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HISTORY NETWORK

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CONTACTFORUM

Handelingen van het contactforum "Proceedings of the 2nd International Conference of the European Architectural History Network" (31 May-2 June 2012, hoofdaanvrager: Hilde Heynen) gesteund door de Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten.

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INTRODUCTION

This volume contains the full text of most of the papers presented at the EAHN Second International Meeting taking place in Brussels, 31 May - 2 June 2012. The conference is the result of a call for session proposals followed by a call for papers. The first call resulted in 78 proposals of which 26 were selected by the scientific committee. These 26 session proposals made up the call for papers. Again the response was very significant – if rather varied for the different sessions. On average, session chairs received about four times as many abstracts as they could accommodate. Because of the wealth of good abstracts, the scientific committee decided to also organize open sessions. Hence, here we can present papers from 30 different sections, offering a variety of themes discussing different time periods.

Presenters could submit their full papers to have them published in these proceedings, which appear at the beginning of the conference. This was an explicit choice of the scientific and organizational committees, to ensure that younger researchers can comply with the rules from their institutions for funding their conference participation, which often require publication of the paper in the proceedings. We thought that these proceedings were most useful during the conference itself and far less afterwards (because there is inherently no overall thematic coherence in such conferences). Hence we pushed for timely publication. This will still allow the session chairs to take the material one step further and to develop themed journal issues or book publications based on the submissions for their session. Participants themselves can also further elaborate their papers into journal articles or book chapters, relying on the feedback they received during the conference.

Given that the session themes were mostly the result of a call for proposals, there was no preconceived structure to the conference. We have nevertheless subdivided the sessions into six thematic 'tracks', mainly for organizational reasons so that papers appealing to the same kind of audience would be presented in consecutive rather than parallel sessions. The outcome of that process was surprisingly convincing, so we decided to structure the proceedings with these tracks as well..

Thus you will first find the papers presented under the heading 'Early Modern', comprising sessions dealing with time periods that precede the nineteenth century. EAHN, like its American sister organization SAH, aims to appeal to architectural historians working on all time periods, not just the exceptionally popular recent centuries. We are therefore pleased that for this conference we were able to put together a substantive track of five sessions dealing with the Renaissance and related themes.

The second track, 'Representation and Communication', brings together those sessions that are concerned with how architectural ideas and buildings are transmitted through documents, models, paintings, fragments or other forms of representation. Significantly, we could recognize this logic in several thematic sessions, indicating that more and more scholars are very sensitive to questions of translation from one medium (such as models) to another (like full scale buildings), from one geographical context to another, or from one time frame to another. Under the third track, 'Questions of Methodology', the reader will find some thematic sessions that are very close to the ones under the second track. Indeed, sensitivity towards issues of communication and representation generates methodological questions and new ways of studying historical evidence. The common denominator of the sessions in the third track is that they all explore somewhat unconventional source materials: not construction archives or buildings themselves, but rather paintings, art collections, didactic materials, liturgical practices or clerical networks.

'Theoretical Issues' is the title of the fourth track, which gathers two roundtables, two thematic sessions and one open session, each dealing with conceptual questions. They take a closer look at the concepts of regionalism, postmodernism, politics, avant-garde, modernism and identity. The last two tracks, 'Twentieth Century' and 'Welfare State Architecture', both comprise sessions that focus on the most recent time periods to concern architectural historians. Various social issues take prominence here. The 'Twentieth Century' track deals with themes such as migration, partnership, development cooperation, or architecture for leisure. The emergence of the Welfare State in the decades after the Second World War fascinates many architectural historians – resulting in a track with five sessions that all discuss aspects of the architectural culture of the 1950s, 1960s and 1970s: housing, engineers and counterculture, theoretical developments, and new organization of professional practices.

Together these six tracks give an overview of new scholarly developments in our field. As the titles of the tracks already indicate, these developments point towards a broadening of the horizon of architectural history, both in terms of sources and research questions, as well as in terms of methodologies and theoretical frameworks. Interdisciplinarity seems to become increasingly important, with sessions that are based on interactions between architectural history on the one hand and such diverse fields as visual studies, postcolonial studies, pedagogy or theology on the other. Geographically, we are also looking

beyond the confines of Europe itself, with several sessions questioning connections between parts of Europe and places elsewhere on the globe.

We are happy to note that the conference attracts not only younger researchers who are pursuing a PhD, but also postdocs and established scholars. We see it as a sign of vitality that EAHN and its conferences appeal to a wide constituency of scholars from different backgrounds, different institutions and different age groups (although we also notice with regret that there is only limited participation from Eastern European countries). We hope that the Brussels conference, like the previous one in Guimaräes, will stay in our minds as a remarkable event with a wealth of thought-provoking sessions, interesting papers and exciting debates. This volume of proceedings records the scholarly contributions that will serve to ignite these exchanges.

Hilde Heynen,
Conference Chair

WELFARE STATE & ARCHITECTURE

Early Modern

The Classical Urban Plan:
Monumentality, Continuity and Change

SESSION CHAIRS:

Daniel M. Millette (University of British Columbia, Canada)

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Greek and Roman monuments have been disappearing from the collective psyche for millennia; as soon as a new Roman emperor assumed power, for example, the architectural landscape was reshaped and adapted to suit the new rule. More recently, the rapid acceleration in the loss of collective memory through the obliteration of monuments has made clear that ancient architecture as we have come to know it is moving away from the physical realm, to the imaginary psyche. One aspect of it, however, remains: the urban grid. Even where ancient architecture has been decimated to make room for new urban and at times, rural spaces, substantial portions of an earlier ancient grid can be retraced and the wider plan can, to varying extents, be recovered. This session will shed light on these "lost" urban and rural plans.

We know that individual monuments as well as monumental architectural ensembles can today be harnessed in the service of memory scripting, just as it was – as Paul Zanker so brilliantly showed – in Roman Republican times. Can the same approach be extended to the planning grid? Does meaning change as the plan is altered? Does memory change? Can an ancient plan reflect a new cultural, political or social order?

Whether intentional or not, each Classical plan has the capacity to embody specific messages linked to such notions as "heritage" and "identity". While this is arguably most significant when considering the formal orthogonal grid, the weight that this infrastructure can bear in terms of cultural meaning has been underappreciated by current scholia. As such, this session invites papers focusing on Greek and Roman grid traces – both literal and figurative. Proposals are particularly welcome which consider ways through which the collective memory of cities and smaller settlements is altered, if at all, with the introduction of newly constructed monuments within an ancient plan. Participants might also address the reciprocity between the institutional and architectural order of cities; or explore how an entire city can be monumentalised by virtue of "inheriting" a Classical plan. Overall, this session will inform theoretical frameworks, thereby broadening as well as reassessing the existing discourse on ancient urban plans.

ALBANO: CASTRUM TO TOWN

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The ancient Regina Viarum, better known as the Via Appia Antica, arrows southeast from Rome in a dead straight line, and is joined by the more sinuous Via Appia Nuova at Frattocchie. At this point the ancient road, which has been climbing imperceptibly along the paleolithic finger of lava from the Latin volcano, begins its long, steady climb up to Albano. This town is at the top of the climb (384 meters above sea level) and on the rim of both the large crater of the Latin Volcano and of its subcrater containing the Lago d'Albano. The Via Appia passes straight through the town, acting as its congested main street before continuing on to nearby Ariccia and Genzano. Currently a bypass for vehicular traffic is being built around the western side of town.

ANCIENT ALBANO

Albano is sometimes thought (erroneously) to have been the site of Alba Longa, the legendary mother town of Rome, birthplace of Romulus and Remus.[1] Historically it is known to have begun as the site of a number of late Republican villas including those of Pompey and Clodius. In the late first century AD the emperor Domitian combined some of these into a large imperial estate. At about 200 AD the emperor Septimius Severus stationed the second Parthian legion as a tactical reserve in a *castrum* which he caused to be built on part of the site of Domitian's great villa.[2] This was the element that was to determine the development of the town situated there today.

The rectangular *castrum* (*Castra Albana*) was sited on a series of artificial terraces descending the fairly steep slope between the lip of the Albano subcrater and the Via Appia (Fig. 1). One short side (240 meters long) of the rectangular *castrum* was roughly parallel to the Via Appia, but set at 50 meters from the edge of that road. The long sides (420 meters long) climbed the hill and stopped about 300 meters short of the rim of the crater. The *castrum* was defended on its four sides by high towered walls laid in large blocks of local peperino (*lapis albanus*). As in other Roman military camps there was a gate on each side, centered on the short sides but off center on the long sides. Two perpendicular streets connected the gates. Two of these gates survive: the main Porta Pretoria (12) facing Via Appia, and the Porta Principalis Sinistra on the long south side. Further uphill, a third street, parallel to the short sides of the *castrum*, defined the edge of the top terrace. Its trace survives and gives access to the large cistern (11) under the top terrace, which supplied water to the *castrum* and was active as recently as 25 years ago. Furthering his father Septimius Severus' development of the site, Caracalla built a large set of baths on a vast podium across the Via Appia from the
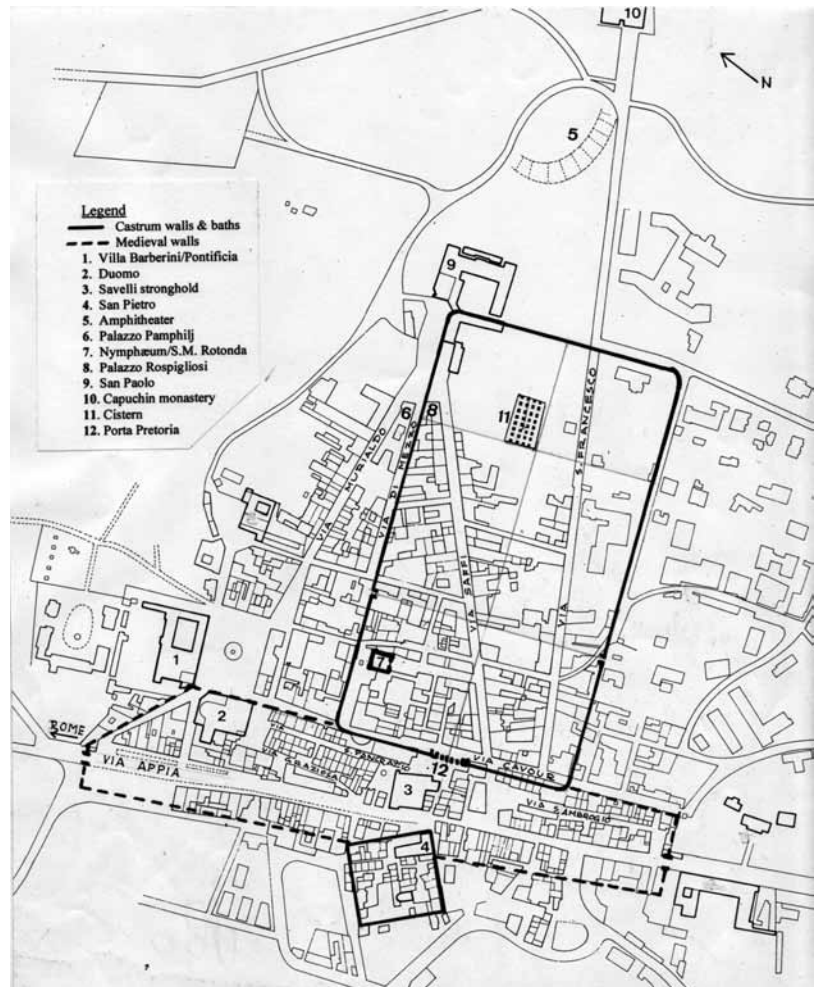
Figure 1. Plan of modern Albano, after T. Paris, *L'Area dei Castelli Romani*. Author's overlay of the castrum, baths and medieval walls.

castrum. This was to have an important effect on the development of the medieval town. At about the middle of the third century an amphitheater was built between the *castrum* and the lip of the crater, half of it carved out of the hillside and half built up in masonry on an artificial terrace.[3]

In the fourth century Constantine withdrew the legion from Albano and the *castrum* declined and eventually emptied.[4] But by that time an ancillary neighborhood serving the *castrum* had developed along the via Appia, between it and the baths. This, together with the baths, became the medieval *borgo* which developed along the Appia after the sack of the town by the Ostrogoths in the sixth century.[5]

MEDIEVAL ALBANO

Medieval towns tended to form on defensible hilltops rather than along Roman roads which made them vulnerable to attack. Medieval Albano is an exception to this rule. Its two early churches are close to, and on opposite sides of the Via Appia. This indicates that the location of the late antique/early medieval settlement straddled this important artery. The Duomo (2) is said to have been founded by Constantine and dedicated to St. John the Baptist. Little besides the nave columns is left of the fourth century church, which was rebuilt in the baroque period and dedicated to S. Pancrazio. The other major church, S. Pietro (4), was probably more important during the medieval period. It is situated on the corner of the great platform of the baths nearest the Via Appia. Directly across this heavily travelled road the Savelli, who gained control of Albano in the late thirteenth century, built a stronghold defended by corner towers (3).

Because of its position on a platform with high drops on three sides, the most defensible part of the town was the medieval quarter that packed into the remains of the Roman baths. The rabbit warren of small streets, which is still visible in the great baths block, attests to the density of this circumscribed neighborhood. The combination of this unit with the Savelli stronghold directly across the Via Appia must have constituted a powerfully defended check point on that highway, as well as the core of the medieval town. The town developed linearly north and south from this center on both sides of the Via Appia. The greater density of the houses in the section between the Savelli stronghold and the Duomo suggests that this was the center of the medieval town.

Though nothing remains of it, a wall must have encircled the medieval town. This made use of the ready-made *castrum* wall parallel to the Via Appia, extending that wall northward to the Duomo, turning on the slanted Via Cairoli, and reaching the Appia at the Porta Romana (demolished in 1905).[6] The bevelled back corner of the Duomo is evidence of the turn in the wall at that point. In the other direction (south) the *castrum* wall was probably extended to a point near the edge of Villa Ferraioli. At this point the medieval wall turned to meet the Via Appia where another gate, of which no memory remains, must have marked its crossing of the highway. On the west side of town the steep drop away from Via Appia itself constituted a defensive barrier, probably consisting of a retaining wall paralleling the highway and running up to both sides of the baths block.

Medieval Albano's street system was remarkably simple. Via Appia was the main street, widening into a large piazza (Piazza Cellamaio) between the Savelli palace and S. Pietro. Not far from this piazza Via Graziosa slanted away from the Via Appia to a corner of the Piazza del Duomo. Another street aligned on the main door of the Duomo ran parallel to the Appia to the corner of the Palazzo Savelli. This axis continued after an interruption as Via S. Ambrogio. Short cross streets, perpendicular to the Appia, provided connections between these major streets. The only aberration to this somewhat regular elongated grid was the complex alleyway system occupying the great baths. This unit, consisting of a large square turned at an angle of about 17° with respect to the Via Appia, connects with Piazza Cellamaio by means of a wide space behind the church of S. Pietro, whose main door formerly opened onto it.

Later medieval presences outside the walls of the medieval borgo suggest the gradual expansion of the town up the hill, in the area of the largely empty *castrum*. The principal example of this is the church of S. Maria della Rotonda (7) built into the *nymphaeum* surviving from the Villa of Domitian and turned into a bath-house by Septimius Severus. This structure lies within the *castrum* near its northwest corner. Running just inside the short *castrum* wall (therefore outside the medieval wall), and obviously determined by it, is the Via de Gasperi/Via Cavour axis. Interestingly it replaced that section of the *circumductio*, (or road around the whole rectangle of the *castrum*) which paralleled the Via Appia. This change of sides of a street with respect to the *castrum* wall is easily explained. When the *castrum* wall became the wall of the medieval town which grew up outside it, the exterior *circumductio* street became a space interior to the medieval town, and as often happened in crowded quarters, it was gradually occupied by houses built right up against the wall. Eventually the wall was enveloped by these houses and disappeared completely. Later the houses were turned to face the new (uphill) section of town and had facades built on what became the street in its present location.

RENAISSANCE ALBANO

The sixteenth century marked the beginning of renewed interest in the Alban hills on the part of the Roman nobility as a location for their exurban summer villas. This stimulated the expansion of Albano not only because it brought the need for housing for people servicing these villas, but also because some of the noble families built villas right next to the town (as occurred at Frascati) as well as palazzi within the town. Thus Villa Barberini (1; now Villa Pontificia), Villa Doria and Villa Altieri are built next to the town, while Palazzo Rospigliosi (8), Palazzo Doria (6), and Palazzo Corsini are built within the town. The connection of all of these names with Papal families should be noted in this context.

The Via de Gasperi/Cavour axis became the base for a triangular extension of the town extending up toward the crater rim. Half of this triangle fell within the area of the former *castrum* and half without. In the late sixteenth century, Albano adopted the formal planning device used in Rome at the beginning of the same century, and known as the *trivium*.[7]

The first formal *trivium* in Rome (1517-1540) was that at Piazza del Popolo: three streets converging on a piazza at equal acute angles. The existing Via del Corso (ancient Via Flaminia) became the axis of symmetry for two new streets converging with it at Piazza del Popolo. On axis with the Corso, at the end of the then trapezoidal piazza, stood a major element: the Porta del Popolo, later elaborated into a sort of triumphal arch by Bernini.

Half a century after this scheme was developed in Rome, the same planning configuration began to appear in towns around Rome (Albano, Genzano, Bagnaia). Albano's *trivium* is perhaps the most impressive version of the three. The similarity of its parts with the Piazza del Popolo *trivium* is remarkable. Like the Via del Corso, the existing center street was a Roman one. Via S. Gaspare del Bufalo (formerly Via di Mezzo) was that section of the ancient *circumductio* around the *castrum* following the long wall on the north side of the rectangle. Two new streets, converging with Via di Mezzo at Piazza S. Paolo, echo Rome's Via Ripetta and Via del Babuino converging on Piazza del Popolo. These are Via Leonardo Murialdo and Via Aurelio Saffi. The focal point of the converging streets in Albano is the piazza in front of the thirteenth century church of S. Paolo (9), located next to one corner of the Roman *castrum.* This parallels Rome's Porta del Popolo in the *trivium* scheme. Just as awareness of the *trivium* configuration in Rome is reflected in the name of Via Paolina Trifaria (three-way), similarly Albano's Via di Mezzo (literally "middle street") suggests that the concept of the *trivium* was clearly understood.

The angle between the Via di Mezzo and Via Saffi is about 23°, almost the same as that of the two Piazza del Popolo angles in Rome. However the angle between Via Murialdo and the Via di Mezzo is only 15°. This angular difference reflects the type of adjustment of a formal urban design pattern to fit local needs that can be noted in another *trivium* in Rome, the Banchi *trivium*. In Banchi one of the flanking streets was aimed at the center door of a church (S. Giovanni dei Fiorentini) while the other was so aimed as to bypass the corner of a palazzo (Orsini/Taverna). At Albano the smaller angle is probably due to an attempt to maintain equal and constant pitches to the two flanking streets so that they could tie in to the two ends of the level Via de Gasperi/Cavour: had the angles been the same, Via Murialdo would have encountered considerably higher ground, resulting in a considerable amount of earth moving so as to maintain the pitch. Avoiding this, the street was aimed at the center of the side of the Duomo. This also had the advantage of leading to the town's market square, Piazza Sabatini (formerly Piazza Roma) which is located next to the flank of the Duomo.

From the plans of the buildings built along the three *trivium* streets, we can deduce that the two new streets received more attention than the Via di Mezzo because nearly all the buildings were built with walls perpendicular to these two streets. The result was that the same buildings, or their extensions, meet the street front of Via di mezzo at odd angles.
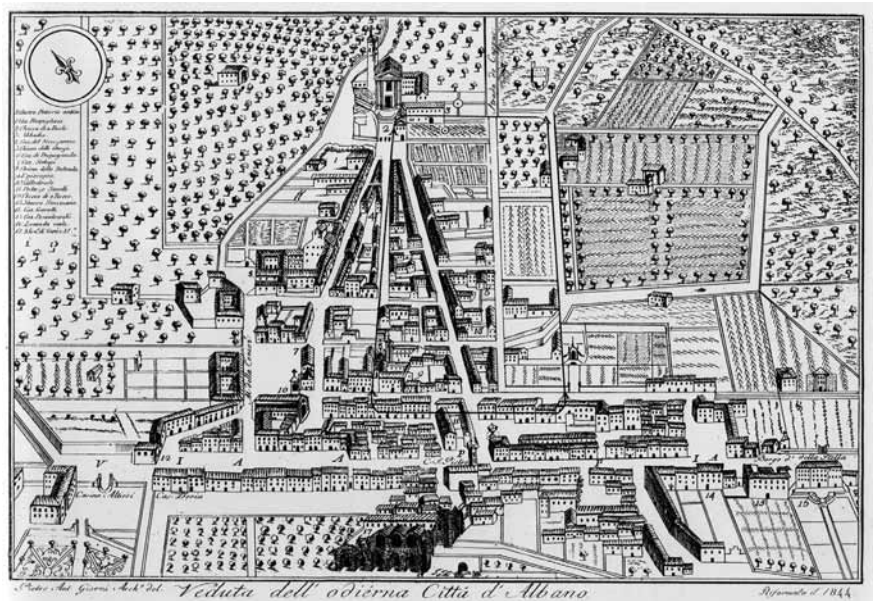
Figure 2. Pietro Antonio Giorni. 1844 reprint of a 1787 print of Albano, after R. Mammucari, *I Castelli Romani*.

Another long straight renaissance street leaving from the Via Cavour (which is an extension of Via de Gasperi/Cavour) leads up the hill through the *castrum* to the 1619 church and monastery of the Cappuccini perched on the rim of the crater. Two other streets in the present town follow the exact trace of the Roman *castrum*'s *circumductio*: the first section of Via Tacito and the straight section of Via Castro Pretorio. As on the Via di mezzo numerous sections of the *castrum*'s walls are visible in the facades of the buildings lining these streets. Thus all four of the *castrum* walls determine streets in the modern town.

BAROQUE ALBANO

The renaissance *trivium* received its major buildings in the baroque period (Fig. 2). Piazza S. Paolo acquired its current appearance at that time. At the head of the trapezoidal site between Via A. Saffi and Via di Mezzo is the mid-seventeenth century Palazzo Rospigliosi (8) with its main entrance on the piazza. Somewhat later on the narrower trapezoid between Via Murialdo and Via di Mezzo, the Pamphilj family built a much larger palazzo complete with garden (6). The short end faces on to Piazza S. Paolo, but its main entrance is in the longer façade on Via Murialdo, while the garden entrance is on Via di Mezzo. It is currently in a state of complete abandonment.

On what is now Piazza Mazzini the same family built a villa with its main building facing the Via Appia, and its gardens occupying the site of Pompey's villa on the downhill side. Nothing remains of the building which was bombed in during WWII, but the gardens are now Albano's public park. Villa Pamphilj was located just inside Porta Romana. Villa Altieri, developed in the early eighteenth century from a large seventeenth century *casale* or farmhouse, is situated on the Via Appia just outside the site of Porta Romana. It is now a hotel. Directly across the Appia from the entrance to Villa Altieri is the entrance to the Villa Barberini which covered a vast area along the crater rim between Albano and Castel Gandolfo. It is now part of the Villa Pontificia, the pope's summer residence.

In the early eighteenth century the Corsini built a palazzo at the other end of town, also facing the Via Appia. Across the street from it the Neoclassic Casino Benucci built in 1834 was later enlarged into the Villa Ferrajoli, now the Museo Civico.

MODERN ALBANO

The Via Appia remains the main street of Albano, and is still the major traffic street lined with shops. An endless stream of through traffic makes it very unpleasant to walk along even though this should be the main pedestrian way. Clearly a bypass was required and one is now being built in the valley below the town, below the railroad line.

Albano suffered heavily from Allied bombing in 1944 after the Anzio beach-head was established. As an unexpected result, some important Roman elements resurfaced, chief among them being the Porta Pretoria, the main gate of the *castrum*, facing Via Appia. Post-war reconstruction did not alter the pattern of streets of the historic town. The recently built extension of town lies on the east side of the Via Appia between Albano and Ariccia on a series of curvilinear streets loosely connected to the old town.

The historic town provides a near-perfect example of urban development over an arc of 2000 years, and yet remains to be studied in any detail. The overlapping yet easily distinguishable ancient, medieval and renaissance/baroque sections of the town present an unusual town plan, proving once more the adaptability of the ancient Roman *castrum* plan.

Endnotes

1. Tonino Paris (ed.), *L'Area dei Castelli Romani* (Roma: Officina Edizioni, 1981), 236.

2. Giuseppe Lugli, *La Villa di Domiziano su i colli Albani*, (Roma: Maglioni e Strini, 1922) 9.

3. Giuseppe Lugli, "L'anfiteatro d'Albano dopo I recenti scavi" in *Castra Albana II* (Roma: Garroni, 1921) 253.

4. Augusto Roca de Amicis, "Albano," in *Atlante del Barocco in Italia, Lazio I, Provincia di Roma* (Roma: De Luca, 2002) 50.

5. T. Paris, op.cit. 256

6. Renato Mammucari and Nello Nobiloni, *I Castelli Romani: immagini dal passato*, (Roma: Newton Compton, 1988) 18.

7. Allan Ceen, *The Quartiere de' Banchi,* (New York: Garland, 1986) ch.3.

MEMORY AND MOVEMENT: ROME'S FORA AS PROBLEM AND SOLUTION

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The built landscape of the city of Rome is a powerful engine of cultural memory. The viewer can pick out the ruins of buildings two thousand years old woven into the fabric of the modern city at every street corner in the *centro storico*, and the mind is constantly tempted to reconstruct multiple pasts from the fragments which now coexist.[1] The visual experience of ancient architecture has been the prime method of accessing the city's cultural heritage at least since the time of the Grand Tour and the *Vedute* of Vasi and Piranesi. But the highlights of this mode of experience, the monuments that can still be seen standing at street level, are not all that Rome has to offer of its Classical past. The contemporary city of Rome is built on, as well as alongside, the monuments of its past. Earlier buildings have continually served as foundations for later structures. The traces of ancient monuments are preserved in the city's fabric not just where columns and capitals are visible, but also in the layout of streets and even the internal articulation of buildings. In a birds-eye view of the area just east of the Campo de'Fiori the shape of Pompey's theatre is immediately visible: the curve of the Via di Grottapinta forms the curve of the cavea. On the ground, though, the presence of the ancient city does not impose itself directly on vision, but on movement.

In many other cities built on Roman foundations the same mechanisms have preserved a clear grid structure, with straight lines and right angles standing out clearly to the eye as well as determining the movement of the body. As our appreciation of cultural heritage has expanded beyond the single monument, the streets which form these grids have themselves been excavated and displayed in towns like Rimini or Gloucester. In such solutions, ringed by railings or covered by glass, the ancient streets fit into the pattern of the *Vedute*. The ancient infrastructure of movement becomes a modern stopping-point, something to look at rather than travel through, and they actually impede the progress of traffic along the modern roads which follow exactly the same route. These obstacles throw into sharp relief the problems caused when memory and movement come together, or perhaps where memory brings ancient and modern movement into conflict. If the streets themselves are monuments, there is no space left in which to move, or from which to watch and remember.

The city of Rome faces slightly different problems in combining memory and movement. The path that a pedestrian or a car takes through Rome is similarly shaped by its ancient structures and the ways mediaeval and later builders reacted to them. But because the ancient city itself does not have the same grid plan as Rimini, the ancient city underlying the modern one is not always obvious. Rome was not a planned city, but an entity which accumulated organically over time. Its warren of winding streets would not have been so dissimilar to those which can still be walked (or, with difficulty, driven) in many parts of the centre today.

The Forum Romanum, after its original construction by a king, was always a place for grand, representational architecture, but it was dominated by no single monument or patron and was not clearly bounded or even regularly shaped. New building activity constantly made minor adjustments to the square itself and the buildings surrounding it, with no central coordination. It was also always a multi-purpose space, hosting commercial alongside political activity, and one of its most important purposes was as a contribution to movement patterns: it was situated at the crossroads of major routes through the city, and was used as a thoroughfare.[2] Organised urban development would not come to the city of Rome until the unifying will of Julius Caesar and the emperors. These rulers devoted substantial time and money to improving the city of Rome. Among their projects were new forums, collectively known as the imperial fora, five of which were constructed in the area to the north of the original Forum Romanum between 46 BCE and 113 CE.[3] These new projects differ substantially from the earlier Forum not only in their original design and purpose, but also in the way they are incorporated into the city today.

The emperors had need to respect the earlier layout of the areas they chose for their fora, instead creating Rome's first and only district laid out in rectilinear fashion. Their plans were articulated with curved exedras, but each forum was based around a central rectangle, and all five followed the same orientation. In these new spaces art and architecture could propagate a single message, in honour of a single patron. Architecturally, the emperors enclosed their fora within massive walls with few openings; they also restricted the activities which took place within them, excluding shops which might have attracted passers-by. Entrance was by stairways, prohibiting wheeled traffic. These innovations produced a unified, immersive experience for those inside, but also meant that the fora stood apart from and even disrupted patterns of movement in the city.[4]

The massive walls which bounded the imperial fora have guaranteed that their footprint has survived into the modern city. For centuries, though, they were hidden under other structures which took advantage of their strong foundations from as early as the fourth century CE, and gradually obscured their shape; new routes developed cutting at angles across their careful plan. Non-scholars might have had no clue about the history of the area.[5]

The Forum Romanum, on the other hand, was still mostly open space, grazed by cows. The tops of monuments like the Arch of Septimius Severus still protruded from the ground, though, and the Forum remained a place of memory in a way the imperial fora did not. The difference in their fates was partly a product of their different relationships with Rome's street network. Without the commanding presence of the emperors, the practical need to create new routes across the massive block of the imperial fora was too great to ignore. Widening the existing access points would have been impractical because of the stairs and changes of level these involved, so new paths were forged on new orientations, thereby lessening the visual effect of the great temple facades which had been designed originally to dominate the fora's specific spatial choreography. The Forum Romanum, on the other hand, was already integrated into patterns of movement, and became an obvious site for mediaeval 'façadism', the practice of retaining imposing ancient façades at the front of entirely new buildings.[6] The overall effect was that here the ancient arrangement of building and road remained stable, providing a pathway lined with evocative monuments and loaded with historical associations. In the practices of papal Rome, this made it perfect for use once more as a thoroughfare, as part of one of the grand processional routes which structured the city in space, movement, and memory.[7]

Movement would continue to be an important way of experiencing the Forum as a space of cultural memory into the modern period. In the nineteenth and early twentieth centuries, the static experiences of *Vedute* were supplemented in the imagination of the champions of Rome's cultural heritage with the idea of a *passeggiata archeologica*, walking routes through ancient monuments preserved in picturesque parkland. Luigi Canina himself instigated the scheme during the Napoleonic period with his excavations and restorations along the Via Appia leading out of the city, and by 1914 the area of the Palatine and Forum too had been converted into an archaeological park, gradually planted with trees which formed long vistas and mapped out walking routes.[8] The *Passeggiata* formalized the concept that Rome's monuments were to be explored in motion, as well as viewed as a static panorama. Entirely excluded was the area of the imperial fora, which were too built up to fit neatly into the concept of a park.

Rome's new *passeggiata*, promising movement, in fact posed a problem for circulation in the modern city. The ancient through routes of the forum, long used by all kinds of traffic from papal processions to cowherders, were now conceptualised as spaces set aside for edifying strolls. The park became an obstacle, which it remains in part today; the Forum Romanum, always a place of transit, has become a destination.

The imperial fora have had a very different afterlife. By the nineteenth century they were entirely built over. But the problems of circulation that the new capital of Italy faced in the automobile age were soon to affect many of Rome's unplanned districts. A number of proposals were already on the table in the nineteenth century to create new, wider roads cutting through the city. Several involved the area of the imperial fora, as a new route was envisaged between Piazza Venezia (and the new Vittoriano) and the Colosseum—thus directly replacing the artery lost when the Forum Romanum became a park rather than a through route.

The various new roads already created in modern Rome offered two different models for how to reconcile their paths with the ancient layouts upon which they were superimposed. The Via Nazionale and Via Cavour, taking advantage of the somewhat more regular layout of the areas of the city laid out by Sixtus V, cut straight lines down the hill of the Esquiline. The Corso Vittorio, in contrast, was designed by the planner Viviani as a modern traffic artery not at all in the style of Haussmann. It curves gently but perceptibly around the great palazzi of the Campo Marzio. In constructing the new road around, rather than through, the pre-existing street layout, Viviani actually succeeded in making a new route punctuated by picturesque piazzas and bounded by imposing facades which observers today might be forgiven for thinking is a relic of the city's ancient or mediaeval layout. Some of the buildings facing onto it were originally designed to front a roadway but were later englobed in later construction; others, like the Piazza della Cancelleria, have had their side facades elaborated to match their fronts.[9] Viviani's careful evocation of the city's organic development is congenial to present tastes, though the false sense of 'authenticity' it offers might find detractors.

Nineteenth century proposals for a route through the area of the imperial fora had been rejected because they would have required too much expropriation. The suggestions of the early 1900s hoped to ameliorate difficulties by suggesting a curving road with minimal demolitions on the model of the Corso Vittorio.[10] The buildings these plans wanted to preserve were not those of the rectilinear ancient fora, but the jumbled mediaeval and later constructions which overlaid them. In the same years, however, others had different ideas. The archaeologist Corrado Ricci and the architect Marcello Piacentini, both of whom would end up working with Mussolini on the eventual Via dell'Impero, proposed in 1911 and 1925 respectively that the area of the imperial fora should be cleared of post-antique structures. They were both primarily interested in investigating antiquity rather than freeing up circulation. Ricci's proposal did include the road, but Piacentini explicitly hoped for an expanded Archaeological Park to include

the imperial fora.[11] Disagreements and funding difficulties meant nothing was done, but the various plans on the table in the early 1900s demonstrate for the first time an awareness of both the street layouts, antique and post-antique, which together constitute the architectural patrimony of the area. Indeed, the great archaeologist and topographer Rodolfo Lanciani, then a member of the Italian Senate, brought up the changes in the area's orientation over time at a hearing on Ricci's proposal in 1917.[12]

As with the original construction of the imperial fora, it would take an autocrat to cut through the deliberations and begin building a new road through the area. Mussolini was perfectly conscious of the parallel he was drawing between himself and the emperors. Both his ideology of *romanità* and the process of expropriation, clearance, and construction here and elsewhere in the capital were well documented at the time and have been examined by many scholarly authors since.[13] Mussolini and those surrounding him were interested in 'liberating' the monuments of imperial Rome from what they saw as worthless accretions which had developed around them over time. They would then be placed in juxtaposition with the new great monuments of the fascist regime. To those who made a claim for the place of Rome's winding streets in her cultural heritage, Mussolini answered that a distinction should be drawn between 'the living testimony of the glory of Rome' and 'the picturesque and so-called local colour'.[14] His supervisor of antiquities, Antonio Muñoz, was not concerned with emulating Viviani's curving route around the present buildings, noting that a proposed curve at the Via Cavour to spare some Renaissance constructions would impede the view of the Colosseum, and he is not even concerned about minimizing the effect on the imperial architecture. Full-scale excavations to uncover its exact layout would require too much money and time. The simplest solution, a straight line, was declared the best.[15] The result was the destruction of an entire neighbourhood, including 5500 residential units, and the construction of the grandiose Via dei Monti, soon renamed the Via dell'Impero, and now the Via Dei Fori Imperiali (Fig. 1).

The road ran, and still runs, in a straight line obliquely across the fora's layout, creating a new line of sight between Piazza Venezia and the Colosseum. The closed spaces were now open for movement: modern speed and fascist parades which paralleled those of the papal period through the Forum Romanum next door. Mussolini was keen to exploit the fora as spaces of memory, and in many ways his imperial pretensions conjured up accurate reflections of their original representational purposes.[16] His use of the area as a processional route solidified its role in collective memory through practice. But it also meant that much was lost: not just the buildings of later periods which were entirely destroyed, but the inward-looking separation and careful layout which were key to the ancient spatial experience of the fora.[17]

Mussolini was looking for a monument, a unified whole which could stand next to his grandiose plans for the third Rome. But so much of the original architecture, here as elsewhere, had been lost, and what remained had embarked on new stories over the intervening centuries. After the demolitions, what remained was inevitably fragmentary. Nowadays, we mourn the loss

Figure 1. The *Via dei Fori Imperiali* today, seen from the top of the Vittoriano. In the foreground, the Forum of Caesar; to the left, the boundary wall of the Forum of Augustus; to the right, the Colosseum. (source: author's photograph)

of the intermediate phases, but for its original audience, the effect produced by the juxtaposition of the fascist showpiece with a past stripped of its context was differently problematic. Mussolini's propaganda described the ancient monuments in their new settings as examples for emulation or celebrations of Italy's imperial past and future standing together. But, as always, a city like Rome can bear many meanings, and the overlay of ancient and modern topography suggested competition as well as emulation.[18] The large walls of the fora of Augustus and Nerva made clear their original orientation, and the way the new road steamrollered across it. Huge portions of the fora were buried under the road and its parks, and Muñoz and others were not shy of admitting that traffic needs trumped historical preservation.[19]

More than this, though, the ruins of the imperial fora, picturesque as they are, were monuments of decline and decay. From one point of view, Mussolini could claim to be avenging the shameful defeat of the ancient past by more recent barbarisms; but surely the eventual fall of the empire he held as his model could also be read as an omen for the eventual end of his new order?[20] Although official communications betray no trace of possible alternative readings, it is clear that in the final phase of

his building projects Mussolini rejected the idea of a glorious unification of past and present, preferring to emulate the emperors more literally and creating new areas in which no extraneous material disrupted the unified modern vision. Originally, the Via dell'Impero was to have been the site for one of the grandest Fascist projects of all, the Palazzo del Littorio, which would be the party headquarters. A massive open competition was held for designs. But in 1935 the site was switched. The new building would now be built at the Foro Mussolini.[21]

Today, the road still runs at its angle across the imperial fora, despite proposals to demolish it for the sake of further archaeological investigation.[22] Despite the continuing traffic, the balance between memory and movement has tipped once again, and the larger excavated areas of the fora appear as closed spaces, out of place in the modern street layout. They are still important spaces of memory, to Romans and to tourists, but only scholars can actually visit them, and even they are guided by temporary fences through defined paths across the ancient open squares. More recent plans for the area speak of valuing all the different stages of the site's development, and integrating architecture of different periods into the modern city rather than regarding it as something separate to be held apart.[23] Even so, the problem of movement and memory has reared its head once again with the excavations for the new Metro Linea C, which will run directly underneath the area. The tunnel itself does not pose a problem: inverting tradition, the engineers plan to dig it at a lower level than any human archaeological strata.[24] But there is to be a station at Piazza Venezia, and in test excavations for possible entrance sites, the archaeologists have discovered more and more fascinating structures connected to Trajan's forum.[25] These difficulties are directly connected to the ways the imperial fora originally controlled movement. Their unified, centrally planned layout left no space unused. Since they butt up against each other eliminating possible access routes to the traffic of their own time, they have not left any gaps for metro passengers today.

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Endnotes

1. On the layering of multiple pasts in Rome, see most recently Dorigen Caldwell, "Introduction: Continuities of Place," in *Rome: Continuing Encounters between Past and Present*, ed. Dorigen Caldwell and Leslie Caldwell (Farnham, Surrey; Burlington, VT: Ashgate, 2011); David F. Karmon, *The Ruin of the Eternal City: Antiquity and Preservation in Renaissance Rome* (Oxford; New York: Oxford University Press, 2011), 3-20.

2. In general on the Forum Romanum: Nicholas Purcell, "Rediscovering the Roman Forum," *Journal of Roman Archaeology* 2 (1989); on movement patterns: Roland Martin, "Agora et Forum," *Melanges de l'Ecole française de Rome; Antique* 84 (1972); David J Newsome, "Movement and Fora in Rome (the Late Republic to the First Century CE)," in *Rome, Ostia, Pompeii: Movement and Space*, ed. Ray Laurence and David J Newsome (Oxford: Oxford University Press, 2011).

3. The latest and best guide to the imperial fora is Roberto Meneghini and Riccardo Santangeli Valenzani, eds, *I Fori Imperiali: Gli Scavi del Comune di Roma (1991-2007)* (Rome: Viviani Editore, 2007).

4. See Eugenio La Rocca, "Passeggiando Intorno ai Fori Imperiali," in *Imaging Ancient Rome: Documentation - Visualization - Imagination*, ed. Lothar Haselberger and John Humphrey (Portsmouth, RI: Journal of Roman Archaeology, 2006), and especially Newsome, "Movement and Fora".

5. Meneghini and Santangeli Valenzani, eds, *I Fori Imperiali*.

6. Caroline J Goodson, "Roman Archaeology in Mediaeval Rome," in *Rome: Continuing Encounters between Past and Present*, ed. Dorigen Caldwell and Leslie Caldwell (Farnham, Surrey; Burlington, VT: Ashgate, 2011).

7. David Mayernik, *Timeless Cities: An Architect's Reflections on Renaissance Italy* (Boulder: Westview Press, 2003), 66-73.

8. Piero Maria Lugli, *Urbanistica di Roma: Trenta Planimetri per Trenta Secoli di Storia* (Rome: Bardi, 1998), 128-9; Paola Ciancio Rosetto, "La 'Passeggiata Archeologica'" in *L'archeologia in Roma Capitale tra Sterro e Scavo* (Venice: Marsilio, 1983).

9. Viviani and the Corso Vittorio: Terry Kirk, "The Political Topography of Modern Rome, 1870-1936: Via XX Settembre to Via dell'Impero," in *Rome: Continuing Encounters between Past and Present*, ed. Dorigen Caldwell and Leslie Caldwell (Farnham, Surrey; Burlington, VT: Ashgate, 2011), 115-9.

10. The Sanjust masterplan of 1909: Lugli, *Urbanistica*, 130-2; Kirk, "Political Topography", 122.

11. Corrado Ricci, *Per L'isolamento degli Avanzi dei Fori Imperiali* (Rome: p.p., 1912); Mario Piacentini, "La Grande Roma," *Capitolium* 1, no. 7 (1925).

12. Francesco Mora, *Da Via Cavour a Piazza Venezia Attraverso ai Fori Imperiali* (Rome: Direzione della Nuova antologia, 1917), 7.

13. E.g. Antonio Cederna, *Mussolini Urbanista: Lo Sventramento di Roma negli Anni di Consenso* (Rome: Laterza, 1979), Kirk, "Political Topography," Spiro Kostof, *The Third Rome, 1870-1950: Traffic and Glory* (Berkeley: University Art Museum, 1973), Rosella Leone and Anita Margiotta, eds, *Fori Imperiali: Demolizioni e Scavi* (Milan: Electa, 2007), Borden W. Painter, *Mussolini's Rome: Rebuilding the Eternal City* (New York: Palgrave Macmillan, 2005). For contemporary records of the ideological weight placed on the site, see the guidebooks of Corrado Ricci, Antonio M. Colini, and Valerio Mariani, *Via dell'Impero* (Rome: Libreria dello stato, 1933) and Mario Gandini, *Cenni Storici Archeologici e Impressioni Panoramiche Della Via dell'Impero* (Rome: Rifugio Minorenni, 1933).

14. Speech of 18 March 1932, quoted in Kostof, *The Third Rome*.

15. Antonio Muñoz, *Via dei Monti e Via del Mare* (Rome: Governatorato di Roma, 1932).

16. We should not forget that he built his own 'imperial' forum, north of the river (the present Foro Italico), a space which revived to the letter the unified visual aspect and propagandistic messages concentrated on a single individual originally found in the imperial fora.

17. Angela Maria D'Amelio, "Foro di Augusto," in *Fori Imperiali: Demolizioni e Scavi*, ed. Rosella Leone and Anita Margiotta (Milan: Electa, 2007), 49.

18. Muñoz, *Via dei Monti e Via del Mare*, 10 remarks with pride that the two exedras which in the new layout of the area flanked the Vittoriano and gave access to the road on one side are ten metres larger than Bernini's exedras at St. Peter's.

19. See Kostof, *The Third Rome*, 21.

20. Painter, *Mussolini's Rome*, 52-3 quotes an American living in Rome who was interviewed for John Patric's *National Geographic* article 'Imperial Rome Reborn' (March 1937): 'Look to your left. See those young Fascists on the athletic field. Behind them lie ruins of Caracalla's Baths. Vast in size and equipped with every luxury then known, they marked beginnings of Rome's fall'.

21. Kostof, *The Third Rome* traces the three phases: reverence and concern for authenticity in the display of monuments; then the juxtaposition of ancient and fascist architecture; and finally the move to entirely new contexts.

22. Italo Insolera and Francesco Perego, *Archeologia e Città: Storia Moderna dei Fori di Roma* (Roma; Bari: Laterza, 1983), Raffaele Panella, *Roma Città e Foro: Questioni di Progettazione del Centro Archeologico Monumentale della Capitale* (Rome: Officina Edizioni, 1989), *Roma, Continuità dell'antico: I Fori Imperiali nel Progetto Della Città*, (Milan: Electa, 1981).

23. See all the items cited in the previous note; more recently, the preface by then-mayor Francesco Rutelli to Eugenio La Rocca, *I Fori Imperiali* (Rome: Progetto Museali, 1995); Sonia Martone, "La Linea C della Metropolitana di Roma. Procedure e Nuove Prospettive," in *Archeologia e Infrastrutture. Il Tracciato Fondamentale della Linea C della Metropolitana di Roma: Prime Indagini Archeologiche*, ed. Roberto Egidi, Fedora Filippi, and Sonia Martone (Florence: Casa editrice Leo S. Olschki, 2010), especially 15-7.

24. Angelo Bottini, "Archeologia e Metropolitane a Roma: Qualche Considerazione," in *Archeologia e Infrastrutture. Il Tracciato Fondamentale della Linea C della Metropolitana di Roma: Prime Indagini Archeologiche*, ed. Roberto Egidi, Fedora Filippi, and Sonia Martone (Florence: Casa editrice Leo S. Olschki, 2010).

25. Roberto Egidi, "L'area di Piazza Venezia. Nuovi Dati Topografici," in *Archeologia e Infrastrutture. Il Tracciato Fondamentale della Linea C della Metropolitana di Roma: Prime Indagini Archeologiche*, ed. Roberto Egidi, Fedora Filippi, and Sonia Martone (Florence: Casa editrice Leo S. Olschki, 2010).

CYRENE AND APOLLONIA:
THE CLASSICAL URBAN PLAN AS A MEASURE OF OPPOSITES

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Greek and Roman society has been characterised as essentially urban civilisations. The formal layout of the orthogonal plan was its most tangible physical element. In the case of Cyrene and Apollonia, two closely linked Cyrenaican cities in Roman Libya, each city introduced the orthogonal grid as a central unit of administration, which enabled the organisation of large areas of land into districts, sub-divided into smaller blocks. In Cyrene, during the Hellenistic period, six districts were laid out across a steep incline with the agora situated in centre block. Space was at a premium. The city was subsequently aggrandised during the early Roman period with many fine monuments placed together on the constricted site. Apollonia increased the number of districts as it was laid out across a long, narrow headland facing the sea and its harbour was Cyrene's port. It is suggested here that as a city Apollonia was likely sub-divided into roughly seven districts, the gates of the town giving onto each insula block, with the agora at the centre.

The planning and application of the city grid in antiquity has been perceived as a defining moment in the urban cityscape. In Cyrene, an orthogonal grid was the underpinning structure of necessary planning in the city from the Hellenistic period until the city was destroyed by an earthquake in the fourth century AD. However, it seems that, as a compositional element, the grid did not always endure the development of a city. In Apollonia, the original grid became obsolete as a new linear pattern emerged through different uses and external forces. It is clear from the evidence of the late Roman city of Apollonia that the institution of the early Christian church created a different rhythm of activity in that city, and thereby developed a different structural arrangement that eschewed the grid.

This paper examines the classical urban plan in these two cities and questions whether the order imposed by the grid enhanced and monumentalised the urban development of these cities or in fact impeded their growth. Describing how human factors can override the most consciously planned spaces, Ward Perkins noted that "even the rare moments of pure invention" are "loaded with the experience of the past".[1]

The visual impact of the city site was a major factor in the planning of cities: a preoccupation of Greek and later Roman urban plan forms, where scenographic planning depended on the architectural exploitation of the landscape. This preoccupation was not sustained during the early Christian period. Viewing each cities planning sequence chronologically allows us to review the coherence of the grid, as the vital element of visual consciousness defined as ocularisation, became less important as traditional Greek and Roman *mores* for living in the city gave way to other activities and priorities which re-defined the use of city spaces.[2]

In a typical Hellenistic city, there was an emphasis on the pleasing visual effect on the senses. In the case of Cyrene, a breathtaking setting was incorporated as the city was cited across a deep ravine; the acropolis and lower agora were linked by elaborate walkways and stairs connecting and solidifying the grid across a small area. In Hellenistic Apollonia, impressive walls were constructed along the length of the seaboard, marking out the districts of the grid as it was planned across the site, embracing the seascape; a narrow headland encompassed a navigable haven for passing ships.

This Hellenistic sensibility of citing buildings in their physical setting was improved upon in the early Roman period as engineers and planners brought new theoretical speculation to planning and maximised potential by introducing focal points while at the same time underpinning the orthogonal grid with essential pragmatic services: water sources, and wider, more orderly streets linked to privately owned houses. Such improvements were made in the both cities: Cyrene and Apollonia seemed to strive towards maximum ocular effect, using the original grid plan as a structure, with colonnaded streets connecting certain areas decorated with the addition of large-scale monumental structures and eye-catching, trophy edifices. In Cyrene, for example, the monumental Caesareum and basilica were added during the first century AD, which created a strong visual presence in this section of the city. In Apollonia, spacious Roman baths, which were added during the second century AD and linked to the forum area by colonnaded walkway, served a similar purpose. Each city was 'dressed' with Roman trophy-monuments as part of a reshaping of their urban landscapes.

On a further point of comparison, ongoing research in the context of Roman Asia Minor demonstrates how rival cities marked their territory with such monumental showcasing.[3] *In Roman Pamphylia, the cities of Perge and Side, which are deserving of*

attention due to their growth in rapid succession during the second century AD, rivalled the other in reshaping their urban landscapes on a scale of magnificence not hitherto seen in other parts of Asia Minor. Collectively, their respective legacies were concentrated in the presence of monumental buildings. Both cities developed over time in identifiable chronological stages, the principal building phases being during the Hellenistic period (from third to second century BC), and subsequently the Roman period (from the first to second century AD), with varied patrons assisting in their improvement and with a noted gradual absorption of landscape. Their distinctive topography and urban form is graphically demonstrated by the significant role played by landscape in shaping their planimetric development.[4]

CYRENAICA

Historically, Cyrenaica was settled by Greek colonists during the late seventh century BC. Herodotus (iv, 151-2) described the foundation of the settlements from Thera.[5] Five cities were established by the sixth century at Cyrene, Ptolemeis, Taucheria Apollonia and Berenice.[6] This region was controlled from afar under the Hellenistic kingdom of the Ptolemies and under the aegis of Ptolemaic Egypt. Cyrene was ceded to Rome at the end of the first century BC and the region became a Roman province, known as Cyrenaica. Thereafter, until the beginning of the fourth century AD, it was governed by proconsuls together with the island of Crete. Cyrenaica remained an outpost of the Roman civilisation on the shores of the Mediterranean, assuming importance when Augustus stationed a fleet at Apollonia during the early first century AD.[7] With administrative reforms of Diocletian (AD 297) Cyrenaica was separated from Crete and divided into two provinces of Libya Inferior and Libya Superior.[8]

CYRENE

Cyrene was the leading city of Cyrenaica from its foundation in the seventh century to the early fourth century AD (Fig. 1).[9] The city was located along a valley of Wadi Bel Gadir.[10] The valley dropped steeply away from cliffs on the north side of the site, upon which were located the city walls, as well as the sanctuary, which was situated on even steeper ground.[11] The natural setting is one of great isolation, whereby the south of the agora is reached by rock-cut stairs in the steep cliff.[12] In 331 BC, Cyrenaica submitted to Alexander the Great and under his successors, the Ptolemies of Egypt, the city was aggrandised to its greatest extent with the positioning of a grid as structure over the flat outlying areas of the town.[13] As the most Hellenistic of cities in Libya by definition, the scenographic planning depended ever more on the architectural exploitation of the landscape, situated on a sloping valley site. The grid organised the key elements of the city plan from the acropolis to the open, sloping terraced area of the agora.

Inscriptions and sculptures from the early first century AD suggest a growth period during the reign of Augustus. Fine figure sculpture adorned newly constructed monumental structures.[14] In AD 115, a Jewish revolt wreaked havoc in most sectors of the city. Improvements were made under Hadrian with additional buildings inserted into the grid plan at strategic locations.[15] The acropolis was situated on the south side.[16] The upper area in vicinity of the Caesareum entrance was approached by two small flanking staircases, immediately in front of the propylaeum. The street of Battus led directly on to the Agora and the Acropolis. Flanking the south side of the Agora was an exedra with several honorary monuments such as a small Corinthian tetrastyle temple of first century AD. These monuments were linked by the earlier Hellenistic portico of the herms which adjoined the south-east corner. At the centre a naval victory monument notionally linked the city to the sea and her port Apollonia.

Figure 1. Cyrene, Rostra. (source: author's photograph)

The upper thoroughfare was lined with free-standing commemorative monuments. Roman typology proliferated from one gate to another in combination: a major bath building and the presence of other distinctly Roman civic buildings were interrelated by the grid architecturally, forming a coherent whole. A sense of monumentality was inherent in the large-scale buildings rising above their surroundings. The Caesareum was entered by a flights of steps creating space and facilities for large crowds in a small geographical area.[17] Other performance-led buildings, such as the odeion, appeared with increasing frequency in confined spaces, often side by side. The odeion was positioned to west of the Caesareum and created another busy urban venue.

The citadel contained sacred temples, and a series of paths linked it to the other valley where the Archaic sanctuary was located. It included the sixth century Temple of Zeus at Cyrene.[18] A well-documented sequence of dating exists for this sanctuary site from 580 BC to 200 AD. The temple was destroyed in the Jewish revolt in AD 115 and rebuilding took place afterward.[19] Connective architecture was installed in the form of porticoed walkways, which led towards these sacred public buildings. The grid remained

the singular element of organisation within this confined geographical space. Order was maintained by the orthogonal grid. Overall, the underlying theme here is the continuity of urban planning practice from the Greek to the Roman period, which produced a coherent system of urban organization: the citing of individual buildings in relation to each other and to their physical setting, producing the physical drama of the city. The difficulties of the site prove overwhelmingly that an inherited grid could be adapted for ease of purpose.

APOLLONIA

Apollonia/Sozusa was originally the port of Cyrene. It acquired the status of city and a distinctive name in the late Hellenistic period. Its civic territory was dependent on Cyrene. It sought economic independence, which was gained from it flourishing as a port in its own right. Apollonia became one of the five Pentapolis cities, independent from Cyrene during the later Hellenistic and early Roman period. It grew from relative obscurity to a seat of government of the Pentapolis by the fifth century AD.[20] This move gave rise to a level prosperity that was connected to the Christianising of the city as well as the construction of several elaborate churches. These transformations point to the presence of a bishop and the presence of a governor's palace: public and private buildings were not set in opposition to one another but mixed together. Taken together, this suggests the presence of a ruling Byzantine elite in the fifth century and sixth century AD. Procopius does not mention any new buildings connected to Justinian and last references to the city suggest city wall was blocked up and later abandoned by AD 642 Arab invasions.[21]

Apollonia lay at the edge of a limestone ridge that had a maximum height of 25.40m, east to west, and the gebel was a mile and a half wide. The sea eroded much of the shoreline and a great deal of the main harbour disappeared into the sea. The main walls of the city were Hellenistic. The walls contained seven gates with the acropolis located on the eastern end. Eastern and western signal forts were located outside the city walls. Further to the west, beyond city perimeter walls, there was the site of a classical temple in a sanctuary. The theatre, which was located outside the walls and hollowed-out of the sandstone ridge, looked out to sea in a gesture embracing the seascape as a backdrop. Although it dated to the Hellenistic period, it was remodeled in the late first century AD. Apart from the Hellenistic development there was also a Roman phase, the main traces of which is a large bath complex dating to the second century AD; this is located to the west of the agora.

Figure 2. Apollonia, Western Church. (source: author's photograph)

In AD 365 an earthquake destroyed much of Cyrenaica.[22] Although this serves as a *terminus post quem* for many other Cyrenaican cities, it subsequently gave rise to Apollonia's brightest phase. The city was restructured to include the building of three intra-mural churches (Fig. 2).[23] In the city centre of Apollonia a pathway was reworked to serve the Christian community and the positioning of the Christian churches along this linear routeway demonstrated the way in which the collective memory of cities and smaller settlements could be altered with the introduction of new building forms.[24] The churches did not encroach upon the earlier Roman buildings. This is a clear example of newly constructed monuments set within an ancient plan following and ancient progressional sequence. The linearity of the arrangement along a parallel causeway close to the seashore suggested this route became the connective armature through the city, ultimately superseding the grid.

CONCLUSION

This type of comparative study enables us to examine the extent of the success of utilisation of the Classical plan in the urban expansion of the cities of Cyrene and Apollonia in Roman Libya. The effect of urban scenography and the importance of the vista were paramount in each case. This was capitalised on during the Roman period by introducing innovative set-pieces of Roman trophy-building which helped to liberate the Hellenistic plan from its over-reliance on the setting. The new manner in Roman building, with its emphasis on axiality, the creation of artificial vistas and appreciation of the importance of building mass, demonstrated a different emphasis in architectural design, especially noted in the situation of Cyrene where, despite the small area of available land, its potential was fully realised.

A comparative study of this nature enables us to examine the extent of urban development in the context of Romanisation and to observe in the case of these Hellenistic cities how their architectural landscape was reshaped and adapted to suit Roman rule. Cyrene can be read as the product of a lengthy process of organic development, where the first Greek citizens traversed from religious sanctuary on a plateau along the Sacred Way to the agora. The location of a grid in the agora of the Hellenistic city facilitated the

cities' successful expansion, until natural acts such as earthquakes later caused discontinuity and the city fell into disuse.

Apollonia, situated by the sea, was planned with a grid and defense-walls to facilitate the port. Urban renewal intensified during the late Roman period and it became an important Early Christian and Byzantine centre. This spiritual impetus altered the focus of activity in the city so that the orthogonal grid was overcome organically, as worshippers processed between the church buildings that were located strategically along certain paths. In Apollonia, the urban grid was decimated to make room for new urban structures of a Christian nature. This change generated a new cityscape and framework – yet substantial portions of an earlier grid can be retraced and the wider plan can, to varying extents, be recovered.

In both sites, as primary functions changed over time, so too did pathways along sacred routes. Whether they linked classical sanctuaries on upper to lower city levels, or transgressed new routes to Byzantine churches that pivoted around a Sacred Way, these routes embodied memory.

In Cyrene, the grid established during the Hellenistic period became superior to an earlier organic linear arrangement. Cyrene was an extensive city site, which was settled for a long period of time. Apollonia by contrast, was the port of Cyrene, laid out on flat plain by the sea that facilitated a harbour. The two cities were linked by a road. As its role became less dependent on Cyrene's economic generation, Apollonia became more independent as a city in its own right. Its Roman grid plan was subsumed into a sacred route posed by the construction of early Christian and Byzantine churches. A new order prevailed and adjusted the trend. Apollonia utilised a linear plan that resulted in a change in use in the city; the physical manifestation of this suggested that the underlying premise of ocularisation was no longer at the core of town planning needs.[25] With the introduction of Christianity to the city, three churches were built using a linear pattern, and there also appears to have been a corresponding societal shift from pagan to Christian ritual: the Roman practices of daily visits to the agora and the assembly of citizens changed to a focus on Christian ritual and worship. The Christian demands of attending several churches during one feast-day overcame the use of the grid plan. A quicker, more direct route along the linear armature – a simple pathway cut through the grid – enabled ease of access to churches placed outside of existing Classical structures. This indicates that the grid was no longer functioning as originally conceived. It seems that while the grid imposed a necessary discipline within the confined geographical space of Cyrene, it functioned as a counterproductive mechanism when new directions in the social order emerged in Apollonia.

Endnotes

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2. J. Pallasmaa *The Eyes of the Skin Architecture and the Senses* (London:Academy Editions 2007).

3. L. Mulvin, 'Perge and Side: the 'Mad Men' or Rival cities of Roman Pamphylia' Paper for Society of Architectural Historians Conference, Detroit, 18 -21st April, 2012.

4. Another point of physical comparison that links these cities of Pamphylia and Libya: H.W. Blundell in the late nineteenth century photographed the walls of Apollonia and compared them to the walls of Perge as both were constructed to create an overwhelming impression of striking fortifications and with a degree of awareness to the site. H.W. Blundell, 'A visit to Cyrene in 1895', *The Annual of the British School at Athens*, Vol. 2, (1895/96,) 113-140.

5. The Greek historian and geographer Strabo (book 17) referred to both cities, giving particular attention to Cyrene which he said had been founded by the inhabitants of Thera and linked to the Battus people. The city had longstanding relations and associations with Crete. Strabo described how the city flourished: "from the excellence of the soil, which is peculiarly adapted for breeding horses, and the growth of fine crops. It has produced many men of distinction, who have shown themselves capable of worthily maintaining the freedom of the place…having continued for some time to be governed by kings, it finally came under the power of the Romans. In the neighbourhood of Cyrene are Apollonia, Barca, Berenice, and other small towns close by".

6. J. Boardman, 'Evidence for the Dating of Greek Settlements in Cyrenaica', *The Annual of the British School at Athens*, Vol. 61 (1966), 149-156.

7. G. D. B. Jones and J. H. Little, 'Coastal Settlement in Cyrenaica', *The Journal of Roman Studies,* Vol. 61, (1971), 64-69.

8. R. G. Goodchild, Mapping Roman Libya, *The Geographical Journal*, Vol. 118, No.2, (1952), 142-152.

9. F.W and H.W. Beechey, *Proceedings of the Expedition to Explore the northern coast of Africa from Tripoli eastwards* (London, 1828), 432.

10. Recent archaeological investigations are working to establish the character of the site of Cyrene through GIS see R. Cuttler, V. Gaffney, H. Goodchild, J. Rossiter, G. Sears, *Cyrene Archaeological Project: Field Survey, GIS and Assessment 2006, Birmingham Archaeology Report PN* (2006), 1320.

11. Beechey, *Expedition*, 424.

12. Late in the seventh century BC a Greek colonist, Battus led a group of prospective colonists from Thera to North Africa they settled on Cyrene five miles inland settled on the crest of Gebel Akhdar an elongated mass of limestone nearly 2000 ft high and 90 miles long separating Cyrene from the littoral. Precipitous face of Gebel at the lower stages was impassible. Therefore the route to sea roundabout and Apollonia was the nearest feasible stopping point at twelve miles from the parent city of Cyrene. The two sites were connected in antiquity by road in the Greek period and modified in the Roman period, see D. White, 'Excavations at Apollonia, Cyrenaica Preliminary report'. *American Journal of Archaeology*, Vol. 70, No. 3 (Jul., 1966), 259-265

13. M. Luni, Il Forum – Caesareum Di Cirene, *Libyan Studies*, 25 (1994), 191-209.

14. S. Walker, 'The Imperial Family as Seen at Cyrene' *Libyan Studies* 25 (1994), 167-184.

15. G. Caputo and R. G. Goodchild, 'Diocletian's Price-edict at Ptolemais (Cyrenaica)', *Journal of Roman Studies* 45, 1955.106-115. Refer also to J. M. Reynolds and J. B. Ward-Perkins, *Inscriptions of Roman Tripolitania* (Rome: Britiah School at Rome, 1951).

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21. Ellis, ibid.

22. D. White, 'Excavations at Apollonia, Cyrenaica Preliminary Report', *American Journal of Archaeology*, Vol. 70, No. 3 (1966), 259-265.

23. John Griffiths Pedley, 'Excavations at Apollonia, Cyrenaica Second Preliminary Report', *American Journal of Archaeology*, Vol. 71, No. 2, (1967), 141-147.

24. J. B. Ward-Perkins and R. G. Goodchild, ed. J. M. Reynolds, 'Christian Monuments of Cyrenaica', *Society for Libyan Studies*, monograph 4, (Hertford:Quadrant Print & Design Solutions, 2003).

25. R. G. Goodchild, *Cyrene and Apollonia: an Historical Guide,* (Tripoli: Department of Antiquities*,* 1970). For further discussion on urban appraisal, See also W.L. MacDonald, *The Architecture of the Roman Empire II An Urban Appraisal* (New Haven and London: Yale University Press)*.* 133.

THE MEMORY REMAINS:
CONTINUITY AND CHANGE IN THE PATTERN OF SYMBOLIC ENCOUNTERS WITHIN THE PLANNING GRID OF PEDNELISSOS

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INTRODUCTION

Rapoport[1] uses the term 'non-verbal communication' to indicate a communication mechanism through environment, particularly the built environment, that functions to organise social relations and acts as a mnemonic device reminding people of the behaviour expected of them. A large amount of literature exists on how a non-verbal communication mechanism operated in antiquity through the use of common elements and symbols as well as building types in the built environment, which were carefully arranged to create encounters between people and those elements of the built environment having symbolic associations.[2] It was through these encounters that the message embodied in the elements of symbolic significance was conveyed. Messages embodied in the built environment and encounters through which these messages were conveyed presented a great variety. For instance, an encounter could involve simply viewing a symbolic object, say an honorific monument, and appreciating the message, in this case the power claim of the person to which the monument was dedicated. In another instance the encounter could take the form of utilizing a public building, for example bathing in a bathhouse, which, in addition to its function, also meant participating in and promotion of a certain way of life. As similar encounters took place again and again during day-to-day activities of people, the messages conveyed via non-verbal communication became inscribed onto the collective memory of citizens, which eventually created a sense of collective identity, shared values and a way of life.

Buildings functioning in the creation of a collective identity through a non-verbal communication mechanism will be referred as 'symbolic buildings', while the encounters between these buildings and people, through which a message is conveyed, will be referred as 'symbolic encounters' throughout this study.

This paper aims to investigate and exemplify how a mechanism of non-verbal symbolic communication via the built environment similar to that of other Classical cities operated in the ancient city of Pednelissos. The role of the planning grid in regulating the pattern of non-verbal symbolic communication and the development and change of this pattern through time will be questioned.

THE BUILT ENVIRONMENT OF PEDNELISSOS: PLANNING AND THE GRID

The highland area around the Lake District in southwestern Asia Minor was known as Pisidia in Antiquity and characterised by massive mountain ranges alternating with deep river valleys, plains and a number of lakes of different sizes.[3] Together with its harsh climate and vegetation cover, Pisidia represented an uncivilised landscape associated with hostility in the eyes of neighbouring communities.[4]

The ancient city of Pednelissos was located towards the southern fringes of Pisida on the southwestern slopes of a free-standing rocky outcrop, which, with its rapid rise and steep slope, would have provided strategic advantages on the one hand but made planning and construction considerably difficult on the other. Pottery finds indicate a continuous inhabitancy from at least the third century BC through to the seventh century AD, and probably onwards into the twelfth century AD.[5]

The ancient city of Pednelissos spreads over two fortified areas: an upper city with three gates, in the north, south and west, each protected with a tower and a lower city entered through an arched gate with a tower above, which was protected by a further tower to the southwest of the gate.[6]

The city was laid out on terraces. It is clearly evident particularly in the upper city that the terraces conform to a loose grid pattern following the contours of the terrain. Long and narrow rectangular blocks of the grid extend with their longer sides across the slope and wrap around the southwestern face of the hill on which the city is situated. Streets running roughly in the northwest – southeast direction across the slope have milder gradients and intersect at roughly perpendicular angles with the northeast – southwest streets, which extend along the slope and often have steps to compensate the steep topography. Pednelissos therefore exemplifies the application of the 'grid-iron' principle in a 'loose' way to fit into an irregular and steep terrain.

Two major axes are identifiable. The first one extends from the northern gate of the upper city to the *agora* and continues further southeast for a long while, while the second axis connects the gate of the lower city to the *agora*, where it intersects with the first major axis. The resemblance of these two axes to the *cardo* and *decumanus* of a typical Roman city is noteworthy.

A central location within the grid is occupied by the civic centre of the city. An *agora* and a market building both of which are dated to the late Hellenistic period form the focus of this centre.[7] The southeastern part of the *agora* is occupied by a large basilical church, which was converted from an earlier building, possibly a *bouleuterion*.[8] A smaller church exists to the north of the *agora* along the main axis. A large amount of *spolia* from an earlier temple, which probably existed around the same location, was used in the construction of this church.[9] Another large basilical church is situated in the southern part of the settlement; whereas, a further smaller one exists to the north of the western gate.

It is not easy to conclude whether the grid was also applied in the lower city, since most of the buildings other than the monumental ones have not been preserved. A Roman period bathhouse[10] to the northeast of the gate and a later church by the western fortifications of the lower city suggest that a grid similar to that of the upper city exists since their shape and orientation resemble the building blocks of the upper city. In contrast, an imperial temple and a church to the northeast of the temple stand out with their irregular orientations. Some parts of the eastern fortifications of the lower city were demolished during the imperial period and a square extending beyond the fortifications was built.

A sanctuary situated outside the city walls and connected to the southern gate via a paved street comprises a rock-cut relief identified as Apollo and dated to the fourth century BC.[11] The area was fortified and a church was built to the south of it in later periods.

Finally a number of tombs and honorific monuments such as *osthotecs*, sarcophagi and monumental tombs in temple form are lined along the roads reaching to the gate of the lower city and the northern gate of the upper city.[12]

The development of the ancient city of Pednelissos can be divided into three periods, Hellenistic, Roman imperial and Christian, each with its own motive, agenda and architectural language. Hellenistic period was the period in which Pednelissos gained the outlook of a Classical city in the Greco-Roman sense with its monumental public buildings and squares, public amenities and honorific monuments planned within a grid system. Hellenistic period, in this sense, focused on creating a Hellenic identity. During the imperial period the city was brought in line with the Roman ideals of city planning. The construction of monumental buildings characteristic of the Romans, such as the bathhouse and the imperial temple, and re-arrangement of a previously occupied quarter in the Roman fashion with squares and monumental buildings displayed the might of the conquerors and promoted the benefits of being a member of the Roman Empire.[13] Therefore the focus of the imperial period was legitimising and praising the new conquerors of the region and stamping the Roman identity throughout the settlement.

With the spread of Christianity, both monumental and small-sized churches took over the planning grid manifesting the Christian identity of the city. It was Christianity this time that was praised and promoted.

This overview shows that a mechanism of non-verbal communication through the built environment operated also in the ancient city of Pednelissos. Built environment was used as a medium of communication for power display, identity creation and promotion of certain ideas and beliefs. Urban features such as the monumental public buildings, military establishments, squares and honorific monuments stand out as the most conspicuous tools of non-verbal communication traceable in the archaeological record.
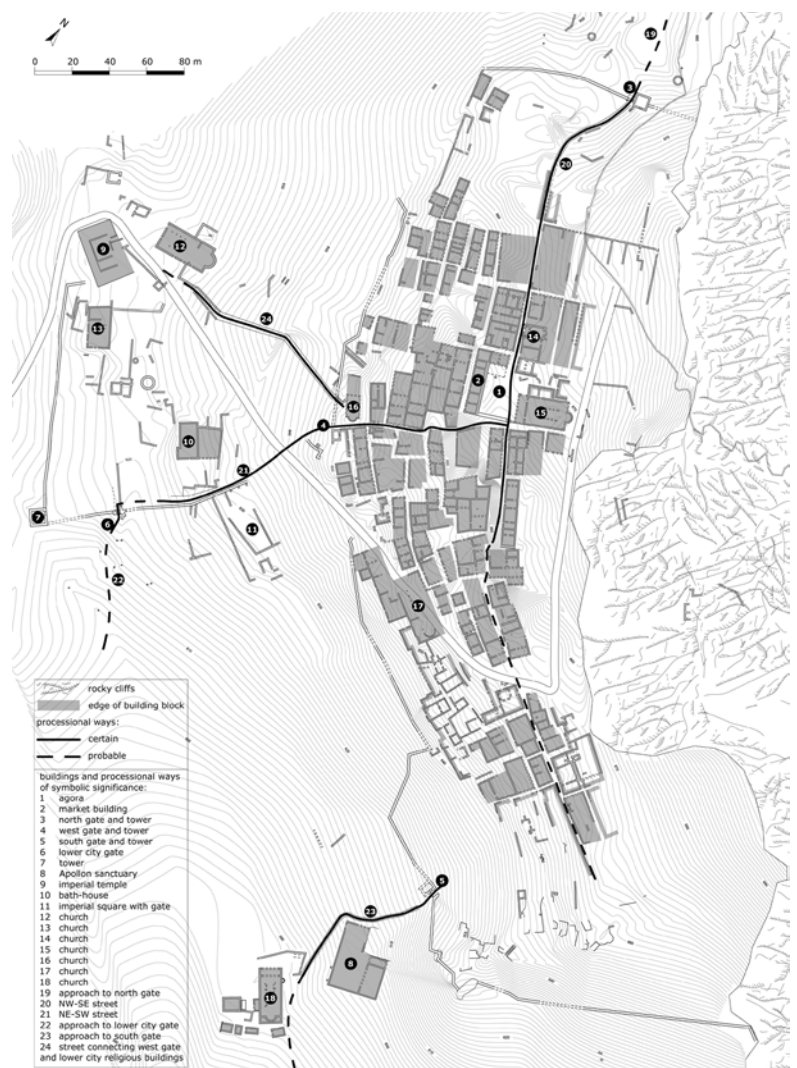
Figure 1. Plan of Pednelissos showing the grid blocks, symbolic buildings and processional ways.

(source: adopted by the author from the site plan by the Pisidia Survey Project)

NON-VERBAL COMMUNICATION NETWORK: THE PATTERN OF SYMBOLIC ENCOUNTERS

Symbolic buildings and locations together with grid blocks as far as traceable from the visible remains are marked on a map of Pednelissos in figure 1.

It emerges from this figure that some streets established a greater number of symbolic encounters than the others. The approach to the northern gate from outside the fortifications, for example, would have provided symbolic encounters firstly with tombs and honorific monuments along the way, which would have reminded of and established links with the past of the city. At the same time, the northern gate and its imposing tower would have provided an impressive backdrop and established another encounter probably symbolising the power of the city. On entry into the city the gate led onto one of the main axes of the grid, along which encounters with the temple in earlier times and the church in later times would have taken place reflecting the belief systems of the citizens. This finally led into the *agora*, where many encounters symbolising the civic life and promoting the powerful actors of it would have taken place. Such streets comprising significant numbers of symbolic encounters are referred as processional ways and also marked on the plan.

An approach of a similar character to the gate of the lower city existed among tombs and honorific monuments, also with impressive views of the gate and the tower nearby as well as the southwestern fortifications of the upper city in distance. The street from this gate to the *agora* also has a processional character, with encounters with the bathhouse, Roman square, western gate, the church beside it and finally the *agora*, establishing links with the civic life, cultural identity and belief system of the city. However, encounters along this street were of a more civil character in contrast to the others where encounters with religious buildings are dominant.

The street from the temple and later churches in the lower city to the church beside the western gate and the approach to the southern gate were two other processional ways of a dominantly religious character. Nevertheless, it should be noted that the plan in figure 1 is inevitably biased in favour of the final phases of the occupation since it is not always possible to comment on the earlier phases without further excavation work. Yet, in many instances it is possible to establish a relative chronology and comment on the periods of buildings during which they were in use (Fig. 2).

Figure 2 shows the locations of symbolic buildings and processional ways in isolation within the grid and regardless of their size. The functions of buildings and periods during which they were in use are also indicated. In this respect, squares represent religious buildings, triangles represent civic buildings and circles represent military buildings. Hatches filling in these shapes indicate the periods during which the buildings were in use; horizontal hatches being the Hellenistic, vertical hatches being the imperial and diagonal being the Christian period. One shape is placed for each of the period during which the building existed.

Figure 2 shows that a number of symbolic buildings communicating a message of political, religious or ideological content were distributed over the city layout. The major axes of the planning grid as well as the approaches to the city gates were arranged in a way to connect
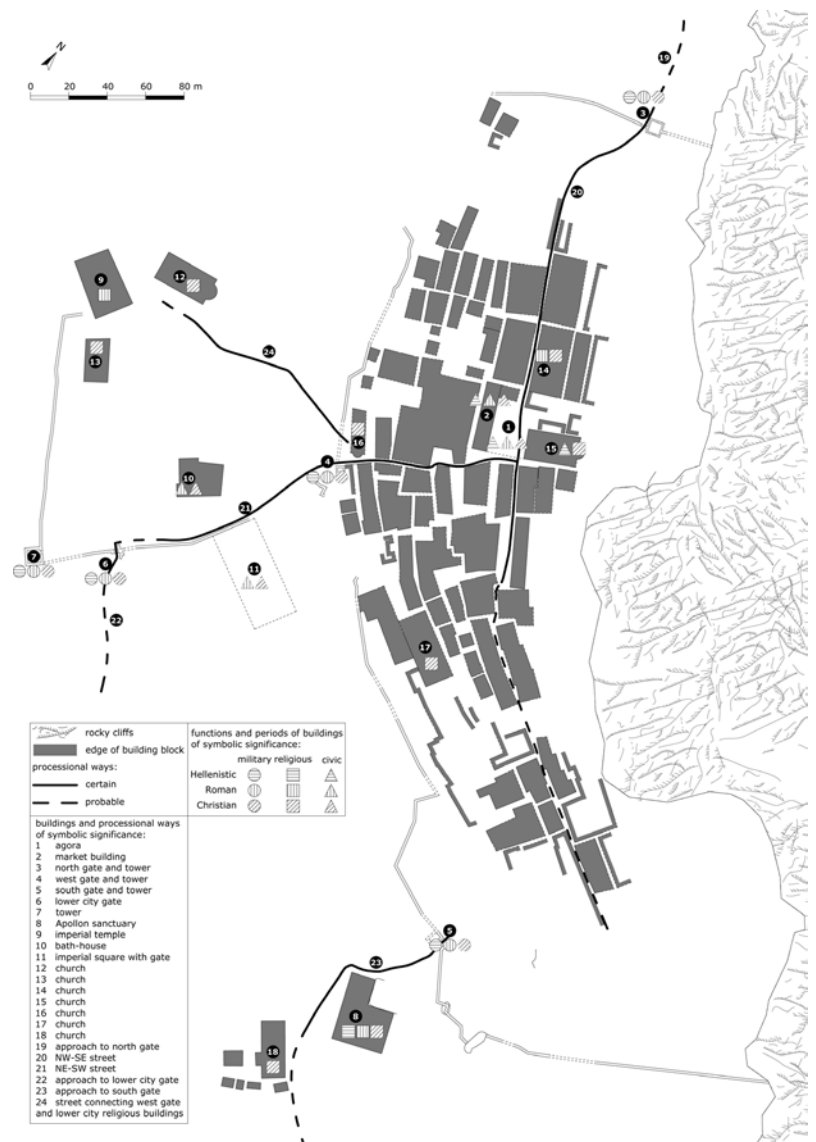
Figure 2. Schematic plan of Pednelissos showing the grid blocks and the pattern of symbolic encounters. (source: plan by author)

these symbolic buildings and establish a significant number of symbolic encounters. These processional ways formed a symbolic communication network and seem to have continued to have a character dominated by symbolic encounters from the very beginning until the final abandonment of the city.

Similarly, locations comprising symbolic elements of non-verbal communication seem to have preserved their characters. Even though the content and message of this non-verbal communication changed through time, it was still the same location that provided the symbolic encounters. Moreover, kind of the encounter also remained the same; that is, a location establishing symbolic encounters of a religious nature continued to provide religious encounters even if the belief systems, and hence the forms and symbolisms changed dramatically. Similarly, locations establishing encounters of a civic nature remained to be associated with civic encounters. Only exception to this is the church in the southeast of the *agora*, which is thought to have been associated with encounters of a civic nature earlier. This could be interpreted as an interference of the religious system into the civic system in the built environment.

Likewise, the area around the Apollon sanctuary and around the temple in the lower city seems to have been associated with encounters of a religious nature from the very beginning until the end, as well as the *necropoleis* outside the city gates. It is noteworthy that the site chosen for the spatial manifestation of a new religious system coincided with, even replaced as in the case of the small church to the north of the *agora*, that of the previous one. One explanation to this could be that the collective memory which was programmed to look for encounters of a religious character at a certain point was inevitably inclined to prefer the same location for the encounter of the same character, even when the belief system radically changed.

It is also interesting that a separate processional way was established to connect the location of apparently religious importance around the temple in the lower city to the west gate and the church beside it. Although this is only a short way from the northeast – southwest main axis of the planning grid, it seems that it was deliberately preferred to restrict the encounters of a dominantly religious character to one processional way and those of a dominantly civic character to another.

Approaches to the city gates were also specially articulated to be replete with symbolism and meaning. These, on the one hand, established encounters of dominantly a religious character through *necropoleis* and sanctuaries, on the other provided symbolic encounters with the strong fortifications and defensive towers, probably symbolising the claims of power and might of the city.

Grid seems to have been employed from the earliest stages of settlement development until the abandonment of the city. Each of the succeeding periods transformed and added something to the contents of the grid; however, the idea of the grid planning was not altered. Although the terrain was problematic for a regular grid-iron layout, adoption of a loose grid to fit the topography must have had symbolic associations, such as having been a spatial manifestation of being a 'civilized city' or an indication of a 'tamed' land. This would have meant a lot for peoples perceived as hostile and barbarous by outsiders.

CONCLUSIONS

Pednelissos was one of the Pisidian cities that incorporated a mechanism of non-verbal communication through the built environment like those in other Classical cities. A number of public buildings, squares and monuments also functioning as tools of non-verbal communication to symbolize and convey political, religious or social messages were distributed over the city. A grid pattern was employed in a loose way to adjust to the irregular topography, which could also be interpreted to have been an act of symbolic importance manifesting the status of a city and claiming ties with the 'civilised' world. Use of the planning grid from the earliest times of the city until the final abandonment shows the continuity of the symbolic significance of it. The grid functioned as a tool to control and regulate the distribution of the symbolic elements of the built environment and the pattern of encounters between these elements and people. The content of messages, form and symbolisms of non-verbal communication embodied in the built environment changed dramatically during the course of time. However, this change seems to have taken place gradually, embracing and slowly transforming the legacy of past symbolisms rather than radically and rapidly destroying them at once. This gradual change found its reflection in the built environment as a locational continuity of symbolic encounters of the same nature. The streets and paths that stand out with greater numbers of symbolic encounters taking place along them also preserved their character and showed continuity throughout the life of the city. It is concluded, therefore, that although the forms and contents of non-verbal communication gradually changed, the pattern of symbolic encounters showed continuity and the collective memory remained in Pednelissos.

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12. L. Vandeput et al., "Pisidya Yüzey Araştırması Projesi: Pednelissos 2003 Sezonu," 240.

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URBANISATION IN INLAND SICILY:
ACCULTURATION ON THE PERIPHERY OF THE GREEK WORLD

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The regular, rigid, orthogonal urban grid was a fundamental aspect of the Greek foundations (*apoikiai)* in Sicily established in the last third of the eighth century BC. By the end of the archaic period, nearly all of the Greek cities of Sicily were designed on orthogonal urban grids with standardised street intervals and house lots.[1] The regular division of land constituted a principal activity in the process of establishing a new city: as early as the beginning of the seventh century BC, Syracuse, Naxos, and Megara Hyblaia were arranged with houses built with consistent alignments and at regular intervals. At Megara Hyblaia, the residential area of the city was laid out with equal size plots 12 m by 10 m wide arranged in pairs sharing common passageways c. 0.45 m wide. Houses occupied only a small portion of each lot and were limited to single-room structures, c. 15-25 m², while the remainder of the lot was used as a garden. Across the archaic period the houses grew first by doubling their size and eventually filling the entire lot and even building across the walkway or ambitus that originally divided them. These initial equal-size lots developed into a full urban grid by the beginning of the sixth century BC as the borders of the plot transformed into streets articulating the city.[2] Similar alignments at Syracuse and Naxos had a higher density of houses, but retained a uniform and consistent alignment within the new city.[3] In this way, the division of land into equal sized plots that occurred within a generation of the foundation of the *apoikiai* also formed the basis for the regular, orthogonal grid actualised with the development of the *polis*. Both within the city and outside of the walls, the parceling out of plots has been understood as a reflection of the consensus of the community, who organized the equal division of space – both domestic and agricultural – perhaps under the direction of a leader or facilitator. Sufficient evidence exists at the colonies of *Magna Grecia* to determine that the nascent *poleis* were governed by a "geometry of organized space" applied with a spirit of egalitarianism and *isonomia*.[4]

The archaic urban grid in Greek Sicily took the form of a *per strigas* system, which incorporated the principal thoroughfares (plateiai) usually arranged oriented east-west, intersecting narrower north-south streets (stenopoi); together they formed the city blocks (insulae). Houses were generally arranged in pairs across the insulae, divided by an ambitus running the length of the block. The salient aspect of the *per strigas* is the arrangement of the plataiai at large intervals to create long, narrow insulae that maximized urban density by providing large, uninterrupted space for housing at the expense of accessibility and articulation within the city. This type of urban plan is found at Selinus, Akragas, Kasmenai and Himera. Selinus, founded in the middle of the seventh century by Megara Hyblaia, developed an urban grid c. 580-570 BCE.[5] Acropolis Hill contained twelve city blocks spanning the interval between the acropolis sanctuary and the foot of the Manuzza Hill; streets in this area appear in three different widths corresponding to their importance: 9.0 m and 6.5 m (plateiai) and 3.5 m (stenopoi). The stenopoi are arranged at intervals of 29 m, so that the width of the city block plus the width of the street nears 32 m, or 100 Doric Feet.[6] Insula length varies between 195 and 180 m on the Manuzza Hill, while one single plateia articulates the Acropolis Hill with the result that insulae run substantially longer.[7] The stenopoi were divided into square lots (*oikopeda*) 14.5 m a side. Akragas, a sub-colony of Gela founded in 580 BC, was laid out on an orthogonal and completely regular urban

Figure 1. Akragas, after L. Braccesi "Agrigento nel suo divenire storico (580 ca.-406 a.C)" (source: *Veder Greco. Le Necropoli di Agrigento* (Rome: L'Erma di Bretschneider, 1988), fig. 1)

grid: six plateiai (7-10 m wide) oriented WSW-ENE are arranged at intervals of 35 m (Fig. 1). At least 30 stenopoi (5.25 m wide) intersect the plateiai in a *per strigas* system with blocks as long as 280 m long. The insulae were divided longitudinally and transversally by ambitus, creating lots for house groups; some archaic houses were as large as 200 m². Kasmenai was also built on a rigid urban grid filling the entire area within the fortification wall, an area of c. 60 ha. Stenopoi (c. 3 m) ran NNW-SSE

forming city blocks 25 m wide.[8] 38 stenopoi in a *per strigas* system extend uninterrupted across the residential area; the largest extended for up to 400 m; each of the city block was divided by transversal ambitus that created lots c. 25 m² that were subdivided into four house units. Recent excavations at Himera, located on the north coast of Sicily, have revealed a regular urban grid in the plain below the upper city dating to the last quarter of the sixth century BC. This area contained a set of stenopoi (6.0-6.3 m wide) oriented NNW-SSE contained city blocks measuring 41 m apiece, which is the widest city block measurement found on the island. Each city block was divided longitudinally and also transversally, with ambitus arranged at regular 20 m intervals: the alleyways divide the blocks into squares measuring c. 20 m a side; each lot was composed of one or more houses.[9] No evidence for perpendicular plateiai has been uncovered to date, however, streets leading from the Temple of Victory are known. Based on the locations of the excavated streets, the excavators hypothesize up to 24 city blocks in the lower settlement, extending west from the Temple of Victory across the northern edge of the plateau.[10]

The use of a specific metrology, i.e. 100 DF, indicates a high degree of preplanning and the forceful imposition of a grid on the natural terrain. The use of precise metrology became a guiding principle in urban design in the ensuing centuries: further refinements in metrology become hallmarks in urban planning in Sicily in the Classical period. The *per strigas* system is refined so that insula length was shortened and commonly established as a multiple of the width. This development appears for the first time in Sicily at Naxos in the first quarter of the fifth century BC. The city underwent a radical transformation c. 470 BC when a new urban grid was laid out over the razed remains of the archaic city. The new grid plan presented a development over the archaic *per strigas* system in that it was based in proportional relationships, with each element of the city relating to another in a rational way. Two of the three plateiai measure 6.5 m, while the central thoroughfare, Plateia A, was larger at 9.5 m. In the same manner, the stenopoi measured 5.0 wide with the exception of stenopos 6, which is 6.5 m wide. The wider stenopos is 1.3 times the width of the others; the plateiai exhibit a similar relationship (1:1.4). The streets were laid out to form insulae measuring 39 x 156 m, a ratio of exactly 1:4. Excavations of Isolato C4 have revealed much information regarding the domestic architecture at Naxos. The city block was divided longitudinally by an ambitus (1.5 m) and also by transversal ambitus (0.4-0.9 m), creating square *oikopeda* measuring up to 18.4 m² apiece. Within the area investigated, the lots contained between one and four houses; a common house plan measures 9.2 x 5.5 m. Metrology of the inhabitation helps to identify authorship of the new urban grid. The principal dimensions of the urban grid can be calculated in Doric feet. Thus, the insula 39 x 156 m is equal to 120 x 480 Doric feet. The central plateia (Plateia A) 9.5 m = 30 DF, house lots of 18.4 m² = 56 DF. The adoption of the Doric Foot has been interpreted as an indication of Syracusan control of the site and reconstruction under Hieron I.[11] Similar rationality is found in the early Classical urban grid at Kamarina: the central E-W plateiai measure 10.7 m wide, while the stenopoi, arranged at 35 m intervals, extend 5.4 m wide, equal to one-half the width of the larger streets. Likewise the city blocks are arranged in a rational relationship, 35 x 136.5 m, near a 1:4 ratio. Houses were divided within the insulae by a longitudinal ambitus (.5 m wide) and consisted of 3-4 rooms arranged around a courtyard; on average the houses covered 220 m² apiece.

The most prominent theoretical bases for urban planning in the Greek world are associated with Hippodamus of Miletos, to whom theories of civic as well as physical divisions of the city are attributed. The cities associated with Hippodamus were designed with "parcel" plans dependent upon a hierarchy of streets, which, if not directly attributed to one individual, appear for the first time in the middle of the fifth century BC. Hippodamus has been associated with the urban plans at Miletus, Piraeus, Thurii and Rhodes, although the Piraeus is the only site for which his attribution has widespread acceptance. The cities of ancient Sicily, for the most part, were not arranged with rectangular parcels as at Thurii or the Piraeus, although rational city designs dominated in the late Classical and Hellenistic periods. Among the later foundations, such as Solunto and Tyndaris, greater influence may be seen from early Classical designs, such as at Naxos, than from "Hippodamean" plans at Piraeus or Thurii.[12] The primary division of urban space within Sicilian cities remained the insula, rather than the rectangular parcel, even if the insula is divided by longitudinal and transversal ambitus. This type of city grid is incorporated into Hellenistic urban planning, which included considerations for public and private space in a comprehensive hierarchy.

Beyond individuating the urban grid, archaeological investigations in Sicily have focused on understanding interactions between Greeks and indigenous populations. Through prolonged contact, Greek goods and aspects of Greek society were slowly adopted across the archaic and Classical periods. This process of acculturation or "Hellenisation" has been well documented for pottery, metalworking, language and even the religious sphere.[13] However, to date trends in urban planning have not received similar treatment, so that this category is underdeveloped as diagnostic devices for identifying cultural identity in the "colonial middle ground." Since urban planning is coterminous and interdependent with domestic architecture, the point of departure for investigations at indigenous sites should begin with early archaic settlements that exhibit designs, forms, and building techniques that reflect Greek influence. Situated along the route from Katane to Morgantina on a ridge south of the Gornalunga River, The Montagna di Ramacca (560 m asl), holds an indigenous settlement that flourished in the early archaic period.[14] Inhabited from

the late Iron Age, the site demonstrates Greek acculturation across the archaic period, attested by domestic assemblages and tomb finds. House RM, dated to the late seventh century BC, consists of two rooms, one with a hearth and low bench along the north wall, the other used for food storage. The bipartite design and the differentiation of space in the house are innovations that have been attributed to Greek contact.[15] The house is similar in plan to Building 2 at Monte Maranfusa, which was divided into two spaces, one of which yielded loom weights, indicating its use for domestic activity. In the second half of the sixth century BC, multi-room houses, often articulated around a paved courtyard, appeared at numerous inland sites including Castiglione, Sabucina, and Vassallaggi. The articulation of the house and the specialisation of domestic spaces are design aspects adopted from Greek domestic architecture. Another indicator of Greek influence on indigenous domestic architecture is the use of sun dried mud brick, inasmuch as this material and technique is not part of the indigenous repertoire. At Morgantina, between the end of the seventh-beginning of the sixth century BC the material is attested for the first time on the Farmhouse Hill. Monte Castellaccio di Paternò, located in the upper Simeto River Valley bordering the foothills of Mt. Etna, revealed a precocious adoption of Greek forms and building techniques. Capanna A6, in use in the ninth and eighth centuries BC, is oval in plan and built with wattle and daub walls; it was built over by the rectangular Building A5, constructed with a stone socle and mudbrick. The floor of the building yielded an imported Corinthian kotyle Aetos 666 and a Rhodian bird cup, both dated to the end of the eighth century BC.[16] Elsewhere at the site, Building B2 (seventh century BC) is apsidal with a stone socle and mud brick upper; sixth century buildings are composed of multiple rooms, some of which were used for storage: all of these indicate acculturation in domestic architecture. Greek architectural elements were also incorporated into sanctuary buildings and monumental constructions. A temple model from Sabucina, dated to the last quarter of the sixth century BC, presents a prostyle temple with horseman and horse acroteria and pedimental sculpture depicting a gorgon mask and perhaps a silenus.[17] From the same site, a Doric column capital with an octagonal, rather than circular, echinus demonstrates an indigenous adaptation of Greek elements.

The adoption of Greek architectural elements does not necessarily indicate an urban reconfiguration based on the orthogonal Greek grid system. Sites such as Sabucina and Polizzello located on gently sloping hills and articulated on terraces, remained without central axes or aligned houses.[18] Across the seventh and sixth centuries BC, urbanisation at indigenous sites develops with rectangular houses and straight streets, such as at Castiglione, Scornavacche, and Hill 2 at Vassallaggi; houses at the latter, identified with San Cataldo located 8 km west of Caltanissetta, were arranged around a central street, and generally align with parallel walls, although orthogonal stenopoi are not part of the plan. A similar arrangement is seen at Morgantina-Cittadella, which in the sixth century BC saw a new urban arrangement that included a sacellum.[19] A lesser degree of planning is found at Castiglione located on a long ridge overlooking the Plain of Kamarina. Individual houses consist of an agglomeration of rooms, often joined at their short ends; open, common space, in which silos were identified, was left adjacent to the houses. The site has been noted for its organic development and the lack of a rigid urban grid.[20] Major and minor streets did not consistently intersect at right angles, and no regular intervals governing the street plan have been discerned. A neighbouring site, Scornavacche, was built with houses uniformly aligned on a central set of streets, however, this arrangement seems to be the result of expediency of construction rather than a regular division of urban space.[21]
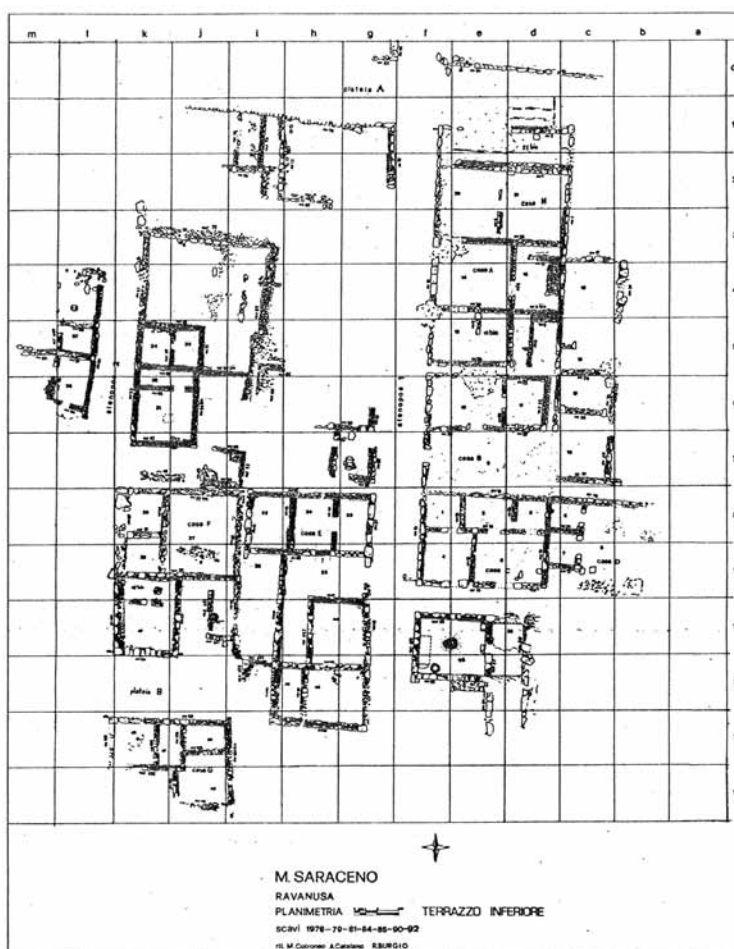
Figure 2. Monte Saraceno di Ravenusa, Plan of urban grid on lower terrace (source: Calderone et al. (eds.), *Monte Saraceno di Ravenusa: Un ventennio di ricerche e studi* (Messina: Sicania, 1996), fig. 13)

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In the Sicilian hinterlands, urban plans that prioritize a rigid, orthogonal network of streets with a regular design appear slightly later and come following impetus from Greek foundations. [22] Regular plans have been proposed for inland sites at Monte Saraceno, Vassallaggi (Hill 3), Monte Gibil Gabib, and Monte Bubbonia. The adoption of the urban grid at these sites is the result of direct political control by Greek cities more than advanced acculturation. Nowhere is this seen more clearly than at Monte Saraceno di Ravenusa, located above the west bank of the Salso River 20 km north of Licata, which developed with a regular, rigid urban grid in the sixth century BC. [23] The indigenous site came under Greek influence shortly after the foundation of Gela and later was brought under control of Akragas, perhaps during the reign of Phalaris. The lower terrace was built with an orthogonal urban grid with regular and standard component parts. Two plateiai measure 5.5 m wide, while the stenopoi from range between 3.8 and 4.0 m wide (Fig. 2). The streets form city blocks 23 x 55.5 m (1:2.4), substantially more compact than the arrangement at Greek cities of western Sicily for the archaic period. As well, the city block interval of 23 m is considerably smaller than that at Himera, Akragas, and Naxos. [24] The insulae are divided longitudinally either by a solid party wall or by an ambitus. The city blocks were also divided by transversal ambitus that create rectangular lots varying in size between 170 and 260 m^2, assumed to contain two houses apiece. [25] Houses excavated on the lower terrace were arranged similar to those of the upper terrace and extended on average c. 100-120 m^2, with rooms varying from 2.6 x 2.6 to 6 x 5 m. House H contains a room (21 Bis) 11 x 2.6 m, presumably open to the north, communicating with two large rooms, articulating a space typical of a pastas house, the only such example seen to date at the site. [26] Urban grids have also been identified at Monte Bubbonia, which fell into Geloan control in the seventh century BC while Monte Gibil Gabib and Vassallaggi Hill 3 (dated later than Hill 2), both in the sphere of Akragas, demonstrate Greek type urban planning with uniformly oriented houses of equal size dating to the second quarter and the second half of the sixth century BC, respectively. [27]

Urbanisation in the Classical period brought an expansive urban grid to Morgantina-Serra Orlando: insulae measure 38.8 x 107.58 m (330 x 120 Doric feet, 1:2.75 proportion). Each of these is divided into lots 17.9 m wide (55 feet) and 18.5 m deep (57.5 feet), for a city block consisting of 6 lots across by two deep, divided by a longitudinal ambitus: by the midpoint of the fifth century BC, all of the developed refinements of Greek urban planning are found in the hinterland of Sicily, on the periphery of the Greek world. [28]

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3. Maria Costanza Lentini, *Naxos di Sicilia: L'abitato colonial e l'arsenale navale. Scavi 2003-2006* (Messina: Sicania, 2009), 19-26; D. Mertens 2006, 74-75.

4. A. Di Vita 1996, 264-265. Here it is worthwhile noting that the division of land as part of the act of founding a city is also recorded in Homer' *Odyssey* in the context of King Nausithous of the Phaeacians who established temples of the gods and alloted land holdings (*Odyssey* 6.10).

5. Erik Østby, "Chronological Problems of Archaic Selinus", *Acta Hyperborea* 6 (1995), 85-87. The foundation date remains controversial. Diodorus Siculus (13.59.4) reports the foundation date as 242 years before its destruction by the Carthaginians in 409 BC, thus 650 BC, while Thucydides states the city was founded 100 years after the foundation of Megara Hyblaia, i.e., 627 BC (Thuk 6.4.2). The higher chronology is generally accepted.

6. Using a Doric foot measuring between .326 and .328 m.

7. Antonio Rallo, "Nuovi aspetti dell'urbanistica selinuntina." *ASAtene* 62 (1984), 90.

8. A. Di Vita, "Un contributo all'urbanistica greca di Sicilia: Casmene," in *Atti del settimo congresso internazionale di archeologia classica* (Rome: L'Erma di Bretschneider, 1961).

9. Nunzio Allegro and Stefano Vassallo, "Himera – Nuovi ricerche nella città bassa (1989-1992)," *Kokalos* 38 (1992), 140.

10. Stefano Vassallo, "Himera: Ricerche sull'urbanistica arcaica della città bassa," in Rosalba Panvini and Lavinia Sole, *La Sicilia in età arcaica: dalle apoikiai al 480 a.C.,* (Palermo: Centro regionale per l'inventario, la catalogazione e la documentazione, 2009).

11. A. Di Vita, "Naxos nell'urbanistica delle città greche di Sicilia." in: *Naxos a quarant'anni dall'inizio degli scavi. Atti della tavola rotonda, Giardini Naxos 26 - 27 ottobre 1995* (Palermo: Museo Archeologico di Naxos, 1995).

12. Similarly, N. Cahill points out that the urban plan at Olynthus, which shares proportional relationships with Tyndaris and Morgantina, does not demonstrate the salient urban features attributed to Hippodamus: Nicholas Cahill, *Household and City Organization at Olynthus* (New Haven: Yale University Press, 2002), 5.

13. Rosa Maria Albanese Procelli, *Sicani, Siculi, Elimi: Formi di Identità, Modi di Contatto e Processi di Trasformazione* (Milan: Longanese, 2003).

14. Enrico Procelli, "Modi e Tempi Della Ellenizzazione Calcidese al Margini Della Piana di Catania," *Kokalos* 34-35 (1988-89); E. Procelli, "Aspetti e Problemi dell'Ellenizzazione Calcidese nella Sicilia Orientale," MEFRA 101 (1989). The site has been identified as Ergetion (Polyaen. V 6, Steph. Byz. s.v. Ergetion), see Eugenio Manni, "Su Alcune Recenti Proposte di Identificazione di Centri Antichi della Sicilia," in *L'Italie Préromaine et la Rome Républicaine: Mélanges Offerts à Jacques Heurgon* (Rome: Ecole Française de Rome 1976), 615.

15. R. M. Albanese Procelli "La ricezione dei modelli dell'architettura greca nel mondo indigeno: le strutture abitative, in Patrizia Minà (ed.), *Urbanistica e Architettura Nella Sicilia Greca* (Palermo: Regione Siciliana, 2005), 126.

16. Brian McConnell, "Monte Castellaccio di Paternò le fasi di età arcaica," in Rosalba Panvini and Lavinia Sole, *La Sicilia in età arcaica: dalle apoikiai al 480 a.C.,* (Palermo: Centro regionale per l'inventario, la catalogazione e la documentazione, 2009).

17. Rosalba Panvini (ed.), Caltanissetta: Il Museo Archeologico (Palermo: Regione Sicliana, 2nd edition 2006), 75.

18. R. M. Albanese Procelli 2003, p. 146-163, Sabucina: Rosanna Mollo Mezzena, "Sabucina. Recenti scavi nell'area fuori le mura. Risultati e problematiche," in *Storia e archeologia della media e bassa Valle del'Himera*, Atti del Convegno Licata-Caltanissetta 1987, (Palermo: Regione Siciliana, 1993); Polizzello: Raffaele Mambella, "La problematica dei sacelli circolari del santuario sicano di Polizzello (CL)," *RdA* 11 (1987). A recent analysis of urbanism in the protohistoric period in Italy traditions by R. R. Holloway demonstrates that urbanism was predicated on the establishment of a seat of power with attendant nucleated settlements, an arrangement that was not mutually exclusive to orthogonal grids, but at the same time did not promote their development: R. Ross Holloway, "Urbanism, Etruscan, Italic and Latin in the light of recent developments," in P. Attema, A. Nijboer and A. Zifferero, (eds.), *Communities and Settlements from the Neolithic to the Early Medieval Period: Proceedings of the 6th Conference of Italian Archaeology held at the University of Groningen, Netherlands, April 15-17, 2003*, (Oxford: Papers in Italian Archaeology VI: Bar International Series 1452, 2005), 32-38.

19. Carla Antonaccio "Urbanism at Archaic Morgantina," *Acta Hyperborea,* 7 (1997); Ilaria Romeo, "Sacelli arcaici senza peristasi nella Sicilia greca," *Xenia* 17 (1989), 14-16.

20. Excavation summaries: see especially Giovanni Di Stefano, *Indigeni e Greci nell'entroterra di Camarina* (Ragusa: Utopia Edizioni, 1995), 57-60.

21. Principal excavations: G. Di Stefano 1995, 31; A. Di Vita, "La penetrazione siracusana nella Sicilia sudorientale alle luce della più recenti scoperte archeologiche," *Kokalos* 2, (1956).

22. Settlement nucleation and the role of the indigenous population in urbanization in Greek Sicily are discussed by Franco De Angelis, "Equations of Culture: The Meeting of Natives and Greeks in Sicily (CA. 750-450 BC)," *East and West* 2 (2003), 32-36.

23. Monte Saraceno has long been identified with Kakyron: Dinu Adamesteanu, "Monte Saraceno ed il problema della penetrazione rodio-cretese nella Sicilia meridionale," *ArchCl* 8 (1956), 138-140. Mercenaries of the Deinomenids took flight following the fall of the tyrants and sought refuge at Omphake, Kakyron and Krastos (Pap. Oxyrh. IV, 665, 1-7). See also Jos de Whaele, *Acragas Graeca. Die historische Topografie des griechischen Akragas auf Sizilien. I Historischer Teil*, (The Hague: Gravenhage- Staatsuitgsverij, 1971), 45-47.

24. The excavators note that the insula interval is 28% smaller than that at Himera Alta (32 m), 44% smaller than Himera Bassa (41 m), 34% and 41% smaller than Akragas (35 m) and Naxos (39 m), respectively: Anna Calderone, "L'abitato," in Anna Calderone, et al. (eds.), *Monte Saraceno di Ravenusa: Un ventennio di ricerche e studi* (Messina: Sicania, 1996), 57.

25. A. Calderone 1996, 57, 63-67.

26. On the pastas house in Sicily, see Ernesto De Miro, "La casa greca in Sicilia," in *Philias Charin: Miscellanea di studi classici in onore di Eugenio Manni*, (Rome: G. Bretschneider, 1979); E. De Miro, "La casa greca in Sicilia," in Francesco D'Andria and Katia Mannino, (eds.), *Ricerche sulla casa in Magna Grecia e in Sicilia: Atti del Colloquio,* (Galatina [LE]: Congedo Editore, 1996).

27. On Monte Bubbonia: Pietro Orlandini, "L'espansione di Gela nella Sicilia centromeridionale," *Kokalos* 8 (1962), 85-86; on Monte Gibil Gabib: D. Adamesteanu, "Scavi e ricerche dal 1951 al 1957 nella Provincia di Caltanissetta," *NSc* (1958), 400-408; on Vassallaggi: E. De Miro 1996, 34-38.

28. Malcolm Bell, "Excavations at Morgantina, 1980-1985: Preliminary Report XII," *AJA* 92 (1988), 316, 319-321.

Siege Views and the Representation of Cities in Early Modern Europe

SESSION CHAIR:

Pieter Martens (K.U.Leuven, Belgium)

This session examines the depictions of cities under siege in the period 1450-1700. Siege warfare was omnipresent in early modern Europe. Nearly all important cities were fortified, and many of them were besieged at least once. Accordingly, images of cities at war compose a large part of the visual culture of the time. Countless siege views were produced in all kinds of media (drawings, prints, paintings, tapestries, etc.), displaying a rich variety of forms (frontal views, aerial perspectives, iconographic plans, etc.), formats (book illustrations, broadsheets, mural maps, etc.), and functions (reconnaissance, news reporting, commemoration, etc.). Some siege images were genuine masterpieces of graphic art and urban cartography.

Notably, siege views pose problems of topographical as well as narrative accuracy: their development is connected to that of cityscapes and mapmaking as well as to that of news prints and graphic journalism. Traditionally, depictions of sieges were memorial works: posterior fabrications devoid of any documentary verisimilitude. But after 1500, they frequently purported to be "true portraits": accurate, eyewitness records of the actual events. At the same time, representations of cities became more accurate due to improvements in perspective drawing and surveying techniques. Siege warfare was certainly an important motor for innovations in urban cartography. For many cities, the earliest accurate representations to have survived are siege scenes. Yet even when made from first-hand observation on site and despite their claims to veracity, depictions of sieges always mixed historical fact with artistic fiction. Thus the abundant imagery of cities under siege offers an enormous potential for urban and architectural historians, but there are many pitfalls awaiting those who want to use such images not merely as illustrations, but as sources in their own right.

This session explores the variety of uses for the testimony of siege views. Papers may consider images in all media of specific sieges or cities, from the whole of Europe (including the borderlands of the Ottoman Empire in eastern Europe and northern Africa). They could also address thematic issues, such as the use of different representational modes, iconographic conventions and genre clichés; the dissemination of siege prints and of innovations in city planning; the commissioning of siege pictures as a form of self-representation; or ensembles of siege scenes and their display in princely palaces or public buildings.

SIEGE VIEWS AND THE GENIUS MILITANT IN VENICE AND THE KINGDOM OF NAPLES

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INTRODUCTION

Celebrations of military victories were highly popular from the fifteenth to the seventeenth century, and were carried out in every conceivable technique and form of representation, including bronze, marble, wooden and silver reliefs, tapestries, ivory and bone engravings, wooden intarsia work, *scagliola* and wax. As Martha Pollak notes:

> Siege views were part of the wider interest in the representation of the city in the Renaissance. The monumental city view and siege had been suggested as appropriate for the decoration of princely residences by Alberti and other early Renaissance humanists; the works of art produced to commemorate, for instance, the Battle of Pavia fulfill this recommendation, linking military representation to Renaissance practice of artistic representation and thus also to antiquity. This established fully the military panorama as a bona fide work of art.[1]

This tradition continued until the baroque period. Reliefs were particularly common on commemorative monuments of military leaders and noblemen who had participated in the main European wars. Iconographic prototypes and models thus spread widely and reached not only educated and scientific circles of collectors, but also the military.

The main centres of production of such reliefs during the sixteenth century were in France and Spain.[2] This is evident not only in the great royal pantheons, most notably the abbey of Saint-Denis and the Escorial monastery, but also in the commemorative monuments of aristocratic families associated with the Habsburg dynasty. In the areas under Spanish influence the main uses of siege reliefs were tomb monuments. Their composition varied, but was frequently similar to altarpieces, as the Iberian clientele requested formal and iconographic characteristics reaching back to medieval tradition. In the iconography of such works secular themes often outweigh the sacred ones; what usually stands out is the glorification of the individual. In the seventeenth century relief maps were increasingly being incorporated, though their use remained a military prerogative.

In Italy the best known examples of this type are the monument to Don John of Austria in Messina (1572-73) and the monument to Alexander Farnese in Piacenza (1620-25). The former, a work by Andrea Calamecca, represents Don John, the half-brother of Philip II, trampling on the head of Ali Pasha. The pedestal has four bronze reliefs, depicting the disposition of the two fleets at the battle of Lepanto, the Turkish defeat, and the fleet anchoring in the port of Messina. It is a respectful homage to the victor of Lepanto, but also a self-celebration of the Sicilian city through the bird's-eye view. This view seems to repeat an iconography that was widespread in European atlases at the time, but it really is a unique document for the history of Messina, since it represents the city's morphology in the very year it was ordered.[3] In Piacenza, bronze panels decorate the pedestal of the sculpture. One of these represents the attempt to destroy the bridge over the River Scheldt during Farnese's siege of Antwerp. Francesco Mochi was commissioned to represent Antwerp using descriptions and military drawings of the time. We can see rafts, sailing ships and forts. On the right there is the group led by Alexander Farnese, in a space of which one half is taken up by water and countryside with the city in the distance, and the other half by a clear sky.[4]

VENICE

Such personal celebrative reliefs became particularly popular in Venice and in Naples. A comparison of them in these two cities affords an understanding of the spread of these iconographic models and their assimilation in different political and cultural contexts. In Venice the most significant monuments are those that celebrate the *capitani da mar*.[5] The intense political tensions in Europe encouraged the Republic to adopt a self-celebratory rhetoric, followed by laudatory propaganda of its main military heroes. The large number of literary and iconographic sources about these reliefs is indicative of the search for new means of representation and of the attempt to obtain closer ties between aristocratic and popular culture, while keeping the basic message understandable. The initiative of the monument's commission could either be taken by the protagonist itself, or by the government.

The commissions of these monuments reflect the concerns mentioned above. From the early seventeenth century the Venetian State tried to influence the city's sensibility. Between the 1650s and 1690s, the prototype of Jacopo Foscarini's monument in the Carmini church, in which the military leader's dignity is given special prominence, is taken up by such patrons as Alvise

Mocenigo (in San Lazzaro dei Mendicanti), Antonio Barbaro (in Santa Maria del Giglio) and Francesco Morosini (in San Vidal, only partially carried out). These works make full use of the Venetian baroque architectural vocabulary, which was principally used by families that attempted to climb the social ladder. Paradoxically, experimentation was more frequent in religious than in civic buildings, but visual programmes typically contained more secular than religious themes, and the most prominent one was individual glorification.

The composition of the Foscarini monument in Santa Maria dei Carmini follows the style of Jacopo Sansovino, with representations of naval battles on the two sides of the pedestal.[6] According to recent studies, Foscarini himself requested to be named captain at the end of the sixteenth century, but it was his son who later, between 1618 and 1620, ordered the monument from Francesco Contarini.

The monument to Alvise Mocenigo in San Lazzaro dei Mendicanti is based on the idea of a triumphal arch.[7] Giuseppe Sardi, a Venetian architect of Swiss origin, was responsible for the iconographic programme. Even if Mocenigo was aware of the importance of his deeds to the Republic, there is no mention of the Republic on his monument. In accordance with local custom there are four high-reliefs, which here represent the fortifications of Candia. These were known from descriptions and illustrations by Marco Boschini in *Regno tutto di Candia delineato,* published in Venice in 1651.[8] In the middle is Mocenigo's portrait as he is watching the procession of the army, wearing ceremonial clothes. On the side there are two reliefs representing views of the battles of Candia and Paros. On Mocenigo's is the flagship *Galeazza*, the only overt reference to the Serenissima.

Antonio Barbaro required a more complex architectural celebration. He is one of the most popular characters of the Candia wars: the siege lasted twenty-two years, and ended in 1669 when Turkey conquered the island. Barbaro took advantage of the war to raise his own social and economical status. This culminated in the spectacular façade of Santa Maria del Giglio, the last and most emblematic example of baroque self-celebration in Venice.[9] The façade, designed by Giuseppe Sardi, with input from Barbaro himself, was built between 1678 and 1681. In the lower order there are four niches with statues of the brothers of the captain, his own portrait being in the central compartment of the upper order. Pictures of naval battles and ships are above; below, in the mirrors of the bases of the half-columns, there are low-reliefs portraying scenes of the life of Antonio Barbaro, as well as planimetric views of the cities where he had political offices, namely Rome and five cities ruled by the Serenissima: Zara, Candia, Padua, Corfu, and Split.

NAPLES

In Naples, the tradition of sculpted representations of sieges is much older. It is connected to the Spanish world, and more specifically to the humanistic culture of the Aragonese court. The oldest recorded example is the double bronze door of Castel Nuovo, with its six relief panels, a work realized after 1465 by the French bronze caster Guglielmo Monaco together with Pietro di Martino.[10] The war is described in three episodes, in the chronological order of the events. In the two upper panels there is the ambush laid to king Ferrante by his disloyal barons with the fortified cities of Teano and Calvi and the *extra moenia* church of Torricella. The lower part shows the capture of Accadia by the Aragonese army in 1462 (Fig. 1); the scene depicts with great realism how a bombard is piercing the towers and walls of the city. In the middle there is the conclusive battle of Troia, with the river Sannoro on one side and the walls, the embattled towers and the gate of the Apulian city on the other.

In the sixteenth and seventeenth centuries Naples was part of the Spanish realm, yet at the same it was far enough removed from the Habsburg court in Madrid to allow its local aristocracy to freely display its own magnificence.[11] Sculpted siege views are mainly found in the sepulchral monuments of Spanish viceroys of the Kingdom of Naples. To begin with, there are the works of Giovanni da Nola, who collaborated with Iberian artists.[12] The first one is the monument to Viceroy Ramón de Cardona at Bellpuig in Catalonia (c.1522),[13] which has a war scene taking place in a marshland area, to commemorate his participation in the battle of

Figure 1. Guglielmo Monaco and Pietro di Martino, The capture of Accadia by Aragonese army in 1462, after 1465. Naples, detail of the bronze doors of Castel Nuovo.

Ravenna (1512) as the commander of the army of the League of Cambrai. There is also the monument to Viceroy Pedro de Toledo and his wife Maria Ossorio Pimentel, ordered from Giovanni da Nola and placed in the Church of San Giacomo in Naples by his son in 1570.[14] On three sides of the pedestal there are low-reliefs representing the Viceroy going to Baia to fight against the corsair Barbarossa and setting him to flee, the Viceroy heading the delegation to welcome Charles V outside Porta Capuana, and the victory over Turkey at Otranto. In the first low-relief there is a view of Pozzuoli, which has recently been recognized as an important iconographic source on the fortifications in the Gulf of Pozzuoli.[15]

There is another interesting bronze panel preserved on a tomb monument in the Kindom of Naples. In 1535, when the Emperor Charles V visited Seminara, he was received by Count Carlo Spinelli, who later distinguished himself as military leader in the Spanish army and was raised to the title of duke by Philip II.[16] Spinelli's claim to fame is the foundation of the citadel of Palmi in 1564.[17] It is noteworthy that two episodes, though distant in time by thirty years, are represented together in one of the four low-reliefs on the pedestal of Carlo Spinelli's monument prior to the Calabrian earthquake of 1783. The panel underlines the continuity in sculptural representations of fortified cities.

The wide circulation and popularity of cartographic views of major military events can be illustrated by two tomb monuments to Neapolitan military captains, Vincenzo Carafa and Carlo Spinelli, from the first half of the seventeenth century.[18] The 1603-11 monument to Vincenzo Carafa in the church of Santi Severino e Sossio in Naples can be attributed, for the sculptural part, to Geronimo d'Auria, one of the best pupils of Giovanni da Nola.[19] It takes up almost completely the wall of the left transept. The structure is still based on sixteenth-century formulas: halfway between an altar and a stylised urn, in a temple-like shape with two pairs of columns that support the pediment.[20] Besides the columns six low-reliefs, by an anonymous artist close to d'Auria, represent the military campaigns in which Carafa took part: the siege of Malta (1565), the battle of Lepanto (1571), the conquest of Tunis (1573), the battle of Alcântara (1580), the siege of Antwerp (1584-85), and the battle of Fontaine Française (1595). The latter seems to be an ideal reconstruction based on written descriptions of the battle, since it is different from the print by Braun and Hogenberg which sets the event in open countryside.

As Carafa took part in the siege of Tunis, together with Don John of Austria, and in the siege of Antwerp, together with Alexander Farnese, it is interesting to compare their respective monuments. While the scenes on Don John's monument in Messina and on Farnese's equestrian monument in Piacenza aim to be celebrative, the battle scenes on Carafa's monument in Naples apparently have a different function: they seem to be in chronological order, like small votive panels, as if this were a token of gratitude for having had the opportunity to commemorate those moments, after an active and glorious life serving the Empire and the Catholic Church.

Such low-reliefs, with a Latin inscription commemorating the event, give representations an iconic meaning, while from the diversity of typologies it is clear that the sculptor used a large number of sources. The representation of the battle of Lepanto shows the well-known formation of the fleets of the Holy Alliance and the Ottoman Empire before the final engagement, as if it were a simple reproduction of an existing print.[21] The perspective view of Tunis is clearly taken from the 1576 edition of Braun and Hogenberg's *Civitates Orbis Terrarum*, but the representation was corrected in order to have a better contextualization of the event that occurred two years earlier. For this reason the view does not include the new fort erected by Don John of Austria after the conquest of the city.[22]   In the battle of Alcântara the troops are shown following the river and Lisbon facing the ocean with the naval fleets ready to attack. Behind the town walls, the part of the city that was later

Figure 2. Anonymous artist from the circle of Geronimo d'Auria, Laboranti Melitæ auxilium fert (Siege of Malta, 1565), early seventeenth century. Naples, Santi Severino e Sossio.

destroyed by the 1755 earthquake is recognizable.[23] The representation of Malta (Fig. 2) is derived from a fresco by Matteo Perez d'Aleccio of 1576 representing *Il soccorso piccolo al borgo di notte tempo a dì 5 luglio 1565*. This painting was engraved by the same artist in 1582, and again by Anton Francesco Lucini in 1631.[24]

The tomb monument to Carlo Spinelli dates from 1634. The sculpture by Giovan Marco Vitale was placed in the second chapel of the left transept of San Domenico Maggiore in Naples.[25] During the Thirty Years' War, Spinelli distinguished himself on many battlefields, from the Low Countries to Bohemia and Moravia, until his death in 1634.[26] He already commissioned his own tomb monument during his lifetime; it was erected after his death by his brother. Spinelli's tomb, in contrast to Carafa's, has a much more traditional plan, with two views on the front of the side pedestals, under statues of Hercules and Minerva, without any historical framework or representations of battles. The two city views, Breda and Prague, take inspiration from sixteenth-century

atlases, with details taken from Joris Hoefnagel's views from the 1572 edition of the *Civitates Orbis Terrarum*. It is possible that the author of the reliefs was not the sculptor, and that the two artists were commissioned on different occasions.

In these practices, the deceased individual is rescued from oblivion by immortalising the attributes that marked the triumphs of his life. Like Venice's *capitani da mar*, Vincenzo Carafa and Carlo Spinelli are typical representatives of the ancient Neapolitan aristocracy that found luck and glory on Europe's battlefields, at the service of Spain. Their portraits, associated with views of their heroic military feats, helped create the myth of the genius militant of Naples. This was eventually turned into a hagiographic celebration by Bishop Raffaele Maria Filamondo's *Genio bellicoso di Napoli*, published in 1694, at the end of the series of siege views discussed here.

Endnotes

1. Martha Pollak, "Representation of the city in siege views of the seventeenth century: The war of military images and their production," in James D. Tracy (eds.), *City walls. The urban enceinte in global perspective* (New York: Cambridge University Press, 2000), 609.

2. For France, see Michèle Beaulieu, "Pierre Bontemps et le tombeau de François Iᵉʳ," in Alain Erlande-Brandenburg and Jean-Michel Leniaud (eds.), *Études d'histoire de l'art offertes à Jacques Thirion. Des premiers temps chrétiens au xxᵉ siècle* (Paris: École des Chartes, 2001), 149-62. For Spain, see María José Redondo Cantera, *El sepulcro en España en el siglo xvi. Tipología y iconografía* (Madrid: Ministerio de Cultura, 1987). For a typological study, see Erwin Panofsky, *Tomb Sculpture. Four Lectures on its Changing Aspects from Ancient Egypt to Bernini* (London-New York: Thames and Hudson, 1964); Michel Ragon, *L'espace de la mort. Essai sur l'architecture, la décoration et l'urbanisme funéraires* (Paris: Albin Michel, 1981).

3. Nicola Aricò, "La statua, la mappa e la storia. Il Don Giovanni d'Austria a Messina," *Storia della città* 48 (1988), 51-68.

4. Cristiana Morigi Govi and Massimo Tirotti (eds.), *I bronzi di Piacenza. Rilievi e figure di Francesco Mochi dai monumenti equestri farnesiani* (Casalecchio di Reno: Grafis ed., 1986); Davide Gasparotto, *Mochi e i Farnese. I cavalli di Piacenza* (Milan: 5 Continents, 2006).

5. Augusto Roca De Amicis, "Le chiese e le facciate commemorative," in Id. (eds.), *Storia dell'architettura nel Veneto. Il Seicento* (Venice: Marsilio, 2008), 248-71; Matteo Casini, "Immagini dei capitani generali «da Mar» a Venezia in età barocca," in Marcello Fantoni (eds.), *Il 'Perfetto Capitano'. Immagini e realtà (secoli xv-xvii)* (Rome: Bulzoni, 2001), 219-70.

6. Paola Rossi, "Le statue del monumento Foscarini ai Carmini," *Venezia arti* 15/16 (2005), 73-7.

7. Emanuela Zucchetta (ed.), *San Lazzaro dei Mendicanti. Il restauro del monumento di Alvise Mocenigo* (Venice: Marsilio, 2004).

8. See Philip L. Sohm, *Pittoresco. Marco Boschini, his critics, and their critiques of painterly brushwork in seventeenth and eighteenth-century Italy* (Cambridge: Cambridge University Press, 1991).

9. Marina Fresa (ed.), *Santa Maria del Giglio. Il restauro della facciata* (Venice: Marsilio, 1997); Wladimir Timofiewitsch, "Einige Bemerkungen zur Fassade von Santa Maria del Giglio in Venedig," in Guido Beltramini and Adriano Ghisetti Giaravina (eds.), *Studi in onore di Renato Cevese* (Vicenza: Centro internazionale di studi di architettura Andrea Palladio, 2000), 473-88; Martin Gaier, *Facciate sacre a scopo profano. Venezia e la politica dei monumenti dal Quattrocento al Settecento* (Venice: Istituto Veneto di Scienze, Lettere ed Arti, 2002), 336-52.

10. Marina Santucci (ed.), *Le porte di Castel Nuovo. Il restauro* (Naples: Electa Napoli, 1997).

11. Georg Weise, *Studi sulla scultura napoletana del primo Cinquecento* (Naples: Edizioni Scientifiche Italiane, 1987), 83-117; Francesco Abbate, *Storia dell'arte nell'Italia meridionale. Il Cinquecento* (Rome: Donzelli, 2001), 6-21. Joan-Luís Palos, *La mirada italiana. Un relato visual del imperio español en la corte de sus virreyes en Nápoles (1600-1700)* (València: Publicaciones de la Universitat de València, 2010), 221-9.

12. Francesco Abbate, *La scultura napoletana del Cinquecento* (Rome: Donzelli, 1992), 181-258.

13. José Teixidó Balcells, *El mausoleo de Ramon Folch de Cardona* (Lerida: Imprenta Monástica-Poblet, 1961); Joan Yeguas i Gassó, "Giovanni da Nola e la tomba del viceré Ramon de Cardona: il trasferimento da Napoli a Bellpuig e i legami con la scultura in Catalogna," *Napoli nobilissima* 6 (2005), 3-20; Id., *El mausoleu de Bellpuig. Història i art del renaixement entre Nàpols i Catalunya* (Bellpuig: Saladrigues, 2009).

14. Roberto Middione, "San Giacomo degli Spagnoli a Napoli: il sepolcro di Pedro de Toledo," *FMR* 3 (2004), 99-124.

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16. Aloisio Antinori, "Carlo V in Calabria", in Simonetta Valtieri (ed.), *Storia della Calabria nel Rinascimento. Le arti nella storia* (Rome: Gangemi, 2002), 17-28. See also Simonetta Valtieri, "I linguaggi e i modelli", Ibid., 189-204. On the work of Andrea Calamecca, see Francesco Negri Arnoldi, *Scultura del Cinquecento in Italia Meridionale* (Naples: Electa Napoli, 1997), 186 and 206.

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24. Albert Ganado and Maurice Agius-Vadalà, *A Study in depth of 143 Maps representing the Great Siege of Malta of 1565* (Valletta: Publishers Enterprises Group, 1995), I, 413, 466-9, 473-4; II, 110, 127, 155.

25. Nappi, "Catalogo," 171-2.

26. Corrado Argegni, "Condottieri, capitani, tribuni", in *Enciclopedia bio-bibliografica italiana* (Rome: Tosi, 1937, III), 356.

ACCURACY AND CONVENTION IN FOUR TAPESTRIES REPRESENTING THE CONQUEST OF TWO MOROCCAN CITIES BY AFONSO V OF PORTUGAL (C. 1475)

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The 'Pastrana Tapestries', a set of four tapestries, depict the conquest in 1471 of the Moroccan cities of Asilah and Tangier by a Portuguese army led by King Afonso V. These tapestries are one of the greatest legacies of Portugal's late medieval expansion and form the principal source about its military actions in Morocco. At the same time, the Pastrana set is quite exceptional in the European context, because it represents a contemporary event, while nearly all tapestries of the period deal with mythological allegories, chivalric legends, ancient history, or religious subjects.

The illustration of the conquest of the two cities is divided in two groups. The first contains the three tapestries of the taking of Asilah: 'Landing at Asilah', 'Siege of Asilah' and 'Assault on Asilah'; the second group consists of one tapestry: the 'Conquest of Tangier'. The tapestry set dates from the final quarter of the fifteenth century, but the exact year of manufacture remains unknown, as there are no written sources about them. It has been argued that the tapestries were manufactured in Flanders, probably in Tournai, in the workshop of Pasquier Grenier. These arguments were based on comparisons of technique and style.[1]

The available sources on the cities of Asilah and Tangier are limited.[2] They are, however, documented by a number of chronicles, most importantly those by Gomes Eanes de Zurara, Rui de Pina, Garcia de Resende, Damião de Góis, and Duarte Nunes de Leão.[3] Only Bernardo Rodrigues, in his *Anais de Arzila* (1560-1561),[4] describes the daily life in the city of Asilah, and says something about the syncretism between the local costumes and the new ones that then appeared. Some precious architectural and archaeological information emerged in 1994 during the restoration of the keep of the Portuguese fort in Asilah, with an important text by Rafael Moreira.[5] However, the main work about this fortified city remains Adolfo L. Guevara's *Arcila durante la ocupación portuguesa (1471-1549)* from 1940.[6]

The iconographic sources are also limited.[7] The most important representations of both cities are in Braun and Hogenberg's *Civitates Orbis Terrarum*, published in the late sixteenth century. These depictions may at first seem rather irrelevant because of the difference in time between the tapestries and these prints, but they are actually key to understanding the cities' representations in the tapestries. If we compare the prints to the tapestries, we in fact notice little difference, despite the evolution of the cities' fortifications during the sixteenth century. Why is there so little differentiation between the medieval fortress and the renaissance bastioned fortifications? The explanation seems to lie in the kind of constructions the Portuguese developed in Moroccan cities: the fortresses were not rebuilt anew; instead the existing walls were adapted to a new concept of fortification.

The tapestries of Asilah depict two opposing sides of the city and thus give us a full view of the city's fortifications. The tapestry of the landing represents the sea-side wall; the other two tapestries represent the side of the fortress facing the African continent. We do not have enough historical sources to completely reconstruct the old Moorish fortress. In order to interpret the depicted fortifications we can, however, consider some other cases of adaptations to gunpowder warfare, and summarize their main characteristics. We can then try to understand how these elements were applied to the fortresses in the tapestries. According to the fortification plan by Adolfo L. Guevara, and following Rafael Moreira's studies, we know that the fortress of Asilah was not modified much by the Portuguese after they took it.[8] The perimeter of the urban walls was reduced, and the walls were reinforced, so as to improve the city's defence against Moorish attacks. But half of the population was left outside the city walls.[9]

The reinforcement of the fortresses of Asilah and Tangier by the Portuguese was in fact very similar to the building system used in Portugal itself, at the frontier strongholds, where these models were first applied. The strengthening of the African fortresses became imperative immediately after their conquest, as they were considered vital elements along the kingdom's new borders.

Thus, the fortress depicted on the tapestries of Asilah is a hybrid of a typical medieval stronghold and a renaissance one. This style may be called transitional, and it was subsequently developed into the bastioned system. The increasing use of gunpowder artillery made adaptations to the fortress walls necessary. The old *castrum* was adapted, replacing the adobe or masonry with other materials more resistant to gunfire. Moreover, the new walls had to increase the defender's protection against medieval crossbows,[10] while at the same time providing platforms to install cannon.

In the case of Asilah, some of the vital parts were only transformed into bastions much later, with the interventions of Diogo Boitaca during the reign of Manuel I (1495-1521). Even then, some of these bastions were built on Muslim foundations, as

was the case with the bastions of Pite João and Santa Cruz, both facing the continent; and those of Praia, Miradouro, São Francisco,[11] Tambalalão[12] and António Fonseca, all by the sea.[13] When we superpose the plan of the Portuguese fortress or Braun and Hogenberg's print on the layout of the city as represented in the tapestries, some structural aspects appear to be coherent. Nevertheless, the scarce archaeological interventions at the fortress make it impossible to draw meaningful conclusions.

On Braun and Hogenberg's print as well as on the plan by Guevara, the layout of the city is outlined in a couple of rectangles of different sizes, which are difficult to identify in the tapestries. Only in the tapestry representing the landing the small rectangle, corresponding to the castle, can be distinguished. The wall with the Ribeira Gate corresponds to the edge of the larger rectangle. If we consider that the old *alcazaba* was placed in the rectangle between the bastions of Praia and Santa Cruz, this actually corresponds to the Moorish castle, even though the representation is somewhat confusing, with many towers in the tapestry.

On the tapestries of Asilah, the focal points of the walls are undoubtedly the gates, which are in general more fragile, and whose protection needed to be reinforced. On the tapestry of the landing, the most prominently depicted gate is quite possibly the Ribeira Gate, now placed by the keep. Its protection was strengthened by using a curved architectonic system which placed the gate obliquely and thus created an impossible shooting angle for the besieger. In addition, we can see elements of a gothic fortress, mainly two towers flanking the gates and a parapet over it. These elements provide direct defence via horizontal fire, as well as a group of machicolations, with wooden protections, for vertical defence. On the left appear the lines of another gate that could be the Albácar Gate. Looking from the opposite side, from the land to the sea, we find on the last two tapestries two further gates: the main one of the fort, the City Gate, and the Barbican Gate. Like the previous ones, these gates have lateral towers and a parapet for protection.

It is recorded that the fortifications had more than ten towers and five gates.[14] When we look at the city walls on the tapestries we see a large number of quadrangular towers, but also, interestingly, semicircular ones. While the quadrangular shape was the most usual, the circular and semicircular towers were an adaptation to new war practices: they improved the viewing angle without weakening the structure with corners vulnerable to gunfire. The fortress represented on the tapestries bears witness to these gradual adaptations. The large number of towers and the high walls between them are characteristic of gothic fortresses: this solution enabled the towers to mutually protect each other, while at the same time improving their viewing angle and giving greater control over the tactics and strategies of the besieging army.[15] The towers on the tapestries are crowned by parapets equipped with machicolations, a typical component of gothic castles. Unfortunately, none of the tapestries shows these elements actually in use.

The apertures in the battlements are extremely narrow, as in authentic late medieval fortifications. This can be explained by the increasing use of gunpowder artillery, which involved building thicker walls at the expense of smaller and slightly inclined gaps for dropping rocks and hot liquids and for shooting with bows, crossbows and firearms, as well as providing a better protection to the soldiers.[16] These fortifications embody the two main stages of the evolution of medieval warfare: first, the evolution from the romanesque to the gothic castle, or from a passive to an active form of defence, and later the adaptation of the gothic castle to the new challenges of gunpowder artillery.

Though the functional factor of the fortress is of primary importance, we should not ignore its aesthetic aspect. Besides the parapets with machicolations and the embrasures, which have the dual purpose of decoration and defence, we see an exaggerated number of windows on the towers, similar to the ones in secular and religious architecture. At the base of the fortress walls these openings are mostly substituted by embrasures for low-level fire. These embrasures consist of two openings: a round one for firearms and a long and narrow one for viewing.

In the tapestries we can see a barbican, or second wall, defending the City Gate. This barbican is not mentioned in the chronicles, but we know that barbicans were frequently used as a first obstacle to the enemy, serving as a reinforcement of the lower, but thicker walls that we see in the transitional style and in renaissance fortifications. These changes reduce the target's size and make it more resilient to cannon fire. Nevertheless gunpowder weapons were still in their infancy and older siege techniques, such as scaling ladders, were still used, which necessitated the construction of high walls.[17] It is possible that a moat between the two walls also existed.[18]

Moorish fortifications were constructed with masonry, *taipa* and adobe.[19] As we can see in the tapestries, both the coloration of the walls and the absence of raised joints of stone divisions support the interpretation that adobe and *taipa* were used in the fort as well as in the city, whose buildings show a strong similarity in the use of materials. To this is added the orange tone of the tiled gabled roofs and the Flemish influenced urban towers. The use of tiles in Moorish constructions is highly likely, yet it is unreasonable to consider the production of gabled roofs with numerous chimneys as seen in the tapestries to be realistic. The style of the houses is similar to that in the sketches by the Portuguese artist Duarte de Armas in his *Livro das Fortalezas* (1506-08).[20] The houses have a ground and upper floor, elongated double windows and round windows close to the roof. All of these

aspects are gothic architectural elements. As was habitual in the majority of European cities in the late medieval period, the cities represented on the tapestries have low and juxtaposed houses between narrow streets. The concentration of houses had to do with issues such as security, thermal stability,[21] and a lack of space within the city walls. A remarkable architectural element is the stepped gable of some houses, which is a typical Flemish detail. This may be the reason why certain authors described the cities in the tapestries as Flemish. However, in our opinion, without denying the existence of several details typical for representations of northern European cities,[22] the houses that dominate the landscape in the tapestries are mainly of Mediterranean type.

One of the main problems concerning the Pastrana tapestries is the identification of the author of the cartoons. The different figures with well defined and personalised facial details, as well as the military equipment, the lines, the perspective and the colours prompted some to propose that the artist be Portuguese, more specifically the royal painter Nuno Gonçalves. Taking into consideration the overall features of the cities and fortresses, the artist must indeed have had knowledge of typical Portuguese fortified cities. Another question is whether the author of the cartoons participated in the battles, or at least visited Morocco. However, the fortification in the Asilah tapestries is very similar to the ones in the Iberian Peninsula at the time, and it is probable that the artist designed the cartoons based on his knowledge of Portuguese fortifications and from descriptions by people who had really been on the battlefield. In fact, we cannot say that the artist based his designs only on artistic conventions, since he placed a precise fortification into a recreated scenario.

In the end, only an interdisciplinary investigation will enable us to reach a proper conclusion. Archaeological research in both cities, particularly regarding the Moorish period, is indispensable but still lacking, leaving the study open and problematic. The visual information contained in these tapestries goes beyond the mere representation of war, and so this paper contributes to only one aspect of the ongoing debate about the 'Pastrana Tapestries.'

Endnotes

1. Museu Nacional de Arte Antiga (ed.), *A Invenção da Glória. D. Afonso V e as Tapeçarias de Pastrana* (Lisboa: Museu Nacional de Arte Antiga; Madrid: Fundación Carlos Amberes, 2010), 30-89.

2. The main part of the Portuguese documentation was lost at the abandonment of the city in 1550; see Mestre António's *Cavalgadas e buas entradas que fez D. Pedro de Meneses, almocadem de Arzila*, or Pero de Andrade Caminha's *Comentários de história de Arzila no tempo do governo de António da Silveira (1525-1529)*. Fundação Calouste Gulbenkian (ed.), *Arzila. Torre de Menagem = Le Donjon D'Asilah* (Lisboa: Fundação Calouste Gulbenkian, 1995), 25-26.

3. Respectively: *Crónica do Conde D. Duarte de Meneses; Crónica de D. Afonso V e Crónica de D. João II; Crónica de D. João II; Crónica do Príncipe D. João; Crónicas dos Reis de Portugal*.

4. Bernardo Rodrigues, *Anais de Arzila. Crónica inédita do século XVI* (Lisboa: Academia das Sciências de Lisboa, 1915).

5. Gulbenkian, *Arzila* (1995).

6. Adolfo L. Guevara, *Arcila Durante la Ocupación Portuguesa: 1471-1549* (Tanger: Inst. General Franco, 1940).

7. Some sources mention the existence of Duarte de Armas' drawings with representations of Moroccan cities. They have disappeared. Gulbenkian, *Arzila*, 28.

8. The construction of the fortifications of Tangier and Asilah began in 1473, with the interventions of Rodrigo Anes. Pedro Dias, *História da Arte Portuguesa no Mundo (1415-1822). O Espaço do Atlântico (séculos XV-XIX)* (Lisboa: Círculo de Leitores, 1998), 22.

9. Rodrigues, *Anais de Arzila*, I, 11-17.

10. Rafael Moreira (ed.), *Portugal no Mundo. História das Fortificações Portuguesas no Mundo* (Lisboa: Alfa, 1989), 91.

11. Probably built over an octagonal tower.

12. The Bastion of Tambalalão is considered the oldest area of the city.

13. Gulbenkian, *Arzila*, 37-39.

14. Pedro Dias, *A Arquitectura dos Portugueses em Marrocos* (Lisboa: Portugal Telecom, Coimbra: Livraria Minerva Editora, 2000), 96.

15. João Gouveia Monteiro, *Os Castelos Portugueses dos Finais da Idade Média. Presença, perfil, conservação, vigilância e comando* (Lisboa: Edições Colibri, 1999), 35.

16. Moreira, *Portugal no Mundo*, 63.

17. Monteiro, *Os Castelos*, 35-37.

18. Monteiro, *Os Castelos*, 86-95.

19. Dias, *História da Arte*, 24.

20. Duarte de Armas, *Livro das Fortalezas* (Lisboa: Inapa, 1997).

21. Lewis Mumford, *The City in History. Its Origins, its Transformations, and its Prospects* (London: Secker & Warburg, 1961), 282.

22. Several decorative details of houses and the overall composition of the larger public buildings do have Flemish influences, especially in the tapestry of Tangier. They are very similar to the cities represented in Flemish illuminated manuscripts of the same period.

THE SIEGE OF YPRES (1383) ENGRAVED BY GUILLAUME DU TIELT: A SEVENTEENTH-CENTURY VIEW OF FOURTEENTH-CENTURY URBAN SPACE

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INTRODUCTION: THE SIEGE OF YPRES ENGRAVED BY GUILLAUME DU TIELT (1610)[1]

The bird's-eye view of the besieged city of Ypres, produced in 1610, is one of the most important works by the engraver/print maker Guillaume du Tielt (c.1585/90-1653) (Fig. 1). Besides the cartographic view itself the print contains a legend at the bottom and two cartouches at the top. It was published together with another engraving of the procession in honour of Our Lady of the *Tuine* (*Onze-Lieve-Vrouw van Tuine*) for publication in a work by Adriaan van Schrieck (c.1559-1621), an alderman of Ypres and confidant of the Archdukes Albert and Isabella.[2] In his book, Van Schrieck attempted to establish the origins of the 'Tuindag', an annual civic festival commemorating the raising of the siege of Ypres in the summer of 1383. The people of Ypres attributed their delivery from the enemy to the intercession of Our Lady of the *Tuine*, who consequently became the city's patron saint. An annual procession had been organised from 1384 onwards, and although this had been abolished during the religious conflicts of the sixteenth century, it was re-established in 1609.

The siege of the city of Ypres was one of the many 'local' military engagements that took place in the course of the Hundred Years' War (1337-1453), an interminable struggle for the French crown between the royal houses of Valois and Plantagenet. Ypres lay in the county of Flanders, a fief of the kingdom of France. In the last quarter of the fourteenth century the conflict between the pro-French count Louis of Male and the three great cities of Ghent, Bruges and Ypres reached new heights. In 1382 the notorious rebel Philip van Artevelde seized power in Ghent. He attempted to forge an alliance with the English, as English wool imports were of crucial importance to the Flemish cloth industry. An English army soon invaded the Flemish coastlands. Ypres had since 1382 again submitted itself to the authority of Louis of Male, and so, the following year, it was besieged by the city militias of Ghent and by English troops.[3] The besiegers fled, however, when the news spread that a French relief force was approaching. The people of Ypres saw in this an answer to their prayers and dedicated the victory to Our Lady of the *Tuine*. Nevertheless, the siege had a devastating impact on Ypres. The city's outermost wall and suburbs had been razed to the ground and could not be rebuilt, while the trade embargo on English wool spelled the end of the local cloth industry.[4]

Van Schrieck's intention in 1610 was not so much to recall the disastrous consequences of

Figure 1. The bird's-eye view of the besieged town of Ypres by Guillaume du Tielt, 17.2 × 20.3 cm (source: Municipal Museum of Ypres, SM 3185)

the siege, as to celebrate the miraculous liberation thanks to the intervention of Our Lady of the *Tuine*, in a manner typical of the Counter-Reformation antiquarianism that developed in the Southern Netherlands in the wake of the Dutch Revolt. The same purpose was to be served by the illustrations added to the book: Guillaume du Tielt's bird's-eye view was not intended to provide a detailed map of the city of Ypres in 1383, but merely to sketch the context of the miracles attributed to the city's patron saint. Our Lady of the *Tuine*

is prominently shown in the posture of a seated Virgin and Child enthroned on a cloud from which rays of light emerge, in reference to her influence on the course of the battle.[5] It is an eye-catching part of the engraving, and rather distracts from the cityscape.

The texts in the cartouches on the edge of the engraving indicate an additional reason for the commemoration (both in the book and on the engravings). The chronogram to the right of the image of the city's patron indicates the year of the siege, 1383, and alludes to the loyalty and courage of the citizens of Ypres.[6] The unity of the citizens and the ecclesiastical and city authorities is evoked in the oval cartouche in the top right corner of the engraving. A bishop's staff (the spiritual power) and two crossed lances (military and judicial-civil power) are 'held' by two joined hands and enclosed in the inscription *CONCORDIA CIVIUM* ('civil concord'), which further underlines the sentiment.[7] According to the nineteenth-century historian Vandenpeereboom there was yet another inscription on the reverse of one of the print's first impressions.[8] This text also shows that the commemoration of the events of 1383 is 'only' a means, the end being the propagation of the cult of the patron saint, and of a sense of (civic) common purpose and urban cohesion.

The message is therefore clear, but this only concerns a fraction of the engraving's content. The bird's-eye perspective gives us a three-dimensional view of the urban landscape of Ypres and its immediate rural surroundings. In the middle, the city centre of Ypres is depicted, circumscribed by a broad moat and ramparts. Around this is a chaotic accumulation of access roads, a ribbon development, tent camps, fires, marching armies, offensive and defensive troop movements, economic infrastructures (mills), ordnance, trees, fields, and so forth. Most of these elements are to be found within a second city wall comprising a broad double moat and nine city gates.[9] Beyond the walls we mostly see countryside, except on the left of the engraving, where there are also troop movements. Overall, the engraving provides a rather chaotic view of the besieging of the city by troops from Ghent and England in the summer of 1383.

This brings us to the central question of the present paper: how accurate is this seventeenth-century representation of a fourteenth-century 'historical event' and cityscape? Generally, these kind of sixteenth- and seventeenth-century bird's-eye views are not thought to be very reliable. However, according to Skelton, 'the general multiplication of detail slightly offends certain commentators who fail to appreciate the purpose of the editors', since 'their primary aim was not to produce well-balanced landscapes, but to give as much information as possible in a pleasing visual form'.[10] In this particular case, it is important to verify if accuracy is secondary to the religious-political message that the image conveys. According to Vandenpeereboom, Guillaume du Tielt's engraving is not only interesting because of the many details it gives relating to the siege, but also for its view of the old topography of the city and its lost suburbs.[11] Guillaume du Tielt's engraving therefore provides a unique view of the city's vanished periphery. It is of particular interest to try to determine whether he gave an accurate portrayal of this semi-urban landscape about 225 years later. A further – and far more difficult – question is what sources he might have used to do so.

DIGITAL THEMATIC DECONSTRUCTION

The recently developed digital research method, 'Digital Thematic Deconstruction' (DTD), was designed, applied and tested in the context of a doctoral project on the urban and environmental development of medieval Brussels, for which two sixteenth-century city maps were the principal sources of data.[12] The analysis of medieval urban space, medieval town development and even urban origins is not possible without studying the oldest urban maps. Although historians and archaeologists usually agree with this statement, they seldom proceed to an in-depth analysis of cartographic documents. As a result, in many historical studies old maps are generally used as mere illustrations. This is not only due to the fact that historians mainly focus on texts (both as records and as means of communication), but also because they lack (or have no access to) appropriate analytical tools and techniques to make more effective use of old maps.[13]

The basic assumption underlying Digital Thematic Deconstruction is that historic maps are very complex and multi-layered compilations of cartographic content, which should be analysed separately from other kinds of records (texts, iconography, material artefacts, etc.). In this respect, historical maps must be seen as palimpsests: they represent a collection of thousands of geographic and topographic – and even human or social – features, which came into being and evolved at different times, but are juxtaposed in a single image (in our case the bird's-eye view of Ypres). It is almost impossible to grasp all these juxtaposed details in one glance, not least because they always appear all together and, secondly, because our eyes are usually guided through the image. In the case of the bird's-eye view of Ypres, our eyes are immediately drawn to the impressive double town walls and their remarkable shape, while we hardly notice, for instance, the fence blocking a winding road on the right side of the engraving. The map includes several hundred cartographic details.

In short, Digital Thematic Deconstruction requires a systematic dismantling of a rasterised file (a high-quality scan of the historic map), followed by its transformation into a thematically multi-layered psd-file. It also requires the conversion of a static image/illustration (which is just nice to look at) into a dynamic file (which can be used for different research purposes and digital

applications). The method not only allows the isolation of every single cartographic detail, but also provides insight into the complex composition and accuracy of the map as a whole. *Mutatis mutandis*, it allows the study of the topographic features and patterns of the mapped town and its surroundings with greater clarity. In the final stage the results of the Digital Thematic Deconstruction should be compared to other data, such as other maps, texts and images.

THE DIGITAL THEMATIC DECONSTRUCTION OF THE SIEGE VIEW OF YPRES

Guillaume du Tielt's engraving has been analysed in detail by means of Digital Thematic Deconstruction (Table 1).[14] The engraving gives a visual impression of a heavily built-up city centre, but pixel analysis shows that this is not entirely the case: only 32% of the area within the inner city wall consists of buildings. The inclusion of the inner city wall (which together with its moats takes up a good 25%) does, admittedly, skew the ratio somewhat. If we leave it out of account and recalculate the percentages, we find that buildings take up 44%.

Nevertheless, du Tielt's engraving indicates that the (fourteenth-century?) city centre of Ypres primarily consisted of open space: roads, squares, waterways, empty lots, infrastructure, etc.

In the suburbs of Ypres there were hardly any buildings at all, at least if we are to believe Guillaume du Tielt. The list of distinctive buildings is remarkably short: six churches, two windmills and an aristocratic town house. The stereotypical buildings are in a ribbon development along the city's arterial roads, although here and there they also stand on secondary roads in locations that might be described as residential neighbourhoods. Then there are a number of connecting roads between these residential clusters, the canalised river Ieperlee, and a series of rows of trees. With these exceptions, the suburbs are largely made up of open space, which in the engraving is filled with scenes of military activity.

What is noticeable is that the elements shown in the suburbs and surroundings of Ypres are on a larger scale than the elements in the city centre. This is true not only of the topography (buildings, trees, roads, etc.), but also of the 'movable elements' (soldiers and troops, siege guns, tents, etc.). This indicates that the view of the city is not rendered in a single scale. This is often the case with bird's-eye views: the perspective generally ensures that the elements in the foreground are larger.[15] In Guillaume du Tielt's city view, however,

Thematic categories	Number of pixels	Pixel percentage
Buildings	**25,487**	**32.4 %**
Stereotypical buildings	22,343	28.4 %
Distinct buildings	3144	4 %
First town wall	**20,129**	**25.5 %**
Moats	11,227	14.3 %
Slopes	2782	3.5 %
Gates	1060	1.3 %
Stone wall	2978	3.8 %
Towers	143	0.2 %
Patrol roadway	1790	2.3 %
Water gate	149	0.2 %
Street network	**11,622**	**14.8 %**
Streets	8723	11.1 %
Squares	1801	2.3 %
Bridges	932	1.2 %
Street furniture	166	0.2 %
Water	**1442**	**1.8 %**
River	1177	1.5 %
Canal	265	0.3 %
Green elements	**1098**	**1.4 %**
Trees	639	0.8 %
Grass	245	0.3 %
Field furniture	214	0.3 %
Parcel limits	**4560**	**5.8 %**
Limits	4468	5.7 %
Gates	92	0.1 %
Un-built-up/open space	**12,507**	**15.9 %**
Various	**1719**	**2.2 %**
Characters	39	0 %
Movable elements	1311	1.7 %
Unknown	369	0.5 %
	78,564	**100 %**

Table 1. Thematic ranking of the elements cut from the bird's-eye view of Ypres for the area within the inner city wall. The two right columns show respectively the number of pixels excised and their percentage share in the whole.

the distortion of scale is concentric: the scale is smallest in the centre of the engraving. This gives prominence to the siege events, which mostly took place in the urban periphery and suburbs. The small scale of the city centre, in contrast, gives the impression of a compact and resilient core (cf. *concordia civium*) resisting its besiegers.

A thorough discussion of each individual cartographic element is not possible within the scope of this short paper. I will therefore restrict my comments to the buildings, hoping that this will provide a sufficient basis to assess the cartographic accuracy of the engraving as a whole. Guillaume du Tielt made a clear distinction between a number of landmark buildings and stereotypical houses. He depicted the stereotypical buildings rudimentarily, while the landmark buildings are rendered in greater detail. These are a series of buildings that catch the eye due to their architecture, their size and/or their function: the famous cloth hall of Ypres, twenty churches and chapels, two religious houses with cloisters, four windmills, the *Zaalhof* (the count's residence), an aristocratic town house, and a large square building on the first city wall (Fig. 2). The cloth hall is recognisable by its location, its trapezoid shape and a number of architectural features (tower, entrance, pinnacles). The moated *Zaalhof* is made up of two long wings and a perpendicular construction. The Dominican church is shown, but not the adjacent monastic buildings; in contrast, the cloister of the Franciscan convent is visible.[16] As they are recognisable, it seems fair to say that these landmark buildings are depicted accurately, albeit sketchily.

An examination of the morphology of the urban fabric lead to the same conclusion. The characteristic shape of the city centre, with a number of thoroughfares running parallel to one another, is clearly depicted. When we zoom in on the details, however, the shortcomings become apparent. There are 'only' six blocks of houses between Rijselsestraat and D'Hondtstraat, while all other historical maps show that there should be nine.[17] The main streets are generally depicted accurately, but side streets are missing, as can be seen from a systematic comparison of a number of blocks south of the main market square.[18] The buildings show structural similarities to representations in other documents (such as Thévelin-Destrée's 1564 view of the city): front-gabled and side-gabled houses, walls and fences and gates are in more or less the right places, but the number and precise alignment is not always correct.
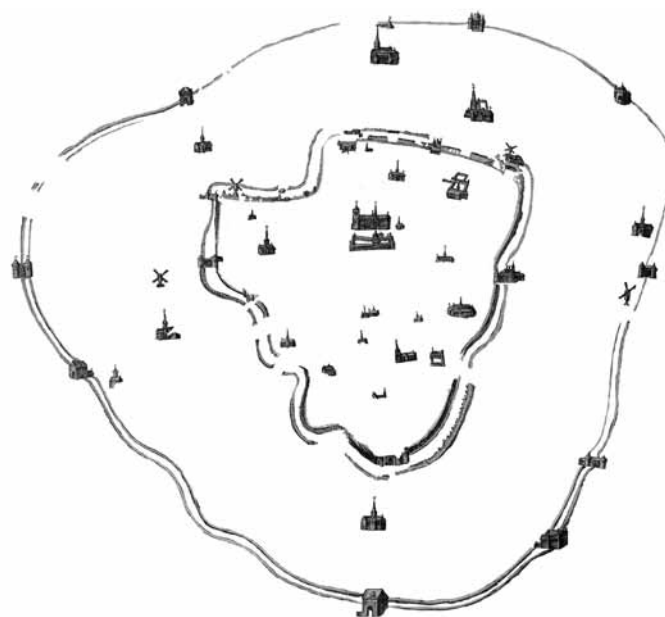
Figure 2. Landmark buildings and town walls (without the moats) isolated from the bird's-eye view . (source: Municipal Museum of Ypres, SM 3185 – Bram Vannieuwenhuyze)

This rather gives the impression that Guillaume du Tielt's engraving is a simplified derivation from other sixteenth-century bird's-eye views. Simplification was necessitated by the relatively small size of the print (17.2 × 20.3 cm), but also by the engraver's focus on the miraculous events of the siege of 1383.

Simplification may also be due to the sources used by the engraver. In the epistle, dated 1 August 1610, by which he dedicated his book on the origins of the *Tuindag* to the city council of Ypres, Adriaan van Schrieck mentions two maps of the city that depicted the events relating to the festival.[19] According to Vandenpeereboom these maps were based on an old painting, which showed on one side the 1383 siege of Ypres and on the other the procession in honour of Our Lady of the *Tuine*. The painting was said to have been produced to mark the first centenary of the liberation of Ypres in 1483.[20] Vanrolleghem has also argued that Guillaume du Tielt, with the help of Adriaan van Schrieck, would have been in a position to base his depiction on 'credible documents' from the late thirteenth and early fourteenth century.[21] Alas, as far as we know, no such documents or maps survive.

Nevertheless, there are a number of details to suggest that Guillaume du Tielt based his own map on the sixteenth- and seventeenth-century topography (and perhaps also on contemporary maps). One is that the city wall had ten gates in the fourteenth century, but the engraving only depicts nine. The Comines Gate is not shown (nor is the Comines road).[22] Either Guillaume du Tielt simply forgot this gate, or he based his picture on the situation in his own time, when the gate no longer existed.[23] The aristocratic residence in the south-western suburb has a slender lookout tower, a typically fifteenth- and (especially) sixteenth-century feature.[24] The engraver located the gates in the city's outer wall at the same level as the ramparts and moats, while archaeological investigation has shown that these gates were set back on the inside of the ramparts.[25]

These and other errors show that Guillaume du Tielt's knowledge of the fourteenth-century situation was by no means perfect. This was in all likelihood because he was working from the sixteenth- and seventeenth-century topography, although it is possible that he was using late-medieval sources that were just as unreliable in these respects.

CONCLUSIONS

Conclusions may be brief. Firstly, it makes no sense to state that Guillaume du Tielt's bird's-eye view of Ypres is inaccurate. The engraver produced a structurally accurate view of the late medieval topography of Ypres, albeit greatly simplified in detail. It was important for the city to be recognisable, but the print was in the first place about the miraculous intervention of Our Lady of the *Tuine* during the siege of 1383. The many episodes of the conflict are depicted chaotically and draw the viewer's eye. Secondly, du Tielt may well have based his image on sixteenth- or seventeenth-century Ypres, no doubt for his own ease, but also due to the rudimentary nature of the source material at his disposal. Finally, this paper also shows that new digital methods of analysis allow a nuanced evaluation of historical bird's-eye views, which can then in turn be used for further research.

Endnotes

1. This paper is partly based on the research of Marieke Moerman, M.A. student at Ghent University in 2009-2010, whose work was supervised by Bram Vannieuwenhuyze: Marieke Moerman, "Diepgaande analyse van twee Ieperse kaarten: het stadsplan van Thévelin-Destrée (1564) en de gravure over het beleg van Ieper van Guillaume du Tielt (1610)" (master's thesis, Ghent University, 2010). Moerman's dissertation and this paper are based on a digital scan of the engraving by Guillaume du Tielt preserved in the Municipal Museum of Ypres. I would like to express my sincere gratitude to Marieke Moerman and the Municipal Museum of Ypres for placing this material at my disposal and to Paul Arblaster for proofreading the text.

2. This book was printed in Ypres in 1610 at the newly established printing shop of François Bellet. It was reprinted in 1733 by Peter Jakob de Rave: Adriaen van Schrieck, *Den oorspronck ende cause vande Jaerlijcksche Feeste der Stede van Ipre ghenaemt den Tuyndach, Met de geschiedenissen in Vlaenderen inde Jaeren 1382, 1383 ende daer ontrent* (Ypres: Petrus Jacobus de Rave, 1733).

3. Paul Trio and Walter Simons, "Achtergronden bij het ontstaan van de tuindagprocessie: bronnen en situering," in Romain Vinckier (ed.), *Ieper Tuindag. Zesde Eeuwfeest. Een bundel historische opstellen* (Ypres: Stedelijke Culturele Raad Ieper, 1983), 110-14; Octaaf Mus, "Het beleg van Ieper in 1383. De vernietiging van de buitenwijken en de gevolgen voor de binnenstad en de bewoners ervan," in *Destruction et reconstruction de villes, du Moyen Age à nos jours. 18ᵉ Colloque international. Spa, 10-12.IX.1996. Actes* (Brussels: Gemeentekrediet, 1999), 21-50.

4. Octaaf Mus, "De eerste fase van het Iepers herstelprogramma na het beleg van 1983 [sic]," in Vinckier, *Ieper Tuindag*, 129-180.

5. Ann Vanrolleghem, *Ieper à la carte. De Ieperse vestingen in kaart gebracht* (Ypres: Erfgoedcel Ieper, 2006), 33.

6. A free translation of the verse might be: 'O citizens loyal to the prince, O, fight bravely. Lo, from above Mother and Child stretch out their arms to suffering Ypres'.

7. Vanrolleghem, *Ieper*, 32-3.

8. A. Vandenpeereboom. "Guillaume du Tielt, graveur: notes sur sa vie et sur ses œuvres," *Annales de la Société historique, archéologique et littéraire de la ville d'Ypres et de l'ancienne West-Flandre* 9 (1880), 284-5. Freely translated, it reads: 'In the year of Salvation 1610 the senate and people of Ypres, in piety and devotion, dedicated to the eternal and mighty Virgin Mother of God, protector of the common weal, this monument in commemoration of the siege in which the struggles, resistance, constancy, loyalty, fortitude, patience and concord of the citizens, wonderful and worthy of remembrance, preserved the city for themselves and for their prince, and delivered Flanders from its enemies.'

9. Ypres had, since the twelfth and thirteenth centuries, possessed a series of suburbs, comprising four parishes, which were added to the territory of the city after the building of a 7.6 km outer city wall in the early fourteenth century. See J. Termote, "De stadsverdediging van Ieper vóór 1388," in Jan Van Acker (ed.), *Wevend aan het verleden. Liber amicorum O. Mus* (Veurne: de rode bles, 1992), 225-8. In 1383 this militarily ineffective rampart and the suburbs it enclosed were levelled as a defensive measure. They were not rebuilt after the raising of the siege (see Mus, "Beleg", 28-30).

10. R.A. Skelton, *Braun & Hogenberg Civitates Orbis Terrarum 1572-1618* (Amsterdam: Theatrum Orbis Terrarum Ltd., 1965), vol. I, VI.

11. Vandenpeereboom, "Guillaume du Tielt," 283-4. More recently, Vanrolleghem has suggested that the engraving provides a 'plausible image of medieval Ypres just past its prime' (Vanrolleghem, *Ieper*, 32).

12. Bram Vannieuwenhuyze, "Brussel, de ontwikkeling van een middeleeuwse stedelijke ruimte" (PhD diss., Ghent University, 2008), especially 16-41.

13. Kelly Knowles, "GIS and History" in Anne Kelly Knowles (ed.), *Placing history. How maps, spatial data, and GIS are changing historical scholarship* (Redlands (California): ESRI Press, 2008) 2.

14. Moerman, "Diepgaande analyse", 56-8.

15. P.J. Margry, "Het gebruik van oude stadsplattegronden en pre-kadastrale kaarten," in P.J. Margry, P. Ratsma and B.M.J. Speet (eds.), *Stadsplattegronden. Werken met kaartmateriaal bij stadshistorisch onderzoek* (Hilversum: Uitgeverij Verloren – Historische Vereniging Holland, 1987) 23-24.

16. This should not be coincidental, since the Franciscans institutionalized the devotion to Our Lady of the Garden (Trio and Simons, "Achtergronden," 119-24).

17. Vanrolleghem, *Ieper*, passim.

18. Moerman, "Diepgaande analyse," 101-2.

19. Vandenpeereboom, "Guillaume du Tielt," 290-1.

20. A. Vandenpeereboom, *Ypriana: notices, études, notes et documents sur Ypres. Tuindag et Notre Dame de Tuine* (Brussels: Culture et Civilisation, 1976 – reprint from 1881), vol. V, 89.

21. Vanrolleghem, *Ieper*, 32.

22. Moerman, "Diepgaande analyse," 62.

23. The Comines Gate had been demolished in 1395 and replaced with a wicket gate; see Octaaf Mus et al., *Omtrent de vestingstad Ieper* (Brussels: Gemeentekrediet – Koning Boudewijnstichting, 1992), 36.

24. Krista De Jonge, "Up die manier van Brabant. Brabant en de adelsarchitectuur van de Lage Landen (1450-1530)," *Bijdragen tot de geschiedenis* 86 (2003), 410.

25. Marc Dewilde and Stephan & Van Bellingen, "A Suburb of Medieval Ypres (Belgium)," in Guy De Boe and Frans Verhaeghe (eds.), *Urbanism in Medieval Europe. Papers of the 'Medieva Europe Brugge 1997' Conference. Volume 1* (Zellik: Instituut voor het Archeologisch Patrimonium, 1997), 61.

SIEGE AND BATTLE SCENES IN HISTORICAL IMAGES OF ROMANIAN TOWNS

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It is said that a picture is worth a thousand words. This may be the reason why images are more often used in historical research since historians discovered that an image from the past contains valuable historical information. Today, historians are interested in studying representations of towns because they offer a wide range of types of information, completing or substituting other sources. Thus, historians can visualise the surroundings of a town at a given moment, the flow of its river(s), now usually modified, former forests, pastures, agricultural land, orchards or vineyards. They can also find, in such images, information about the local economy (mine pits, mills, commercial ports, trade fairs), architecture (towers and other fortifications, market places, houses and palaces, churches and bridges), everyday life and social conditions, confessional and political urban life. This paper intends to deal with one such type of information, which can be found in historical images of cities at war (be it of cities under siege or of battles in front of cities). It will primarily concentrate not on the historical events themselves, but on the city views in the background.

One of the issues concerning research on graphic representations of cities is their level of reality. In order to be used as historical documents, one has to find out whether they represent a real or an imaginary city; whether the events depicted took place as represented or otherwise; whether they provide real information about cities or only give an impression; whether their authors perceived and understood the differences between their own world and the one they represented, or just created stereotypical city views. The borderline between realism and convention varies from one period to another and from one place to another, a fact which makes it quite problematic for the present-day historian to interpret past conventions. Drawings and engravings, either loose or included in books, are for us precious indications about mentalities, art practices and ways of seeing the world of those who made them.

While making a repertoire of historic images of present-day Romanian towns[2] – about 600 representations in total – I was able to identify 48 images that contain town views in the background of battle scenes, towns under siege, or towns being surrendered by their inhabitants or ruler. Twelve of these depict events from the Thirteen Years' War (1593-1606), also known as The Long War. As happened many times before and after, in the course of this war between two great powers, the Habsburgs and the Ottomans, the Romanian Principalities were caught in the middle. After the Christian coalition was created, Michael the Brave (1593-1601), the ruler of Wallachia, started a campaign against the Ottomans and conquered several castles near the Lower-Danube, including Giurgiu, Brăila, and Hârşova, while his Moldavian allies defeated the Ottomans in Iaşi and other parts of Moldavia. These campaigns were supported by the Habsburg Empire and its Austrian and Hungarian troops.

Here only one aspect will be examined, leaving other issues to be discussed for later articles. An example of an event which had such an echo in the West that it was represented in many different images was *The regaining of the town of Târgovişte* (Fig. 1) by Michael the Brave in October 1595.[3] There is no description of the city in Boissard's *Historia* (1528-1602),[4] with the exception of the text[5] printed above and below the picture, which explains the elements of the image and the battle scene by Theodor de Bry. There are descriptions of the city of Târgovişte in some other books too, contemporary to the event, which offer details about the fortification works carried out by Sinan, works not identifiable from the image alone. The Franciscan monk Giuseppe Pisculo[6] wrote:

Figure 1. *The regaining of the town of Târgovişte*, in Jean Jacques Boissardus, *Pannoniae Historia Chronologica* (Frankfurt, 1596), 112. (source: "Lucian Balga" Central University Library Cluj-Napoca, Digital Library)

> Sinan left Bucharest with the army and headed to Târgovişte, where he arrived on 29 August and soon began carrying out reinforcing work on the prince's palace, surrounding it with a palisade or a jig (*palanka*) following the custom of that country; he made another one alongside, leaving between them a gap of two steps; then he had a ditch dug on the outside, throwing the earth between the two palisades and so building an earthen rampart with three sides in total, but not supporting each other; behind it, at the east, is a meaningless little river, which is high only during the rain season, the front of it is the town or the village that stretches along the long and narrow river

(...). The fort of Târgovişte built by Sinan from 30 August to 15 October had on the inside about 1000 arms, measured at the top of the earthen rampart. It has a not too high tower with four jackals on top and his gabions were still not filled, because they were not finished (...) for lack of time and in many places the ditch remained insufficiently deep.[7]

More details are given by yet another contemporary source:[8]

> The fortress which the Turks have done [in Târgovişte] has a surrounding wall measuring on the outside 400 steps of my horse, steps that are almost like those of an ordinary man. It has three small round towers, and on the fourth side is the eastern small gate, covered with iron bands. Another two smaller [towers] are in the north towards the river, whose shore helps to strengthen that fortress. From the south was built a trench over eight arms large and the palisades and the gabions were filled up and stacked with sandy earth and gravel. These fences eight arms large surrounded that fortress with beams stuck across and consolidated with wooden stakes of very good workmanship. But the little towers had no windows or openings for cannons and the 40 bombards were placed in the towers and in the curtain gabions; all were small and old (...). The whole citadel was connected with bars and by a fence on the outside and was plastered with lime on the inside to keep the clay tightly together. From the east to the River Ialomiţa a trench was made with material from a church tower. At the end of the trench they added a small four-sided patch to the fortress, in order to protect it. In this city is the new church of St. Francis where several monks and the royal palace remained unharmed, together with the church; all the other buildings were turned into ash, except the metropolitan church, large and rich, where priests of the Romanian Orthodox religion preach.[9]

The battle scene between Michael the Brave, Sigismund Bathory and Sinan Pasha on 18 October 1595, near the "walls" of Târgovişte, was taken from Theodor de Bry by Hans Johann Sibmacher and is published in several versions by different publishers. One of them (Fig. 2)[10] is the plate printed between pages 292 and 293 in Hieronymus Oertel/Ortelius, *Chronologia oder Historische Beschreibung aller Kriegsempörungen* (Nuremberg, 1603). It represents a medieval town surrounded by defensive walls, with towers, schematically rendered houses and allegorical images, without any explanatory text. Sibmacher used a conventional image of a medieval town, assuming even the allegorical elements of the previous image, the comet (Sigismund Bathory) and the eagle (Sinan Pasha). The army of Sigismund Bathory is placed in the foreground while the fortified city is in the background. The wall has a breach through which soldiers enter the city.

In *Turckische und Ungarische Chronica, oder Kurze Beschreibung aller Historische Deren zwischen dem auch hochloblichsten Ertz Hauß Oesterreich andern Christischen Potentaten Türchen*, published in Nuremberg in 1663, there is the same image, by the same author, with a few differences, including the explanations[11] that have been introduced inside a cartouche in the image space. The text accompanying the second picture is placed in the right column of page 206. It mentions:

Figure 2. *Abris der Belegrung Tervovist, und der Schlacht, so vom Pr. von Siebenbürgen geschehen Anno 1595. Mense Octob*, the plate between pages 292 and 293 in Hieronymus Oertel/ Ortelius, *Chronologia oder Historische Beschreibung aller Kriegsempörungen* (Nuremberg, 1603). Source: "Lucian Balga" Central University Library Cluj-Napoca, Digital Library.

> On October 17 [the armies] from Transylvania approached the city of Târgovişte, where Sinan Pasha had assembled all his forces in the camp located in front of the city. The town and the castle that had been built by the voivode Michael from a monastery, was taken by Hassan Pasha together with 400 Turks. Sinan Pasha left the place quickly.

Alongside *The Battle of Târgovişte* (October 1595), Johann Sibmacher also engraved for Ortelius's *Chronologia* images representing *The Battle of Timişoara* (June 1595)[12] and *Oradea Conquered by the Ottomans* (1598)[13]. These three views created by Sibmacher were used, without modification, in the book *Ortelius redivivus et continuatus*,[14] this time complemented by other images, including some made by Lucas Schnitzer,[15] such as the representation of the city of Satu Mare (Zatmar);[16] as well as in Tomasi Giorgio's *Delle guerre et rivolgimenti del regno d'Ungaria e della Transilvania: con succesi d'altre parti seguitti sotto l'imperio di Rodolfo e Matthia Cesari sino alla creatione in imperatore di Ferdinando II arciduca d'Austria* (Venetia, 1621).

Typically, these images depict a battle in the foreground, while the background shows a city that is recognisable only because its name is indicated. The foreground depiction completes the data we know about the place in a certain period, but otherwise the artist used topographical and chronological conventions.[17] Such images circulated widely, as several publishers used them to illustrate

books dealing with current events. The repeated copying of such images turned into a general phenomenon. The same views were used either in their original form but with modified text, or copied with amendments and sometimes in adapted dimensions.

Incidentally, it should be stressed that Wallachia and Moldavia never had fortified cities. There were fortified monasteries, but not wholly fortified urban settlements. For strategic reasons, in some cities like Târgovişte, *palanka* (settlements enclosed with wooden palisades) were built under the Ottoman rule.

Copying was an important part in the training of artists, especially if they were taught graphic arts. Engaging in reproductions was a requirement in the artist's education. For example, Aegidius Sadeler, an engraver at the Imperial court of Rudolf II, made multiple copies of the works of famous artists of the time, to complete the Emperor's rich collections.[18] The study of these successive copies, and the transformations they underwent, remains an important task for the historian of images.[19]

The use of conventional views by authors who visited Romania or who were born there is telling for their mentality. Their representations of towns can only be identified through inscriptions on scrolls or the town's coat of arms. Sometimes specific elements such as churches or other major buildings were introduced to make the place recognisable. From the sixteenth to the eighteenth century, most graphic representations of Romanian towns were made by Western European travellers or by artists commissioned by these travellers. Before such a Western European traveller was to draw a place unknown to him – be it from first-hand observation or from his imagination – he first had to understand the topography by setting it within the well-known boundaries of his own mental stereotypes. The easiest way to do so was to adapt a certain typical town scheme by adding some distinctive features that made it acceptable or even recognisable for potential beholders of the image.[20] Furthermore, these images were destined to those left at home, who had not seen and would probably never see these places. They could however recognise in them what they expected of a town or city. This is why, for centuries, the Wallachian and Moldavian towns were represented like those from Transylvania, looking much like Western towns.[21]

In conclusion, it may be said that images of Romanian towns where adaptations of Western European towns. Throughout the seventeenth and eighteenth centuries, artists were not particularly interested in rendering concrete facts or in depicting original aspects of these towns, but in expressing ideas. Consequently, these towns are portrayed as fortified towns of Western type.[22] In the eighteenth century the situation changed: interest in this area grew during the wars fought by the Austrians, Russians and Turks, and it was this period that became the peak for more realistic depictions of towns in siege views or battle scenes, with detailed legends and scrupulous representations of the participants, especially of the winners.

Endnotes

1. This paper is supported by the Sectorial Operational Programme Human Resources Development (SOP HRD), financed by the European Social Fund and the Romanian Government (contract SOP HRD/89/1.5/S/59758).

2. "Historic images of towns" is here understood to comprise partial or overall depictions of towns, in such media as drawings, water colours, prints and paintings. The notion covers the time period between the late fifteenth century and the spread of photography after the mid-nineteenth century.

3. The Ottomans had conquered the city of Târgovişte two months before.

4. Jean Jacques Boissardus, *Pannoniae Historia Chronologica: res per Ungariam, Transylvaniam iam inde a co[n]stitutione Regnorum illorum, usque ad invictiss. Rom. im. Rodolphum II. Vngariae regem christianum 40. et sereniss. Sigismundum Bathorium Trans. etc ducem, maxime vere hoc bello gestae: Vitae item actaet victoriae reliquorum eius belli procerum*, (Frankfurt, 1596) or the German edition of the book: Jean Jacques Boissar, *Historia Chronologica Pannoniae: Ungarische und Siebenbürgische historia, was sich in denen Landen sent der Sündflut hero bis auff jetztregierende Rö. Keys. Mt. Rudolphum II. den XXXX. Christlichen König in Ungarn und Sigismundum Bathorium Heertzogen in Siebenbürgen etc.*, (Frankfurt, 1596).

5. The text from the Latin version of the book is: 'Figura haec ob oculos ponit duo insignia miracula, alterum quidem terrestre, sed coeleste alterum, Cometam videlicet novum in coelo ardentem: et praegrandem Aquilam, quae supra Serenissimi Principis Transylvani castris in aere se libravit' above the image, and 'I. Cometa novus coelo sereno apparens. II. Rupes populariter Lapis regius der Königstein dicta, de qua se Aquila volatu demisit. III. Aquila viribus et mole corporis praecellens. IV. Pagus qui primus in Valaquia occurit. V. Castra Principis Transylvani. VI. Tentorium eiusdem. VII. Exercitus Transylvani. VIII. Urbs et arx Tergovista. IX. Milites Transylvani expugnant Tergovistam. X. Sinanis Bassae tentorium et castra. XI. Sinan Bassa sua fuga deserens Tergovistam contendit. XII. Quatuor millia Turcarum, qui praedatum exierant, reversi cum praeda armentorum numerosissima, ex Transalpina abactorum, se ad Sinanum suum redire putant; sed in Transilvanum incidentes ad unum omnes pereunt' below the image. The German edition texts are: 'Dise Figur helt in sich die zwey grossen Wunderzeichen himlisch und jridisch als den hellen Cometen am Himel vnd fliegenden grossen Adler vber dem Läger Fürst: Durch leuchtigkeit in Sybenbürgen bey Tergovist wie denn hernach folget' above the image, and on the right of the image, on the next page: '1. Der helle Comet am klaren Himel. 2. Der Felß Königstein genannt davon der Adler geflogen. 3. Der grosse starcke Adler. 4. Das erste Dorff in der Walachey. 5. F.D. in Sybenbürgen Läger. 6. F.D. in Sybenbürgen Gezelt. 7. Das Sybenbürgisch Kriegsvolck. 8. Die Statt und Vestung Tergovist. 9. F.D. Kriegsknecht stürmen vnd gewinnen Tergovist. 10. Synam Bassa Gezelt vnd Läger. 11. Synam Bassa Flucht auß seinem Läger auff Buccarest. 12. Die 4000. Türcken so mit dem grossen hauffen Haubwiehes so sie in der

Walachey geraubet widerkommen vermeynent den Synam Bassa noch zu finden aber von dem Fürsten in Sybenbürgen aller schlagen worden'.

6. After the Italian text, published by A. Veress, "Campania creştinilor contra lui Sinan Paşa din 1595" (Christians campaign against Sinan Pasha in 1595), in *Analele Academiei Române. Memoriile Secţiei Istorice* (Romanian Academy Annals. Historical Section Memoirs) 4 (1924), 146-7.

7. Giuseppe Pisculo, "1595 August," in *Călători străini despre Ţările Române* (Foreign travellers about Romanian Countries), vol. III (Bucharest: Scientific Publishing House, 1971), 630-1.

8. Filippo Pigafetta's travel diary was translated and published by Veress, "Campania creştinilor," 141-2.

9. Filippo Pigafetta, "Către Belisarie Vinta cancelarul Marelui Duce de Toscana" (To Belisarie Vinta, the chancellor of the Great Duke of Toscany), in *Călători străini*, 549-50.

10. *Abris der Belegrung Tervovist, und der Schlacht, so vom Pr. von Siebenbürgen geschehen Anno 1595. Mense Octob.*

11. *Schlacht zwischen dem fürsten von Siebenbürg: und Sinan Bassa mit eroberung Tergovist un Bogerist unnd Hirgio*, plate 15 in the mentioned book.

12. *Contrafactur wie die Vöstung Temeswar, vom Fürsten aus Siebenbürgen bellegert Gewest. Anno 1596*, the plate between pages 316 and 317.

13. *Wahre Contrafactur der Vöstung Gros Waradein, in ober Unger. Wie die Türken belegert gewest. Anno 1598*, plate between pages 416 and 417.

14. Paulus Fürsten, *Ortelius redivivus et continuatus oder der Ungarische und Siebenbürgische Kriegs*, Frankfurt am Mayn, 1665. The image of the town of Târgovişte is on the plate between pages 182 and 183: *Abris der Belegrung Tervovist, und der Schlacht, so vom Pr. von Siebenbürgen geschehen Anno 1595. Mense Octob*; the image of the town of Timişoara is on the plate between pages 195 and 196: *Contrafactur wie die Vöstung Temeswar, vom Fürsten aus Siebenbürgen bellegert Gewest. Anno 1596*; the image of the town of Oradea is on the plate between pages 247 and 248: *Wahre Contrafactur der Vöstung Gros Waradein, in ober Unger. Wie die vom Türken belegert gewest. Anno 1598*.

15. *The Romanian World in Images. XV–XIX Centuries*, interactive CD-ROM / *Lumea Românească în Imagini. Secolele XV–XIX*, interactive CD-ROM, Text & legends / Text şi legende: Cătălina Macovei; Photograph credits / Sursă de imagini: Biblioteca Academiei Române (Bucharest, NOI Media Print, [2004]).

16. *Urbs et fortasitium Zatmaria' in Ungaria munitum a Rudolfo II*, plate II, between pages 212 and 213.

17. *The Romanian World in Images.*

18. Andrea Bubenik, "The Art of Albrecht Dürer in the Context of the Court of Rudolf II," *Studia Rudolphina. Bulletin of the Research Center for Visual Arts and Culture in the Age of Rudolf II*, 5 (2005), 20.

19. David Freedberg, *The Power of Images. Studies in the History and Theory of Response* (Chicago and London: The University of Chicago Press, 1989), 121.

20. E.H. Gombrich, *Art and Illusion. A Study in the Psychology of Pictorial Representation* (London: Phaidon 1960), 71.

21. Andrei Cornea, *De la portulan la vederea turistică. Ilustratori străini şi realităţi româneşti în secolele XVIII-XIX* (From *Portulan* to Sightseeing. Foreign Illustrators and Romanian Realities in the 18th and 19th Centuries), (Bucharest: Sport Tourism Publishing House, 1977), 38.

22. This is true of views of Transylvanian cities, which resemble Western cities.

Court Residences in Early Modern Europe (1400-1700). Architecture, Ceremony and International Relations

SESSION CHAIRS:

Konrad Ottenheym (Universiteit Utrecht, The Netherlands)

Stefan Hoppe (Ludwig-Maximilians-Universität München, Germany)

This session focuses on the architecture of the court residence in the period 1400-1700. It aims more specifically at examining the interaction between palace architecture and the "ceremonial" – the set of rules which regulates and codifies human interaction in this space. To the informed observer, a palace's architecture carries multiple connotations, representing power, lineage, and tradition versus innovation. Patterns of court ceremonial are perceived by the palace's owners, inhabitants, and visitors alike in many different ways and expressed in many different sources. The ceremonial influences the material form of the palace, from its disposition (spatial organization) to its decoration. Conversely, the palace's architecture, its space and form, serves as a barometer for the major evolutionary steps of the court ceremonial, and thus of the structure and composition of the court in general. A particular issue is the growth of public versus private spaces, and the nature of privacy.

Furthermore, the palace was a prominent place of cultural exchange in early modern Europe. Due to the numerous, convoluted dynastic relationships between them, the world of the courts 1400-1700 constituted a network of international character on a truly European scale, long before the age of Versailles. These international relationships pervaded all aspects of court life; the architecture of the courts cannot be adequately understood without studying these exchanges and influences. Thus the scope of this session is deliberately pan-European. It similarly transcends the common boundaries of styles and stylistic periods, and encourages an international, comparative, transdisciplinary perspective.

This session invites papers that consider specific instances of court architecture as means of expression, representation, and communication with subjects, or outsiders, of court society. It particularly welcomes papers that focus on the international connections which give meaning to the palace's architecture. Papers may deal with court residences from the realms of the dominant monarchies (Burgundy/Habsburg, Valois/Bourbon, Tudor/Stuart, etc.), but we are also looking for examples coming from other parts of Europe.

THE OTTOMAN PALACES IN THE FIFTEENTH CENTURY AND EUROPEAN INFLUENCES

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OTTOMAN PALACE AND COURTYARD

The aim of this paper is to analyse the Ottoman palaces in the first half of the fifteenth century, the period prior to the conquest of Constantinople and construction of Topkapı Palace (Fig. 1) by Mehmet II. Until 1453, the Ottoman court was based at Edirne, former Adrianople which was incorporated into the Ottoman domain in 1360s. Two palaces, Edirne Old Palace (Saray-ı Atîk) and Edirne New Palace (Sarayı-ı Cedîd), are known to be built in Edirne during its heyday. While Edirne New Palace had remained on ground until the end of the nineteenth century and has been discussed in several articles, Old Palace had never been studied. In fact, due to lack of both remains and written sources, Ottoman palaces before Topkapı palace have seldom been studied within context of 'the history of Ottoman palace'. Gülru Necipoğlu as well, does not refer much to the palaces in Edirne in her monumental research of Topkapı Palace. According to Necipoğlu, Topkapı Palace 'was originally made up of a collection of stylistically diverse units that reflected the universalism of Mehmed II's imperial idea'[1] and 'was built as an architectural frame for that image, codified in Mehmed's *kanunname* (law code) '.[2] The role of Mehmed II is intensely emphasised here as the creator of new Ottoman palace style. Then, did the former palaces not have any impact on the history of Ottoman palaces? Was Topkapı Palace a unique structure that was formulated under guidance of a heroic sultan?

Figure 1. Istanbul, Topkapı Palace, founded by Mehmet II.

In Topkapı Palace, the political and ceremonial nucleus was the second courtyard, while the Harem district was designed for residential and private use. Around the second courtyard were Dîvânhane(Council hall), huge court kitchens and Bâb-üs Saadet (Gate of Felicity), that symbolised the authority of sultan. The courtyard itself was the place where imperial ceremonies, such as enthronement, audience and banquet took place. Analysis of ceremonial courtyard in Ottoman palaces is important not only for its aesthetic value, but also for exmining the development of the Ottoman court organization and diplomatic protocol.

First of all, the present paper is to show that the first ceremonial courtyard in Ottoman palace emerged at Edirne Old Palace in the beginning of the fifteenth century, prior to the construction of Topkapı Palace. Secondly, its introduction is to be interpreted as an influence from the Byzantine residential architecture, in which courtyard had been a principal ceremonial element.

PRE-FIFTEENTH-CENTURY PALACES IN ANATOLIA

Before discussing Edirne Old Palace, a brief look at pre-fifteenth-century palaces in Anatolia provides a good starting point of this paper.

Ibn Battuta, who was a legal scholar of Moroccan origin, is famous for his extensive travel report in the first half of the fourteenth century. During his lifelong journey, he visited Western Anatolia as well, which at that time was split into several principalities, including the Ottomans in Bithynia region. The local rulers welcomed the traveller of learning and the receptions usually took place in suburban gardens or palaces in cities. While the former shows nomadic nature of Turkic principalities, the existence of urban palaces indicates that the process of sedentarisation had started among erstwhile nomadic warriors. For example, in Birgi, Ibn Battuta was received by the Bey of Aydınoğlu at a lofty pavilion with a large hall and a fountain on the top.[3] The structure depicted by the traveller resembles *Köşk* architecture of Persian tradition. On the other hand, description of courtyard is absent in the record. Unfortunately, when Ibn Battuta visited the Ottoman capital Bursa, due to the Sultan's absence he did not visit the

palace in the citadel, which was the very first Ottoman palace, and wrote nothing about it.[4] However, the citadel on narrow hilltop could allow too little space for the palace to construct a vast courtyard. We should conclude that the fourteenth-century Bursa Palace, which has rarely been scrutinised until now, did not have a courtyard either.

A thirteenth-century palace of the Rum Seljuk dynasty, Kûbâdabâd Palace, also confirms lack of ceremonial courtyard within palace before the fifteenth century. Excavation surveys since 1949 have revealed that there were several buildings loosely located on the shore of Beyşehir Lake, while no significant remains of large courtyard have been found.

These evidences indicate that Turkic palaces before the fifteenth century did not have ceremonial courtyards where official reception was performed. When a ruler preferred to entertain a guest in the open air, suburban garden/meadow was its theatre, not in an architectural setting, courtyard. Within a city, an indoor hall of palace was utilized for reception. It seems reasonable to conclude that the ceremonial courtyard of Topkapı Palace is such a unique element in the history of Turkish palace history that its origin and development requires further investigation.

EDIRNE OLD PALACE

After the conquest of Adrianople (Edirne) in 1360s, the Ottomans started to reconstruct this ex-Byzantine city with their own manner; constructing mosque and other Islamic institutions along with *waqf* properties that supported these financially, building commercial facilities and importing population from all over the country. However, the old capital Bursa still remained as the 'prime' capital and Edirne functioned as an outpost for Balkan campaigns. Tayyib Gökbilgin claims that Bursa was the capital of the Ottoman Empire until the catastrophic defeat against Timur and the capture of Sultan Bayezid I in 1402. After the event, the dynasty suffered ten years of civil war period called 'Ottoman Interregnum' and during a state of disorder the royal treasury was for the first time transferred to the new capital Edirne, leaving Bursa behind.[5]

The site where the aforementioned first palace was constructed, is now occupied by the Selimiye mosque built during 1568-74 by the virtuoso architect Sinan. As a result we can not rely on excavation survey to examine the building. Instead analysis of written sources is the only way to elucidate the characteristic of this little known structure.

The construction date of Edirne Old Palace is hard to confirm as there is a contradiction between the documents. According to a seventeenth-century traveller Evliya Çelebi, the palace was initially established by Murat I (reign 1362-89), the conqueror of Edirne. But he also informs that wall of the palace was constructed by Musa Çelebi in the beginning of the fifteenth century.[6]

On the other hand, a Byzantine chronologist Doukas tells that Mehmed I, reviver of the Ottoman dynasty and a brother of Musa Çelebi, 'died peacefully in Adrianople within the palace he had built,[7] and his corpse was 'placed it in the palace courtard[8] in 1421. An anomymous Ottoman chronologist also confirms the construction of palace by Mehmed I.[9] Considering the Ottoman court settled in Edirne after the interregnum period (1402-13), the later evidences seem much probable. While the outer wall of the palace, as Evliya Çelebi tells, may be attributed to Musa Çelebi, who entered Edirne before Mehmed I and was soon eliminated by his brother, we can conclude that palace's most part was built by Mehmed I in 1410s-20s.

EUROPEAN REPORTS ON EDIRNE OLD PALACE

Then, what kind of space did Edirne Old Palace possess? There are three European travellers who visited and wrote about Edirne during the reign of Murat II (reign 1421-44, 46-51), son of Mehmed I. Among these travellers, Bertrandon de la Broquière, an envoy of Burgundian king Philippe le Bon, left the most detailed information of Edirne Old Palace where he visited in 1433.

According to his report, when the audience was permitted he entered the palace from the first gate (*la premiere porte*) which was guarded by a group of slaves. After passing through the gate he and his company were taken to a courtyard. Then Sultan Murat II left his private quarter (*chamber*) to the courtyard through a gate next to it and seated upon a throne put under a portico adjacent to the courtyard. Court officials too sat under the portico and foreign embassies were taken in front of the portico to prostrate themselves before the sultan. Following the reception, a meal of rice and mutton was prepared for the participants in the courtyard.[10]

Figure 2 is a schematic plan of Edirne Old Palace reconstructed from the description of Bertrandon de la Broquière and Evliya Çelebi. Whole site was surrounded by a rectangular wall with towers and there was a gate at the northern side according to Evliya Çelebi. Unfortunately a perfect reconstruction of the palace complex
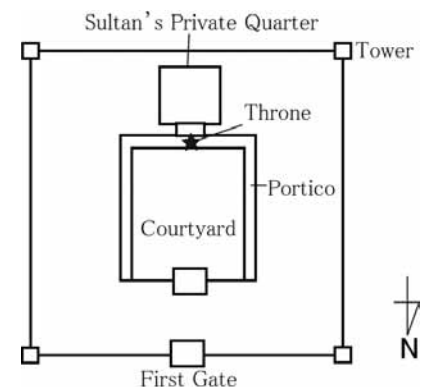
Figure 2. Schematic plan of Edirne Old Palace, reconstructed from the description of Bertrandon de la Broquière (1892) and Evliya Çelebi.

behind the outer wall is arduous due to the incompleteness of the narratives. However, its framework is clear. There was a ceremonial courtyard flanked with a portico where the throne was established. Most probably the portico was annexed to another gate leading toward sultan's private quarter. The resemblance between the Edirne Old Palace and Topkapı Palace is obvious, both morphollogically and functionally.

An Italian merchant and antiquarian Ciriaco d'Ancona also proves what Bertrandon writes about the palace. In one of his Latin letter to his friend in 1444, he tells that there was a large courtyard (*aula*) where people gathered and had an audience.[11] The scene of reception resembles to what was experienced by Bertrandon in 1433.

Meanwhile, the meaning of *aula* and *atrium* is somewhat tricky here. While Ciriaco refers the place of reception in Edirne Old Palace as *aula* in one of his letters, he also writes that the sultan usually receives the guest at *atrium* in another letter mentioning his visit to a palace at Manisa in 1446, where semi-retired Sultan Murat II stayed leaving his son Mehmed behind at Edirne.[12] In fact, a Latin word *aula* can be interpreted as courtyard or indoor hall, which in this case the meaning should be understood within the context. As Ciriaco knew that *atrium*, that means courtyard under any circumstances, was the place for reception from his experience at Edirne Old Palace, *aula* in the letter of 1444 must have meant to be 'courtyard' as well.

Thus, the ceremonial use of courtyard in Edirne Old Palace became clear from the reports of European travellers. as is shown by the schematic plan, the framework of the palace can be regarded as the prototype of later palaces, namely Edirne New Palace and Topkapı Palace.

BYZANTINE RESIDENCES AND COURTYARD

From where did the Ottomans adopt the new palace style, courtyard, for their palace? As is discussed above, ceremonial use of courtyard before the fourteenth century was not common among Turkic dynasties in Anatolia. Its origin should be sought out from somewhere else.

There is no room to doubt that the Byzantine architecture had an immense impact upon the Ottoman architecture in the making. For example, similarity between the early Ottoman mosques and the late Byzantine churches is obvious technically and morphologically. For the rising Ottoman dynasty, indigenous Byzantine society and culture provided both a group of artisans and artistic style, which was not a strange phenomenon at all in the multi-cultural and eclectic Ottoman society. Ottoman use of the courtyard, which had been a core of residence in the Mediterranean region since ancient times, should be then regarded as one aspect of the cultural exchange between the Ottomans and Byzantines.

According to Yuichi Taki, a Byzantine architectural historian who analysed a tenth-century ceremonial protocol *De Ceremoniis*, a courtyard (*aule*) in Bonos Palace in Constantinople was 'the functional core' during ceremonies.[13] During a religious ceremony in the palace, the emperor waited the clergy on a seat placed in the courtyard while they were performing ritual in the Chapel Royal, whose main facade seems to have faced toward the courtyard.

A few other written sources show the existence of courtyard in the medieval Byzantine residences. Michael Angold introduced two inventories of Palace of Botaneiates which was possessed by a Byzantine aristocrat in Constantinople around 1200. In these inventories, individual buildings and space of the palace complex are recorded including several courtyards.[14] Although their function and usage are unknown from the documents, the aforementioned case of Bonos Palace suggests that these also had ceremonial function.

Another source introduced by Cyril Mango tells that, Theodore Metochites, a fourteenth century Byzantine Prime Minister, had a palace in Constantinople with a paved courtyard surrounded by a portico.

> There was also a courtyard surrounded by a portico sheltered from the rays of the sun; it was a delight to walk through it. It was very large as befitted the buildings, and it was pleasant to behold its position and the proportion of its length to its width. It was paved with quarried stone besprinkled with old lime dust in a uniform, dry layer so as to afford easy passage to both men and horses, free from the hindrance of marshy ground.[15]

There is little doubt that courtyard was an essential element in the fourteenth century Byzantine residence too. The pavement that allows easy passage indicates the courtyard was used for assembly and parade.

Three cases introduced here confirm the ceremonial use of courtyard within the Byzantine residences in the medieval period, which was also discovered at Edirne Old Palace. The proximity can be regarded as a result of not only aesthetic exchange but also personal and liturgical exchange between the Ottomans and Byzantine.

CONCLUSION

In this paper, the existence of ceremonial courtyard in Edirne Old Palace in the beginning of the fifteenth century and its Byzantine, and thus European or Mediterranean, origin were discussed. The reason of the emergence of ceremonial courtyard in this period can be explained by the expansion and sophistication of the Ottoman government structure. As well as the ceremonies

with a group of the newly founded Janissary army necessitated a vast open space within palace, the Ottoman dynasty, which had entered into the European power game, had to prepare a pompous architectural setting for diplomatic ceremony with the Europeans.

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Endnotes

1. Gülru Necipoğlu, *Architecture, Ceremonial, and Power - The Topkapı Palace in the Fifteenth and Sixteenth Century* (Cambridge, Mass.; London: MIT Press, 1991), 244.

2. Necipoğlu, *Architecture, Ceremonial, and Power* ,250.

3. 'We climbed a long flight of stairs with the sultan and came eventually into a fine audience-hall, with an ornamental pool of water in the centre and the figure of a lion in bronze at each corner of it, spouting water from its mouth. Round this hall there was a succession of benches covered with rugs, on one of which was the sultan's cushion.' Ibn Battuta(trans. H. A. R. Gibb), *The Travels of Ibn Battuta A.D. 1325-1354*, vol. 2 (Cambridge: University Press, 1962), 442.

4. Ibn Battuta, *The Travels*, 451-452.

5. Tayyib Gökbilgin, "Edirne," *İslâm Ansiklopedisi*, vol.10 (İstanbul: Türkiye Diyânet Vakfı, 1994), 426.

6. 'Eski sarây: Fâtih-i Edirne Gâzî Hudâvendigâr'ın ibtidâ-i fethde binâsıdır. Kefere kralı Manyas Kapusu kurbunda sâkinlerimiş. Ba'dehû bu Eski Sarâyı, Çelebi Sultân Mûsâ b. Yıldırım Hân tevsî' edüp kal'a-misâl burc [u] bârûsuz(bârûlu?) bir sûr-ı azîm seng-binâ bir sarâyı ra'nâ etdi. Dâ'iren-mâdâr cirmi beş bin adım ihâta eder. Şekl-i murabba'dan tûlânîce bir mihmânsarây-ı sultândır. Dîvârlarının kaddi yigirmi zirâ'dır. Cânib-i şimâle bir aded hadîd bâb-ı hümâyûnun vardır. Ba'dehû Süleyman Hân Engürüs seferlerine rağbet etmeğile bu sarây ve yeniçeri odalarını imâr edüp kırk bin yeniçeri âmâde ve altı bin gılmân-ı hâssa bu sarâyda karâr-dâde olmağıçün bu sarây-ı atîkde dîvânhâne-i âlîler ve hâsoda ve büyük ve küçük ve hazîne ve kilâr ve doğancılar ve seferliler odalarıyla âbâdan etdi. Ammâ bâğ u bâğçesi yokdur. Lâkin âb [u] hevâsı bir mürtefî' zemînde olmağıla latîf ü mu'tedil hevâdır. Târîh-i binâsı sene 767. Âsitâne-i kadîm olmağın bunda neşv ü nemâ bulup perveriş olan gılmân-ı hâssa ve sâ'ir huddâmân-ı enderûn [u] bîrûnlar elbette ve elbette berhûrdâr-ı ömr olup sa'âdet-i dâreyne nâ'il olurlar. Ve kânûn-ı Süleymân Hân üzre bu sarây-ı kadîmde üç bin gulâm-ı hâs tâ'at u ibâdâta meşgûl olup tekmîl-i fünûn edüp üç senede bir yollarıyla Âsitâne-i sa'âdete gelüp mertebelerince Yeni Sarây'a girüp hizmet-i şehriyârîde olurlar. Sarây-ı Atîk-i Edirne böyle bir nazargâh-ı selâtîndir. İnkırâzu'd-deverân dest-i Âl-i Osmân'da âbâdân ola.' Evliyâ Çelebi(prep. S. A. Kahraman, Y. Dağlı), *Evliyâ Çelebi Seyahatnâmesi*, vol.3(İstanbul: Yapı ve Kredi Bankası, 1999), 255.

7. Doukas (trans. H. J. Magoulias), *Decline and Fall of Byzantium to the Ottoman Turks* (Detroit: Wayne State University Press, 1975), 127.

8. Doukas, Decline and Fall, 131.

9. 'Evvel Edrene'de ol saray başladı, düzdürdi, anan sonra pâdişahlar Edrene'de turur oldılar. İlerü gelen beğler Burusa'da tururlardı. Ol vakit Edrene'nün hisarından taşrasında evler yogidi. Andan sonra taşrası dahi hep şehir oldı.' Anonim (prep. N. Azamat), *Anonim Tevârîh-i Âl-i Osman –F. Giese neşri* (İstanbul: Edebiyat Fakültesi Basımevi, 1992), 59.

10. Bertrandon de la Broquière (ed. Ch. Schefer), *La voyage d'Outremer de Bertrandon de la Broquière* (Paris: E. Leroux, 1892), 189-195.

11. 'Postquam unas ad te hac ex urbe litteras dedimus, suavissime Andreole, ad XII Kalendas Iuniarum faustum Iovialem Iovisque humanati ascensione ad caelum mirifica solempnem venerandumque diem, una nostro cum clarissimo Drapperio Raphaeleque Castelleoneo, ad regiam soltanei principis Murath Bey, magni regis Asiae, praestantiam ascendimus, amplissimae aulae regia patente porta, ingenti splendore et apparatu frequentissima hinc inde suorum barbaric spectatione praestante regeque, stratis de more tapetis, primis cum et eximiis principibus suis iuxtaque Cialaby filio, splendore region et barbaric more sedente.' Ciriac of Ancona (ed. and trans. E. W. Bodnar), *Later Travels*(Cambridge, Mass ; London: Harvard University Press, 2003), 34-36.

12. 'At enim interea, quam pridie hic nostri gratia Calliope ad seraphycum Franciscum pro Francisci Drapperii nostri salute orationem habuerat, lectitabis et deinde ut B. ipse optimus eiusdem seraphycae religionis minister videat, opera dabis. Quam et ut caelum tetigisse percipias, habeto quod ad celebrem resurgentis magni Redemptoris diem magnus ille Asiae regnator, regia patente porta, non, ut mos et solitus est quascumqueexternas vel sui generis legationes suscipere, solitum se patens in atrium contulit, quin ad domesticam suam interiorem et secretam aulam, ubi nulli fas esset externo tantum insistere limen, Franciscum nostrum ad se iusserat introire et alia pleraque ipse magnus princeps satrapesque suieximiae erga eum venivolentiae insignia declararunt. Quae omnia laetum conspexi cum sui tu et utique gratia vestri, quod et non modo sibi ipsi, quin et vestrae quoque rei comondum accedere late putabam.' Ciriac of Ancona (ed. and trans. E. W. Bodnar), *Later Travels* (Cambridge, Mass. ; London: Harvard University Press, 2003), 246-248.

13. Yuichi Taki, "The Palace of Bonos in Constantinople Residential architecture in "de ceremoniis,"" Journal of Architecture and Planning (Transactions of AIJ) (1999) 523, 301-306.

14. Michael Angold, 'Archons and Dynasts: Local Aristocracies and the Cities of the Later Byzantine Empire,' in *The Byzantine Aristocracy, IX-XIII centuries* (Oxford: B. A. R.,1984), 254-266.

15. Cyril Mango, *The Art of the Byzantine Empire, 312-1453* (Toronto; London: University of Toronto Press, 1986), 247.

ERARD DE LA MARCK
HIS THREE RESIDENCES IN THE HABSBURG NETHERLANDS AND THE PALACE OF LIÈGE MONUMENTAL ELEMENTS IN A COMPLEX MATERIAL DISCOURSE ON POWER, RENASCENCE AND ALLIANCE[1]

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Erard de la Marck, prince-bishop of Liège from 1505 until 1538, ranks among the most famous personalities of the history of the prince-bishopric of Liège, and at the same time was one of the political key figures in western Europe, especially after he went into an alliance with Charles V in 1518.[2] Although he commissioned many works of art and initiated some major building projects in Liège and elsewhere in his country, he is currently remembered as the commissioner of the palace of Liège, one of the most iconic buildings of the city.[3] However, behind this stereotypical connection of Erard and his palace lies a network of historical facts, building intentions and practical functions that result in a nuanced image of the ceremonial that was displayed in architecture and decoration of the building, and of the multiple identity of the palace.

Even before the prince-bishopric existed, in the 8th century, on the site of the actual building a palace stood as the residence of the counts of Hesbaye. Notker, the first prince-bishop of Liège who ruled the country from 985 until 1008, built up the city as a strong political and cultural centre, providing a genuine urban network with fortifications.[4] In Liège, Notker built no less than seven collegiate churches, two abbeys, the Saint-Lambert cathedral and, last but not least, a new palace, later designated as *Le Vieux Palais*. This impressive achievement gave Notker the heroic status of a diligent and perfect ruler. Therefore, the site of the palace was very significant for the local community, as the continuous centre and symbol of the prince-bishop, as ruler of the country of Liège; but also as a reference to the golden age of Notker.

When Erard de la Marck decided to rebuild the palace, this historical situation was bound to accompany the process of planning, but yet another historical factor was of important influence: the long-lasting crisis that the country of Liège had been going through, starting with the independence wars against the duke of Burgundy, that lead to the destruction of Dinant in 1466 and of Liège in 1468. Specially the gruesome sack of Liège and the systematic burning and demolition of all buildings except the churches, the palace, canon's houses and abbeys, had a disrupting effect on the country and on the city. After the occupation by Charles the Bold, a period of civil wars began, opposing the powerful family De la Marck against the prince-bishops Louis de Bourbon and his successor Jean de Hornes.[5]

It was only during the reign of Erard de la Marck that the country of Liège found a stable renascence, and an impressive building programme was developed as an answer to the many practical needs after the sack of Liège and the crisis that followed. The prince-bishop himself took a great part in it, insofar that his building activities would become an essential element in his personal image and his posthumous fame. The inscription on his funeral monument specifically glorifies Erard as a builder, naming all the castles he had built or restored, and ending the enumeration with the palace of Liège.[6] Juan Calvete de Estrella mentioned Erard in this same sense, in his famous account of the travel of Philip II of Spain through Southern Netherlands in 1549. 'One could say', he wrote, 'that he had found Liège as a city of bricks and that he left it as a city of marble', adapting the winged words that Suetonius had used to praise Augustus on
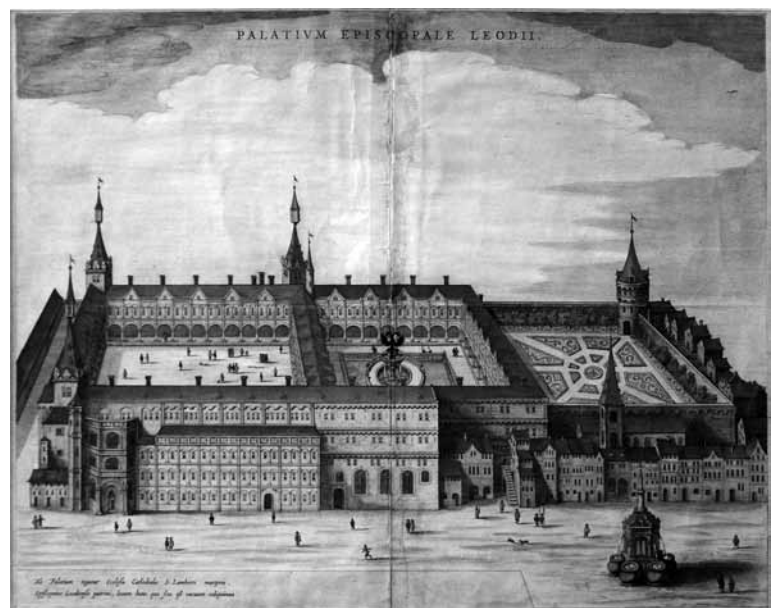
Figure 1. Johan Blaeu, The palace of Liège, 1649. Collection du cabinet des Estampes et des Dessins de la Ville de Liège. (source: CED - Ville de Liège)

his achievements in Rome.[7] Clearly, Erard marked the renascence and rebuilding of Liège, and the palace symbolised this renascence to a great extent. An extent that went further than the prince-bishop himself. After all, the palace was not only his official residence, but also the seat of many institutions, such as the Estates and the justice of the peace court. This concentration of functions defined the palace as the political and judicial forum of the country. Due to the crisis, the condition of the building was so rough, that it was no longer used. Construction work started only in 1526, and from 1532 on, the building was used as the princely residence, although the works continued even after Erard's death in 1538.

Although contemporary archival and iconographical sources hardly subsist, there are several interesting 17th century views and descriptions on the palace.[8] Analysis of these images illustrates that the new palace integrated several elements of the famous *Vieux Palais*. A print of Joan Blaeu of 1649 shows the entrance building, created in 1449 by prince-bishop Jean de Heinsberg (Fig. 1). The Romanesque buildings on the right of it date from the 12th century, and the complex contains even some older parts, dating of Notker's time.[9] Whether this integration of older elements in the new complex should be explained by reasons of economy, or as a deliberate choice, Erard's new palace linked up with the *Vieux Palais*, symbolising the revival of the fatherland and the continuance of the old regime; and indeed also manifesting Erard de la Marck as the just and magnificent prince-bishop of the country, a dignified successor of great rulers such as Notker. In this respect it should be noted that Erard de la Marck did make use of iconic elements of the local history, in order to legitimize his position as a ruler. His very first commission concerned the reliquary of Saint Lambert, that shows the patron saint of the cathedral, honoured by the kneeling prince-bishop. [10]Considering the specific architectural qualities of the palace, there is a strong 'French connection', already well established in the existing literature.[11] The French court culture, including the contemporary palatial architecture, had a strong influence on Erards cultural horizon, since he was strongly attached to the French royal court during the first period of his reign. Indeed, Erard had been elected prince-bishop thanks to the support of the French king Louis XII, and for many years, he was a confidant of the French king and frequently stayed at court in Blois and elsewhere. He also accompanied Louis XII in 1509 during his military campaigns in Italy. His friend cardinal Georges d'Amboise, bishop of Rouen and the minister of state, supported his election as bishop of Chartres in 1507. Georges d'Amboise could be considered as an important cultural role model for Erard. He invested his wealth in an impressive number of commissions, building up a material culture in which architecture played an important role.[12] As a bishop, d'Amboise had many residences at his disposal, of which the most important were the palace of Rouen and the castle of Gaillon, the humble summer residence that was rebuilt into a magnificent casle by his order.[13]

The palace of Liège displays two courts and a garden, lying in line, each area with a specific purpose, and arranged in a sequence from public to strictly intimate use. This distribution shows some resemblance with the palace of Rouen after the rebuilding by Georges d'Amboise in the period 1494-1507, which resulted in two courts and a third area with a garden.[14] The court façades that combine a gallery, a first floor with cross-windows and a roof floor with lucarnes, equally with cross-windows, have justly been compared with the Logis des Sept Vertus in the casle of Amboise, and with the Louis XII-wing of the castle of Blois, a residence that Erard visited several times. Yet another element should be mentioned in that same international context, namely the first court, with its columns and sculptured ornaments, which is clearly the most famous aspect of the palace that has fascinated many visitors from different periods, and scholars too. The columns should be seen as an example of the contemporary aesthetics, where elements like complexity of forms, rich decorative patterns, inventiveness and variety were essential categories in art and architecture. Columns with balusters or shaped like candelabra perfectly fit in that context. In his *Medidas del Romano* (1526), Diego da Sagredo praised these '*colunas dichas monstruosas, candeleros y balaustres*', that is, fanciful and of a curious beauty.[15] In Northern Italy, these columns were not unusual in architecture, and in the 16th century, they were introduced in Spain, France and elsewhere. Their adaptation as a structural element however is not common in the Netherlands, although the palace of Liège certainly is not the only example, as other buildings in Maastricht and Bruges prove.[16] The iconography of the sculptural decoration of the first court has puzzled many scholars, but as yet, a consistent explanation on its meaning has not been given. I would like to propose a new hypothesis that takes into account the ceremonial of the specific area of this palace. The emphasis of the iconography lies on fools, figures with strange grimaces, fantastic and savage creatures, exotic looking masks, all of these in close connection to a scenery with abundant foliage. In earlier literature, references were made to the theme of folly as treated by Erasmus in his *Laus Stultitiae* (1511) and by Sebastian Brandt in his *Narrenschiff* (1494). Concerning the exotic motifs, the contemporary fascination on the people and the culture of the newly discovered continent of America was named as source of inspiration and indeed cultural circles in Liège shared this general interest, as is proved by the chronicle of Liège by Jean de Brusthem, who described in detail the public presentation of a group of captured Indians in 1509 in Rouen.[17] Furthermore, Margaret of Austria possessed a collection of exotic treasures in her palace in Malines, and so did the emperor Charles V in his palace in Brussels.[18] Most probably, Erard de la Marck himself did see these objects during his frequent stays in both cities. Still, all these and other anecdotal facts and assumptions, connecting the prince-bishop and his circle to possible sources of inspiration, do

not give an explanation on the function and the meaning of the iconography, displayed in this court. We should however take into account, that for centuries in western imagery an important emphasis was laid on wild and exotic people, on fools, peasants and other categories regarded as marginal. They were introduced as stereotypes in a system of negative self-definition, by connecting them with unwanted behaviour and qualities such as immorality, impulsiveness, folly, coarseness, lack of discipline, of culture, of sociability. This negative mould clarified the supposed or aspired self-image. This system is found in a wide range of artistic genres,[19] from visual arts to literature and theatre, and its application in the court of Liège should be regarded as a definition of this court and of the surrounding buildings, and of its function. This centre of political, diplomatic and judicial activities, crowded with members of the Estates, judges and clerks, was defined through the mirror image of vices and stereotypes that embodied them. Thus, the iconography of this court defines the area as a place where good governance, justice and civilisation rule, in fact as a *palazzo della ragione*. In contrast to this first court, the second court of the palace totally lacks this sculptural decoration, for indeed, this area was preserved for the apartments of the prince-bishop himself and therefore could do without this discourse on virtues.

Figure 2. Renier Blockhuysen, The Jesuit College of Malines, engraving, 1727, in: Antonius Sanderus, Chorographia sacra Brabantiae, Den Haag, 1726-1727, vol. 3. (source: Stadsarchief Mechelen – www.beeldbankmechelen.be) The college included the former palace of Margaret of York, and to the right of it, the residence of Erard de la Marck.

Erard's political aspirations could not entirely be translated in this palace. Since his alliance with the Habsburg Netherlands, concluded in the treaty of Saint-Trond in 1518, he personally purchased no less than three residences in significant cities in the Netherlands: Brussels, Malines and Antwerp, two of which were lying in the vicinity of the most important political centres.[20] In Brussels, he possessed a residence not far from the palace of Charles V, and in Malines he had bought the residence of Philip van Cleve, Lord of Ravenstein (Fig. 2). This dwelling stood next to the former palace of Margaret of York and almost in front of the palace of Margaret of Austria, the governess of the Netherlands.[21] These residences were not only used as an accommodation during Erard's frequent politically inspired travels to Brussels and Malines, but also could function as a monumental reference to their possessor, identifying him as an important political figure and a valuable ally. These qualifications seem to be embodied by a rare and remarkable relic of Erard's residence in Antwerp, the entrance with an abundant sculptural decoration that only recently has been identified as such.[22]

Endnotes

1. The current article presents an aspect of my doctoral research. Stefaan Grieten, The material image-building of Erard de la Marck, Prince-Bishop of Liège. Strategy, components and significance of a versatile discourse (KU.Leuven, promotor prof. Dr. Krista De Jonge).

2. Several monographs have been published on Erard de la Marck: Léon-E. Halkin, *Le cardinal de la Marck. Prince-Evêque de Liège (1505-1538)* (*Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liége*, 43) (Liège : Vaillant-Carmanne – Paris: Champion, 1930) ; Eugène Buchin, *Le règne d'Erard de la Marck. Etude d'histoire politique et économique* (*Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liége*, 47) (Liège: Vaillant-Carmanne – Paris: Champion, 1931); Paul Harsin, *Le règne d'Erard de la Marck 1505-1538* (*Etudes critiques sur l'histoire de la principauté de Liège 1477-1795*, 2) (Liège: Université de Liège, 1955).

3. Suzanne Collon-Gevaert, *Erard de la Marck et le palais des princes-évêques à Liège* (Liège: Vaillant-Carmanne, 1975); Jean Lejeune (ed.), *Liège et son palais. Douze siècles d'histoire* (Anvers: Fonds Mercator, 1980); Liliane Sabatini, *Le palais de Liège, ancien palais des princes-évêques et des Etats de Liège: étude historique et architecturale* (*Les carnets du patrimoine*, 12) (Namur: Ministère de la Région wallonne – Liège: Editions du Perron, 1995); Bruno Demoulin (ed.), *Liège et le palais des princes-évêques* (Bruxelles: Fonds Mercator, 2008); Julie Godinas, *Le palais de Liège, coeur de la Cité ardente* (Namur: Institut du Patrimone wallonne, 2008).

4. Godefroid. Kurth, *Notger de Liège et la civilisation au Xe siècle* (Paris: Alphonse Picard et Fils, 1905); Jean-Pierre Delville, Jean-Louis Kupper and M.

Laffineur-Crepin (ed.), *Notger et Liège: l'an mil au cœur de l'Europe* (Liège: Perron, 2008).

5. Jean-Louis Kupper and Philippe George, *Charles le Téméraire. De la violence et du sacré* (Liège: Perron, 2007).

6. Joseph Brassinne, "Le tombeau d'Erard de la Marck, évêque et prince de Liège," *Bulletin de la Société du Bibliophile liégeois* 17 (1946), 85-118; Hadrien Kockerols*, Monuments funéraires en pays mosan* 4. *Arrondissement de Liège. Tombes et épitaphes 1000-1800* (Malonne: Kockerols, 2004), 210-214.

7. '… el Cardinal Eberardo, d'el qual se puede dezir, que hallo a Lieja, hecha de ladrillo, y la dexo de marmol'. Juan Christoval Calvete de Estrella, *El felicissimo viae d'el muy alto y muy poderoso principe Don Phelippe, hijo d'el emperador Don Carlos Quinto Maximo, desde Españo à sus tierras de la baxa Alemaña, con la descripcion de todos los estados de Brabante y Flandres* (Antwerp, Martinus I Nutius, 1552), fol. 330v°. Suetonius introduced the image in his *De Vita Caesarum – Divus Augustus*.

8. For instance the detailed account of Philippe De Hurges: H. Michelant, *Voyage de Philippe de Hurges à Liège et à Maestrect en 1615* (Liège, 1872).

9. Jean Lejeune, "Le nouveau palais," in Jean Lejeune (ed.), *Liège et son palais. Douze siècles d'histoire* (Anvers, 1980), 59-63.

10. Pierre Colman, *L'orfèvrerie religieuse du XVe siècle à la révolution* (2 vols, Liège: Université de Liège, 1966), vol. 1, 94-109; Id., "Le Buste-reliquaire de Saint-Lambert et sa restauration," *Bulletin de l'Institut du Patrimoine Artistique* 14 (1973/1974), 39-83; Ernst Günther Grimme, *Hans von Reutlingen "golsmit zo aach"* (Aachen: Einhard, 1999), 33-48 and 128-129.

11. Suzanne Collon-Gevaert, «Le palais des princes-évêques à Liège et la Renaissance française,» *Bulletin de la Société d'art et d'histoire du diocèse de Liège* 39, (1955), 53-83 ; Id., *op. cit.*, 23-42 ; Id., "La construction du palais (cr. 1526-1536) ," in Jean Lejeune (ed.), *op. cit.*, 127-132 ; Liliane Sabatini, *op cit.*, 13-16 ; Cécile Oger, "Le siècle des cardinaux (1505-1580), " in B. Demoulin (ed.), *op. cit.*, 54-59.

12. For Georges d'Amboise, a.o. Y. Bottineaux-Fuchs, *Georges Ier d'Amboise (1460-1510). Un prélat normand de la Renaissance* (Rouen: Editions PTC, 2005). In 2010, two colloquia on the personage of Georges d'Amboise were organised : *Georges d'Amboise, l'homme et son œuvre* (8-9/10/2010, Université de Rouen), and *Georges Ier d'Amboise (1460-1510) : une figure plurielle de la Renaissance* (2-3/12/2010, Université de Liège).

13. For Gaillon, a.o. Elisabeth Chirol, *Un premier foyer de la Renaissance en France. Le château de Gaillon* (Paris: Picard – Rouen: Lecerf, 1952) ; Flaminia Bardati, Monique Chatenet and Evelyne Thomas, «Le château de Georges I d'Amboise à Gaillon,» in Bernard Beck et al., *L'Architecture de la Renaissance en Normandie* 2. *Voyage à travers la Normandie du XVIe siècle* (Caen, Presses universitaires de Caen, 2003), 13-29 ; Flaminia Bardati, «*Il bel palatio in forma di castello». Gaillon tra Flamboyant e Rinascimento* (Roma, Campisano Editore, 2009).

14. Flaminia Bardati, "Le palais archiépiscopal de Rouen," in Bernard Beck et al., *L'Architecture de la Renaissance en Normandie* 2. *Voyage à travers la Normandie du XVIe siècle* (Caen, Presses universitaires de Caen, 2003), 121-126.

15. Krista De Jonge, "'Anticse Werken' : Architecture in the Antique Manner 1500-1530, " in Krista De Jonge and Koen Ottenheym (eds.), *Unity and Discontinuity. Architectural Relationships between the Southern and Northern Low Countries (1530-1700)* (Turnhout: Brepols, 2007), p. 21-40; Krista De Jonge, "Style and Manner in Early Modern Netherlandish Architecture (1450-1600). Contemporary Sources and Historiographical Tradition," in Stephan Hoppe, Matthias Müller and Norbert Nussbaum (eds.), *Stil als Bedeutung in der Nordalpinen Renaissance. Wiederentdeckung einer methodischen Nachbarschaft* (Regensburg: Schnell & Steiner, 2007 [2008]), 102-123.

16. Krista De Jonge, "Columns and Pillars, Antique and Modern," in Hans Hubach et al. (ed.), *Reibungspunkte: Ordnung und Umbruch in Architektur und Kunst. Festschrift für Hubertus Günther* (Petersberg: Imhof, 2008), 39-46.

17. Edmond Reusens, "Erard de la Marck. Prince-évêque de Liège. Extrait de la chronique de Jean de Brusthem (1506-1538)," *Bulletin de l'institut archéologique Liégeois* 8 (1866), 30.

18. Paul Vandenbroeck, "Amerindiaanse kunst- en siervoorwerpen in adellijke verzamelingen: Brussel, Mechelen, Duurstede, 1520-1530," in *America: Bruid van de zon. 500 jaar Latijns-Amerika en de Lage Landen* (exhibition catalogue, Antwerp, 1991) 99-119; Dagmar Eichberger, *Leben mit Kunst, Wirken durch Kunst: Sammelwesen und Hofkunst unter Margarethe von Österreich, Regentin der Niederlande* (Turnhout: Brepols, 2002), 179-185; Deanna MacDonald, "Collecting a New World: The Ethnographic Collections of Margaret of Austria," *Sixteenth Century Journal* 33 (2002), 649-664.

19. Paul Vandenbroeck, *Beeld van de Andere, vertoog over het Zelf. Over wilden en narren, boeren en bedelaars* (exhibition catalogue, Antwerp, 1987).

20. For Brussels, see J.-M. Duvosquel, "De oude hoven van der Marck-Arenberg te Brussel," in J. Roegiers et. al. (eds.), *Arenberg in de Lage Landen. Een hoogadellijk huis in Vlaanderen & Nederland* (Leuven: Universitaire Pers Leuven, 2002) p. 163-165. For Antwerp, see A. Mertens, "Arenberg in Antwerpen," J. Roegiers et. al. (eds.), *Arenberg in de Lage Landen. Een hoogadellijk huis in Vlaanderen & Nederland* (Leuven: Universitaire Pers Leuven, 2002), 161-163.

21. For these two palaces: Krista De Jonge, "The Principal Residences in Mechelen: the Court of Cambrai and the Court of Savoy," in Dagmar Eichberger (ed.) *Women of Distinction: Margaret of York/Margaret of Austria*, Leuven: Davidsfonds 2005, 57-66.

22. The author is preparing an article on this discovery.

GRAND DUCAL GRANDEUR
PALAZZO PITTI IN FLORENCE AS A MODEL FOR EUROPEAN BAROQUE COURT RESIDENCES

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Mi è parso dunque di fare una opera meritoria verso il ben publico di tutte le Provincie Oltramontane, producendo in luce li dissegni da me raccolti nella mia peregrinatione Italica, d'alcuni Palazzi della superba città di Genova. Perché si come quella Republica è propria de Gentilhuomini, così le loro fabriche sono bellissime e commodissime, à proportione più tosto de famiglie benché numerose di Gentilhuomini particolari, che di una Corte d'un Principe assoluto. Come si vede per essempio nel Palazzo de Pitti in Fiorenza, e il Farnesiano in Roma, la Cancellaria, Caprarola, e infiniti altri per tutta l'Italia, sì come ancora la famosissima fabrica della Regina Madre nel borgo di San Germano a Parigi. Li quali tutti eccedono in grandezza, di sito e spesa, le facultà di Gentilhuomini privati.[1]

In 1622 Peter Paul Rubens outlines, in his successful volume on *The Palaces of Genoa*,[2] a bold mapping of European models: the Pitti palace of Tuscany's grand-dukes in Florence is the modern example that updates a Renaissance, Roman model (from the Cancelleria to the Farnese's palaces), a link to the new French examples such as the Luxemboug palace that Marie de Médicis wanted to be "sous la forme e le modèle du palais Pitti", so that Solomon de Brosse decided to use for its facade the peculiarly Florentine doric and ionic orders with rusticated quoins, recognized at once as the queen's "ordre de sa Patrie" .[3]

Palazzo Pitti had been built for the Pitti family in the 1460s. (Fig.1) It was bought by the Medici in 1550 and became their official seat at the end of the century, integrating their residence in the city centre, palazzo Vecchio, linked through the Uffizi with a long aerial passageway crossing the river, built by Vasari in 1565. As the new grand-ducal palace, Pitti underwent extensive enlargement and renovation works: in the 1570s Bartolomeo Ammannati concluded a first building campaign that transformed it into a grander structure, leaving the front facade untouched but articulating the back into a C-shaped courtyard opening onto the gardens of the Boboli hill, enriched with fountains, stuatuary, and grottoes. In 1618 grand-duke Cosimo II started on a new programme, having his court architect Giulio Parigi design a new extension facing an enlarged, regularized piazza towards the city. In the 1640s this programme was completed under Cosimo's son, Ferdinando II, by Parigi's son Alfonso: through extensive annexions, the Boboli gardens were also reshaped with an open-air theatre, and a large, straight alley running downhill towards porta Romana, where it would connect to the new alley leading to the villa of Poggio Imperiale, built in the 1620s for the grand-duchess as an extra-moenia extension of the residential dynastic system.[4]

Figure 1. Florence, palazzo Pitti. Facade.

Rubens' remarks applied to a building that was being thoroughly reshaped, stirring debates and confrontations in court and academic circles in Florence and abroad. The issue of the shaping of a new image of magnificence for dynastic court residences had been strongly felt in the Italian capitals since the second half of the sixteenth century, when new structures and functions had to be devised in the new political centres of Turin, Parma, Modena. Grand-ducal Florence, with a strong sense of supremacy for its international dynastic links, and as the cradle of modern artistic languages, led the debate together with papal Rome, where

cultural and symbolic values, uses and functions, reflected the peculiar institutional structure and the highly diversified patronage of the papal court.

In my opinion the interplay of roles between Florence and Rome in the first half of the Seicento has been highly underestimated, and modern scholarship tends to see Florence's architectural production as peripheral, parochial and uninfluential, opposed to the international success of Rome's Baroque architectural masterpieces. On the contrary, the very nature of Florence as a dynastic capital with strong foreign alliances, made its new architectural and urban structures – together with other artistic expressions of court art, from dress codes to music and pageantry – receptive on the one hand, and esteemed, praised and studied on the other, reflecting the cultural, political, even military prestige of its ruling family and its international role. Thus, Florence contributed consistently to the shaping of Europe's early modern capitals. Besides Rubens' remarks, a wealth of evidence testifies it.

At the end of the 1620s Florence's debate on Pitti and the ruler's ideal palace influenced Rome's debate on the designs of the new palace for pope Urban VIII's family, with the involvement of Florentine scholars and architects-courtiers strongly linked to Barberini's intellectual circles: Michelangelo Buonarroti the Younger and Sigismondo Coccapani.[5] Thus the design of palazzo Barberini, that in 1629-30 with Maderno, Bernini, Borromini, and Pietro da Cortona, would introduce revolutionary codes and start a new artistic era, included Florentine echoes, such as the unusual location in the outskirts of the city centre, that emphasises visibility and spatial dominion.[6] A decade later, Pietro da Cortona, working on the decoration of the state rooms at Pitti, was asked by an over ambitious Ferdinando II to submit ideas to update the front facade: Cortona's design introduced Roman issues into the local language of the peculiar, highly intellectual archaizing front of the grand-ducal palace[7]. The interplay between the building sites of Pitti, with its peculiar architectural choices, and Barberini, the masterpiece of Maderno and his young collaborators Bernini and Borromini, is telling evidence of the high reputation of Florence's court, its architecture and learned debates.

In 1644 the English scholar John Evelyn, travelling through the continent, on visiting Florence noted in his diary that the Palace of Pitti was built by that family, but of late greatly beautified by Cosmo with huge square stones of the Doric, Ionic, and the Corinthian orders, with a terrace at each side having rustic uncut balustrades, with a fountain that ends in a cascade seen from the great gate, and so forming a vista to the gardens. Nothing is more admirable than the vacant staircase, marbles, statues, urns, pictures, court, grotto, and water-works. In the quadrangle is a huge jetto of water in a volto of four faces, with noble statues at each square, especially the Diana of porphyry above the grotto. We were here showed a prodigious great loadstone. The garden has every variety, hills, dales, rocks, groves, aviaries, viaries, fountains, especially one of five jettos, the middle basin being one of the longest stones I ever saw. Here is everything to make such a Paradise delightful.[8] (Fig. 2)

Evelyn caught one the most important peculiarities of Pitti, that is its brilliant relationship between the long front of the building, the two wings defining the open

Figure 2. View of piazza Pitti. Etching, 1640 ca (after F. Cecchi Conti). (source: The British Museum, London)

courtyard, and the vista into the gardens, then extended with the new transverse alley towards Porta Romana. At the end of the Cinquecento Robert Dallington, in his highly critical *Survey of the Great Dukes State of Tuscany*, had already written approving notes on the Pitti palace, and on the city's structure:

> beautified with many stately Palaces, which have more *del Reale* than *del Cittadinesco*, as that of the *Signoria*, that of the Pitti, where is always the great Dukes court: that of the *Medici* that of the *Strozzi* and many others: it is graced with many large *Piazzes*, and in them many *Statues*, some of Brasse, as that of *Cosme*, the first great Duke .[9]

Inigo Jones, who perhaps visited Florence for the first time with Dallington, had direct contacts with Giulio Parigi, drawing substantial inspiration for his masques from Medicean court pageantry.[10] But besides the overt classical and Palladian language

that Jones was to introduce into the English architectural world, in his very entourage there developed other accents: Nicholas Stone the Younger, son of Jones' master mason, was sent to Italy in 1638-1642 with his brother Henry to buy antiques, architectural books and prints, and study architecture and sculpture in Florence, where he stayed three months visiting and surveying monuments and drawing in the grand-ducal Galleries, and in Rome, where he had the chance to attend Bernini's atelier.[11] In Florence Stone studied, sketched and described with enthusiasm Michelangelo's works, and "the great Dukes pallace and garden called Bubley behind the pallace Pictey", the funerary chapel at S. Lorenzo ('for cost and beautiful stone the richest worke on of them in all ye world'), the newly built villa at Poggio Imperiale: his English mentor in the city, Mr Paston, 'taking very good liking to this housse desired leave that I might come to take a modell of it, which was granted' .[12]

The German architect Joseph Furttenbach, that like Inigo Jones studied under Giulio Parigi during his stay in Florence early in the century, contributed to the European fortune of the model of Pitti including it in his successful treatise *Architectura civilis*, completed with a full set of images reproducing its elevations and plans,[13] contributing the first architectural images of the palace that integrate an official production of prints otherwise limited to festivals and theatrical performances that spread throughout Europe an image of magnificence so eagerly promoted by the ruling family.

Public spaces connected to Medicean residentiality and court festivals were re-designed to create stage-sets for the ruling family and their court: the vast piazza facing the Pitti palace was enlarged and regularized from 1616 on, a mighty symbol of power and magnificence;[14] it found its counterpart, replete with baroque symbolism, in the square opened up before the most important, oldest and richest hospital of the city, S. Maria Nuova, now under full grand-ducal control.[15] The rebuilding of the hospital, started in 1616, is thus complemented with a public space that hints at the new piazza in front of Pitti: it is a stately space, indented from the street, faced on all sides by the hospital's porticoed fronts decorated with the busts of the grand-dukes. The ruler's palace, and the poors' hospice, evoke the double nature of Medicean virtues and power: the triumph of magnificence and the exercise of piety. Finally, the grand-ducal square of SS. Annunziata, regularized with its porticoes, decorated with the equestrian statue of Ferdinando I between the two fountains at its centre, and dominated by the Medicean shrine of the Virgin evocked, in its Capitoline setting, an ancient roman forum, soon adopted in European royal squares, from Paris to Madrid to Nancy, where Florence's primacy in the production of full-size bronze equestrian monuments was honoured by requesting Pietro Tacca's statues[16] (in London, according to John Evelyn, Inigo Jones's Covent Garden piazza was more reminiscent of the main square of the new Tuscan harbour town of Leghorn, also praised in 1638 by Nicholas Stone) .[17]

Wolf Caspar von Klengel, court architect to Johann Georg I Elector of Saxony, studied Florence's Medici architectural monuments with care during several stays between 1651 and 1657, and, together with other Italian, Palladian and Roman, examples, integrated them in his designs for Dresden's new court structures. His enthusiasm for the grand-ducal workshop where marble inlay mosaic was produced led the Elector to petition the grand-duke for artists to be sent to Germany.[18]

Sweden's culture in the 'age of greatness' is also interspersed with Florentine suggestions: in his Italian sketches dated 1650-51, court architect Erik Dahlbergh studied Pitti along with Roman architecture and other structures that started stirring international interest: the still unfinished ducal palace of Modena, with its Roman grandeur and brilliant, original solutions (the open-well square stately staircase), was spotted as the ultimate offspring of a glorious tradition.[19] Later in the century, during his formative travels through France, Germany, Austria, England and Italy in 1673-1690, Nicodemus Tessin the younger also studied Pitti and the funerary chapel at S. Lorenzo during his two European tours.[20] Eager to familiarize with the newest masterpieces of Italian, and especially Roman, architecture, Tessin is perhaps less interested in the architectural tradition of Florence: it is the richness of the city's art collections, their display in the magnificence of lavishly decorated and dedicated spaces, and the elaborate court ceremonials that took place in such setting, that catches his interest. Pitti is now seen, as Gualdo Priorato had it in the eulogy published in 1668, as a 'reale, e superba machina' ('a royal, and grand machinery'), an elaborate stage for the self-representation of a ruler's grandeur:[21] so, mingled with French and other Italian models (the ducal palaces of Turin and Modena, Caprarola, etc.), Pitti, as well as the funerary chapel in S. Lorenzo, still has a role to play in Tessin's designs for the renovation of Stockholm during the reign of Christian XII.

During the first half of the Seicento the Pitti palace shows to emerging European courts all the values of a grand architectural structure, a stage for magnificent state ceremonies and court life. It is its integration of functions, of architecture and urban planning, history, theatre and nature, that seems to be so fascinating: the palazzo with its vast, regularized square sets a physical, and metaphoric void between the ruler and his people; the gardens extending to the city walls spread beyond the city boundaries – Poggio Imperiale, the Cascine - towards the villas, gardens and farms in the outskirts. The Medici funerary chapel, the Cappella dei Principi in the palatine church of S. Lorenzo, whose inner revetment of semi-precious stone mosaic was regarded as one of the world's wonders, was admired as a true seal of princely magnificence. Started in 1604, the mausoleum was built slowly along the century, celebrated in Baroque terms as a 'divine structure', 'eighth wonder of the world', 'miracle', 'sun': emblem,

for courtesan and architect Cesare Bracci writing a short panegyric loaded with symbolism in 1633, of the 'perfection' of Florence, 'city of happyness'.[22] Drawing from straightforward and easily recognisable hyerosolimitan symbols, the excesses of such dynastic pantheon make it a masterpiece of Baroque architecture, famed - and indeed imitated - throughout Europe.

More than anywhere else in Italy, Florence's court residential system seems pervasive, transforming the whole urban fabric into a stage set for a never ending performance of grandeur, political, cultural, military, in the integration of the two main palaces (Pitti, and palazzo Vecchio), new piazzas, alleys, specialized court structures with offices, museums, theatres, nunneries, family and dynastic shrines, workshops, stables and even a famed, and imitated, wild animal's *serraglio*.[23]

Endnotes

1. Peter Paul Rubens, *Palazzi di Genova* (Antwerpen, 1622).

2. On the exceptional fortunes of Ruben's book: Piet Lombaerde (ed.), *The reception of P.P. Ruben's Palazzi di Genova during the 17th century in Europe: questions and problems* (Turnhout: Brepols, 2002). See also Piet Lombaerde, Barbara Uppenkamp, and Ben van Beneden (eds.), *Palazzo Rubens. The Master as Architect* (Brussels: Mercatorfonds, 2011).

3. Marie-Noelle Baudouin-Matuszec, *Un palais pour une reine mère*, in *Marie de Médicis et le Palais du Luxembourg* (Paris: Délégation à l'action artistique de la Ville de Paris, 1991), 187-188; Claude Mignot, *L'architecture française au temps de Marie de Médicis*, in *Marie de Médicis. Un gouvernement par les arts* (Paris: Somogy, 2003), 37.

4. For recent scholarship on the Pitti Palace: Marco Chiarini (ed.), *Palazzo Pitti: l'arte e la storia* (Firenze: Nardini, 2000); *Palazzo Pitti: la reggia rivelata* (Firenze: Giunti, 2003); "Palazzo Pitti", *Opus incertum*, 1 (2006).

5. Patricia Waddy, "Michelangelo Buonarroti the Younger, *sprezzatura*, and Palazzo Barberini", *Architectura* 5 (1975), 101-122; Ead., "The Design and Designers of Palazzo Barberini", *Journal of the Society of Architectural Historians* 35 (1976), 151-185.

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7. Malcolm Campbell, *Pietro da Cortona at the Pitti Palace. A study of the Planetary Rooms and related projects* (Princeton: Princeton University Press, 1977); Id., "Da Palazzo Pitti a Palazzo palatino: osservazioni sul 'Gran progetto' di Pietro da Cortona", in Christof L. Frommel and Sebastian Schütze (eds.), *Pietro da Cortona* (Milano: Electa, 1998), 256-261; Laura Baldini Giusti, *Il palazzo nella progettazione di Pietro da Cortona*, in *Palazzo Pitti. La reggia rivelata*, cit., 364-371; Jörg Merz, *Pietro da Cortona: realizzazioni e progetti nella Toscana di Ferdinando II*, in Mario Bevilacqua, Giuseppina C. Romby (eds.), *Atlante del barocco in Toscana* (Roma: De Luca, 2007), 109-116 (now in Id., *Pietro da Cortona and Roman Baroque Architecture*, New Haven/Conn.: Yale University Press, 2008, 107-111); Mario Bevilacqua, *Palazzo Pitti*, in Id., Romby, *op. cit.*, 402-405.

8. John Evelyn, *Diary and Correspondence of John Evelyn, F.R.S.*, ed. William Bray (London: Bradbury and Evans, 1850), I, 92.

9. Robert Dallington, *A Survey of the Great Dukes State of Tuscany. In the yeare of our Lord 1596* (London: Edward Blount, 1605), 9. Cf. Edward Cheney, *The Evolution of the Grand Tour* (London: Frank Cass Publishers, 1998), 143-160.

10. Stephen Orgel and Roy Strong, *Inigo Jones. The Theatre of the Stuart Court*, I-II (London: Sotheby Parke Bernet, 1973); John Harris and Gordon Higgott, *Inigo Jones: Complete Architectural Drawings* (London: Zwemmer, 1989). Jones was in Italy for a first time in ca. 1597-1603, then in the much better documented tour accompanying Lord Arundel in 1613-14.

11. London, Sir John Soane's Museum's collection of drawings, vol. 93. Stone's Italian travel notes are in the British Library, Har. MS 4049, published in Walter L. Spiers, "The Note-Book and Account-Book of Nicholas Stone, Master Mason to James I and Charles I", *The Walpole Society*, vii (1919), 20-26, 158-200; David Howarth, "Samuel Boothouse and English Artistic Enterprise in Seventeenth-century Italy", *Italian Studies*, xxxii (1977); Howard Colvin, *A Biographical Dictionary of British Architects* (New Haven-London: Yale University Press, 1995), 930.

12. Spiers, *op. cit.*, 166-167. Some days later Stone noted in his diary: 'I went to Poggio Imperiale and toke the groundplott thereof', 'I drew it faire one a large shette of payper for Mr Paston', 'I went to Poggio and drew the second story and front', 'I drew them faire upon large paper'.

13. Joseph Furttenbach, *Architectura civilis, das ist Eigentlich Beschreibung wie Mann nach bester Form und gerechter Regul...* (Ulm: Jonam Saurn, 1628).

14. Daniela Smalzi, "Giulio Parigi architetto di corte: la progettazione dell'ampliamento di palazzo e piazza Pitti", in Mario Bevilacqua (ed.), *Architetti e costruttori del barocco in Toscana* (Roma: De Luca, 2010), 69-87.

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16. Wolfgang Lotz, *Studies in Italian Renaissance architecture* (Cambridge/Mass.: MIT Press, 1977); in the vast body of literature on the subject Florence's seems to be rather overlooked: cfr. A. Köstler, *Place Royale. Metamorphosen einer kritischen Form des Absolutismus* (München: Fink, 2003). On Tacca's equestrian groups for Madrid and Paris: Franca Falletti (ed.), *Pietro Tacca. Carrara, la Toscana, le grandi corti europee* (Firenze: Mandragora, 2007); for Nancy: Christina Strunck, "How Chrestienne became Cristina. Political and Cultural Encounters between Tuscany and Lorraine", in Ead. (ed.), *Medici Women as Cultural Mediators (1533-1743)*, (Milano: Silvana, 2011), 157.

17. Evelyn, *op. cit.*: "the Piazza is very fayre ad comodious, and with the Church whose 4 columns at the portico are of black marble polish'd, gave the first hint to the building both of the Church and Piazza in Covent Garden with us, tho' very imperfectly persu'd". For Stone's remarks: Spiers, *op. cit.*, p. 159-160: "Ligorne being very pleasent, having the streats crossing each other att right angles, the housses all painted with fresco. Ligorne has one very faire church fronting a great markett place w.ch is very plaine but handsome".

18. Günther Passavant, *Wolf Caspar von Klengel. Dresden 1630-1691* (München-Berlin: Deutscher Kunstverlag, 2001), 18, 84-85, 107-109, 121, 384, 414-418.

19. Wilhelm Nisser, *Die Italienischen Skizzenbücher von Erik Jönson Dahlberg und David Klöckner Ehrenstrahl* (Uppsala: Almqvist & Wiksells, 1948). On Modena's ducal palace, built by Bartolomeo Avanzini for duke Francesco d'Este, who also consulted Bernini, Cortona, and Rainaldi in Rome, see Anna Maria Matteucci, *Il palazzo Ducale nel dibattito sulle residenze di corte*, in *Il palazzo Ducale di Modena. Sette secoli di uno spazio cittadino*, ed. Albano Biondi (Modena, Panini, 1987), 83-121; *Modena 1598. L'invenzione di una capitale*, eds. M. Bulgarelli, Claudia Conforti, and Giovanna Curcio (Milano: Electa 1999).

20. *Nicodemus Tessin the Younger. Sources, Works, Collections. Travel Notes 1673-77 and 1687-88*, eds. Merit Laine and Börje Magnusson (Stockholm: Nationalmuseum, 2002); *Nicodemus Tessin the Younger. Sources, Works, Collections. Traictè dela decoration interieure 1717*, ed. Patricia Waddy (Stockholm: Nationalmuseum, 2002); *Nicodemus Tessin the Younger. Sources, Works, Collections. Architectural Drawings, I. Ecclesiastical and Garden Architecture*, eds. Martin Olin and Linda Henriksson (Stockholm: Nationalmuseum, 2004); see also Elizabeth Pilliod, "Tessin's Florence", in Marten Snickare (ed.), *Symposium. Nicodemus Tessin the Younger* (Stockholm: Nationalmuseum, 2003), 74-81.

21. Galeazzo Gualdo Priorato, *Relatione della città di Fiorenza, e del Gran Ducato di Toscana sotto il Regnante Gran Duca Ferdinando II, con tutte le cose più degne, e curiose da sapersi* (Colonia: Pietro de la Place,1668).

22. Cesare Bracci, *Della cappella de Ser.mi Granduchi di Toscana nella Chiesa di S. Lorenzo in Fiorenza. Discorso morale* (Arezzo: Ercole Gori, 1633); on the meaning of "città Felice" in Italian Baroque urban and architectural culture see Marcello Fagiolo and Maria Luisa Madonna, *Il Teatro del Sole. La rifondazione di Palermo nel Cinquecento e l'idea di città barocca* (Roma: Officina, 1981), 65-115. On the chapel: Alessandro Rinaldi, *La cappella dei Principi in S. Lorenzo e le retrovie del Barocco*, in Marcello Fagiolo and Maria Luisa Madonna (eds.), *Il Barocco romano e l'Europa* (Roma: Poligrafico, 1992), 321-355; Massimiliano Rossi, *Emuli di Goffredo: epica granducale e propaganda figurativa*, in Elena Fumagalli, Massimiliano Rossi and Riccardo Spinelli (eds.), *L'arme e gli amori: la poesia di Ariosto, Tasso e Guarini nell'arte fiorentina del Seicento* (Livorno: Sillabe, 2001), 32-42.

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CEREMONIAL AND CULTURAL INTERPLAY IN CONFLICT? PALACE ARCHITECTURE OF THE SAVOYANS IN TURIN

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INTRODUCTION

'*Madama sposa … sostiene la libertà francese… et esser servita alla Regina nella maniera del Re suo fratello'*– 'she wants to keep up the French freedom … and to be served in the royal manner like her brother the King'[1].

This observation was made by a Florentine ambassador about Marie Christine de Bourbon, daughter of the French King Henry IV and Maria de' Medici and from 1619 onwards the spouse of the Savoyan Duke Vittorio Amedeo I in Turin[2]. The comment suggests that French customs were not a matter of course at the court of the Savoyans in Turin. Earlier sixteenth century observers, such as the Venetian ambassadors, speak indeed of Spanish style court etiquette, which reflected the close political ties between Savoy and the Spanish royal house[3]. In this contribution, I would like to show what the introduction of French culture, by Marie Christine in Turin, meant for court ceremonies and how this affected the topography of the palace architecture. We will also touch here upon a theme which has primarily occupied scholars in the context of the later aegis of Louis XIV in Versailles: the relationship between Spanish and French court ceremonial and residential architecture in the network of European court culture[4].

We are confronted however, by a number of problems whilst considering this theme, especially in the case of Turin. In order to answer the question of possible changes and innovations by Marie Christine, we must take a look at Savoyan residential architecture and Savoyan court ceremonies prior to the arrival of the French princess in Turin. There is unfortunately a substantial gap in research here though. The institutional structure of the Savoyan court around 1600s has been researched, but the question which is of interest for art history, the ceremonial customs and their interaction with palace architecture, is still completely unsettled. This is due, on the one hand, to the small amount of source material available on ceremonies prior to Marie Christine's time, and on the other hand to the lack of architectural evidence, as no residential architecture of the early seventeenth century has survived in its original form. We must therefore work on the basis of just a few indicators, in part from later periods. Last but not least, I am just at the beginning of my review of the extensive source material on the ceremonial customs under Marie Christine, which include the protocols of the masters of ceremonies, the ceremonial books, diplomatic reports and travel accounts, as well as inventories[5]. What I present here is a first draft of a lengthy work in progress.

SAVOYAN COURT CULTURE BEFORE MARIE CHRISTINE

What sort of court culture did Christine find on her arrival in Turin in 1619? Let us take a look at the history of the Savoy dynasty and its residence city. The dynasty, which originally came from Savoy in the western Alps, was able in the course of time to expand its territory into Italy, into the Piedmontese plain[6]. The Savoyans knew how to exploit the strategically important position of their territory between France, the Habsburg Empire and the states of the Italian peninsula, and by clever marriage and alliance policies, as well as successful military exploits, they established themselves as a respectable middle-ranking European power. Parts of the Savoyan territories were subject from the middle ages de jure to the feudal suzerainty of the emperor.

The expansion of their territory to Piedmont was not without its consequences. In 1563, Duke Emanuele Filiberto transferred his residence from Chambéry to Turin[7]. This was the beginning of the development of Turin into one of the most magnificent Baroque cities of Europe. There was, however, a long way to go before this was achieved, as almost everything was missing which characterised a royal capital. The new capital had to be 'created'! One of the foremost tasks was the construction of a new residence befitting its status- the medieval castle was definitely too modest and too old-fashioned.

Two building complexes were developed: first, under Duke Emanuele Filiberto, the Palazzo Vecchio di San Giovanni to the north of the Cathedral, destroyed in nineteenth century, and second, on the other side of the Cathedral, the Palazzo Nuovo or Palazzo Ducale which still exists and is known today under the name Palazzo Reale[8] (fig. 1). Work on this latter complex was begun by his successor Carlo Emanuele I in 1584 in connexion with the planned expansion of the city[9]. Work on this building went on into the eighteenth century, but the spatial organization corresponds to the project of 1584[10]. However, in the first half of the seventeenth century, the decades of Marie Christine - court life took place in the Palazzo di San Giovanni as well as in the Palazzo Madama, the restored mediaeval castle[11].

The disposition of the residence raises questions regarding the type of ceremonial practises at the Savoyan court. The organisation of the ducal household and its functions, which the household ordinances documented from the late sixteenth century, and from a summary of historical research, showed that Burgundian-Spanish traditions did not differ substantially from that of many other European courts[12]. In accordance with this pattern the ducal household was divided into departments, *Casa* (Household), *Camera* (Chamber) and *Scuderia* (Stables) with the *Gran Mastro* (Lord High Steward), the *Gran Ciambellano (* the Great Chamberlain), and the *Gran Scudiere* (the Master of the Horse), as their respective heads. As usual, the *Casa* was responsible for life at court, particularly for the public ceremonies in the palace, while the *Camera* concerned itself with the personal and private affairs of the monarch and therefore had the closest contact with him. The few sources which are currently available to us regarding ceremonial practices in Turin, indicate a scant approachability on the part of the monarch, that he has cultivated a great distance from members of the court and to guests. According to contemporary reports, following the marriage of Carlo Emanuele I and the Infanta Catherine, daughter of Philipp II, the Spanish influence on the Savoyan court increased in the sense that communication was further reduced between the ruler and his members of the court and with greater severity[13].

The question of how Spanish ceremonial customs affected the functional disposition of the rooms in the Residence - that is, what happened in which rooms, has yet to be addressed by scholars. The function of the rooms known from later periods and the knowledge of Spanish ceremonial customs in Turin make it possible - with all necessary reservations - to draw deductions about the spatial order in the seventeenth century. Above all, this applies to the (still existing) Palazzo Reale[14]. I believe that from the beginning a double, male and female apartment with an *enfilade* of a *salone* were planned, also a number of antechambers and finally an adjoining audience room. Entry to the individual rooms were strictly regulated according to the person's rank in the court hierarchy. The internal rooms, with the bedroom and the cabinet, led on from these public rooms. *French Ceremonial Usage Under Marie Christine?*

When Marie Christine arrived in Turin from France 1619 she thus found a court with Spanish-influenced ceremonial etiquette and a corresponding room arrangement in the Residence. This was now to change. Her royal French origin played a special role for Marie Christine, as she could pride herself on being of higher rank than her spouse, who was 'only' a Duke. She even used her descent to

justify her controversial regency, which after the early death of her spouse in 1637, she assumed for 26 years. Her royal French self-assurance manifested itself in a series of artistic undertakings influenced by the French cultural tradition[15]. I refer here to a facade project for the Palazzo Reale, as well as the rebuilding of the mediaeval castle, the so-called Palazzo Madama[16]. Both buildings are distinguished by a colossal order, a motif characteristic of the architecture of the French royal house[17]. The Castle Valentino, with its pavilion system and steeply pitched roofs is also a model of contemporary French architecture[18].

We are well informed about the ceremonial customs of Christine thanks to the protocols the master of ceremonies regularly drew up from the thirties onwards, as well as the report regarding the visit of Queen Christina of Sweden in 1656[19]. Only the diplomatic ceremony is presented here, such as the reception of foreign princes, ambassadors and other high-ranking guests. From this, the following can be deduced: Madama Reale resided in the Palazzo di San Giovanni or in the Palazzo Madama and held public audiences in the Camera di Parata, which was part of the state apartments. In the Palazzo di San Giovanni an *enfilade* of the *salone* was used for the Swiss guards and two antechambers preceded this to the Camera di Parata[20] (Fig.1). I believe that the sesequence of rooms were located in the south and east wings of the Palazzo
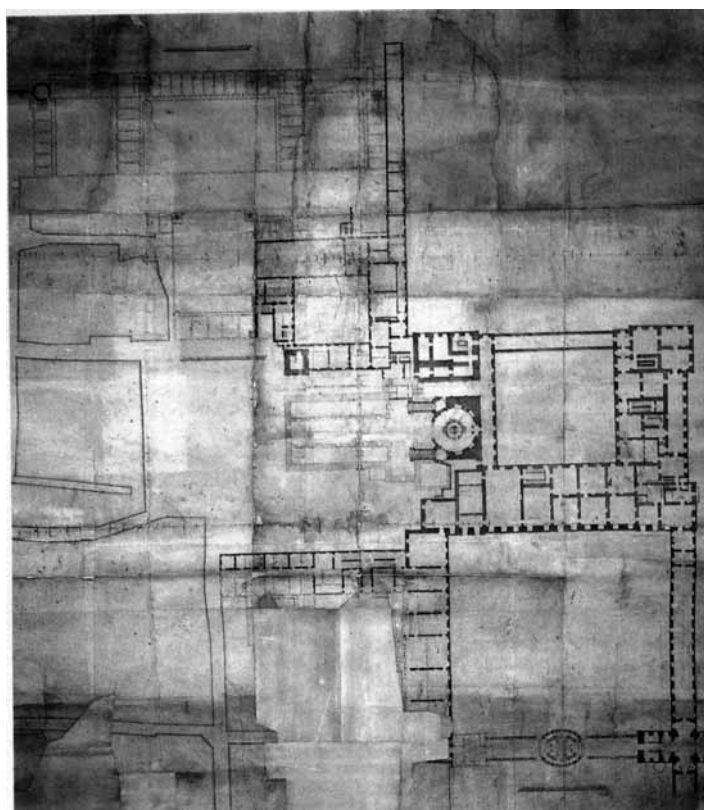
Figure 1. Turin, Palazzo Vecchio di San Giovanni and Palazzo Reale, groundplan (Amedeo di Castallamonte ?), about 1660 (ASTO, Sezione Corte, Carte topografiche e disegni, Torino, Palazzo Reale, mazzo (source: Andreina Griseri and Giovanni Romano (eds.), *Porcellane e argenti del Palazzo Reale di Torino* (Turin, Milan: Cassa di Risparmio di Torino, 1986), 26)

di San Giovanni. In the Camera di Parata stood a bed, raised by a podium, surrounded by a balustrade and emphasised by a canopy. During the audience Marie Christine stood, or sat on a chair, underneath the canopy in the so-called 'ruella', the place between the bed and the balustrade[21].

The traditional Savoyan audience room had thus become a *Chambre de Parade* with a state bBed akin to the French model, which was expressed in the designation of the rooms. In France the King or Queen's state bedrooms were traditionally rooms of a public nature whereby audiences were often held. A large circle of people had entry here - long before this tradition reached its zenith under Louis XIV in Versailles[22]. It must be emphasised that Marie Christine did not hold audience *in* or *on* the bed, as, could happen in the French royal court and at the beginning of the seventeenth century, and was favoured by aristocratic ladies in Paris such as Madame Rambouillet[23]. Marie Christine would only receive *al letto* in Turin when she was indisposed and then only in one of her inner rooms for a private audience without elaborate ceremony[24]. The punctilious differentiation between public-representational audiences in the state apartments and private audiences in the inner chambers was therefore preserved in a court with Spanish traditions of an imperial prince. It was on the other hand inconceivable in accordance with Spanish etiquette that receptions could be held in bed. Further study of source material is required to determine where the boundary lay between public-representational and private spheres, where perhaps the introduction of French culture had reached its limits. Particularly important in this context is the question of the extent to which the Duchess practised public reception and access in the daily life of the court, whether for example there was a *lever*.

In any event, public audiences in the state bedroom in the first half of the seventeenth century were a unique occurrence for an imperial prince. In the late seventeenth century the Savoyans found a solution, which later became common in the courts of other imperial princes: a separation between the audience room and the adjoining state bedroom, which in Turin marked the transition between the public and the private rooms[25]. This room arrangement took place in Turin *before* it took place in German imperial residences, which are generally regarded as the earliest examples: i.e. *before* the palace of Prince Eugen in Vienna and the Palace of Rastatt[26]. The Regent Marie Christine can thus be regarded as the originator of the state bedroom in Turin and thus in the Empire.

Endnotes

1. Archivio di Stato di Firenze, Mediceo 2963, 27 January 1620, cited from Martha D. Pollak, *Turin 1564-1680. Urban Design, Military Culture and the Creation of the Absolutist Capital* (Chicago – London: University of Chicago, 1991), 114.

2. On Marie Christine cf. Gaudenzio Claretta, *Storia della reggenza di Cristina di Francia*, 3 vols. (Turin: Civelli, 1868- 69); Domenico Carutti, *Storia della Diplomazia della Corte di Savoia*, vol. 2 (Rome,Turin, Florence: Fratelli Bocca, 1876), 311-551; Lorenzo Franceschini, *Documenti inediti sulla storia della reggenza di Maria Cristina, Duchessa di Savoia (*Rome: Tipografia dell'Unione coop. Editr., 1895); Giulia Datta de Albertis, *Cristina di Francia, Madama Reale*, Turin 1943; Federico De Gaudenzi, "Torino e la corte sabauda al tempo di Maria Cristina di Francia", *Bollettino storico-bibliografico subalpino* 8 (1913),1-111; recently Giuliana Brugnelli Biraghi and Maria Bianca Denoyé Pollone, *Chrestienne di Francia, Duchessa di Savoia, Prima Madama Reale* (Cavallermaggiore: Gribaudo, 1991); Renata Stoisa Comoglio, *La prima Madama Reale* (Turin: Piazza, 2003); Pollak 1991 (note 1), 108-148.

3. Luigi Firpo (ed.), *Relazioni di ambasciatori veneti al Senato, tratte dalle migliori edizioni disponibili e ordinate cronologicamente*, vol. 11: *Savoia, 1496-1797* (Venedig: Bottega d'Erasmo, 1983), *passim*; cf. Pierpaolo Merlin, *Tra guerra e tornei. La corte sabauda nell'età di Carlo Emanuele I* (Turin: Einaudi, 1991), 11-28.

4. This relationship has been studied for the period of Louis XIV, cf. for example Henriette Graf, *Die Residenz in München. Hofzeremoniell, Innenräume und Möblierung von Kurfürst Maximilian I. bis Kaiser Karl VII.* (Munich: Bayerische Verwaltung der Staatlichen Schlösser, Gärten und Seen, 2002), 95-116; *eadem*, „Hofzeremoniell, Raumfolgen und Möblierung der Residenz in München um 1700- um 1750", in Peter-Michael Hahn and Ulrich Schütte (eds.), *Zeichen und Raum. Ausstattung und höfisches Zeremoniell in den deutschen Schlössern der Frühen Neuzeit (Rudolstätter Forschungen zur Residenzkultur,* vol. 3) (Munich, Berlin: Deutscher Kunstverlag, 2006), 303-324; Jeroen Duindam, *Vienna and Versailles. The Courts of Europe's Dynastic Rivals, 1550-1780* (Cambridge: Cambridge University Press, 2003).

5. The most important documents are to be found in: Turin, Biblioteca Reale (BRTO), *Ceremoniali di corte*, Ms. Storia Patria 726; Archivio di Stato di Turin, Sezione Corte, Casa Reale, *Ceremoniale* and *Lettere Ministri*.

6. From the extensive literature on the history of the Savoy dynasty the following may be mentioned here: Giuseppe Ricuperati (ed.), *Storia di Torino,*vol. III: *Dalla dominazione francese alla ricomposizione dello stato (1536-1630) (*Turin: Einaudi, 1998); vol. IV: *La città fra crisi e ripresa (1630-1730)* (Turin: Einaudi, 2002); Walter Barberis (ed.), *I Savoia. I secoli di una dinastia europea* (Turin: Einaudi, 2007); Walter Barberis et al., „I Savoia. Storia di una dinastia", in Enrico Castelnuovo (ed.), *La Reggia di Veneria e i Savoia. Arte, magnificenza e storia di una corte europea* (Turin, London etc.: Allemandi, 2007), 21-90.

7. On the town development numerous contributions by Vera Comoli Mandracci, in particular: *Torino* (Bari/ Rome: Laterza, 1983); recently „L'urbanistica della città capitale e del territorio", in Ricuperati 2002 (note 6), 431-461; also Pollak 1991 (note 1). A more general survey on Savoyan patronage recently in the exhibition catalogue edited by Castelnuovo 2007 (note 6).

8. The history of the residential complex still poses many questions, cf. Clemente Rovere, *Descrizione del Palazzo Reale di Turin* (Turin : Botta, 1858); Marziano Bernardi (ed.), *Il Palazzo Reale di Torino* (Turin : Istituto Bancario San Paolo di Torino, 1959); Marziano Bernardi, « Vicende costruttive del Palazzo Reale di Turin », in Vittorio Viale (ed.), *Barocco Piemontese* (Turin: Pozzo-Salvati-Gros Monti, 1963), vol. 1, 9-19; Clara Palmas, « La fabbrica del Palazzo Nuovo Grande di Sua Altezza », in Andreina Griseri and Giovanni Romano (eds.), *Porcellane e argenti del Palazzo Reale di Turin* (Milan : Fabbri, 1986), 19-37; Giuseppe Dardanello, « Cantieri di corte e imprese decorative a Turin », in Giovanni Romano (ed.), *Figure del Barocco in Piemonte. La corte, la città, i cantieri, le province* (Turin: Cassa di Risparmio di Torino, 1988), 163-252, in particular 173-180; Giovanni Romano, « Il Palazzo Ducale a Turin (1562-1606) », *Atti e rassegna tecnica* N.S. 42, 1988, 127-134 ; Andrea Barghini, « Fonti archivistiche per il palazzo ducale di Turin », in Gianfranco Spagnesi, *L'architettura a Roma e in Italia (1580-1621). Atti del XXIII congresso di storia dell'architettura 1988*, vol. 2 (Rome, 1989),105-110 ; Vera Comoli Mandracci, « Il palazzo ducale nella costruzione della capitale Sabauda », in *ibid.*, 75-84; contributions in Michela di Macco and Giovanni Romano, *Diana trionfatrice. Arte di corte nel Piemonte del Seicento* (Turin : Allemandi, 1989), 322-324, 350, 356; Cristina Cuneo, "Il palazzo per Sua altezza Reale in piazza duomo", in Vera Comoli and Roberto Roccia (eds.), *Progettare la città. L'urbanistica di Torino tra storia e scelte alternative* (Turin, 2001), 65-70.

9. For the town development cf. note 7.

10. The history of the appartments and their ceremonial usage, still poses many questions; on this cf. Elisabeth Wünsche-Werdehausen, "Entre Bourbon et Habsburg? Les principales salles en enfilade au Palais royal de Turin", in: *L'appartement monarchique et princier en France et dans les pays germaniques 1650-1750*, Deutsches Forum für Kunstgeschichte, Paris (in course of publication).

11. Francesca Filippi (ed.), *Palazzo Madama. Gli appartamenti delle Madame Reali di Savoia 1664 e 1724* (Turin, 2005), 17-30, 105-130; Giovani Romano (ed.), *Palazzo Madama a Torino. Da castello medioevale a museo della città* (Turin: Editris Duemila, 2006), 253-280, 262-268.

12. For the organisation of the Savoyan court cf. Isabella Massabò Ricci and Claudio Rosso, "La corte quale rappresentazione del potere sovrano", in Giovanni Romano, *Figure del Barocco in Piemonte. La corte, la città, i cantieri, le province* (Turin: Cassa di Risparmio di Torino,1988), 11- 40; Merlin 1995 (note 3); Robert Oresko, "The Duchy of Savoy and Kingdom of Sardinia. The Sabaudian Court 1563-c.1750", in John Adamson (ed.), *The Princely Courts of Europe. Rituals, Politics and Culture Under the* Ancien Régime *1500-1750* (London: Weidenfels and Nicolson, 1999), 231-254; Cristina Stango, "Le corti ducali (1630-1675)", in Ricuperati 2002 (note 6), 503-512; P. Merlin, "La struttura istituzionale della corte sabauda fra cinque e seicento" in: Paola Bianchi and Luisa Clotilde Gentile (eds,), *L'affermarsi della corte sabauda. Dinastie, poteri, élites in Piemonte e Savoia fra tardo medioevo e prima età moderna* (Turin: Zamorani, 2006); Andrea Merlotti, "La corte sabauda fra Cinque e Settecento", in Castelnuovo 2007 (note 6), 91-102.

13. Cf. bibliography in note 3.

14. For the reconstruction of the functional disposistion of the apartments in the late 17th and early 18th centuries cf. Paolo Cornaglia, "Architettura, distribuzione e cerimoniale nel Settecento. Le residenze di corte in Piemonte", in Mauro Volpiano (ed.), *Le residenze sabaude come cantieri di conoscenza. Ricerca storica, materiali e tecniche costruttive* (Turin: Cassa di Risparmio di Torino, 2005), 133-148; *idem*, "Il teatro della corte e del cerimoniale nel Settecento", in Paola Bianchi and Andrea Merlotti (eds.), *Le Strategie dell'apparenza. Cerimoniali, politica e società alla corte dei Savoia in età moderna* (Turin: Zamorani, 2010), 147-166; Wünsche-Werdehausen (note 10).

15. Cf. bibliography cited in note 2; Andreina Griseri, *Il Diamante. La Villa di Madama reale Cristina di Francia* (Turin: Istituto Bancario di San Paolo,1988=; Pollak 1991 (note 1); Elisabeth Wünsche-Werdehausen, "Female Emancipation: The Regents of the House of Savoy in Turin", in Juliette Dumas and Sabine Frommel, (eds.), *Quand les femmes investissent la scène publique… Hommes et familles dans le patronage architectural feminine en Orient et en Occident* (in course of publication).

16. Cf. bibliography in notes 8 and 11.

17. Monica Melters, *Die Kolossalordnung. Zum Palastbau in Italien und Frankreich zwischen 1420 und 1670* (Berlin: Deutscher Kunstverlag, 2008).

18. Bruno Signorelli, „Per una nuova storia del Castello del Valentino e del suo comprensorio", *Bollettino della Società Piemontese di Archeologia e Belle Arti* 25- 26 (1971- 72), 109- 132; Griseri 1988 (note 15); Costanza Roggero Bardelli et al., *Ville Sabaude* (Milan: Rusconi, 1990), 200-239; Costanza Roggero and Aurora Scotti, *Il Castello del Valentino* (Turin: Politecnico di Torino, 1994); Federica Bianchi, "Alessandro Casella da Carona", in Giuseppe Dardanello (ed.), *Disegnare l'ornato. Interni piemontesi di Sei e Settecento* (Turin: Cassa di Risparmio di Torino, 2007), 19-26.

19. Turin, Biblioteca Reale (BRTO), *Ceremoniali di corte*, Ms. Storia Patria 726-1 and 726-2; Maria Luisa Doglio (ed.), *Valeriano Castiglione. La regina Cristina di Svezia a Torino nel 1656* (Alessandria : Edizioni dell'Orso, 2010).

20. Cf. the description by Castiglione (note 19), 38f.: , Partì sostenuta dall'Altezza Reale e trovò alla porta una superba seggietta in cui fu portata al Palazzo, già abitazione del duca Vittore Amedeo, principe di fama e di riverita memoria. A piè della scala presentossele Madama Reale con le serenissime principesse a riceverla, e complimentò con quella grazia e maestà ch'è propria di lei. Ascese poi al gran salone abbellito de' ritratti equestri de' principi della casa; passò per la stanza degli arcieri, tappezzata ed ornata delle imagini delle duchesse; entrò nell'anticamera, adobbata di broccati piani a fiori e di baldachino simile, con ampio marciapiede coverto di tappeti turcheschi, preparato al mangiar in publico… S'inoltrò la Reina alla camera di parata, proveduta a meraviglia degl'occhi di tapezzarie, di letto, di baldachino, di sedie, di taburetti singolarissimi di prezzo e vaghezza per i lavori fatti all'ago, a sete, argenti, ori e figure di fiori, di augelli e d'arabeschi, con altri accompagnamenti camerali; tutto convenevole a Maestà Regia ad alla magnificenza del casato di Savoia. Dopo questa, andò la Maestà Sua nell'altra degli specchi, che tutta risplende e tutto rappresenta di visibile, attorniata in alto delle imagini coniugali de'duchi e duchesse di Savoia. Vide poscia il gabinetto vicino per dormire…'. However the sequence of rooms in the Palazzo Vecchio needs further clarification; cf. Rovere 1858 (note 1), 6-9; Michela di Macco, "Critica occhiuta": la cultura figurativa (1630- 1678)", in Ricuperati 2002 (note 6), 337- 430, here 352-353.

21. On the occasion of the visit of the English ambassador: ' ..Madama Reale si è compiaciuta ... di darli un altra solenne udienza, la quale fu li 7 detto (april 1638), et io (the master of cerimonies) l'introdussi, fu ricevuto da Madama Reale nella Ruella di suo letto, nella detta Camera di Parata, stando in piedi, fuori dell'scalino, che è attorno all'letto, e due cadreghe erano anco fuori di detto scalino...' (Turin, Biblioteca Reale (BRTO), *Ceremoniali di corte*, Ms. Storia Patria 726, Vol. 1, fol. 45-45 verso). On the occasion of the marriage of Christine's daughter Ludovica with Maurizio of Savoy : ' ... La Camera detta di Parada ornata di tapezzerie d'oro. Sotto un ricco baldachino stava elevato un trono di quattro scalini, rinchiuso da una balaustrata coperta d'oro ... Stando dunque Madama sedente nel trono, sedevano parimente due passi appresso il Duca.....il Noncio del Papa, e l'ambassador di Francia ... Aspettava il Marchese di Cirié ... dopo le dovute riverenze, postosi in ghinoccio sul terzo grado del trono salutò la Duchessa e relevatosi chiedette la Principessa Ludovica Maria sua figlia primogenita in nome del Principe Mauritio di Savoia per sua moglie...' (Turin, Archivio di Stato, Sezione Corte, Materie politiche per rapporto all'interno : Valeriano Castiglione, *Historia della Regenza di Madama Reale Christiana di Francia* ..., libro nono, fol. 70, 71.

22. Monique Chatenet, *La cour de France au XVIe siècle: vie sociale et architecture* (Paris: Picard, 2002); Nicolas Le Roux, "La Cour dans l'espace du palais: l'exemple de Henri III", in Marie-France Auzépy (ed.), *Palais et Pouvoir. De Constantinople à Versailles* (Presses Universitaires de Vincennes, 2003), 229-268; Monique Chatenet, "The King's Space: the Etiquette of Interviews at the French Court in the Sixteenth Century", in Marcello Fantoni (ed.), *The Politics of Space: European Courts ca. 1500-1750* (Rome: Bulzoni, 2009).

23. Barbara Krajewska, *Mythes et Découvertes. Le salon littéraire de Madame de Rambouillet dans les lettres des contemporains* (Paris, Seattle, Tübingen: Leiner, 1990), 38-40; Graf 2006 (note 4).

24. D. Perrero, *Il conte Fulvio Testi alla Corte di Torino negli anni 1628 e 1635: documenti inediti* (Milan: G. Daelli, 1865), 148: 'Verso un'ora di notte andai all'udienza di Madama. S.A.R. era in letto circondata da una gran quantità di donne; si trovava indisposta d'itterizia per li disagi e disordini passati del carnevale'.

25. Wünche-Werdehausen (note 10).

26. Ulrike Seeger, *Stadtpalais und Belvedere des Prinzen Eugen: Entstehung, Gestalt, Funktion und Bedeutung* (Wien: Böhlau, 2004).

Across Geographies:
Shifting Boundaries of Renaissance Architectural Historiography

SESSION CHAIR:

Sevil Enginsoy Ekinci (Middle East Technical University, Turkey)

Over the past several decades, there has been a growing interest, in many fields of history, in "de-centering," "re-framing," and/or "re-orienting" the Renaissance which aims to "re-place" it within a more global context. Parallel to the attempts to make architectural history less Europe-centered and more cross-cultural, this interest has been voiced in some recent studies on the history of Renaissance architecture as well. Accordingly, these studies seek to shift the geographical boundaries of Renaissance architecture by expanding them beyond "Europe" and by including especially the "Islamic East" and the "New World."

With the hope of contributing to this emerging literature, this session aims to open it up to new directions of research by exploring how this shift can be mapped out without essentializing these geographical distances in such terms; how it can be traced out architecturally by means of travelling forms, images, ideas, texts, and people; and how cross-cultural approaches in architectural historiography can show us crossing not only geographical, but also disciplinary boundaries, and furthermore, the boundaries of the "Renaissance" as a paradigm.

In line with these questions, this session invites papers that present fresh insights into architectural encounters, contacts, interactions, and/or exchanges across geographies in various ways as case studies of the shift of boundaries in Renaissance historiography. It also encourages papers of theoretical discussion that look for alternative frameworks within which such encounters/contacts/ interactions/exchanges can be interpreted.

'BYZANTIVM SIVE CONSTANTINEOPOLIS': BYZANTINE AND OTTOMAN IN THE PANORAMA OF MELCHIOR LORCK

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The sixteenth century Panorama of Constantinople by the Danish artist Melchior Lorck is a uniquely valuable and detailed depiction of the urban skyline on the south-western side of the Golden Horn in Istanbul, during the reign of Sultan Süleyman the Magnificent.[1] Although Lorck's Panorama is annotated with the date of 1559, it was a later compilation of site sketches executed by the artist during his residence in the city as a member of the retinue of the ambassador of the Holy Roman Empire.[2] The Constantinople Panorama is also a significant document in the early modern cultural exchange between East and West, not least because of the self-conscious way in which Lorck represents such exchange – his self-portrait was originally juxtaposed with two turbaned Turks, the Sultan's imperial barge was depicted sailing on the Golden Horn together with those of the Austrian and Persian ambassadors, and references to Byzantine monuments float over a sea of Ottoman buildings. While Lorck's Panorama has also been the subject of considerable recent study, a thorough optical analysis of the method of composition of the panorama has not been attempted to date.[3] In their analysis of the Panorama, Fischer and Iuliani argue, following Wulzinger, that it is an amalgam of both detailed studies of individual buildings, such as the Süleymaniye mosque, and "rough and succinct" handling of areas containing "the more anonymous buildings", some of which may be invented.[4] Following an argument first proposed by Wulzinger, Fischer and Iuliani argue that the artist interpolated into a general panoramic structure, itself based upon field sketches, more detailed drawings of monuments based upon close observation.[5] This paper will evaluate these claims, and the question of the Panorama's veracity, in attempting to reconstruct the market district of the city.

The urban layout of Istanbul in the late sixteenth century, the capital of an empire at the peak of its power constituted through its monuments and urban spaces, what Kafescioğlu has recently described as the "resignification of Constantinople" – the re-inscription of Istanbul as an Ottoman capital.[6] Nevertheless, to draw a distinction between western and eastern, Byzantine
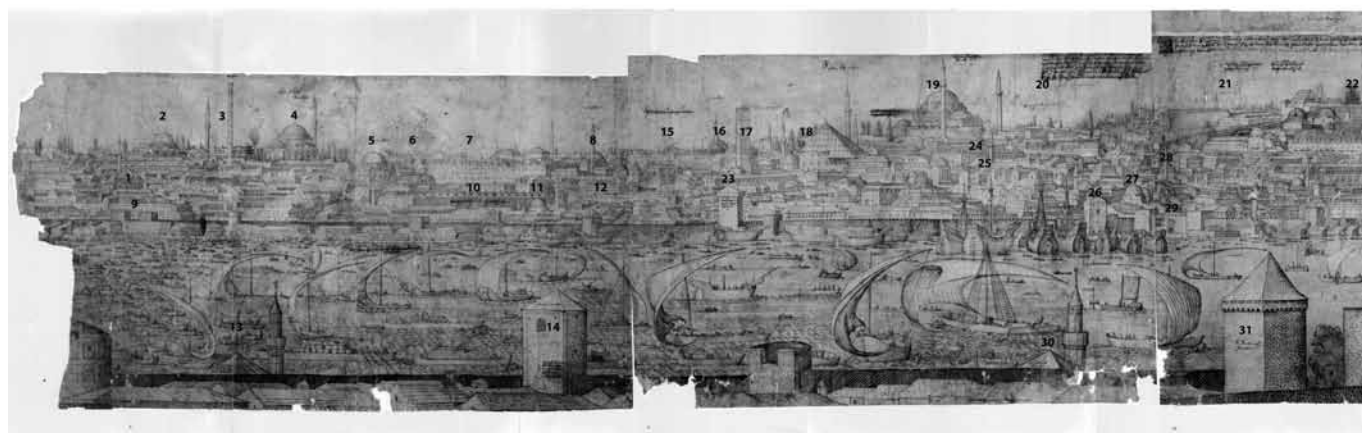
Figure 1. Right hand fragment of Sheet 7, Sheets 8 and 9, and left-hand end of sheet 10. (source: N. Westbrook, adapted from E. Fischer et al., *Melchior Lorck* (2009) vol. 4, sheets 7-10) Legend: 1. Daya Hatun mosque? (M. & Y.); 2. Mahmud Paşa mosque; 3. Çemberlitaş ('burnt column'), or Constantine's Column; 4. Atik Ali Paşa mosque; 5. Mahmud Paşa hamamı; 6. Unnamed building- possibly Atik Ali Paşa medresesi; 7. 'Empress Caravansarai (han)- argued here to be Sandal Bedestan of Mehmed II; 8. Tarakçılar masjid (M. & Y.); 9. Bahçe Kapı?; 10. Mahmud Paşa (Kürkçü) han; 11. Çelebioğlu Alaüddin masjid (M. & Y.); 12. Synagogue; 13. Eski Yağ Kapanı (İbrahim Paşa) mosque (M. & Y.); 14. Yağ Kapanı gate and prison tower (M. & Y.); 15. 'İbrahim Caravansarai' (han) argued here to be the Old Bedestan; 16. Mercan Ağa masjid (M. & Y.); 17. Eirine tower; 18. Atik İbrahim Paşa mosque with enclosure wall of Beyazit mosque in distance; 19. Beyazit mosque; 20. Forecourt of Beyazit mosque, unknown column and grain market in distance; 21. Eski Saray; 22. Eastern section of Süleymaniye külliyesi; 23. 'Tower of the Empress' prisoners' (sic); 24. Unknown han on a street corresponding to Uzunçarşı Caddesi- possibly site of Kilit Han; 25. Merdinvenli masjid; 26. Prison tower, with Şeyh Davud masjid behind (M. & Y.); 27. Tahtakale (Rüstem Paşa) hamamı; 28. Unknown mosque; 29. 'Obst Tor' (Zindan Kapısı); 30. Unknown mosque (appears to be on a similar site to the Nişancı masjid); 31. 'St. Antoniß Portten' (thought by M. and Y. to be Azap kapı but unlikely given viewing position).

and Ottoman urban topography requires subtle differentiation: archaeological evidence demonstrates that the late Antique urban layouts of regular streets, colonnaded *emboloi*, and geometrically-ordered urban fora did not characterize late Byzantine Constantinople, in which the street layouts were far less ordered, and clusters of dwellings were typically grouped around neighbourhood churches, in fact, much more like Ottoman Istanbul or mediaeval European towns.[7] In the first century after the conquest, it would appear that the physical fabric shared similarities with the late Byzantine city. Despite the relative absence of identifiably Byzantine buildings by the time of the Panorama, there were large numbers of converted Byzantine houses and churches as well as Italian trading buildings that had retained their function, during the reigns of Mehmed II and Bayezid II. By the mid-sixteenth century, it would seem that many of these structures had either lost their former associations, and therefore had lost any symbolic significance, or had been demolished.[8]

In a previous paper, we employed digital modelling to demonstrate how digital reconstruction, locating viewing positions, could be used to 'reverse-engineer' Lorich's drawing onto an accurate topographical model of the city.[9] Here, we develop this methodology further in reconstructing the commercial area of the Istanbul promontory between Atik Ali Paşa Mosque to the east and the Eski Saray (Old Palace) to the west, and from the skyline down to the city walls on the shore of the Golden Horn. Through digital overlays and 3D modelling, we are reconstructing elements of an area that encompass monuments of known form and location, such as the Column of Constantine and Atik Ali Paşa complex,[10] the Old and Sandal Bedestan ,[11] the Irene Tower and Çandarlı İbrahim Paşa Mosque,[12] the Bayezid II Mosque, and the Eski Saray.[13] The Panorama depicts significant buildings that have disappeared, but can be provisionally located through visual analysis, such as the sea walls and towers, water towers, mosques, and the Elçi Han to the south of the main street of Divan Yolu on the ridge. The Panorama depicts a rich and complex urban territory of public monuments and secular structures that is, in some areas, substantially different to the city described in the 1913-1914 survey maps.[14] We propose that it is possible, through the viewshed techniques outlined above, to identify with some degree of confidence otherwise unlocatable buildings, thus significantly adding to the body of urban historical and topographical research.[15]

The intention of Lorck's Panorama was not so much to create a 'rotating' image, as in modern photographic panoramas, but instead to 'unfold' the coastline and provide as much topographic information on the city as possible. This he achieved by adopting multiple viewpoints.[16] Our analysis began with the overlay on a digital model of cartographic representations of Istanbul, from the current municipal map to the oldest maps possessing some cartographic accuracy, reconciling them with pre-modern urban elements in the earlier maps (street alignments, buildings) that are still recorded on the 1913-14 survey maps. These elements were then used as spatial reference points in order to establish Lorck's viewing locations for the densely populated urban area between Atik Ali Paşa Mosque and the Beyazit Mosque.[17]

The historic maps of Istanbul reveal the primary armatures in this region. Running approximately north-south, to the east of the present-day site of Istanbul University is Uzunçarşı Caddesi, which passes through the Grand Bazaar, or Kapalı Çarşı, then descends to the harbour on the Golden Horn. Further west, another north-south road, Zeyrek then Unkapanı Caddesi, linked the harbour on the Sea of Marmara to the south with the Golden Horn to the north, approximately on the alignment of the present-day Atatürk Bulvarı. These ran up to several major streets on an approximately east-west alignment, following the ridge-lines, as do the modern streets that have regularized their alignments. Between these major streets, however, the streets evidently adjusted themselves to the often steep terrain, creating a dense network of non-orthogonal streets forming neighbourhoods around local mosques and their associated buildings. The earliest of the maps under discussion, the Kauffer-Le Chevalier map, although more fragmentary and distorted than later maps, permits identification of the primary streets of the later maps.

A question arises from the topographical analysis of pre-modern Istanbul: can we identify a specifically 'Ottoman' character to the city? This is the thesis of Zeynep Çelik, who contrasts the pre-modern Ottoman city with a pre-conquest Byzantine city of broad thoroughfares and fora, and arguing that the Ottoman city constituted a clear topographical and historical break, in which public space was de-emphasized in favour of religious institutions.[18] Çelik bases her argument for such a transformation in part upon the birds-eye view of Vavassore.[19] This interpretation is, we would argue, problematic and needs revision. Firstly, Vavassore himself probably never saw Istanbul, but based his woodcut upon an earlier view – furthermore, the convention of the bird's-eye view was itself broadly representational, rather than scientifically accurate, and thus little reliance can be placed upon any details in the depiction.[20] Secondly, her characterization of late Byzantine Constantinople is not supported by the archaeological evidence, which indicates that the later Byzantine city had either abandoned or greatly modified the early 'Roman' layout.[21]

In fifteenth century Constantinople, as in late Byzantine Thessalonica, colonnaded arcaded streets had either fallen into ruin, or were built over by a generally denser and poorer building stock.[22] For example, the Forum of Constantine, which had been reconstructed as a circular open area, was later in-filled with a straight market street in the middle Byzantine period.[23] It is thus possible to see in the re-urbanization of Constantinople/Istanbul, the construction of new infrastructure in areas which had become re- or de-urbanized.

On the other hand, aside from clear evidence of neglect and depopulation in the late Byzantine period, and the concentration of the population into pockets, mostly centred upon the ports, it is surely possible to see in the 15th and 16th century a continuity with the immediately preceding period, by the construction of enclosed market buildings and hans which recall the earlier structures.[24]

Mundell Mango has proposed a correspondence between a northern-directed Byzantine market street, the *Makros Embolos*,[25] and the similarly directed streets that connect the Grand Bazaar with the northern harbour-front on the Golden Horn.[26] According to this thesis, the *Makros Embolos* began as a porticoed street that ran north from the ridge.[27] In the later Byzantine period, commercial markets: *macella*, and *horrea* (warehouses), were established by Byzantine and Italian merchants in the area later occupied by Ottoman Hans and the Egyptian Market. In the early Byzantine period, the waterfront had been built around two enclosed harbours – the Neorian harbour to the west, and the Prosphorian Harbour to the east.[28] The waterfront transformed substantially in the middle Byzantine period – the ancient harbours were filled in and built over, the adjacent forum of the Strategion lost some of its significance, and the sea walls were expanded and strengthened to present a continuous frontage, as later depicted by Lorck.[29] By the sixteenth century, there were extensive wharves along the waterfront, consisting of landing-stages[30] belonging to various national or city trading groups. Behind the walls, accessed through city gates, properties were located, sometimes fortified, belonging to each trading group, with their associated markets, churches, synagogues and mosques.[31]

The evidence for the market district provided by Lorck's Panorama, as demonstrated by the viewshed analysis, exhibits a considerable degree of similarity in urban layout to this area of the city as described on the 1913-14 survey maps. By the mid-sixteenth century, there was already a concentration of mercantile hans on what appears to be the same area as described by these maps.

The Panorama depicts a great number of buildings in the market district, and a considerable number of monuments and major public structures (see figure 1). To the left of the section discussed here , the twin-domed mosque of Mahmud Paşa (1462-3)is depicted, to the right of which is the Column of Constantine (c. 330).[32] Behind them is the Elçi Han, the embassy lodgings of Lorck – south of the Divan Yolu street. To its right is the Atik Ali Paşa Mosque, and further to the right, the dome of the Mahmud Paşa Hamamı,[33] and a double-storey masonry building denoted 'Mahomet Pascha Carwasaraÿa' (Mahmud Paşa Han) that is shown directly below another large, double-storey building denoted 'der kaiserin Carawaseraÿ' (Empress Han). To the left and behind Mahmud Paşa Han, the eponymous hamam is depicted. Further to the right of the Empress Han and at a similar height, another large building is depicted, the 'Ibrahim Carwasaraÿa,' presumably part of the Kapalı Çarşı – built by Pargalı İbrahim Paşa (Grand Vizier 1523–1536)?, and in between the two, a small domed mosque, the Tarakçılar masjid.[34]

Attribution of the han buildings in the Panorama depends upon determination of the correct viewpoints. As noted, the 'Empress' han, another han-like building to its left, and the 'Ibrahim' han appear above the original core of the Mahmud Paşa han. Two primary viewpoints can be demonstrated to have been used – Wulzinger's Viewpoints A and B. Mapping the viewshed from Wulzinger's Viewpoint B reveals an interesting outcome. The unlabeled building on the skyline to the right of the Mahmud Paşa hamam appears to correspond to the medrese of the Atik Ali Paşa complex, while the 'Empress' han corresponds to the location of the Sandal Bedestan, and the 'Ibrahim' han with the Old Bedestan. The latter is shown higher than the Sandal Bedestan, as indeed it is, sitting higher up the hill. The area of the extant Valide han, identified by the location of the Eirine Tower, is shown without major buildings, demonstrating that there were no substantial buildings here in the mid-sixteenth century (figs. 1 and 2). The latter tower was later absorbed into the Valide Han, but is here shown as free-standing. Wulzinger's Viewpoint B is generally very close to the alignments shown in the Panorama, with some notable exceptions. Thus, in no possible viewpoint do the Mahmud Paşa mosque, the Çemberlitaş and the Atik Ali Paşa mosque appear as shown by Lorck – it would therefore appear to be a case of poetic license- presumably adopted to prevent one building obscuring another. Secondly, the orientation of the buildings on the skyline, and the south-east courtyard of the Beyazit mosque reveal that the viewpoint used here was that of the Galata Tower (Wulzinger's Viewpoint A) – note here the correspondence between the courtyard, the Eirine Tower, and the Atik İbrahim mosque.[35]

Thus, a number of major commercial buildings, the 'Empress' han, Mahmud Paşa, or Kürkçü Han (late fifteenth century), the still-extant Atik İbrahim Paşa mosque[36] and medrese, and the Mahmud Paşa hamamı (1466), lined or were accessed off the east-west directed street (later known as Mercan Caddesi), from the Divan gate of the Eski Saray, which becomes the Çakmakçılar Yokuşu, before dividing into several streets leading down to the port area. Delimiting the market area to the east is a curving street, Mahmud Paşa Yokuşu that leads north to the port, and south to the Mahmud Paşa Mosque (1462). Immediately to the east is the Rüstem Paşa medrese on the street of Yerebatan Sokağı leading south-east down to Hagia Sophia. The rôle of the east-west road as an important early artery is also indicated on the 1863 Stolpe map, where it and the north-south Uzunçarşı Caddesi are depicted as being lined with large hans. The map depicts large konaks and public offices further east on the high ground, located between the market district and the Topkapı Sarayı.[37] It would appear that these streets had replaced the earlier Byzantine streets leading down to the forum of Strategion and the harbour front, that had been blocked by the construction of the western portion of the wall enclosing the Topkapı, which had subsumed a large, previously built-up, urban area.[38]

Our study of the viewshed that produced the Panorama confirms Wulzinger's deduction that sheets 8 and 9 were produced by multiple view-points.[39] It would seem that the only view-point that places the building labelled 'Mahomet Pascha Carwasaraÿa' (Mahmud Paşa or Kürkçü han), and Atik Ali Paşa mosque in this relation, is at the eastern extremity of either the sea-wall or middle wall of Pera, although even then there seem to be discrepancies. However, from this view, one would see the Mahmud Paşa mosque in front of the Atik Ali Paşa Mosque, with the Mahmud Paşa baths and han to the right, as is approximately shown. As noted, Wulzinger's Viewpoint B seems to have been used to construct most of this section of the drawing, and Viewpoint A, on top of the Galata Tower, for the notable buildings and monuments. The documentary value of the drawing is complicated by the evident use of artistic licence in areas such as the Mahmud Paşa mosque, Atik Ali Paşa Mosque, Mahmud Paşa hamam and han. Additionally, there are omissions of known pre-1559 buildings. Thus, the Rüstem Paşa medrese (1550) should be quite visible to the left of Mahmud Paşa han and in front of Mahmud Paşa mosque, but is not depicted. Nonetheless, the drawing reveals noteworthy details for which we have no other evidence. For example, the Mahmud Paşa han is shown with a large structure to its right, at an evident angle labelled: '*Juden kirchen vnd Sinago*.' Viewshed analysis suggests that this structure would have been located north-west of the later Valide Han, in the vicinity of present-day Fincancılar Sokak and the location of the Ottoman Sümbüllü Han. [40]

To summarize, from our analysis, the only extant structure that accords with the 'Empress Han' is, the Bedestan-i Cedid (Sandal Market) (post-1453), in the core of Kapalı Çarşı. The rectangular structure depicted with corner towers behind it on the skyline, appears to be the medrese of Atik Ali Paşa mosque. The han-like building on the skyline further to the right of the 'Empress han,' labelled 'Ibrahim Carwasaraeÿa,' is in all likelihood the Old Bedestan built by Mehmet II.[41] From the view-point B cited above, the Eirine Tower, the Atik İbrahim Paşa Mosque, the north east of the Beyazit Mosque and Külliye,[42] appear to be in approximately the correct relation on the Panorama. From this second view-point, the artist has depicted another han-like building to the right of the Atik İbrahim Paşa Mosque. Perhaps this building, known

Figure 2. Figure 2, Plan of major buildings on Panorama sheets 8 and 9, and overlay of viewshed. (source: (N. Westbrook, M. Delroy-Carr, R. Van Meeuwen and C. McCormack) Legend: 1. Galata (Christ) Tower; 2. Proposed location of Zindan Kapısı; 3. Tahtakale ham.; 4. Süleymaniye complex; 5. Balkapanı hanı; 6. Remnants of sea-wall; 7. Merdivenli msj.; 8. Atik Ibrahim msq.; 9. Eirine tower; 10. Kilit Hanı and Samanveren msj.; 11. E-W road; 12. Mahmud Paşa or Kürkçü han; 13. Mahmud Paşa ham.; 14. Rüstem Paşa medr.; 15. Eski Saray and Divan Gate; 16. Beyazit complex; 17. N-S road; 18. Old Bedestan; 19. Sandal Bedestan; 20. Mahmud Paşa msq.; 21. Atik Ali Paşa complex; 22. Çemberlitaş (Constantine's Column); 23. Eski Saray; 24. Firuz Ağa msq.; 25. Ibrahim Paşa palace; 26. Topkapı palace; 27. Çinili Köşk; 28. Hagia (Aya) Sophia; 29. Haseki Hürrem ham.; 30. Ishak Paşa ham.; 31. Simkeş hanı and Beyazit ham.; 32. Gedik Paşa ham.

from older foundations to have existed on the site of the Kilit Han located on the corner of Nargileci Sokak and facing the Samanveren masjid, across, and adjacent to the north-south road of Uzunçarşı Caddesi. This Ottoman han may thus occupy the same site as the depicted building, which may have a pre-Ottoman foundation. Another commercial building known to have been built before the drawing of the Panorama, Balkapanı Han, located close to the sea-walls, appears to have been overlooked by the artist, unless one of the unidentified structures in that location below the depiction of the Atik İbrahim Paşa Mosque. Balkapanı Han has Byzantine foundations, providing evidence of the continuity of use and occupation of this area.[43]

The Panorama, if adjusted to compensate for the differing viewpoints, also provides us with valuable evidence for the appearance of the sixteenth century harbour wall.[44] On sheet 9, the Tower 'B' and 'Fruit Gate' ('Obst Thor'), is given by Mamboury and

Yerasimos as the site of a prison, and a gate that was known as Zindan Kapısı ('Prison Gate'). Further to the left (east) is another tall tower, which they argue was erroneously identified by Lorck as the prison.[45] Clustered in front of the wharves on sheet 8, and the Zindan Kapısı on sheet 9 are numerous ships of Western type, again testifying to the function of the city as a great entrepôt for trade between East and West. From Wulzinger's Viewpoint B, the Zindan Kapısı (prison gate) can be securely located, north of the Tahtakale hamamı. This would place the tall tower depicted with a basket hanging from a window, and marked with a letter 'B' on the outer angle of the wall.

Our study of the commercial district of Ottoman Istanbul depicted in Lorck's Panorama, demonstrates that the drawing can be used, in a localized and cautious manner, to identify the location of lost urban structures. This area of the Panorama was drawn with the aid of at least two separate viewpoints, with probably a third viewpoint to enable detailed depiction of the walls to the east, and would be partially obscured from Viewpoints A and B. The resultant image is, therefore, revealed to be 'correct' only in localized areas, corresponding to the central portions of the field sketched, prior to the necessary adjustments to convey a sense of continuity. However, study of the Panorama in concert with digital mapping has enabled some identifications to be made, suggesting that the major east-west and north-south streets of this area in the sixteenth century broadly corresponded to those shown on the 1913-14 survey maps (fig. 2). The commercial district was laid out approximately in relation to two east-west streets: the first passing through the Kapalı Çarşı to the İbrahim Paşa Mosque, and the second leading from the main gate of the Eski Saray then bending south towards the Kapalı Çarşı, while branches descended north to the harbour-front. The north-west aligned Uzunçarşı street, perhaps following the alignment of the Byzantine *Makros Embolos*, connected the ridge to the harbour-front. This street network did not accord with any orthogonal layout, but may well, in part, have derived from the pre-existing late Byzantine street structure. Furthermore, the study has managed to map the major towers and gates, depicted by Lorck. Clearly, we have only scratched the surface for the potential of this historical artefact to supply evidence for the Byzantine and Early Ottoman city. This remains the object of an ongoing study.

Endnotes

1. N. Westbrook, R. Van Meeuwen and K. R. Dark, 'Constructing Melchior Lorichs's Panorama of Constantinople,' *Journal of the Society of Architectural Historians* 69/1 (2010).

2. Lorck's panorama is entitled Bÿzantium sive Constantineopolis,' adapted from the Vavassore bird's-eye view of circa 1520. Fischer gives Lorck's date of arrival in Constantinople as before 1556, and his date of departure as 1559-60. He was in Vienna by 1560. The drawing was therefore made in or after 1560. See E. Fischer, 'The Life and Works of Melchior Lorck,' in E. Fischer (ed.) with Ernst Jonas Bencard and Mikael Bøgh Rasmussen and a Contribution by Marco Iuliano, *Melchior Lorck* (4 vols.) (Copenhagen: Vandkunsten, 2009) vol. 1 (2009) 91-106. The source for Melchior Lorck's period in Istanbul is an autobiographical account contained in his book *Soldan Soleyman Turkischen Kaysers, ... Whare und eigendtliche contrafectung und bildtnuß ... dem Leben nach gemacht*, published in Antwerp in 1574. See *op. cit*. vol. 3, 15. Lorck completed several views from the residence of the Holy Roman Imperial embassy, the Elçi Han, which Fischer locates immediately south of Constantine's Column, or Çemberlitaş, and south-east of the Atik Ali Paşa mosque and no-longer extant medrese. The ambassador was the humanist Ogier Ghiselin de Busbecq. For his time in Istanbul, see Edward S. Forster, trans., *The Turkish Letters of Ogier Ghiselin de Busbecq: Imperial Ambassador at Constantinople 1554–1562* (Oxford: Clarendon Press, 1968).

3. Fischer's analysis of probable viewpoints is dependent on Wulzinger's, and remains inconclusive, as in his discussion of the view-point for the depiction of the Süleymaniye Mosque in the panorama, where three possible vantage points are listed. See Fischer's discussion of the Turkish Publication, No. 3, dating 1570 in Fischer *et al.*, *Lorck*, Vol. 3: 'Catalogue Raisonée Part One' (2009) 31-35 at 35.

4. E. Fischer and M. Iuliani, Vol. 4: 'The Constantinople Prospect,' in Fischer et al., *Lorck* (2009) 7-23, 25-60, at 7, 47.

5. Wulzinger, 'Melchior Lorichs Ansicht' (1932) 355-68. With regard to the change of ink colour, Susanne Meurer, a specialist on North German printmakers of the sixteenth century, has suggested another explanation, that the 'brown' ink would have been originally black in appearance, but has changed colour through oxidization. Nevertheless, it is apparent that different types of inks have been used for the drawing. Meurer further suggests that the use of different inks might have served an intended aesthetic effect, emphasizing certain elements, such as ridge lines and contributing to the perspectival effect of the drawing. S. Meurer, conversation with authors, 3 February 2012.

6. Ç. Kafescioğlu, *Constantinopolis/Istanbul: Cultural Encounter, Imperial Vision, and the Construction of the Ottoman Capital* (Pennsylvania: Penn State University Press, 2009) 130.

7. Kafescioğlu acknowledges the influence of the previous Byzantine layout upon Otttoman Istanbul. *Op. cit.* 135. Both Istanbul and other Ottoman cities such as Thessalonica would appear to have been comprised of identifiable districts and neighbourhoods, the latter often centred upon a local mosque or mescid, or parish church (the latter usually Greek Orthodox or Armenian). However in the early decades after 1453, the centrality of the quarter mosque in the social life and identity of the neighbourhood is argued by Kafescioğlu to be less absolute than previous scholarship had painted it. *Op. cit.* 180-184, 196.

8. *Op. cit.* 204-6.

9. Westbrook *et al.*, 'Constructing Melchior Lorichs's Panorama' (2010) 72, 73-75, 82 and figs. 12, 14 and 21.

10. Fischer, *Lorck* (2009) vol. 4 Sheet 8.

11. *Op. cit.*, sheets 8 and 9.

12. *Op. cit.*, sheet 9.

13. *Op. cit.*, sheets 9 and 10.

14. In this respect, we must disagree with the conclusion of Gül and Lamb that no substantial urban rationalization took place until Henri Prost in the 1930's. The 1913-14 German maps show a number of areas where the old street network was in the process of being replaced by a new gridded network, as in the area of Kumkapı and Aksaray. See Murat Gül and Richard Lamb, 'Mapping, regularizing and modernizing Ottoman Istanbul: aspects of the genesis of the 1839 Development Policy,' *Urban History*, 31/3 (2004) 420-36.

15. For studies of the topography of Constantinople/Istanbul, see W. Müller-Wiener, *Bildlexikon zur Topographie Istanbuls* (Tübingen: Wasmuth, 1977); G. Necipoğlu, *The Age of Sinan: Architectural Culture in the Ottoman Empire* (Princeton and Oxford: Princeton University Press, 2005); Ç. Kafescioğlu, Constantinopolis/Istanbul (2009).

16. The first attempt to reconstruct the viewpoints used by Lorichs was by Wulzinger, building upon the analysis of the drawing by Oberhummer. See K. Wulzinger, 'Melchior Lorichs Ansicht von Konstantinopel als topographische Quelle,' in T. Menzel (ed.), *Feschrift Georg Jacob* (Leipzig: Harrassowitz, 1932) 353-368; E. Oberhummer, *Konstantinopel unter Sultan Soleiman dem Grossen, aufgenommen im Jahre 1559 durch Melchior Lorichs aus Flensburg* (Munich: R. Oldenbourg, 1902).

17. This district constituted one of the densest areas of the city in 16th Ottoman Istanbul, as it had in the Late Byzantine period. On the commercial district in the Byzantine period, see P. Magdalino, 'The Maritime Neighborhoods of Constantinople: Commercial and Residential Functions, Sixth to Twelfth Centuries,' *Dumbarton Oaks Papers* 54 (2000) 209-226 and fig. 1; *idem*, *Studies on the History and Topography of Byzantine Constantinople*, Variorum Collected Studies Series CS855 (Aldershot, Hampshire: Ashgate, 2007).

18. Çelik and Kafescioğlu describe the reorganization of the city based upon the division of the city into quarters or *nahiyes* mostly centred on major religious foundations, and *mahalles*, centred upon mosques, tombs, and convents, funded by *vakifs*, or religious foundations, however Çelik emphasizes more the change in public space. Çelik, *The Remaking of Istanbul* (1993) 3-30; Kafescioğlu, *Constantinopolis / Istanbul* (2009) 53-108.

19. *Op. cit.*, 23.

20. For discussion of the Vavassore map of Constantinople and its copies, see: R. H. W. Stichel, 'Das *Coliseo de Spiriti* in Konstantinopel: Ein Phantom – ein Beitrag zur Erklärung der Stadtansicht vom Vavassore-Typus,' *Istanbuler Mitteilungen* 51 (Tübingen: Ernst Wasmuth, 2001), 445–59; I. R. Manners, 'Constructing the Image of a City: Christopher Buondelmonti's *Liber Insularum Archipelagi*,' *Annals of the Association of American Geographers* 87/1 (1997) 72-102; A. Berger, 'Zur sogenannten Stadtansicht des Vavassore,' *Istanbuler Mitteilungen* 44 (1994), 329-55; *idem*, 'Zur Topographie der Ufergegend am Goldenen Horn in der byzantinischen Zeit,' *Istanbuler Mitteilungen* 45 (1995) 149-65; and C.L. *Striker*, 'The *Coliseo de Spiriti* in Constantinople, in O. Feld and U. Peschlow (eds.), *Studien zur Spätantiken und Byzantinischen Kunst*, vol. 1, (Bonn: Habelt, 1986) 7-11. For technical development and cultural meanings of maps around the time of the Vavassore map, see: M. I. Fead, 'Notes on the Development of the Cartographic Representation of Cities, *Geographical Review* 23/3 (1933), 441-56; and J. Schulz, 'Jacopo de' Barbari's View of Venice: Map Making, City Views, and Moralized Geography before the Year 1500,' *Art Bulletin* 60 (1978), 425-74.

21. For surveys of the archaeological and historical evidence for Constantinople, in particular the maritime and market districts, see C. Mango, *Le Développement urbain de Constantinople (IVᵉ–VIIᵉ siècles), 2ⁿᵈ ed.* (Paris, 1990*); idem, Studies on Constantinople* (Aldershot: Variorum, 1993); M. Mundell Mango, 'The Commercial Map of Constantinople,' *Dumbarton Oaks Papers* 54 (2000) 189-207; *idem*, 'The Porticoed Street at Constantinople,' in N. Necipoğlu (ed.), *Byzantine Constantinople: Monuments, Topography and Everyday Life*, (Leiden: Brill, 2001); P. Magdalino, *Constantinople mediévale. Études sur l'évolution des structures urbaines* (Paris, 1996); *idem*, 'The Maritime Neighborhoods of Constantinople: Commercial and Residential Functions, Sixth to Twelfth Centuries,' *Dumbarton Oaks Papers* 54 (2000) 209-226 and fig. 1; *idem*, *Studies on the History and Topography of Byzantine Constantinople*, Variorum Collected Studies Series CS855 (Aldershot, Hampshire: Ashgate, 2007); W. Müller-Wiener, *Bildlexikon zur Topographie Istanbuls* (Tübingen: Ernst Wasmuth, 1977).

22. In December 1928, during excavation works for a new sewer line along Alemdar Caddesi, Ernest Mamboury recorded a late Byzantine structure north of Firuz Ağa mosque that was built upon what must have been originally the Mese roadway. The earlier colonnaded arcade had been replaced by masonry piers, and the street had clearly narrowed. Additionally, Mamboury discovered building structures east of the Sublime Porte, now Adliye Sarayı, whose alignment suggests that a major roadway in use in the eighth century connecting the forum of Strategion with Hagia Sophia and the Hippodrome seems to have disappeared before 1453, and the Strategion itself had sunk from a 'Roman'-style enclosed forum to a muddy market-place. See Ernest Mamboury Archive: 'South of Hagia Sophia,' and 'Alemdar Street', Deutsches Archäologisches Institut, Istanbul; P. Magdalino, 'Maritime Neighborhoods' (2000) 220. On Late Byzantine Thessalonica, see Charalambos Bakirtzis, 'The Urban Continuity and Size of Late Byzantine Thessalonike,' *Dumbarton Oaks Papers* 57 (2003) 35-64 at 42.

23. E. Mamboury, measured survey drawing of vicinity of the Forum of Constantine, now vicinity of Atik Ali Paşa Mosque, in J. Bardill, 'The Palace of Lausus and Nearby Monuments in Constantinople: A Topographical Study,' *American Journal of Archaeology* 101 (1997) 67-95 at 72.

24. M. Mundell Mango, 'The Commercial Map of Constantinople,' *Dumbarton Oaks Papers* 54 (2000) 189-207. See, in particular Mundell Mango's association of the Portico of Domninos, or Maurianos Embolos, with the Ottoman development from the Kapalı Çarşı north to the hans on the Golden Horn.

25. Portico of Domninos, later called the Makros or Maurianos Embolos. See *Op. cit.*

26. M. Mundell Mango, 'Commercial Map' (2000) 189-207. See also *idem*, 'The Porticoed Street at Constantinople' in N. Necipoğlu (ed.) *Byzantine Constantinople, Monuments, Topography and Everyday Life* (Leiden, Boston, Cologne: Brill, 2001) 29-51.

27. In Byzantine Constantinople, the main road of the city was the Mese, or Middle Way, which ran along the the ridge of the promontory of the city. It intersected with the *Makros Embolos* at the site of a *tetrapylon* or *quadrifons*, a symmetrical, four arched monument that marked the crossing point. See C. Mango, *Le développement urbain de Constantinople, IVe-VIIe siècles. Réimpression conforme à l'édition de 1985 augmentée d'addenda de l'auteur,* Travaux et mémoires du Centre de recherche d'histoire et civilisation de Byzance. Monographies, 2 (Paris: De Boccard, 1990).

28. The Neorian harbour and its adjacent boat-yards was the location for construction of naval ships, while the Prosphorian Harbour to the east, which was fronted by the commercial stoae of the greater and lesser Strategion for a, was commercial in nature. To the east of the Prosphorian harbour a great defensive chain protected the Golden Horn from enemy attack. See Magdalino, 'Maritime Neighborhoods' (2000).

29. The sea-walls had been strengthened by the nineth century emperors Michael II and Theophilus, and further strengthened after the Byzantine recapture of the city from the Franks in 1261. Alexander van Millingen, *Byzantine Constantinople: The Walls of the City and Adjoining Historical Sites* (London: John Murray, 1899) 181-85; Alice-Mary Talbot, 'The Restoration of Constantinople under Michael VIII,' *Dumbarton Oaks Papers* 47 (Dumbarton Oaks, 1993) 243–261 at 249.

30. These wharfs are called İskeles (Turkish) or Skalai (Greek).

31. In the Late Byzantine period, the area of the Prosphorian Harbour (*Perforo*) had became the location for the Genoese Quarter, approximately located in the area between Yalı Köşkü and the fish market, or Balık Pazarı, with the quarters of the Pisans and Amalfitans nearby. Magdalino places the colony of the Genoese immediately west of this harbour, and the forum / market of Strategion. His locations for the trading quarters are based upon published surviving documents of sale. Nearby was the Hospital of St. Markianos and two churches built by the Pisans: San Pietro and Santa Nicola. The Venetians first settled in Perama, west of the former area of the Neorian Harbour with the docks of the Heptaskalion further west, in front of the market of Leomakellon, associated by Magdalino with modern-day Unkapanı, where the early maps suggest, a N-N-E-directed street ran down to the Unkapanı İskele (wharf). Magdalino places the colony of the Genoese immediately west of this harbour, and the forum / market of Strategion. His locations for the trading quarters are based upon published surviving documents of sale. See Magdalino, 'Maritime Neighbourhoods' (2000); W. Müller-Wiener, *Die Häfen von Byzantion-Konstantinupolis-Istanbul* (Tübingen: Ernst Wasmuth, 1994) 126-27.

32. Fischer, *Lorck* (2009) vol. 4, sheet 8.

33. Mango and Yerasimos, Commentary, in *idem*, *Lorichs* (1999) 10. The authors also identify four smaller mosques, which are here omitted for brevity.

34. *Op. cit*., 10: Tarakçılar Masjid; Fischer, *Lorck* (2009) sheet 9..

35. On the development of the markets and hans, see R. Murphey, 'The Growth in Istanbul's Commercial Capacity, 1700-1765: The Rôle of New Commercial Construction and Renovation in Urban Renewal,' *Acta Orientalia Academiae Scientiarum Hungaricae* 61, (1-2) (2008) 147-155 at 149. The Valide Han, built in 1646, replaced the palace of Cerrah Mehmed Paşa, built in 1604.

36. The Atik Ibrahim Paşa mosque is depicted overscaled in the panorama.

37. Topkapı Sarayı= Yeni Saray (new palace).

38. See forthcoming paper by Nigel Westbrook on the roads to the Strategion to be published in the proceedings for *Fabulations*, the 29th Annual Conference of the Society of Architectural Historians Australia and New Zealand, University of Tasmania, Launceston, Tasmania, 5-8 July 2012.

39. Wulzinger 'Melchior Lorichs Ansicht' (1932) 355-68 and map; Fischer and Iuliani, *Lorck*, Vol. 4 (2009) 49. It should be noted that our analysis produced different view-points to Wulzinger's points A and B. This may perhaps be explained by the different methods utilized to analyze the Panorama. Wulzinger utilized a survey triangulation, whereas we 'camera-matched' a digital aspect ratio with that produced by Lorck's method of surveying the landscape, which we have theorized to be a draftsman's grid.

40. On the later transformation of the Jewish quarter in Eminönü district to construct the Yeni Valide mosque complex (built between 1597 and 1665), see L. Thys-Şenocak, 'The Yeni Valide Mosque Complex at Eminönü,' *Muqarnas* 15 (1998) 58-70.

41. The name suggests the Grand Vizier Pargalı İbrahim Paşa (1494-1536), however there is, to our knowledge, no evidence that he commissioned a han in this location.

42. The reference on the skyline right of the Beyazit mosque derives from the Vavassore bird's-eye view, from which Lorck derived a number of inscriptions, and does not refer to the line of domed structures, which belong to the forecourt of the Beyazit mosque.

43. M. Mundell Mango, 'The Commercial Map of Constantinople,' *Dumbarton Oaks Papers* 54 (2000) 189-207 at 206-07 and fn. 152.

44. In the area described in sheets 8 and 9, the later Yeni Valide Mosque was located in a still-existing crook of the sea-wall, where it folded back to the south. Just to the west of here was the Balık Pazarı and hence also the Balık Pazarı kapısı. This gate is depicted – probably erroneously – to the right of sheet 6 ("*porta della pescarie*") – thus further to the left (east). The crook in the wall would itself appear from Lorcks' drawing to be the eastern wall of the tower, which was, presumably, demolished to make way for the mosque. East (left) of this gate, the second tower is labeled as the 'Jews' Gate.' This location may have been the western boundary of the former Prosphorian harbour, and the alignment of the crook could well have been the boundary between the commercial Prosphorian harbour and the naval Neorian harbour. Note, however, the inscription "*porta della pescarie*" (gate of the fish / fishermen)- did this function exist here during Byzantine period, or did this function move here when boat building moved north across the Golden Horn to the yards there (*palaia exartysis*). See Müller-Wiener, *Häfen* (1994) 31-2.

45. Mamboury and Yerasimos, Commentary, *Lorichs* (1999) 10.

NEO-PALLADIAN ARCHITECTURE IN PORTO: JOHN CARR'S HOSPITAL DE SANTO ANTÓNIO

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Erudite and popular. Convenience in the building of the new Hospital

For the city of Porto, John Carr designed an interesting example of Neo-Palladian architecture found outside England – the *Hospital Geral de Santo António*. Paying close heed to the new technical advancements achieved in terms of drainage and ventilation, Carr idealised a large modern hospital that would be capable of meeting the needs of the dynamic local population. The project was completed in 1769 and represented one of the first major works undertaken by this architect from York. In the part of the hospital that is still visible today, we can clearly see the classical orientation derived from Palladio's influence, which was widely disseminated in Britain by Lord Burlington, and then further developed by Colen Campbell, William Kent and John Wood. Adopting the schemes that had become widespread when the Renaissance was at its height, and based on Antonio Averlino Filarete's design for the *Ospedale Maggiore* of Milan, it is a remarkable example of architecture with distinct Mediterranean roots that spread to the area around the North Sea and later gained substance on the Atlantic coast of Portugal.

A city where business was conducted by both land and sea, Porto continued to consolidate its Baroque profile until well into the mid-eighteenth century. This architectural style became the characteristic expression of a city that was politically-dominated by religious institutions, whose carefully shaped granite towers rose to form its distinctive skyline. The wealth accumulated by the mercantile bourgeoisie helped to finance the building of new churches and convents, in a display of modernity that was open to international influences. This was the time when Roman Baroque art was to be found all over Porto, with Italian architects being brought to work in the city and with its own artists being fully trained in this new and highly theatrical language. When the Enlightenment reached the city in the second half of the century, the social revolution became even more intense and power was gradually transferred to civil society, with the ecclesiastical authorities progressively losing their influence over the management of everyday affairs. New monuments, such as schools, law courts, prisons and hospitals, began to take the place of churches in the representation of urban values.

Neoclassical culture was brought to Porto by the British community, who had settled there due to the ever-expanding wine trade. They brought with them the rationalist debate on the social and human dimension, which was itself largely based on the political and philosophical discourse of Francis Bacon (1561-1626) and was committed to placing science at the service of mankind. In architecture, a Neo-Palladian movement was formed as a particular version of illuminism, which was to become reflected in architectural practices in the British Isles throughout the eighteenth century, most notably in the building of country houses and in the renewed image afforded to many public buildings with a variety of different functions. It was a movement that spread across the whole British Empire and into the most distant areas of its colonising influence. Among the many agents actively involved in the spread of that influence, during the second half of the eighteenth century, attention is drawn to the figure of the British Consul in Porto, a self-confessed amateur architect, who designed a series of new buildings for the city.

Demonstrating the influence of the Neo-Palladian movement, one of the projects that was designed by John Carr and served as the theme for the Porto hospital, was *Harewood House*, which dated from 1758. This building was conceived within the compositional framework devised for the ennoblement of private residences, adopting the structure of the elevation that can be seen in the engravings of Colen Campbell, published in the book *Vitruvius Britannicus*, and which had itself been inherited from the proposals of Inigo Jones. This made it similar to *Holkham Hall*, designed by William Kent, as well as other country houses dating from the same period. The façade was developed horizontally, being divided into five parts, with the central body of seven openings being placed higher up. Here, the prominent balcony and portico occupy the three modules that define its symmetry, completed by a triangular pediment. The corner turrets stand out from the intermediate parts because of their more classical and ornate appearance, with particular emphasis being given to the double Corinthian pilasters supporting the friezed cornice of an independent roof and the Palladian window designed in keeping with the version that was widely used at that time.

Portugal was master of the seas at the beginning of the sixteenth century, becoming the great colonising power of that time, together with Spain. It crossed the Atlantic and Indian Oceans, forming an empire based on the spice trade, which reached as far

as the China Sea. A country inhabited by a relatively small number of people, its strategy was based on the skilful use of available resources. It developed a policy of public salubriousness designed to preserve the life of its population, increasing the mechanisms provided for the protection of health, with the creation of an important network of hospitals. The *Hospital Real* in Lisbon, dating from 1492, was the first large hospital to be built outside Italy in accordance with the Renaissance model of spacious courtyards and wards in the shape of a cross, in keeping with the scheme proposed by Antonio Filarete for Milan. In Porto, a mediaeval lodging-house was rebuilt and, for two centuries was used to provide health care to the inhabitants of Porto. The growth of the city rendered it insufficient for their needs, so that the authorities decided to build newer and more modern facilities.

At the suggestion of the chaplain of an important colony of English traders residing in the city (also a fellow native of York), and with the approval of the Consul for British business, John Carr was invited by the Porto authorities to devise a large hospital to meet the needs of what was by then a large and dynamic local population. The project represented a special opportunity for the architect, who until then, had devoted his time to building bridges and country residences in Yorkshire. His earlier experiences that came closest to the new problem placed before him were the nursing home that he designed in Leeds, the original version of the *General Infirmary*, a project from the previous year, and the *House of Correction* in Wakefield. Although, in order not to endanger his chances of being granted such a valuable commission, he presented himself as a highly experienced specialist who had travelled around his country visiting the most advanced constructions so far produced in terms of health facilities.

He did not follow the model of the *Middlesex Hospital*, the most recent and famous example of such a building erected at that time, which was designed by James Paine. This project was to merit great attention because, in keeping with a certain empiricism that was characteristic of British culture, it revealed the technical perfections that the health sciences had introduced into the organisation of medical practice. Yet the architectural expression of Paine's work, designed in keeping with the then predominant Neo-Palladian style, was more a distancing factor than it was suggestive of any closer approximation to the combative spirit exhibited by Carr, who regarded his colleague (also active in Yorkshire) as a competitor sponsored by the intellectuals of London, in whose work he did not recognise the distinctive elegance or formal equilibrium that were worthy of Palladio's teachings. The *Middlesex Hospital* was a solid block whose articulation of forms and rules of symmetry were not enough to overcome its insensitivity to questions of proportion and a certain coldness in its style.

Nor was Carr guided by other English hospitals. The clearest reference to the planned organisation of such spaces was to be found in the designs drawn up in the Renaissance period, which had themselves emerged from the scheme designed by Filarete, with its various replicas in sixteenth-century Europe. This was a design consisting of a regular geometrical base, which in this case, came close to that of a square unit opening onto an enormous central courtyard. The project was planned to be built on flat terrain, paying no attention whatsoever to the particular features of the surrounding area, since the architect did not know either the site or the city for which this hospital was planned. He did not take into account the country's architectural culture and adopted classical principles in the rustic treatment that was afforded to the façades of the main storey 'according to Palladio', in the architect's own words. This was the supposed superior culture of the colonising people, exporting work without bothering to find out about the particular conveniences of each case or the practices arising from the solution that was to be adopted.

In reality, the English architect sought his inspiration in the primary sources, drawn from the most emotive examples of the Italian Renaissance. The solution in the form of a closed square sheltering the spacious central area offered him four main façades, neutralising the problematics of the building's integration into the urban landscape, whose conditions he had no knowledge of. Like Bramante in *San Pietro in Montorio*, he worked upon an autonomous form, making this an architectural object that had no roots and no predominant direction. Capable of being partially observed from any position in the surrounding area, without any loss of its unity and classical coherence. Like Palladio in the *Villa Rotonda*, he offered four porticos, all endowed with the same sense of monumentality, so that none of the façades was afforded prominence over the others. Like Giulio Romano in the *Palazzo del Te*, he lowered the built mass by establishing the interior circulation around its perimeter inside the volumes themselves, following a logic of spatial sequences governed by the rhythm of the entrance halls in the middle of each wing of the building.

The east elevation was the only one completed in careful conformity with the initial project. In the middle, it presents a large porticoed balcony containing five openings with giant Doric columns surmounted by a triangular pediment and standing over a rustic arcade that serves as the hospital's main entrance. One hundred and eighty metres long, it is divided into five parts, a solution that was already conventionally established in Neo-Palladian architectural practice in England. The central block is wider than the portico that it contains and the two turrets completing the corners have a colonnaded balcony with three modules, but with a straight cornice. The intermediate bodies are lower and more discreet, repeating the rustic arcade at the front of a recessed plane. Through the dynamic interplay of the different planes highlighting the chiaroscuro effect, we are left with the impression of a neo-classical building of delicate proportions, which was discreetly accompanied by some other remarkable projects that were also undertaken at around this time in Porto.

Being an English project inspired upon the classical game of Mediterranean experimentalism, the hospital immediately appeared as an innovative sign situated in distant Western Europe. The neo-classical style of southern Portugal, which had difficulty in freeing itself from baroque decorativism, was matched in the north of the country by the plainer formulations of the imitators of Palladio, who in turn was himself a creative imitator of the old Roman Empire. The windows are surmounted by curved and straight pediments, highlighting the alternate nature of the planes of the composition. In the key position, there is a prominent 'Serliana', known in Carr's home country as a Palladian window, which the dilettantes of the new aesthetic order adopted as a mark of English architecture. Contrasting with the rusticated expression of the ground floor, was the distinctive and perfect work undertaken by the masons on the upper storeys, not only visible in the way that they had finished the stones and established the geometrical links between them, but also in the shaping of the mouldings, the execution of the balustrades, and the sculptures and vases that defined the skylines.

It was intended that the hospital church should be built in the centre of the great cloister. This would have a floor plan in the shape of a Greek cross, standing on a podium and with a dome, so that it would be similar in every respect to the idea developed by Filarete for the largest courtyard of the *Milan Hospital*. The elevations were planned to be the same, two by two, with porticos surmounted by pediments on each of the four façades, repeating the idea that had been popularised by Palladio for the *Villa Rotonda* in Vicenza, an exceptional work running counter to the idea of façadism that characterised all of the Italian master's work. An orientation was immediately proposed for the church though, defining its preferential direction at the expense of the door and staircase, which were aligned along the axis of one of the exterior porticos of the main building, placing the altar opposite the apse. It did not really matter which façade was chosen as the main one. Use would be made of the one that was best suited to the urban circumstances that were to be encountered at the site. It fell to the local body responsible for the hospital to choose the east side, which faced the city, as the preferred façade, and this ended up being the only one that was built.

In Carr's project, the body that was built generally presented two storeys above the ground level chosen for the implantation of the work, with there being a third storey only in the central bodies of each wing of the resulting square. The building's volumes had a width of roughly 20 m, which meant that there would be approximately 140 m left over for the large free central space where an interior garden with a church was to be installed. The façades of the courtyard had an arcade of regular-shaped arches running all the way along them, sheltering the rooms from the blazing sun and guaranteeing the correct ventilation of the wards. Other technical considerations were outlined in the descriptive memoirs that accompanied the project, related with the convenient distribution of the compartments, the organisation of the functional system, salubrity and drainage, always benefiting from the empty square that was formed by the cloister.

The whole project was painstakingly detailed, with precise indications being given for the building of the rustic walls and the division of the stones in all the inside walls, which was warmly welcomed in an economic area where buildings were traditionally made of granite, for which there was no shortage of well-trained craftsmen. The process were based on the preparation of general plans for the main floors, as well as partial plans, exterior and interior elevations, the planning of the chapel and drawings of detailed aspects of the construction work. Being an abstract formulation, it was planned that the building would be erected on a flat terrain, when, in reality, the site that had been set aside for the construction of the hospital was fairly irregular, with steep slopes linking two banks of a stream. The Porto community knew how to deal with such situations and sought to benefit from the singularities of the proposal, adapting it to the local topography with sensitivity and pragmatism, as well as to the existing material conditions, adjusting the size to the available financial resources and to the time required for the manufacture of building elements, when working at their natural rhythm.

That was the reason why the project was only half completed, although it was correctly finished in the new formulation of the tops of the side wings. The most abrupt part of the terrain, where the south wing was located, made it unfeasible to build the portico with the pediment in the middle of this elevation. This did not however remove the need to erect enormous supporting walls to maintain the hospital building in a high position, at a level that was roughly equivalent to that of the new city, which at that time was beginning to grow beyond the limits of the mediaeval city. This procedure highlighted the advantage of lowering the height of the earthwork for the courtyard-garden to roughly three metres below the level of the street where the main entrance was to be built. This justified the inclusion of another storey below ground, creating a third and lower porticoed entrance leading to the courtyard, similar to those on the upper floors. This solution ended up improving the degree of comfort of the hospital's interior enclosure.

At the time of the first inauguration of the new hospital in 1780, all that was built was a small part of the enormous project. The work began with the building of the south turret and grew from there with the construction of the intermediate block of the east wing, the one whose façade faced towards the growing city, and the first sector of the south wing. In the second building campaign, at the beginning of the nineteenth century, the portico was completed (still without its pediment), which was to become the main

entrance, and the whole of the east wing spread as far as the north turret. The large building began to be considered a priority in the representation of the new neo-classical civil architecture that was gradually becoming the main identifying feature of the urban expansion westwards, accompanying the economic dynamics established along the banks of the River Douro towards the sea, with the increase in the export of wines. There then began to appear replicas of the Neo-Palladian style, and not only in the establishment of a new town in the city's riverside district or in its expansion into a modern Porto beyond the city walls.

These dynamic transformations took root in the minds of the intellectuals of the Enlightenment and aroused the interest of the governors, who were attentive to the symbolic role that architecture played as a stimulus for the organisation of the new society. This area of growth was to become marked by the replacement of the old convents with urban equipment that had an innovative social function, such as the institutions created for the education of the bourgeois classes involved in trade or the reconstruction of the law court and prison as a symbol of the rigorous social discipline that was called for at that time. The inhabitants of the bustling city took the gradual darkening of the granites of the hospital's main entrance as a clear sign that they were on a path leading to progress. In the palaces that were built at that time, with their unadorned façades and symmetrical organisation, repeated copies were made of rusticated doorways, pediments and balustrades, contributing to the liberal character of the Atlantic city that had created its own singular expression in the European space.

John Carr wrote at that time, in a letter that accompanied the project:

> 'I dare say that the plan is distributed with propriety and convenience for the intended purpose (...) the architectural parts are perfectly appropriate and correct, and, at the same time as there is uniformity and simplicity, there is also variety in the composition.'

Designed under the direct influence of Palladio's ideas, *Holkham Hall* is said to be an outstanding example of the neoclassical illuminist architecture that was specific to England. Nevertheless, due to its particular geographical position, which creates a unique triangulation between Italy, Portugal and England, the Porto Hospital was to become a building displaying a form of Palladian Mannerism that was much sharper and more precise in comparison with the architecture that was being produced in England at that time.

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Islamic and Renaissance Gardens: A Case of Mutual Influence?

SESSION CHAIRS:

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In the sixteenth century, political and economic engagements between Renaissance Europe and the Islamic world opened new pathways for cultural exchange. Trade, diplomacy and tourism vastly enhanced Europeans' knowledge of Ottoman, Safavid and Mughal urban design and architectural practice. As travel narratives from the period attest, Europeans reported on the cities, gardens, and buildings with which they came into contact, often characterizing them as sites of social interaction. Some of the accounts even included drawings and sketches of Islamic cities and gardens, which captured the attention of European cultural elites. Intellectual and artistic exchanges facilitated by merchants, tourists, and missionaries also added to the reciprocal flow of architectural ideas and concepts.

During this period, some simultaneous changes occurred in garden design in Europe and Persia. The role of gardens in cities grew in prominence, with a gradual shift in emphasis from gardens for the private sphere to an increasingly public function. As a natural consequence of this shift, gardens began to serve as the core of new urban plans and designs. This phenomenon not only established a new relationship between the garden and city, but also emphasized the garden pavilion or villa as the focal point. Are such concurrent developments in European and Islamic gardens the result of universal political and social changes in both regions or could these garden design traditions mutually have influenced one another? The papers in this panel can study such potential influences by comparing the meanings and forms of gardens in the Islamic world to those in Europe or by exploring historical documents to validate mutual influence in garden design. The papers can also compare and contrast between the function of the palace or pavilions in relation to the garden in Islamic cultures and the villa in relation to the garden in European cultures.

ITALIAN AND OTTOMAN
LANDSCAPES OF LOVE AND IMAGINATION IN THE EARLY MODERN RENAISSANCE

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HYPNEROTOMACHIA POLIPHILI AND *ŞEHRENGIZ* GENRE

Francesco Colonna's *Hypnerotomachia Poliphili,* dated 1499, is an account of a journey within the fragmented landscape of a dream vision, where the protagonist Polifilo wanders in a variety of landscapes narrating nature and architecture, admiring monuments and gardens, while at the same time, desiring to unite his beloved Polia. *Şehrengiz* is a neglected literary genre in Ottoman studies developed between 1512-1730, considered to be artless, simply accounts for journey(s) of poet(s) through a city as they wander along different neighbourhoods, illustrating and admiring urban culture, daily life, architecture, gardens and nature; where at the same time uttering affection for beautiful young men of the guilds as the Beloved ones. Apart from Istanbul -which was the center of Ottoman rule- *Şehrengiz* poems depicted thirteen other provincial cities as sources of joy, pleasure, and wonder; treated cities as Paradise(s).[1]

Both Colonna and *Şehrengiz* poets used languages purposefully. Colonna used Italian syntax and Latin vocabulary displaying knowledge Hebrew, Arabic and Chaldean. *Şehrengiz* poets used common Turkish written in Arabic alphabet as opposed to artful refined court language.

Both *Hypnerotomachia Poliphili* and *Şehrengiz* poems can be studied in terms of their performative qualities and pragmatics. Pragmatics is a subfield of linguistics, a tradition to be traced back to the ancient Greek rhetorics, and to the arts of ekphrasis, also common Byzantine art. Ekphrasis is generally described as an extensive textual description of an image. Most of the contemporary studies on the tradition of ekphrasis focus on the contrast between image and text emphasizing that visual imagery is superior to textual narrative. However, the tradition of ekphrasis neither favors text nor image. It aims to create a lively scene where the writer aims to trigger the imagination of the audience/reader to a point that he would be able to experience the text more vividly than its actuality. This performative quality of ekphrasis is explained by "energeia." The arts of ekphrasis involve pragmatics, imagination. It requires the involvement of an audience. The famous rhetorician Quintilian of 1st c. discusses the importance of imagination in the arts of ekphrasis by explaining the term "energeia" which is "produced when the orator uses his own power of imagination to conjure up a scene in his mind."[2]

LANDSCAPES OF LOVE AND IMAGINATION

Byzantine scholars, who had migrated to Italy throughout the 15th century, reintroduced the philosophers of antiquity to the western world. One of these scholars was George Gemistos (d. 1452). Gemistos named himself Plethon after Plato. He had given lectures in Florence about the differences between the philosophies of Aristotle and Plato, and argued the superiority of Plato over Aristotle. Gemistos observed that the western world was interested in the studies of Plato only in the domain of arts. He wanted to establish Neo-Platonism in the domains of philosophy and sciences. Gemistos explained his neo-platonic arguments in relation to Islamic and other ancient near eastern philosophies. He claimed that in the future the world would be dominated by a single religion. Scholaris, who was appointed as the Patriarch of the Orthodox Church by Mehmed II after the conquest of Istanbul, accused Gemistos for associating Platonism with paganism. Scholaris claimed that Gemistos' association of Platonism with paganism was a result of his education from a scholar, who was a subject of the Ottoman rule. In the major research conducted on the life and philosophy of Gemistos, Woodhouse argues that Gemistos did not have any knowledge of Arabic or Persian. He adopted the ideas of his teacher directly, when he had become a disciple of this Ottoman subject. Though the identity of this Ottoman scholar still has not been truly identified, Gemistos himself stands as one of the major indications that by the 15th century, Neo-Platonism was adopted and practiced in the intellectual circles of the Ottoman rule in Asia Minor.[3]

Both Francesco Colonna's work *Hypnerotomachia Poliphili* and the poems of *Şehrengiz* genre are to be discussed in terms of Neo-Platonic ideals as practiced in the early Renaissance Italy and early modern Ottoman Culture. The birth of Platonic Academy in the west was dated to 1463. [4] The neo-Platonic tradition in the Ottoman Empire *was* inspired from the 13th Sufi master Ibn al-'Arabî, originally from Al-Andalus.

Joscelyn Godwin informs that Francesco Colonna (1433-1527) was a priest of the Dominican Order at Treviso, and, a member of

the SS. Giovanni e Paolo- an "unreformed" monastery, "which meant that its members did not follow strict rules of monasticism."[5] Like Colonna himself, poets of the *Şehrengiz* genre participated in, or, were influenced by a religious teachings; philosophy and ideals of a secret mystic society called the *Bayrami-Melâmis*. Similar to the "unreformed" monastery of Colonna; this secret society was not an institution; it was not associated with a specific school, dress code, or any established practices, unlike other orders of Islamic mysticism. *Bayrami-Melâmis* participants adopted a protest philosophy following 'Arabî's doctrines of love and of the "Unity of Being," and, advocated Islamic individualism.[6]

Neo-platonic philosophy bringing together celestial and mundane worlds for the attainment of knowledge, which is the knowledge of Divine, foresees love as the basis of, and, the one and only common feature of all Creation. In the western counterpart, the correspondences between Ficino and Paolo Orlandi illustrates love as the vital energy which enables life and draws all Creation towards one another and to God: [7]

> In the second case, the case of ecstasy, a new light and power poured in by God…kindles the will with a wonderful love…drawing the intelligence into God. There love itself, whose function in the universe is generation, regenerates the soul and makes it divine.

Traversari and Ficino are important figures of the Western neo-platonic tradition. Ficino worked on his Platonic commentaries between years 1480 and 1490. Sometimes, he organized meetings at the Camaldolese House of S. Maria degli Angeli and named such gatherings as Academy. Ficino asserted that the sacred philosophy of Plato had to be practiced at sacred places before a religious audience whom he called as "*dilectissimi fratres*" (meaning, most beloved brothers).[8] Almost fitting to Ficino's illustration of the practices of Neo-Platonism, *Şehrengiz* poems were subtexts of secret rituals performed in a variety of spaces of different cities, with a religious audience, whom were called the Beloved ones, as the subjects of divine and mundane Love.

Both the work of Colonna and poems of the Şehrengiz genre are considered to embody eroticism. Both Polifilo, and, subjects of Şehrengiz poems, feel ecstasy and are aroused as they verbally illustrate their visual contemplation of objects, landscapes or Beloved ones. Both *Hypnerotomachia Poliphili* and *Şehrengiz* poems embrace philosophies calling for a polytheistic world. Where as the name of Colonna's protagonist, Polifilo, is perceived by Godwin as "Poli-phile" – as the "lover of Polia as well as the "lover of many,"[9] Şehrengiz poems also narrate the love of poets for the multiplicity of the Beloved Ones.

CONSTRUCTION OF LANDSCAPE, POLITICS AND IDENTITY

The gardens and landscapes of Colonna are fragmented parts of dreamscape, which triggers imagination by the act of desire, contemplation and love. Like the Medieval tradition of dreaming, where dreams are considered to constitute within in-between spaces,[10] Şehrengiz poems also dwelled on an idealized concept of in-between following the neo-platonic vision of Ibn 'Arabî who introduced the concept of in-between as "barzakh." The concept of "barzakh" embodies an understanding of "both/and" instead of "either/or." The presence of a "barzakh" enables the co-existence of ontology and epistemology; allowing metaphysical and physical worlds to be of equal importance; and, discuss the significance of the individual self as equal to God. Thus, "barzakh" is portrayed as a space of encounter, as a third space in which the other two domains meet. In this respect, the act of imagination also takes place at *barzakh*. It is referred to as the realm of imagination. *Barzakh,* or the realm of imagination, is portrayed in the form of an ideal or real space. It places the individual human self at the centre of understanding the entirety of creation. It is a space created by the act of communication, the act of imagination. It is a space created by the attainment of knowledge. *Barzakh*, this intermediary or in-between space, is formed between the Real and Ideal spaces; between the realm of God and earth, between meaning and form. It is conceived of as a space of encounter, reconciliation, and a meeting point. Ottoman scholars define the concept of *barzakh* as a place where the two seas meet, metaphorically, as an ideal ground that would bring together Ottoman Orthodoxy and the heterodox groups within the Empire; unite the Laws of *Shari'a* and mystic traditions of various *tariqat*.[11]

"City," was a metaphor for *barzakh,* and for the locus of True knowledge; where again the esoteric and exoteric knowledge meet, and where the world and the self is constructed upon the knowledge from opposing domains of Ottoman faith. The city becomes a place of seeking for the divine love and truth, a place where imagination is nourished from, a pool of bodies which the appetite will desire one after the other, where the heart will look for the divine beauty in each thing, but never attached to a single one. By stirring the city, the city becomes a pool of bodies to be contemplated by imagination in the process of gaining divine knowledge.[12] Representation of the unity of multiplicity enables attainment of divine knowledge, but ıt also enables the creation of novel forms and ideas. The city provides a storehouse for the faculty of imagination to contemplate. The city becomes an intermediary realm where the faculty of imagination is practiced, presenting a variety of loci and beloved ones. Such fragmented visions of mapping urban city spaces and countryside plotted in different scales, unified the imagination and practices of the *Şehrengiz* genre provides a unique understanding of the Ottoman landscape. Thus, this exceptional idea of fragmented landscape had been constructed mutually, as the genre had stimulated and encouraged the construction of free will and the individual self in the pre-modern Ottoman world. But the most important metaphor for the *barzakh* was the garden.

In the dream landscape as constructed by Colonna flourished the Neo-Platonic visions of divine and mundane appreciation, embracing wonders and orders of different cultures, different languages, and different religions. Within the in-between space of both the Colonna's and the Ottoman poets' performative texts, ideals for a new world emerged, claiming for the integrity and togetherness of antiquity and nature, landscape and identity, cities and gardens. Nevertheless *Hypnerotomachia Poliphili* was a "religious and political hagiography"[13] similar to Şehrengiz poems, where they both depicted the fragmented landscapes of political identity embraced through divine love. What had been created in the clash of such unnoticed mutual influence between the East and the West, both in Italy and in Ottoman Istanbul there were gardens of early 16th century, which is the subject of further study of this research paper.

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Endnotes

1. For an extended study of the *Şehrengiz* genre and *Şehrengiz* rituals, see B. Deniz Çalış, "Ideal and Real Spaces of Ottoman Imagination: Continuity and Change in Ottoman Rituals of Poetry (Istanbul, 1453- 1730)," (Unpublished Ph.D. Thesis: Middle East Technical University Faculty of Architecture**,** 2004).

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3. C. M. Woodhouse, *George Gemistos Plethon The Last of the Hellenes* (Oxford: Clarendon Press, 1986). I am thankful to Prof. John Monfasani, former Director of the Renaissance Society of America, for his reference about Gemistos Plethon.

4. Dennis F. Lackner, "The Camaldolese Academy: Ambrogio Traversari, Marsilio Ficino and the Christian Platonic Tradition." In *Marsilio Ficino: His Theology, his philosophy, his legacy*. Micheal JB Allen and Valery Rees, editors (Leiden: Brill, 2001), 30-31.

5. Joscelyn Godwin (trans.) *Francesco Colonna Hypnerotomachia Poliphili The Strife of Love in a Dream* (London: Thames and Hudson: 1999), xv.

6. See, Abdülbaki Gölpınarlı, *Melâmilik ve Melâmiler* (İstanbul: 1992), 36-37. Melâmi-Bayramis claimed that individuals embodied true reality, and thus were the embodiment of divine knowledge. The following verses from the 14th century Melâmi-Bayrami poet Hacı Bayram Veli illustrates the importance given to individuality: 'He found the enlightened in himself. He found himself.' Melâmis were considered infidels for giving such importance to the individual self, such importance that the individual came to be treated equal to God. As members of a secret society, Melâmis identified themselves and each other subtly by the shape of their tombstones.

7. Dennis F. Lackner, "The Camaldolese Academy: Ambrogio Traversari, Marsilio Ficino and the Christian Platonic Tradition." In *Marsilio Ficino: His Theology, his philosophy, his legacy*. Micheal JB Allen and Valery Rees, editors (Leiden: Brill, 2001), 33.

8. *Ibid.,* 30-31.

9. Godwin, *Colonna*, vii.

10. Steven F. Kruger, "Dream space and masculinity," *Word And Image* Garden and Architectural Dreamscapes in the Hypnerotomachia Poliphili, vol 14 number 1/2 (1998), 11.

11. For further detail see, Derin Terzioğlu, "Sufi and Dissent in the Ottoman Empire: Niyazi-i Misri (1618-1694)" (Unpublished PhD. dissertation, Harvard University, Cambridge, 1999), 270.

12. Travelling from one city space to another, chasing after the beloved one, the heart would become a mirror reflecting divine knowledge. When the heart reflects divine knowledge, it becomes a space for the illustration of truth in the phenomenal world. Thus, the heart reflects concepts and idea-images from the realm of imagination to the phenomenal world. This suggests the creation of new ideas, new forms and new concepts. Corbin names this process of "objectivization" and explains it as the creative power of the heart or as the "creative imagination" (imaginatrix). See, H. Corbin, *Creative Imagination in the Sufism of Ibn 'Arabi* (Princeton: Princeton University Press, 1969), 224.

13. N. Temple, "The Hypnerotomachia Poliphili as a possible model for topographical interpretations of Rome in the early sixteenth century," *Word And Image* Garden and Architectural Dreamscapes in the Hypnerotomachia Poliphili, vol 14 number 1/2 (1998), 153.

Representation
& Communication

Open session:
Layers of Time

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REPRESENTING PROCESS IN 16TH CENTURY ROME

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The treatise written by the 16th century architect Domenico Fontana, *Della trasportazione dell' obelisco vaticano,* published in Rome in 1590, combines a re-evaluation of architectural agency with a lucid description of the experiential impact of construction process. It is written, in part at least, to advertise the judgment of Fontana as an architect and it conforms to the tradition such publication required: Fontana stands as the author; the book combines text, costly production and fabulous illustrations; and it describes what, since the framing of architecture as an artistic and intellectual discipline at the start of the modern era, must be considered as architectural 'works'.

At first glance the fontispiece to the book emphasises its alignment with this tradition. Here Fontana represents himself very much according to the idea of the architect that became common in the early Italian Renaissance, and which continues to colour our view of what an architect is to this day (fig 1). He is pictured in three quarter view, at a table bearing the tools essential to his calling, clutching an architectural body to his breast. The body in this case is that of an obelisk, and the suggestion one almost inevitably derives is one of ownership between the 'work' and the architect pictured – Fontana does not appear to be offering the obelisk to anyone else (unlike contemporary portraits in which Michelangelo is seen offering a model of St Peters to the Pope), but rather asserting his claim over it; the obelisk is very much Fontana's, standing on his table among his other possessions. But on closer examination disturbances are to be found in this reading. There is something strange both about the placing of the obelisk on Fontana's table (balanced on the rear edge) and about the positioning of Fontana's hands. The right appears to have got caught up in the chain and medallion hanging around his neck, and is evidently dealing with some additional interaction – why, one wonders, must Fontana run chains through his fingers in order to hold the obelisk? The fingers of the left hand appear to be in motion, as if hesitantly investigating something apt to escape, intangible. What, then, is the work in question here? How could the obelisk Fontana holds be considered as emphemeral, light enough to hover off the table, hard to grasp?

Works are what people experience and judge when valuing the agency of an author. Thus the works of Shakespeare are the plays you hear; hearing the plays is what allows a judgement to be passed on Shakespeare as a dramatist. In architecture, works have tended to be identified with artefacts – objects, buildings – and the representation of such works with a description of the design or intention that lies behind the physiognomy of those artefacts as created and as experienced. Twinned with this definition comes a tie of architectural authorship. Architectural works are things owned - 'Le Corbusier's Chapel at Ronchamp' or 'Bramante's Tempietto' – and this creates an emphasis, evident in most architect's treatises from Serlio to Le Corbusier, suggesting that architectural agency lands and has its final justification in an account of the building created as a new object in the world.

In *Della trasformazione dell' obelisco vaticano*, the question of the architectural work is more complicated. Although Fontana appears to assert a tie of ownership in the frontispiece, the subject of this authority – the nature of the work owned – requires some consideration. *Della trasportazione dell' obelisco vaticano*, as its title implies, describes processes as much as objects. Of the several projects in the treatise, the most spectacular, which gives its name to the book and which informs the frontispiece, concerns the removal of the Egyptian obelisk that, since antiquity, had stood to the south of what became the basilica of S. Peter in Rome. In 1585 Fontana obtained the commission to translate the obelisk to a new location axially before the façade of the Church, then in the process of reconstruction, to what is now known as Piazza San Pietro. The work took exactly one year, from 25 September 1585 to 26 September 1586. What is created here, and what must be described to illustrate Fontana's judgement, is not an artefact, but an event – a staging, a happening. Fontana adds very little artistic creativity in relation to the physiognomy of the obelisk; indeed, the reverse is rather the case – his goal is to translate it without material change, alteration or damage. What is changed is not the object itself but its relation to the city. And what is created through Fontana's 'work' is the extraordinary process that moving the obelisk entailed.

Fontana's task involved a combination of rotational, vertical and horizontal translation in which the vertical needle was first to be laid flat on the ground, then moved on a sledge to its future location, where it would be returned from horizontal to standing. The challenge to design lay in conducting this extremely basic geometrical operation with the limitations of the technology available. The strongest motive power unit available at the time was an horse or ox, capable of exerting a continuous force of around 125 lbs (50 kg) in an unsteady horizontal direction. The strongest cable able to transmit this force could take something over 20,000

lbs of tension (8 tonnes, 40 times what the horse could move). But the obelisk was a single piece of stone 114 ½ palms high by Fontana's calculation (around 25 meters) weighing 963,537 $^{35}/_{88}$ lbs (Fontana calculates the weight to this precision), about 8000 times as much as a horse could lift through direct traction. Thus the richness in Fontana's work, which evidently was a richness and thrill experienced by a crowd of thousands, was to establish sufficient force to lift, rotate and drag this gargantuan object with the means available.

The images Fontana uses to explain this process follow conventions of architectural draftsmanship – plan, section and elevation; perspective; an isolation from and a filtering of contextual information to communicate content. Since Serlio all these techniques had been used to represent architectural works as artefacts. Yet what is clearly articulated in Fontana's depictions is not the final, static, monumental capacity of the obelisk itself, but the moment before this capacity is realised – the drama of 'placing' - or 'displacing' - what, for the eternalised duration of the moment in the book, must be considered a temporary, movable and ephemeral object. The drawings deserve to be studied as a series, but many of the qualities they convey, and the re-evaluations they imply, can be exemplified by looking carefully at one image (fig 2), which shows the plan for the works.

In this drawing Fontana makes visible that which for us is usually excluded from the representation of cities – the temporary supports, tools, workers, scaffolding that allow material construction to come into being. Indeed, Fontana's whole work revolves around such objects, upsetting any hierarchy that divides the representation of city as built over that of the city in the making. But because such an hierarchical order was already inscribed into the systems of representation Fontana was using, he has to twist the rules of those systems to make his description. The points at which he does so usually betray where challenges are being made around the status of the temporary versus the permanent. If Fontana's redefinition of what an architectural work might be plays itself out in a reclassification of temporary and process based actions versus permanent space making structures, one might expect evidence in his means of representation an examination of these two categories. And in this respect it is intriguing that in Fontana's drawing the binary opposition usually implied between the categories of the 'permanent' and the 'temporary' appears to be expanded into a set of minutely graded steps, where changes in the order of representation correspond to changes in the order of classification.

If one reads into the picture one starts naturally outside the plan with the scene at the base, which it seems provides both a foreground introduction and implicitly a foundation for the meaning of everything else. Using naturalistic perspective convention, this scene represents only things that move and whose manifestation is temporary – animate stevadores, horses, wips-in hand circumambulate an inanimate windlass. As one moves from the perspective scene into the plan drawing it is clear that each one in the swarm of circles filling the space in the plan represents such an assembly. In this translation from perspective to plan, however, the most 'temporary' objects are lost to the conventions of representation (the people and animals disappear) and what remains marked on the paper is the outline of the slightly more permanent and inanimate objects on which they exert force – windlasses, ropes and the rotational track of the moving figures. So the first stepping point highlighted in this combinatory drawing is that between animated objects (that move freely and diurnally; they go home at the end of the working day) and inanimate ones – winches and ropes.

The next step that one can impute is one between varying orders of permanency in temporary objects concerning whether their job is to move – rotationally or linearly, providing motive power – or to guide movement – to resist force and orientate translation. The articulation of this spatio-temporal step between classes of transience and permanence is also built into the representational convention of the picture, evident in the ways in which the windlasses are represented compared to the 'castello' or scaffolding that surrounded the obelisk. The slippery nature of the windlasses is indicated by their contrasting degrees of rotation in plan relative to the axis of the picture. The 'fixed' and fixing nature of the castello orientates its cross orthogonally on the paper, giving a kind of cardo and decumanus to the composition. If the castello can be seen as the stationary element around which all the other urban structures revolve, one also notes that in its representation only *fixed* items concerned in the movement of the obelisk are shown. There is therefore a very subtle change of drawing convention between the windlasses and the castello; in drawing the latter, the lines representing the mobile rope disappear and only the beams that will support the obelisk and the pulleys that will channel the motive forces in the cables are shown.

The castello, which anchors the picture, might be seen as a kind of pin connecting the worlds of 'building' (as an action) and buildings (as artefacts) – or perhaps one could say as one side of a central link in the chain of connection the drawing suggests between the class of the temporary and the class of the permanent. Like the windlasses the castello is a temporary manifestation – it existed during one year in two different locations, and its internal material connections were designed such that all the elements in its assembly could be re-used and disappear into other constructions. But its classification as 'temporary' becomes highly complex, for what is most important about the castello, in fact, is its absolute permanency in relation to the enduring moment in which the obelisk must be lowered from vertical to horizontal, characteristics described in later plates where Fontana shows

the use and appearance of the mechanism. Thus the castello derives an aura of permanence through its task of resisting and modulating forces that are absolute and permanent. And so the whole of Fontana's drawing, as this section of the whole event, becomes orientated around the orthogonal propriety of this object.

The permanence and fixed nature of the castello is spelt out clearly in the detailed plan which is superimposed, at larger scale, midway up the picture and which shows a reflected view of its 'roof' (the underside) from which the obelisk was to hang. Here the positions of the blocks (doubled pulleys are shown with a doubled ellipse) are shown that were to channel the forces that made this suspension possible. In this detailed plan we also meet the obelisk for the first time, heavily hatched at the centre, and thus one can suggest that this image too embraces a step. That is, one moves within its frame from considering a 'temporary' and transient construction that must be considered as absolute and permanent for the process in the picture (the castello) to a 'permanent' and 'fixed' edifice that must suddenly be interrogated in terms of its transient potential (in the obelisk that is the subject of the movement in the work).

If one lifts one's gaze again to encounter the framing device of the picture as a whole one realises that in order to navigate this extreme slip-plane between artefacts of inverted logic a further mediating device is needed. In the four elevational views that frame Fontana's drawing one is never permitted to view the obelisk directly. Each view is protected by a sheathing layer, lying between the obelisk and the castello, the obelisk and the viewer's eye, and between the obelisk and harm. Following elevation convention, the representation here is nearly lifelike again, showing the blocks and tackles that will move the object, the detail of iron connecting rods and bindings, the shadow relief on the bundled timbers. As well as an evident tie to the conventions of representing bodies at the base of the picture, there is something ornamental about these images. And indeed, in the original sense, 'ornament' is exactly what this additional layer of stuff that acts in the zone of tolerance between temporary and permanent is. The bundles and straps that surround the body of the obelisk are that casing that allows it to perform in the theatre of translation that Fontana demands it enters; a kind of armour devised to absorb the shocks and slings of combat. Together this assembly of straps and pulleys and timbers creates the device that allows a translation between two contrasting notions of the absolute – the one 'temporary and permanent' (an obelisk that will last until the end of the world but that well may move) the other the constructional and platonic (a network of forces that act on this object and condition its placing, manifest in the castello that will last a year but in which movement is untenable).

From the clothed obelisk it is possible to descend into the plan drawing of the picture again to follow a further set of steps. Where the drawing up to now has communicated the absolute, and in platonic terms 'permanent', nature of the seemingly transient (windlasses, castello), it now relates the *temporariness* of apparently permanent structures. This transience to be found in the permanent (the obelisk may move) develops in the next set of representations to re-affirm and follow an equivalent set of steps to those which lead from the moving horsemen to the castello. Every single 'permanent' structure represented turns out to be in the process either of construction or demolition, and although they stand for the urban 'permanence' in the picture, they are all shown as somewhat shadowy fragments around the vital elements of construction that fill the centre.

CONTEMPORARY

To the contemporary eye, Domenico Fontana's drawing seems valuable in that it curates and makes visible an aspect of urban experience that is often neglected both in representing and planning cities. Although the experience Fontana conveys is partly emotive - horses strain, windlasses creak, hemp cable groans - behind this lies a choreographic scheme; fixed relationships of contract and risk; links that, although not manifest permanently in any one location, have their own kind of permanence through repetition. The phenomena amounts to another kind of urban pattern replete with its own tightly controlled formal structure, and the drawing signals the *urban* presence of these 'discovered' permanencies that are implied by the invisible path of the obelisk or the rotations of the temporary windlasses. Indeed, as one reads Fontana's textual description of the project one understands his awareness that this 'pregnant' moment of moving the obelisk, like a piece of military strategy hanging in the balance, is at the centre of a national network of supply, transit, climate and administration that is and must be ongoing. Fontana's description of the logistic background to the project has the same panoscopic fascination that emerges in life cycle cost analysis today. Working outwards from the obelisk itself this concerns the calculations in building statics made to estimate its weight; the design of the timber castello that should bear and rotate this mass; the sourcing and geographical transport of the timber; the papal bulls required to secure the commodities involved and assistance at the right price; the estimate of the number of horses (and therefore the amount of horsepower) required as motive force; the breaking strain of hemp cable; the supply of the hemp; cable manufacture; the stabling of the horses; the removal of men; the provision of foodstuffs *et cetera*.

What emerges out of this distortion of renaissance modes of architectural representation appears valuable in theorising architectural agency today, and if one wants to understand how such agency might be usefully formulated in the future. To shift one's emphasis

from an understanding of architectural authorship as the creation of magnificent works to valuing a microscopic understanding of process is to shift how one values a Le Corbusier or a Cedric Price, or more latterly a SHoP architects in New York or a Lacaton & Vassal in Paris. What materials we use to build cities, what we have to do to them in order to make them serviceable, where they come from and the ways in which we join them together and erect them – all these questions are suddenly fraught with potential. In this condition the potential to 'curate' this concern, to make visible and therefore central to 'everday' experience the technological, 'carbon significant' processes on which urban habitation depends is an important one. Buildings and design processes are having, increasingly, to make manifest the methods and materials of their own construction, a requirement put in place by the, perhaps rather dry, but surely fundamental propositions of the new building codes. In this concern the theatre of construction constitutes a vital arena in which such awareness of process might be made general.

ROME, SEEN FROM PARIS, SEEN FROM ROME

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Francesco Milizia was a true *maestro* of Italian architects in the second half of the eighteenth century. He was considered the person who rationalised Piranesi's ideas, moving beyond the Manichaean separation between the Greeks and Romans. Summarising and simplifying the genealogy of architecture, he assigned the invention of the temple to the Greeks and the invention of the vault to the Romans, using the trilithic system as his base. We owe much to these two principles, Milizia thought – even combined: 'With less you have more!'[1] Milizia cited not only Greek and Roman forefathers and their excellent interpreters – Palladio, Scamozzi and Algarotti, but also several French authors. He believed that the French remained true to the ancient models and, by doing so, rose above their defects and emphasised their qualities. 'We wanted to avoid Gothic eccentricities: they were to be avoided. We wanted to re-establish noble Graeco-Roman Architecture: very reasonable. But when we discarded it, we didn't discard all its absurdities; we didn't know how to keep what was good or its lightness; and when we adopted the latter, we weren't able to adapt it. We've ruined both and have become grave. It's possible to keep the good in the Gothic and easily graft it with the beauty of Greek architecture, the one true architecture'. Focusing on the internal layout of churches Milizia states that peristyles create the most pleasing effect: 'peristyles: the outer porticoes of ancient temples had these embellishments which were also present inside Gothic churches in the form of naves divided by columns. […] Finally gold has been created from Gothic mud - a miracle was wrought by the French'[2]. Milizia makes explicit reference to the Royal Chapel in Versailles designed by Mansart (1698-1710), 'the first amongst the moderns who dared use columns to support the vault'.[3]

The models used by 'daring' French architects reveal the trend illustrated by treatise writers – once again French – who in turn advised readers to consult Latin precedents. In the early eighteenth century De Cordemoy stated: 'Pagans did the same in their temples and I think there's nothing wrong in following suit. […] Michelangelo would have been more credible if he'd kept what's good in the Gothic, I mean, the width and correct spacing between the columns, which we like enormously. […] So it seems to me there's enough to prove that churches from Constantine onwards were normally built with peristyles. In fact they were all based on the model of the basilica mentioned by Vitruvius'.[4]

Vitruvius' basilica as a 'source' for secular and religious buildings with naves and freestanding columns was common in all treatise writers and theorists during this period.[5] However, there are different theories about the actual form of the basilica described in generic terms by Vitruvius at the beginning of Book Five and then in more detail when he talks about the basilica in Fano.[6] In all editions of Vitruvius' work – Cesariano (1521), Barbaro (1556), Galiani (1758) or even Palladio (1570) – the basilica is considered to be a big hypostyle space with two orders and a flat ceiling. Others, however, such as Giovan Battista da Sangallo, thought it had a barrel vault.[7] The problem was solved in France by Perrault who assigned a vaulted ceiling to both the generic basilica and the one at Fano, using the giant order to differentiate between the two.[8] The success of Perrault's *Vitruvius* was enhanced by its dedication to Louis XIV and the numerous

Figure 1. J.-F.-T. Chalgrin, Inside view of Saint-Philippe-du-Roule, Paris, 1772-84 (engraving by J.N.L. Durand). (source: Turin, private collection)

seances of the French Academy dedicated to the interpretation of the new translation.[9] The 'basilican' interpretation became even more popular after Perrault designed Ste. Genevieve (ca 1675) and Bruant designed St. Louis des Invalides (ca 1678).[10] In his defence of freestanding architraved columns, De Cordemoy seems to have Perrault's 'Vitruvian' design in mind when he lists his recommendations regarding the manner in which churches should be built in order to conform to antiquity and beauty.[11] Nevertheless, he constantly integrates the Vitruvian model with the early Christian model. He refers to the early church and how it influenced the Middle Ages, suggesting it was inspired, perhaps unconsciously, by Greek, Gothic and early Christian models. As is well known, it was another French treatise writer, Laugier (who was not an architect) who developed and defined the architectural model, crystallising the Greek-Gothic formula which would soon emerge in the final design of Ste. Genevieve.[12] But before he did, several ecclesiastical buildings were built in France with characteristics that appear to follow De Cordemoy's dictates, making his proposal a prototypical one. These are for instance Saint-Philippe-du-Roule by Jean-Francois Thérèse Chalgrin (1767) (Fig. 1), St. Symphorien (1764-70) in Versailles by one of Chalgrin's pupils, Louis-Francois Trouard[13], Saint Louis (1764) in St. Germain-en-Laye designed by Potain and based on an earlier project by Soufflot dated 1754.[14] All these churches have three naves, an internal hypostyle order and a barrel vault.

The construction of buildings with 'Greek-Gothic' characteristics was also influenced by older buildings described by travellers, draughtsmen and chroniclers. The year Chalgrin designed his church in France, Le Roy published his work on Christian churches from Constantine onwards, focusing at length on early Christian churches.[15] However, he neither proposed them as models nor did he mention examples with vaulted ceilings.

In general, the French fans of Piranesi who passed through Rome up until the mid-eighteenth century were not particularly interested in Christian basilicas.[16] These included Chalgrin, Trouard, and the *pensionaires* in the 1750s. Rather, they were fascinated by architectures with huge coffered vaults (for example the basilica of Massenzio or the temple of Venus and Rome surveyed and published by Desgodetz[17]), triumphal arches, and even the Pantheon. In the nineteenth century, these were topics repeatedly discussed in the *envoi* of French *pensionaires,* amounting to a veritable triumphal march of coffered vaults.[18] These vaults not only covered huge masses of masonry, but were used to complete Roman temples and perpetuate the influence of the Greeks, for example in the reconstruction of the Temple of Bacchus in Baalbeck by de Monceaux (ca 1680) or the design by Fischer von Erlach for the Temple of Olympian Zeus in Olympia[19] (1721) with its trabeated columns and barrel vaults. In addition, travellers began to circulate information about the ruins of vaulted temples in Asia Minor in printed journals and surveys.[20]

Interest in basilicas – particularly the Christian basilicas cited by De Cordemoy – developed in the early eighteenth century when the new historical method meant that people began to consult sources.[21] Nevertheless, many French still turned to the basilica 'crystallised' by Chalgrin rather than genuine examples of the early Christian architecture. For example, a minor author, Hubert Rohault de Fleury, who lived in Italy and Rome between 1803 and 1804, chose to survey basilicas with architraved columns, 'I also note that the architraves are better than arches: this is Greek architecture'.[22] What he has in mind were the premises by De Cordemoy and Laugier which effectively pushed correspondence with documentary evidence onto the backburner.

Even Quatremére de Quincy, when he wrote about Saint-Philippe du Roule in 1816 said: 'He was inspired by Christian basilicas'.[23] Quatremére was pleased that models of early churches were being studied once again, because 'they have everything architecture can desire in terms of simplicity and variety together'.[24] Even Quatremére, however, wondered if barrel vaults were appropriate and whether it wasn't better to use a flat or trussed roof for columned architecture.[25] He too ignored the fact that most basilicas had arches supported by columns.

The term *à la grecque* was extensively used, not least because French travellers who reported from Rome had to adapt to the dictates of the *Académie* with its rationalist approach. The basilicas drawn and engraved by Legeay, Piranesi, Bellicard, etc. (Piranesi drew the interior of San Paolo fuori le mura[26]) reveal the typical irregularities of late ancient architecture as well as the much berated arches on columns. The latter were also present in other kind of late ancient architecture, for example circular churches with freestanding columns: Santa Costanza and Santo Stefano Rotondo. In the voyage between Rome and Paris, these two examples (also included in the re-edition by Desgodetz) suffered the same fate as the Christian basilicas, namely a transformation and hybridisation based partly on indications from old treatise writers, partly on the structural rationality required by the French proto-enlightenment.

Like French basilicas, monopteral and peripteral temples involve the concept of freestanding columns supporting the architrave which in turn supports the dome.[27] In a logic of contamination, both the huge spatial interior of Constantine's church and Santo Stefano Rotondo with its architraved hypostyle columns, provided an opportunity for the French to reinterpret and merge elements in order to create new but unmistakably 'Roman' solutions. Shortly before he published his work on Roman basilicas in 1749, Le Roy entered his design of a *Temple de la Paix ... dans le gout des Temples Antiques[28]* in the competition *Grand Prix de Rome*. The temple was round with a free internal superimposed order and dome. Up until the 1750s, the French

produced several of this kind of plan in Rome, merging features of the Pantheon, late ancient layouts, treatise writers and, even if not explicitly, Bramante, imbuing it all with the appealing style of Piranesi.[29] Legeay and Peyre, teacher and pupil, often experimented with a vaulted hypostyle round plan. Maintaining a rationalist approach, they used 'classical' features on the exterior inspired by the Pantheon and the tombs of Romulus or Cecilia Metella.[30] This fondness, pictorial as well as picturesque, for both types of late ancient models and their 'conversion' into rationalist architecture is visible in the works of Charles-Louis Clérisseau who drew numerous vaulted buildings whilst in Italy with Robert Adam (1755-57). During a journey in Asia Minor he drew Diocletian's palace, proposing a double circular and vaulted order of the Temple of Zeus in his sketch for a *Mausoleum*. During Clérisseau's career as an architect and artist he also drew numerous hypostyle projects with barrel vaults scattered across Europe, *in primis* the spectacular *trompe-l'oeil* in the *Hall of Ruins* (c. 1766) in the French Monastery in Rome.[31]

Italian architects were familiar with the French's idea of Rome because many of them owned engravings, either loose or in collections, or had access to them in libraries of the Academies of Fine Arts.[32] Take for example Filippo Castelli from Turin and the Ticino region, who lived in Rome between 1757 and 1759. He was a trainee with Posi[33] and returned to Piedmont with a real treasure trove of engravings: Several tables from Piranesi's *Varie Vedute,* published by Amidei in 1748,[34] and views by Legeay, Bellicard and Duflos. Other of his bound volumes contained the engravings of classical views by Mariette to Weirotter, often drawn in Rome and engraved and printed in Paris, and an album of drawings which he probably meant to engrave. The latter were very similar to works of the French *pensionaires* of that period. Once back in Turin, Castelli designed the chapel for the main city hospital (1762-68).[35] Once his experimentation with the superimposed internal hypostyle order covered by a dome was executed, he went to live in Paris in 1764 and 1765 where he bought still more engravings, this time produced by the milieu known as *à la grecque*: funerary monuments by Challe; views of the Chateau d'Issy; tables of Greek antiquities by Le Roy; the first design on loose sheets of paper by Ledoux for the salt pans in Chaux; the early drawings of the Hotel Dieu in Lyon by Soufflot engraved by Blondel, but above all the remarkable and rare engraving of Boullée's design for the embellishments of the Collège Louis le Grand in 1759.[36] While training in Posi's atelier, Castelli was joined by Giacomo Quarenghi whose background was very similar. During his adventure at the court of the Russian Tsar, Quarenghi designed vaulted hypostyle rooms in religious and secular buildings, for example the chapel of the Order of Malta in St. Petersburg (1798) recalling the giant order of the Vitruvian basilica at Fano, and the Ostankino Palace in Moscow belonging to the Sheremetev family (1780-1790). In addition, he used a domed hypostyle rotunda in several of the pavilions.[37]

Yet it was in the next century, after the Napoleonic era, that Italian architects started using French-style Roman models in a great many buildings, especially churches: this trend involved both suburbs and city centres and even penetrated the academies. Proof of this trend lies in competition designs, for example the winning design Giuseppe Martelli submitted to the Academy of Fine Arts in Florence in 1816: a gigantesque *Metropolitan Church* with a Latin cross, three naves, a double order of architraved hypostyle columns and a coffered vault with round arches.[38] As a pupil of Luigi de Cambray Digny and member of the Academy of San Luca in Rome from 1803, Martelli was very much part of an institution whose task it was to defend tradition vis-à-vis young trendsetters of 'parallel' academies, such as the *Accademia della pace*.[39]

More inspiration came from works in Roman academies, for example the splendid edition of Perrault's *Vitruvius* in the library of Raffaele Stern, which his pupil Antonio Sarti bought when the library was auctioned in 1824.[40] Stern, whose writings were collected and edited by Sarti in the book *Lezioni di Architettura,* stated that the example of 'Constantine-style churches' remained the best model and, using gentler tones than the French, lamented the fact that architects felt obliged to copy Saint Peter's and abandon the example of 'major architects'.[41] Between 1830 and 1846 Antonio Sarti designed the church of the Holy Saviour in the Borgo Pio district of Terracina ((Fig.2) an 'old-style' basilica with freestanding columns, architrave and coffered barrel vault) at a time when the debate around the reconstruction of St. Paul outside the Walls was trying to impose a

Figure 2. A. Sarti, Inside view, Santissimo Sacramento Church, Terracina (Latina, Italy), 1830-46. (source: Rome, Archivio Accademia di San Luca)

philological reconstruction of early Christian basilicas with columns, arches and flat ceilings.[42]

In another academic milieu, this time in Milan, Carlo Amati couldn't help but look to the French given the Napoleonic atmosphere in which he had studied, under Albertolli at the Brera academy.[43] Despite the fact his edition of Vitruvius published in 1829 was in line with contemporary versions, in particular the ones by Schneider and Galiani, and that he illustrated the topic of basilicas with numerous examples (Pompeii, Fano, the probable original shape of San Lorenzo in Milan, all with flat ceilings[44]), his designs for religious buildings were all inspired by French-style basilicas.

The model promoted by Amati up until the 1840s was shared by his colleague and friend from Piedmont, Giuseppe Talucchi. Talucchi introduced the professor of the Brera academy to the young Chevanard and Pollet, restoration architects for the Theatre in Lyon by Soufflot (1830-37), thereby closing the circle with the father of 'Greek-Gothic' architecture.[45] Apart from maintaining ties with his French colleagues, Talucchi was a self-confessed and wholehearted admirer of Milizia, meticulously copying the *Memorie degli architetti antichi e moderni* (Bologna 1827) and sharing Milizia's critique of using columns and arches together. This was a 'structural fabrication',[46] unacceptable for architecture governed by rationalism and obedience to ancient models. Not surprisingly, Talucchi's church designs from the 1830s and 40s were all based on the French model.

The basilica model – whether civic or religious – proposed by eighteenth-century French treatise writers has nothing of the considerations proposed by their Italian epigones in the nineteenth century who only referred to antique examples as a specific trait of vaulted basilicas. In a competition for the votive temple of the Gran Madre di Dio in Turin in 1818, the jury considered two of the designs with a hypostyle layout and barrel vault as having '[a form] most similar to the preferences of the ancients'.[47]

Surprisingly, it was the most learned and philologically erudite of all the architects in the first half of the nineteenth century who finally 'loosened the knot' between the rationalist French interpretation and the way the model was used by their Italian colleagues. In his book, *Ricerche sull'architettura più propria dei Tempj cristiani*, Luigi Canina wrote 'I, instead, have gone back to what was originally implemented by ecclesiastic institutions and tried to show what kind of architecture was characteristic of Christian temples, the one used immediately after it was possible to publicly celebrate Christian rites thanks to the protection of Constantine and to this end noble sacred buildings were erected'.[48] He cites several examples and remarks on the fact that all new churches were built to look like basilicas. Commenting that the trend was widespread in Europe, he expresses his unqualified support for this model. He is even more radical than the French in his support of the basilican model: he shifts its origin back in time, making the Christian basilicas, albeit modified and corrupted, an evolutionary product of the Roman civilian basilica and of the Vitruvian basilica whose reconstruction, together with the Ulpia basilica in Rome and the one in Fano, he presents in his work on *Tempj cristiani.*[49]

Like his French predecessors, Canina proposes a variation in the ceiling of the Church of the Sanctuary in Oropa (1846) - the exact same variation proposed by Chalgrin, Talucchi, Amati and many others: 'in order to erect a building that can effectively resist the harsh climate of the site where it is to stand I was forced to slightly modify the forms prescribed for normal basilicas; and replace the flat ceiling with a vault with round arches: however since this method is based on old works, this ceiling will prove it's possible to vary basilican architecture, something I have at length described'.[50]

Endnotes

1. Francesco Milizia, *Roma delle Belle Arti del disegno. Parte I dell'Architettura* (Bassano: s.e., 1787), 198; Gian Paolo Consoli, 'Col meno si ha più: la filosofia dell'architettura in Francesco Milizia' in *Francesco Milizia e il Neoclassicismo in Europa*, Acts of International Colloque, Oria 1998, (Bari: Edizioni Giuseppe Laterza, 2000), 217-41.

2. 'Noi abbiam voluto evitare le bizzarrie Gotiche: erano evitande. Abbiam voluto ristabilire la nobile Architettura Greco-Romana: era ben ragionevole. Ma nel lasciar quella non abbiam lasciato tutto il suo assurdo; non abbiam saputo conservare il suo buono, né la sua sveltezza; e nell'abbracciar l'altra non abbiam saputo adattarla. Le abbiamo guastate tutte e due, e siamo caduti nella gravezza. Si può tenere il buono della Gotica, e innestarlo facilmente col bello della Greca, che è la vera Architettura', Francesco Milizia, *Principi di Architettura Civile*, (Finale: De Rossi, 1781), book II, 428 and 431.

3. 'é stato il primo fra i moderni, che ha osato impiegar colonne per sostenere la volta', *Ibid.*

4. 'Les Payens en usoient ainsi à l'egard de leur Temples; & j'epense qu'il n'y a pas d'inconvenient de les suivre en cela. [...] Michel-Ange auroit été plus estimable, s'il eût retenu ce qu'il y a de bon dans le Gothique, je veux dire, le dégagement & l'âpreté des Entrecolonnements, qui nous plaisent si fort.[...] En Voilà, ce me semble, assez puor prouver que les Eglises depuis Constantin, ont été ordinairement en peristiles. En effect, elles étoient toutes faites sur le modele des Basiliques dont parle Vitruve'; Jean-Louis De-Cordemoy, *Nouveau traité de toute l'architecture ou l'art de bastir: utile aux entrepreneurs et aux ouvriers*, (Paris: Coignard, 1714) (IInd. ed.), 197 and 205. Regarding the concept of *degagement*, see Wolfgang Herrmann, *Laugier and the eighteenth Century French Theory, (*London: Zwemmer ltd., 1962), 68-72.

5. Vittorio Pizzigoni, *La Basilica di Fano: la sola architettura di Vitruvio,* in H. Burns, F.P. Di Teodoro, G. Bacci (eds), *Saggi di letteratura architettonica. Da*

Vitruvio a Winkelmann, book III, (Milan: Olschki, 2010), 251-270; The bibliography on Vitruvius is endless, but for an attempt at summary see the proceedings of the meeting *Vitruvio nella cultura architettonica antica, medievale e moderna*, Gian Luigi Ciotta (ed), (Genova: Deferrari, 2003).

6. Vit. V, 4-7.

7. Drawings and sketches in the margins of Sulpicius' *aeditio princeps* dated 1486, halfway through the mid fifteenth century, Gabriele Morolli, *L'architettura di Vitruvio. Una guida illustrata*, (Firenze: Alinea, 1988), 123.

8. Claude Perrault, *Les dix livres d'architecture de Vitruve corrigez et traduits nouvellement en François, avec ned Notes et des Figures. Seconde Edition reveue; corrigée et augmentée* (Paris: Coignard, 1684), tab. XXXVIII; also Laugier, after De Cordemoy, had supported the validity of the hypostyle, barrel vault solution, Marc-Antoine Laugier, *Essai sur l'architecture*, (Paris: Duchesne, 1775), 178.

9. Maria Luisa Scalvini, *Vitruvio* mis en François *da Jean Martin a Claude Perrault*, in *Vitruvio nella cultura architettonica*, 639-645.

10. Herrmann, *Laugier*, 108-110.

11. *Sur la Maniere dont les eglises doivent être bâties, pour être conformes à l'Antiquité et à la belle Architecture;* De Cordemoy, *Nouveau traité*.

12. Herrmann, *Laugier*, 68-90.

13. Louis Hautecoeur, *Histoire de l'Architecture classique en France*, (Paris: eds. Contemporaines, 1952), book IV, 214 and 219.

14. Pierre Pinon, 'La pianta basilicale nell'architettura religiosa francese: dalla basilica civile alla basilica paleocristiana'*,* in *Ricerche di Storia dell'Arte*, special issue: *I revivals paleocristiani (1764-1870)*, n. 56 (sett. 1995), 6-18.

15. Julien-David Le Roy, *Histoire de la disposition et des formes différentes que les crétiens ont données à leurs Temples, depuis le Règne de Constantin le Grand, jusqu'à nous, (*Paris: Desaint & Saillant, 1764); Pinon, *La pianta basilicale;* Pinon believes that the combination of hypostyle plan and barrel vault is the result of the 'crossing' of the Christian basilica and Roman civil basilica, while a true adherence to the post-Constantine real model would only examples in the nineteenth century, with a flat ceiling and characterized by a more strictly archaeological approach.

16. Janine Barrier, *Les architectes europeéns a Rome. 1740-1765. La naissance du goût à la greque*, (Paris: edition du Patrimoine, 2005), 158-162.

17. Antoine Degodets, *Les édifices antiques de Rome, dessinés et mesurés très exactement*, (Paris: Coignard, 1682).

18. *Roma antiqua. Envois des architectes francais (1788-1925). Forum, Colisée, palatin*, Exhibition Catalogue, (Rome: Academie de France a Rome, 1985).

19. Johan Bernhard Fischer Von Erlach, *Entwurf einer historischen Architectur*, (Wien: n.p., 1721), tab. V.

20. For example the temple of Zeus in Aizianoi (Turkey), from the Age of Hadrian, published, amongst others, by Léon de Laborde, *Voyage de l'Asie Mineure par M.rs Alexandre de Laborde, Beker, Hall et Léon de Laborde, redigé et publié par Léon de Laborde*, (Paris: Firmin-Didot fréres, 1837).

21. Susanna Pasquali, 'Basiliche civili e cristiane nell'editoria romana di architettura tra Sette e Ottocento', in *Ricerche di Storia dell'Arte*, 19-29.

22. 'Je remarque aussi que les architraves font mieux que les arcades: c'est l'architecture greque' Giusi Andreina Perniola, 'Les basiliques chrétiennes sont de l'architecture greque. L'image de Rome de Hubert Rohault de Fleury (1804)', in V. Meyer et M-L. Pujalte-Fraysse (eds.), *Voyage d'artistes en Italie du Nord XVI°-XX° siècle*, (Rennes: Presses Universitaires, 2010), 167-180, 172.

23. 'Il s'etait inspiré des basiliques chretiénnes'; Hautecoeur, *Histoire de l'architecture,* 214.

24. Antoine-Chrysostome Quatrémere De Quincy, *Notice historique sur la vie et les ouvrages de M. Chalgrin, architecte,... : lue à la séance publique du samedi 5 oct. 1816 / par M. Quatremère-de-Quincy,... ; [à l'] Institut royal de France*, (Paris: F. Didot, 1816).

25. Also in the *Dictionaire* Quatrémere disapproves of the union free-standing columns and vault: 'these [churches with flat ceilings] have greater agreement, greater elegance and lightness, as the light comes from above is much more convenient, as the simple decoration ceilings of these blends more with the rest of the building' in Antoine-Chrysostome Quatrémere De Quincy, *Dictionaire d'architecture*, book I, (Paris: Le Cléré, 1832), ad vocem: *Basiliques*; (it. ed. Mantova 1842).

26. The engraving is included in the posthumous collection *Views of Rome*, 1778, but was sold separately and circulated before.

27. Vit., IV, VIII, 1.

28. Jean-Marie Perouse de Montclos, *Les Prix de Rome. Concours de l'Académie Royale d'architecture au XVIII° siecle*, (Paris: Berger-Levault, 1984), 51.

29. Barrier, *Les architectes européens*, 109-119. On Piransi as precedent for the French, see *Piranese et les Francais*, Exhibition Cathalogue (Rome: Elefante, 1976).

30. Reference is made here, amongst others, to Peyre's *Sepulchral Chapel* (*Oeuvres d'Architecture* 1765) or Legeay's design for the Church of Sainte-Hedwige in Berlin (1747); Gilbert Erouart, *Architettura come pittura. Jean-Laurent Legeay un piranesiano francese nell'Europa dei Lumi*, (Milan: Electa, 1982), 95-108.

31. Thomas J. McCormick, *Charles-Louis Clàrisseau and the Genesis of Neo-Classicism*, (Cambridge: MIT Press, 1990).

32. For example, the *Oeuvres d'Architecture* by Peyres (Paris 1765) are in the Cicognara collection, *Catalogo ragionato dei libri d'arte e di antichità posseduti dal Conte Cicognara*, (Pisa: Capurro, 1821) book 1.

33. Elena Dellapiana, 'La formazione di Filippo Castelli. Disegni romani e progetti piemontesi di un architetto ticinese', in Elisa Debenedetti (ed), *Collezionisti, disegnatori e pittori dall'Arcadia al Purismo, II*, (Roma: Bonsignori, 2010), 247-260.

34. *Varie vedute di Roma Antica e Moderna Disegnate e intagliate da Celebri Autori. In Roma 1748 A spese di Fausto Amidei Libraio al Corso*. These engravings are in Archivio di Stato, Torino, *Archivi Privati*, *Archivio Castelli-Berroni,* Carte, b.4, f. 3.

35. Paolo San Martino, 'La Cappella dell'Ospedale di Filippo Castelli: Roma e Parigi per un moderno tempio 'all'antica'', in *Studi Piemontesi*, vol XVI fasc. 2 (nov. 1987), 301-314.

36. Archivio di Stato, Torino, *Archivi Privati*, *Archivio Castelli-Berroni, Disegni e incisioni*, c. 7, ff. 140, 139,138.

37. *Giacomo Quarenghi. Architetture e vedute*, exhibition catalogue, Milan, Electa 1994, in particolar the paper by Gianni Mezzanotte, pp. 15-31.

38. In Mauro Cozzi, *Edilizia in Toscana dal Granducato allo stato unitario*, (Firenze, Edifir, 1992), 87-90; Dario Matteoni, 'Tra Roma e Firenze: anticipazioni e ritardi nella Toscana lorenese', in Angela Cipriani, Gian Paolo Consoli, Susanna Pasquali (eds), *Contro il Barocco. Apprendistato a Roma e pratica dell'architettura civile in Italia (1780-1820)*, (Roma: Campisano, 2007), 245-256.

39. Susanna Pasquali, *A Roma contro Roma: la nuova scuola di architettura*, *Ibid.*, 81-108.

40. Fabrizio Ambrosi de Magistris, *Raffaele Stern e i volumi della Biblioteca Romana Sarti*, *Ibid.*, 327-331.

41. *Lezioni di architettura civile del cavaliere Raffaello Stern.* Collected by Antonio Sarti, (Rome: Salviucci, 1822), 139-141.

42. Gian Paolo Consoli, Susanna Pasquali, 'Roma: l'architettura della capitale', in Amerigo Restucci (ed) *Storia dell'architettura italiana. L'Ottocento,* (Milano: Electa, 2005), 245; Giovanni Sapori, 'Le rovine, le chiese, la città nelle vedute di Rossini e Sarti', in Sandra Pinto, Liliana Barroero, Ferdinando Mazzocca (eds), *Maestà di Roma. Da Napoleone all'Unità d'Italia,* (Milano: Electa, 2003), 543-553; Elisabetta Pallottino, 'La nuova architettura paleocristiana nella ricostruzione della basilica di S. Paolo fuori le mura a Roma (1823-1847)', in *Ricerche di storia dell'Arte*, 19-31.

43. Arnalda Dallaj, Caterina Mutti (eds), *Il Fondo Amati del Castello Sforzesco*, 2 books., (Veniezia: Marsilio 1997).

44. *Dell'Architettura di Marco Vitruvio Pollione libri dieci. Pubblicati da Carlo Amati Professore Architetto.* (Milano: Pirola 1829), anastatic edition edited by G. Morolli, (Firenze: Alinea, 1988).

45. Elena Dellapiana, 'Lettere di Giuseppe Talucchi a Carlo Amati: rapporti tra l'Accademia Albertina e Brera nel primo Ottocento', in *Studi di storia dell'architettura per Alfonso Gambardella*, (Milano: Skirà, 2006), book. II, 87-92.

46. Elena Dellapiana, *Giuseppe Talucchi architetto. La cultura del classicismo civile negli Stati Sardi restaurati*, (Torino: Celid, 1999).

47. *Ibid.* 114.

48. Luigi Canina, *Ricerche sull'architettura più propria dei Tempj cristiani basate sulle primitive istituzioni ecclesiastiche e dimostrate tanto più con i più insigni vetusti edifizj sacri quanto con alcuni esempj di applicazione,* (Rome: Canina, 1843) (II estended edition 1846). 'Io invece, retrocedendo sino a quanto fu primieramente operato a norma delle istituzioni ecclesiastiche, cerco di dimostrare essere il genere di architettura più proprio per i tempj cristiani, quello che venne posto in uso subito che si ottenne di poter pubblicamente celebrare il culto cristiano precipuamente colla protezione di Costantino e che s'innalzarono a tale oggetto nobili edifizj sacri', *Ibid.*, 5-6.

49. The first tables of the work of Canina, among other things, show the *hypostyle hall of the great Theban building*, *said Kranac,* the reconstruction of the Vitruvius' basilica, either with or without the inclusion of *calcidiche*, both with the stands; Canina, *L'architettura più propria,* 19, 24, 27.

50. 'Per costruire una fabbrica atta a poter validamente reggere alla rigidezza del clima proprio del luogo, in cui deve edificarsi, fui costretto di allontanarmi alcun poco dalle forme prescritte per le comuni basiliche; onde poter sostituire al soffitto in piano una volta di tutto sesto: ma essendo tale metodo pure basato su esempj di antiche opere, potrà il medesimo piano servire di dimostrazione del modo come si possono praticare variazioni sulla indicata architettura basilicale presa ampiamente ad illustrare', *Ibid*, 14, tab. V bis. Augusto Sistri (ed), *Luigi Canina (1795-1856). Architetto e Teorico del classicismo*, (Milano: Guerini, 1995).

OUT OF SIGHT, OUT OF MIND; REPRESENTING DUBLIN CITY 1740-1806

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Views of Dublin in the mid eighteenth century attempted to place Ireland's capital in a wide martime and economic context. Looking seaward and eastward the paintings positioned Dublin as a port city of the north Atlantic, a peripheral capital of empire, a node in a wide network. Such positive viewpoints coincided with Dublin's golden Georgian age of architecture and urbanism, when a visionary series of public streets and buildings established her identity as the second city of the British Empire. The design achievements of Richard Castle, James Gandon, Thomas Cooley, Edward Lovett Pearce and others had established Dublin at the vanguard of Georgian public architecture and through the Wide Street Commissioners, urban planning.[1] Dublin's quay and riverine structure crystallized in the early eighteenth century. Walter Harris reminded his readers in his book *History and Antiquities of the City of Dublin*, of how 'the space of ground now occupied by Crane-lane, Essex street, the Custom-house, Sycamore alley, Temple-bar, Fleet-street, Aston's quay, and Lazer's-hill' had been 'under the dominion of water' within living memory. He remembered how the south side George's quay together 'with a large tract of many acres, (now good meadow ground) from the lower end of Lazer's-hill to Rings end bridge' had also in 'our memory been recovered from that element'.[2] He recalled how 'East of Essex Bridge the north river banks had been "covered with ouse, and overflowed by the tides", the south banks likewise, so that the eastern area '"contiguous to the sea" was not physically suited to attract development.'[3] Thus 'Dublin was transformed in the eighteenth century from a relatively compact single-centred walled town with incipient suburbs to what was by the standards of the time a metropolis, with a fragmented, multi-centred structure.'[4]

Dublin's swivel to the east was also evident before any taste for sea bathing or seaside life took hold, and it owes much of its origin to the power and sway of Dublin's two great eastern landowners; the Gardiner family to the northeast of the city; the Fitzwilliam family to the southeast. The reclamation of the north docks of Dublin began as a city corporation project and was quite slow to take off. The great landowners acquired northern docks lots in a piecemeal fashion with the Gardiner family buying into the process quite late in the day, preferring initially the solid ground of Henrietta St. and moving slowly but progressively eastward to Gardiner St. and to piecemeal plots in the docklands.[5] The Duke of Leinster had made the first significant genteel commitment to a sea prospect in 1741, when he commissioned Richard Castle to build Leinster House for him, with its garden front looking towards a sea vista. This was a relatively short-sighted commitment in that (unlike Lord Aldborough- who later built a similar villa on an opposing north side location) Leinster did not own the entire site upon which he built his townhouse; that was in the possession of the Viscounts Fitzwilliam of Merrion, and it is their prospects which began to develop the eastern bias of Dublin city, and confirmed that of her northern quarter also. The development of these low-lying eastern areas by predominantly genteel housing developments gave Dublin an unusual structure. In direct contrast to both London and Paris, Dublin's wealthy lived close to the sea and docks and the east end of Dublin gradually became the preferred end of town:

> It is here necessary to remark, that the eastern side of the City, contiguous to the sea, is almost entirely laid out in elegant streets, for the residence of the gentry: and the western side, though more remote from the sea, and consequently not so conveniently situated for the purposes of commerce, is chiefly inhabited by merchants and mechanicks.[6]

This eastern swivel was highly indebted to Dublin's growing pride in her maritime identity. As a port city she drew comparative inspiration from the other great port cities of Europe and most particularly Amsterdam, the richest and most successful trading city of the seventeenth-century North Atlantic periphery. Richard Castle, architect of the majority of Ireland's mid-century country houses, recommended his talents to Irish gentlemen by referring exclusively to the knowledge he had acquired from Dutch projects and sources.[7] His *Essay on Artificial Navigation* 'if published, would have been the first treatise of its kind to be published in the English language and a seminal work for eighteenth-century hydraulic engineering'.[8] Therein, he referred to his 'long application to the practical and speculative branches of the mathematics, and a careful inspecting of the several methods of carrying on such works in Holland and other places'.[9] Many Irish gentlemen had fought in the Low Countries and had witnessed at first-hand the extraordinary feats of Dutch hydraulic engineering. Amsterdam's success probably made it reasonable to embark on substantial land reclamation projects in Dublin despite the fact that Dublin had large areas of land that did not require drainage. What is also unusual about the success of the reorientation is the degree to which genteel housing developed in such low-lying areas. Typically the risks attached to reclaimed land are not borne by the wealthy, as the nearby areas of Irishtown and Ballybough testify (Baile

bocht- poor town). In Dublin however, the wealthy, en masse, built, moved, lived and leased in the Fitzwilliam estate's south side housing developments. This spectacular reconfiguration of the southeastern quarter of the city was achieved through the fortunate combination of the following factors: 1. The emulation of Dutch hydraulic engineering practice, and of other port cities 2. The acceptance of complex tenurial structures involving leases and eventually mortgages. 'Regulating tenurial relationships through the lease and other legal contracts supposedly marked off the new, Anglicized Ireland from the old, in which economic and social relations were organized according to military contingencies and hereditary obligations'[10] 3.The Phoenix Park was a morphological barrier to the north-western expansion of the Gardiner estate. 4 The northeastern Gardiner estate's success made other noblemen, keen to emulate its success. 5. The scale and spread of the Fitzwilliam estate, with no problematic pockets of land, was such that it had little if any negotiations to complete before commencing or adjusting development plans.

Figure 1. Gabrielle Ricciardelli, View of Dublin, c.1745.

The Neapolitan Gabriele Ricciardelli'- (active 1745-1777) painted an oil of the arrival by boat into Dublin Bay in c.1740 (Fig. 1). The landscape depicts the large engineering works then underway to reclaim the south docks and the land contiguous to them. A lattice of dykes/roads is under construction and the haycocks within the dykes suggest a careful programme of cultivation, with the rotation of selected crops facilitating the rapid drainage of the ground and the slow desalination of the soil. The draining of bogs had long held ideological connotations in Ireland and 'distinctive features in the Irish landscape, notably bogs, fascinated the inquisitive. The Boates, as befitted Dutchmen, reveled in describing how Irish bogs had been drained. They praised such work as conducive 'to the general good of the land'.[11] Reclamation and drainage projects may have become ideologically powerful enough to proceed without a full economic calculation of their intended benefits in advance. Substantial private schemes, such as those of Lord Molesworth at Breckdenston in north Dublin, suggest that design or ideological benefit could sometimes outweigh economic risk.[12] Design decisions always contain substantial aesthetic and ideological motives. These could, in certain circumstances, outweigh those of a more practical or economic bent. Very wealthy estates, such as that of the Fitzwilliam family, increased substantially in wealth by intermarriage with the wealthy London city Decker family (of Dutch origin), could afford perhaps to proceed with such projects without substantial preliminary economic calculations.

This painting also reveals the growing significance of the traveller's view of Dublin. Depicting the visitor's entry into Dublin bay, the painting's viewpoint is not that of the native. Located on an east-facing bay between the rising isthmus of Howth and the gentle slopes of the Wicklow mountains, Dublin was often compared to Naples in the eighteenth century. Reaching a population of 200,000 in 1800 it was then the sixth largest city in Europe and the third largest port city, following Naples with a population of 430,000 and Amsterdam with a population of 217,000.[13] This Neapolitan comparator affected the location and interior decoration of villas as the century progressed. Valentine Lawless, Lord Cloncurry patronised the painter Gaspar Gabrielli in 1800 at his country house of Lyons commissioning two opposing views of the bays of Naples and Dublin for the walls of his dining room.[14] Despite such landscape views Dublin was growing too big to be visualized, imagined or designed as a complete entity: 'A metropolis by its very scale is destined to develop several or multiple centres of economic and social activity, and discrete local loyalties and identities; the sheer distances to be overcome within a large city necessitate this.'[15] It developed, what Edel Sheridan-Quantz describes as a 'spatial skew' as 'the configuration of actors shaping Dublin's urban morphology in the late seventeenth and the eighteenth century resulted in a spatially dichotomous provision of housing types'. If a dichotomy of two appears a little limited when applied to housing types, a dichotomy between east and west does not. Writing of how 'this spatial skew was closely linked with the evolution of significant political and social nodes of activity and foci for the development of upper-class and middle-class local identity' she concludes that 'significant investment in the urban fabric of Dublin was almost

wholly concentrated in the eastern half of the city.'[16] Responding to this growing eastern genteel bias the city was also skewed pictorially, turned to be seen from the eastern approach. By the end of the eighteenth century Dublin's sea prospect was wholly positive, as was the power of the absent point of view.

Landscape paintings of Dublin document this growing pull of empire. Focused initially on the city itself, the paintings slowly adopt an oblique position, drawn by the foreign tourists sailing into Dublin bay, the absentee landlords in their distant English homes and the growing imperial weight of London. Moving from city to quay and out into the bay these images describe not only a geographic momentum but also a temporal projection of Ireland's future. Such owners of Dublin determined her prospects, and their view of Dublin could be markedly off-centre and off-set such as in William Jones 1745 painting 'View of Howth'. Taken from a prospect on rising ground to the southeast of the city it included a view and legend of Lord Howth's interests in Dublin, the city itself remaining out of view. The foreground of Jones' view belonged to the Rt. Hon. Viscount Fitzwilliam, who commissioned oil paintings of his Dublin prospects for his villa in Richmond-upon Thames from William Ashford in the early nineteenth century. Such developers, particularly those with magnate ambitions, were not always Irish. The Viscounts Fitzwilliam of Merrion, titled in Ireland and not in England, chose to displace their Irish identity with one of a more suburban mercantile and London cast. This displacement affected not only their personal and family identity but also slowly that of their lands, designs and native city. As they moved from a medieval Dublin Irish castle to a Dublin suburban villa to one located in Richmond-upon-Thames so their perception of Ireland changed and shifted from native to visitor to owner to tourist. Consecutive Lords Fitzwilliam, cosmopolitan Londoners and reluctant visitors to Ireland, came to see Dublin only from the absent point of view. A pronounced disinclination to visit or tour their Dublin properties gave the southeastern quarter of Dublin a peculiar presence of absence, as any clarity of intent fractured in transit. William Ashford's view from Mount Merrion, the family's suburban Dublin seat, is taken from mid-way along the axis of the North Avenue (Fig. 2). At Mount Merrion the family had demolished the original house in the 1730s and had never quite got around to building another one, a fact which proved deeply distressing to their Dublin agents.[17] Depicted standing and issuing instructions to his agent, Fitzwilliam's pointing arm follows the mariner's compass of avenues he had laid out in his deer park, looking outwards and over the sea to his London home. The painting also carefully depicts Dublin's Vesuvius of the Hill of Howth and the long south wall his family had built to enable the development of Ringsend and Irishtown, the two sectarian villages depicted so carefully in William Jones' view.

Much of Irish urban, suburban and rural space has been designed from just such an absent point of view. With those in power and possession off stage and out of view both space and its representation acquired a particular character, as if the principal protagonists have stepped outside. On the Fitzwilliam estate in suburban Dublin, making up some one quarter of Dublin's area, this absent point of view permeated the history of the estate's development, frustrating any cohesive spatial quality. Yet absentees and tenants also benefitted from their distant viewpoint and its consequent abstraction. They could visualise objectively where the estate's potential lay and jump at it when required; thus when the estate's Dublin fishing villages of Ringsend and Irishtown began to attract day-trippers and short-term summer visitors after

Figure 2. William Ashford, View of Mount Merrion, 1806. (source: The Fitzwilliam Museum, Cambridge)

a period of long decline, they could move quickly to grasp the opportunity.[18] Likewise in Merrion Square when the madness of the 1780s buildings boom took hold they were also there to grasp such opportunities.[19] Free from the resident's subjective social and spatial hierarchies, for the absentee and the tourist both land and prospect are principally financial with overtones of pure aestheticism.

By the close of the eighteenth century, and in the wake of both the French Revolution and Ireland's 1798 Rebellion, as Dublin's prospects contracted, so London's grew. In 1800 the Act of Union sought to ensure that constituent kingdoms, such as Ireland, dissolve their separate identities, capitals and images in the service of Great Britain and its empire. Thus many positive prospects for Dublin, Ireland, and in particular her houses of parliament, diminished and collapsed. Native reaction to the reframing of Dublin as a provincial capital sometimes took a representational form, as Ireland's ruins came to depict a ruined Ireland. One

Figure 3. James Malton, Diptych of Houses of Parliament. (source: Collection of the Bank of Ireland)

diptych of Ireland's parliament building presented a utopian view of Ireland's past and a dystopian view of its future (Fig. 3). No longer inhabited by well-dressed men about town, the great national monument housed only the beggars, vagrants and layabouts of a dying city. The real passage of time was pessimistically extended into mythic proportions by the ruinous condition of the future as only untold years of stasis and neglect could have affected the degree of represented decay. With the passing of the Act of Union in 1800 the 'aristocratic capital to which James Gandon had come in 1781' became 'a commercial centre whose commissions Gandon did not want, its new patronage symbolized by a competition for converting the Parliament House into a bank'.[20] The prospect for Dublin's national buildings, and in particular her houses of parliament, became but a subjugated and servile one. James Gandon 'was given the bitter task of evaluating the materials and site of Pearce's (and his own) building [The Irish Houses of Parliament] in case it was to be demolished.'[21] As Dublin's prospects contracted, so London's grew. Supporters of Union, and those realists who accepted its passing, transferred the focus of their gaze to London. Irish architects transferred the focus of their gaze from London to Dublin building comparative slights into their argument to justify both the advancement of London and their departure from Dublin: 'The River at Dublin was a mere ditch compared to the Thames, and yet its Quays were extremely handsome and convenient. They had all been at Paris, and they knew what was the effect of the Quays there'.[22]

This brief paper argues that Dublin's identity and the representation of that identity was not fixed but oscillated slowly over the 1740-1801 period to reflect historical reality. This could depend upon spatial location, where the observer stood, and whether they or their ancestors had once owned that same prospect. The visitor to Ireland was rarely only a tourist, and the Irish Grand Tour but rarely perceived by an uncomplicated tourist's gaze alone. The absentee gaze has much in common with the tourist's gaze in that both affect a distanced 'objective' critique.[23] Yet this absent presence creates a potent cultural context and in Ireland it was reflected in the physical reality and representation of those places in which they elected not to live. Landscape paintings and printed views document Dublin's rapid transition from capital city of an independent kingdom to peripheral city of empire. Moving Dublin out of view served the project of empire well, as to create an imperial capital the subsidiary cities had to become demonstrably provincial. The temporal speed implied and represented in these images, suggests why such manipulation might have been politically advantageous. It also suggest ways in which complex obliquely structured views helped both to authenticate the modern imperial metropolis and to diminish the provincial capital, not only in the eyes of her own inhabitants but also those of the wider world.

Endnotes

1. See Edward McParland, *Public Architecture in Ireland 1680-1760*, Yale, 2001: Chapter 7.

2. W. Harris, *History and Antiquities of the City of Dublin*, London, 1766, 101-102.

3. Edel Sheridan-Quantz, 'The Multi-centred metropolis: the social topography of eighteenth-century Dublin' in Peter Clark & Raymond Gillespie (eds.), *Two Capitals; London and Dublin 1500-1840*, Oxford, 2001, 266: Note 4: W. Harris, History and Antiquities of the City of Dublin, London, 1766, 101-102.

4. Edel Sheridan-Quantz, 'The Multi-centred metropolis: the social topography of eighteenth-century Dublin] in Peter Clark & Raymond Gillespie (eds.), *Two Capitals; London and Dublin 1500-1840*, Oxford, 2001, 287.

5. For a general history of Dublin's Georgian development see Nuala Burke, 'Dublin 1600-1800; A Study in Urban Morphogenesis' (Unpublished PhD thesis, TCD, 1972) and Colm Lennon, *Irish Historic Towns Atlas, no.19, Dublin, part II, 1610-1756*, Dublin, 2008.

6. R. Pool and J. Cash, *Views of the most remarkable public buildings, monuments and other edifices in the City of Dublin,* Dublin, 1780, 14.

7. National Library of Ireland, Ms. 2737: Richard Castle, *Essay on Artificial Navigation*.

8. Christine Casey, 'Eighteenth Century Architecture in Ireland, A Bibliographical Approach', unpuplished Ph.D. thesis, Trinity College Dublin, 1992, 207.

9. National Library of Ireland, Ms. 2737: Richard Castle, *Essay on Artificial Navigation*.

10. Toby Barnard, *Improving Ireland? Projectors, Prophets and Profiteers 1641-1786*, Dublin, 2008, 32.

11. Toby Barnard, *Improving Ireland? Projectors, Prophets and Profiteers 1641-1786*, Dublin, 2008, 36: G. Boate, *Ireland's Naturall History*, London, 1652, 114-17, 167-9.

12. See Finola O'Kane, *Landscape Design in Eighteenth-century Ireland; Mixing Foreign Trees with the Natives*, Cork 2004: Chapter 2

13. J. Bradford De Long, 'Princes and Merchants: European City Growth before the Industrial Revolution', National Bureau of Economic Research & Harvard University, , http://econ161.berkeley.edu/pdf_files/Princes.pdf, accessed 1.12 2011. Ca. 1800: London - 948,000; Paris - 550,000; Naples - 430,000; Vienna - 247,000; Amsterdam - 217,000; Dublin - 200,000; Lisbon - 195,000; Berlin - 172,000.

14. Marguerite Lillis, 'A Roman Landscape Painter in Ireland', *Apollo,* February, 1989, 114-115.

15. Edel Sheridan-Quantz, 'The Multi-centred metropolis: the social topography of eighteenth-century Dublin' in Peter Clark & Raymond Gillespie (eds.), *Two Capitals; London and Dublin 1500-1840*, Oxford, 2001, 265-266.

16. Edel Sheridan-Quantz, 'The Multi-centred metropolis: the social topography of eighteenth-century Dublin] in Peter Clark & Raymond Gillespie (eds.), *Two Capitals; London and Dublin 1500-1840*, 266.

17. For a discussion of the evolution of Mount Merrion demesne see 'An Absentee Family's Suburban Demesne; The Making of Mount Merrion, Co. Dublin' in *The Irish Country House*, Terry Dooley & Christopher Ridgeway eds. Dublin, 2010.

18. See Finola O'Kane, '"The Appearance of a Continued City"; Dublin's Georgian Suburbia' in Gillian O'Brien and Finola O'Kane eds. *Georgian Dublin*, Dublin, 2008.

19. See Finola O'Kane '"Bargains in View"; The Fitzwilliam Family's Development of Merrion Square, Dublin' in Christine Casey, (editor), *The Dublin Townhouse*, Dublin, 2010.

20. Edward McParland, *James Gandon, Vitruvius Hibernicus*, London, 1985, 189.

21. Edward McParland, *James Gandon, Vitruvius Hibernicus*, London, 1985, 189.

22. Frederick William Trench, *A Collection of Papers relating to The Thames Quay with Hints for Some Further Improvements in the Metropolis by Colonel Trench M.P.*, London, 1827, 9.

23. See also Finola O'Kane, *Ireland and the Picturesque, Design, Landscape Painting and Tourism in Ireland 1700-1840*, Paul Mellon Centre for Studies in British Art, Yale, (forthcoming).

VISUALIZATIONS OF ATHENS. THE CASE OF KLEANTHIS-SCHAUBERT'S PLAN

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Responding to the request of the provisional Greek government (on May 1832), Stamatios Kleanthis (1802-1862) and Eduard Schaubert (1804-1860), both newly-graduated architects of the Berlin Bauakademie, submitted in December 1832 a *Plan for the New City of Athens* accompanied with an explanatory *memorandum*. In July 1833 the new government, under the regency of King Otto, approved the plan in the same decree that announced Athens as the capital of Greece.[1]

Several interpretations of the role and implications of this *Plan of Athens* have been offered. For me, the most influential is that of Professor Panayotis Tournikiotis who in his lectures focus on the temporal visualisation of Greek antiquities, particularly on the Parthenon. Other important contributions are Leni Bastéa's examination of the *Plan*'s role in forging the identity of the modern Greek nation, Alexander Papageorgiou-Venetas's important gathering of all existing documentation, and Yiannis Tsiomis's many relevant references. There are other important scholars too: Hans-Hermann Russack, who in his treatise *Deutsche bauen in Athen,* endowed us with the first publication of the *Explanatory Memorandum*; Margarete Kühn, who discovered and first published the earliest version of the Plan, and Thomas Hall who provided the general context of such plans.[2]

My own, brief contribution to this research will focus on two aspects only: firstly, how the profound preference for the classical antiquities of Athens has been shaped through and reflected into Stamatios Kleanthis and Eduard Schaubert's *Plan*, and secondly, how this turn to the classical Athenian past, paradoxically, implied an orientation to the future.

At the beginning of the nineteenth century, as the bourgeois class gradually embraces democracy, the myth about Athens reaches its peak. The newly emerged state of Greece and the evolving notion of European Civilization both seek their roots within the same geographical and chronological limits, namely those of the fifth century (BC) Athenian Democracy. These roots got their most potent symbolic articulation in the *Plan for the New City of Athens*, which was the first major plan devoted to the regeneration of the glorious Athenian past. We can trace this specifically through three distinct items - all parts of the *Plan for the New City* project: the *Final Plan for the New City of Athens* now surviving in two copies, the accompanying *Explanatory Memorandum,* and the earliest known version of the *Plan*, the *First Plan for the New City of Athens* (Fig.1), known also as the 'Plan of Berlin', discovered and first published by Margarete Kühn.[3]

The *Final Plan for the New City of Athens*, presented as a beautiful lithograph with its legends and title in Greek, is without doubt the most commented plan on the
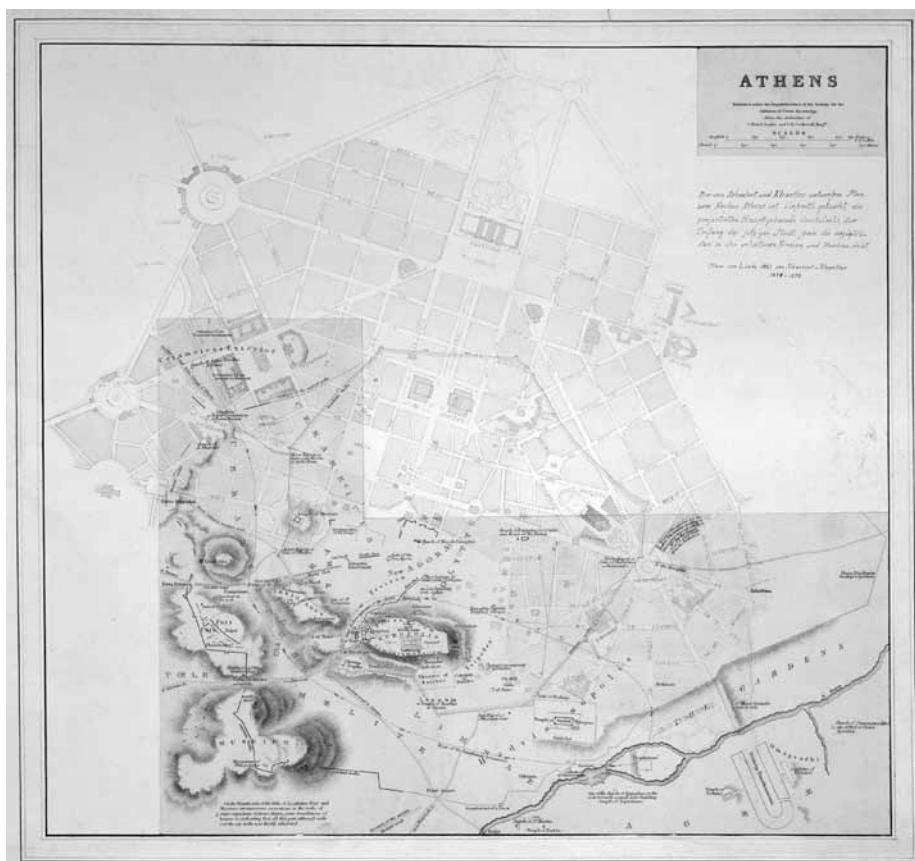
Figure 1. Eduard Schaubert and Stamatios Kleanthes: Athens, city plan 1831/32. (source: Stiftung Preußische Schlösser und Gärten Berlin-Brandenburg/ Fotograf: SPSG)

formation of modern Athens. The plan is labelled: 'Plan of the New City of Athens. Approved by the Greek Government'. Underneath is written: '1833 July', and that was indeed when, after having been approved by the Regency (29 June 1833), the plan was given a final stamp of approval by Royal Decree.

What really attracts our attention here is not the *Plan* itself; it is rather the decorative frame with nine distinct representations of landmarks and monuments, which seem to abolish the incessant course of time. The longest of all, illustrated at the top of the *Plan*, is a panoramic view of the Acropolis captured from the East, where the Columns of Jupiter Olympius survive (the Columns being illustrated too). The two at the bottom (at the right and left of the caption), show a mosque and a church (the Metropolis) respectively. The remaining six images represent classical antiquities. The fact that more than the two-thirds of these representations are referring to the classical Athenian past already creates a certain imaginary for the city, especially when one thinks that, at the time, Athens counted around 115 churches (albeit many ruined by the war) and four mosques, while most of the classical antiquities were still unknown.[4]

Each of these illustrations constitutes an interpretation of an ideal presence. Monuments are idealized: framed by their surroundings (which are, in most cases, natural) but detached from the reality of the city, they represent some kind of everlasting beauty. None of them, of course, constitute faithful archaeological representations (like those produced, for instance, by Le Roy).[5] Thus, behind the Agora Gate (known as the Bazaar-gate under the Ottomans), a byzantine church is illustrated next to one of the many humble huts of the old city; the Monument of Lysicrates and the Tower of Winds are illustrated surrounded by houses and Ottoman monuments. Even the Parthenon: ruined, with the mosque that was built in it and was not torn down but in 1843. This picturesque representation does not, however, signify the architects' respect for all the 'archeological layers' of the city. It is, instead, taking advantage of the contrast in order to convey a desired sense of cleanliness, shininess and civility - three values that, deriving from diverse ideological depositories, nourished most European nations at the beginnings of their modern life and that had profound implications for the production of new forms of spatial distribution.[6] In this respect, the representation of historical Greek landmarks functioned – quite conveniently − as prototypes for new architecture. James Stuart had already reproduced the Monument of Lysicrates and the Tower of Winds in Shugborough, in 1770 and 1764 respectively; Parthenon had been imitated several times, most famously in Leo von Klenze's Walhalla in Munich, 1816, to mention only a few. The *vignette* presents, on the one hand, the most serene aestheticization of Classical art, and on the other, the most eloquent architectural dictionary that ever appeared in western architecture: a dictionary for an architecture to come.

Stamatios Kleanthis and Eduard Schaubert's *Explanatory Memorandum* of the *Plan* may help explain what has not yet been made clear: namely why an age of a promising spatial, socio-economic, political and national development should turn to the classical Athenian past.[7] Giving a detailed description of the architects' intentions, the *memorandum* coins Athens as 'the cradle of the arts and the sciences'.[8] On their own initiative, the architects declare, they undertook the documentation of the existing city, producing an exact map of all its newly discovered ruins and remnants ('even bare foundations')[9] as well as of its topography. And, they 'took pains'[10] to accomplish this registration because they had 'foreseen' that 'the learned world of Europe would take an interest out of this work',[11] and also because they believed that this survey could be used as a preliminary plan 'for the reconstruction of Athens out of its ruins, whether or not this city should be designed as a future capital of Greece'.[12]

This intention is declared right from the first paragraph, which concludes as following:

> We believed that we served both objectives by meticulously recording the names of all existing churches since in archaeology one can sometimes draw conclusions from the name of a church about a building that existed earlier in its place. In May of the present year we were actually commissioned by the provisional government to design the drawings of New Athens, keeping in mind the glory and the beauty of the ancient one.[13]

It may seem an odd and dubious strategy to plan a new city by 'keeping in mind the glory' of an old one. But the architects are sincere, for what really characterizes this proposal − contrary to other urban design schemes of the same period − is the will to re-establish, in the urban tissue, all the classical monuments and routes. Thus, what at first seems like a purely preservationist spirit (the registration of 'all existing churches'), is in fact nothing more than the intention to discover (through the name of a church), something that 'existed earlier in its place'. Either way, '[t]here are 115 small churches, of which only 30 are reasonably kept and could be renovated'.[14] The choice to preserve '[o]nce in a while a small picturesque church ruin from the Byzantine Middle Ages',[15] does not at all negate the ancient past. On the contrary, it could 'create a pleasant contrast to these works of the ancients'.[16] (Perhaps, it should be also noted that the archaeologist Ludwig Ross, who helped the architects with their survey map of Athens, was much pleased by the fact that the majority of churches was ruined since, as he wrote, it was from their walls that most of his archaeological finds derived.)

The text continues by justifying the transfer of the city onto a plateau to the north of the old centre. The architects pointed out 'the added advantage that the ground over the ancient cities of Theseus and Hadrian [at the western and northern part of the Acropolis

hill] remains unbuilt and there is room left for later excavations'.[17] Thus overthrowing an important part of the city, the architects proposed a new element, an element to become constitutive of New Athens: 'a museum of ancient building-art second to none in the whole word'.[18]

In this very sentence we can discern the *point d'attache,* where the 'spirit' of Greek antiquity (which seeks to rest in the future) and the modern European 'spirituality' (which seeks its roots in the past) come to meet each other. The idea of the museum is linked to western modernity to the degree that, as an institution, it moves away from the mere expression of an individual choice (a collection). Michel Foucault in his lecture 'On Other Spaces', famously described the modern museum as 'the idea of constituting a place of all times that is itself outside of time and inaccessible to its ravages'.[19] The same can be projected on what Athens, as a whole, was designed to become − as far as Kleanthis-Schaubert's *Plan* is concerned.

The earliest known version of this *Plan* can offer us a more concrete picture of the kind of projection going on here. Rough plans, not initially made to communicate ideas, can sometimes 'clear up the field' right from their first drafted lines. Thus, much of the importance of the *First Plan for the New City of Athens* derives from the fact that a map of the antiquities of Athens is literary pasted upon it. This map is attributed to William Martin Leake (1777-1860), a British antiquarian and topographer who in 1821, right before the Greek War of Independence and six years after he retired from the army (where he had been training the forces of the Ottoman Empire), published a book on Athens entitled *The topography of Athens: With some remarks on its antiquities.*[20] I have not found any evidence of this map within the first publication of this book.[21] However, several scholars attribute this map to this publication[22] while a series of similar maps on the antiquities of Athens, published later, claim to be copies of this one (or, more generally, drawn out of 'the authorities of Colonel Leake').

The map that Kleanthis-Schaubert's Plan is based on, is one of these subsequent copies, a copy drawn by William Branwhite Clarke (1798-1898) and engraved by Josiah Henshall (1801?-1869) that was published under the superintendence of the Society for the Diffusion of Useful Knowledge (SDUK), dated '1 November 1832' (that is, more than a month before the Plan's first submission) and entitled 'Athens. (with) Acropolis of Athens'.[23] It sizes 34 x 40 cm and its scale is 1: 8000, the same scale the First Plan was drafted. On its margins runs a vignette with four distinct illustrations, one on each side. The illustration on the top –again, the longest one– is a panoramic view of the Acropolis (which possibly has been a source of influence for the decoration of the Final Plan). However, it is captured not from the East but from the West side, where the Pnyx stands, thus allowing the illustration to show parts of the old city at the North.[24]

All the classical antiquities are mapped, restored, liberated from the thick mass of the ottoman city (which at the time the map was drafted − possibly well before 1821− occupied even the Acropolis, with a Mosque inside the Parthenon and the houses of the Turkish garrison at the surrounding space).[25] The 'Ancient' and 'Modern' walls are also outlined. The map is, of course, exemplary of a particular representational fashion, common for this period. However, Leake's role was even more important as he had sailed with the ship engaged to carry the marbles Elgin purchased from the Ottomans, from Athens to England. The marbles collected by him in Greece were presented to the British Museum, where the artistic production of fifth-century (BC) Athens was, for the first time, elevated to the highest standard of artistic excellence.[26]

It is with this in mind that we should return to the *First Plan*. Here, the proposed new city is drafted on top of Leake's map while the old (ottoman) city's street pattern has not been superimposed except in some few parts. The old city is also absent in Leake's archaeological map; yet this absence signifies the prevalence of the city's strata of classical antiquities and its privileged position over the other layers of the city. In neither a progressive view of time nor a cyclical one, merely two layers of time (one of the past and another to come), superimposed one on top of the other. That is, in general terms, what the draft of the *Final Plan* consists of.

A few more phrases taken from the *memorandum*: the new city expands on the north side 'in such a way that the new city connects with the old city in the shape of a crescent moon'. This 'crescent moon', is in fact an isosceles triangle shaped by the main axes of the plan, had its peak at north of the Acropolis. That, it seemed, was the perfect place for the palace:

> The most prominent streets meet here in such a way that the balcony of the royal palace overlooks the beautifully formed Lykabettos, the Panathenaic Stadium of Herodes Attikos, the Acropolis, rich and proud in memories, and the war −and merchant− ships in Piraeus and the road to Eleusis.[27]

As long as the King is looking at his kingdom from his balcony, 'the most important antiquities had to be used as *points de vue*'.[28] But to look at the antiquities of Athens is to be looking at 'the glory and the beauty' of the ancient Athens, and, more than that, it is the appropriation of this history – to make this history equal to all other possessions.

We are thus, confronted neither with an artistic nor a cultural phenomenon. The plan has been drafted as an image-symbol, an utopia for the western city, representing, above all, a shift of political nature: Absolutism (a metaphor for the ultimate exercise of Power) and Democracy (a metaphor for the exercise of freedom and equality), meet each other in the same narrative, a narrative

that insists to see 'bright' and 'dark' layers, 'glorious' and 'inglorious' eras, arranging the classification through taste alterations that, only temporarily, settle down the conflict –and that is, indeed, a very recent narrative.

Every era seeks to reinvent for itself a classification of the layers of time. Nowhere, however, does this trend find a more full justification than in modernism. One of the most influential architects of the modern era, Le Corbusier, was acutely aware of this fact. In his *Plan Voisin*, he suppressed and destroyed layers of time, 'digging' in search for the history's 'ground zero'.[29] Somehow motivated by the same tradition set up by *Plan of Athens*, under the strong influence of the Academies who 'lied' and towards a new architecture, he had to trace a 'human epilogue' again in (classical) Greece, where he was convinced that 'the origin of our West' could be found. [30]

Endnotes

1. Ephemeris tes Kyverneseos [Government Gazette], no. 26, April 27, 1867.

2. Panayotis Tournikiotis (ed.), *The Parthenon and its impact in Modern Times* (Athens: Melissa, 1994), 200-29; Eleni Bastéa, *The Creation of Modern Athens: Planning the Myth* (Cambridge: Cambridge University Press, 1999); Alexander Papageorgiou-Venetas, *Athena: Ena horama tou klassikismou* [Athens: A vision of classicism] (Athens: Kapon, 2001); Yiannis Tsiomis, "Athena, evropaeke hypothesi" [Athens, a European Case] (paper presented at the International Symposium on the History of the Modern Greek City: Ottoman inheritances and the Greek state, September 29-30, 1984) as well as Yannis Tsiomis, "Athènes 1833 : la guerre pour la capitale de l'État-Nation," *Études Balkaniques* 12 (2005), 173-76 ; Hans-Hermann Russack, *Deutsche bauen in Athen* (Berlin: Wilhelm Limpert , 1942), 177-82; Margarete Köhn, "Schinkel und der Entwurf seiner Schüler Schaubert und Kleanthes för die Neustadt Athen," in Willmuth Arenhoverl and Christa Schreiber (eds.), *Berlin und die Antike: vol. 1* (Berlin: Deutsches Archäologisches Institut, 1979), 509-22; Thomas Hall, *Planning Europe's Capital Cities: Aspects of Nineteenth-Century Urban Development* (London: E. & F.N. Spon, 1997), 104.

3. Presently, at the Stiftung Preussische Schlösser und Gärten Berlin-Brandenburg (SPSG) from where I was kindly given (with permission for publication) the digital copy, 'Eduard Schaubert und Stamatios Kleanthes: Athen, Stadtplan. 1831/32; SPSG, GK II (1) Mappe Griechenland' (F0019685).

4. Mentioned in the *Explanatory Memorandum*, which we are about to examine (see note 19). Also, at 1832, Ludwig Ross (1806-1859) described Athens as 'a shapeless gray mass of ash and dust' [Ludwig Ross*, Erinnerungen und Mittheilungen aus Griechenland* (Berlin, 1863)] while Jacques-Louis Lacour wrote: 'The heart tightens on arriving in Athens. New ruins cover the ancient, which are buried in the earth […]. Filthy, sooty and foul-smelling shops […] have replaced the Odeon of Perikles, the Elefsinion, the Lyceum, the Gardens and the Temple of Aphrodites, the Gates of Hermes […] and other monuments, whose names alone have remained' [Jacques- Louis Lacour, *Excursions en Grèce pendant l'occupation de la Morée par l'armée française*, *dans les années 1832 et 1833* (Paris, 1834), 170].

5. Julien-David Le Roy, *Les ruines de plus beaux monuments de la Grèce* (Paris, 1758).

6. *Explanatory Memorandum* (see note 21).

7. The original text entitled "Erläuterung des Planes der Stadt Neu-Athen" was, as mentioned above, published for the first time in Hans-Hermann Russack, *Deutsche,* 177-82. Here we are using the Renate Lohmann's English translation, as appeared in Eleni Bastéa, *The Creation of Modern Athens,* 217-222.

8. Eleni Bastéa, *The Creation of Modern Athens,* 217.

9. Ibid., 217.

10. Ibid.*,* 217.

11. Ibid., 217.

12. Ibid., 217.

13. Ibid., 217.

14. Eleni Bastéa, *The Creation of Modern Athens,* 218.

15. Ibid., 219.

16. Ibid., 219.

17. Ibid., 218.

18. Ibid., 219.

19. Michel Foucault, "Des espaces autres," in Michel Foucault *Dits et écrits: 1954-1988, t. IV* (Paris: Gallimard, 1994), 752-62.

20. William Martin Leake, *The topography of Athens: With some remarks on its antiquities by Lieut.-Col. W.M. Leake R.A., LL.D. F.R.S., Member of the Royal Academy of Sciences at Berlin* (London: John Murray, MDCCCXXI).

21. This first edition can be fully downloaded from the website: Ebooks and Texts Archive, "The Topography of Athens; with some remarks on its antiquities (1821)," Internet Archive, http://www.archive.org/details/topographyofathe00leakuoft. The only image that one can find within its 586 pages is that of the temple of Victory [before the southern wing of the Propylaea], in page 203.

22. Bastéa presents a map which is certainly not that of the first English edition (title and legends written in German), stating that this is Leake's Plan of the Antiquities from '*The Topography of Athens*, London, 1821', (Eleni Bastéa, *The Creation of Modern Athens,* 74). Venetas on the other hand presents a copy

of 1832 (see note 28) stating again that it is Leake's archaeological map, 'from his work *The Topography of Athens*, London 1821', (Alexander Papageorgiou-Venetas, *Athena: Ena horama tou klassikismou*, 26). In his references however, he uses the 1844 German edition ['Leake, William Martin, Topographie Athens (übersetzt von J.G. Baiter und H. Sauppe).2.Aufl., Zürich, 1844], (Alexander Papageorgiou-Venetas, *Athena*, 399). Wagstaff, on the other hand, states: 'The first edition contains eight plates; in the second edition, six rather different plates are used', (John Malcolm Wagstaff, "Pausanias and the topographers: The case of Colonel Leake," in Susan E. Alcock, John F. Cherry, and Jaś Elsner (eds), *Pausanias: Travel and memory in Roman Greece* (New York: Oxford University Press, 2001),195). According to Wagstaff, the plans published in the first edition were: a *Plan of Athens and its Harbours with the Surrounding Country from an actual Survey* and a *Plan of the Antiquities of Athens* both of which had at the bottom the signature: 'W.M.L met.' (John Malcolm Wagstaff, "Pausanias and the topographers," 197). And indeed, underneath is also written: 'Published according to act of Parliament by John Murray, 1st Jan. 182[1]' (the number one in brackets as I did not find it easy to read the year in that publication). Again, one can hardly trace the edition Wagstaff is talking about as in his references it is merely written: 'Leake, W.M. 1821. *The topography of Athens with some remarks on its antiquities.*London' (John Malcolm Wagstaff, "Pausanias and the topographers," 340). Then, in pages 198-199 Wagstaff illustrates the map, stating that this is the map of the first edition, 'reproduced by permission of the British Library'. However, a quick search on the British Library's catalogue will show that the only *Plan of the Antiquities of Athens* attributed to Leake, is the one entitled: 'Plan of the Antiquities of Athens *Copied* [emphasis added] from Lieut Col Leake's Topography of Athens' which was published in London 1823 (and *not* 1821) [Identifier: System number 004795394/ Shelfmark(s): Cartographic Items Maps 295.(1.)/ UIN: BLL01004795394], Explore the British Library, "Leake, Maps," The British Library, http://explore.bl.uk/primo_library/libweb/action/search.do?ct=facet&fctN=facet_rtype&fctV=maps&dscnt=0&indx=1&tab=local_tab&dstmp=1329660502355&vl(freeText0)=leake&fn=search&vid=BLVU1&mode=Basic. The same map is published by Manolis Korres (Manolis Korres, *Oi prote chartes tes poleos ton Athenon* [The First Maps of the City of Athens] (Athens: Melissa, 2010), 63. One can assume that the map was contained in another volume (as a folding plate perhaps). However none of the scholars seems to have yet shaped a clear view on that.

23. The map is part of the David Rumsey Historical Map Collection and can be studied online, in great detail, at "Athens. (with) Acropolis of Athens," David Rumsey Map Collection: Cartography Associates, http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~21000~530092:Athens--with--Acropolis-of-Athens--. It should also be mentioned that a physical copy of the SDUK edition's map is kept in the Museum of the City of Athens, Vouros-Eutaxias Foundation (n. 438). The title block of this map, where is noted: 'From the authorities of Colonel Leake *and* [sic] C.R. Cockerell Esqr'(thus certifying its paternity), is also pasted on Kleanthis-Scaubert's *First Plan* (at the upper-right-hand corner), proving too that this was the copy they used. Underneath, there is an explanation written by the architects: 'The Plan for the New construction of Athens, designed by Schaubert and Kleanthes is colored in light red, the main buildings planned in dark red, the perimeter of the existing city, as well as most of the important churches and mosques which survived with the city in violet. *Plan of Leake 1821* [why did they write that, since they eventually used the 1832 copy of the map?]. *Plan of Schaubert and Kleanthes 1831-1832.*'
(Translated by the author).

24. On the bottom of the map lay 13 drawings of classical monuments, restored. Underneath them are drawn two elevations (a northern and a western) of the Acropolis, also restored. The overall presentation concerning Leake's map, introduces interesting research questions such as: (1) when exactly Leake drew the map (because it is well known that he left permanently Greece in 1810)? It is questionable to assume that he drew the map later on by recollection. [Perhaps, Korres is right when he mentions that the map was drawn in 1806 (Manolis Korres, *Oi prote chartes tes poleos ton Athenon*, 62)]; (2) In any case, when and in what form has this map been made public since, as the evidence shows, it is not included in the original 1821 edition? (3) While, apparently Kleanthes and Schaubert used the 1832 map for the *First Plan*, which version did they use for their survey in November 1831?

25. See for instance: Edward Dodwell, *Views in Greece* (London: Rodwell and Martin, 1821), 32 as well as James Stuart and Nicholas Revett, *The Antiquities of Athens* (London, 1787), vol. 2, chapter 2, plate I.

26. Peter Collins, *Changing Ideals in Modern Architecture, 1750-1950* (London: Faber & Faber, 1965), 87. See on that: Eleni Bastéa, *The Creation of Modern Athens,* 100. Leake had nevertheless expressed this view, on the superiority of classical Greek art and architecture, in his *Topography* where he wrote particularly on architecture (William Martin Leake, *The topography of Athens,* cxiv): 'But it is particularly in architecture that we need the guidance of the Greeks'.

27. Eleni Bastéa, *The Creation of Modern Athens,* 220.

28. Ibid., 220.

29. Le Corbusier, *The City of Tomorrow and its Planning*, trans. Frederick Etchells (London: John Rodher, 1929), 287.

30. Yiorgos Simaioforidis (ed.), *Le Corbusier, Keimena yia ten Hellada, Photografies kai sxedia* [Le Corbusier, Texts on Greece, Photographs and Drawings] (Athens: Agra, 1987), 153.

Communicating Architecture: Working with Documents in Construction

SESSION CHAIRS:

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While architectural drawings have always been at the centre of attention of architectural historians, the role of textual documents produced in the construction of buildings and their interrelationships with drawings remains under-investigated. This may well be because drawings and accompanying construction documents are often preserved separately in the archives and because architectural history has tended to focus on design while questions of the building process are dealt with by construction history. The development of drawings, specifications, building contracts, bills of quantities and other construction documents depends on local building practices and law and their histories differ across Europe, but these documents can be considered to share some common characteristics. They describe and define the building prior to its realization. They are, to varying extents, instructions to workmen but also serve as legal documents. They are not the sole preserve of the architectural profession, but are the product of complex co-operation, conflict and negotiation between a wide range of actors and institutions. As such they may formally act as limitations but also have a constitutive role in the production of architecture.

We think that historical research of legal and regulatory documents in architecture has implications beyond procurement and construction history. In this session we would like to bring together a range of researchers to open up a discussion about the different meanings and values these documents hold and how they might be interpreted, critiqued, or used in architectural history and theory. We are particularly interested in what kinds of histories are made available through their exploration and how these documents might offer openings for questions in architectural history and theory that might otherwise remain under-explored.

These questions might include: *How* has architecture been encoded in the building process, either in individual documents or through their interrelationships?; *How* might we read these documents not merely for themselves or for their technical contents, but as historical accounts of specific processes and relationships involved in the making of architecture?; *What* are the interrelationships between text and drawing, and is it possible to discern a developing notation system between them that is typical of architecture and building?; *What* functions have these texts and drawings served during the building process, is there any continuity in their development, and can we speak of a specific form of architectural discourse that might emerge from this kind of study?

TEXTS IN AN ORAL WORLD:
THE CASE OF BUILDING CONTRACTS IN EARLY EIGHTEENTH-CENTURY MONTREAL

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For the urban working classes, the eighteenth century was a special time in the history of their relationship to the written word. Because of both trade and administrative requirements, writing penetrated all areas of activity. Yet, the individual ability to read and write had not spread to the collective level, as it did in the nineteenth century, albeit unevenly, as compulsory primary education was introduced.[1] The result was a situation full of contrasts. In order to meet the new requirements, some craftsmen sought to master reading and writing themselves. For this, they depended on existing educational networks, such as priests and itinerant school teachers, and they succeeded in escaping the oral world.[2] For others, the cultural integration was essentially passive, in other words, they employed various intermediaries on a temporary basis to read and write documents for them. In the following pages, I will try to gain a better understanding of these passive interactions by examining a specific environment: the construction industry in Montréal between 1700 and 1750.

Analysis of archival sources shows that the first half of the eighteenth century was a critical period during which writing generally came to play a larger role in workers' daily lives. In May 1700, the notary Adhémar indicated in a document entitled 'Record of what the mason Jean Deslandes dit Champigny, owes' that 14 legal documents and copies of legal documents had been processed in his office for Deslandes that month.[3] In January 1745, the carpenter Baptiste Poirier reported that he had been robbed of a chest containing '...all his papers and titles...', which were so numerous that he could not draw up an accurate list of them all.[4] The fact that people had written documents in their homes is confirmed in a more systematic manner by inventories done during probate procedures. Analysis of such inventories reveals that the number of documents owned by craftsmen when they died varied over the course of the eighteenth century.[5] The later the date, the more papers people had in their possession. From an average of five legal documents per person until the 1730-1740s, this average went from eight to ten in the following decades. In April 1760 the probate inventory of the papers belonging to a carpenter included some 15 documents.[6]

While written documents were more present in daily life, it is not clear that this surge was contingent on the worker's individual ability to decipher these documents. The account book of the merchant Alexis Lemoine shows that the brothers Guillaume and Jean Baptiste Valade, who were both masons, regularly bought 'quires' from him, that is to say packages of 24 pieces of paper.[7] Yet, neither brother knew how to read, write or sign. Studies on the level of literacy among all class of workers active in Montréal's construction industry in the period 1700-1750, show that 60 percent of them knew neither how to read or write. This percentage was obtained by including among the illiterate those who said they could not sign and those whose signature was childlike, an indication that they had memorized it and that they could not in fact read or write.[8]

However, in order for this percentage to be meaningful, it must be related to the actual writing practices in the principal field of activity in which these craftsmen were employed, namely construction. As might be expected, the paperwork production cycle began when a building contract was drafted. Whenever the work in question was major, Montrealers preferred written records that were either signed privately or notarized. Notarial services were very common, a fact borne out by the 370 notarized agreements that have been preserved from the period. While notaries recorded most of the agreements, in some cases they simply added the terms of the agreement 'at the bottom,' that is to say following an estimate that had been agreed to privately and that was submitted by the co-contractors. Nearly 20 percent of notarized agreements in Montréal at the time were written in this manner. Once everything was signed, the notary was required to keep the original version of the contract and send one copy each to the client and the entrepreneur, whether or not they could read. This can be seen in the case of an agreement between Marie-Madeleine Raimbault and the mason Jacques Jousselan, in which the notary Hodiesne wrote in the margin: 'Sent to both parties'.[9] Yet, the agreement in question shows that Jousselan did not know how to sign his name.

Document production did not end with the contractual stage. It could continue, in particular with the writing of lists detailing the dimensions and cost of millwork to be delivered. When the work was done, receipts for payments made and bills for amounts outstanding were frequently required. It should also be kept in mind that paper money was scarce in New France, so entrepreneurs often paid their employees with promissory notes that could be redeemed from merchants. This is how the brothers Jean Baptiste and Guillaume Valade operated. They were both employed to build a home for the merchant Alexis Lemoine. In his account

book mentioned earlier, entitled 'Book concerning work done on my house', Lemoine recorded, over a one year period, all of the goods delivered to the Valades' employees and sub-contractors upon presentation of promissory notes.[10] Since both brothers were illiterate, we can infer that the 100 or so notes issued to their employees were drafted by a writer working for them. This accounting work was certainly the source of the regular orders of 'quires'.

Given the surge in written documents, how did masons, stonecutters, carpenters, and joiners actually use these documents? Did workers always find eyes and hands to read and write for them? The study of a specific case concerning the problems experienced by Jean-Baptiste Morisseau when he had a house built by the mason François Brossard can give us a glimpse of how things played out.[11] The events began in August 1721, when the client Morisseau and the entrepreneur Brossard went to the notary David, to sign an agreement concerning the building of a 'two story stone house 30 feet wide and 26 feet long'.[12] While the text of the agreement was not especially difficult, it nonetheless contained very detailed specifications, in particular concerning the number and dimensions of the doors and windows, and the thickness of the walls. Things must have gone wrong since we encounter both parties two years later, in 1725, in civil court. Morisseau was refusing to pay Brossard for the last stage of work, alleging that it was not consistent with the agreement. The expert survey of the house, which was conducted a few days later by the masons Dominique Janson Lapalme and Jean-Baptiste Angers, agreed with the client. Having inspected the work, the two experts, who had a copy of the agreement in hand, found that the specifications had not been complied with: the doors and windows did not have the dimensions they were supposed to have, one wall was two feet thick when it was supposed to be only a foot and a half, the staircase was inside the house instead of outside. The problems did not concern the stability of the building or the quality of the materials, but measurements and locations that did not comply with the terms of the agreement. We think that the origin of the problem lies with the fact that Brossard, who could not sign his name when the agreement was made, probably did not know how to read either. When work began in May 1722, the mason had only a vague memory of the specifications discussed nine months earlier in the notary's office. Unable to read his copy of the agreement, finding no one to do it for him, Brossard could only improvise. And he did.

Although the blame rests entirely on the mason, the attitude of the client should also be questioned. Indeed, since Morisseau must certainly have heard Brossard declare being unable to sign when the agreement was made, why did he not suspect that things would turn out as they did? This lack of awareness is all the more surprising considering that Morisseau worked as '[the] King's interpreter for Iroquois missions'.[13] In other words, the client was a specialist in situations of dysfunctional communication. We believe that the reason he did not anticipate the problem lies in the fact that it was obvious to him that Brossard would make up for his illiteracy by asking a third party to read his copy of the agreement, a level of expectation attesting that this type of interaction had become routine. Basically, the world of Morisseau was one where mediation of this kind occurred not only in contexts of ethnolinguistic interculturalism, such as when he acted as an interpreter in dealings with the Iroquois, but also in situations of domestic alterity, among individuals belonging to the same group, of whom some were already acculturated to writing and others were not. Other evidence from the case confirms the prevalence of these mediations, such as when Brossard himself hired a certain Delafosse to write a summons to force one of Morisseau's neighbours to testify in court about the common ownership of a wall.[14] Similarly, among the six experts who, in teams of two, performed three successive surveys of the work, two did not know how to write, but each of them was paired with a worker who did.[15]

While the examples analysed so far clarify the passive processes of acculturation to writing in Montréal's construction industry, the complete account of this situation naturally depends on the historian's ability to track evidences of such interactions. This poses no problems when the third-party writer's name appears on the text. This is the case of a document from 1749 in which the masons Deguire and Truteau having stated that they could not read,
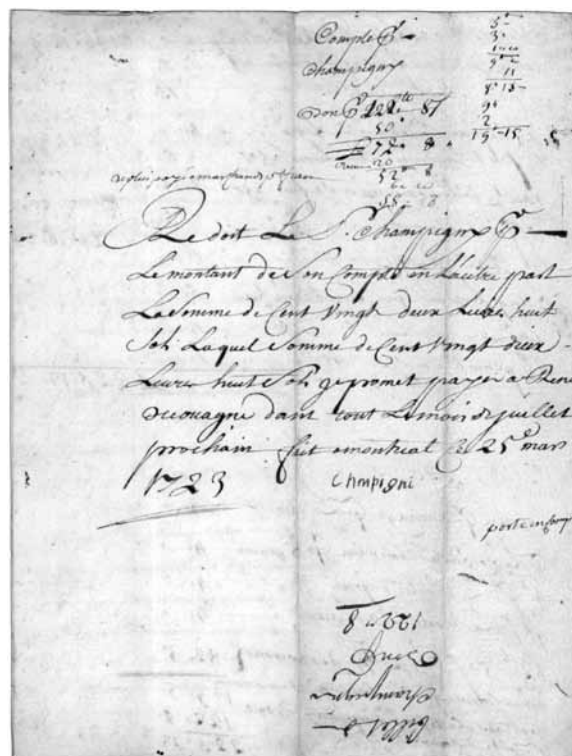
Figure 1. Litigation between René de Couagne, merchant, and Jean Deslandes dit Champigny, mason, 25 March 1723. (source : Bibliothèque et Archives Nationales du Québec, Direction du Centre d'archives de Montréal, Fonds Juridiction Royale de Montréal, TL4,S1,D3384)

write or sign, 'asked *Maître* Souste and Cousin to sign [for them]'.[16] Instances when the writer, though not named, is referred to as 'the writer' poses no problem either.*[17]* However, things get more complicated when use of a third party was anonymous. In order to identify these uncredited contributions, the historian, working two centuries after the fact, has to focus on differences in handwriting, such as in this promissory note (Fig. 1) dated March 1723, in which the mason Champigny promised a merchant the sum of 122 pounds. The note shows a striking contrast between Champigny's clumsy signature at the bottom of the note and the body of the text by a hand trained in the art of elegant writing, but whose identity is not mentioned.[18] In other instances, differences in handwriting are much more difficult to discern. On a document dated March 1727, one sees a mark, in the form of a cross, left by a craftsman who did not know how to sign (Fig. 2).[19] However, closer examination reveals that the two lines are surprisingly smooth, as if they had been traced by a very confident hand. Clearly, they were drawn by someone who wrote often and was skilled in using a pen, but who remains anonymous. Such instances of anonymity attest to the fact that, in the eighteenth century, the use of writing not only spread widely in everyday life, but was also a social norm. Thus, it is understandable that some people were already a little reticent or unwilling to record elaborate interactions that evoked an oral culture on the verge of obsolescence.
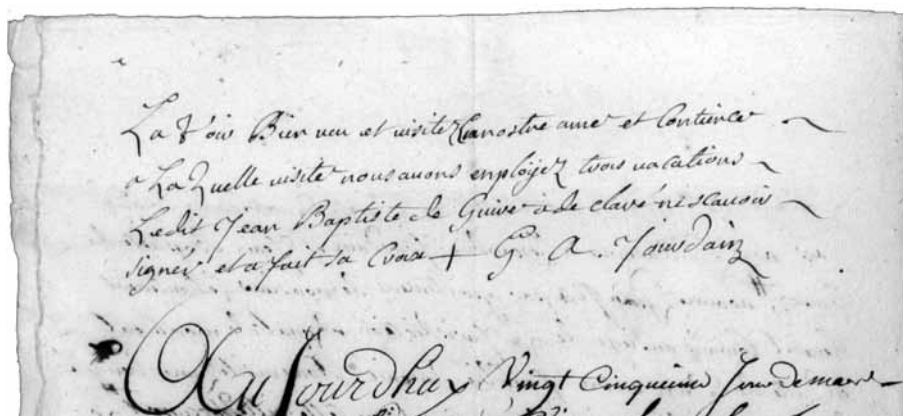
Figure 2. Litigation between René Godefroy de Tonnancour and a tenant, 24 March 1727, detail. (source: Bibliothèque et Archives Nationales du Québec, Direction du Centre d'archives de Montréal, Fonds Juridiction Royale de Montréal, TL4,S1,D3353)

In the course of this study, we saw the many different forms of interactions used to facilitate the use of writing in a field of activity with a low level of literacy. It is clear that the construction industry counts among the numerous contexts where, on a much larger scale, the civilization process entailed by the shift from the oral to the written word occurred. However, it should be noted that the paperwork inflation as we have described it, emerged mainly at the crossroads of two histories: that of a relatively large group of clients and builders, and that of a smaller group of public officers who wrote, or required, most of the papers circulating in relation to construction sites (agreements, expert surveys, pleas, copies, permits). It is our opinion that these two narratives did not cross by chance, but rather resulted from complementary changes in the public and private spheres that were occurring at that time.

Indeed, it is generally agreed that, during the early modern period, traditional social ties (family, village, neighbourhood, feasts and rituals) were gradually breaking down and being replaced by more individualised relationships between people, a movement that brought about a growing anonymity but also intimacy.[20] It is well known that the transformations that occurred in the urban domestic architecture of the eighteenth century, in particular regarding the interior distribution of rooms, played a fundamental role in these changes. The same period also witnessed, in parallel to this transformation of the private sphere, a major transformation of the public sphere, which systematized its control of the population by establishing numerous administrative requirements and bureaucratizing relationships with various authorities.[21] The public service was transformed by the creation of a new bureaucracy that made more centralized management possible, actions that reveal the authorities' attempts to manage an urban society that was increasingly mobile and complex.

We believe that it is in the inner workings of this dual mutation that we must locate the basic reasons for the growing use of administrative documents in ordinary economic life, such as in the building industry. In the regulation of a body social that was expressing itself in an increasingly individual manner, personal possession of written documents produced or requested by bureaucratic agencies began to play a fundamental role. In order to govern better, the authorities directly or indirectly required individuals to have documents and to produce them regularly. However, this movement was not one way. The possession of such documents made it possible for individuals to recreate their identities using the new criteria of the public sphere: they were no longer defined by their street, neighbourhood and rituals, but by compulsory paperwork.

Endnotes

1. On the growing use of paperwork in daily life in the eighteenth century, see: Armando Petrucci, *Scrittura e popolo nella Roma barocca, 1585-1721* (Rome: Quasar, 1982); Peter Burke, *The Historical Anthropology of Early Modern Italy: Essays on Perception and Communication* (Cambridge: Cambridge University Press, 1987), 110-131; Henri-Jean Martin, *Histoire et pouvoirs de l'écrit* (Paris: Librairie académique Perrin, 1988); Jean Quéniart, *Culture et société urbaines dans la France de l'Ouest au XVIIIe siècle* (Paris: Librairie C. Klincksieck, 1978), 167-170.

2. On reading and writing literacy in France in the eighteenth and nineteenth centuries, see: Harvey Chisick, *The Limits of Reform in the Enlightenment: Attitudes Toward the Education of the Lower Classes in Eighteenth-Century France* (Princeton: Princeton University Press, 1981); François Furet and Jacques Ozouf, *Lire et écrire,l'alphabétisation des français de Calvin à Jules Ferry* (Paris: Éditions de Minuit, 1977); Jacques Rancière, *La nuit des prolétaires: archives du rêve ouvrier* (Paris: Fayard, 1981).

3. Bibliothèque et archives nationales du Québec (BAnQ hereafter), fonds juridiction royale de Montréal, TL4, S.1, file 408.

4. *Ibid.*, TL4, S.1, file 5127; the conservation of documents among the working class during the early modern period is explored in: Daniel Roche, *Le peuple de Paris. Essai sur la culture populaire au XVIIIe siècle* (Paris: Aubier-Montaigne, 1981); Jacques-Louis Ménétra*, Journal de ma vie: Jacques-Louis Ménétra, compagnon vitrier au 18e siècle* (Paris: Montalba, 1982); Jean Vassort, *Les papiers d'un laboureur au siècle des Lumières: Pierre Bordier, une culture paysanne* (Seyssel: Champ Vallon, 1999); Christine Métayer, *Au tombeau des secrets: les écrivains publics du Paris populaire, Cimetière des Saints-Innocents, XVIIe-XVIIIe siècles* (Paris: Albin Michel, 2000).

5. P.-E. Latouche, "Les marchés de construction notariés et les transformations de la sphère privée et de la sphère publique à Montréal entre 1700 et 1755'' (PhD diss., Laval University, 2005), 241-243.

6. BAnQ, probate inventory of Jean-Baptiste Maranda, carpenter, 1 April 1760, papers of de Louis-Danré de Blanzy, notary, CN601, S.108.

7. BAnQ, Account book of Alexis Lemoine, merchant, 1731-1745, Fonds Société d'archéologie et de numismatique de Montréal, P345.

8. The findings vary depending on the trade. Three quarters of masons and stone cutters knew neither how to read, nor how to write. In the case of carpenters, 60 percent did not sign at all, or only very clumsily. As usual, carpenters were the group in which the greatest percentage had taken the leap into the world of writing: 70 percent of them signed, and did so smoothly, often with elegant flourishes. Finally, while day and unskilled labourers were rarely parties to contracts, when they were, they generally did not sign: 70 percent did not even leave an "X" or other mark, see Pierre-Édouard Latouche, "Aptitude à signer et usage de la signature chez les ouvriers du bâtiment à Montréal, 1700-1750,'' *Revue de bibliothèque et archives nationales du Québec*, 1 (2009), 20-31.

9. BAnQ, building contract between Marie-Madeleine Raimbault and Jacques Jousselan, 18 April 1754, papers of Gervais Hodiesne, notary, CN601, S.202.

10. BAnQ, account book of Alexis Lemoine, *op. cit.*

11. BAnQ, TL4, S.1, file 3025.

12. *Ibid.*, building contract between Jean-Baptiste Morisseau and François Brossard, 19 August 1721, papers of Jacques David, notary, CN601, S.111.

13. *Idem.*

14. BAnQ, TL4, S.1, file 2745.

15. *Idem.*

16. BAnQ, TL4, S.1, file 5410.

17. *Ibid.*, TL4, S.1, file 5788.

18. *Ibid.*, TL4, S. 1, file 3384.

19. *Ibid.*, TL4, S.1, file 3353.

20. Yves-Marie Bercé, *Fête et révolte : des mentalités populaires du XVIe au XVIIIe siècle : essai* (Paris: Hachette, 1976); Philippe Ariès, "Pour une histoire de la vie privée," in Philippe Ariès (ed.), *Histoire de la vie privée* (Paris: Seuil, 1985),7-19; Michel Vovelle, *Piété baroque et déchristianisation en Provence au XVIIIe siècle; les attitudes devant la mort d'après les clauses des testaments* (Paris, Seuil, 1973).

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ADMINISTRATIVE DOCUMENTS AS A SOURCE FOR THE STUDY OF STANDARDISATION AND PROFESSIONALISATION OF ARCHITECTURE IN RURAL VILLAGES. THE EXAMPLE OF NINETEENTH-CENTURY WEST-FLANDERS

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INTRODUCTION

The considerable number of public works is one of the most striking exponents of the strong development of the construction industry in Belgium in the course of the nineteenth century. Not only the leading cities, but also small rural communities – often with a population varying from one hundred to about five hundred inhabitants – set up building projects. Typical examples of such building projects include the partial or complete reconstruction of parish churches, presbyteries, primary schools, elderly homes or a public pumps. The designs for these buildings were communicated with patrons and builders through a number of documents like plans, estimates and building specifications. This paper concentrates on the legal encoding and the standardisation of these documents, and on their role in the professionalisation process of the architect in nineteenthcentury Belgium. The province of West-Flanders, in the nineteenth century a predominantly rural region, forms the geographical scope of this case study. The analysis is based on circular letters and on the archives of approximately six hundred building projects, mainly dating from the period 1820-1895.[1]

THE LEGAL CONTEXT FOR MUNICIPAL BUILDING PROJECTS

The Belgian Municipal Law of 1836 confirmed the municipal responsibility and the right of initiative in relation to municipal buildings, meaning that local governments were free to organise public works. Municipalities were also stimulated by the national government to start up building projects among which primary schools were urgently needed. Article five of the Education Act of 23 September 1842 obliged local authorities to provide educational training and to have at least one public primary school per municipality. One of the results of the law was that from 1850 onwards in the rural areas a considerable number of primary schools were constructed (Fig. 1).[2] Although municipal governments had the freedom to initiate building projects, construction works could not start without an official approval of the higher authorities. For example a royal decree from 1824 stipulated that for the construction or alteration of parish churches a royal approval was obligatory. The Belgian Provincial Law of 1836 placed several acts of the municipal government under the superintendence of the provincial government, including construction and major repairs of municipal buildings.[3] Moreover, the municipal government depended upon the provincial and national governments for the financing of their public works. The construction of a municipal school, a parish church or a presbytery was

Figure 1. The village of Zuienkerke with the municipal primary school dating from 1872-1874, postcard dating from the early twentieth century. (source: Bruges, Provincial Library Tolhuis)

generally for one third of the expenses subsidised by the higher authorities. One of the purposes of this policy of subsidising was to improve the quality of municipal buildings and – in more general terms – to contribute to the modernisation of the rural society. On the other hand the provincial and national government could by this practice of granting subsidies strengthen their supervision on the municipal finances and the quality of architectural design.

Municipal authorities needed to submit their projects to the higher authorities for preliminary control in order to obtain financial support and the permission to execute the works. As a result throughout the nineteenth century the design and construction process became strongly embedded in administrative procedures and consequentially increasingly encoded in legislation. This

evolution had its consequences for the documents through which the architectural design was communicated. These processes and documents should also be regarded as exponents of the rise of a modern civil service system.[4] In the nineteenth century the planning of architecture thus became increasingly part of public administration.

ARCHITECTURAL DESIGN AS AN ADMINISTRATIVE FILE

In 1880 the Belgian Minister of Internal Affairs Gustave Rolin-Jaequemyns (1835-1902) stated in a circular letter that municipal building projects only could be considered complete when they included the plans, the detailed estimations and the building specifications.[5] This letter indicates that for the approval of construction projects a number of documents had to be submitted. Throughout the nineteenth century the Belgian government regulated increasingly the number, the form and the content of these documents. In 1830 the government stipulated that for the construction, enlargement or major repairs of churches and presbyteries a plan and a building estimate had to be submitted to the national government, an affirmation of the situation before the Belgian independency.[6] More detailed regulations were published after the establishment in 1835 of the Royal Commission for Monuments, a national advisory body with the task to oversee the quality of restoration of historical buildings as the construction of public buildings, both regarded as important for a national culture policy.[7] In order to obtain approval a set of plans drawn in ink in scale 1/100 had to be presented, together with a situation plan, a description of the works and a building estimate. With the regulations a model for a building estimate was published, including type descriptions and uniform prices. The idea behind this regulation was to obtain 'more regularity in the design of the projects and a greater consistency in the drafting of the specifications'.[8]

For other building types even more extensive prescriptions were published. The Ministry of Internal Affairs published in 1853 an inventory of the documents needed for the projects for the construction of municipal primary schools. Apart from plans in scale 1/100, a situation plan and a building estimate, also explanatory notes were needed.[9] Comparable were the regulations for the construction of hospitals, for which a full set of plans of the projected building, a situation plan, a cadastral map, details on the ventilation system, a building estimate and an explanatory note were needed.[10] The aim of these prescriptions was to obtain a 'complete knowledge of the buildings'. The standardisation of the construction of municipal primary schools was further stimulated with the publication of detailed programmes, models and inspiring examples.[11] In 1852 the first Belgian governmental programme on the construction of school buildings was published, describing in detail the various requirements the designs had to conform to. This programme was not only communicated by a circular letter, but also with a publication, to which as a clarification, three building estimates and a set of 29 plates were added.[12] The programme was revised in 1875 and again by the government published with models of building estimates and type plans for primary schools by Jean-Lambert Blandot (1835-1885). This Belgian architect had already in 1864 in government order published a book on school buildings in Belgium, presenting sixty projects throughout the country and examples of building cost estimates and building specifications.[13] These documents circulated through the administrative system: the national government sent a number of copies to the provincial governors, who in their turn distributed them to the municipal councils. A copy of the publication with the governmental programme of 1852 for example was sent to every community in West-Flanders.[14] In 1864 the Minister of Internal Affairs Alphonse Vandenpeereboom (1812-1884) recommended the provincial governors to purchase Blandots book on primary schools and subsequently put it to the disposal of the provincial architects.[15]

From the mid-nineteenth century onwards templates for building specifications were published, as well on the national, the intermediate and the local level. The Ministry of Public Works published in 1864 a standard specification, a document that was revised in 1881, 1890 and 1897. It was used as a template for national building projects and was widely spread among architects as well as an individual publication as through juridical literature. The provinces of Antwerp and Limburg included in their regulations for the service of the provincial architect specifications for construction and even added 'model documents'.[16] These building specifications – in Belgium indicated as *cahiers de charges* or *algemene voorwaarden* – were necessary to put up building works to public tender, as was done for most municipal building projects. Unlike the Belgian State, communities were not legally obliged to put up building works to public tender. Nevertheless in the course of the nineteenth century this procedure became more and more the rule.[17] Not only was this practice seen as a guarantee to obtain the best price, it was also stimulated by the central and provincial government who only subsidized building projects under the condition that the works were put up to public tender. The building specifications became crucial documents in the context of public works since they are, as the architectural historian Inge Bertels stated, 'the tool *par excellence* to stipulate the obligations of the client, the architect and the contractor'.[18] Moreover the specifications were part of the official contract between the municipal authority and the contractor since they were included in the documents both parties signed and were used a base to fight legal disputes.[19]

The project files for municipal buildings were composed of several drawings and plans, as well as written documents; all answering to officially fixed standards (Fig. 2). A ministerial circular letter of 1858, by which the size of the plans for primary

school buildings became fixed, reflected the idea that the plans were administrative documents since the standard size of the sheets on which the drawings were made had to enable the ministry to arrange the plans in a decent way in their files.[20] Architectural designs thus became administrative files enclosing all the necessary information for a 'bureaucratic' judgement of the project. From an administrative point of view the codification and the standardisation of the project files had to produce to a certain extent comparable designs, which could easily be examined and approved by civil servants. Consequently ministers repeatedly stressed that only complete files were due to receive approval.[21] Hence the planning of municipal buildings became part of a centralised administrative procedure with the ministry as controlling body that needed to approve the plans before construction.

ARCHITECTURE AND ADMINISTRATIVE PROCEDURES

Research on municipal projects in West-Flanders reveals that in practice most projects went through multiple inspections by municipal, provincial and national governments. The initiative for public building projects was almost always taken by the municipal government. The records of the council meetings often give clear insight in the planning procedure. Generally the planning started by appointing an architect to prepare the works. His design was, after approval by the municipal council, submitted to the provincial government. On this level all the designs were examined by the provincial architects, an official function that was created in most Belgian provinces from the early nineteenth century onwards. They were to advise and inspect local authorities regarding their building projects in order to avoid exaggerated building costs and to improve the quality of the constructions. In their rapports they primarily concentrated on the technical, administrative and financial aspects of the designs.[22]

Figure 2. Plan and building estimate by Pierre Nicolas Croquison for the construction of a municipal primary school in the village of Meulebeke, 1860. The building estimate is handwritten, following a template systematically used by Croquison for all his designs. (source: Bruges, State Archives, Archive Provincie West-Vlaanderen, 4e afdeling, 232)

After control by the provincial administration the projects were either approved or returned to the municipal government in order to adjust them according to the provincial advise. A definitive approval of the building project – including the decision on the subsidies granted and the permission to put the works up for public tender – was given by the national government after an inspection by the national administration or a competent national advisory body.

The administrative inspection of the projects was entrusted to skilled civil servants or 'experts' in the field of architecture, education or public hygiene. The national government also made an appeal to specialised advisory bodies like the Royal Commission for Monuments and the High Council for Public Hygiene. Obviously, the intellectual and professional background of these civil servants and the members of the advisory bodies determined the nature of their advices and judgments. The national and provincial education inspectors, for example, took great care to ensure that the designs for primary schools answered to the national legislation and guidelines. The High Council for Public Hygiene – a national advisory body established in 1849 – mainly stressed in their advises for the construction of hospitals those aspect which reflected the hygienic qualities of the design, like orientation, technical equipment and ventilation systems.[23] The Royal Commission for Monuments was strongly dominated by architects. Six of the nine initial members were for example practicing architects or engineers, including the royal architect and the city architects from Antwerp, Ghent and Tournai.[24] The advices of the commission seem to reflect predominantly a concern with the appearance and the artistic qualities of the buildings.

ADMINISTRATION AND THE PROFESSIONALISATION OF THE ARCHITECT

Throughout the nineteenth century in official documents complaints about a lack of quality of the plans and the building estimates can be found. A project for the construction of a sacristy in the village of Wijtschate for example was in 1891 rejected because neither the design nor the estimate presented the required quality. As a conclusion the provincial authorities advised the municipal council to contact a 'qualified man'.[25] The low quality of designs and a lack of uniformity in their form had been part

of the motivation to create the function of provincial architect in most Belgian provinces. These civil servants not only controlled municipal building projects, but also were in numerous cases responsible for the designs. In West-Flanders the function was already in 1807 created, being the earliest example in what is now Belgium.[26]

In Belgium only in 1939 the profession of architect was legally recognised. Up till that date a heterogeneous group of engineers, engineer-architects, architects, land surveyors, contractors, carpenters, masons and other craftsmen were involved in the design of private and public buildings. Throughout the nineteenth century the design of public buildings was to a large extent entrusted to 'official architects', being the municipal architects in the cities and the provincial architects for the rural communities. In West-Flanders the provincial architects Pierre-François Buyck (1805-1877) and Pierre Nicolas Croquison (1806-1887) managed to dominate the official building projects in the rural areas since they were responsible for nearly fifty percent of the designs made between 1840 and 1880 (Fig. 2). The other half was assigned to municipal architects, the growing group of private architects or a local contractor, mason or carpenter. Auguste Van Keirsebilck, a contractor from the village of Avelgem, was for example in the 1870s highly active as designer of primary schools and presbyteries in the surrounding region. The diverse educational backgrounds of these designers of public buildings led to a divergent level of design-expertise within this group. Nevertheless an important implication of the legal encoding of public building projects – as translated in administrative documents and procedures – was that designs had to meet up with an equal minimum standard and quality. All designs were essentially inspected on the same principles. The educational inspectors for example used from 1853 for their judgment of primary schools a fixed checklist of eleven points for attention, including the orientation of the building, the size of the classrooms in relation to the number of pupils, ventilation, heating and also the general appearance of the buildings.[27] His critiques were primarily dealing with aspects of size and hygiene and were for similar on designs by official architects, private architects and contractors.

The standardisation of documents and the administrative procedures undoubtedly contributed to the improvement of the architectural and technical skills of the designers of public buildings. The process of advice and decision-making often resulted in an alteration or adjustment of the designs. Professionals whose skills were recognized by the authorities examined the documents, suggested alterations or even corrected the designs themselves. The designers – whether they were architects or craftsmen – had to adjust their projects to these suggestions. The preserved documents often still bear traces of this practice. In this way the administrative processes can be regarded as a form of training through practice. Furthermore the designs – in the form of plans, estimates and building specifications – were the documents through which the building project was communicated to the contractors executing the works, a group who was regularly also responsible for designs. The contractors thus were on the building site working with designs that answered to the official standards. When designing projects themselves, these documents – of which a number of copies circulated – served undoubtedly as models. Moreover by the mid-nineteenth century a considerable number of craftsmen was attending architecture courses at local academies and drawing schools to receive a similar training as architects. These art schools founded in the period 1775-1850 primarily provided an artistic and theoretical education, to a certain extent regarded as complementary to the training through practice of artisans.[28] Official publications like the above-mentioned books by Blandot or standard building specifications were used in the training at the academies, as their presence in the library collections of these institutions indicates.[29]

During the second half of the nineteenth century in Belgium an increasing number of Industrial Schools was founded, institutions which provided a more technical training for artisans as a supplement to their practical experience. The responsibilities of these schools in the building industry became the practical organisation of construction works and the translation of broader design concepts into concrete and practical tasks for their workforce.[30] The organisation of a mere appropriate training 'strongly supported contractors' professionalisation throughout the nineteenth century'.[31] This evolution to a better distinction between the various professional groups and their distinct role in the construction process is also reflected in the administrative documents and procedures. The building specifications for example clearly defined the responsibilities of both the architect and the contractor or, in other words, distinguished two groups of professionals. The regulations in force also pointed at the incompatibility between one the hand designing a project and other hand executing these works. Official architects had to control municipal building projects and were at the same time allowed to design similar projects. In this way they became competitors to other architects, whose projects they supervised, a situation that could lead to abuses. For this, they were from the late nineteenth century onwards more and more prohibited to design projects in favour of an exclusively supervisory task.[32] As such three, more or less, distinct professional groups came to the fore: practising architects, supervising architects and contractors. Nevertheless the distinction between these groups often remained vague, a problem that only found its final solution with the 'architects law' of 20 February 1939. Unmistakably the documents generated in the context of public building projects form, together with aspects like education and professional networking, crucial sources for understanding the professionalization processes of both architects and contractors. [33]

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Endnotes

1. This research is part of the author's doctoral research *De provinciaal architecten in West-Vlaanderen (1807-1914). De betekenis van een openbaar ambt voor het 19e-eeuwse architectuurlandschap in West-Vlaanderen*, supervised by Professor Luc Verpoest and Professor Krista De Jonge and funded by the Research Foundation Flanders (FWO).

2. Verpoest, "Twee eeuwen scholenbouw".

3. This was also indicated in articles 76 and 77 of the Municipal Law (1836).

4. Raadschelders and Rutgers, "Evolution," 78.

5. Borman, *Répertoire de doctrine*, 363.

6. "Circulaire betrekkelijk de over te leggen stukken bij het aanvragen van Rijks Subsidien tot het bouwen, herstellen of vergrooten van Kerken enz.," *Verzameling der akten van algemeen bestuur der Provincie West-Vlaanderen* (1830), 263-4.

7. On the history of the Royal Commission for Monuments see: Stynen, *Onvoltooid verleden*.

8. "Instructions pour la conservation des monumens et édifices publics," *Recueil des actes d'administration générale de la Province de Flandre Occidentale* (1835), 688-9. Stynen, *Onvoltooid verleden*, 32.

9. "Exécution du programme adopté par le Gouvernement pour la construction du bâtiments d'école," *Mémorial administratif de la province de la Flandre Occidentale* (1853), 552-61.

10. "Circulaire du ministre de la justice relative à la construction de bâtiments appartenant à des établissements de charité," *Pasinomie* (1852), p. 120-1.

11. Bertels, "Building the city," 289-300. Bertel, "Technical discourses," 268-73.

12. *Instructions ministrérielles concernant la construction des Maisons 'Ecoles* (Brussels: Heger, 1852).

13. Lambert Blandot, *Maisons et écoles communales de la Belgique* (Paris: Noblet et Baudry, 1864).

14. Bruges, State Archives, Archive Provincie West-Vlaanderen, 4ᵉ afdeling, 103.

15. Bruges, State Archives, Archive Provincie West-Vlaanderen, 4ᵉ afdeling, 284.

16. Bertels and De Jonge, "Building Specifications," 197-202. Cornilly, "Contractors of".

17. Borman, *Répertoire de doctrine*, 14.

18. Bertels, "Building the city," 379.

19. Borman, *Répertoire de doctrine*, 423.

20. *Mémorial administratif de la province de la Flandre Occidentale* (1858), 450-3; (1859), p. 516-7.

21. See for example a cirucular letter from Minister Alphonse Vandenpeereboom (1812-1884) dating from 1864. Stynen, *Onvoltooid verleden*, 305.

22. Cornilly, "Belangenconflict tussen," 569-76.

23. Van de Vijver, "Architectuur die heelt," 60-1.

24. See for example the royal architect Tilman-François Suys (1783-1861), the city architect of Ghent Louis Roelandt (1786-1864), the city architect of Antwerp Pierre Bourla (1783-1866) and the city architect of Tournai Bruno Renard (1781-1861). They were teaching architecture in the academies of respectively Brussels, Ghent, Antwerp and Tournai. Stynen *Onvoltooid verleden*, 31-2.

25. Bruges, Provincial Archive West-Flanders, 3e afdeling, 3772.

26. Cornilly, "Belangenconflict tussen," 565-76.

27. "Exécution du programme adopté par le Gouvernement pour la construction de bâtiments d'école," *Mémorial administratif de la province de la Flandre Occidentale* (1853), 552-61.

28. Verpoest, "Architectuuronderwijs in België," 99-101, 156.

29. Poperinge, City archive, MA 519.

30. D'Hoker, "Ontwikkeling van het nijverheids". Bertels, "Building the city," 182.

31. Bertels, "Building the city," 195.

32. Cornilly, "Belangenconflict tussen," 582-90.

33. Verpoest, "Architectuuronderwijs in België," 276-86. Van der Woud, "Professionalisering en integratie," 165-7.

Urban Representations of the Temporal

SESSION CHAIRS:

Michael J. Schreffler (Virginia Commonwealth University, U.S.)

Nancy Stieber (University of Massachusetts Boston, U.S.)

Scholarship on the representation of urban space has explored the ways in which visual images of cities project meaning onto the built environment. One aspect of this phenomenon is temporal. Indeed, images of unbuilt architectural projects and utopic urban plans may imply an orientation to future time, while exaggerated representations of historical landmarks look to the past. Other images purport to show the phases of development of a city and thus imply a progressive view of time. Still others may emphasize the relationship between the modern and the ancient and imply cyclical time. This session explores the wide range of temporal dynamics in urban representation. To that end, we invite papers that examine temporality in images of cities from the fifteenth to the nineteenth centuries.

We will particularly favour papers that focus on the historiographical implications of visual representation: how is the image conveying, supporting, arguing for a particular historiographical position and in service of what interests? The urban representations may be in any medium, including but not limited to prints, paintings, and photographs; not excluding maps, iconic images, touristic guides, or popular ephemera. We hope to foster a comparative discussion about the myriad ways that the representation of time has been embedded in the visualization of the city.

DISABITATO: URBAN MORTALITY AND ETERNITY IN EARLY MODERN IMAGERY OF ROME

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When considering the dimension of time in urban representation, there is an argument to be made that all city imagery must contend with the temporal. There is always an urban history to grapple with, and all the transformations to a city's fabric that go along with its existence over time must also be considered. Of course this is especially true for cities that grow slowly and organically, but even in imagery of planned urban environments constructed *ex novo*, like the ideal, fortified city of Palmanova laid out in the 1590s in north-eastern Italy, or l'Enfant's Washington DC of 1791, a reflection of earlier cities is sedimented in the urban design. In imagery of cities with a longer history, the challenge is analogous to making a portrait of a human being, which is meant both to capture an individual's appearance at a single stage of life, and to distil something timeless worth remembering. It is no coincidence that early modern representations of cities were commonly called portraits. These works were similarly concerned with presenting a visual biography of their subject, not a simple snapshot of its current state.

That said, some cities have a longer, more turbulent history than others, and thus pose particular challenges to representation. Jerusalem and Constantinople come to mind, but I have chosen to focus on Rome in this paper because no other city shares such a rich tradition of imagery. As a palimpsest of history, archaeology, and myth, the Eternal City has proven endlessly fascinating to artists, and has been depicted more frequently than any other place in the world. Rome was a magnet for pilgrims and proto-tourists, so there was surely a commercial impetus fuelling image production—a factor that is particularly pronounced once we enter the realm of print. Whatever their motivations, artists in the Renaissance, especially, struggled to negotiate the shifting sands of a patrimony that was ancient, medieval, modern, pagan and Christian. Rome's very condition was seen as emblematic of the self-proclaimed cultural renewal, on one hand, and the ravages of time, on the other. Over the course of the sixteenth century, Rome came to symbolize the Church triumphant to Catholics, and worldly corruption to Protestant Reformers: growth on the one hand, decay and degeneracy on the other. Mortality and its opposite—eternity—were leitmotifs of the city's symbolism, spurred by a constantly changing cityscape where modern marvels were rising even as ancient ones were falling.

In imagery of Rome, artists confronted the dimension of time in ingenious ways, pressing it into the service of a wide array of messages. During the late Middle Ages and into the early Renaissance it was common to present Rome's decline from its ancient greatness as a moralizing allegory: urban change over time as deterioration. A case in point is a miniature of 1477 from a luxury manuscript—now in the Bibliothèque Nationale de France in Paris (BNF Italien 81)—of the *Dittamondo*, a fourteenth-century geographical poem recounting the journey of the author, Fazio degli Uberti, to visit the world's cities.[1] His guide on this journey is the ancient geographer Solinus, who plays the role of Virgil to Fazio's Dante. In the illustration, they have arrived in Rome, which is personified by a wretched widow huddled by the banks of the Tiber. Surrounded by monuments scattered across a schematic cityscape, she looks up meekly, beseechingly, at them. This once-great lady has been tragically humbled. She seems to bear out Petrarch's lament over Rome as a 'crumbling city' populated by 'broken ruins'.[2]

There was no denying that Rome had suffered a number of vicissitudes. Since late antiquity, the city had been sacked repeatedly, decimated by plague, abandoned by its leaders—first the emperors and, a millennium later, the popes—and the city was weakened further by internal feuding among baronial families and disintegrating infrastructure. The population had dropped from over 1,000,000 to fewer than 20,000, most of whom clustered close to the banks of the Tiber, not unlike the pathetic old widow in the miniature.[3] By the late fifteenth century, however, Rome's situation had begun to improve.[4] The popes had returned from Avignon and initiated a series of urban and cultural renewal projects: aqueducts were being repaired; churches and palaces were in the midst of construction; the population began to increase.

In imagery, optimism about the city's current state became the dominant theme, but the earlier nostalgia for a lost golden age never disappeared. Sometimes the two even coexisted within a single representation. Even in the *Dittamondo* miniature, there is evidence of the enduring fascination of Roman monuments or *mirabilia*, pagan as well as Christian, beneath the sanctimonious façade. Alongside the most important pilgrimage churches, for example, the Coliseum appears fully intact. To the left of it, the equestrian statue of Marcus Aurelius appears below the Lateran Basilica, and above a stretch of aqueduct. Beneath that, the Pantheon, which had been converted into a church in the seventh century, rises prominently. Ancient landmarks share centre

stage with Christian churches, betraying little sign of decay, or of the humility that characterizes *Roma* the woman.

This paper will explore the range expressive possibilities by focusing on Rome's *disabitato*, or uninhabited zone, in a series of images spanning roughly a century, from the late 1400s to the late 1500s. These images encompass various media and were made for vastly different purposes and publics, but each is, in its own way, exemplary of a certain class of image, and reflected certain expectations or desires on the part of its audience. Those factors, as we shall see, helped to shape their treatment of the *disabitato*: a vast swath of pastureland and wilderness that took up much of the eastern and southern expanse of the city within the third-century Aurelian walls.[5] Now, this sprawling, under-populated topography was never truly a wasteland. Several of the city's major basilicas were located here—namely Santa Maria Maggiore, Saint John Lateran, and Santa Croce in Gerusalemme. In the Renaissance, this zone was increasingly dotted with vineyards, gardens, and rustic retreats. The very name *disabitato*, so redolent of absence and desertion, is not from the Renaissance. It is, rather, a modern (and quite catchy) term coined by Richard Krautheimer.

That said, the *disabitato*, in its size and sparseness, presented unambiguous evidence that Rome had contracted dramatically since its heyday. The impressive ruins that loomed across this zone's surface heightened awareness that it had witnessed a former, glorious life, long over. The densely populated power- and nerve-centres of the city lay elsewhere, in the Campo Marzio and the Vatican. But precisely this liminality—and this dramatic reversal of fortune—made the *disabitato* the most contested, intriguing site in imagery of Rome. More than any other feature, it spoke to the vagaries of time as a regressive or progressive force. The *disabitato* could evoke the slow and painful death of the city, or alternatively the promise of urban rebirth.

A woodcut of 1493—one of the earliest printed views of the city—took an extreme stance by neutralizing the *disabitato* as a witness to the damaging effects of time (Fig. 1).[6] This image was one of many city portraits that appeared in the celebrated *Liber chronicarum*, or Nuremberg Chronicle, published by Anton Koberger. We are gazing out upon the city from the northwest. The Aurelian walls occupy the foreground, with the Porta del Popolo, the northernmost city gate, at far right, and the Porta Pinciana directly ahead of us. Space is oddly collapsed. Toward the left-centre of the image, the Pantheon presses forward as though seen through a telescope. At upper right, our gaze is drawn to the pinnacle of the image, the Vatican, where Old Saint Peter's rises proudly on the other side of the Tiber, magnified such that it dominates the image fully. The *disabitato* is reduced to a narrow sliver, a threshold space between the city walls and the vibrant urban density of the centre. The famous horse-tamers statue on the Quirinal and a handful of crumbling ruins scattered across rolling hills are all there is to lend topographical specificity to this zone and to make it more than a no-man's land. This image of Rome skips blithely over the most potent site of decline to show a city that exists decisively in the present, populated by Roman marvels both classical and Christian. All but negating the existence of the *disabitato*, it sings the praises of a reenergized Rome by writing away the city's past travails. Admittedly, the views from the Nuremberg Chronicle—those that were not generic—tended to be iconic. That is, they conformed to a formula for depicting walled sites where one or two key features dominated and emblematized the city. Rome was too complex, its topography too uneven, to conform neatly to this scheme, so elision was inevitable. Still, the choice to marginalize the *disabitato* and favour the centre was deliberate and meaningful.

A related image from several decades later takes the opposite approach to the *disabitato* and espouses an entirely different rhetoric (Fig. 2). This anonymous painting on canvas from ca. 1538, now in the Palazzo Ducale in Mantua, was based on the same prototype as the view in the Nuremberg Chronicle. The model for both was a now-lost engraving of Rome by Florentine printmaker Francesco Rosselli dating from about 1485-90.[7] This painted version, like the earlier woodcut, shows the city from the northwest, with the Aurelian walls in the foreground, the Pantheon visible toward the middle, and the Vatican at upper right. Yet a gulf now separates the viewer from those monuments. There is a sense of greater distance to the centre, and the view is not telescoped to magnify the remote monuments. The image extends farther to the right and left, encompassing the entire circuit of city walls. In hindsight it is clear just how cropped the woodcut was. The painted version also shows the city from a higher vantage point, in a bird's-eye view.

Figure 1. Michael Wolgemut and Wilhelm Pleydenwurff, image of Rome from Hartmann Schedel, *Liber Chronicarum*, Nuremberg: Anton Koberger, 1493 (woodcut, 23 x 53 cm). (source: Private collection)

Figure 2. Francesco Rosselli (after), View of Rome, ca. 1538 (tempera on canvas, 118 x 233 cm). (source: Palazzo Ducale, Mantua)

The sum total of all these modifications is that we now have a panoramic perspective onto the *disabitato*, which takes up the foreground and the entire left side of the image. Its breadth provides a counterpoint to the densely packed northern quadrant of the city at right, establishing a visual yin-and-yang relationship between the dead and living parts of Rome. This view does not hide the fact that Rome had shrunk dramatically since late antiquity. Instead, it seems to revel in it. Signs of life in the present are minimized. The *disabitato* becomes a poetic landscape, with bits of ruin poking out here and there, fragmentary emblems of a vanished golden age. If the woodcut view marginalized the *disabitato* and with it Rome's troublesome past, this painting savours the city's temporal pathos.

Marginalia in the foreground—abraded but decipherable—make this sentiment explicit. A banderol bearing a Latin inscription speaks for Rome in the first person: 'How great I once was, now only the ruins show'.[8] Further to the right, a banner contains a vernacular verse that reinforces the same message. Addressed now *to* Rome, it questions her lost magnificence: 'Where, Rome, are your honours from ancient times?/ …Gates, arches, temples, statues, arms, obelisks,/ Baths, colossi, fora, amphitheatres/ … Where are they?/…No earthly state [is] therefore eternal,/ As one learns from you…'.[9] In this moralizing commentary of the *ubi sunt* variety, Rome's decline symbolizes the fleetingness of earthly achievement. To press this point, the destructive power of time is personified by a winged figure to the right of the text—now barely visible—menacingly brandishing a scythe. In this way, Rome becomes an allegory of human hubris, just as it was in the *Dittamondo* miniature.

This longstanding trope is not, however, the only message of this painting. The view might incorporate a timeworn rhetoric of loss, but it also represents Rome in a distinctly celebratory way—as a stage for marvels from all eras. Among the myriad examples that could be cited are the Pantheon next to the Column of Marcus Aurelius, St. Peter's Basilica, and the Castel Sant'Angelo. Pagan and Christian monuments appear in loving detail, disproportionately large. The surrounding urban density speaks to boisterous human activity in the present. In sum, the optimism of a city rising balances the nostalgia of a city humbled. Such a mixed response to Rome was far from unusual. The sight of its faded grandeur could spark a sense of nostalgia and wonder together, as expressed eloquently by the late-medieval commentator Magister Gregorius, who wrote: 'although all of Rome lies in ruins, nothing intact can be compared to this'.[10]

Because we can assume it was a commissioned work, the patronage of the Mantua canvas might provide a clue to its dual message. The painting is thought to have been one of a cycle of murals depicting famous cities that Isabella d'Este, wife of Francesco II Gonzaga, wished to display in an arcade of the ducal palace of Mantua in the 1530s.[11] In that context—essentially a hall of state—the view of Rome served as a statement of power and prestige. Although the Gonzaga had no claims to Rome, the view shows their emblem, the eagle, emblazoned on a yellow pennant fluttering over the city, next to the flag of Rome, at the bottom margin. Through this image, the rulers of Mantua took symbolic possession of the Eternal City—a claim that was only worth making if the city still preserved some of its grandeur. Hence Rome is not just reduced to a tragic cityscape, but also commemorated in the painting. It is also important to consider Isabella d'Este herself, for she was one of the most discerning collectors of the sixteenth century, and her intense interest in antiquity might also help to explain the painting's emphasis on Rome's past.[12] The Gonzaga court in general cultivated a highly learned, humanist atmosphere.

But why might Isabella or the Gonzaga court have favoured the rhetoric of loss promoted by this image—its presentation of the ghostly *disabitato* as emblematic of Rome? We can only speculate, but it is likely that this manoeuvre, too, carried a political message that fit the larger program of the image's elite patronage. Perhaps Isabella d'Este or the advisers who oversaw her hall of cities wished to suggest that Rome's time had come and gone. A capital of the past, it was now supplanted by centres of power and culture that lay elsewhere—like Mantua itself, a new Rome. Regardless of the intentions, this case again demonstrates that multiple implications could be concentrated in an image of the allusive urban palimpsest, none of which was necessarily seen to contradict the others.

In contrast to a work like the painting for the ducal palace in Mantua, printed images were produced for a larger public, and their messages were intended to resonate more broadly. These works therefore reveal more about cultural attitudes in general. So, was the notion widely held that Rome was a half-dead city whose glory lay largely in the past? The magnificent map published in 1577 by Stefano Du Pérac, a French etcher who worked in Rome, offers some insight onto that question.[13] Again, the interpretive key is to be found in the treatment of the *disabitato*. At first it seems that the answer is yes. Like the anonymous artist of the painting in Mantua, Du Pérac placed the *disabitato* in the foreground and made no effort to disguise its vastness. Yet Du Pérac shows this zone in development, not deserted. Its growth is evident in the neatly ploughed fields in the midst of cultivation; the walled, demarcated gardens and properties; new streets like the Via Pia and Via Merulana from the 1560s and 1570s; and new constructions like Michelangelo's church of Santa Maria degli Angeli, also from the 1560s, rising suggestively from the ruins of the Baths of Diocletian. The *disabitato* has been individualized here to an extent far beyond its stereotyped representation in the painting. Rewritten as a testament to the regenerative effects of time, it is an ode to the city's future, not its past.

This future would become even more promising a decade later when Pope Sixtus V (r. 1585-90) laid out a new network of streets across this supposed wasteland, thus creating the infrastructure for Rome's further expansion—or rather, its re-expansion into areas that lay fallow. Already in Du Pérac's Rome, the *disabitato* is no longer burdened with the weight of allegory or pathos. It is, rather, a living, breathing topography that speaks to a living, breathing city—if not eternal (and who can know?), then at least remarkably enduring. Although time constraints prevent me from citing additional examples, suffice it to say that this cheerier outlook was much more prevalent by the late sixteenth century than was the old-fashioned sentimentality of the painting in Mantua, whose somewhat antiquated message was dictated by specific circumstances and representational imperatives.

As a group, these three views of Rome embody complex meanings that are neither unequivocal nor static. They bear witness to the extraordinary range of approaches to a city's temporality that could be brought to bear on a single place. The *disabitato*, a major part of Rome's physical fabric if not of daily life in the Renaissance city, was a particularly polarizing site, but it was also exemplary. Any cityscape could become a platform for projecting ideas and ideals about a city's long and continuing existence, its identity across a continuum of time and not just an expanse of physical space.

Endnotes

1. Amato Pietro Frutaz, *Le piante di Roma*, 3 vols. (Rome: Istituto di studi romani, 1962), 1:129-30, no. 81.

2. Petrarch, "Walks in Rome," letter to Giovanni Colonna di San Vito (*Ep. Fam.* VI, 2), 1337-41, in David Thompson, ed., *The Idea of Rome, from Antiquity to the Renaissance* (Albuquerque: University of New Mexico Press, 1971), 173.

3. Richard Krautheimer, *Rome: Profile of a City, 312-1308* (Princeton, NJ: Princeton University Press, 1980).

4. This development is traced thoroughly in Italy Insolera, *Roma. Immagini e realtà dal X al XX secolo* (Rome: Laterza, 1980).

5. On the *disabitato*, see Krautheimer, *Rome: Profile of a City*, ch. 14 ("The Disabitato and the Lateran"); Robert Coates-Stephens, "Housing in Early Medieval Rome, 500-1000 AD," *Papers of the British School at Rome* 64 (1996): 239-59.

6. Frutaz, *Le piante di Roma*, 1:149-50, no. 96; Mario Gori Sassoli, ed., *Roma veduta. Disegni e stampe panoramiche della città dal XV al XIX secolo* (Rome: Artemide, 2000), 138, no. 5; Clemente Marigliani, ed., *Le piante di Roma delle collezioni private* (Rome: Provincia di Roma, 2007), 116-17, no. 8-10.

7. On this painted version and Rosselli's original, see especially Frutaz, *Le piante di Roma*, 1:151-5, no. 97; Marcello Fagiolo, "Quanta ego iam fuerim sola ruina docet: La construzione prospettica e antiquaria della veduta di Mantova," in *Roma veduta*, ed. Gori Sassoli, 69-78 (both with further references). See also my forthcoming article, "Francesco Rosselli's Lost View of Rome: An Urban Icon and Its Progeny," *Art Bulletin* 94, no. 3 (Sept. 2012).

8. "Quanta ego iam fuerim sola ruina docet." Unless otherwise noted, all translations are the author's. For a discussion of the inscriptions and imagery, see Fagiolo, "Quanta ego iam fuerim sola ruina docet." See also Frutaz, *Le piante di Roma*, 1:152-4.

9. 'U' son Roma gli honor de' tempi prisci?/…Porte, archi, temple, statue, arme, obelisci,/ Therme, colossi, fori, anfitheatri,/… U' son?.../ Nullo terreno stato dunque eterno,/ Per te s'impari…'.

10. Master Gregorius, *The Marvels of Rome*, trans. John Osborne (Toronto: Pontifical Institute of Mediaeval Studies, 1987), 18-19.

11. On the connection to Isabella d'Este, see Giovanni Battista de Rossi, "Panorama circolare di Roma delineato nel 1534 da Martino Heemskerck pittore olandese," *Bullettino della Commissione archeologica comunale di Roma* 19 (1891): 330-40 (337).

12. Rose Marie San Juan, "The Court Lady's Dilemma: Isabella d'Este and Art Collecting in the Renaissance," *Oxford Art Journal* 14 (1991): 67-78.

13. Francesco Ehrle, *Roma prima di Sisto V: La pianta di Roma du Pérac-Lafréry del 1577 riprodotta dall'esemplare esistente nel Museo Britannico. Contributo alla storia del commercio delle stampe a Roma nel secolo 16 e 17* (Rome: Danesi, 1908); Frutaz, *Le piante di Roma*, 1:186, no. 127; Emmanuel Lurin, "Étienne Dupérac vedutista e cartografo: la costruzione della pianta di Roma del 1577," in *Le città dei cartografi: studi e ricerche di storia urbana*, ed. Cesare De Seta and Brigitte Marin (Naples: Electa Napoli, 2008), 49-59.

THE URBAN SPACE AS A TIME MACHINE:
REPRESENTING PAST AND FUTURE
DURING EARLY MODERN TRIUMPHAL ENTRIES IN EDINBURGH

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In this paper, I will discuss how and to what end the issue of temporality was addressed in triumphal entries staged in Edinburgh between 1503 and 1633. During this period eight entries took place in Edinburgh, the acknowledged capital of Scotland. These were: the welcome to Margaret Tudor as James IV's bride in 1503, the triumphal entry of Mary of Lorraine as James V's queen in 1538, the celebrations *in absentia* for Mary Queen of Scots' wedding to the French Dauphine, celebrated in Paris in 1558, and Mary's triumphal entry into Edinburgh on her return to Scotland in 1561. In 1579 a triumphal celebration in Edinburgh marked the start of James VI of Scotland's adult rule, and in 1595 James' bride Anne of Denmark was welcomed into the city. After the court left for England in 1603 following James' ascent to the English throne, the King was ceremonially welcomed back in Edinburgh during his visit in 1617, followed in 1633 by Charles I's visit to Edinburgh for his coronation. I will show how in these occasions the urban setting and the ad-hoc temporary additions worked together to enhance the significance of the built environment, transforming it into a representation of temporality. I will demonstrate how transforming the ruler's urban experience into a journey through time strengthened burgh-ruler relationship in early modern Scotland. Finally, I will discuss how attempted alterations to the standardised triumphal ceremony signified a changed perspective of the balances of this relationship. The ultimate crisis of the Caroline years seems to suggest that these alterations represented a different understanding of the burgh's and king's relationship and common past, standing for a problem in communication which will become apparent in the 1640s.

In ancient Rome, triumphal entries were staged to celebrate victorious conquerors, generals and emperors who paraded through the city with their armies, prisoners, and spoils. During the Renaissance, rulers adopted triumphal celebrations of Roman traditions to mark their role as military and cultural leaders, and in an attempt to visibly declare their hegemony, wealth, and power over their subjects and territories[1]. Although eager to be considered equals to their wealthier foreign counterparts, the Stewarts suffered from an annoying lack of funds and were placed in the geographical periphery of Europe. Triumphal celebrations offered them a unique opportunity to stage wealth, culture and military readiness to international observers in a relatively inexpensive way through temporary and eye-catching constructions in canvas and timber, and cosmetic alterations to the urban environment.

As exemplified by Medici's Florence, the city in which the triumphal entry is set was not a mere backdrop for the staging of the monarch's glorification, but was one of the key elements of the performance. In Florence the variations of the triumphal routes over the years represented the ever-changing relationship between the Signori and their city. In 1539 the triumphal procession celebrating the wedding of Cosimo de' Medici and Eleonora of Toledo bypassed the civic and public buildings in the city centre, emphasising the private character of the event. In 1574 Cosimo's funerary celebrations passed right next to those buildings, acknowledging his control of the old republican institutions. In this occasion the procession also performed part of a symbolic 'founding' walk along the Roman city's perimeter, confirming Cosimo's role as *pater patriae* and founder of a renewed city[2]. Triumphal entries staged in Paris in the sixteenth century instead followed a more steady route between Gate St Denis and the Palace of Justice, symbolising a less mutable relationship between ruler and capital city[3]. The triumphal route becomes a key element of the entry, influencing the viewers' perception of the city's history and of its relationship with the ruler.

By the beginning of the sixteenth century, Edinburgh had become the unofficial capital of Scotland and the Stewarts' favourite residence. It offered the security of the traditional lodgings at Edinburgh Castle, but also the comfort and luxury of the new apartments at Holyrood Palace, renovated in the early 1500s by James IV. Between these two residences stood Edinburgh and Canongate, two burghs founded by King David I around 1130. The burgh of Canongate had been founded to provide services to the Abbey of Holyrood, later superseded by the royal palace of the same name. The adjoining burgh of Edinburgh, of much older date, had been granted the status of royal burgh by King David and enjoyed commercial and administrative rights: it could collect taxes and revenues, build a defensive perimeter, and host a market. By granting communities of skilled freemen control over specific areas and the right to found a burgh, David I was creating a network of centres of power and wealth faithful to the crown and responding to him[4]. Scottish rulers and Scottish burghs -Edinburgh in particular- enjoyed a win-win situation based on a long tradition of mutual support. On one hand, thanks to the rulers' support, burghs flourished and their role as the country's economic backbone

granted them some bargaining power. On the other the ruler strengthened his control over the land, and these wealthy commercial towns were ready to provide him with goods, men, and loans. In addition, Scottish rulers' claim to the throne –emphasised by the sympathetic works of courtiers and scholars Hector Boece, John Belender, and John Mair- was presented as solidly grounded in legitimate inheritance[5]. According to tradition, Scotland was the only western nation not to have succumbed to the dominion of the Romans and whose kings' line stretched back uninterruptedly to Roman times, making them one of the most ancient and politically solid monarchies of Early Modern Europe. This also meant that Scottish rulers were virtually bound to recognise and embrace their ancestors' political moves, and could hardly back down from fulfilling their traditional obligations towards the burghs.

Triumphal entries in Edinburgh were organised by local authorities under the supervision of high-profile, learned courtiers –such as David Lindsay in 1538, to whom the burgesses and guild-members responsible for the decoration of the various stations were to answer[6]. They were to take the rulers' preferences and expectations into consideration, but they were also to present issues and topics of local relevance, to be brought to the king's attention in the informal and merry atmosphere characterising this day of celebrations. Scotland's history had the potential to both exalt and bind ruler and country. It reminded both of their obligations towards each other, it legitimated their expectations and aspirations and it represented a topic welcome to both parties, to be represented during urban celebrations. However, while it was in the burgh's interest to maintain the status quo and visually represent it through a repetitive triumphal route, towards the end of the sixteenth century Scottish rulers started appreciating the advantages of an increasingly absolutistic idea of monarchy. While the burgh had an interest in maintaining a traditional kind of entry where the civic and the royal parties met as equals, the Stewarts were now inclined to modernize their views on royal power. While the steady route centred on urban landmarks represented the burgh's more traditional point of view, the more flexible decorative apparel answered to the monarch's increasingly absolutistic expectations.

Triumphal routes in Edinburgh followed a fixed route, welcoming the ruler into the royal precinct at West Port -or at Bristo Port in 1503- and accompanying him down the High Street, the burgh's spinal cord on the edge of a long volcanic ridge. From the West Port the procession moved up the Upper Bow, the burgh's western gate before the border was moved outwards following urban expansion. From the Upper Bow, the procession moved to the Butter Tron, one of the burgh's weighing locations, and then down the High Street to burgh's very core, the cluster of Market Cross, St Giles Kirk and the Tolbooth From here, the procession moved down to the Salt Tron, another weighing facility, and then to the Nether Bow, the lower gateway marking the end of the burgh and the beginning of its lesser neighbour Canongate. All triumphal entries organised between 1503 and 1633 followed this pattern[7], and while Edinburgh's geographical conformation might partially justify this choice by making it one of the few routes practicable, the buildings employed as key points of the celebrations were also symbolically charged. These buildings and landmarks expressed the burgh's own identity and traditional privileges, based on its history and on the bond with the ruler; they represented the burgesses' rights and the spaces to exercise them.

The urban gateways represented the burgh's right to build perimeter walls to defend itself, to control access and request payment from foreign merchants. The Tron buildings provided burgesses, merchants and customers with the weighing facilities essential to buy and sell goods, and expressed the burgh's right to control such exchanges when made within its territory. The Market Cross, the Kirk of St Giles, and the Tolbooth represented the geographical and symbolical heart of the burgh; the cross was the visible symbol of the burgh's right to hold a market, the Kirk represented its main religious centre and doubled up as Parliamentary hall, and the Tolbooth stood for its right to administer itself, collect taxes, and judge and punish criminals. When placing these buildings on a map, the symmetry of this arrangement becomes quite apparent: the gateways represent the initial and final stations of the entry, the way in and the way out of the burgh. The Market Cross-Kirk-Tolbooth cluster stands in the centre of town, while the two weighing facilities –sensibly placed at the upper and lower end of the market area- stand between the place of access and the centre. The Over Bow or Upper Bow, as previously mentioned, had represented the earlier eastern border of the burgh since its foundation and until supplanted by the West Port, constructed between 1477 and 1507[8]. The Netherbow or *arcus inferior* also had a predecessor, which stood as high as Blackfriars wynd and was superseded before 1369 when the Netherbow itself appears in the records[9]. When adding this information to a map of the burgh, it becomes clear that the Edinburgh procession was not merely a promenade throughout town visiting the burgh's most prominent landmarks, but it followed a route border-periphery-core-periphery-border. The core also represented the burgh's founding values and its very reasons to exist as granted by David I. The outer parts of the burgh between the core and the site of the first urban gateways represent its successive phases of enlargement, and the areas between the first and the second gateways represented even later developments. One can also notice how there is no royal palace as key starting point or destination of the journey: the ruler's own residence, Holyrood Palace, was outside the perimeter of the burgh, and the lack of such a focal point within the precinct underlined the ruler's position as a most welcomed guest in a separate spatial entity, neighbouring but not overlapping his own private space.

In Edinburgh there is no sign of the Italian tradition to perimeter the outline of the Roman settlement as an act of homage towards a ruler founding the city anew, as Edinburgh was not a city of Roman origin and there was no Roman perimeter to retrace. However, this parade through the burgh's history could be described as a Scottish version of a founding walk, which efficaciously connected the ruler to the burgh's historical development. Moving from West Port to Netherbow, the ruler was shown through the city in its developing, beginning with the borders representing the newest expansion of the city, to the older core with the buildings representative of the city history, and out again through the newest external parts and the city gate. Throughout the route, the ruler saw buildings connected with mercantile traditions and local history, standing symbols of the traditional privileges the sovereign's ancestors had granted, and which the ruler was now invited to recognize and reaffirm. As the key to the monarch's right to rule was his legitimacy and rightful inheritance, it becomes virtually impossible for the ruler to refuse to continue the tradition of royal support, and the bond between ruler and burgh is strengthened once again.

The rulers' ancestors appeared in the entrance in many occasions: in 1579 King James VI was shown *'a mercat place of salt, wharupon was payntit the genealogie of the Kings of Scotland'*[10], in 1590 King James and Queen Anne were shown children dressed to represent the king's ancestors and sitting on the branches of an artificial tree[11], and in 1633 Charles I saw as many as a hundred and seven Scottish kings, probably painted on canvases, decorating the third triumphal arch built for his arrival[12].

Showing the burgh's historical development as a dependent of the benevolence of the monarch's ancestors created a personal bond between the present ruler and the burgh itself. The vision of plenty and harmony presented by the triumphs and to be enjoyed by the country in the future depended on the continuation of this historically-based collaboration. This triumphal route was regularly repeated with little or no alterations between 1503 and 1633, portraying an emphatically steady relationship between the parts involved. However, the temporary decorations applied to that route evolved over time, and towards the end of the XVII century they spoke the language of obsequiousness and flattery. In 1503 James IV and Margaret Tudor had performed repeated acts of homage and obedience, kneeling and kissing the relics presented to them by Edinburgh's religious congregations at the entry Port, in the Overbow/Butter Tron area, and again in the Holyrood Church[13]. In 1561 Mary Queen of Scots' Catholic faith was challenged by presenting her with an English bible at the Butter Tron, and with a harsh pageant at the Salt Tron showing God's vengeance upon idolaters; at the Netherbow a scaffold showing a dragon was burned, a possible reference to the hellish beast of the Revelation[14]. However, in 1579 young King James VI was flattered by comparisons with the wise King Salomon at West Port, and by actors interpreting Bacchus[15] and King Tholomeus cheering his reign as wealthy, fortunate and long-lasting at the Market Cross and at the Netherbow respectively[16]. An increasingly classical language –highly fashionable at the other European courts- was also frequently adopted: the single Bacchus pouring wine to the passer-byes at the Market Cross in 1579 was substituted by as many as seven classical deities performing the same task in 1633[17]. Flattery became the rule: in 1633 Charles I's modest successes in promoting the Scottish colonies in North America were hailed as outstanding enterprises at the Overbow[18]. Speeches and decorations focused on good omens for the future, complimentary messages, and celebrative themes. While the physical locations of the triumphal stations remained the same and embodied the old-fashioned relationship based on mutual support and recognition, the kind of royal power presented throughout the decorations and accessory performances appears increasingly centralized, absolutistic, and ruler-centric. During the sixteenth and at the beginning of the seventeenth century, the burgh's and the rulers' views on what their shared history is and how to represent it apparently starts to diverge. While the bond burgh-monarch had been instrumental in determining the success of David I's reign and in those of his descendants, James VI/I and Charles I are wealthy rulers of a unified Britain and are now looking beyond Edinburgh and the usual reminders of their traditional mutual obligations. Charles I in particular, when coming back for his coronation visit in 1633, showed little understanding of the way Edinburgh's urban spaces represented the burgh's traditional identity. When refused by the burgh's authorities permission to stage his coronation in the Kirk of St Giles[19] -a proposal going against all precedents and appearing probably an invasion of an emphatically civic space- Charles I decided for a personal addition to the coronation ceremony. The night before the ceremony was held in Holyrood Abbey, he rode to the castle to have supper there, and progressed from the Castle to Holyrood Abbey on horseback on the following day followed by his entourage[20]. This extremely interesting innovation seems to show how the city was ostentatiously perceived as the king's own dominion. Having been refused the chance to stage a celebration of absolute monarchy in the city's main urban stage, he appropriates the whole main street to host his parade of power. In addition, Charles' strong support for the construction of a new Parliament in Edinburgh in 1636, to become a forth element of power in the Market Cross-St Giles-Tolbooth historical node well represent Charles' attempt to permanently influence the urban fabric of the city. Charles urban improvements and his new parliament represented a way to force his views of centralized royal power onto his northern capital[21]: through appropriating and altering the buildings and spaces representing the city's collective memory, it is the past itself which is adapted to the ruler's iconographical requirements.

The issue of temporality was frequently staged during triumphal entries organized in Edinburgh between 1503 and 1633. Historical themes had the potential to both exalt and bind rulers and burghs, and triumphal entries became perfect occasions for the country's history to be staged, to remind each party of their roles and responsibilities towards each other. The late Scottish entries seem to show an effort from the burgh's part to maintain this relationship through the permanence of a highly traditional triumphal route. Charles I's act of defiance in 1633, taking possession of the burgh's urban space during an unauthorized cavalcade while on his way to his coronation, represent the Stewarts' refusal to keep up their side of the bargain. Secure on the throne of Britain and far removed in London, he might have felt the back-up of the burgh was unimportant, the legitimation provided by history obsolete, and representation of temporality redundant. One may wonder if Charles' apparent lack of sensibility for traditional symbolism and historical precedents may have had an influence in his later fall from grace and unhappy end.

Endnotes

1. Mary Beard, *The Roman Triumph* (Cambridge: The Balknap Press of Harvard University Press, 2007); Roy Strong, *Art and Power: Renaissance festivals 1450-1650* (Woodbridge: Boydell, 1984); Gordon Kipling, *Enter the King: Theatre, Liturgy, and Ritual in the Medieval Civic Triumph* (Oxford: Clarendon Press, 1998).

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16. Colville, 179.

17. *The Entertainment of King Charles*, 13.

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CARTOGRAPHIES OF CITIES PAST

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> ... there occurring nothing new under the sun ... it is primarily in past events that we can draw rules of prudence and conduct for the present and the future.[1] (Nicolas Delamare, *Traité de la police*, 1705)

How do you draw something you have never seen? How does one picture things that no longer exist? The question of representing things unseen or past poses all sorts of practical and theoretical difficulties. Some of these have been explored: in architectural history, for example, we may think of Richard Krautheimer's seminal essay on the medieval buildings that were meant to be imitations of the Holy Sepulchre at Jerusalem, or Mario Carpo's studies on the tradition of ecphrasis and the role of printed images in shaping the visual culture of the Renaissance.[2] Within this constellation of issues (representation, copy, reproducibility, etc.) I propose to sketch a brief and necessarily incomplete history of a special form of representation, one that has to do with time itself, with the figuration of temporal dynamics and, in particular, with the graphic representation of urban history. I am concerned with one type of city maps, a type that is familiar to all students of urban history—anyone who has ever seen a diagram of a Roman *castrum*—and yet has been so overlooked that we even lack a proper name for it. In this paper, I shall explore maps that depict past states of a city—the 'cartographies of cities past'.

The earliest fully-developed example of what, short of a better word, we may call 'conjectural' or 'fictive' city maps dates, I believe, to the beginning of the eighteenth century. By 1705, when the Paris police officer and historian Nicolas Delamare published the first volume of his great *Traité de la police*, there was no shortage of maps depicting the city in its present state. No one, though, had ever attempted to systematically represent Paris through the phases of its historical development. Delamare did. Drawing on hundreds of printed and archival sources—from the writings of Julius Caesar, Strabo, and Ptolemy, to medieval charters and legal titles, descriptions of *antiquitez*, building contracts, or letters patent authorizing public works—Delamare painstakingly retraced the city's history and produced a set of eight extraordinary maps portraying Paris from its mythical origins to what he called '*la grandeur, & la magnificence*' the city had reached under Louis XIV—from a hut village called Lutèce to Paris the capital of the *grand siècle*.[3] (Fig.1)

In Parisian cartography, there is hardly any precedent for such a phenomenal representation of the city's temporal development. This is also the case, I believe, for practically all major cities of early modern Europe—with one, very notable exception: Rome.

It is no surprise that the 'Eternal City' (how apt this long-worn expression seems here) proved to be an exceptionally fertile ground for experiments in historical and cartographic imagination: it is there that modern antiquarian and topographical scholarship first emerged, once the medieval tradition of the *Mirabilia urbis Romae* was supplanted by the new critical method of humanists such as Poggio Bracciolini and Flavio Biondo. Throughout the fifteenth and early-sixteenth century, though, few scholars seem to have tried to actually represent ancient Rome. When maps were made, their object was to record the present city, not to picture the ancient one. Alberti is an example. In the *Descriptio urbis Romae*, he devised a brilliant method with which anyone would be able to produce his own map of the city and draw the walls, the river, and the main monuments '*uti esse*

Figure 1. *Lutèce ou Premier plan de la ville de Paris* [detail]. (source: Nicolas Delamare, Traité de la police, Paris, 1705)

per nostra haec tempora cognovimus', 'as we know them to be in our time'.[4] Even Leo X's famous project of archaeological reconstruction was, to some extent, ambiguous. In his letter to the Pope, Raphael recalled how Leo had asked him '*ch'io ponessi in disegno Roma anticha*', that he 'put into a drawing ancient Rome'; but it is unclear whether the goal was to produce an image of ancient Rome or—the difference is crucial—an image of the ruins of Rome.[5] The first pictures of ancient Rome were the work of two rather uncommon scholars: Annius of Viterbo and Fabio Calvo. The Dominican theologian Annius included a view of ancient Rome in his *Commentaria ... super opera diversorum auctorum de antiquitatibus*, of 1498, a book in which he purported to present several lost works of ancient authors; among the texts, many of which were later proved to be forgeries, he presented one by the Roman historian Fabius Pictor, and accompanied it with an image illustrating pseudo-Fabius's account of Rome's founding, eventually making a case, in both text and image, for an Etruscan primacy over Roman culture.[6] Calvo, a philologist who had been close to Raphael, published his *Antiquae urbis Romae cum regionibus simulachrum* in 1527, weeks before the Sack of Rome; its first woodcuts presented four images of the city's history, from the '*Quadrata Roma*' of Romulus to the city at the time of Servius Tullius, Augustus, and Pliny the Elder.[7] Modern historians have at times been cavalier toward these images. Pietro Frutaz, in his study of Roman cartography, referred dismissively to Annius's picture as a '*ricostruzione fantastica*'; Eugène Müntz, who first connected Calvo with Raphael's project, called Calvo's images '*d'une barbarie incroyable*'; for Roberto Weiss, they were 'so naive as to be little more valuable than the plan invented by Annio da Viterbo'; Anthony Grafton called them, memorably, 'a kind of systematic classics comic book'.[8] Certainly, the cartographic accuracy of Annius's and Calvo's images is pitiful. Drawn using the conventions of late antique and medieval art and marred with all sort of anachronisms, they are fictive in the most basic sense. And yet those images were revolutionary. After Annius's and Calvo's leap of cartographic imagination, it was finally possible to see—or at least fancy—what ancient Rome may have looked like. Indeed, after them, experiments in fictive reconstruction took on almost a life of their own, with the work of artists and antiquarians such as Giovanni Bartolomeo Marliani, Pirro Ligorio, and Etienne Dupérac. (The grand finale of these experiments is, of course, Piranesi's *Campo Marzio*.)

Delamare was well versed in Roman history. Significant portions of the *Traité*, for example, dealt with the history of ancient Roman institutions and included a wealth of erudite quotations drawn primarily from ancient sources but also from modern scholars such as Pomponio Leto and Onofrio Panvinio. It is very likely that Delamare had seen some of the fictive reconstructions of the city's ancient topography. Perhaps he knew Famiano Nardini's *Roma antica*, of 1666, which included several small illustrations of ancient Rome, and may even have seen Calvo's plates, which were recut by Theodor De Bry in the second part of Jean-Jacques Boissard's *Topographia romanae urbis*, published in 1597 and again in 1627.[9] Most certainly, he had seen Ligorio's fictive map of Rome of 1553. It was published in 1696 in volume three of Johann Georg Graevius's *Thesaurus antiquitatum romanarum*, which also included the texts of Panvinio from which Delamare quoted.[10] Interestingly, fifteen years after Delamare's death, Anne-Louis Lecler du Brillet, a former assistant who was charged with seeing to the completion of the *Traité*, claimed that in 1664 the young Delamare had actually travelled to Rome. The story is almost certainly apocryphal—there is no archival record of Delamare's alleged Roman sojourn—but is nevertheless telling. Delamare must have boasted of his knowledge of things ancient and Roman.[11]

Aside from the literature on Roman history, other works, other images may have inspired Delamare to become a fictive cartographer. A possible source may have been the maps of ancient Jerusalem that had appeared since the sixteenth century in several Bibles, most notably in the polyglot Bible printed in Antwerp in 1571-72,[12] or perhaps one of the seventeenth-century copies of the *Vera hierosolymae veteris imago* that Jerónimo de Prado and Juan Bautista Villalpando had published in 1604 with their commentaries to Ezekiel. Outside the literature of Biblical exegesis, however, the most likely source for Delamare's idea were the atlases that were published in Europe in the sixteenth and seventeenth century, some of which had been specifically devoted to comparisons of modern and ancient geography. Beginning with Abraham Ortelius's *Parergon*, published from 1579 as an addendum to his *Theatrum orbis terrarum* (1570), maps of the Roman empire or of ancient Gaul, for example, could be seen in Petrus Bertius's *Geographia vetus* (1630), Nicolas Sanson's so-called *Atlas des cinq royaumes* (1644), and Philippe Briet's *Parallela geographiae veteris et novae* (1648) and *Theatrum geographicum Europae veteris* (1653). The geographer Pierre Duval too had done fictive maps, which he collected in 1665 in an atlas titled, very aptly, *Cartes géographiques dressées pour bien entendre les historiens*.[13] In the atlases, nevertheless, images of ancient cities were scarce. Some views of ancient Jerusalem could be found in Philippe de La Rue's *La terre sainte* (1651); François de Belleforest's *Cosmographie universelle* (1575), a revised and much expanded edition of Sebastian Münster's *Cosmographia universalis*, showed both an ancient Jerusalem and an ancient Rome '*en sa grand'fleur*' ('in her heyday'), as did Allain Manesson Mallet's *Description de l'univers* (1683).[14] But, all in all, fictive urban reconstructions were few and far between. When cities were shown, views were almost invariably modern. Of the over 500 city views contained in the most famous of early modern collections, Georg Braun and Franz Hogenborg's *Civitates orbis terrarum* (1572-1617), only one was a fictive map, Ligorio's *Antiquae urbis Romae imago*, of 1561.[15]

If images of ancient cities were hard to come by, historical descriptions of cities were relatively plentiful. For Paris, in particular,

Delamare could peruse an already extensive literature. In the section of the *Traité* that accompanied the fictive maps, he listed several of the sources he used. In addition to ancient and especially late antique authors (e.g. Ammianus Marcellinus, Eutropius, Paulus Orosius, Fortunatus, Gregory of Tours) Delamare referred to the writings on Parisian *antiquitez* by Gilles Corrozet, Jacques Du Breul, and André Duchesne, as well as Belleforest's *Cosmographie*, which included a remarkable section on the history of Paris.[16] Although he never mentioned it directly, Delamare also made use of the manuscript by Henri Sauval that was to be published in 1724 as *Histoire et recherches des antiquités de la ville de Paris*.[17] Moreover, and most importantly, Delamare had been given access to the archives of several royal, municipal, and ecclesiastical institutions (e.g. Châtelet, Chambre des Comptes, Archbishopric of Paris, Saint-Germain-des-Prés). He unearthed a trove of documents and sources, and brought them to bear on his reconstruction of the history of Paris.[18]

The story of the production of Delamare's maps is difficult to write. The first seven maps (the properly 'fictive' ones) were drawn and engraved by Antoine Coquart, who had been employed since about 1703 by the Parisian cartographer Nicolas de Fer, one of the period's most important producers of maps and, significantly, the author of the eighth map in the *Traité*, that is, modern Paris.[19] A volume in Delamare's archive contains notes on the making of the fictive maps, primarily draft versions of titles and captions (many in Delamare's tortured hand) and lists drafted by Delamare's clerks with the names of streets and monuments to be corrected, added to, or stricken from the maps.[20] The notes were made at a relatively late stage in the production process but before the captions were added. The historian Beatrice Pacha has uncovered five of these proofs at the Bibliothèque Municipale de Blois. We know, for example, that the vineyards that had been initially drawn in the first map were later erased, and that the assistant working on the seventh map was instructed to '*Abattre l'ancienne porte saint honnoré, et a sa place une boucherie*', 'Remove the old gate of Saint Honoré, and [put] in its place a slaughterhouse'.[21] Unfortunately, though, we cannot reconstruct the early, critical phases of the production process. Many questions remain unanswered. How were the maps first drawn? Which models did their authors consult? How did the idea of representing Lutetia as an agglomeration of little *cabanes* come about?

If the extent of the collaboration between Delamare, de Fer, and Coquart is unclear, the maps' true authorship is anything but: all eight prominently featured the signature 'M. L. C. D. L. M.', a grand-sounding acronym for Monsieur Le Commissaire De La Mare.[22] The title Commissaire is important, for Delamare was, first and foremost, a police officer. His *Traité* was certainly a scholarly endeavour, a work of historical erudition; but above all it was meant to contribute to—and be, as it were, an instrument in—the government's project to police Paris. (In early modern France, the term *police* 'embraced' the public good. Used broadly to describe the way social life should be organized, the term referred both to the means to achieve the public good—e.g. the measures to secure a city's subsistence—and to the end of such means, that is, public good as such.[23]) The project had been defined in 1667, when Louis XIV and Colbert created the Lieutenancy of Police: 'to guarantee the peace of the public and of individuals, to purge the city of what can cause disorder, to secure abundance, and to make everyone live according to his condition and duty'.[24] Gabriel-Nicolas de La Reynie, who served as Police Lieutenant from 1667 to 1697, was a major sponsor of Delamare's *Traité* and, in many ways, its co-author.[25] The *Traité* was central to the crown's effort to police Paris—so much so that Delamare's research, in addition to enjoying royal patronage, would later be ingeniously financed with a percentage on ticket sales at the Opéra, the Comédie française, and the Comédie italienne.[26] I mention such creative financing not to be witty (as Voltaire was to do: in *Le siècle de Louis XIV* he quibbed that the administration 'might as well have given to the *comédiens* a pension taken from the policemen' salaries'[27]) but to insist on the importance that the *Traité* had in the eyes of late seventeenth- and early eighteenth-century high government officials. Not only would the *Traité* offer a comprehensive history of the police and an exhaustive compendium of police regulations; it was also to serve as a solid basis to better understand, enforce, and eventually draft police regulations—i.e. new policy. To discuss Delamare's work within the larger project of policing Paris is ultimately to shed a new light on the fictive maps themselves. They were not so much exercises in antiquarian erudition (or examples of a too vivid cartographic imagination) as attempts to confront major contemporary questions of governance and urbanism. In particular, Delamare's maps must be read as an attempt to confront one of the key preoccupations of the *ancien régime* administration: urban growth.

Delamare wrote at length on the problem. It concerned, of course, issues of military defense, but above all, it was a matter of *police*. Roman governors and French monarchs alike, Delamare argued, had at all times tried to control urban growth, 'heeding the rule of prudence that Plato and Aristotle left us, that in order to make a city happy and prosperous one must give her limits, neither too small nor too large': too small a city, 'she cannot be provided with the arts and all other things necessary to make the citizens happy'; too big a city, 'she necessarily falls under her own weight, either by lack of provisions or lack of discipline, because of the difficulty for the magistrate to see to the needs of too many people and contain them within their duty'.[28] Beginning in the mid-sixteenth century, the monarchy had laboured at containing the potentially catastrophic threat of urban overgrowth. Limits to the expansion of the faubourgs had been established in 1548 and again in 1638. In 1672, then, even as the fortification walls were being demolished—and indeed precisely because they were being demolished—a new attempt was made to contain

Paris by planting new *bornes* on the edges of the faubourgs and prohibiting construction *au-delà*. 'Our predecessors', read the royal declaration establishing the new city limits,

> ... have made all efforts to make Paris the most beautiful, rich, and populous city of France; but they raised her ... to a point where she has exceeded in all things the most famous cities of the world. They had wisely foreseen that, in the state of *grandeur* to which they had brought her, she should fear the destiny of the most powerful cities, which found in themselves the principle of their ruin; and since it is difficult that order and police *se distribuent* through all the parts of so great a body, this reason convinced them to reduce her and her faubourgs within just and reasonable limits ...[29]

Order and police '*se distribuent*', i.e. spread, reach through the city. *La police* is a fluid of sorts, a substance that circulates through the urban body, a healing agent that can only work its benificent powers if the body is not overgrown. It is significant that Delamare's chapter on the history of Paris ended with a full transcript of the two royal acts that, in 1702, increased to twenty the number of Parisian quartiers by redrawing their boundaries—an arrangement that would provide a more rational organization; a better, healthier 'distribution' of police. Delamare's fictive maps told the story of Paris almost as a cautionary tale. They offered for the first time a means to gauge the extent of the problem of urban growth. To do so, it was essential that the city be pictured not only in its heyday, as had been the case in Rome, but along a temporal continuum.[30] Whereas the focus of Roman scholars was to restore, renew, conjure (or, indeed, *instaurare*) Rome at its most glorious, Delamare needed to examine Paris 'in all the different states through which she has passed until today', to see the city through all its '*accroissemens*'.[31] As with the project of *instauratio urbis* in Rome, the fictive representation of Paris had ultimately a political dimension, but of a different and perhaps more radical nature.[32] Delamare's project was meant to be instrumental: it was directly, immediately political. The *Traité* offered no grand vision of a new urban magnificence but a project only seemingly more modest, concerned with the life of Parisians, the food they ate, the air they breathed, the houses they dwelled in—the prosaic matters of police.

Endnotes

1. 'Ainsi n'arrivant rien de nouveau sous le ciel, selon le dire du sage, c'est principalement dans les évenemens passez que nous pouvons puiser des régles de prudence, & de conduite pour le présent, & pour l'avenir'. Nicolas Delamare, *Traité de la police* (Paris: Jean & Pierre Cot, 1705), [xviii-xix].

2. Richard Krautheimer, "Introduction to an 'Iconography of Mediaeval Architecture'," *Journal of the Warburg and Courtauld Institutes* 5 (1942): 1-33; Mario Carpo, "*Descriptio Urbis Romae: Ekphrasis* geografica e cultura visuale all'alba della rivoluzione tipografica," *Albertiana* 1 (1998): 121-42; Mario Carpo, "How Do You Imitate a Building That You Have Never Seen? Printed Images, Ancient Models, and Handmade Drawings in Renaissance Architectural Theory," *Zeitschrift für Kunstgeschichte* 64 (2001): 223-33.

3. Delamare, *Traité de la police*, [iv].

4. Leon Battista Alberti, *Descriptio urbis Romae*, edited by Jean-Yves Bouriaud and Francesco Furlan, introduction by Mario Carpo and Francesco Furlan, English translation by Peter Hicks (Florence: Leo S. Olschki, 2005), 73, 117.

5. Raphael and Baldassare Castiglione, "Lettera a Leone X," Bayerische Staatsbibliothek, Munich, cod. it. 37b, fol. 78r, in Francesco P. Di Teodoro, *Raffaello, Baldassar Castiglione e la 'Lettera a Leone X'* (Bologna: Nuova Alfa Editoriale, 1994), 117.

6. See Roberto Weiss, "Traccia per una biografia di Annio da Viterbo," *Italia medioevale e umanistica* 5 (1962): 425-41; Gabriele Morolli, *'Vetus Etruria'. Il mito degli Etruschi nella letteratura architettonica, nell'arte e nella cultura da Vitruvio a Winckelmann* (Florence: Alinea, 1985), 112-15; Anthony Grafton, "Invention of Traditions and Traditions of Invention in Renaissance Europe: The Strange Case of Annius of Viterbo," in Anthony Grafton and Ann Blair (eds.), *The Transmission of Culture in Early Modern Europe* (Philadelphia: University of Pennsylvania Press, 1990): 8-38.

7. See Vincenzo Fontana and Paolo Morachiello (eds.), *Vitruvio e Raffaello. Il 'De Architectura' di Vitruvio nella traduzione inedita di Fabio Calvo ravennate* (Rome: Officina, 1975), 58-60; Pier Nicola Pagliara, "La Roma antica di Fabio Calvo. Note sulla cultura antiquaria e architettonica," *Psicon* 8/9 (1977): 65-87; Philip Jacks, "The *Simulachrum* of Fabio Calvo: A View of Roman Architecture *all'antica* in 1527," *The Art Bulletin* 72, no. 3 (September 1990): 453-81.

8. Amato Pietro Frutaz, *Le piante di Roma*, 3 vols (Rome: Istituto di Studi Romani, 1962), 1:50; Eugène Müntz, "Raphaël archéologue et historien d'art," *Gazette des Beaux-Arts* 22 (October, November 1880): 307-18, 453-64 at 463; Roberto Weiss, *The Renaissance Discovery of Classical Antiquity* (Oxford: Basic Blackwell, 1969), 96; Anthony Grafton, "The Ancient City Restored: Archaeology, Ecclesiastical History, and Egyptology," in Anthony Grafton (ed.), *Rome Reborn: The Vatican Library and Renaissance Culture* (Washington: Library of Congress, 1993): 87-123 at 106.

9. Famiano Nardini, *Roma antica* (Rome: Per il Falco, 1666); Jean-Jacques Boissard, *II pars antiquitatum romanarum seu topographia romanae urbis* (Frankfurt: apud Theodorum De Bry, 1597); Jean-Jacques Boissard, *Topographia Romae* (Frankfurt: apud Matthaeum Merianum, 1627-28).

10. Johann Georg Graevius, *Thesaurus antiquitatum romanarum*, 12 vols (Utrecht: apud Franciscum Halmam; Leiden: apud Petrum van der Aa, 1694-99), 3:476-77. When discussing the Roman *curatores* Delamare quoted an excerpt ('Curatorum munus erat procurare commoda regionum ...') and referenced it cryptically: 'Sextus Ruffus Petr. Victor Pancirol. de quatuordecim Regionib. Urb. Romae Onuphr. Panvin. antiq. Urbis imago c. de Urbis region'. Delamare, *Traité de la police*, 20, note k. Delamare conflated in one note several texts, all of which had appeared in volume three of Graevius's *Thesaurus*: Panvinio's editions of Sextus Rufus's and Publius Victor's "De regionibus urbis Romae" (25-36, 37-52) as well as his "Antiquae urbis imago" (203-322) and Guido Panciroli's "De

quatuourdecim regionibus urbis Romae" (322-92). The excerpt on the *curatores* is on p. 281. In the nineteenth century the attributions of the regionary catalogues to Sextus Rufus and Publius Victor were proved to be erroneous. See Roberto Valentini and Giuseppe Zucchetti (eds.), *Codice topografico della città di Roma*, vol. 1, *Fonti per la storia d'Italia pubblicate dal R. Istituto Storico Italiano per il Medio Evo* 81 (Rome: Tipografia del Senato, 1940), 200-06; Joseph Connors, *Piranesi and the Campus Martius: The Missing Corso; Topography and Archaeology in Eighteenth-Century Rome* (Milan: Jaca Books, 2011), 49-50.

11. [Anne-Louis] Lecler du Brillet, "Eloge de M. de la Mare," in *Traité de la police*, vol. 4 (Paris: Jean-François Hérissant, 1738), [ii]. Delamare's biographers have generally taken Lecler du Brillet's story at face value: Paul-Martin Bondois, "Le commissaire Delamare et le *Traité de la police*," *Revue d'histoire moderne*, no. 19 (September-October 1935): 313-51 at 314; Marcel Le Clère, "Un commissaire de police au grand siècle: Nicolas de la Mare, 1639-1723," *Vigilat*, no. 3 (October 1952): 15-17; Nicole Diament, "Recherches sur la police parisienne sous Louis XIV à travers l'œuvre et la carrière de Nicolas Delamare" (Thesis, Ecole des Chartes, 1974), 140-1. The first to question the story was Nicole Dyonet, "Le commissaire Delamare et son *Traité de la police*, 1639-1723," in Claire Dolan (ed.), *Entre justice et justiciables: les auxiliaires de la justice du moyen âge au XXe siècle* (Laval, Quebec: Presses de l'Université Laval, 2005): 101-19 at 105.

12. See Caroline Delano-Smith and Elizabeth Morley Ingram, *Maps in Bibles, 1500-1600: An Illustrated Catalogue* (Geneva: Librairie Droz, 1991); Zur Shalev, "Sacred Geography, Antiquarianism and Visual Erudition: Benito Aritas Montano and the Maps in the Antwerp Polyglot Bible," *Imago Mundi* 55 (2003): 56-80.

13. See Mireille Pastoureau, *Les atlas français, XVIe-XVIIe siècles. Répertoire bibliographique et étude* (Paris: Bibliothèque nationale, 1984), 65-66, 89-93, 95, 156-57, 430-32; Jeremy Black, *Maps and History: Constructing Images of the Past* (New Haven: Yale University Press, 1997), 1-26; Walter Goffart, *Historical Atlases: The First Three Hundred Years, 1570-1870* (Chicago: University of Chicago Press, 2003), 13-39.

14. François de Belleforest, *La cosmographie universelle de tout le monde* (Paris: Michel Sonnius, 1575), tome 1, vol. 2, cols 545-48; Allain Manesson Mallet, *Description de l'univers* (Paris: Denys Thierry, 1683), 4:243. Münster had included a reinterpretation of one of Calvo's images in his edition of Solinus's *Polyhistor* (Basel, 1538) and a view of ancient Rome in his *Cosmographia universalis* (Basel, 1550), probably based on an image in Marliani's *Urbis Romae topographia* (Rome, 1544). Manesson Mallet's ancient Rome was drawn after the maps in Nardini's *Roma antica*.

15. Georg Braun and Franz Hogenborg, *Civitates orbis terrarum. Cities of the World: 363 Engravings Revolutionize the View of the World; Complete Edition of the Colour Plates of 1572-1617*, edited by Stephen Füssel, foreword by Rem Koolhaas (Cologne: Tachen, 2008), 338.

16. 'De la grande, excellente, et ancienne cité de Paris, chef du royaume de France' in Belleforest, *La cosmographie universelle*, tome 1, vol. 1, pp. 175-209. However extensive his reliance on the *Cosmographie*, Delamare referred to it only once, as a source for the claim that the proconsuls of Gaul had chosen Lutetia as their regular residence. Delamare, *Traité de la police*, 69, note c. On the literature on Parisian *antiquitez*, see Maurice Dumolin, "Notes sur les vieux guides de Paris," *Mémoires de la Société de l'histoire de Paris et de l'Ile-de-France* 47 (1924): 209-85; Robin Middleton, "The Abbé de Cordemoy and the Graeco-Gothic Ideal: A Prelude to Romantic Classicism," *Journal of the Warburg and Courtauld Institutes* 25, no. 3/4 (1962): 278-320 at 294-97; Hilary Ballon, *The Paris of Henri IV: Architecture and Urbanism* (Cambridge, Mass.: MIT Press, 1991), 247-49; Hilary J. Bernstein, "Cosmography, Local History, and National Sentiment: François de Belleforest and the History of Paris," *French Historical Studies* 35, no. 1 (Winter 2012): 31-60.

17. After Sauval's death in 1676, his manuscript passed into the hands of Claude-Bernard Rousseau, who had collaborated with Sauval and eventually became his editor. Rousseau was Auditeur at the Chambre des Comptes, one of the institutions in which Delamare did archival research. The two became close friends: '... deux des mes intimes amis, à qui je dois icy cette reconnoissance publique, m'ont aidé plus que tous les autres: Monsieur Baudelot de Dairval ... m'a souvent fait part de ses livres & de ses lumieres. Monsieur Rousseau Auditeur des Comptes qui a joint à une exacte probité l'étude des belles lettres, & un juste discernement des auteurs, & qui a penetré par une application infatigable ce qu'il y a de plus certain & de plus curieux dans les antiquitez de cette ville, a eu la bonté de me communiquer ses memoires, & les anciens & rares manuscrits de sa bibliotheque'. Delamare, *Traité de la police*, [xviii]. See Michel Fleury, "Notice sur la vie et l'œuvre de Sauval," introduction to Henri Sauval, *Histoire et recherches des antiquités de la ville de Paris* (Geneva: Slatkine Reprints, 1974), now in *'Si le roi m'avait donné Paris sa grand'ville...' Travaux et veilles de Michel Fleury* (Paris: Maisonneuve et Larose, 1994): 305-24, esp. 312-13, 319; Quentin Epron, "Nicolas Delamare et la culture juridique française des pré-Lumières," *Revue d'histoire des facultés de droit et de la science juridique*, no. 24 (2004): 9-33 at 18-19.

18. In a marginal note, Delamare listed the following: 'Registre de la Chambre des Comptes du Tresor des Chartres & du Chastelet de Paris. Anciens titres qui sont dans les Archives de l'Archevêché de Paris, de S. Germain des Prez, de Sainte Geneviève, de S. Martin, de S. Eloy, de Saint Magloire, & du Temple'. Delamare, *Traité de la police*, 75.

19. Coquart engraved several plates of monuments and sites (e.g. the Paris Observatoire, Mont Saint-Michel, the Corduan lighthouse) for de Fer's *Atlas curieux*, a collection which, interestingly, included some images of ancient Jerusalem. Nicolas de Fer, *L'atlas curieux, ou Le monde réprésenté dans des cartes générales et particulières du ciel et de la terre* (Paris: Chez l'auteur, 1700-05). On Coquart, see Ulrich Thieme and Felix Becker, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart*, vol. 7 (Leipzig: E. A. Seeman, 1912), 382; Marcel Roux, *Inventaire du fonds français. Graveurs du XVIIIe siècle*, vol. 5 (Paris: Bibliothèque Nationale, 1946): 245-48; Beatrice Pacha, *Les plans du 'Traité de la police' de Nicolas Delamare (1705)*, *Les cahiers de la bibliothèque municipale de Blois*, no. 11 (Blois: Les Amis de la Bibliothèque de Blois, 1993), 33-34.

20. Bibliothèque nationale, Paris [BN], manuscrits français 21694.

21. Pacha, *Les plans du Traité de la police*, 18, 31; Beatrice Pacha and Ludovic Miran, *Cartes et plans imprimés de 1564 à 1815. Collections des bibliothèques municipales de la région Centre. Notices de la base BN-Opaline* (Paris: Bibliothèque nationale de France, 1996), 226-27.

22. De Fer thought differently: in 1714 he had Coquart re-engrave the seven fictive maps in a reduced format, with all references to Delamare and the *Traité* removed; these he published in the *Suite de l'Atlas curieux* (Paris: Chez l'auteur, 1714) and probably also sold as a set with other engravings of Parisian

monuments (one such collection is at the New York Public Library, Map Division, Atlas cases, Fer, N. de, Collection of maps of Paris). After de Fer's death, his son-in-law, Guillaume Danet, included the reduced maps in his re-edition of de Fer's *Les beautés de la France* and issued them also as a set. Nicolas de Fer, *Les beautés de la France* (Paris: Chez le Sr. Danet, 1724); *Plans historiques de la ville de Paris* ([Paris]: [Danet], 1724). Three of the reduced maps were re-engraved for the 1735 abridged, duodecimo edition of Michel Félibien and Guy-Alexis Lobineau's *Histoire de la ville de Paris*, originally published in 1725 in five folio volumes with a map of modern Paris engraved by Coquart. [Pierre-François Guyot Desfontaines, Jean Du Castre d'Auvigny and Louis François Joseph de la Barre], *Histoire de la ville de Paris*, 5 vols (Paris: Charles-Jean-Bapt. Delespine fils, 1735). The seven maps were re-engraved and further reduced to fit the octavo format in Le Sage [Pons-Augustin Alletz], *Le géographe parisien, ou Le conducteur chronologique et historique des rues de Paris*, 2 vols (Paris: Valleyre l'aîné, Veuve Duchesne, Laurent Prault, Desaint, Delalain, 1769). Delamare's original maps were reprinted *telles quelles* in the second edition of the *Traité* (Paris: Michel Brunet, 1722), re-engraved for a pirated edition (Amsterdam: Aux dépens de la compagnie, 1729), and reprinted as a set as *Le theatre de la ville de Paris dans ses differens ages et son agrandissement jusqu'a-present, en huit plans, publiés par Mrs. de La Mare et de Fer* (Amsterdam and Leipzig: Arkstee & Merkus, 1755). See also Jean Boutier, Jean-Yves Sarazin and Marine Sibille, *Les plans de Paris des origines (1493) à la fin du XVIIIe siècle. Etude, cartobibliographie et catalogue collectif* (Paris: Bibliothèque nationale de France, 2002), entries no. 154-61, 178-84, 213-15, 290-96.

23. See Steven Kaplan, *Bread, Politics and Political Economy in the Reign of Louis XV*, 2 vols (The Hague: Martinus Nijhoff, 1976), 1:12.

24. '... la police qui consiste à assurer le repos du public & des particuliers, à purger la ville de ce qui peut causer les desordres, à procurer l'abondance, & à faire vivre chacun selon sa condition & son devoir'. Royal edict, March 1667. Archives nationales, Paris [AN], AD/@/390.

25. See the extensive correspondence between La Reynie and Delamare at BN, manuscrits français 21566.

26. Delamare had received a royal pension of one thousand livres since 1684. Although the pension was doubled in 1685, he apparently encurred large debts in producing the *Traité*, and by 1714 owed more than eleven years of rent (about 9000 livres) to his landlord, the Hôtel-Dieu. In 1716, after receiving approval from the Procureur Général and the First President of the Parlement, Delamare engineered the curious arrangement with which the price of tickets to Parisian spectacles would be augmented by one-ninth, the extra revenue to be shared by himself and the trustees of the Hôtel-Dieu. Details are at BN, Collection Joly de Fleury 144. Most relevant are: copy of the 19 December 1714 agreement between the trustees of the Hôtel-Dieu and Delamare and his wife, in which the Delamares promised to pay '9018 livres 15 sols' (fols 94-95); print of the 5 February 1716 royal ordinance authorizing the increase in the price of tickets and allocating it to the Hôtel-Dieu (fol. 83); 31 December 1716 note listing payments to two assistants, Le Camus and Du Tremblay (fol. 107); 22 May 1722 contract between Delamare and the trustees of the Hôtel-Dieu listing payments over the years 1716-22 (fols 115-23); details of payments to Delamare's assistants for the years 1711-29 (fols 124-26).

27. 'La Mare ... a fait un ouvrage qui était de son ressort, l'*Histoire de la police* [sic]: il n'est bon que pour les Parisiens, et meilleur à consulter qu'à lire. Il eut pour récompense une part sur le produit de la Comédie, dont il ne jouit jamais; il aurait autant valu assigner aux comédiens une pension sur les gages du guet'. Voltaire, *Œuvres historiques*, Bibliothèque de la Pléiade, edited by René Pomeau (Paris: Gallimard, 1957), 1172.

28. 'L'on a suivi en cela cette regle de prudence qui nous a esté laissée par Platon & Aristote, que pour rendre une ville heureuse & florissante, il luy faut donner des limites, ny trop etroites, ny trop estenduës. Ces deux sages & habiles politiques en rendoient cette raison, qu'une ville trop petite ne peut etre fournie de tous les arts & de toutes les autres choses necessaires pour rendre ses citoyens heureux; & que lors qu'elle est portée à une excessive grandeur, elle tombe necessairement sous son propre poids, ou faute de subsistance, ou faute de discipline, par la difficulté au Magistrat de pourvoir aux besoins d'un aussi grand peuple, & de le contenir dans son devoir'. Delamare, *Traité de la police*, 70.

29. 'Les Rois nos prédecesseurs, ayant toujours consideré notre bonne ville de Paris, comme la capitale de leur royaume, & le lieu ordinaire de leur séjour, ils ont cherché tous les moyens de la rendre non-seulement la plus belle, la plus riche & la plus peuplée de la France ; mais ils l'ont élevée par leurs graces & par leurs liberalitez, jusques à ce point, qu'elle a surpassé en toutes choses les plus fameuses villes du monde. Ils avoient sagement prévû, qu'en cet estat de grandeur où ils l'avoient portée, elle devoit craindre le sort des plus puissantes villes, qui ont trouvé en elles-mesmes le principe de leur ruine ; & estant difficile que l'ordre & la police se distribuent dans toutes les parties d'un si grand corps, cette raison les auroit portez de la réduire & les faux-bourgs d'icelle, dans les limites justes & raisonnables, faisant défenses tres-expresses de les étendre au-delà de celles qu'ils avoient prescrites'. Royal declaration, 26 April 1672. AN, AD/@/426. See also Jeanne Pronteau and Isabelle Dérens, *Introduction générale au travail des limites de la ville et faubourgs de Paris, 1724-1729* (Paris: Paris Musées, 1998), 23-31.

30. Even if published three years after Delamare's maps, mention should be made of Bonaventura van Overbeke's great map of ancient Rome, which included small diagrammatic vignettes of six phases of the city: *regia*, *consularis*, *imperatoria*, *victa*, *serva*, and *pontificia*. Bonaventura van Overbeke, *Reliquiae antiquae urbis Romae*, 3 vols (Amsterdam: Ioannes Crellius, 1708). The book was published by Bonaventura's brother, Michael, who also produced a French edition, *Les restes de l'ancienne Rome*, 3 vols (Amsterdam: Jean Crellius, 1709).

31. 'Description historique, & topographique de la ville de Paris, considerée dans tous les différens estats par lesquels ella a passé jusqu'à present, & qui sert d'introduction à la connoissance de sa police'. Delamare, *Traité de la police*, 67-96.

32. See Manfredo Tafuri, "'Roma instaurata'. Strategie urbane e politiche pontificie nella Roma del primo Cinquecento," in Christoph Luitpold Frommel, Stefano Ray and Manfredo Tafuri, *Raffaello architetto* (Milan: Electa, 1984): 59-106; Maria Grazia Blasio, "Memoria filologica e memoria politica in Biondo Flavio. Il significato della 'instauratio urbis'," in Claudia Bastia and Maria Bolognani (eds.), *La memoria e la città. Scritture storiche tra Medioevo e Età Moderna* (Bologna: Il Nove, 1995): 307-17; Lola Kantor-Kazovsky, *Piranesi as Interpreter of Roman Architecture and the Origins of His Intellectual World* (Florence: Leo S. Olschki, 2006), 63-81; Pier Vittorio Aureli, *The Possibility of an Absolute Architecture* (Cambridge, Mass.: MIT Press, 2011), 85-140.

LOOKING BACK AND AHEAD. EDMOND SACRÉ, ARMAND HEINS AND THE TRANSFORMATION OF GHENT

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Between 1870 and the First World War the city centre of Ghent (Belgium) underwent extensive changes.[1] As was the case in most European cities, public and religious buildings were cleared from the surrounding urban tissue and broad boulevards created space for through-city traffic, promenading and window-shopping. New viewpoints satisfied the needs of the tourist and offered an easily legible image of the city centre. Two developments allowed this transformation of the city to gain momentum. First, the creation of Haussmannian boulevards in the 1880s linked the area of the railway station with the city centre. This project resulted in the isolation of Ghent's three central landmarks: the Saint-Nicolas Church, the Belfry and the Saint-Bavo Cathedral. Second, the transformation of the city centre was completed for the occasion of the World Exhibition in 1913. In the years preceding the exhibition, many buildings and façades were brought back to (often an interpretation of) their original state. The central thoroughfare was continued by creating the bridge of Saint Michael, a broad elevated bridge that allowed the ever-growing traffic streams to cross the city and acted as a elevated balcony with a view on the new urban panorama.

In this period of transformation, Edmond Sacré (1851-1921, photographer) and Armand Heins (1856-1938, historian/artist) both played an important role in both documenting and imagining the transformation of the city.[2] This paper investigates the role of the representation of the temporal in a city in continuous transformation. Visual media, such as photography and drawings, played an important role in the imagination of the future, the documentation of the past and the visualization of different phases of transformation between past and future.

LOOKING BACK AND AHEAD

Armand Heins was a man with many occupations: he was an artist as well as a commercial printer, publisher and a self-made historian/archaeologist.[3] Heins was part of a network of organizations and persons who fulfilled the role of urban planners in an era in which a professional planning apparatus did not yet exist as such. As one of the founding members of the Ghent Historical and Archeological Circle and adjunct-secretary of the Ghent Monument Commission, Heins' impact on the city's restoration and reconstruction politics during the early twentieth century should not be underestimated.

In many of his lithographs and etches he re-evoked picturesque sights of a Ghent on the verge of disappearance. These drawings were edited by the Heins publishing house in a number of artist's albums between 1894 and 1914. One of the most extensive of these albums was *Les vieux coins de Gand* ('The old corners of Ghent'), a series of 124 lithos published in several episodes in 1898 and 1899.[4] (Fig. 1) The introductory text expresses the feeling of regret that the transformation of the city evoked with many of its inhabitants:

> The rearrangement of our streets and public spaces in the new style causes the disappearance of one or another interesting corner of our old neighbourhoods on a daily basis. Houses, courtyards and alleys, thousands of small things we are sweetly used to gazing upon are definitively destined for demolition, for irretrievable demolition. The destruction is slow but sure. However much we suffer from this idea, we have nevertheless to acknowledge that we are seeing the end of these painterly, touching scenes. The winding alleys, the slumbering corners and the ancient streets; old walls, cracked façades, tumbling roofs, so many witnesses of the life of our ancestors, all these stones that refresh the past in our memory, are disappearing forever.[5]

However, Heins concludes his lamentation about the disappearance of old Ghent rather pragmatically by stating that 'complaint and opposition is superfluous because these current changes are mostly necessary.'[6] Heins' twofold attitude towards the transformation of Ghent – a feeling of regret for the disappearance of the old combined with a belief that change is necessary – is reflected in the whole of his production. Apart from the sights of the disappearing city, Heins produced drawings to envision the city of the future as well. In 1896, the newspaper *La Flandre Libérale* published a drawing made by Heins that familiarized the inhabitants of Ghent with the image of the new city centre with the main monuments as freestanding objects, linked by a series of squares. In the decades preceding the world exhibition, Heins again produced a number of bird's eye views of the new layout of the site around the Saint-Michael bridge. In the work of Heins the drawing was the medium that enabled looking back – by depicting corners of the city that had disappeared or were about to – and looking forward in time – by simulating a vision of the city of the future.

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Photography, the medium of Edmond Sacré, has a different relationship with temporality. At the end of the nineteenth century, photography was considered by many to be the medium that represented reality as such – the camera was a scientific instrument that, in contrast to the drawing, would produce a faithful image of the world.[7] Sacré was in the first place a commercial photographer who worked on commission. One of his most frequent clients was the Ghent Monument Commission, which used the photographic images as a documentation of construction and of city quarters that would disappear, transform or be restored. The photographic production of Sacré – spanning almost half a century – displays all stages of transformation of the city. The constantly repeated photography of the same urban views allows the reconstruction of an almost cinematic image of the city changing over time. An aspect

Figure 1. [left] Armand Heins, view of the Schokkenbroersvestje. (source: Armand Heins, *Les Vieux Coins de Gand*, 1898-1899)

Figure 2. [right] Edmond Sacré, Ter Plaeten, 1908. From Armand Heins' collection *L'Habitation ancienne en Belgique*. (source: Paul Bergmans and Armand Heins, *Album du vieux Gand*, 1913)

of temporality can be detected, however, not only in Sacré's series of repeated photographs. Sacré mostly worked with series of images when documenting a building or site for one moment in time as well, circling around an object or moving through space. These series suggest a temporality that is linked with movement instead of with the succession of views of a transforming object in time, as was the case in repeated photography. Sacré sometimes succeeded in including a temporal narrative in one image as well, by showing traces or indications of past or future changes. For example, in a series on the Ter Platen hamlet in the south of the city centre, temporality is suggested by a gradual movement through space in the series, but in each image in itself as well as by signs of transformation in time, such as the groundworks for new infrastructure or the new townhouses on the background that seem ready to overrun the area. (Fig. 2)

THE PICTURESQUE AND HISTORICAL INTEREST

Although both drawing and photography allow the insertion of a notion of temporality in urban imagery, in the images of Edmond Sacré and Armand Heins these two media seem to do this each in a different way. While the drawings of Heins enable the visualization of objects, constructions and city views that no longer exist or do not yet exist, the photographs of Sacré seem to be restrained to a reality at the exact moment the image is made. In *Notes et croquis d'archéologie pittoresque* Heins himself explicitly opposed both media. According to Heins, the balance between an archeological and picturesque interest in the drawing is replaced by the pure registration of a historical fact in photography.[8] The distinction between the 'picturesque' and the 'historical' way of looking Heins is alluding to is closely linked to the different relationship between the medium and temporality described above. The photograph can only register the world at a specific moment in time, while the world in the picturesque drawings seems timeless.

One of the most ambitious projects about the city of Ghent that Heins was involved with was the *Inventaire archéologique de Gand* ('Archaeological inventory of Ghent'), initiated in 1896 by the Historical and Archaeological Society of Ghent and edited by the Heins publishing house.[9] With its ambition to treat architecture and all kinds of objects dating from before 1830 in illustrated file sheets, it can be situated in the line of similar historicizing inventories that were set up all over Europe.[10] Although photography was used as well, most of the objects described in this inventory were illustrated by means of drawings, most of them from the hand of Heins himself. Here as well the medium of the drawing allowed the combination of scientific data-gathering and artistic interpretation.[11]

While the *Inventaire archéologique de Gand* was an inventory in which the objects under study were interpreted through the medium of the drawing, *L'Habitation ancienne en Belgique,* a photographical inventory Heins collected for his own documentation, seems to show a less interpreted image of the city. This inventory of photographs of old dwellings – many of them shot by Sacré – served as the basis for the drawings Heins produced for several publications on this subject.[12] In contrast to the drawings in the *Inventaire archéologique de Gand* or *Les Vieux Coins de Gand*, which filter information to construct a timeless picturesque scene or a schematic or idealized version of a façade, the photographs of *L'Habitation ancienne en Belgique* cannot erase the context of the documented dwellings: posing figures, tramlines or neighbouring modern houses unambiguously situate the object in the reality of the contemporary city.

However, the distinction between photography as 'pure registration of a historical fact' and drawing as an interpretation which can be read in the inventories becomes blurred when studying other publications of Heins. One of the most remarkable albums is the *Album du vieux Gand* ('Album of old Ghent'), composed by Paul Bergmans and Armand Heins in 1913 for the occasion of the world exhibition.[13] (Fig. 2) According to the authors its ambition was to provide the historical information that the average tourist guide failed to mention.[14] The 56 illustrated plates of the album - apart from some water colours all photographic images - served as the illustration for Heins' text. However, the images have their own – visual – narrative, running parallel to the text. As the album is conceived as a guided walk through the historical city centre, the framing and the order of the images is carefully chosen. The first plate is a photo of the entrance gate of the restored Gravensteen castle. The castle was one of the main attractions of the world exhibition, and the image was in 1913 an archetypical opener for a photo album on Ghent. However, the images immediately skip to the ruins of the Saint-Bavo abbey, then functioning as a stone museum. The image shows the octagonal lavatory, seen from the refectory. The third image displays the columns of the former cellar of the abbey, while the following image brings us back to the cellar of the Gravensteen. The images as well as their captions establish both a visual and a textual link between the two sites.

The visual strategy of the first plates sets the tone for the rest of the album. This album is clearly not intended for those who want to visit the historical city centre as a series of façades of well-known monuments. Instead, it serves the visitor who wants to understand the city from a historical awareness. Once we pass through the façade of the Gravensteen, Heins takes us on a tour in a labyrinth of fragments, a trajectory that can only be understood by subtle visual links and by a knowledge of history. As a consequence, the role of photography is in this album more than a registration. By a clever juxtaposition and succession of photographic images the historical awareness of the viewer is manipulated in a different, but equally effective way as is done in his drawings of the *Inventaire archéologique de Gand* or in *Vieux Coins de Gand*. The fragmented, almost cinematic montage of the city in *Album du Vieux* Gand creates an image of the city that crosses all temporal layers of the city, an image that is at once rooted in history and timeless.

CUT-AND-PASTE

The images and publications discussed in this paper are produced in an era in which the city itself looked simultaneously back and forward in time. In the decades preceding the world exhibition, the modernization of the city on the level of urban planning was accompanied by a return to history as far as architecture was concerned.[15] New constructions, such as the post office and the adjacent houses were constructed in a neo-gothic/renaissance style and many historical buildings were restored to re-evoke the atmosphere of old Ghent. As was the case in other cities, Heins and his fellow citizens were involved in fierce debates on how to deal with the past. Heins became one of the protagonists of a vision on restoration that respected the past, rather than 'reconstructing' an – often fictitious – past state[16]. However, Heins also took part in the historicizing operation that took place in the city as his images of old street views, and façades became a model for future ones. The re-assembly of history reached its peak in the construction of Old Flanders on the premises of the world exhbhition itself.[17] Following the example of 'Old Antwerp', 'Vieux-Paris' and 'Vieux Liège' at previous world exhibitions, Old Flanders was a collage of (mostly sixteenth and seventeenth century) buildings from cities from all over Flanders, reconstructed in plaster. The design of architect Valentin Vaerwyck was largely based on the archive and publications of Armand Heins, who assisted Vaerwyck with the design. Although the buildings in Old Flanders were a relatively faithful reconstruction of the original architecture in comparison with previous similar villages, historicism was in the first place used to create a picturesque experience.[18] It is not difficult to see some similarities between Old Flanders and the transformation of the city centre. Both environments utilize a cut-and-paste strategy to create a décor of a – mostly medieval – city. In the process, photographic images and drawings played a crucial role and established a complex relationship between past and present. In Old Flanders as well as in the city centre drawings and photographs were used as a source to create a 'historical' collage, that in its turn acted as a model for the restoration and reconstruction of urban environments in later decades.

In the run-up to the world exhibtion, diverging ambitions came together: the modernization of the city centre and the re-evocation of the past. Different attitudes towards history were simultaneously at stake – attitudes that seem contradictory from a current-day perspective: a well-informed historiography with scientific aspirations; an eclectic cut-and-paste strategy and a longing for the sensory experience of the city of the past. The use of photography and drawings produced by Armand Heins and Edmond Sacré raise some questions about the complex relationship between these media and the representation of the temporal. Although photography was considered by many – among which Armand Heins – as the pure registration of a moment in time, while the drawing would enable the interpretation of the city both for an archaeological and picturesque interest, publications such as the *Album du Vieux Gand* and constructions such as Old Flanders indicate that this relationship was far more complex.

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1. Birgit Cleppe and Pieter Uyttenhove, "Infrastructure and urbanism," in Marc Boone and Gita Deneckere (eds.), *Ghent. A city of all times* (Ghent: Mercatorfonds/ STAM, 2010), 200-249.

2. Bruno Notteboom, "Portretten van een stad" and "Portraits of a city" (English summary) in Bruno Notteboom and Dirk Lauwaert, *Edmond Sacré. Portret van een stad* (Brussels/Ghent: Mercatorfonds/STAM, 2011, 82-101 and 243.

3. René De Herdt (ed.), *Armand Heins. Etser, lithograaf en drukker* (Ghent: VIATvzw, 2009); Etienne Dhont, "Armand Heins, kunstenaar en esteet (1856-1938)," in *Kultureel Jaarboek voor de Provincie Oost-Vlaanderen* (Ghent: Provincie Oost-Vlaanderen, 1973)**:** 217-232.

4. Armand Heins, *Les vieux coins de Gand/De oude hoekjes van Gent* (Ghent : Maison d'éditions d'art N. Heins,1898-1899), re-edited as Armand Heins and Anne-Marie Vanden Abeele, *Oude hoekjes van Gent* (Nazareth: De Klaroen, 1995).

5. *Ibidem*, Introduction.

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7. André Rouillé, *La photographie. Entre document et art contemporain* (Paris: Éditions Gallimard, 2005).

8. Armand Heins, *Coups d'oeil et coups de plume. Notes et croquis d'archéologie pittoresque,* Extract of *Bulletin de l'Académie royale d'Archéologie de Belgique* (Antwerp : 1907-1908), vol. 1, 4-5. Cited in Maarten Delbeke, «De 'sprekende stenen' van Sint-Baafs ,» in Bruno Notteboom and Dirk Lauwaert, *Edmond Sacré. Portret van een stad* (Brussels/Ghent: Mercatorfonds/STAM, 2011, 62-73.

9. Paul Bergmans et al. (ed.), *Inventaire archéologique de Gand. Catalogue descriptif et illustré des monuments, oeuvres d'art et documents antérieurs à 1830* (Ghent : N. Heins / Société d'histoire et d'archéologie de Gand, 1897).

10. On a similar inventory on Brussels , see : Annelies Cousserier, "Het verleden gefixeerd. De fotografische inventaris van het Comité d'études du Vieux Bruxelles," in Steven Humblet and Dirk Lauwaert, *Citygraphy #02* (Brussels: Efemera, 2009) 20-39.

11. Often Heins decorated his drawings with a frivolous frame or 'medieval' banners and he interpreted some of his subjects by altering details, as was the case

in some of the re-editions of maps of the historical city centre edited by the Heins publishing house. See: Marie-Christine Laleman, "Armand Heins: een 'artiste peintre' met archeologische blik," in René De Herdt (ed.), *Armand Heins. Etser, lithograaf en drukker* (Ghent: VIATvzw, 2009), 196-215.

12. For example Armand Heins, *Contribution à l'habitation privée en Belgique. Restes d'anciennes constructions pittoresques dans notre pays et dans les contrées limitrophes* (Ghent: N. Heins, 1908).

13. Paul Bergmans and Armand Heins, *Album du Vieux Gand. Vues monumentales et pittoresques de la ville de Gand à travers les âges accompagnées de notices historiques* (Brussels : Van Oest, 1913).

14. This was also the goal of a tourist guide written by Bergmans and Heins in 1904: Paul Bergmans and Armand. Heins, *Promenade pittoresque à Gand* (Ghent: Vander Haeghen, 1904).   .

15. On the transformation of the city for the world exhibition: André Capiteyn, *Gent in weelde herboren. Wereldtentoonstelling 1913* (Ghent: Stadsarchief, 1988).

16. This was an ongoing discussion in Brussels under mayor Charles Buls as well.

17. *Ibidem*, 153-158 and Tim Dickel, *Wereldtentoonstelling Gent 1913. Oud Vlaendren en het Moderne Dorp: schijnbare tegenpolen?* (Ghent, Ghent University,2004) (masterthesis).

18. *Ibidem*, 56.

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REINVENTING THE 19ᵀᴴ CENTURY CITY: ISTANBUL EXHIBITIONS AND URBAN IMAGINARY

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In the last few decades, Istanbul has taken its place once again on the global stage. It has been marketed as a trademark and its image has been promulgated in diverse forms through national and international media in an effort to be recognized as a 'globalised city,' 'cosmopolitan city,' or 'world city.' Istanbul in many ways resembles other contemporary cities that have undergone major transformations and faced the challenge of producing a cohesive image. This paper will explore in particular the way recent exhibitions devoted to representing and shaping Istanbul's image have been as important to the transformations of the city as those brought about by financial capital. As Andreas Huyssen has commented, 'the spread of the global and regional culture industries, heritage foundations, mass tourism, labour migrations, academic exchanges, and cultural spectacles such as biennales, sports events, and museum shows have made "other cities" part of the way we live and perceive the world'.[1]

Since the 1980s, the city of Istanbul has seen the development of plans for an intensive renovation and reconstruction of the city in competition with other cities on the global scale. Such changes in the physical form of the city have emerged in part due to new neoliberal policies and their management techniques. However, equally crucial for the campaign to make Istanbul a global city have been cultural identity and the urban imaginary. Attention has been drawn to 'the need to make changes that would be in agreement with the cultural and historic identity' of the city.[2] Such an aim has resulted in an ongoing discussion about cultural heritage. Istanbul has on the one hand a privileged position within global competition among cities as the inheritor of the Byzantine and Ottoman past. But how this heritage should be instrumentalized remains a contested topic.[3]

In this paper I will consider the measures that have been taken to reflect a certain past and future onto the city of Istanbul. I will focus on the concept of the 'urban imaginary' rather than adopting a landscape perspective where the totality can be seen and analyzed. I take as my notion of the urban imaginary its delineation by Huyssen:

> An urban imaginary marks first and foremost the way city dwellers imagine their own city as the place of everyday life, the site of inspiring traditions and continuities as well as the scene of histories of destruction, crime, and conflicts of all kinds. …. An urban imaginary is the cognitive and somatic image, which we carry within us of the places where we live, work, and play. …Urban imaginaries are thus part of any city's reality, rather than being only figments of the imagination. What we think about a city and how we perceive it, informs the ways we act in it.[4]

In the last decade several exhibitions have contributed to the production of the urban imaginary of Istanbul. I will discuss four of them with the aim of unpacking their construction of Istanbul's past.

The 2010 exhibition *Ghost Buildings* explored the past through a focus on the destroyed buildings of the city. The catalogue of the exhibition stated:

> Architecture has its ghosts, too. (…) Worse of all is not to disappear but to be forgotten completely. For people who are interested in architecture or for mindful citizens who can see, absence of a building which had been 'there' once before does not mean that it has never existed.[5]

By recalling the buildings selected from different historical eras of Istanbul that no longer exist, the exhibition intended to reinstate them into the memories of the people living there today (Fig. 1). The exhibition organizers wrote that what they intended to emphasize was not the 'romance, tears, pain, (once again here) melancholy for Istanbul's past. (...) The project does not suggest anything else beyond mere imagining these buildings. (…) We are not willing to see one of them reconstructed one day and become a zombie instead of being a charming ghost'.[6] They commented that the intention was to introduce the city as 'temporary', 'open', 'a place for collective memories' and 'the city of leisure', all of which referred to the possibilities of using the memories of the buildings now rather than suggesting a futile re-creation of the past. The exhibition offered a way of looking at the city. The chosen sites which included a variety of buildings from different historical periods were identified with an 'absence' in the city. On the other hand it can be said that the exhibition offered the spectator 'a packageable and consumable manner of looking at the cities.'[7] The exhibition relied on the 'desire to be connected with the past, even if fictionalised in the legendary form and stylised in visual imagery.'[8] It also expressed the curators' choice of the sites as generators of memory.

It could be said that what is to be remembered and what is to be forgotten defines the character of Istanbul. Most of the projects realized with the funds of the Istanbul European Capital of Culture Agency in 2010 consisted of the restoration of historical

buildings. Designating 'historic' areas of the city and certain built forms as heritage sites and developing plans towards their preservation were introduced as remedies for the erasure of memory. However, as noted by Zerrin Boynudelik and a few others, '… these measures, historically informed in their claims and enactment, embody the danger of disregarding recent histories of social and communal structures and of reproducing histories and heritage that reflect the demands of contemporary economic and political interests'.[9] The nineteenth century neighbourhood of Beyoglu is a case in point. The destruction of some of its buildings in the mid-1980s gave rise to a heated discussion about what it symbolizes. While today it forms the cultural and entertainment centre of the city, for some, it is 'neither Ottoman, nor European, but Levanten;' while 'for others it symbolised nineteenth century European capitalism as it was the centre for European finance and cultural life.'[10] In yet another interpretation, the neighbourhood recalls a particular past replete with multi-ethnic and multi-religious identities. Indeed, the various interpretations of Beyoglu all refer to a city that does not exist today, but remains as the space for the nostalgia of a disappeared past. In any case, the questions of what Beyoglu resembled in the past, which Beyoglu was to be revived for whom, and

Figure 1. What if Taksim Artillery Barracks existed? (source: *Ghost Buildings Exhibition Catalogue*, no page numbers)

what Beyoglu represented for whom became political issues that are discussed on a wider plane. Meanwhile, the old palace district was recently designated as the 'historical peninsula', an area which includes many historical buildings such as the old Ottoman palace, the Hagia Sophia, mosques and old bazaars, but also recently developed museums. 'Re-vitalizing' an old neighbourhood included the reading and interpreting history in a certain way. These are examples of the way that current cultural policy of the state as well as the local cultural industry operate on the one hand to restore memories of a certain past while erasing memories of others. Huyssen comments that, 'no real city can ever be grasped in its present or past totality by any single person'.[11] And he continues 'All cities are palimpsests of real and diverse experiences and memories.'[12] Today Istanbul is referred to as both a historical and a modern city. This seeming contradiction complements another contrast: Istanbul as the cultural capital of the nation-state juxtaposed to the official capital, Ankara, which symbolizes the bureaucracy and republican imaginary.[13]

A related issue concerning the recent changes in Istanbul is gentrification. Gentrification has taken hold of the city and this involved the unprecedented commercialization of the city in the past two decades.[14] A number of exhibitions reflected the perspective of gentrification[15] as did many media advertisements. One particularly effective reaction against the policies of gentrification and historic preservation was presented by the curators of the ninth Istanbul biennale in 2005. This exhibition, which was entitled 'Istanbul', identified the 'touristification' of the city as a problem. The exhibition catalogue stated that the exhibition was 'for Istanbul and about Istanbul'.[16] The choice of venues for the biennale indicated what was meant by that expression. Rather than the 'traditional, historical sites'[17] used in previous biennales, such as Topkapi Palace Complex or the Hagia Irene church, which could be dated to the Ottoman and Byzantine past of Istanbul, the curators chose 'more modest spaces'[18] that 'sat in different types of urban setting.'[19] The venues included Deniz Palas, Bilsar, Garibaldi Buildings and Platform Garanti Contemporary Art Centre in Beyoglu; Antrepo no 5 and Garanti Building in Karakoy, and Tobacco Warehouse in Tophane, which developed and extended the city in the nineteenth century and remained the cultural and financial centres. By rejecting an image of the city that could be described as 'oriental', 'touristic' or 'exotic'; 'historical' and 'impressive' sites were dismissed in favour of a more nuanced appreciation of the complexities of the city's past. According to one of the curators,[20] the inspiration for the biennale's concept was the book *Hatiralar ve Şehir* by the renowned Turkish author Orhan Pamuk.[21] In the book, Pamuk, explains the

curator, endeavours to look towards the past of the city through the lens of the photographer Ara Guler.[22] The curators comment that, 'once the minorities of Istanbul who had made the city dynamic started leaving the city around the 1930s, Istanbul lost its central position in the world economy as well'.[23] The Istanbulites therefore experienced 'the decay of the city as capital of the empire as the foundation of the republic took a role in erasing a certain history'.[24] The fact that Istanbul later transformed into a metropolis in 1980s 'also involved a turning back to its nineteenth century model'. The curator explains that this 'also brought the "modern will" of the twentieth century' to an end,[25] which sought, homogeneity in the society and its appearances, rather than the complexity and heterogeneity the metropolis is associated with.

One of the earlier exhibitions produced referring to Istanbul, also dealt with the historical image of the city. The exhibition *Iskorpit*[26], displayed in Berlin in 1998, celebrated art that differentiated itself from the 'glamorous, decorative, ornamented Eastern art as it was reborn as the precious fish of Bosporus, *Iskorpit*, from the underground'.[27] Three generations of artists came together around the idea of 'novelty' symbolised by the fish, which also symbolised locality against the existing tides of globalization processes. The artists sought to 'communicate and relate themselves to the society and surroundings they live in.'[28] Against the globalisation processes that as 'some institutions needed to restructure themselves, (…) they also brought a missing sense of place'[29] In this sense, an artwork by Huseyin Alptekin defined the 'sweet desire of belonging to a place which was almost nostalgic' while another artist Sarkis chose Hagia Sofia as a site for his work, a renowned symbol of the Byzantine Orthodoxy embedded in the history of the city and turned into a symbol of the city itself. Creating a sonic environment, considering that 'it is a response to the spatial relations interacting with movements of the body', the artist directed attention to the sonorous history of the Hagia Sophia, and referred to history as being constructed each time by every individual's experience. The curators commented that 'the dialogue of the artist with the lived-architecture through sound heightens the pleasure we get from architecture, (…) compassing all memories,…'[30]

Figure 2. From division '1910 – 1930' (source: *Istanbul 1910 – 2010 Exhibition Catalogue*, 115)

During the first decade of the twentieth century, Georg Simmel characterized the metropolis as an interrelated domain of the built environment, communal lives, technology and political institutions. David Frisby counters that notion of inter-relationship with the spatio–temporal disruptions and transformations of the following decade which he believes seriously hindered our ability to come to terms with the past and the present of the metropolis, resulting in a 'systematic erasure of memory traces'.[31] An exhibition and book of 2010, entitled *Istanbul 1910 - 2010: City, Built Environment and Architectural Culture Exhibition*, [32] presented a similar position. It too noted with regret the loss of memory. The exhibition catalogue begins by explaining its aims with the following statement: '1910-2010: A century of collective amnesia, beginning with the forgetting of the most recent past'.[33] What is specifically important is the interpretation by the exhibition of the '1910s – 1930s as an extension of the cosmopolitan nineteenth century (…), seeking to preserve Istanbul's privileged place on the global stage'.[34] By contrast, the years 1930 - 1950, which were also the early years of the Turkish Republic, were approached as the years of 'the eclipse of Istanbul's cosmopolitan vitality, now giving way to the republican project of re-making the city into a theatre of modern life, and its people, into modern citizens'.[35] The period up to 1930s (the last years of the Ottoman Empire), which is taken as an extension of the nineteenth century in the exhibition, also differ in terms of its presentation. This period reflects the richness of a 'cosmopolitan' Istanbul and its knowledge by focusing on its urban imaginary rather than the mere presentation of the historical facts (Fig. 2). The visualisation of the material culture, the artistic reflections, poems and literature, present the city of this period in collective memory in a much richer way than the other periods presented in the exhibition.

In the 1980s, a new wave of cultural nostalgia appeared in Istanbul. The old non-Muslim communities of Istanbul were emphasised and names reminiscent of the 'plural paradise in the past'[36] were given to newly opened businesses. Issues related to exhibiting the past introduced new ways of dealing with the construction of history and the processes of differentiation, commodification and exoticism. In general, exhibitions create a past that manifests itself as the new and the different as well as the old and the traditional. In the revival of the past in the exhibitions mentioned in this paper, nineteenth century and early twentieth century Istanbul emerges at the intersection of modern and traditional. It has appeared as new and old, same and different, and familiar and exotic. Istanbul in these exhibitions is presented not only as a historical city but also as its 'other'. The exhibitions are sites where the past is invented in various ways. Here the notions of the exotic and of difference are reconstructed in order to maintain the citizen's self-consciousness of each region and as a way of supporting the survival of local identities in a global cultural system.

I argue that these exhibitions, performing a certain past for the present, simultaneously play with 'exoticism' and 'novelty', the two crucial notions for studying culture in a globalizing world. The images exhibited in these exhibitions are familiar but also novel for an audience that cannot capture the past in memory. Novelty has a strong connection to the exotic, which is defined as 'strikingly' and 'excitingly unusual or different.'[37] In the sense that Henri Lefebvre forms his triad of space,[38] these exhibitions transform the representations of space into a representational space. The nineteenth century material world, its buildings, objects, and artefacts, turn into the expression of a 'lost' city. Accordingly, exhibitions are not only places for consumption but also places for production.

CONCLUSION

The living traces of nineteenth-century architecture and urban planning is often cited as belonging to a period of modernization for the city. The preoccupation with the city's past stands in front of the urban transformations of the present, where several exhibitions and artworks contribute to the production of the urban imaginary of Istanbul. In several cases, the urban imaginary conforms to the present vision of the city as well as the gentrifying policies of the present. The images of the past are both familiar and novel to a certain audience and refer to the past chosen to be remembered. Istanbul carries the simultaneity of the representational images; the city becomes a tool that shapes the urban imaginary as well as being shaped by it.

It could be said that in all these exhibitions the past is approached by its difference from the present. Quoting Lowenthal, 'it is no longer the present or the past that speaks to us but its pastness'.[39] In the case of Istanbul, preserving the city's traces, which differentiate it from the present, reinvents the past.

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12. Andreas Huyssen, *Other Cities, Other Worlds, Urban Imaginary in a Globalizing* Age (Durham and London, 2008), 3.

13. Bulent Batuman's recent article discussed the emergence of a particular historical representation of the 'early republican Ankara' in the last two decades. Within the current politics in Turkey with the pressure of Kurdish nationalism and political Islam, Batuman claims that the category of 'early republcian Ankara' is a product of the nationalist call, and a nostalgic image to promote national unity. See Bulent Batuman, " 'Early Republican Ankara': Struggle over Historical Representation and the Politics of urban Historiography", *Journal of Urban History* 37 (2011): 661 – 679.

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21. Orhan Pamuk, *Istanbul: Hatıralar ve Şehir*, (Istanbul, 2003). Translated as Istanbul: Memories and the City by Vintage in 2006.

22. Ara Guler (1928 -) is an Armenian photographer, who photographs the city focusing on the historical city including nineteenth century minority neighbourhoods that include the cultural centre of Istanbul today.

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25. Vasıf Kortun, "Istanbul: Sanat için bir Yer" (Istanbul: A Place for Art), in Zerrin I. Boynudelik, ed., *Istanbulun Ruhu* (The Spirit of İstanbul), (Istanbul, 2007), 168.

26. *Iskorpit* is a type of fish that is identified with Istanbul in certain cases.

27. *Iskorpit: Contemporary Art from Istanbul* (exhibition catalogue), (Berlin, 1998). Curators: René Block and Fulya Erdemci, 7.

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29. *Iskorpit: Contemporary Art from Istanbul* (exhibition catalogue), (Berlin, 1998). Curators: René Block and Fulya Erdemci, 9.

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New Ideas, New Models?
Architectural Representation and
its Objects in the Twentieth Century

SESSION CHAIRS:

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The architectural model represents a particular mode of reflection. Oscillating between the abstract and the concrete, the model is a working tool for conceiving, developing, and communicating form and space, as well as an exhibition object in its own right. Representing a tradition as real and influential as built architecture, the history of the architectural model spans from prophesy to documentation; invoking the possible, the unachievable, the typical, the utopian, the rejected, the permanent and the past.

Recently, models have attracted much attention in the context of twenty-firstcentury design approaches that rely on computer technologies as well as in research on Renaissance and nineteenth-century themes. Our question is: what happened to models in the twentieth century? Did they change character during the period identified with modernism and its legacy, when plaster signified a return to the past and the computer had not fully emerged as a design medium?

We welcome papers that look at models in the context of the design process or the subsequent representation, explanation or exhibition of new architectural designs and ideas in this period. Models were used to introduce new ideas to the public throughout the century: earlier, at MoMA's "Modern Architecture – International Style" exhibition and later in the 1981 "Idea as Model" produced by New York's IAUS. Were their uses of the model new or derivative of earlier practices? At a time when structure and materials were viewed as generators of architectural form, did architects adapt the engineer's empirical approach to the model as a design tool? What role did models play in the identification of space and transparency as a constituent element of architecture? Did they address changing social practices? Other topics to consider are the materiality of models, particular architects' changing use of models; or the role of models in the conceptualization of architecture. We are interested in papers that address the issue thematically or with case studies.

THE ARCHITECTURAL MODEL IN THE AGE OF ITS MECHANICAL REPRODUCIBILITY

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INTRODUCTION

The architectural model witnessed a *spectacular* revival in the early part of the twentieth century. The so-called 'model boom' followed a period of decline marked by a combination of factors: the rise of the picturesque aesthetic; the development of projective geometry; the advent of low-cost reproduction techniques; and, not least, the Beaux-Arts emphasis on drawing and painting – all of these had contributed to foster the preeminence of graphic over plastic media in the nineteenth century.[1] The subsequent comeback of the model, which intensified after World War I, has often been ascribed to the modernist turn towards a *new objectivity*: a distinctive trait of the International Style, as Hitchcock and Johnson put it, was to privilege 'the effect of volume' over 'the effect of mass'. More broadly, the practice of model making was given a boost by the introduction of lightweight materials, such as cardboard, which made miniatures more expedient than ever. The ability to examine a project in the round appealed to designers and clients alike, as the model offered not only a versatile design medium but also an effective mode of presentation.[2]

A literature on model making burgeoned over the inter-war years, notably within western architectural discourse.[3] Thus, for instance, in a mid-1930s article appeared in *The Architects' Journal*, Kenneth McCutchon asserted that 'models are still the most accurate medium of foreseeing a projected building.'[4] A series of British-based modernist projects – by the likes of Connell, Ward and Lucas; Mendelsohn and Chermayeff – demonstrated how models allowed one to study miniature buildings from different viewpoints and under varying lightings. In short, the model provided 'true "manipulation of space"'. Other authors sought to capitalize on the seductive power of miniatures in pragmatic ways. Among them was LeRoy Grumbine, an American designer who championed the architectural model as an antidote to what he called the 'problem of salesmanship'.[5] A well-made miniature, he suggested, could lure a client away from the financial preoccupations derived from a costly investment:

> A model demonstrates the architect's ability without the client's cooperation. It creates a desire on the part of the client, who sees a beautiful creation without the exercise of imagination. He wants it. His mind is on the thing itself, *not the cost.* The psychological effect is *positive* instead of *negative.*[6]

The author, who was also an expert renderer, maintained that model making should be treated like perspective drawing, and a design proposal should not be over-detailed. This echoed the classical pronouncement made five centuries earlier by Leon Battista Alberti, who warned that an overly refined model would endanger the integrity of architecture by detracting the viewer's attention from a design concept.[7] While 'photographic exactitude' was not the goal, Grumbine added that pictures of models were 'excellent for publication' nonetheless.[8] This incidental remark touched on a seemingly marginal aspect of model making which, in reality, became so significant as to take a life of its own. It is to the life of this imagery that we shall now turn our attention.

The inter-war revival of the architectural model was inextricably linked with another major development that occurred at the same juncture: the progressive alignment of architecture with the culture of mass media.[9] The encounter between photography and the model unleashed a new class of images that was widely used to examine, present, and exhibit design projects as well as disseminate them in the architectural press. The boom of illustrated magazines led to models circulating widely *as images* through a myriad of publications. Within this context, model photography played a key role in forging the image-repertoire of modernism. While the sheer circulation of printed photographs contributed to document the exploits of modern architects, new creative possibilities were also afforded by this hybrid medium. Thus, by abstracting the model from its surroundings, it was possible to project an ideal view of architecture free from scalar constraints. Photographs were carefully framed and manipulated to transform 'ideas into pictures', as the artist Andreas Feininger once remarked.[10] One of the best examples of this process is the model of the house designed by J.J.P. Oud for Philip Johnson's mother in Pinehurst, North Carolina. At Johnson's behest, it was exhibited at the *Modern Architecture – International Exhibition* at New York's MoMA in 1932, where architectural models took centre stage. Despite Oud's efforts to complete this work in time for the show, the model was reportedly shunned by visitors in favour of more elaborate exhibits. The plain cardboard miniature, however, proved to be rather photogenic, and Oud had a number of pictures of it taken in the studio. Three low-angle views, suitably cropped to eliminate all background, were chosen to

illustrate the Johnson House project in the influential Dutch magazine *De 8 en Opbouw*.[11] These images, which emphasized the horizontal lines of the building, depicted a pristine and weightless object devoid of any contextual or scalar reference.

This abstract mode of representation became fairly popular in the 1920s, yet was not the only means of visualizing architectural models to emerge at the time. Nor, indeed, was the revival of models a prerogative of the modernist avant-garde. As mentioned above, the appeal of miniatures responded to a widespread quest for new means to communicate ideas in three dimensions, one that transcended styles and movements. That model photographs constituted an extremely diverse class of images is demonstrated by the following example.

In January 1933, *The Architects' Journal* reviewed an exhibition of the latest advances in hospital building held at London's Building Centre. The article featured two projects designed by London-based architects. The first was the King's Fund model undertaken by Henry Percy Adams and completed, after his death in 1930, by his partner Lionel Pearson;[12] the second was the project for a tuberculosis clinic in East Ham prepared by Berthold Lubetkin and Tecton. Images of models illustrated both projects, yet their representations could not have been more different. Tecton's chest clinic was illustrated by a full series of drawings - plans, sections, and perspectives - which included a view of the model encircled by isometric diagrams of the circulation patterns (Fig. 1). Such a rather functional use of model photography emphasized the formal and volumetric qualities of the rational design, which presented architecture as an autonomous object. In the reviewer's words, 'It is a work of three-dimensional design intended to stand by itself as an isolated unit.'[13] Although this comment referred to the overall project, the photograph served to enhance the model's autonomy in the modernist vein discussed above.

An altogether different image illustrated Adams and Pearson's model. An interior view of the children's ward drew the viewer inside a space inhabited by nurses and young patients, complete with details such as painted tiles and miniature toys. Although the edge of the showcase was visible in the picture, it still offered a fairly realistic glimpse into a modern hospital interior. This make-believe effect suited the aim of an exhibit designed to attract donations for a charitable foundation. As the reviewer pointed out:

> The main object of the model is, of course, to raise money. It is therefore not primarily intended for the instruction of architects. Even so, in a model designed by a firm of acknowledged hospital experts, and in which every piece of equipment has been made to scale and in photographs quite completely deceives the eye, we cannot fail to be professionally interested in its visible workings.[14]

The deception produced by the picture is very much the crux of the matter here. This pursuit of realism took advantage of the photograph's capacity to frame a miniature universe of its own, thereby exploiting - and amplifying - the verisimilitude of the model. A distant relative of the *trompe l'oeil* technique, this optical illusion alerts us to a use of photography that emerged in contradistinction to the modernist attitude outlined above. Here the agency of the camera was mobilised not to evoke an abstract design concept, but rather to lure the viewer into an imaginary world where a story might unfold.

A striking precedent of this 'special effect' can be found in the famous doll's house designed by Edwyn ('Ned') Lutyens for Queen Mary a decade earlier. Based on the scale commonly used for architectural models (one inch to one foot), this extraordinary miniature provided a major focal point to the 1924 British Empire Exhibition where it was first exhibited. This was a retrospective model,[15] in that it aimed to recreate a typical aristocratic residence from the exterior decoration to the interior furniture, with perfect replicas of every detail down to the manuscripts in the library, the wine bottles in the cellar, and the
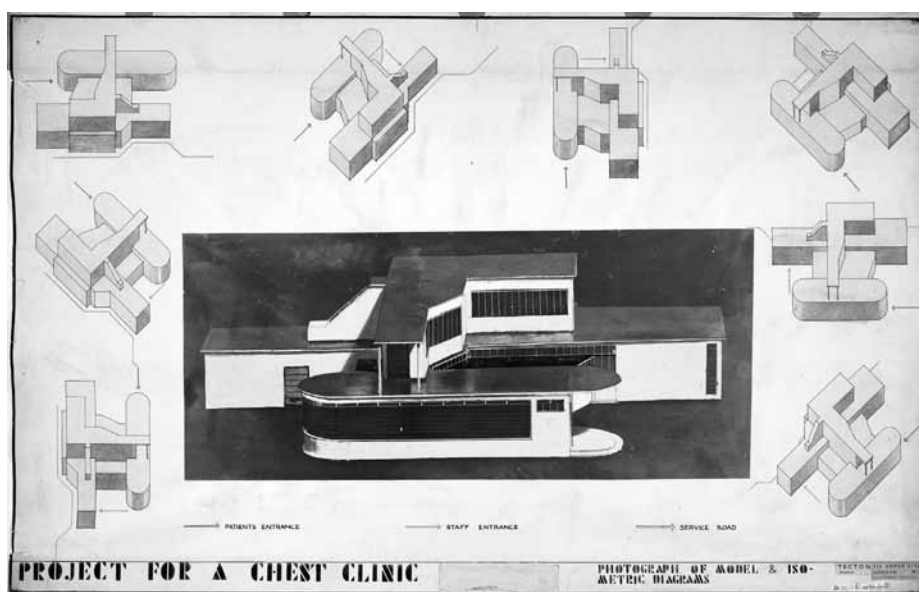
Figure 1. Project for the East Ham Chest Clinic, London, designed by Lubetkin and Tecton for Dr Philip Ellman: isometric diagrams and a photograph of a model (1932). (source: RIBA Library Drawings Collection)

toys in the nursery.[16] In elevating a doll's house to the rank of architecture, Lutyens turned a private pastime into a public spectacle – one that proved enormously popular. As Lutyens's biographer Jane Ridley observed, he plunged headlong into this project at a difficult moment of his career:

> With the doll's house Ned could escape from the disappointments of the real world, creating a world in miniature where he was in complete control. That the make-believe world was shared with a real-life queen made it all the more compelling.[17]

This comment calls to mind the analysis formulated by Gaston Bachelard in *The Poetics of Space,* where he revisited the theme of miniature from the perspective of a phenomenology of the imagination. Here Bachelard argued that miniature thinking allows us to free ourselves from the psychic as well as physical constraints of dimension, engendering a distinct form of *topophilia.* Accordingly, the experience of miniature affords us a glimpse of another world; an escape into a fantastic realm where one can temporarily rest and be soothed: 'it seems that by living in the world of miniature,' wrote Bachelard, 'one relaxes in a small place.'[18] Hence, it is only in a state of reverie that we can truly enjoy the reassuring comfort of an another dimension, and find in the minuscule 'one of the refuges of greatness.'[19]

This argument was subsequently discussed by Susan Stewart who pointed out how our perception is invariably conditioned by external factors. In *On Longing,* Stewart cogently argued that miniatures are always the product of social and cultural operations that help to domesticate the experience of a full-size reality: 'There are no miniatures in nature; the miniature is a cultural product, the product of an eye performing certain operations, manipulating, and attending in certain ways to, the physical world.'[20] More specifically, she observed that the miniature has a unique ability to produce a sense of *spatial closure* by inhabiting a microcosm with its own 'absolute sense of scale'.

Against this background, the doll's house defines a particular type of miniature that is historically related to the emergence of the modern interior as the habitat of the bourgeois subject.[21] Its defining elements of wealth and nostalgia made it a favourite entertainment for adults. It was only in the nineteenth century that it became a popular pastime for children amidst a craze for train sets and other miniature toys that were originally meant to simulate – and, thereby, exorcise - the effects of industrial progress. In this respect, Stewart observed that the Queen's Doll's House was designed to encapsulate the upper-class ways of life as a complete and self-sufficient microcosm unto itself.[22] Not surprisingly, such considerations were totally absent from the official rhetoric surrounding this artwork. The two-volume publication issued on the occasion of its original display described it as 'an allegory of the minuteness and intricacy of life' that retained 'a touch of childlike fancy'.[23] The author praised the architects and craftsmen's ability to reproduce, down to the smallest detail, a typical domestic interior that was supposed to bespeak comfort rather than luxury: a house suitable for a 'quiet family life' than for 'profuse or sumptuous entertainments'.

Figure 2. Interior view of Queen's Mary's Doll's House, designed by Edwyn Lutyens (ca 1924). (source: The Book of the Queen's Doll's House, Plate XXXVII)

The visual apparatus of *The Book of the Queen's Doll's House* was part and parcel of this 'pleasant spectacle for contemporary eyes'. A series of lifelike photographs of the miniature's interior, part in colour, afforded a glimpse into the Queen's and King's mock apartments (Fig. 2).[24] Here the *topophilia* elicited by the miniature verged on *scopophilia*, the visual pleasure associated with peeping into someone else's life. While the Queen's Doll's House marked the climax of narrative realism in model making, its pictures invited a suspension of disbelief of a higher order: these model photographs could hardly be told from views of full-size interiors illustrated in architectural magazines at the time.[25]

In the quest for a perfect simulacrum, a key role was played by the technique of composite photography, which consisted in grafting a picture of model onto a view of the intended site so as to obtain a seamless montage. This method, also called 'double photography', was developed by Harvey W. Corbett during his stint as a studio tutor at Columbia University in the early 1920s. Working mainly with cardoard models, Corbett perfected what might be called the *hyper-realist* approach to model photography; besides adopting it in his own practice, he expounded its virtues in a series of articles for the magazine *Pencil Points*.[26] Composite photography aroused interest on the other side of the Atlantic, too, where it featured in model-making handbooks such as, for instance, *Models of Buildings: How to Make and Use Them,* by the British architect and journalist William Harvey. Under the eloquent heading, 'Seeing is believing', this manual extolled the virtues of *the solid* in expressing those volumetric aspects of a project that could be lost in orthographic projections. 'To those who are not experienced in this art of interpreting architectural drawings', Harvey recommended, 'the model is indispensable.'[27] Similarly to Corbett, he asserted that model photography of the composite variety was the best means of visualizing a building. To prove his point, Harvey used an artist's impressions of the Bank of England remodelled by Herbert Baker on the site of John Soane's original building.[28] Not only did the photo-composition offer a more accurate representation of the project in its site, it also allowed the viewer to appreciate the architectural qualities of the building better than perspectival drawing - for, in the latter, 'critical attention is liable to be directed towards admiration of the drawing as a picture, instead of to the improvement of the synthesis of solids and voids in the building.'[29] Here was the Albertian principle again, lurking in a different guise.

This literature on models sanctioned the primacy of photography in visualising the shape of things to come. While perspectival drawing was inevitably bound to reveal the traces of a subjective and pictorial depiction, the camera was seen as a superior guarantor of objectivity. Behind this assumption was a longing for a perfect architectural simulacrum which led architects to harness the three-dimensional properties of the model towards ever more sophisticated visual effects.

This brief historical overview has shown different approaches to the photography of models that emerged in the inter-war period. Diagrammatic abstraction and narrative realism stand at the extreme ends of a broad field of representation that arose from the encounter between the camera and the model. However, it would be misleading to posit a clear-cut division between two opposite camps: on the one hand, a modernist avant-garde in thrall to a conceptual imagery; on the other, a professional rear-guard with a penchant for baroque illusions. The story is more nuanced – and, arguably, more interesting. In point of fact, the aesthetic of hyper-realism appealed to a number of progressive, modernist architects as well, especially after the Second World War.

The realm of visual effects expanded significantly when both model making and model photography reached new peaks of technical precision. Composite imagery was used systematically by prominent figures like Mies van der Rohe and Oscar Niemeyer, whose work was often presented through model photographs. The seamless montages realised by the Chicago-based firm Hedrich-Blessing for Mies epitomise the degree of perfection attained by professional image-makers in the 1950s. While the German architect had experimented with photo-montage since his early years, the hyper-realist works of his American period demonstrate not only the adherence to the scale model as his preferred medium, but also the calculated use of photography as a powerful means of communication and self-promotion.

Less known, perhaps, are the composite images realised by the photographer Rafael Landau for Oscar Niemeyer around the same period. Many of Niemeyer's 1950s projects for large building complexes, such as the Copan Building in São Paulo and the Quitandinha Hotel and Apartment Block at Petrópolis, Rio de Janeiro, were disseminated through such images.[30] If Landau's montages lacked the cool precision of Hedrich-Blessing's, they made up for it with a distinct sense of narrative and sometimes even irony. These compositions set up a dialogue between the building and the surrounding landscape, an intent that was pursued also by other modernist architects in the post-war period, including Carlo Mollino and Eero Saarinen.

The realist approach to model making reached a crisis point in the 1960s, when it became associated more with technical and commercial practices than with the architect's creative endeavour.[31] The 1976 *Idea as Model* exhibition in New York marked a significant attempt to reclaim the model from its ancillary role as a surrogate building and to reinstate its vocation as a conceptual medium. But the power of the simulacrum could not be easily reined in, and a platoon of new technologies took over and expanded the realm of architectural simulation in the computer age. Today, as the architecural imagination feeds increasingly on digital media and hybrid models, the brief history charted in this paper reminds us that *intermediality* is not a new phenomenon, and the pretense of autonomy attached to the architectural model has long been mediated by visual media.

Endnotes

1. Karen Moon, *Modeling Messages: The Architect and the Model* (New York: The Monacelli Press, 2005).

2. In parallel, the model was also adopted as a pedagogic tool by avant-garde schools such as the Vkhutemas and Bauhaus where experiments with forms, volumes, and materials became central to design education.

3. The present essay focuses on developments registered in twentieth-century western architecture, hence the emphasis on cases from Europe and the United States.

4. Kenneth McCutchon, "Architectural Models," *The Architects' Journal* 1 (1936), 459.

5. Grumbine had served in the US army during World War I and may have come in contact with military model-makers during a duty tour he made to France and Germany.

6. LeRoy Grumbine, "The Use of Scale Models as an Aid to the Architect," *The Western Architect* (June 1925), 59-63.

7. Leon Battista Alberti recommended that models should be 'plain and simple, so that they demonstrate the ingenuity of him who conceived the idea, and not the skills of the one who fabricated the model.' Quoted in Albert C. Smith, *Architectural Model as Machine: A New View of Models from Antiquity to the Present Day* (Boston: Elsevier, 2004), 28.

8. LeRoy Grumbine, "Using Scale Models Advantageously," *The Architectural Forum* 50 (1929), 109-10.

9. Beatriz Colomina, *Privacy and Publicity: Modern Architecture and Mass Media* (Cambridge MA: The MIT Press, 1994).

10. Quoted in Rolf Janke, *Architectural Models* (London: Thames and Hudson, 1968), 119.

11. *De 8 en Opbouw* 23 (1932), 229. These three pictures were featured also on the cover of the same issue.

12. The two architects were partners in the firm Adams, Holden, and Pearsons, which specialised in hospital design.

13. Anon., "An Exhibition of Hospitals," *The Architects' Journal*, January 18, 1933, 113.

14. Ibid.

15. On the difference between 'projective' and 'retrospective' models, see Mark Morris, *Models: Architecture and the Miniature* (Chichester: Wiley Academy, 2006).

16. The latter included several miniatures of miniatures, such as a train set and even the section of a doll's house.

17. Jane Ridley, *Edwin Lutyens: His Life, His Wife, His Work* (London: Pimlico, 2003), 304. On Lutyens' nostalgia and fascination with the miniature, see also Morris, *Models*, 118-9.

18. Gaston Bachelard, *The Poetics of Space* (Boston: Beacon Press, 1994), 162.

19. Ibid., 155.

20. Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Baltimore: Johns Hopkins University Press, 1984), 55.

21. Ibid., 61-3.

22. For an insightful analysis of Lutyens' doll's house project and his coeval plan for New Delhi interpreted through Stewart's categories, see: Timothy M. Rohan, "Lutyens, the Miniature and the Gigantic," in Andrew Hopkins and Gavin Stamp (eds.), *Lutyens Abroad: The Work of Sir Edwin Lutyens outside the British Isles* (London: The British School at Rome, 2002), 115-28.

23. A. C. Benson, "Introduction," in A. C. Benson and L. Weaver (eds.), *The Book of the Queen's Doll's House*, Vol. 1 (London: Methuen & Co., 1924), 6.

24. A set of similar photographs illustrated a feature on the Queen's Doll's House that was published in the March 1924 issue of *The Architectural Review*.

25. See, for instance, the review of the neo-Georgian town house designed by Edmund Wimperis & Simpson at 38 South Street, London, in *The Architectural Review* 55 (1924), 168-9.

26. Harvey Wiley Corbett, "Architectural Models of Cardboard," *Pencil Points* 3 (1922). See also Moon, *Modeling Messages,*

27. William Harvey, *Models of Buildings: How to Make and Use Them* (London: The Architectural Press, 1927), 3.

28. Harvey trained as an architctural assistant with Baker, then managed his main office in Westminster in the ealry 1920s.

29. Ibid.

30. Stamo Papadaki's account of the Brazilian architect's 'maturity and middle work', for instance, opens with these two projects, each of which is introduced with a composite model photograph. Stamo Papadaki, *Oscar Niemeyer: Works in Progress* (New York: Reinhold, 1958).

31. See Moon, *Modeling Messages,* 113-6.

THIS IS NOT A MODEL:
THE CASE OF THE STRADA NOVISSIMA

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> By making a model, you will have the opportunity, thoroughly to weigh and consider the form and situation…
> - Leon Battista Alberti, The Ten Books of Architecture

Models have always been part of architecture's cultural and professional realm. Yet their types and purpose have varied across time and space. For centuries models have been associated with bewildering verisimilitude – either miniature, to get a sense of the ensemble, or fractional, as in the case of seventeenth- and eighteenth-century plaster casts. In the modern era they became powerful tools for conception, at the basis of any good Bauhaus-like architectural education: something that 'need not merely describe a project, but generate it.'[1]

Belittling the Beaux-Arts tradition – ruled by the standard presentation drawings of plan, section and perspective – modernists favored models for representing their ideas. Closer to reality, models offer a representation of space that communicates well and is easier to grasp for the architect as well as for the layman. Modernists insisted on the potential of models as a 'vehicle for pure creativity'.[2] In *Precisions: On the Present State of Architecture and City Planning*, Le Corbusier summarised to his disciples the essence of the modern aversion to aesthetic drawings:

> Now that I have appealed to your *sense of truth*, I should like to give you, you the students of architecture, the hatred of rendering. […] Architecture is in space, in extent, in depth, in height: it is volumes and circulation. Architecture is made *inside one's head*. The sheet of paper is useful only to fix the design, to transmit it to one's client and one's contractor. When you have created a pure functional organism with the plan and section, *your facade will result from it*; and if you have within you some power of harmony, your facade could become moving. […] Architecture is organization. *You are an organizer*, not a draftsman.[3]

But in the postmodern era things were once again to change, as the supremacy of the image as a surrogate for buildings would hugely influence the way architecture was conceived and communicated to the public.

When, in 1979, in the heyday of postmodernism, Paolo Portoghesi had the task of conceiving an international exhibition of architecture for the Venice Biennale, he opted for a hybrid: something situated between the drawings or 'image' of architecture and the tradition of real-scale mock ups. Using the theatrical effect and illusionary nature of real-scale models he aimed at making architecture less elite and increasingly engaged with the public in new ways. At the 1980 Venice Architecture Biennale models did not only precede the building, they surpassed it. The centrepiece of the event was the Strada Novissima, a seventeen-metre long interior street made of twenty full-scale façades.

In this paper I will ask what is a model and how thinking of the Strada Novissima in terms of a model can help us assess the nature of this idiosyncratic exhibition apparatus. I will consider whether the façades of the 1980 Venice Architecture Biennale were architecture, images or models; set, scenery, surrogate or simulacrum. In theory, the model is the building's ultimate referent, but what if there is no building? This paper will discuss the Strada Novissima as if it were ephemeral architecture, film set, scenery, projective model, or real-scale drawing.

EPHEMERAL ARCHITECTURE?

The rules proposed to the twenty exhibitors of the Strada were made explicit by a short text accompanied by a series of technical drawings. Architects were asked to imagine 'a series of houses' each being either: 'a. the architect's dwelling, with the place where he works, or a personal museum, or a space for the exhibition and "sale" of his own ideas; b. simply a "dwelling", a place for everyday and private life; or c. a façade (maybe only partial) of a building destined for meetings (for work or study), gatherings, entertainment.'[4] A plan of an individual exhibition space (originally drawn at scale 1:50) indicated the maximum width of the façade (1.60 metres), the exact dimensions of the columns (0.95 × 0.95 metres), the space between two columns (7.00 metres), the position of lateral fixed panels put up by the Biennale, the space between the centre of a column and the back wall of the Arsenale, the maximum projection of cantilevered structures (0.50 metres), the joint with the adjacent façade, etc. A section showed the possible views from the ground floor and also from the mezzanine.

Placing their show within a tradition of real-scale models, the organisers of the First International Architecture Exhibition of the Venice Biennale insisted on the idea of 'building' something. If the idea was first to realise a project concerning the *Serinissima* – either a new U.S.A. pavilion for the *Giardini,* some work on Wright's project for the Fondazione Maziero, or, more seriously considered, new public transport (*vaporetto*) terminals in Venice – all the above possibilities were discarded for being too dangerous and difficult to implement. The favoured option – the street of façades built *inside* the Corderie – was, necessarily, ephemeral. Its only real legacy was thus to give a new life to the Arsenale di Venezia, one of the most important buildings of Venice's past glory. Analysing the curators' intentions, it seems as if the façades of the Strada Novissima were meant to be the model of an architecture yet to come and an epitome of each architects' language. However, these 'models' – if they were models – bore no constraint (other than size wise) and had no link with a real site.

FILM SET?

The Strada Novissima was built *in vitro* by unemployed technicians from Cinecittà,[5] the famous Roman cinema studio (more or less like the imaginary cities of Federico Fellini).[6] The history of the cinema studios of Cinecittà had consisted of crises followed by periods of effervescent activity. Built in less than a year, the cinema studios of Cinecittà were officially opened by Mussolini in 1937.[7] Intended as a kind of factory for the Italian state cinema, Cinecittà worked on the production of most of the Fascist cinema. But in 1943, the 1,200 employees of the Roman studio were sacked and it was not until 1950 that Cinecittà revived as a result of the Americans coming to Italy to make films.[8] Indeed, in the 1950s Cinecittà became a sort of 'Hollywood on the Tevere' as big productions such as *Roma Holiday* (1953) and *Ben Hur* (1958) were filmed at the studios. In the 1960s, Italians took repossession of Cinecittà with neorealist films by Fellini, Rossellini and Visconti. However, from the end of the 1960s, with the growth of television and the end of vast historical productions, the Italian cinema industry went into decline and Cinecittà slowly lost its pre-eminent position at the forefront of cinematographic technique and production. The state of crisis at Cinecittà in the 1960s is well depicted in the 1963 film *Le Mépris* by Jean-Luc Godard, a sort of requiem to Cinecittà: in it we see that after 1960 Cinecittà had become almost a ruin. In 1980, when Portoghesi was looking for people with the skills to build his street of papier-mâché, the technicians of Cinecittà were probably desperate to find contracts in order to keep the studios viable. In this respect we can say that it was a perfect timing for both the curator and the technicians of Cinecittà.

Filmmakers and architects working on films build models (real or reduced in scale) of existing or imaginary buildings. And they exhibit their creations via films, accessible sometimes to very large audiences. The construction of the Strada Novissima and the way in which Portoghesi and his team decided to address the difficult question of 'how to exhibit architecture' suggested a new interdisciplinary relation between film and architecture.

The film *Playtime* (dir. Jacques Tati, 1967) usefully explores the relation between cinema and architecture. For *Playtime*, in which a group of American tourists spend their holiday in a hypermodern simulacrum of Paris, Tati created an entirely artificial set, a city within the city, the model of an ultra-modern Paris nicknamed Tativille.[9] Although he originally intended to use a real location for the filming of *Playtime*, Tati decided to build a large studio lot on the plateau de Gravelle in Joinville. Here, 'a town would be created for the film by set designer Eugène Roman'[10] – a town of two 100 by 25 metre sets with 15-metre high Plexiglas façades that could be wheeled around. Tativille was never intended to be permanent. Indeed, on 15 September 1967 it was demolished 'despite foreign production companies keen to use the magnificent set, despite petitions to Andre Malraux, French Minister of Culture and despite desire to turn the set into a film school'.[11] This enthusiasm for Tativille came from the fact that after the end of the filming the set had turned into a 'real' attraction for Parisians and tourists to come and visit the set (the model) as if it were an architectural exhibition.

Looking at this film in the context of the Strada Novissima reveals some shared characteristics. Joan Ockman has observed that 'the architectural setting of the film itself has become the spectacle'[12] and 'people were "extras". Architecture was the *vedette*.'[13] Tativille has some similarities with the Strada Novissima. It was a film set that turned into an exhibition while the Strada Novissima was built by film set technicians as an exhibition. But while Tativille endures through the film, nothing remains of the Strada after its short international tour. Both constructions were, in reality, a collection of Potemkin-like[14] façades that produced the simulacrum of a street or a city. Both were meant to be ephemeral and were eventually destroyed. Finally, even if built more than a decade apart, both the Strada Novissima and Tativille were direct and explicit critiques of modern architecture.

Examining the afterlife of both *Playtime* and the Strada Novissima, it is worth considering what exactly architects or architectural historians look at when scrutinizing retrospectively this film or this exhibition. Do they look at *Playtime* to investigate the film itself or the set - the model of Tativille - as revealed through the film? Likewise, are those studying architectural exhibitions such as the one presented in Venice in 1980 seeking to understand what happened during the exhibition, or are they attempting to understand how the display has been mediated subsequently through films, press releases, books and other types of media?

SCENERY?

If the Strada Novissima was built using cinema set design techniques, its most striking link was with the world of theatre, and particularly that of the Renaissance period. Indeed, the Strada Novissima, like the historical model of the Strada Nuova in Genoa – a sixteenth-century residential palace street or linear piazza built in the centre of Genoa 'designed to legitimize and enhance the authority of a ruling elite'[15] – was a scenographic urban enclave with a central monumental perspective axis, and, most importantly, a public presentation space.[16] Moreover, the reference to Vicenzo Scamozzi's trompe l'oeil on-stage scenery in Palladio's Teatro Olimpico in Vicenza was evident and acknowledged – a longitudinal section of the theatre figured on the cover of the first version of the exhibition's English catalogue. But more than a mere formal similitude with the scenic perspectival space, The Strada bore resemblance with the politics of spectacle.

In the Strada Novissima, the visitors strolled into the extremely immersive giant model of the exhibition scenography and thus were part of the spectacle. And if the inspiration of sixteenth-century theatre can be seen as regressive (in its visual and historical aspect) it was in fact a highly progressive idea. It shows how, in a sort of residue of the public sphere, architecture (or more precisely architectural exhibition) could make a political statement about urbanism. More than a mere *mise-en-scene*, the Strada Novissima was meant to awaken consciousness.

PROJECTIVE MODEL?

The projective model differs from the representational one. Mike Morris explains that a projective model, or process model 'may adhere to an internal language of the designer – formal shorthand, quick gestures, partial spot-checks'.[17] In the case of competitions, although entailing a communicative act, the projective models are first and foremost 'rhetorical devices for the narration of a project'.[18] The 1976 'Ideas as Model' exhibition, held by the Institute of Architecture and Urban Studies in New York, was tinged with this very idea of the projective potential of models. On the occasion of the exhibition, Peter Eisenman wrote: 'Models could have almost unconscious, unpremeditated, even generative, effects on the design process, that is, a similar effect to that of a two-dimensional projection to provoke unforeseen "structural" developments or even modes of perception in the process of design.'[19]

Was the Strada Novissima meant to be generative and projective? Photographs taken during the exhibition's assembly in the Strada Novissima reveal that the idea of 'making' was of crucial importance. The facades became a sort of 'do-it-yourself' architecture, a giant model allowing architects to experiment with their own language (as if they were artists), yet not quite getting to the real thing. With the exception of a few 'senior' figures (Venturi, Moore, Isozaki…), most of the exhibitors of the Strada Novissima had built very little real buildings. Suddenly lifted to the apex of glory – the Venice Biennale – they abandoned their drafting tables for the more hands-on activity of 'making'. Yet this was also the time when architects were experimenting in order to develop their own personal language, producing drawings only for the sake of exhibiting them. This was evident in other group exhibitions of the period – 'Europa-America' (1976), 'Roma Interrotta' (1978), 'Dieci progetti per Venezia' (1978), just to name a few.

Thinking of the Strada Novissima as a series of gigantic prospective models opens up multiple interpretations and analyses of the single pieces. Considering the exhibition from a larger perspective, comparing it with other shows that had around the same period generated a series of models that could almost be perceived as sculptures, confirms the changing significance of models across historical periods.

REAL-SCALE DRAWINGS?

In the postmodern era, the façade became independent from the building. It did not, as in the case of Le Corbusier, ensue from the plan but was a rhetorical communicative apparatus, flanked on seemingly independent interior spaces. Symbolic of its time, the Strada Novissiva was nothing but a row of decorated sheds, a series of rhetorical images or blown-up drawings – so it was a model that in its form said something very powerful.

Massimo Scolari's façade is probably the one that most resembled a drawing: it was a real-scale transposition of an earlier painting by the architect – Venezia Città di Mare. Yet the case of Scolari suggests a bewildering triangular relation between the paintings, the reduced-scale model and the real-scale façade. A photograph of the young Scolari watching the assembly of his façade in the Arsenale is framed in a particular way: as if the photographer had wished to insist on the crucial importance of an object placed in the middle of the composition – an intriguing miniature, a cross between a model and a rendered drawing, depicting a kind of door with lateral wings. This object is also an example of what is normally shown in an architecture exhibition: a representation of a built (or sometimes unbuilt) work. In the case of the Strada Novissima, the representation, although presented in the exhibition space, takes second place to the backbone of the show: the façades. Therefore, what was displayed in the Strada

was not the representation of a built work, but real-scale constructions. These constructions, however, were not real buildings as they lacked any tectonic or spatial quality. So what exactly were they? Representation, simulacra, signs, images? Were they real or imaginary? This very exhibition (as well as many of Scolari's writings), then, raises the question of which takes precedence, the drawing or the building?

CONCLUSION

The idea of the Strada Novissima comes from a desire to create an exhibition that is more than a photography exhibition. Paolo Portoghesi said: 'In order to make architecture understandable, you need to put people *inside* architecture, that is, in contact with architecture, giving it thus a sense. Architecture becomes something real only if there is a link between architecture and humans'.[20] Is it to say that the Strada Novissima has no referent attached to it and therefore is the real thing as opposed to the model?

The 1980 Venice Architecture Biennale changed the significance of architectural exhibitions. Means of simulacra have long been used for architectural exhibitions and in the modern tradition of exhibitions three-dimensional real-scale models have often served as prototypes or experimental devices, integral to the production of architecture but standing in for something that either did, or might, exist. The houses built in the MoMA garden in the 1940s and 1950s, for example, served as projections into the future, both for the creators and for the public. Yet in the 1980 Biennale exhibition, simulacrum was employed purely to generate an image. 'The Presence of the Past', with its Strada Novissima, was not raw documentation of architectural projects (as in the 1932 International Style exhibition or the 1973 Triennale) and it was not a prototype (like Le Corbusier's 1925 Pavillon de l'Esprit Nouveau, the 1927 Weissenhofsiedlung, the Buckminster Fuller 1942 Dymaxion Deployment Units, or the Smithsons' 1956 House of the Future). Neither was it a formal abstraction suggesting what the future might be like (such as Mies van der Rohe's 1929 Barcelona pavilion).

Unlike other architectural exhibitions whose individual objects - drawings and models - on display may survive the ephemerality of the ensemble, not much endured of the 1980 Venice Architecture Biennale. The Strada Novissima only existed for a very short time – between 1980 and 1982 – and the real-scale parts of the exhibition were mainly temporary and were dismantled or lost after the show's presentation. Built as film set, the giant model that was the Strada Novissima was not a means to an end but was an end in itself, and once the show was over nothing was left but a few photographs and individual memories. The temporariness of these constructions and their explicitly theoretical quality drew attention to the ephemerality of the object, and pointed to an underlying duplicity about the nature of representation itself. Flipping the relationship between reality and representation, the façades of the Strada Novissima were a hybrid between a real-scale image and a model, yet one with no referent attached to it. Its ephemerality contributed to its appeal.

Endnotes

1. Mark Morris, *Architecture and the Miniature: Models* (London: Wiley Academy, 2006), 7.

2. Mark Morris, *Architecture and the Miniature: Models*, 7.

3. Le Corbusier, *Precisions on the present state of architecture and city planning : with an American prologue, a Brazilian corollary followed by the temperature of Paris and the atmosphere of Moscow* (Cambridge, Mass.: MIT Press, 1991), 230.

4. Paolo Portoghesi, Vincent Scully, Charles Jencks and Christian Norberg-Schulz, *The Presence of the Past: First International Exhibition of Architecture-Venice Biennale 80* (London: Academy edition, 1980), 38.

5. A small Cinecittà sign was carefully placed at the bottom each façade.

6. Pasquale Chessa, 'Colloquio con Paolo Portoghesi A Venezia in via del post-modernismo', *L'Europeo*, (July 22nd 1980), As D'Amato recalls, the transport and the montage of the façades into the Arsenale actually cost more than their fabrication in the Cinecittà studio. Claudio d'Amato during the event 'Sabati dell'architettura: La Strada che ha attraversato l'oceano', Biennale di Venezia (11 September 2010).

7. Five years after the opening in 1932 by Mussolini, of the Mostra Internazionale del Cinema, mother of all film festivals.

8. Fellini, *Cine Città*, 165.

9. Tativille was built in 1964.

10. *Au delà de Playtime,* dir. by Stephane Goudet (France: 2002).

11. *Au delà de Playtime,* dir. by Goudet .

12. Mark Lamster (Ed.), *Architecture and Film* (Princeton: Princeton Architectural Press, 2000), 179.

13. Mark Lamster (Ed.), *Architecture and Film*, 181.

14. In reference to the historical myth According to which, there were fake settlements purportedly erected at the direction of Russian minister Grigory Potempkin to fool Empress Catherine II during her visit to Crimea in 1787. According to this story, Potemkin, who led the Crimean military campaign, had hollow facades

of villages constructed along the desolate banks of the Dmieper River in order to impress the monarch and her entourage with the value of her new conquests, thus enhancing his standing in the empress's eyes.

15. George l. Gorse, 'A Classical Stage for the Old Nobelty: The Strada Nuova and Sixteenth-Century Genoa', *The Art Bulletin*, vol.79, no. 2 (1997), 54.

16. George l. Gorse, 'A Classical Stage for the Old Nobelty', 54-61.

17. Mark Morris, *Architecture and the Miniature: Models*, 69.

18. Mark Morris, *Architecture and the Miniature: Models*, 71.

19. Peter Eisenman, 'Preface' in Richard Pommer, Kenneth Frampton and Silvia Kolbowski (eds.) *Ideas as Model* (New York: Rizzoli, 1981), 1.

20. Paolo Portoghesi, in *La Presenza del Passato, dir. by Cascavilla* .

Fusion Architecture from the Middle Ages to the Present Day: Incorporation, Confrontation or Integration?

SESSION CHAIRS:

Brigitte Sölch (Kunsthistorisches Institut in Florence - MPI, Italy)

Erik Wegerhoff (Technical University of Munich, Germany)

Most histories of architecture tend to portray neatly-defined, self-contained examples of buildings from different eras. The built reality is, however, often very different. This is not only true of fittings and furnishings from later periods (i.e. a Gothic church equipped with Baroque altars) but also of the incorporation of almost whole, pre-existing buildings which are (re)framed and re-interpreted as a consequence. Renaissance Italy provides a number of examples, like the new outer shells added by Alberti and Palladio to some medieval buildings, not least Vasari's Uffizi in Florence which integrated both the medieval Zecca and a Romanesque church to create a new visual, spatial and architectural concept; or the Capitol in Rome which swallowed its medieval and ancient predecessors. Nonetheless, this phenomenon is not limited to any single period. Indeed, it continued well into the nineteenth and twentieth centuries and even continues today – one need only think of the Smithsons' Upper Lawn Pavillion at Fonthill or, more recently, Nieto Sobejano's bold creation, in the German town of Halle, of a new art gallery from the bishop's medieval palace. This roundtable session addresses issues of architectural incorporation and metamorphosis from the Middle Ages to the present day. Its focus lies not on the pragmatic appropriation of pre-existing structures, but on their purposeful integration as part of intentionally planned new wholes. Why embed an existing building in a new structure? What formal, visual and spatial solutions are found? Do we go too far if we think of this action as actually venerating a pre-existing building? To what extent was the previous structure preserved, controlled or regulated? We welcome contributions (of about ten minutes) that explore examples of architectural fusion and use these as keys to a broader theoretical and/or systematic perspective on the phenomenon.
Our aim will also be to critically reflect upon a phenomenon which has received considerable interest in postmodernist practise and discourse, but which has barely been systematically or theoretically discussed since.

FUSION ARCHITECTURE

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"From the first drawings to the final demolition, buildings are shaped and reshaped by changing cultural currents, changing real-estate value, and changing use". With these words Stewart Brand emphasizes the relationship between time and architecture in his book *How Buildings Learn: What Happens After They're Built* (1994). He interprets architecture "as a whole - not just whole in space, but whole in time".[1] While architecture may make claims to, as well as suggest, permanence, it is not an unchangeable quantity. Instead, recurring changes and transformations charaterise it, whether cautious or controversial, additive or substitutive. In the course of these metamorphoses, what is new not only relates to, but is actually challenged by what is old.

Transformations of this type are discussed in the Round Table *Fusion Architecture from the Middle Ages to the Present Day: Incorporation, Confrontation or Integration?* Under fusion architecture, we understand buildings transformed into completely new architectural entities by fundamental and intentional interventions. One might actually speak of incorporation: an existing building is reformed, deformed and transformed, it is built in or built over. (Fig. 1) The discussion will thus focus on interventions that are linked to, yet not the same as phenomena from the realm of building conservation such as restoration, remodelling or reconstruction. *Fusion Architecture*, however, owes a significant debt to these lively and controversial debates taking place in this field about the relationship of old and new. In them, too, time is understood as a central factor of architecture.[2] One need only recall Cornelius Gurlitt's plea that new additions actually look new, in order to preserve the purity and difference of the old. Gurlitt's position, expressed in 1900, did not become a central concern until the *Venice Charter* of 1964 .[3] On contrast, in 1865 Eugène-Emmanuel Viollet-le-Duc stated that restoring a building "ce n'est pas l'entretenir, le réparer ou le refaire, c'est le rétablir dans un état complet qui peut n'avoir jamais existé à un moment donné".[4] Viollet-le-Duc's and Gurlitt's stances can be seen as dialectical and run parallel to contemporary practice – not just in conservation but also in adding to existing structures. Adding on has since become respected as a creative architectural process in its own right.[5] As early as the 1950s, Alison and Peter Smithson set the direction with their call to engage with (the social as well as spatial structure of) the existing city, coining the term "as found".[6] Fuelled by the criticism of modern architecture in the second half of the twentieth century, an absolutism which overlooked the rootedness of buildings in time was called into question. The emergence of two schools can then be observed: On the one hand, the emphasising of the gap, and thus encouragment of the visible confrontation of old and new, on the other the developing of any new architectural addition along the lines of what is already there. The underlying strategy of the latter approach is rooted in the search for the fundamental principles that determined the old structure, using these as an inspiration for the new. Titles such as *New Uses for Old Buildings* (1975), *Saving Old Buildings* (1980) or *Architecture Reborn* (1999) demonstrate the booming interest in transformation.[7]

Figure 1. St Wolfgang near Dorfen, Bavaria/Germany, fountain chapel from around 1400 incorporated into the larger church dating from 1430-1484. (source: photograph by the authors, 2012).

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The Round Table will look at a wide spectrum of examples from practice as well as theory. With case studies of fusion architecture ranging from careful integration to forced absorption, the aim is to discover and explore underlying positions. A perspective spanning all epochs from the Middle Ages to date promises to render visible the methods and levels of interpretation that characterise fusion architecture. Although a common phenomenon in the history of the city and architecture since antiquity, architectural fusions have not yet been subject to systematic scrutiny or studied in their wider correlations. What motivates architects and those who commission them to intervene in an existing building? What are the modes of transformation, the individual architectural solutions, and what correlations of meaning do these suggest?

MOTIVES

Motives behind architectural transformations vary. There are pragmatic considerations such as economic pressure and time constraints. A prime example is the Aurelian Wall of ancient Rome which incorporated existing buildings such as the barracks of the praetorian guard, the amphitheatrum Castrense and the pyramid of Cestius.[8] In fact, time and cost may have been issues in Francesco Borromini's baroque transformation of St John Lateran. He decided to re-vest the ancient basilica for the Holy Year of 1650 leaving existing tombs, inscriptions and a fresco by Giotto visible and creating a subtle play of openings and perspectives.[9] Alleged protection and conservation may also have been motivations for architectural fusion. An example is Carlo Maderno's insistence that New St Peter's had merely "encapsulated" the remains of Old St Peter's.[10] Furthermore, fusion architecture may have been caused by attempts to fashion an impression of origin and legitimacy through the architectural manifestation of tradition. If possible early modern palaces integrated ancestral buildings to preserve dynastic memory and ensure legitimacy, as can be seen in Heidelberg or Zerbst near Dessau, Germany.[11] Large public commissions often developed in a similar way when buildings formed an integral part of state-building processes and appropriated, transformed or incorporated pre-existing governmental structures, often using strategies that allow for their visibility. The Mint in Florence thus came to form an integral part of Giorgio Vasari's new Uffizi because "the planned magistrate's building was to profit from the legitimacy inherent in the buildings from Republican times. In this way, the duke's prestigious building on the newly constructed magnificent axis was to appear as the legitimate continuation and reshaping of the Republic's administrative district".[12] Publicly demonstrated piety, however, may have been the motive for the Uffizi swallowing yet another medieval building, the Romanesque church of San Pier Scheraggio, which had already lost an aisle in 1410 due to the extension of a road before the rest was completely integrated into Vasari's new design more than a century later. Today, its spoil-like columns are visible in the uncovered stonework.[13]

MODES OF TRANSFORMATION

Only careful formal analysis can assess if existing buildings have been included respectfully, cautiously, usurpingly or triumphantly. What terms exactly might describe these processes of integration, be they limited to a certain period or recurring? Recent publications on the topic introduce a number of terms and categories. The editors of *Build-on: Converted Architecture and Transformed Buildings* (2009), for instance, distinguish between an additive way of extending space (*Add-on*), the preservation of the outer appearance with a new design limited to the interior (*Insideout*) and the so-called *Change Cloth[e]s*, a term which describes interventions that "entirely change the face of the existing building structure – both programmatically and aesthetically".[14] The exhibition catalogue *Créer dans le créé* (Centre Pompidou, 1986) names different "attitudes": from *célébration* (also of the *genius loci*) via *contextualité* to *source de* […] *l'imagination* and *contraste* or *opposition*.[15] To what extent do terms and categories such as these prove useful for a diachronic perspective? And what terms, and thus meanings, were actually used in early modern times which might help in our discussion of fusion architecture today? Sebastiano Serlio, for example, in his seventh book on architecture discusses the issue of "restauramenti".This he understands to be a contemporary modification of (at least) the outer appearance of a building in line with contemporary theories of *decorum*.[16] A century later, one finds the term *enveloppe* used in relation to Louis XIV, who wrapped his father's hunting lodge with his new Versailles – a process and term which might also prove useful for describing Palladio's intervention at the Basilica of Vicenza. Colbert's aesthetic criticism of the Versailles *enveloppe* as "rapetasserie" (patchwork) and comparison to a deformed human body draws our attention to the problems with which fused architecture has been confronted ever since the analogy of body and building set up by Plato and Aristotle.[17]

ARCHITECTURAL SOLUTIONS AND CORRELATIONS OF MEANING

What formal architectural solutions are found in the confrontation of old and new? To what extent does the old have to comply with the new, or vice versa, to convey, (re)present and exhibit its value, be it in terms of content, material, or aesthetics? Can one talk of a change of semantics? In what way does a building's meaning vary through differing formal ways of appropriation,

through different strategies of making building parts visible and invisible; and how does all this relate to the urban, social, cultural and political context? When discussing questions such as these, it is worth noting that even those eras which loudly proclaimed a rupture with the immediate past, namely the Renaissance and the early twentieth century, found sophisticated ways of handling tradition. The significance of, for instance, architecture from the Middle Ages in the Renaissance raises questions of tradition and continuity. Styles not only mirror an evolution in the history of architecture but may be consciously used to communicate a certain message („Stil als Bedeutung").[18]

Vasari's Uffizi, to return to an example, not only transformed the Mint, it also framed the old building, exhibited it, and made it understandable in a new whole. Georg Simmel's theories on the meaning of the (picture-) frame formulated in 1902 might be an interesting starting point for an analysis and interpretation of such solutions. Simmel reflects on the structure of meaning evoked by the frame and states that the "character of things depends ultimately upon whether they are wholes or parts. Whether an existence, sufficient within itself, closed within itself, is determined only by the law of its own nature or whether it stands as an element within the context of a whole, from which it receives power and meaning".[19] In what ways is framing architecture similar to or different from framing pictures? Frame and envelope (Colbert) are but two examples of a whole array of potential terms as well as of formal and aesthetic solutions that demand further investigation and elaboration. The humanist concept of the art of dissimulation (*dissimulatio*) may help interpret Alberti's wrapping of Santa Maria Novella in Florence[20] as well as inspire reflection upon the Italian *faccia* (face) as a term closely linked to *facciata* (façade). All of this might open up new ways of thinking about fusion architecture.

Many projects of fusion architecture in the second half of the twentieth century by such practitioners as Carlo Scarpa and Gottfried Böhm are characterised by an emphasis on the gap and intentional confrontation. On an aesthetic level at least this is nothing new, it was practised already in early modern times. This does not mean, however, that the motives were the same. The architect Oswald Matthias Ungers enriched options and attitudes with his concept of the "house within the house", most evident in the Museum of Architecture in Frankfurt (1979-1984).[21] Strikingly, when it comes to listed buildings, recent debates have begun to call for an "un-stressed" approach to construction, suggesting that the era of an absolute distinction between old and new may have come to an end.[22] Discussing fusion architecture becomes all the more relevant with the honouring of Wang Shu with the Pritzker Prize (2012). Shu realises projects *ex novo* pervaded by memories, craftsmanship and a sense of time by re-using the material of destroyed buildings. In his History Museum in Ningbo, China (2003-2008), Shu creates an aesthetics of difference between the old and the new simply by using and changing materials, with the intention "that at the end there is something inside the building".[23]

When, then, is an existing structure preserved, when is it made a relic, and when does it become a trophy? When does it go beyond being revered as something precious? When is it taken hostage, vanquished or conquered?

Endnotes

1. Steward Brand, *How Buildings Learn. What Happens After They're Built* (New York: Viking 1994), 2. For the early modern period, cf. Marvin Trachtenberg, *Building-in-time from Giotto to Alberti and Modern Oblivion* (New Haven, Conn.: Yale University Press, 2010).

2. Cf. e.g. Norbert Huse, *Denkmalpflege: deutsche Texte aus drei Jahrhunderten* (Munich: Beck, 1996) and Nicholas Stanley-Price (ed.), *Historical and Philosophical Issues in the Conservation of Cultural Heritage* (Los Angeles: J. Paul Getty Trust, 1996).

3. Cf. Thomas Will, "Grenzübergänge: ‚Weiterbauen am Denkmal'," *Werk, Bauen + Wohnen - Swiss Edition* 90 (2003).

4. Eugène-Emmanuel Viollet-le-Duc, *Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle*, vol. VIII (Paris: Morel, 1869), 14. The first edition dates from 1865.

5. Cf. the articles in *Werk, Bauen + Wohnen* 6 (2003), and the recent examples in Charles Bloszies, *Old Buildings, New Designs* (New York: Princeton Architectural Press, 2011).

6. Cf. Robert Klanten and Lukas Feireiss (eds.), *Build-On: Converted Architecture and Transformed Buildings* (Berlin: Die Gestalten Verlag, 2009), 3.

7. Sherban Cantacuzino, *New Uses for Old Buildings* (London: Architectural Press, 1975), Barbaralee Diamonstein, *Buildings Reborn: New Uses, Old Places* (New York: Harper & Row, 1978), Sherban Cantacuzino and Susan Brandt, *Saving Old Buildings* (London: Architectural Press, 1980), and Kenneth Powell, *Architecture Reborn: The Conversion and Reconstruction of Old Buildings* (London: King, 1999).

8. Cf. Kathrin Schade, "Palladio und die Soldatenkaiser. Renaissancezeichnungen verlorener Monumentalbauten des 3. Jahrhunderts in Rom," in Klaus-Peter Johne, Thomas Gerhardt and Udo Hartmann (eds.), *Deleto paene imperio Romano: Transformationsprozesse des Römischen Reiches im 3. Jahrhundert und ihre Rezeption in der Neuzeit* (Stuttgart: Franz Steiner Verlag, 2006), 356.

9. Cf. Max Dvořák, "Francesco Borromini als Restaurator," *Kunstgeschichtliches Jahrbuch der K[aiserlich-]K[öniglichen] Zentral-Kommission für Erforschung und Erhaltung der Kunst- und Historischen Denkmale* 1 (1907), 89-98.

10. Cf. Horst Bredekamp, *Sankt Peter in Rom und das Prinzip der produktiven Zerstörung: Bau und Abbau von Bramante bis Bernini* (Berlin: Wagenbach, 2000), 110-112.

11. Cf. Matthias Müller, *Das Schloß als Bild des Fürsten: herrschaftliche Metaphorik in der Residenzarchitektur des Alten Reichs (1470-1618)* (Göttingen: Vandenhoeck & Ruprecht, 2004), 220.

12. Matteo Burioni, "Vasaris Uffizien: Transformation stadträumlicher Bezüge am Übergang von der Republik zum Prinzipat," in Stefan Schweizer and Jörg Stabenow (eds.): *Bauen als Kunst und historische Praxis: Architektur und Stadtraum im Gespräch zwischen Kunstgeschichte und Geschichtswissenschaft*, vol. 1 (Göttingen: Wallstein-Verlag, 2006), 226.

13. Cf. Nello Bemporad, "San Pier Scheraggio nella Galleria degli Uffizi a Firenze," *L'architettura* 18 (1972), 338-344.

14. Robert Klanten and Lukas Feireiss (eds.), *Build-On: Converted Architecture and Transformed Buildings* (Berlin: Die Gestalten Verlag, 2009), 4.

15. Isabelle Maheu-Viennot and Section française de l'Icomos (eds.), *Créer dans le créé. L'architecture contemporaine dans les bâtiments anciens*, Exhibition Catalogue, Centre Pompidou, Paris, 28 May - 7 September 1986 (Paris: Electa Moniteur, 1986), 21-25.

16. Sebastiano Serlio, *Il settimo libro d'architettura di Sebastiano Serglio bolognese. Nel qual si tratta di molti accidenti, che possono occorrer'al architetto, in diuersi luoghi, & istrane forme de siti, e nelle restauramenti, o restitutioni di case, e come habiamo a far, per seruicij de gli altri edifici e simil cose* [...] (Frankfurt: ex officina typographica Andreae Wecheli, 1575), 156-157.

17. Cf. Robert W. Berger, "The chronology of the Enveloppe of Versailles," *Architectura* 10 (1980), 105-133. For Colbert's critique see ibid., 109 and 112: "[...] ce chasteau ressemblera à un petit homme qui auroit de grands bras, une grosse teste, c'est-à-dire un monstre en bastimens".

18. A term coined by the editors in Stephan Hoppe and Matthias Müller (eds.), *Stil als Bedeutung in der nordalpinen Renaissance: Wiederentdeckung einer methodischen Nachbarschaft* (Regensburg: Schnell & Steiner, 2008).

19. Georg Simmel, "The Picture Frame: An Aesthetic Study," *Theory, Culture & Society* 11 (1994), 11. First published as "Der Bildrahmen - ein ästhetischer Versuch," *Der Tag* 541 (18 November 1902).

20. Cf. Mark Jarzombek, "Das Enigma von Leon Battista Albertis dissimulatio," in Kurt Walter Forster (ed.), *Theorie der Praxis: Leon Battista Alberti als Humanist und Theoretiker der bildenden Künste* (Berlin: Akademie-Verlag, 1999), 203-216.

21. Jasper Cepl, *Oswald Mathias Ungers: eine intellektuelle Biographie* (Köln: König, 2007), 375-376 and 418-421, and Arne Winkelmann (ed.), *Das Haus im Haus. Zur Wirkungsgeschichte einer Entwurfsidee* (Heidelberg: Kehrer, 2008).

22. Cf. the articles in *Werk, Bauen + Wohnen* 6 (2003). Thomas Will pleas for "Gelassenheit", ibid., 50.

23. On 27 February 2012 Wang Shu discussed his work with architectural historians Robert McCarter and Seng Kuan. The talk took place at the Kemper Art Museum, Washington University in St. Louis, cf. *Architect Wang Shu, 2012 Pritzker Winner, in St. Louis*, http://www.youtube.com/watch?v=WM71gG8tCXo.

LEON BATTISTA ALBERTI AND THE CONSONANCE OF OLD AND NEW

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Leon Battista Alberti's architectural work is a highly interesting example of fusion architecture. The buildings of the humanist and self-taught architect are collage-like compositions of architectural ideas, types and forms from widely differing contexts. Rather than being conditioned by strict, canonical classicism, his work is marked by an eclectic combination of classical, medieval and local architectural reminiscences. Alberti's preference for using an extremely heterogeneous architectural vocabulary is rooted in his background in classical-humanist rhetoric, where he learnt to choose motives and arguments and combine them to create a powerful and convincing speech.[1] Inspired by Quintilian's analogy between rhetoric and a statue, based on which a well-proportioned body requires the proper joining together of its limbs,[2] Alberti continually demands in his architectural treatise that the architect, too, must strive to ensure harmony between the parts and the whole.[3]

The assembly of heterogeneous parts into a harmonious whole reveals one of the guiding themes in Alberti's architectural practise as well as a key focus of his theory of art and architecture. He sees beauty defined as *concinnitas*, a term which he borrows from rhetoric where it refers to formal and harmonious balance.[4]

The heterogeneous parts, which in Alberti's architecture are assembled into artful collages or mosaics based on the principle of *concinnitas*, also include the existing historical buildings he finds at his sites. The appreciation of the architectural heritage of our ancestors as well as the risk of losing 'a whole section of our life and learning' for ever are Alberti's main incentives for writing his treatise on architecture.[5] In fact, he uses his *Ten Books* to call for historical buildings to be handled with respect.[6] He repeatedly appeals to the moral responsibility that architects of his time should have not just for the architecture of antiquity but also medieval buildings. Apart from criticising the plans of Pope Nicholas V to demolish Saint Peter's Basilica in Rome,[7] he also stresses the importance of preserving less significant buildings. Wherever possible, we should avoid destroying existing buildings to make way for new ones, for it is a sign of an architect's experience and skill to keep the old intact.[8]

Alberti's theoretical demands for the consonance of old and new are mirrored in his architecture. The humanist did not design many buildings *ex novo*, but rather developed an astonishing variety of concepts and strategies when working on pre-existing buildings. This shows that the architect takes an individual and appropriate approach to each situation he encounters. However, his approach is not that of a building conservationist who wants to preserve the old for the sake of itself, but that of a creative architect for whom existing buildings provide a key source of inspiration, generating design parameters to create something new. This is illustrated by the well-known Tempio Malatestiano in Rimini. Here, Alberti's task was to give the Gothic church, San Franceso, a monumental exterior shell to reflect its new function as a burial place and temple of glory for Sigismondo Malatesta. The church's interior, which had only been remodelled a few years earlier, was to remain unchanged as far as possible.[9]

Alberti solves this problem by creating an independent, classically inspired shell which fully envelops the Gothic church, thereby unifying the previously heterogeneous exterior and giving it a monumental quality.[10] One of the noticeable features created by Alberti is the wide gap between the old walls of the nave and the new arcade walls placed in front. This is primarily due to the practical requirement of leaving all fourteen Gothic windows of the existing building intact so as not to prevent light from entering the interior. However, Alberti instantly turns this necessity into a conceptual design artifice: by creating a gap, he ensures that the Gothic structures are not entirely hidden from view but can be made out behind the new arcade walls, as if seen through a veil. Alberti uses this artifice to produce a contrast between the monumental, classically inspired exterior and the decorative Gothic interior, thereby creating the suggestive image of an architectural shrine or reliquary that protects its precious content and provides an ennobling enclosure.[11]

The architect took a fundamentally different approach when designing the façade of Santa Maria Novella in Florence, where he was confronted with various pre-existing Gothic elements in the form of sepulchral niches and side portals on the ground floor as well as the oculus on the top level.[12] Alberti first framed the existing Gothic elements of the ground floor, using the giant order of engaged columns to create a superordinate architectural system, whose unifying character is emphasised by additional broad pilasters at the lateral edges of the façade.[13] He then visually separates the ground floor from the section rising above by means of a tall, non-articulated attic as if inserting a dividing line. This allows him to design the top floor independently from the articulation of the ground floor and largely *ex novo*.[14] Ultimately, however, the frame and division are merely subordinate artifices, forming part of a system that integrates all building elements into a unified whole. Alberti succeeds in creating a careful

harmony between the existing elements and the new additions, on the one hand by adopting and continuing the Gothic language of decoration and material, and on the other by integrating both old and new structures into a superordinate, geometric system of proportions based on a square, which visually blends the old and the new into a harmonious whole.[15]

Alberti's structural approaches in Rimini and Florence demonstrate a great respect for the earlier buildings. However, the ways in which the architect formulates the relationship between the old and new structures in the two examples are entirely different: in Rimini he creates a deliberate and rigid contrast between old and new, whereas his Florence design focuses on the sensitive integration and assimilation of what is already there. This difference is due not only to the nature of the projects but also to the position and intention of the people commissioning them: on the one hand Sigismondo Malatesta, who is realising his personal burial place and monument of glory, and on the other hand the Florentine merchant Giovanni Rucellai, a long-term social outsider vying to be accepted into the Alliance of Florentine Rulers with his building projects.[16]

Giovanni Rucellai's San Pancrazio Chapel of the Holy Sepulchre is another, final example of Alberti's skilful use of pre-existing building structures. Here, as with all of the humanist's architectural creations in Florence, the focus is once again on the careful reconciliation and harmonisation of the existing building with the new additions through the integration of both old and new structures into a superordinate geometric ratio.

Figure 1. Layout of the marble flooring of the Cappella Rucellai according to the author's architectural survey (larger areas with subsequent alterations are marked darker). (source: Anke Naujokat, *Non est hic. Leon Battista Albertis Tempietto in der Cappella Rucellai* (Aachen: Geymüller Verlag für Architektur, 2011), 158)

This time, Alberti has a particularly complex task at hand: he has to place the precious Tempietto of the Holy Sepulchre at the centre of a fourteenth century family chapel, maintaining its size and shape.[17] Due to the fixed footprint of the rectangular chapel, the architect has little flexibility in his design. Alberti solves the challenge of creating a relationship between the tempietto and the surrounding pre-existing chapel by modifying the spatial proportions in terms of height and providing the chapel with a new, decorative inner shell which functions as a unifying matrix linking old and new, the key element being the black and white marble flooring which Alberti spreads over the older tiles of the chapel like a geometric carpet (Fig. 1 & 2). The new geometry of the floor matches neither the exact dimensions of the chapel nor those of the tempietto, but Alberti manages to mask this effectively. The lines suggest a perfect proportional relationship between the *tempietto* and the chapel which in fact does not exist, and thus merge the old building with the new one into one harmonious design.[18]

Not least, these examples challenge the commonly held view of Alberti as merely a designer who advises from a distance and who lets others implement his design concepts on site. His carefully planned use of pre-existing structures suggests a different method of work, one that is characterised by a deliberative and careful approach on site, face to face with what is already there.

Figure 2. Existing chapel flooring and the ideal geometric scheme on which it is based. (source: Anke Naujokat, *Non est hic. Leon Battista Albertis Tempietto in der Cappella Rucellai* (Aachen: Geymüller Verlag für Architektur, 2011),160)

Endnotes

1. For more on the collage and mosaic character of Alberti's architecture and its origin in the artist's grounding in humanist rhetoric cf. Mario Carpo, *Review of: Roberto Cardini, Mosaici. Il 'nemico' dell'Alberti*, Bibliothèque d´Humanisme et Renaissance 54 (1992), 283-6; Howard Burns, "Antike Monumente als Muster und als Lehrstücke. Zur Bedeutung von Antikenzitat und Antikenstudium für Albertis architektonische Entwurfspraxis", in Kurt W. Forster and Hubert Locher (eds), *Theorie der Praxis. Leon Battista Alberti als Humanist und Theoretiker der bildenden Künste*, (Berlin: Akademie Verlag, 1999), 129-55; Arnaldo Bruschi, "Alberti 'storico' dell'architettura? Lo studio dell'architettura

del passato nel *De Re aedificatoria*", in Arturo Calzona et al. (eds), *Leon Battista Alberti teorico delle arti e gli impegni civili del 'De Re aedificatoria'* (proceedings of the international conference of the *Comitato Nazionale VI centenario della nascita di Leon Battista Alberti* (Mantua, Italy, 17–19 October 2002; 23–25 October 2003), (Florence: Olschki 2007), Vol. 1, 439; Anthony Grafton, *Leon Battista Alberti. Baumeister der Renaissance*, (Berlin: Berlin Verlag, 2002), 472; Anke Naujokat, "Ut rhetorica architectura. Leon Battista Alberti's Technique of Architectural Collage", *Candide. Journal for Architectural Knowledge* 2 (2010), 73-100; Alberto Giorgio Cassani, *Leon Battista Alberti: 'conservatore' o 'distruttore'?*, Albertiana 14 (2011), 109-10, 117.

2. Quintilian, *Institutio Oratoria*, 7, Preface, 2.

3. 'Just as with animals members relate to members, so too in buildings part ought to relate to part', *De Re Aedificatoria*, Book I, 9 (Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert et al. (Cambridge/Mass., London: The MIT Press, 1988), 23; see also Book IX, 7 (ibid. 309-10) and Book IX, 5 (ibid. 301f).

4. 'Beauty is a form of sympathy and consonance of the parts within a body', *De Re Aedificatoria*, Book IX, 5 (Alberti, *On the Art of Building*, 303); 'It is the task and aim of *concinnitas* to compose parts that are quite separate from each other by their nature, according to some precise rule, so that they correspond to one another in appearance', ibid. 302.

5. 'Examples of ancient temples and theaters have survived that may teach us as much as any professor, but I see – not without sorrow – these very buildings being despoiled more each day. And anyone who happens to build nowadays draws his inspiration from inept modern nonsense rather than proven and much commended methods. Nobody would deny that as a result of all this a whole section of our life and learning could disappear altogether.

Since that is how things stood, I could not help but consider long and often whether it was not my duty to write a commentary on this subject […]. Moreover, I felt it the duty of any gentleman or any person of learning to save from total extinction a discipline that our prudent ancestors had valued so highly', *De Re Aedificatoria*, Book VI, 1 (Alberti, *On the Art of Building*, 154).

6. Cf. Cassani, *Leon Battista Alberti: 'conservatore' o 'distruttore'?*, 103-17; Andrea Pane, "L'antico e le preesistenze tra Umanesimo e Rinascimento. Teorie, personalità ed interventi su architetture e città", in Stella Casiello (ed.), *Verso una storia del restauro. Dall'età classica al primo Ottocento* (Florence, Alinea editrice, 2008), 88-95.

7. See *De Re Aedificatoria* Book I, 8 and Book I, 10. In Book X, 14 Alberti, as an alternative, proposes a building conservation concept to repair the old basilica, cf. also Cassani, *Leon Battista Alberti: 'conservatore' o 'distruttore'?,* 111-14.

8. 'Even then would I advise you not to let your desire to build impel you headlong into commencing the work by demolishing any existing buildings or laying extensive foundations for the whole of it: this is what a foolish or rash man would do', *De Re Aedificatoria*, Book II, 1 (Alberti, *On the Art of Building*, 35).

'Moreover it is not proper to show disrespect to the work of our ancestors or to fail to consider the comfort that citizens draw from their settled ancestral hearths; there will always be time enough to do away with, demolish, and level whatever is standing anywhere. Therefore, I would prefer you to leave all old buildings intact, until such time as it becomes impossible to construct anything without demolishing them', *De Re Aedificatoria*, Book III, 1 (Alberti, *On the Art of Building*, 62).

9. Matteo de' Pasti and Agostino di Duccio had combined existing late Gothic elements with Renaissance styles in the church's interior in an eclectic way. It remains unclear whether or not Alberti was already involved in the first stage of the re-design. On this discussion cf. in summary: Angelo Turchini, "Rimini e il Tempio Malatestiano", in *Leon Battista Alberti e l'architettura* (Milano: Silvana editoriale, 2006), 272-3. – Of the comprehensive literature on the Tempio Malatestiano the following works should be mentioned in connection with Alberti's re-design of the façade: Franco Borsi, *Leon Battista Alberti. L'opera completa* (Milan: Electa, 5 ed. 1996), 135-66; Angelo Turchini, *Il tempio malatestiano. Sigismondo Pandolfo Malatesta e Leon Battista Alberti* (Cesena: Società editrice Il Ponte Vecchio, 2000), 305-29; Robert Tavernor, "La transformation de San Francesco de Rimini en 'Tempio Malatestiano' par Alberti", in Françoise Choay and Michel Paoli (eds), *Alberti, humaniste, architecte* (Paris: École Nationale Supérieure des Beaux-Arts, 2006), 144-65.

10. In his famous letter to Matteo de' Pasti, Alberti emphasises his aim to merge the church's heterogeneous elements into a unified picture. 'This façade is a work in itself, for the widths and heights of the chapels confuse me', autograph letter from Leon Battista Alberti to Matteo de' Pasti, 18 November 1454, as quoted in Turchini, *Il tempio malatestiano*, 620; English translation by Claudia Hall.

11. On the interpretation of the Tempio Malatestiano as a shrine cf. also Gianfranco Spagnesi, "Note sul Tempio Malatestiano a Rimini", *Palladio* 14 (1994), 119.

12. For more on Alberti's façade for Santa Maria Novella cf., inter alia: Borsi, *Leon Battista Alberti*, 80-105; Marco Dezzi-Bardeschi, *La facciata di Santa Maria Novella a Firenze* (Pisa: Nistri-Lischi, 1970).

13. Cf. Howard Burns, "Leon Battista Alberti", in Francesco Paolo Fiore (ed.), *Storia dell'architettura italiana. Il Quattrocento* (Milan: Electa, 1998), 138-9. On the concept of framing cf. also Cassani, *Leon Battista Alberti: 'conservatore' o 'distruttore'?,* 115.

14. Cf., e.g., Burns, *Leon Battista Alberti*, 139.

15. Cf. Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (London: Warburg Institute, 1949), Ch. II, 3; Borsi, *Leon Battista Alberti*, 83-4.

16. On Giovanni Rucellai's striving for social recognition cf. Francis-William Kent, "The making of a Renaissance patron of the arts", in *Giovanni Rucellai ed il suo Zibaldone, vol. 2: A Florentine Patrician and his Palace* (London: The Warburg Institute, 1981), 9-95. Giovanni Rucellai's building programme also includes the façade of the Palazzo Rucellai, created to unify an ensemble of older townhouses. Here, too, the pre-existing buildings are an important part of the design process, which cannot be discussed within the scope of this abstract.

17. The tempietto itself is the result of a clever and complex design process, where the focus was placed on the reference to the Jerusalem original in terms of architecture, dimension and number symbolism, cf. Anke Naujokat, *Non est hic. Leon Battista Albertis Tempietto in der Cappella Rucellai* (Aachen: Geymüller Verlag für Architektur, 2011) 141-53.

18. For a detailed examination of the chapel's proportional system see Naujokat, *Non est hic*, 153-62.

FRAMING POLITICAL RELICS
THE INTEGRATION OF MEDIEVAL TOWN HALLS
IN EARLY MODERN BUILDING COMPLEXES

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The early modern period saw a building boom of prestigious municipal palaces across many parts of Europe. The town halls of Augsburg, Amsterdam and Lyon, among others, set new standards of public architecture in Northern Europe, both in terms of building dimensions and architectural splendour.[1] Nevertheless, some cities did not follow this trend and continued to use their old medieval town halls. The ancient buildings were set into a new architectural context in order to provide a reinterpretation of the city's history. This paper discusses different aesthetical strategies and political interpretations of this kind of architectural incorporation. To illustrate the widest possible range of motifs and readings examples will be presented from very different or even opposing political backgrounds.

During their virtual tour through the Palazzo Vecchio the young Prince Francesco asked Giorgio Vasari why he did not advise his father, the Duke, to tear down some of the old walls and to build in their place a modern palace, which represented the Duke's grandeur, the architect's virtue and the city's magnificence. Vasari, who was largely responsible for the restoration and redecoration of the Palazzo at that time, answered that any mediocre mind is able to create something new, whereas the true '*maggiore ingegno*' reveals itself in the skilful restoration of old structures. Vasari's main argument for the preservation of the palace, however, was its symbolic meaning as the former core of the Florentine republic. Appropriated by Cosimo I. and converted to a ducal residence, the palace displayed the ideology of the ducal reign as based on the republican order and rooted in Florentine history. Moreover, Vasari drew a parallel between legislation and building policy: Just as the Duke preserved and amended the ancient republican laws, he correspondingly restored and rearranged the old palace's disordered structures.[2]

Vasari's arguments correspond in large parts to those brought forward in Venice in the discussions on the reconstruction of the burnt-down council hall of the Doge's Palace in 1577. Some architects recommended replacing the severely damaged palace with a modern Renaissance style building. The magistrate, however, decided to restore the building, not only for financial reasons, but also, as Francesco Sansovino put it, because of its function as a witness and as evidence of the Serenissima's rise to power and grandeur.[3] In early modern Venice, as in Florence, the medieval communal palace was the nucleus of the governmental building complex and a cornerstone of the government's legitimation strategy.

Yet, these similarities cannot hide the fact that the two palaces represented different political orders and different conceptions of history. In contrast to the significance of the Doge's Palace as a symbol of stability and continuity, the preservation of the Palazzo Vecchio aimed at disguising a political caesura, in accordance to the teleological court historiography linking the republican past to the monarchical present. The Medici's most revolutionary act – with regard to architecture and urbanism – did not affect the palace building itself but its urban setting. The construction of the Uffizi, where the assembly rooms of the until then independently residing guild corporations were concentrated, caused a complete restructuring of both the Palazzo's surrounding and the city's political topography.[4] Furthermore, the arrangement of the double-winged Uffizi building set the Palazzo Vecchio in a perspective scene illustrating the subordination of the guilds to the authority of the Duke. But however radical this building campaign may seem, there were also limits respected by Cosimo: While he ordered the demolition of dozens of private houses to make room for the new building, he did not dare to tear down the Loggia dei Lanzi, the Zecca (Mint) and the church of S. Piero Scheraggio. Considered as sacrosanct relics of the city's past, these buildings were at least partially preserved and integrated into the Uffizi. This building complex therefore perfectly mirrors Cosimo's ambiguous historical image, oscillating between the 'proto-absolutist' ruler, as modern historians characterize him, and the 'citizen-prince' respecting the republican past, as his court writers portrayed him.[5]

Similar examples of integrating medieval town halls, be it entirely or partially, into early modern building complexes are to be found all over Europe. Especially interesting are the town halls of the Dutch cities restored during the Revolt in the later sixteenth and early seventeenth century. Like the Palazzo Vecchio, they served as symbols of continuity and legitimacy in a revolutionary era. The political background of the rebellious Dutch cities, however, was quite the opposite of the situation in Medici Florence. It is important to point out that the Dutch Revolt did not begin as a struggle against the monarchy as such, but

against a foreign tyrant abusing his power. It took a while before the states definitely broke with the monarchy and founded a republican federation. And it took even longer before the general superiority of a republican form of government became the topic of theoretical treatises and public works of art.

A monument in which the memory of the counts of Holland was kept alive even during the Revolt is the town hall of Haarlem.[6] The core of this important medieval town hall is formed by a hall which was constructed c. 1370 by the city council, replacing a former comital castle. In the seventeenth century, however, this building was believed to be the ancient palace of the counts. In his description of Haarlem (1628), Samuel Ampzing states that this is proven by the sculptures of the rulers placed on the town hall façade which were commissioned, he argues (albeit not very convincingly), by the counts themselves. Ampzing even goes further, asserting that the current building was constructed as the residence of Count Willem II., Roman King in 1247-56, and therefore deserves the title of a 'royal palace', a '*Koninklijk Paleys op ouder Graven gronden*'.[7] However, the royal status of the building and its princely iconography are not to be understood as a commitment to the monarchy, but as evidence of Haarlem's traditional leading role in the county and as a source of pride for the city.

When the town hall was restored and extended in 1622-1633, large parts of this historical document were preserved. The façade of the hall was slightly modified in a modern style, but the building remained clearly recognizable as the ancient core of the complex. The most important project of those years was the construction of a new wing on the northern corner of the town hall, stretching along the Zijlstraat. It is a prestigious building showing an ornamental brick-and-stone architecture characteristic of Haarlem's city architect Lieven de Key. Ampzing praised it as a master-piece of contemporary architecture, surpassing the ancient hall by far ('dat ver in zijn zieraed en pracht en mogendheyd het oud te boven gaet').[8] But as it adjoins the square with the short side, it is clearly subordinated to the massive volume of the hall building and to the general impression of a historically grown structure.

During the Golden Century, most town halls of the prosperous and expanding Dutch cities were restored, extended or rebuilt, but most building campaigns aimed at preserving the ancient town halls entirely or at least in part. The goal of these modifications was not to eliminate the gothic forms but to correct the irregular structures. Already Vasari stressed the necessity of a regularization of the government building, making the link between architectural and political order explicit.[9] The function of the old structures and stones as '*testimonie*' of the city's glorious past, as Vasari put it, became a central argument in Holland, too.[10] This was all the more important for cities such as Leiden and Haarlem, which, in response to the parvenu's Amsterdam rise to political supremacy, made great efforts to emphasize their historical importance in Holland.[11]

Town hall architecture in early modern Holland, I conclude, was affected by two conflicting developments: on the one hand the growing importance of the town hall as the political centre, causing a boom of ever more prestigious town hall buildings;[12] on the other, the growing importance of the city's history as a source of political legitimation and urban self-consciousness which led to an increasing interest in the town hall as a historical document. Many city magistrates sought to meet both developments by combining old and new, by framing the historical relics with modern architecture and, in some cases, by integrating them in a comprehensive structure. The analysis of these forms of fusion architecture can provide revealing insights into a political culture, in which even rebellious cities and usurping princes had to appeal to tradition, history and continuity.

Endnotes

1. Koen Ottenheym, Monique Chatenet and Krista de Jonge (eds.), *Public Buildings in Early Modern Europe* (Turnhout: Brepols 2010); Sascha Köhl, "Das Rathaus", in Pim den Boer et. al. (eds.), *Europäische Erinnerungsorte 2* (München: Oldenbourg 2012), 170-1.

2. Giorgio Vasari, *Ragionamenti sopra le invenzioni da lui dipinte in Firenze nel Palazzo di loro Altezze Serenissime* (Arezzo: Michele Belotti 1762), 3-4; see also John M. Najemy, *A History of Florence. 1200-1575* (Malden, MA: Blackwell 2006), 488-90.

3. Francesco Sansovino, *Lettera intorno al palazzo ducale e descrizione dei quadri nella sala del gran consiglio esistenti prima dell'incendio del 1577* (Venezia: Alvisopoli 1829), 22; see also Wolfgang Wolters, "Überlegungen zum Wiederaufbau stark zerstörter Gebäude im Cinquecento. Die Gutachten nach dem Brand des Dogenpalasts vom 20. Dezember 1577," in Victoria von Flemming and Sebastian Schütze (eds.), *Ars naturam adiuvans. Festschrift für Matthias Winner* (Mainz: Philipp von Zabern 1996), 327-333.

4. See, among many others, Matteo Burioni, "Vasaris Uffizien. Transformationen stadträumlicher Bezüge am Übergang von der Republik zum Prinzipat," in Stefan Schweizer and Jörg Stabenow (eds.), *Bauen als Kunst und historische Praxis. Architektur und Stadtraum im Gespräch zwischen Kunstgeschichte und Geschichtswissenschaft 1* (Göttingen: Wallstein 2006), 205-47.

5. Henk Th. van Veen, *CosimoI. De Medici and His Self-Representation in Florentine Art and Culture* (New York: Cambridge University Press 2006), 185-190.

6. Wim Cerutti, *Het stadhuis van Haarlem. Hart van de stad* (Schuyt: Gottmer 2001); Elisabeth de Bievre, "Violence and Virtue: History and Art in the City of Haarlem," *Art History* 11 (1988), 303-34.

7. Samuel Ampzing, *Beschryvinge ende lof der stad Haerlem in Holland* (Haarlem: Adriaen Rooman 1628), 49-53.

8. Samuel Ampzing, *Beschryvinge ende lof der stad Haerlem in Holland* (Haarlem: Adriaen Rooman 1628), 53.

9. Giorgio Vasari, *Ragionamenti sopra le invenzioni da lui dipinte in Firenze nel Palazzo di loro Altezze Serenissime* (Arezzo: Michele Belotti 1762), 3-4.

10. Giorgio Vasari, *Ragionamenti sopra le invenzioni da lui dipinte in Firenze nel Palazzo di loro Altezze Serenissime* (Arezzo: Michele Belotti 1762), 4.

11. Simon van Leewen, *Korte Besgryving van het Lugdunum Batavorum nu Leyden* (Leiden: Johannes van Gelder 1672), 1-37.

12. See the statements of Dirck van Bleyswijk, who describes this development as a contemporary observer in 1667; M. Gout and M.A. Verschuyl, *Stadhuis Delft* (Delft: Waltman 1988), 7.

DALY'S THEORETICAL FRAMEWORK FOR FUSION ARCHITECTURE
THE CASE OF THE RESTORATION AND COMPLETION OF THE ALBI CATHEDRAL

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In 1844 César Daly received the commission regarding the cathedral Sainte-Cécile at Albi in the Languedoc (France). The Ministry asked him not only to restore the building but also to complete it. The construction of the church was started at the end of the thirteenth century and was suddenly stopped at the end of the fifteenth century. In 1844, the church was generally conceived as an unfinished part of a greater concept by the bishop Bernard de Castanet (1277). This made Daly's task an interesting but very difficult commission. The building itself was unconventional. First, it hardly seemed to fit in with the typical medieval French churches of its time. The important Notre Dame in Paris or the cathedral of Chartres or the church of Saint-Nazaire in Carcassonne could not be seen as meaningful precedents.

Second, as we know from the work of Viollet-le-Duc and others, at the time, completion meant finalising a building towards an ideal construction. But how was that possible here? The cathedral did not have the unified qualities like Chartres or Amiens;n contrast, it was a kind of hybrid. Partly church and partly fortification, it was structured by an additive combination of segments, fusing disparate formal elements. The tension between the confronting fragments, the defragmentation and the greater force that unites them raised different questions as to how to comprehend this building and how to complete it. That would not have been a particular problem, had it been defined as an uninteresting aberration or an exception in architecture; but it was not. Different important architectural and cultural figures like Viollet-le-Duc underlined the uniqueness of the building.[1] How could Daly tackle that? Albi could not be placed on a timeline of building types, since it was not fully church nor fortification. (Fig. 1) For Daly it could at this time, in 1844, only be analysed in its concluded thirteenth to fifteenth century historical framework.[2] Following the romantic notion of the spirit of the time[3] of his master Felix Duban and de Caumont's archaeological principles, one could and should deconstruct the building into a set of formal and structural components. As a consequence, meaning could be communicated by its several parts.

To understand this we have to reflect on Daly's other activities. He was – as chief editor of the influential magazine *Revue Général d'Architecture et des Travaux Publics* (1840-1888) – not a practising architect but before all an architectural critic and theoretician. It is important to understand that the *Revue Général* had other ambitions than those of the present day. Daly stated in his journal that he definitely did not want to limit himself to one sort of architecture or period, but found it essential to examine all architecture in its function at the present time.[4] Beside being a medium in which the contemporary architectural discussion was debated, the *Revue* had at the same time the ambition of being a scientific encyclopaedia which brought the 'results of the higher scientific culture'[5] to the working table of the scholar as well as the practitioner.[6]

In 1847, at the same time when he worked on his first proposals for the completion of Albi, Daly published his first theoretical elaboration on contemporary architecture in his *Revue*. In summary, he states that the building as a unique object, the specificity of the artistic approach and the creative process show that freedom is an essential factor for every artistic practise. Only because the artist demands this freedom has he got the ability to create his own scripture, give the work a surplus value and exalt it towards a masterpiece. Only in this freedom a work of art can really be true.[7] The freedom that Daly defended in this article is however closely linked to societal obligations. It is here that scientific reference plays its role. The belief in the essential neutrality towards all architectural forms
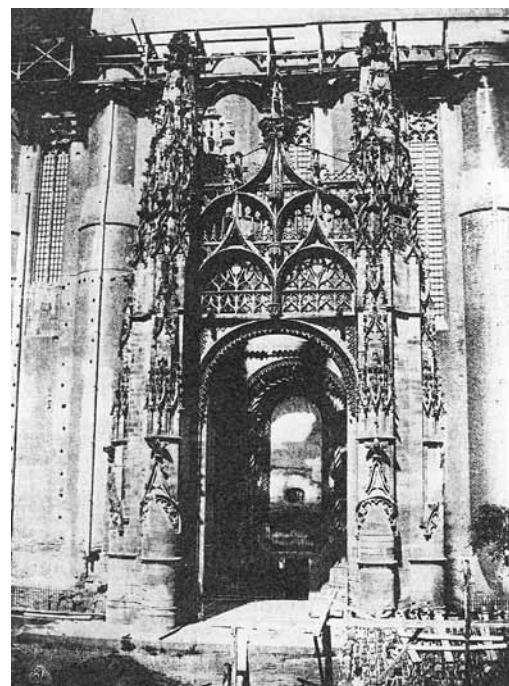
Figure 1. Cathedral Albi, Baldaquin, State in 1860. (source: Becherer Richard, *Science plus Sentiment – César Daly's Formula for Modern Architecture* (Michigan, UMI Research Press, 1984))

was evident in historiographical research, but less in contemporary design activity. But this was just one of Daly's concerns. It seemed evident that the architect did not investigate the past scientifically purely in terms of an archaeological interest. His curiosity was motivated by the creation of his own better work, and by this in the creation of an improved society. Historic erudition had to be used as a foundation for the production of a new language. The use of unscientific and banal ornaments had in the past lead to a condemnation of different buildings that gave the spectators only softened memories. Architectural historical components were to be not just exotic references but authorised by scientific propriety and authenticity. Historiography here gained a clear operative objective and formed a contribution to contemporary design practise. Daly strongly praised the scientific-historical knowledge and its methodology as a necessity to furnish one's own design with a stronger legitimacy.[8] His final goal was not only to trigger an intelligent and useful emulation but also to provoke – thanks to the scientific methodology – a 'reasoned choice'[9] as base for a justified contemporary design. And this design was by definition eclectic, a fusion architecture made up of several elements. Daly formulated eclecticism as a scientific method in his numerous articles.

It was in the same year of 1847 that Daly got involved in a discussion with Didron l'Aîné, editor of the *Annales Archéologiques*. As a true antiquarian Didron believed that every ornament and detail in an old building, like Albi, had an historical meaning and should not be removed or altered, even if that resulted in a heteroclite architecture. (Fig. 2) At first one might think that Daly would share this analytical iconographic method, but he did not. Daly strongly believed that the Albi church, in spite of its heterogeneous form, was hiding an organic unity, 'an idea'. Daly did not only refer to Albi. For him, this was not only a purely historical, but also a methodological question towards contemporary nineteenth century building practice; an artistic and ideological inquiry. Architecture was not only created by piling up scientific details. The designer had to combine them into a coherent whole. The value of the design genius is presented in societal ambition and the involvement of the public. The components/elements that he operates with in his architecture mediate between ideas, narratives and experiences, which are brought together in a recovering manner. All seams between these components were carefully eliminated towards a spiritual unity, *un tout ensemble*. The building is the perfect match of knowledge and image.

Figure 2. Cathedral Albi, 2008. (source: Wikimedia Commons)

Knowledge of historical architecture and its scientific sources is considered an absolute necessity for the architect. The great artistic merit of the designer is located in procuring abundance and multiplicity to a strong story anchored in contemporary society. Exactly the scientific nature makes this eclecticism intelligible. For the spectator, the whole gains its fascination by the combination of scientific character and picturesque variability. The result of this well-considered eclecticism has experimental character that leads to a new, unprecedented but recognisable familiar architecture. The heterogeneous image that eclecticism produces is contrary to the idea of style unity. However this was not described as non-harmonic. The possible confusion that could arise when fusing contrasting elements is countered by a belief in another paradigm apart from the notion of unity of style.

Multiplicity and mixture were related to scientific aspects, communication of the parts, societal meaning and reinterpretation of the combined elements towards a new creative architecture, where the juxtaposed parts would have their legitimate place and would create another kind of unity, structured not by style but by ontology.

Endnotes

1. See Becherer Richard, *Science plus Sentiment – César Daly's Formula for Modern Architecture*, (Michigan, UMI Research Press, 1984), 135.

2. Daly César, "La Cathéédrale de Sainte-Cécile à Albi." in *La Revue de l'Architecture et des Travaux Publics* (1857), colon2. Although this raised also many questions. The St. Nazaire churche in Carcasonne was built at the same time and in the same violent societal conditions. But it looked quit different from Albi. How could that occur?

3. Daly César, "Salon de 1853." in *La Revue de l'Architecture et des Travaux Publics* (1853), colon212 .

4. Daly César, "Introduction." *La Revue de l'Architecture et des Travaux Publics* (1855), colon3-5.

5. Daly César, "Introduction." *La Revue de l'Architecture et des Travaux Publics* (1863) colon7.

6. In the 19th century there was a great difference in relation to our contemporary architectural practices. At this time there was an actual mix of the architect as a designer and as an historic researcher. A lot of practising architects had ambition to be also historians or connoisseurs.

7. Daly César, "De la Liberté dans l'Art." *La Revue de l'Architecture et des Travaux Publics* (1847) colon396.

8. Daly César, "Introduction." *La Revue de l'Architecture et des Travaux Publics* (1863) colon4.

9. Daly César, *L'Architecture Privée au XIXme Siècle sous Napoléon III* (1869), colon6.

THE FUSION OF NEO-CLASSICISM AND POSTMODERNISM
THE *ZEUGHAUS* OF BERLIN

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The history of modern architecture is a neatly defined record of Neo-Classicism, Arts and Crafts, the Bauhaus, totalitarianism, the Modern Movement and Postmodernism. However, the stylistic entwinement and fusion of past and new architecture have been a popular, if almost always contentious development throughout history. While imitation of the ancient Greek and Roman architecture (and hence of ruins) have been a repeated theme in western architectural history, the fusion among different cultures, continents, or regions is also not uncommon. Each successive adaptation bears specific contextual connotations and is not without problems ― ideologically, culturally, and functionally. Take the recent architectural trend as an example, the integration of new extensions and old structures of existing historical buildings in an attempt to rejuvenate a building or a whole city which has provoked questions as to its significance both locally and internationally.

After *die Wende* (the fall of the Berlin wall), numerous ambitious building projects were staged in Berlin. These include both new and sleek multi-million buildings and renovated old building complexes. Among them the *Zeughaus* renovation and extension project right at the heart of Berlin's historical building complexes attracted a great deal of attention (Fig. 1). The *Zeughaus* (old arsenal) was built between 1695 and 1730 under the Prussian Elector Frederick III. It was a classical building in the Baroque style executed by a

number of architects, including Johann Arnold Nering, Martin Grünberg, Andreas Schlüter and Jean de Bodt. The main body of the *Zeughaus* complex is a square and symmetrical quarter with a spacious courtyard right in the middle of the building for military use. The rusticated ground floor, the rather refined *piano nobile* centering on a Greek temple front with Doric columns, and the statued balustrade on the roof level manifest a distinct "Baroque flare". The statues and reliefs of helmets, armour, gods and goddesses present a statement of the Prussian military tradition. With Karl Friedrich Schinkel's serene and simplistic *Neue Wache* of 1816 and the classical and neo-classical structures such as colonnades, towers, and rotundas on the Museum Island right next to the *Zeughaus* complex, the area is monumental and classical in essence. Therefore, the decision to commission the Chinese-American architect, I. M. Pei's (1917-) design to renovate the deteriorated *Zeughaus* did not pass without considerable controversy.

Figure 1. Facade of *Zeughaus, Deutsches Historische Museum*. (source: http://lt.wikipedia.org/wiki/Vaizdas:Deutsches_historisches_Museum_Zeughaus_Dec_2004_2.jpg)

This renovation project undertaken by Pei in 1998 was not completed until 2004[1]. Pei, renowned for his sophisticated skill in providing historical buildings with new aesthetics and contemporary spirit, was commissioned for this project after a series of discussions and consultations between the city municipal government and the architect. The major part of the renovation project includes an extension which opens up the old building at the north side of the *Zeughaus* (Fig. 2). The extension includes a glazed cone-shaped spiral tower with three layers slightly leaning towards different directions, which links an open court and lights up the interior space. The extensive use of glass bringing sunlight to the old and dark Prussian stone building is intended to signify the full transparency of the operation of the modern capitalist state.

While a similar building style and visual techniques have been employed by Pei in France, Japan, America and other countries, the effect and impact vary according to the cultural and materialistic elements of the site where the buildings are situated. In the case of the *Zeughaus* in Berlin, the remodelling project comprised of an extension of the depot of the *Zeughaus* and the damaged

Figure 2. I. M. Pei, the extension of *Zeughaus* in the backyard. (source: http://www.journal.denkeler-foto. de/2011/12/sehen-und-gesehen-werden-am-zeughaus-pei/)

parts of the original building on the *Unter den Lind*en. The whole complex is located in an area with the densest classical buildings fully charged with Berlin's history, in particular the aspect of national identity throughout the 18th and the 19th centuries and continuing to the present. There is no doubt that the allocated site for this project is highly constrained. The imposing visual and spatial effect of the new structure and the fully polished old façade of the *Zeughaus* aimed to combine historicity and technical advancement. Unlike his steel and glass pyramid at the *Louvre* in Paris in 1984, which refers to the ancient Mediterranean civilization, the *Zeughaus* extension project is much more modernist and postmodern in spirit. Pei's project here was inspired by Schinkel's *Neue Wache* aesthetically and paid homage to Tatlin's tower ('Monument to the Third International') stylistically. While the light-colour limestone wall provides solemnity and elegance, the transparency of glass makes it possible for the visitors to look through the building and to be looked at when inside the building. The elements of cleanness and transparency of liberal Modernism are neatly adopted here. Meanwhile, the stylistic association with Tatlin's *Monument to the Third International* provides an annotation which positively acknowledges the communist history of the city (the former East Berlin). The sentiment that Berlin and, in every sense, Germany in the 1990s were enthusiastic to be part of the contemporary international scene — politically, culturally, and economically – is apparent, and this was well manifested in Pei's building.[2] However, the stylistic break with the classical architectural tradition was daring, similar to what Modernist architects had attempted in the 1920s. The outcome is an eye-catching piece of work, which automatically draws the attention of visitors in this quarter. Pei's building serves as a focal point which provokes museum visitors' curiosity and excitement. Despite all the wonders provided by this modern project, its contemporary adaption of a version of the 'international style' still appears as a celebration of the most updated technology and international materialistic sophistication rather than as homage to Prussian cultural significance and history.

In an attempt to reconcile the paradoxical aspirations for both the East and the West of the recently unified city of Berlin on the one hand, and to stage Berlin as a world city on the international stage on the other, the remodelled *Zeughaus* reflects the wider paradoxes between the culture this building resides in and its built environment. If we accept the Hegelian axiom that art reflects society, then Pei's *Zeughaus* project as part of the contemporary international trend managing to present the tension of the city's inborn controversy[3] and its history is in this respect a success.

Endnotes

1. For the official record of the project commission process, see the website of *Deutsches Historisches Museum.* (http://www.dhm.de/pei/urbantheatre.htm).

2. The former Chancellor of Germany, Willy Brand, spoke out for his support to the new project of the German Historical Museum that it were "not desirable that Berlin should exclude itself from this project, which focuses on international interest" ("nicht für wünschenswert, wenn Berlin sich von diesem Vorhaben, auf das sich auch das internationale Interesse konzentriert, ausschlösse"). See Brandt's statement in *Gratulationsschreiben von Willy Brandt an den Regierenden Bürgermeister von Berlin*, Walter Momper, 17.3.1989. Archiv der Senatskanzlei, Berlin. Quoted in "*Um- and Neubau*" in http://www.dhm.de/pei/urbantheatre.htm#3.

3. This controversy existed from the point when the *Zeughaus* was built in the late 17th century. From the Prussian period throughout to the whole 20th century, the ideology of Nationalism and the concept of national identity played a key role in various political, social and cultural crises. The *Neue Wache* and other major buildings along the *Unter den Linden* and on the Museum Island were built with sentiments along this line. When the Berlin Wall was built by the GDR in 1961, the *Zeughaus*, being on the side of the former East Berlin, was then entrusted with a version of nationalism tightly associated with communist socialism.

ST. KOLUMBA IN COLOGNE, GERMANY:
A CASE OF THE ELABORATION OR THE ELISION OF MEMORY?

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The church of St. Kolumba, located in the heart of Cologne, Germany, presents a particularly striking example of the incorporation or 'fusion' of a pre-existing building into a new structure, and its reframing and reinterpretation as a result.

The long history of this Romanesque, Gothic and Baroque church came to an abrupt end in World War II, as it was destroyed by Allied bombing. It is at this point that its story becomes interesting for our discussion. Although it had never been one of Cologne's major monuments, St. Kolumba became famous after the war thanks to a 15th-century statue of the Virgin and Child that had 'miraculously' survived the bombs. This statue – dubbed the 'Madonna Among the Ruins' – was immortalised by postwar photographers both in Germany and abroad.[1]

For Cologne's residents, the statue quickly became a symbol of survival and enduring Catholic faith in the aftermath of destruction.[2] It was in part because of this symbolism that the unusual decision was made not to restore the ruined church, but to preserve it by 'fusing' what remained with a new, modern structure. The architect chosen to lead the project was Gottfried Böhm. He elected to reuse some surviving elements of the old church, in particular the massive base of its Romanesque tower (Fig. 1). This he remodeled as a nave-like space leading to and 'fusing' with a small octagonal chapel, walled completely in glass, as the display setting for the Madonna statue. The rest of St. Kolumba's ruins Böhm left standing as they were, a vivid reminder of the war, its causes and its consequences.

When completed in 1950, 'Madonna Among the Ruins' proved to be an ensemble of great affective power. It had what Françoise Choay has called 'the weight of the real', with the ability to 'mobilize and engage memory…in such a way as to recall the past while bringing it to life as if it were present'.[3] These effects were heightened by its unmediated quality, by its full integration into the urban landscape.

Then came the *Wirtschaftswunder* of the 1950s and 60s – decades during which memories of the war, its hardships and its lessons receded (or were pushed) into the background as normality slowly returned to everyday life in Cologne. In this changed atmosphere, 'Madonna Among the Ruins' began to lose some of its original impact; in particular, the remaining shell of the destroyed church became something of an eyesore, especially as it continued to deteriorate. An extensive campaign of archaeological excavations

Figure 1. Gottfried Böhm, "Madonna in den Trümmern" ensemble, Cologne 1947-50. (source: *Jahrbuch der rheinischen Denkmalpflege* 20 (1956), 245)

undertaken in the mid-1970s only exacerbated the situation. Indeed, as reconstruction around the church continued to advance, Gottfried Böhm's ensemble sank ever further into neglect. This process reached its nadir in the late 1980s, when it became unclear whether the church could be preserved at all.

In 1990, however, the Archdiocese of Cologne proposed a solution: it would adopt the entire site as the location for its planned new Diocesan Museum, and would incorporate the chapel ensemble into these plans. Thus in 1996 an international competition was launched to decide on an architect and a design.

The choice of 'Madonna Among the Ruins' as the site of the new museum was not entirely uncontroversial, however. Aside from the question of whether it was permissible to tamper with Böhm's original postwar design, many asked whether it was morally responsible to interfere with its meaning as a '*Mahnmal*' or 'memorial' to the events of the war. In response, the Archdiocese called attention to the archaeological discoveries that had been made on the site, and that demanded worthy presentation: said

one spokesman, the decision to build here was made 'in the conviction that the untapped historical potential there would only be activated through a future concept'.[4]

This statement implied, of course, that the history of the site was not already being sufficiently 'activated' by the existing design – perhaps inasmuch as that design focused on only one of its dimensions, that of the wartime destruction of St. Kolumba and its postwar reframing. The reference to 'untapped potential' may also have been an acknowledgement that the chapel complex in its present condition was no longer functioning effectively as a *Mahnmal* (memorial) and a *Mahnung* (warning) about the dangers of hatred, intolerance and war. This seems confirmed in the competition brief published in 1996.[5]

At the same time, however, the competition brief also made clear that the intent was not merely to 'renew' the existing ensemble, but to fundamentally alter the character of the entire site. The goal was to create a 'place of spontaneous artistic experience and deep reflection' where visitors could experience all periods and all dimensions of the history represented at the site – 'city history, Church history, the history of worship, the history of death and burial, and the history of art' – as a larger continuity.[6]

The winning design did indeed 'integrate' these heterogeneous aspects into a continuity. Submitted by Swiss architect Peter Zumthor, it imposed the new museum over the entire 'Madonna Among the Ruins' site and materially 'fused' it with the ruined walls of the old St. Kolumba, while still leaving them visible (Fig. 2). At the same time it completely swallowed Böhm's chapel, which now became visible only from inside the museum. There it forms one side of a large hall housing the open excavations, which visitors can explore from an elevated walkway. The enclosing brick walls are pierced by gaps which allow a dim light to filter in. Supported on pilotis above this hall are the exhibition spaces of the museum itself. The only part of the earlier 'Madonna Among the Ruins' ensemble left unintegrated is the old sacristy of St. Kolumba, which remains as a 'trace' of the postwar complex.[7]

Figure 2. Peter Zumthor, "Kolumba", Cologne 1996-2007. (source: photograph by the author, March 2012)

When finished in 2007, 'Kolumba', as the new museum was called, was opened to much critical acclaim.[8] Indeed, there is no question that the building is formally attractive[9]; it also succeeds well as a museum, showing the Archdiocese's impressive collections to advantage. As a result, the site – including Böhm's 'Madonna Among the Ruins' – is very well visited and very much in the forefront of public consciousness. The complex has thus certainly been 'activated' in a way it was not before, or had ceased to be.

That said, the concerns expressed at the start of the planning process in the 1990s have never been completely laid to rest. Zumthor's design does indeed interfere with the original effect and meaning of 'Madonna Among the Ruins', both as a church and as a *Mahnmal* – and this despite the fact that the chapel is physically still there, complete and intact, inside the museum.[10] This has been underlined in some sharp criticism from observers such as Cologne architectural historian Wolfgang Pehnt..[11] He argued that Böhm's building was now only a 'museum piece', the 'largest object on display' at the new 'Kolumba'.[12] It is a valid point: by setting the chapel inside the museum, the builders effectively 'museumified' it. As a result, its immediate affective power has been greatly diminished.[13] Pehnt saw a truly dangerous development evidenced by the new 'Kolumba'. Could it be, he asks, that what stands behind the design of, and the public's enthusiastic response to, Zumthor's building is in fact 'disinclination to engage in analytical effort, in dialectical play, in permanent reflection?'

> Could it be that a greater measure of normality is desired, because life demands security and not one crisis after another?…Could this longing for casualness have something to do with a growing weariness with history? With the desire no longer to be burdened with thoughts about past catastrophes, about war, about loss?[14]

For their part, Zumthor and the Archdiocese have countered suggestions that the design interferes with or elides history by

emphasising the idea of '*Weiterbauen*' or 'elaboration' of the existing architectural idea. Zumthor describes his vision as follows:

> The new building, rising from the existing foundations of the old…bind[s] the fragmentary and the heterogeneous…into a new whole… The new architectonic idea is reconciliatory and integrative; this is how we have understood the client's intentions and this is how the building is conceived…It does not erase any traces…It fills in gaps and moves forward in the quest for its own essential form. Hence, no holding open of wounds and no commentary on this through architectural means; rather, as unaffected a handling as possible of that which remains, within the objective framework of a new building task with its own purpose and meaning.[15]

I would like to put out two questions for discussion by our panel. First, does the museum 'elide' or 'elaborate' the meaning contained in the original 'Madonna Among the Ruins' ensemble? My own answer will be 'a bit of both': while the impact and affect of Böhm's work have undeniably been lost, the whole now reflects much more accurately the ways our perspectives on and understanding of World War II have changed over the past 60 years.

My second question is more general: is it now permissible, in the particular German context, to take leave of and move on from the postwar period and the architectural symbols and messages specific to it, for example by transforming these symbols through strategies such as fusion? I will argue in the affirmative: again, the enormous changes that have taken place in Germany since 1950 mean that many such monuments – and 'Madonna Among the Ruins' was one of them – have become ineffective or have ceased to speak to their intended audiences, and are thus failing their important purpose. I would suggest that to continue to realise this purpose – and it remains urgent that we do continue – we must find new ways to engage with the memory of World War II, ways that do not necessarily involve 'holding the wounds open'.[16]

Some may feel that Zumthor has already accomplished this at Kolumba. But there is one respect in which he – as well as the Archdiocese of Cologne – must be faulted, namely their failure to acknowledge the full implications of the design decisions made here and to work through them honestly and openly. What exactly does it *mean* to 'complete the gaps' and 'reconcile' with the past at 'Madonna Among the Ruins'?

Endnotes

1. Walter Geis, "Was soll mit Kapelle und Ruine 'Madonna in den Trümmern' geschehen?", *Denkmalpflege im Rheinland* 9 (1992), 84.

2. See Josef Zimmerman, "U[nsere] L[iebe] Frau von den Trümmern", *Kirchen-Zeitung für das Erzbistum Köln*, September 29, 1946, 110.

3. Françoise Choay, *The Invention of the Historic Monument* (Cambridge: Cambridge University Press, 2001), 12.

4. Stefan Kraus, "Über (Um)Wege zum Wettbewerb", in Joachim Plotzek et al., *Kolumba, ein Architekturwettbewerb in Köln 1997* (Cologne: Verlag Walther König, 1997), 18.

5. The competition brief suggested that 'the ruins with their admonition demand renewal in the present'. Official competition brief, reprinted in Joachim Plotzek et al., *Kolumba, ein Architekturwettbewerb in Köln 1997* (Cologne: Verlag Walther König, 1997), 99.

6. Ibid., 99.

7. Thomas Goege, "Die Ruine von St. Kolumba im Bau des Kölner Diözesanmuseums von Peter Zumthor", *Jahrbuch der rheinischen Denkmalpflege* 40/41 (2009), 481.

8. See Ibid., 184.

9. See Robert Boecker, "Architektur gebt dem Ort die Würde zurück", *Kirchenzeitung Köln*, June 20, 1997.

10. See Wolfgang Pehnt, "Diözesanmuseum Kolumba in Köln: Peter Zumthor. Ein Haus für Sinn und Sinne", *Baumeister* 104 (2007), 55.

11. 'From 1945 until the start of construction', Pehnt wrote in a 2008 article, 'the place where Zumthor's massive structure now rises was sacred ground for the citizens of Cologne…There were few other places in this city where the suffering of the war and the spirit of brave improvisation that marked the immediate postwar years could still be seen and experienced…It was an open wound in the flesh of the city, if a carefully treated one. Of this there is no trace left'. Wolfgang Pehnt, "Die große Geschichtsvergessenheit", *Frankfurter Allgemeine Zeitung*, November 19, 2008, 35.

12. Wolfgang Pehnt, "Das Ende der Wundpflege", *Frankfurter Allgemeine Zeitung*, November 9, 1998.

13. See Thomas Goege, "Kolumba in Köln als Geschichtspanorama", in Ulrich Stevens and Ulrike Heckner (eds.), *Denkmal-Kultur im Rheinland: Festschrift für Udo Mainzer zum 65. Geburtstag* (Worms: Werner, 2010), 343.

14. Ibid.

15. Statement by Peter Zumthor, reprinted in in Joachim Plotzek et al., *Kolumba, ein Architekturwettbewerb in Köln 1997* (Cologne: Verlag Walther König, 1997), 186.

16. Wolfgang Pehnt, "Diözesanmuseum Kolumba in Köln: Peter Zumthor. Ein Haus für Sinn und Sinne", *Baumeister* 104 (2007), 58.

MONUMENT OR MUSEUM? THE POLITICAL CHARGE OF THE ARA PACIS IN ROME

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In 1995, left-leaning Mayor of Rome Francesco Rutelli met the architect Richard Meier at a seminar in Davos, Switzerland, and asked him if he would be interested in designing a new architectural container for the Ara Pacis Augustae. This ancient monument comprises a large, marble altar and exterior precinct walls, which are completely covered in elegantly-carved reliefs. The Augustan Altar of Peace had been gradually buried below subsequent layers of architecture and habitation in the Campus Martius region of the Eternal City.[1] In the 1930s, however, Mussolini had ordered the structure to be not only excavated, but reassembled with original and reconstructed pieces..[2] The freshly-reconstituted ancient monument was erected away from its original location in Mussolini's brand new Piazzale Augusto Imperatore, carved out of the densely-built up medieval neighborhood surrounding the Mausoleum of Augustus in the northern Campus Martius.[3] The Mausoleum, which had undergone innumerable transformations since antiquity, was emptied out and turned back into a hulking, ancient ruin.[4] The Ara Pacis was installed alongside it in a building, designed by the architect Vittorio Ballio Morpurgo, that was little more than giant, walk-in vitrine. Standing in the new Piazzale, the observer in 1938 thus had a clear view of both the Ara Pacis and the Mausoleum, as well as the exterior façades of the new buildings that surrounded the Piazza. These façades were adorned with mosaics, reliefs and inscriptions from the 1930s comparing the Fascist regime to the glories of imperial Rome.

In this urban framework, the Ara Pacis was not merely a historical relic from the long-distant reign of Augustus, but part of a carefully-choreographed tableau of living monuments to the current political regime as well. Links between his government – and his new Italian Empire, established through the conquest of Ethiopia in 1936 – and that of the Emperor Augustus were a touchstone of Mussolini's self-fashioning, and the new-old monuments of the Piazzale were an important venue for the display of this ideology.

Inspite of the the heavy-handed, noxious political symbolism of the Piazzale, the square remained, until the late 1990s, almost entirely unchanged; there are to this day people who live in apartment buildings whose exterior walls facing into the Piazza are adorned with pairs of reliefs depicting ancient Roman weapons and their Fascist counterparts. Nevertheless, despite modern Romans' apparent indifference to the Fascist material culture in their midst, it is hard to believe that defascisization wasn't somewhere in the back of Mayor Rutelli's mind when he made his pitch to Meier at Davos. There were of course plenty of non-political reasons regarding the conservation of the ancient monument to do something about Morpurgo's pavilion which was never intended to be permanent. But the unusual executive decisions to tear down and replace Morpurgo's building rather than renovate it, and to hand the job to Richard Meier without running a competition first, suggest deeper motives. As some scholars have pointed out, Meier was American and Jewish, which might hint at a desire on the part of the young, handsome, left-leaning mayor (nicknamed "Clintonino") both to shore up his progressive, modernist credentials and perhaps even to atone for the sins of the Fascist era.[5]

Equally significant, I would argue, is the fact that by this stage in his career, Meier was famous above all for his international museum architecture. This is significant because the idea that the new container for the Ara Pacis is a *museum*, and not just a giant, walk-in pedestal, is, I believe, central to the political ideology of the project. The building goes out of its way to announce itself as a museum. This is evident in its official name (the "Museo dell'Ara Pacis") and also from its architecture, many features of which are clear signifiers of "museum-ness": its enormous size, the presence of a large public square and fountain in front, and the inclusion within its walls of a number of ancillary spaces, none of which seem absolutely necessary for the appropriate housing of a single monument.

What is at stake in the insistence that the new structure is a museum? As Ann Thomas Wilkins has suggested, "The term 'museum complex' conveys a subtle change in emphasis: the altar becomes primarily a work of art, and its restoration is no longer a reference to Fascist imperialism."[6] By removing the Ara Pacis from its Fascist-era pedestal and reinstalling it in a new, ostentatiously modernist museum, Mussolini's alchemical transformation of the work would be undone. It would revert back to its former status as mere *objet d'art*, no more relevant to current events than any of the thousands of other artistic treasures filling Italy's state museums. Mark O'Neill has noted that the power dynamic of museums is similar to that of a panopticon, in which being in power entails the right to survey others (or the past), but never to be seen oneself.[7] Indeed, despite having 46,000 square

feet available to tell the complete, rich, fascinating history of the Ara Pacis, the curators decided to cut the tale short. Nowhere in the galleries is the monument's Fascist or more recent political history presented. The museum and various cultural ministries of Rome have sponsored a number of important publications on this topic. But the exhibition itself remains committed to the notion that this is a monument from the distant past, with no modern history or relevance.

The irony is that the more noisily the Meier museum insists on the object's newfound political neutrality, the more it underscores the darkness of its past. Far from neutralizing the Altar's ideological charge, the project radically repoliticized it.[8] Right-leaning critics of Mayor Rutelli, and of his successor, Walter Veltroni, who took office in 2001 and presided over the opening of the museum in 2006, criticized the new museum from a number of angles, whether concerning architecture and aesthetics or the planning and building process. The most outspoken critic has been Vittorio Sgarbi, a cultural commentator and art critic who served in Silvio Berlusconi's administration, and who at one point set fire to a model of the Meier building in the Piazzale. Sgarbi tipped his hand when he articulated what he didn't like about Meier's design by comparing it to a gas station. It is impossible to know whether the reference was subconscious or calculated, but the message is unmistakable to anyone who has ever seen the infamous photographs of the executed, mutilated bodies of Mussolini, his mistress and five other Fascist cronies hanging by their feet from a gas station at Piazza Loreto in Milan. Like that iconic scene, the new building is an attack on Fascism, or at least on its memory, Sgarbi seemed to be implying with this comparison (which he repeated endlessly). It is thus hardly surprising that when Gianni Alemanno, a candidate from the far-right Alleanza Nazionale party ran for Mayor against Veltroni in 2008, he pledged to tear the Meier museum down if elected. Having won, he has since backed down on this pledge, but only slightly. It was recently announced that the long, tall travertine wall that currently serves as a divider between the congested, Lungotevere roadway and the museum will be dismantled, ostensibly because it blocks the view from the roadway of the two Baroque churches that stand at the Piazza's southern end.

This is perhaps a reasonable compromise, in that it at least allows Alemanno to save face without seriously diminishing the visitor's experience of the interior of the building, or of the altar itself (although the violence it does to Meier's exterior design is significant). What is worth pointing out is that no one would be talking about removing the view-blocking wall if there weren't a neo-Fascist mayor in office. Quite the opposite of depoliticizing the Ara Pacis, the status of new Museum of the Ara Pacis is a perfect mirror of the current leanings of Italian politics. When the left is in power, the building goes up; and when the right is in power, the building is in danger of coming down. This odd state of affairs shouldn't be blamed on Alemanno, of course; it has in fact been the case since Mayor Rutelli's first conversation with Richard Meier after the Davos session on the Future of Cities.

Endnotes

1. A basic introduction to the monument, with prior bibliography, is Orietta Rossini, *Ara Pacis* (Milano: Electa, 2006).

2. C. Gobbi, "Storia delle esposizioni dell'Ara Pacis," *Bullettino Musei Comunali* 17 (2003), 53–78.

3. Where to erect the Ara Pacis was a topic of intense debate at the time, with proposals running from leaving it where it was found to installing inside the Mausoleum of Augustus. It was apparently Mussolini himself who made the final decision to use the monument to close of the western side of his new Piazzale.

4. The story of Mussolini's creation of the Piazzale Augusto Imperatore is told in memorable, vivid detail by Spiro Kostof, "The Emperor and the Duce: the Planning of Piazzale Augusto Imperatore in Rome," in Henry A. Millon and Linda Nochlin, *Art and Architecture in the Service of Politics* (Cambridge: MIT Press, 1978), 270-302.

5. These include the passage of racial laws in 1938, which were responsible for the demise of the career of Morpurgo, who was Jewish.

6. Ann Thomas Wilkins, "Augustus, Mussolini and the Parallel Imagery of Empire," in Claudia Lazzara and Roger J. Crum, eds., *Donatello Among the Blackshirts. History and Modernity in the Visual Culture of Fascist Italy* (Ithaca and London: Cornell University Press, 2005), 53-65, at 63.

7. Mark O'Neill, "Enlightenment museums: universal or merely global?" *Museum and Society* 2 (2004), 192-202.

8. Benedetti, S., S. Portoghesi, G. Muratore, M. Vittorini, V. Bordini, G. Farina, R. Di Paola, and G. Carbonra, "Ara Pacis Augustae: Una controversa vicenda romana," *Palladio* 34 (2004), 105–56.

Questions of Methodology

Travel of Men and Models: Interpreting, Collecting and Adapting French Art and Architecture in Europe during the 17th and 18th Centuries

SESSION CHAIRS:

Linnéa Rollenhagen Tilly (CDHTE Paris, France)

Linda Hinners (curator Nationalmuseum Stockholm, Sweden)

With the French "grand siècle," Paris became a centre of art and culture, and as such it attracted artists, agents and administrators from many European courts to study architecture and art, collect models and recruit artists. This movement is exemplified with the rebuilding of the royal palace in Stockholm from the 1690s and with Peter the Great's Saint Petersburg in the beginning of the eighteenth century, where French artists were recruited and the architectural and artistic production and administration was structured according to French principles, but also adapted to Northern building traditions and environmental requirements. The art life at the courts of Prussia, Dresden and Spain, to mention some, experienced similar developments.

In this session we would like to gather active researchers working upon this topic, to map recent and ongoing studies and to collect examples of foreign architects, craftsmen and artists in Paris, and French artists working for foreign courts in Europe. The aim is to obtain a better comprehension of travel and mobility of men and architectural models during the early modern period, but also to gain new insight in how French models and patterns of building organization and administration were reinterpreted outside the French borders. Not only were the foreign artists and agents interested in the art market and the ongoing building sites (private and public), but also in the French administration surrounding the academies, the manufactures and the superintendency of royal building projects. This resulted in national interpretations of French building administration and art academies in other European countries. How do the examples of collecting and interpreting French art at European courts during the seventeenth and eighteenth centuries differ from each other? How were the French models adapted to various European traditions and climates? Of great interest are also European "agents" responsible to choose and buy models in Paris. We would like to discuss and compare detailed examples of how these agents worked: how they competed to obtain the best prices during sales of drawings and models, and how they created and used their personal network to recruit French architects and artists to the courts that they served.

THE 'CONNOISSANCE' OF FRENCH ART AND ARCHITECTURE AT THE IMPERIAL COURT AROUND 1700

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THE 'GRAND TOUR' OF YOUNG ARISTOCRATS AND THE TRAVELS OF DIPLOMATS

Around 1675, French architecture was known in Central Europe,[9] but it did not earn as much respect as that of Italy.[10] Young aristocrats generally travelled to France at that time to learn the language, good behaviour (riding, dancing, table manners), and military architecture.[11] Nevertheless, there were ways to acquire information about French civil architecture, as can be proven by the example of Leopold Joseph Count of Lamberg (1653–1706). From November 1676 to September 1677, this member of an important (but not rich) family was studying in France (and England). There he visited the most important buildings, such as the royal residences at the Tuileries, Saint-Germain-en-Laye, Vincennes and Fontainbleau, as well as the gardens of Versailles, but he had also a look to the *Gardemeubles* and the *Gobelins* in Paris.

During their Grand Tour they saw the castle of Gaston d'Orléans at Blois and Château Richelieu.[12] Training in military architecture, with the help of the book *Les traveaux de Mars* by Alain Manesson Mallet,[13] was traditional. But we should not forget that books like *Ibrahim ou l'Illustre Bassa* by Georges de Scudéry informed Austrian aristocrats about modern (virtual) trends in French architecture and emblematic, and how important it was for a gentleman to discuss these topics.[14] Lastly, Count Lamberg enjoyed real architecture instruction with Jean Marot, and he also bought *les plans de l'architecte Marot*, a series of more than 100 engravings published by this architect between 1654 and 1660, the so-called *Recuil*.[15]

In 1698 Count Ferdinand Bonaventura of Harrach (1636–1706), an outstanding diplomat of Emperor Leopold I and also one of the most important builders and collectors of the Viennese court, made a three-week-stop in Paris to buy art and decorative objects on the way from Madrid to Vienna. The Austrian diplomat was portrayed by Hyacinthe Rigaud and discussed the plans for his palaces with the architect Pierre Cottard. Indeed there exist French drawings for a gallery in the Harrach Archive, which might date from this time.[16] Harrach also spent much time visiting royal residences and aristocratic houses. In Versailles he was disappointed because the real view of the castle was not as good as suggested by the bird's-eye views of the engravings. He criticised that the famous *Escalier des ambassadeurs* did not have any natural light from windows, but he liked the *Grand Galerie*. The Count also visited the Tuileries, where again he did not like the staircase by Le Vau (1664–66); he was sure that the staircase of his own palace has better proportions. Because Harrach had already seen the place in 1669[17], it might have been no coincidence that the two staircases had the same structure. The Austrian diplomat also visited Marly, St. Cloud and Fontainebleau, as well as the Places Royale and Vendôme, Val-de-Grâce and the Hôtels de Bouillon and de Guise.[18]

Count Philipp Ludwig of Sinzendorf served as imperial ambassador to Louis XIV from 1699–1701. On account of political and ceremonial problems, he had to wait several months for his audience.[19] Thus he had time enough to order a small portrait of himself and his wife by Rigaud, which cost 300 livres.[20] During negations for the Treaty of Soissons in 1728, the Austrian diplomat commissioned a larger portrait in the habit of the Golden Fleece by the King's painter, which cost not less than 3000 livres.[21] The Count also used his stay in Paris to speak with King's architect Robert de Cotte about designs for the Moravian castle Židlochovice/Seelowitz. Although de Cotte's ideas were not realised, Sinzendorf's castle is a rare example of a modern *Cour d'honneur* building after the French model in Central Europe.[22]

THE IMPORT AND REPRINT OF BOOKS AND ENGRAVINGS OF FRENCH ARCHITECTURE AND DECORATIVE STYLE

As we have seen, Count Leopold Joseph of Lamberg bought books and engravings during his *Grand Tour*, and he continued to do so after his return to Vienna.[23] We do not know if some of his books were later passed on to his brother, but in a 1713 inventory of the library of Franz Sigismund of Lamberg (1663–1713)[24] we also find many books in French.[25] Most interesting for us are the two architecture treatises published in the context of the Academie Royale de Architecture and based on the works of Vitruv and Vignole. The book in the Austrian library was the short version by Claude Perrault (1613–1688) published 1695 in Amsterdam under the title *Architecture general*. The second book in Lamberg's collection was the *Cours d'architecture qui comprend les ordres de Vignole* par Augustin Charles D'Aviler (1653–1701), published in Paris in 1691. The book offers a lot of theory, but

with its excellent illustrations it also informs non-professionals about the history of and current trends in architecture and the decorative arts, especially in France.[26]

In contrast to Count Sigismund Franz, who stood at the lowest level of higher Austrian nobility, Prince Eugene of Savoy was at that time climbing to the top. Hence he was able to assemble a collection of books and prints of international quality. After 1713 the field marshal received books and engravings from the collection of Pierre II and Jean Mariette and from their family's printing house. Among the books we find volumes such as the *Cours d'architecture enseigne dans l'Academie Royale d'Architecture* by François Blondel (Paris, 1675), *Les Travaux de Mars* (Paris, 1684) and *Les Oeuvres d'architecture d'Anthoine Le Pautre* (Paris, s.a.).[27] The prints include 68 volumes of reproductions by or after French artists, for instance three volumes by Le Brun (decorations of the Louvre and fountains of Versailles; series of Alexander the Great), as well as many volumes with views of Paris and Versailles or depictions of historic events.[28] The volumes were organised by Pierre Jean Mariette, who was in Vienna from 1717 to 1718, and bound after the royal model set by Etienne Boyer the Younger, the son of a Parisian royal bookseller.[29]

That a prince born in Paris who never spoke German well became one of the main importers of French culture to Vienna is neither astonishing nor new. In contrast we should be aware that many French books were bought for the school library of Archduke Charles, from 1695 onward, when he was a mere 10-year -old. In the library of the later emperor we find some of the books that we have already noted in the Lamberg libraries, especially the works on the architecture of fortification by Mallet and some biographies. Another book by Manesson Mallet, *Description de l'Univers* (1683), must have been a shock for the Hapsburg prince, because he was confronted there with the views of the old-fashioned Hofburg in Vienna and the new residences in Paris and Versailles.[30]

The book *Philosophia imaginum* (Amsterdam, 1695) by the French Jesuit Claude François Menestrier (1631–1705) was one of the most important works on emblematics and rhetoric. The National Library in Vienna still preserves the Archduke's original copy.[31] Charles Perrault (1628–1707), the brother of the architect and – as *Premier Commis des Bâtiments* and secretary of the *Petite Académie* – one of the most important theorist of France at the end of the 17th century, was represented in the Archduke's library by two works. Firstly the 1693 series of engravings of the liberal arts, originally painted around 1680 for his private library. Its *Allegory of Architecture* by B. Audran after L. de Boulogne describes French contemporary architecture – exemplified by Claude Perrault's Louvre facade and the triumphal arch of the Faubourg Saint-Antoine, and by the apartments of Versailles – as the zenith of architectural development since antiquity. Published the same year, in 1693, the second edition of Perrault's *Parallèle des Anciens et Modernes* communicated the same message. This volume was also included in the library of Prince Eugene of Savoy.[32]

But the most intriguing work in the Hapsburg library was *La Description du Chateau de Versailles* (1684) in the 1694 edition. The original book, still preserved in Vienna, includes a bird's eye view of Versailles, details of the garden, the labyrinth, the menagerie, the stables and the Grand Trianon.[33] The text outlines some aspects of the ideology of the decoration: Firstly the book tells us that all decorative elements allude to the sun, because this was the motto of Louis XIV. Therefore the seven rooms of the Kings apartment were devoted to the seven planets, and in every room the iconography parallels the painted heroes with the deeds of the King himself. Secondly, the guide informs the reader that the material of the decoration becomes richer according to the importance of the ceremony conducted in every room.

When Charles left Austria in 1703 to become King of Spain, he took his library with him. In a list of the books made in Barcelona from the year 1708,[34] we find some of the aforementioned books – such as Vauban, Perrault, Menestrier and the *Description of Versailles* – as well as a number of other interesting works: *Tapisseries du Roy* (fol. 131r), *Architecture de Vignole avec le Commentaire du Daviler* and *La vue de Versailles* by Kraus (fol. 133r). The book by D'Aviler is the same as that which we found in the Lamberg library. Even more astonishing is the publication of the series of royal tapestries designed by Charles Lebrun 1664 and published by André Félibien in 1670.[35] The version in the Hapsburg library was obviously the German reproduction in smaller format by Johann Ulrich Kraus of Augsburg, printed in 1687, and again in 1690, under the title *Tapisseries du Roy, ou sont representez les quatre elemens et les quatre saisons. Avec les devises qui les accompagnent et leur explication. Königliche Französische Tapezereyen, oder überaus schöne Sinn=Bilder / in welchen Die vier Element / samt den Vier Jahr=Zeiten/ Neben den Dencksprüchen u. ihren Außlegungen / vorgestellet werden.*[36] The tapestries honoured the Sun King, whose splendour in the four elements and in the four seasons is made visible by allegories, views of royal residences and many emblems and inscriptions, which were also translated into German. The young Archduke was directly confronted with the panegyric of Louis XIV, who – as the introduction says – the French placed above all other monarchs, even into heaven. The *Vues de Versailles* of Charles' library must have been a series of engravings of the residence and its garden monuments, engraved by Adam Perelle (1628–1702) or Israel Silvestre.

FRENCH AND SWEDISH ARTISTS AND INTELLECTUALS WHO CAME FROM PARIS TO VIENNA

Although Emperor Leopold allegedly once said that he did not like people speaking French, the language of his enemy, at his court,[37] and although in the 1690s some French tapissiers did not receive a commission because they were *natione gallus*, French born and French trained artists and intellectuals were aplenty in Vienna. Among the court artisans, the *tapissiers* were the group with the highest percentage of French people. Between 1680 and 1730, we know that eight of the 27 persons working in this sector were French.[38] Jean Trehet (around 1654–1740) left France – possibly on account of his Protestant faith – and arrived in Vienna in 1686 with the idea of founding a tapestry factory. This project could not be realised and the artisan had only to repair some tapestry. For this he let also come four other colleagues from France. In 1690 Trehet made a tapestry portrait of Leopold I, and he also delivered designs for the imperial gardens – in the modern French style. From 1695 to 1697 he created the garden for Fischer von Erlach's palace Schönbrunn. In 1697 Trehet made the two-meter-long design for the garden of Prince Mansfeld-Fondi.[39] From 1706 onward, Trehet worked for Joseph I and Charles VI exclusively as the engineer of the gardens in the imperial summer residences *Favorita* and *Augarten*.[40] In 1725 he also designed the garden of the aforementioned Seelowitz Palace of Count Sinzendorf.[41]

Another French artisan was Pierre Quentin, who in 1692 wanted a job as court *tapissier*. On account of his French nationality he did not receive this position until 1699. In 1711 he switched to the service of the widow of Emperor Joseph I. Quentin later made some luxury beds for her daughters in Dresden and Munich,[42] but unfortunately neither his works nor his designs have survived. French specialist for interior decoration and garden design also stood in the service of Prince Eugene of Savoy: Claude Le Fort du Plessis (ca. 1681–after 1754) and Dominique Girard (ca. 1680–1738). The former was responsible for the interior decoration of the Belvedere, but he might already have worked in the city palace during the first years of the 18th century, because the *boiserie* there is of strictly French style.[43] Later or even before his service for the Prince – at least in the year 1708 – Le Fort worked for the imperial court, and in the 1720s he was responsible for the decoration of the imperial gallery in the *Stallburg*.[44] Girard, who was trained in the royal gardens of Saint-Cloud and Versailles, switched from the service of Louis XIV to elector Max Emanuel in Munich in 1715. From 1717 to 1722 he was, however, also responsible for the garden of the Belvedere in Vienna.[45]

Another group of specialists was the portraitists.[46] Already in 1688–89, the Parisian Henri Gascar (1653–1701), since 1680 member of the Académie Royale, spent some time in Vienna, there producing portraits of the aforementioned Bavarian elector Max Emanuel and his Hapsburg wife Maria Antonia. Both paintings were bought after the painter's death in 1701 in Rome by Count Leopold Joseph of Lamberg.[47] For a short time, probably between 1701 and 1703, Charles Boit (1662–1727) worked in Vienna, where he created a portrait of Emperor Leopold and his family. The Swedish miniaturist from a French family had been in Paris in 1682 and was trained in Sweden, probably by Pierre Signac. Boit became a member of the Académie Royale in Paris in 1717, where he also taught the later Viennese court painter Martin van Meytens.[48] Another Swedish portraitist, David Richter the Elder (1662–1735), active in the 1690s in Dresden, Berlin and maybe also Vienna, was in Paris in 1698–99, where Count Harrach found him in Rigaud's workshop. In 1701 Richter arrived in Vienna, where he married in 1708 and died in 1735.[49] He painted Prince Eugene of Savoy in 1705, Archduchess Maria Amalia four years later, and Charles VI and the Empress Elisabeth Christine around 1718.[50] Other fields of science and craftsmanship with a high reputation in France were numismatics and the production of portrait medals communicating the fame of the Sun King. The Swedish medallist Daniel Warou (1674–1729), who brought with him the French technique of *balanciers*, had been working in Kremnitz/Kremnica since 1697 and also in Vienna, where he was made medallist of the imperial chamber in 1713.[51]

SENDING ARTISTS TO FRANCE AND COPYING THE ROYAL STRUCTURES

It must have soon become obvious at court in Vienna that books, engravings and foreign artists were not sufficient for staying well informed about the French aesthetic offensive. Thus, during peacetime in 1698, Joseph I ordered his French garden engineer Jean Trehet to travel to France for the purpose of buying some rare plants, and of drawing royal and aristocratic residences and summer palaces in and around of Paris. In the end Trehet spent seven month in France for his work.[52] A year later the German architect Leonhard Christoph Sturm also visited Paris. It was only after the close of the War of the Spanish Succession (1701-15) that architects from Central Europe could again travel to France.[53]

In 1708 the Swedish intellectual Carl Gustav Heraeus (1670–1725) arrived in Vienna. This son of a Stockholm patrician had studied in Paris in 1693, and he had lived there from 1698 to 1701 as the tutor of a young aristocrat. To study architecture he bought French books like the aforementioned *Architecture General* by Perrault,[54] and the *Explication historique, de ce qu'il y de plus remarquables dans la maison royale de Versailles* by Laurent Morellet (pseud. Combes; 2nd ed., Paris, 1695), who named Versailles *le plus superbe Palais du Monde*.[55] Heraeus also came in contact with the royal academies and art institutions. Thus he dedicated his 1721 volume of *concetti* to Jean Paul Bignon (1662–1743) – president of the Académie Royal des Sciences et des Inscriptions and also Royal Librarian; and he was portrayed before 1725 by Etienne Desrochers (1668–1742) for the latter's

Recueil de portraits.[56] In 1710 Joseph I made Heraeus director of the imperial coin collection.[57] In his new office Heraeus set to work on a *historia metallica* of Emperor Charles VI after the model of Louis XIV.[58] Heraeus called Bengt Richter (1670–1737) to Vienna. The cousin of David Richter had been working on the *histoire métallique*, and in Vienna he started with a medal for the coronation of the new emperor in Frankfurt in December 1711. In 1712 he was declared Chief Medallist, and later he was named Inspector of the Imperial Coinage in Vienna, where he died in 1737.[59]

Heraeus' contacts in France obviously were helpful for the young Joseph Emanuel Fischer von Erlach, when he was studying between 1717 and 1719 the French architecture in Paris. Even more important was François-Charles de Vintimille Comte du Luc (1653-1740), the French ambassador at the imperial court from 1715-1717. We can suggest, that the son of the imperial court architect lived in Paris in the house of the French diplomat and got with his help direct contact to the royal architects and their projects.[60]

The final shift to the French system of art production occurred in 1726 with the refounding of the art academy in Vienna after the Parisian model under the direction of Jacques van Schuppen (1670–1751). This portrait painter was the son of an engraver in Paris and a pupil of Nicolas de Largillierre. In 1704 he was accepted at the Académie royal, and two years later he entered into the service of the Duke of Lorraine in Lunéville. In 1712 van Schuppen moved to Vienna,[61] where in 1718 he painted a portrait of Prince Eugene of Savoy[62] – this being a further example for the latter's importance in introducing the French style in Vienna. Painter of the imperial chamber from 1723 onward, van Schuppen in 1726 became the first director of the new imperial academy of arts in Vienna and he based its statutes in part word for word on those of Paris.[63]

Endnotes

1. Alain Hugon, "Les méthodes de lutte entre les maisons de Bourbon et de Habsbourg (1598-1700)" in Lucien Bély (ed.), *La présence des Bourbons en Europe XVIe-XXIe siècle* (Paris: Presses Univ. de France, 2003), 59-74; Franz Bosbach, „Der französische Erbfeind. Zu einem deutschen Feindbild im Zeitalter Ludwigs XIV." in Franz Bosbach (ed.), *Feindbilder. Die Darstellung des Gegners in der politischen Publizistik des Mittelalters und der Neuzeit. Bayreuther Historische Kolloquien 6* (Köln, Weimar and Vienna: Böhlau Verlag, 1992), 117-139; Christoph Kampmann a.o. (eds.), *Bourbon – Habsburg – Oranien. Konkurrierende Modelle im dynastischen Europa um 1700* (Köln, Weimar and Vienna: Böhlau, 2008).

2. Hendrik Ziegler, *Der Sonnenkönig und seine Feinde. Die Bildpropaganda Ludwigs XIV. in der Kritik* (Petersberg: Imhof, 2010), 103–107.

3. Petr Fidler: "'…alla moderna gebaut und vom sehr artigen goût...' Das Palais Dietrichstein-Lobkowitz in Wien. Zur Frage des französischen Einflusses in der mitteleuropäischen Architektur des 17. Jahrhunderts", *Acta Historiae Artium* 37 (1994*)*, 145-174.

4. Friedrich Polleross, *Die Kunst der Diplomatie. Auf den Spuren des kaiserlichen Botschafters Leopold Joseph Graf von Lamberg (1653-1706)* (Petersberg: Imhof, 2010), 269, ill. 243.

5. Vienna, ÖNB 44.Q.12: Liselotte Popelka, *Eugenius in nummis. Kriegs- und Friedenstaten des Prinzen Eugen in der Medaille* (Vienna: Heeresgeschichtliches Museum, 1986), cat. no. 39.

6. Hendrik Ziegler, "Le demi-dieu des païens. La critique contemporaine de la statue pédestre de Louis XIV" in Isabelle Dubois, Alexandre Gady and Hendrik Ziegler (eds.), *Place des Victoires à Paris: Histoire, architecture, société. Monographie Centre allemand d'Historie de l'Art* (Paris: MSH, 2003), 48-65.

7. Guido Braun, *Von der politischen zur kulturellen Hegemonie Frankreichs 1648-1789 WBG Deutsch-Französische Geschichte 4* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2008); Olivier Chaline, Jaroslaw Dumanowski and Michel Fignac (eds.), *Le rayonnement français en Europe centrale du XVIIe siècle à nos jours* (Pessac: MSHA, 2009); Jiří Kroupa, "La Moravie et la France" in Jiří Kroupa (ed.): *La Moravie à l'âge baroque 1670-1790. Dans le miroir des ombres* catalogue d'exposition Rennes (Paris: Somogy, 2002), 310-323; Martin Schieder, "Akkulturation und Adelskultur. Französische Kunst im Deutschland des 18. Jahrhunderts. Eine Einführung" in Uwe Fleckner, Martin Schieder and Michael F. Zimmermann (eds.), *Jenseits der Grenzen. Französische und deutsche Kunst vom Ancien Régime bis zur Gegenwart. Thomas W. Gaehtgens zum 60. Geburtstag. Band I Inszenierung der Dynastien* (Köln: Dumont, 2000), 12-51; Patrick Michel (ed.), Art français et art allemand au XVIIIe siècle. Regards croisés (Paris: École du Louvre, 2008); Manuel Weinberger, "L'architecture à la française. Die Hofburg zu Beginn des 18. Jahrhunderts" in Werner Paravicini and Jörg Wettlaufer (eds.), *Vorbild - Austausch – Konkurrenz. Höfe und Residenzen in der gegenseitigen Wahrnehmung. Residenzenforschung 23* (Ostfildern: Thorbecke, 2010), 289-300.

8. Two recent publications are also dedicated to this subject: Veronika Hyden-Hanscho, *Von Reisenden, Migranten und Kulturmanagern. Mittlerpersönlichkeiten zwischen Frankreich und dem Wiener Hof (um 1630-1730)* (Graz: Ph.diss. ms. University of Graz, 2011); Rainald Franz, "Ornamentvorlagen für Boulle-Marketerien. Ein Medium des Kunsttransfers in Mitteleuropa an der Wende vom 17. zum 18. Jahrhundert" in Renate Eikelmann (ed.), *Prunkmöbel am Münchner Hof. Barocker Dekor unter der Lupe* (Munich: Bayerisches Nationalmuseum, 2011), 32-45.

9. Regarding the influence of French architecture in Central Europe, especially on the palace of the princes of Lobkowitz at Raudnice and on the Liechtenstein Palace at Valtice, see: Fidler, "Dietrichstein-Lobkowitz", 159–163; Monika Brunner-Melters, *Das Schloß von Raudnitz 1652-1684. Anfänge des habsburgischen Frühbarock. Manuskripte zur Kunstwissenschaft 60* (Worms: Werner, 2002) 116–118, 135–165.

10. At least in the words of Prince Karl Eusebius of Liechtenstein (1611–1684), who wrote instructions for his son Johann Adam Andreas. He did not approve of the French palaces – 'a pavilion' or 'a corps de logis' and galleries, as they were to be seen in the French architecture books – and he ordered his son to build only

in the Italian style of architecture, because 'Italy with its buildings is the best in the world': Victor Fleischer, *Fürst Karl Eusebius von Liechtenstein als Bauherr und Kunstsammler (1611-1684). Veröffentlichungen der Gesellschaft für neuere Geschichte Österreichs 1* (Vienna and Leipzig: C.W. Stern, 1910), 182-183.

11. Thomas Grosser, *Reiseziel Frankreich. Deutsche Reiseliteratur vom Barock bis zur Französischen Revolution* (Opladen: Westdeutscher Verlag, 1989); Hyden-Hanscho, *Von Reisenden*, 44-60.

12. Polleross, *Lamberg*, 122-130. In 1698 Count Friedrich Karl of Schönborn (1674-1746) studied in Paris for seven month and also visited Marly: Ulrike Seeger, "Marly und Rom in Wien – Zur Konzeption des Gartenpalais Schönborn in Wien", *Zeitschrift für Kunstgeschichte* 62 (1999), 366-393, here 381

13. The exemplar Vienna ÖNB 213708-B Alt is a 1686 version with an ex libris of the Count Joseph of Windischgraetz (1744-1802).

14. Fidler, "Dietrichstein-Lobkowitz", 169; Polleross, *Lamberg*, 118-122.

15. Marot made a smaller and a larger version. Katharina Krause, "Les plus excellents Bastiments de France. Architekturgeschichte in den Stichwerken des Ancien Régime", *architectura* 25 (1995), 29-57; Kristina Deutsch, "Reproduktion, Invention und Inszenierung. Jean Marot (1619-1679) und die druckgraphische Architekturdarstellung in Frankreich", in Markus A. Castor, Japer Kettner and Christien Melzer (eds.), *Druckgraphik. Zwischen Reproduktion und Invention. Passagen/Passages 31* (München and Berlin: Deutscher Kunstverlag, 2010), 403-417.

16. Ziegler, *Ludwig XIV.*, 156–158 and 175–177; Polleross, *Lamberg* 42–44, ill. 35.

17. Hyden-Hanscho, *Von Reisenden*, 60-73.

18. In 1725 the son of Ferdinand Bonaventura ordered further plans from Paris, commissioning Jean Nicolas Jennesson to design a *maison de plaisance*: Wilhelm Georg Rizzi, "Ein französisches Projekt für ein Gartenpalais der Familie Harrach", *Wiener Jahrbuch für Kunstgeschichte* 34 (1981), 180–182.

19. Ilse Bankier, *Die spanische Erbfolgefrage und der Gesandtschaftsbericht Graf Philipp Ludwig Sinzendorfs vom Hof zu Versailles von 1699-1701*, (Vienna: Ph. diss., ms., University of Vienna, 1994).

20. He also ordered two copies at half price: Paul Eudel, *Les livres de comptes de Hyacinthe Rigaud* (Paris: Librairie H. Le Soudier, 1910), 52.

21. Eudel, *Les Livres*, 110 ("1729 'M le comte de Zuizindorff, chancelier de l'empereur, en habit de cérémonie de chevalier de la Toison d'or.'"); Jiří Kroupa, "Le portrait «à la française" in Jiří Kroupa, *La Moravie à l'âge baroque*, 298-309; 310–323. On the 1728 painting in the Kunsthistorische Museum see Stephan Perreau, *Hyacinthe Rigaud 1659-1743. Le peintre des rois* (Montpellier: Les Presses du Languedoc, 2004), 104–105, ill.76.

22. Jiří Kroupa, "'Lieu de plaisance' und das barocke Mähren. Notizen zu einem ‚französischen Modus' in der Architektur des 18. Jahrhunderts', *Umění* 43 (1995), 317-337, here 322-324; Wilhelm Georg Rizzi, „Zum Stand der Forschung über Joseph Emanuel Fischer von Erlach", in Friedrich Polleross (ed.), *Fischer von Erlach und die Wiener Barocktradition. Frühneuzeit-Studien 4* (Vienna, Köln and Weimar: Böhlau, 1995), 249-278, here 252–53, ill. 77; François Fossier, *Les dessins du fonds Robert de Cotte de la Bibliothèque Nationale de France. Architecture et décor* (Paris: Bibliothèque Nationale de France, 1997), 659–660.

23. Polleross, *Lamberg*,157-158.

24. Friedrich Polleross, "'Ein Original v. Rubens von 5 Figuren'. Gemäldesammlungen der Grafen Lamberg in der ersten Hälfte des 18. Jahrhunderts" in Jiří Kroupa, Michaela Šeferisová Loudová and Lubomír Koněcný (eds.), *Orbis artium. K jubileu Lubomíra Slavíčka. Opera Universitatis Masarykianae Brunensis, Facultas Philosophica 382* (Brno: Munipress, 2009), 707-720.

25. Regarding French books in Central Europe libraries see also some chapters in Chaline, Dumanowski and Figeac, *Le rayonnement*.

26. Bernd Evers (ed.), Architekturtheorie von der Renaissance bis zur Gegenwart (Köln a.o.: Taschen, 2003), 248–257; 264–273; Bettina Maria Köhler, *'Architektur ist die Kunst, gut zu bauen'. Charles Augustin d'Avilers 'Cours d'Architecture qui comprend les Ordes de Vignole'. Studien und Texte zur Geschichte der Architekturtheorie* (Zürich a.o.: gta-Verlag, 1997).

27. Vienne, ÖNB sign. BE.5.F.5, BE.4.S.11, BE.6.H.3.

28. The prints after Lebrun: Vienna, Albertina HB 110, 1–3.

29. Selma Krasa, "'Imagines'. Die Stich- und Zeichnungssammlung des Prinzen Eugen", in Otto Mazal (ed.), Bibliotheca Eugeniana. Die Sammlungen des Prinzen Eugen von Savoyen (Vienna: Österreichische Nationalbibliothek, 1986), 293-297; Christian Benedik, "Die Kupferstichsammlung von Prinz Eugen in der Albertina", in Agnes Husslein-Arco and Marie-Louise von Plessen (eds.), *Prinz Eugen. Feldherr, Philosoph und Kunstfreund* (Munich: Hirmer, 2010), 154-159; Pierre Rosenberg: *Les dessins de la collection Mariette. Ecole francaise, vol. 1*, Milan 2011, XVIII–XLVI.

30. Friedrich Polleross, "'Monumenta Virtutis Austriacae'. Addenda zur Kunstpolitik Kaiser Karls VI." in Markus Hörsch and Elisabeth Oy-Marra (eds.), *Kunst, Politik, Religion. Studien zur Kunst in Süddeutschland, Österreich, Tschechien und der Slowakei. Festschrift für Franz Matsche* (Petersberg: Imhof, 2000), 99-122, here 102–103, Fig. 2.

31. Friedrich Polleross, "Von *redenden Steinen* und *künstlich-erfundenen Architekturen*. Oder: Johann Bernhard Fischer von Erlach und die Wurzeln seiner *conceptus imaginatio*", *Römische Historische Mitteilungen* 49 (2007), 319-396, here 331, ill. 7.

32. Polleross, "Von redenden Steinen", 335–339, Fig. 11–13.

33. Vienna, ÖNB Sign. BE.9.W.60.

34. Catalogus librorum in Camera regia erectorum, Barcinonae, die 23, mensis Octobris anno 1708: Vienna, HHStA, HA Familienakten K. 104, fol 129r–141v.

35. Wolfgang Brassat, *Tapisserien und Politik. Funktionen, Kontexte und Rezeptionen eines repräsentativen Mediums* (Berlin: Gebrüder Mann, 1992), 204–206.

36. Helmut Gier and Johannes Janota (eds.), *Augsburger Buchdruck und Verlagswesen. Von den Anfängen bis zur Gegenwart* (Wiesbaden: Harrassowitz, 1997), 37-39; Wolfgang Augustyn, „Augsburger Buchillustration im 18. Jahrhundert", in Gier and Janota, *Augsburger Buchdruck*, 791-861 and 842–843.

37. Friedrich Polleross, "'Pro decore Majestatis'. Zur Repräsentation Kaiser Leopolds I. in Architektur, bildender und angewandter Kunst", *Jahrbuch des Kunsthistorischen Museums* 4/5 (2003), 191-295.

38. Veronika Hyden-Hanscho, "Französische Tapissiers als kulturelle Mittler um 1700 am Wiener Hof" in Wolfgang Schmale (ed.), *Multiple Cultural References in 18th-Century Habsburg Monarchy. Jahrbuch der österreichischen Gesellschaft zur Erforschung des 18. Jahrhunderts* 24 (2009), 123-144.

39. Schwarzenberg Archiv Český Krumlov, Coll. of plans, Nr. 9154: Harald Zinner, *Das Gartenpalais Mansfeld-Fondi-Schwarzenberg. Genese eines barocken Gartenpalais unter Einbeziehung des Milieus der Wiener Adelsarchitektur* (Vienna: Mastertheses University of Vienna, ms. 2011), 48–49, ill. 24.

40. Erika Neubauer, *Wiener Barockgärten* (Dortmund: Hardenberg Kommunikation 1980), 24, ill. 3–5; Beatrix Hajos, "Neue kunsthistorische Forschungen zum Barockgarten Schönbrunn", *Österreichische Zeitschrift für Kunst und Denkmalpflege* 57 (2003), 365-398.

41. Walter Pillich, "Jean Trehet. Ein französischer Künstler im Dienst des Wiener Hofes 1686-1740", Jahrbuch des Vereines für Geschichte der Stadt Wien 12 (1955/56), 130-144; Hyden-Hanscho "Tapissiers", 129-131.

42. Hyden-Hanscho, "Tapissiers", 132–133 and 139–143.

43. Hellmut Lorenz, "Einige unbekannte Ansichten Salomon Kleiners aus dem Stadtpalast des Prinzen Eugen in Wien", Wiener Jahrbuch für Kunstgeschichte 40 (1987), 223-234, 383-386; Richard Kurdiovsky, Klaus Grubelnik and Pilo Pichler, Das Winterpalais des Prinzen Eugen. Von der Residenz des Feldherrn zum Finanzministerium der Republik (Vienna: Brandstätter, 2001, 106–108; Ulrike Seeger, Stadtpalais und Belvedere des Prinzen Eugen: Entstehung, Gestalt, Funktion und Bedeutung (Vienna, Köln and Weimar: Böhlau, 2004), 151, fn 306.

44. Sabine Haag and Gudrun Swoboda (eds.), Die Galerie Kaiser Karls VI. in Wien (Vienna: Kunsthistorisches Museum, 2010), 14-15.

45. Winfried Hansmann, "Dominique Girard" in Allgemeines Künstlerlexikon 55 (Munich and Leipzig: Saur 2007), 164–165.

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47. Polleross, Lamberg, 468, ill. 203 and 217.

48. Gunnar Wilhelm Lundberg, Charles Boit 1662-1727. Emailleur-miniaturiste suédois – biographie et catalogue critique, Nogent-le-Rotron: Daupeley-Gouverneur, 1987; H. O. Boström, "Charles Boit". in Allgemeines Künstlerlexikon 12 (Munich and Leipzig: Saur, 1996), 331.

49. Bengt M. Holmquist, Das Problem David Richter. Studien in der Kunstgeschichte des Spätbarocks. Stockholm Studies in History of Art 15 (Stockholm: Almquist & Wiksell, 1968), 14-71.

50. The original painting of Eugene in Vienna was destroyed in 1941, but several other versions have survived: Karl Gutkas (ed.), Prinz Eugen und das barocke Österreich (Vienna: Niederösterreichisches Landesmuseum 1986), cat. no. 1.67; Holmquist, Richter, 33, ill. 9, 10–11; Günther Heinz and Karl Schütz, Porträtgalerie zur Geschichte Österreichs (Vienna: Kunsthistorisches Museum 1976), cat. no. 142; Enikö Buzási, Alte ungarische Bildnisse (Tata and Szombathely, 1988), cat. no. 16–17.

51. Heinz Winter, *Glanz des Hauses Habsburg. Die habsburgische Medaille im Münzkabinett des Kunsthistorischen Museums Sammlungskataloge des Kunsthistorischen Museums 5* (Vienna: Kunsthistorisches Museum, 2009), 24; Herbert Haupt, *Das Hof- und hofbefreite Handwerk im barocken Wien 1620 bis 1770. Ein Handbuch. Forschungen und Beiträge zur Wiener Stadtgeschichte 46* (Innsbruck, Vienna and Bozen: Studien Verlag, 2007) 745, no. 4129.

52. Pillich, „Trehet", 137–138.

53. Marcel Schumacher, "Von Wien nach Paris. Der Parisaufenthalt Joseph Emanuel Fischers von Erlach im Kontext der Architektenreisen nach 1715", *Frühneuzeit-Info* 19 (2008) No 2, 48-58.

54. Friedrich Polleross, "'Wien wird mit gleichem Recht Neu=Rom genannt, als vormals Constantinopel'. Geschichte als Mythos am Kaiserhof um 1700", *Jahrbuch des Kunsthistorischen Musems Wien* 11 (2009), 102-127, 118, ill. 12. This book was also in the library of the architect and designer Antonio Beduzzi: Wilhelm Georg Rizzi, "Eine wiedergewonnene Zeichnung des Antonio Beduzzi", *Österreichische Zeitschrift für Kunst und Denkmalpflege* 37 (1983), 27–30, here 29.

55. Vienna, ÖNB Sig, 48.K.49.

56. Carl Gustav Heraeus, *Inscriptiones et Symbola varii argumenti* (Nürnberg: Peter Conrad Monath, 1721), 3; Vienna: ÖNB Bildarchiv PORT_00027278_01.

57. Anders Hammarlund, *Ett äventyr i staten. Carl Gustav Heraeus 1671-1725. Från Stockholm till kejsarhovet i Wien* (Stockholm: Carlsson, 2003).

58. Cf. a parallel project in Dresden: Martin Heidemann, "Die Histoire métallique Ludwigs XIV. Von Frankreich und ihre Rezeption in der sächsischen Medaillenkunst unter August dem Starken", *Jahrbuch der Staatlichen Kunstsammlungen Dresden* 31 (2004), 2007, 51-61.

59. Haupt, *Handwerk,* 644, no. 3354.

60. Schumacher, "Von Wien nach Paris", 49–52; Franz Matsche, "Joseph Emanuel Fischer von Erlach und die französische Architektur", in Lorenz Dittmann, Christoph Wagner and Dethard von Winterfeld (eds.), *Sprachen der Kunst. Festschrift für Klaus Güthlein zum 65. Geburtstag* (Worms: Werner, 2007), 1-18; Franz Matsche, "'Le Comte du Luc' und Joseph Emanuel Fischer von Erlach. Zum französischen Kunsttransfer nach Österreich im 18. Jahrhundert", *Frühneuzeit-Info* 22 (2011), 163-170.

61. David Mandrella, "Les peintres lorrains en Allemagne au XVIIIe siècle," in Michel, *Art français et art allemand*, 253-263, here 253–254.

62. Pierre Schreiden, *L'influence française à Vienne dans les arts plastiques au cours de la première moitié du XVIIIe siècle (Jacques Van Schuppen 1670-1751)*, Brüssel:Editions de l'Université de Bruxelles, 1983), 15; Husslein-Arco and von Plessen, *Prinz Eugen*, cat.-II.104.

63. Simon Mraz, *Die Geschichte der Akademie der bildenden Künste in den 30er und 40er Jahren des 18. Jahrhunderts unter besonderer Berücksichtigung des internationalen, politischen und künstlerisch-organisatorischen Umfelds* (Vienna: Mastertheses University of Vienna, ms. 2007) 75–87.

JOSEPH EFFNER'S TRAINING AT THE WORKSHOP OF GERMAIN BOFFRAND. THE CASE OF INTERIOR DECORATION

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The most varied aspects in the work of the Bavarian court architect, Joseph Effner (1687–1745), reveal that he must have been a student of Germain Boffrand (1667–1754). This was suggested by the fact that Effner's patron, the governor of the Spanish Netherlands and imperial Elector Max Emanuel of Bavaria, had summoned Boffrand as an architect to Brussels in 1705/06. In fact, Boffrand and Effner are documented as having worked together in the rebuilding of Max Emanuel's palace in Saint-Cloud, with Effner being paid as a construction supervisor. Max Hauttmann reported this long ago in 1913, in the first and only monograph on Effner. He did not pursue any further research into the field of room decoration, since Boffrand's interiors were not known to him then. In contrast, 99 years later, we now possess an extensive idea of Boffrand's interior decoration. Although until now, an investigation comparing the room creations of both architects has been lacking. This was the goal of my doctoral thesis, whose results are the basis for the following paper.[1] First, I would like to look at Effner's years in Paris and the most important commissions executed by Boffrand during this period. The second part will analyse Effner's own works in the palaces of Dachau and Nymphenburg, which persistently exhibit a close dependence on his teacher.

EFFNER IN PARIS

Joseph Effner was the second youngest of ten children, the son of a court gardener serving the Electoral Bavarian court, and was baptised on 4 February 1687 in Dachau. Effner was first introduced by his father to the craft of the pleasure garden. To improve Effner's knowledge and skills, acquired in Dachau's court garden, the Elector Max Emanuel sent him to Paris and financed his stay there. In Paris he received board wages continuously from January 1707 to May 1708. The expense books always record him as a gardener in Paris. This changed with the following entry from spring 1708: Effner was 'paid 229 guilder for diverse instruments to study mathematics and architecture.' In June 1708 at the latest, Effner began his apprenticeship in the architectural studio of Germain Boffrand. From this month on, the notation 'gardener in Paris' disappears from the expense books. From here, he received monthly board wages for over a year and finally in September 1708 another three-digit amount for various instruments for an architect's use. Effner was paid 150 *livres* every quarter as a pension for his new master, 600 *livres* annually. After the second quarter of 1709, exactly a year later, the regularity of the pension payments stopped. In the following period, accrued amounts were only sporadically paid to Effner. Perhaps, because after twelve months, the apprenticeship was over in a strict sense.

After 1709, Effner continued to work in the studio of Germain Boffrand, but now as a draughtsman. In these years firstly, board wages for Effner, as well as the pension for the master who employed him, continued to come out of the Elector's coffers. Payments faltered though and cannot be continuously documented. Secondly, he is still mentioned in Paris and regularly recorded as an 'architect'. According to a document from 1711 or 1712, Effner has stayed in Paris *in begreiff: unnd uebung der Architectur*. This double term 'learning and practise of architecture' refers to both the apprenticeship and the subsequent journeyman period. In addition, Effner's obvious knowledge of Boffrand's building and decoration works from the period 1709-1715 is the most convincing argument for assuming that he worked with the Parisian architect, including after 1709.

In all these years Effner was financed by the Elector Max Emanuel, who engaged Boffrand as an architect for his palaces in and around Brussels in 1705-06. Boffrand thus completely re-decorated the bedroom and the adjoining cabinet for the governor's residence at the Coudenberg. These works included gilded pilasters and grotesque painting, probably executed by the renowned French ornamental painter Claude III Audran. The court *tapissier* of Louis XIV, Pierre Lallié, provided the material for the textile decoration of the bedroom. Boffrand, was also commissioned to redecorate Max Emanuel's apartments in the palace of Tervuren, which also received textile deliveries from Lallié and drew plans for a new building, a hunting pavilion in Boitsfort, which contrary to prevailing opinion was probably never begun, again according to the archival documents in Munich. Max Emanuel greatly admired the design drawings and the interior decorations by Boffrand. In a letter from Brussels he described the French architect as a sought-after man, who was very skilled, possessed good taste, and worked extremely quickly.

Let us return to Effner. Just like Boffrand, he first worked as a draughtsman under Jules Hardouin-Mansart before he was engaged as a construction supervisor at the Place Vendôme. Effner likewise, was initially employed as a draughtsman and then, as he

gained experience in construction technology and practice, was sent by Boffrand to supervise and carry out the final acceptance of buildings. Effner achieved this position by 1713 at the latest, when Boffrand was tasked with the reconstruction of a house that Max Emanuel had purchased in Saint-Cloud. Here Effner was paid for supervising construction. The house was severely damaged by fire in 1870 and the remaining ruin finally torn down in 1970. A document on the reconstruction of the house contains further information of special importance though. A letter to the Elector mentions, that Effner will work on a new drawing for the design for the ornamentation of the buffet, which he has begun together with Boffrand. The item not only indicates their cooperation in the architectural studio, but also Effner's drawing skills. As both of them designed the element of the permanent interior decoration, Effner's competence for drawing ornamental portions becomes apparent.

We must recall here that Joseph Effner studied architecture only in Paris. He was, so to speak, trained and moulded in a purely French manner between 1708 and 1715. During his years with Boffrand, his master was appointed as the first architect of the Duke of Lorraine, and accepted into the first class of the Royal Architecture Academy in Paris. Almost no written information exists on working conditions in the architectural studio run by Boffrand, who in 1712 was mentioned, as living near the church of Saint Paul in the fourth *arrondissement* and presumably had his studio there as well. But, on the basis of a preserved collections of drawings, the design process, in which Effner too was involved, can at least be reconstructed.

The first building project, in which Effner must have participated from the beginning, was the reconstruction of the Hôtel du Petit-Luxembourg in Paris for Anne of Bavaria. The princess, who belonged to the royal family, hired Germain Boffrand for the planning and realisation of the project in 1709, which was completed in 1713. The permanent decoration of the main staircase, completely covered in stucco, is for the most part authentic. Only the central ceiling painting in the cupola and the latticework on the vaulting surrounding it are later additions. The same applies to the mirrors inserted into the arcades of the wall division and the balustrades. Composite pilasters, which support a concave scotia, the *corniche*, running around the staircase, are placed between the arcade's arches. The *salon* likewise preserves the original decoration. The idea of emphasising the doors, windows, and chimney axis by means of the same arcade framing comes from Boffrand, and has to be noted as a particularly characteristic and fruitful principle. The idea of continuing the arcades on the wall opposite the windows ultimately creates a unified room impression. In this manner, the different wall openings become equal parts of a whole. The ornamental decoration of the walls is concentrated in the trapezoidal fields between the arches typical of Boffrand. These are not made of wood, but of stucco, just like the ornamental bordure in the cavetto at the edge of the ceiling. The following parade bedroom preserves the original wainscoting designed by Boffrand, but not the concluding *corniche* anymore. The completely carved ornamental over-doors stand out especially, whose supports with large contrary curves form the outline of a bell. Their relative compact trophies, profiled bands, fantastical creatures, and latticework belong to the fundamental repertoire of the French architect, which later will be omnipresent in Effner's work. The cabinet, the last room in the enfilade and the smallest one, preserves Boffrand's original decoration almost completely intact. The completely panelled rooms impress the observer with their very reserved adornment of the boiseries. The chimney, in particular, is emphasised by a risalit and the extension of the *corniche*, a motif that Effner later employed in the Geheimen Ratszimmer (Privy Council Room) in Nymphenburg. The over-doors are evident in their internal composition, with protruding contrary curves from the previous room. The ornaments of the boiseries and the *corniche* with the allegorical allusions to the arts, reveal the compact trophies typical for Boffrand. The structuring of the wall strives for the most mirror-symmetric form possible. As in the other rooms, the white-gold tonality almost completely pervades, while the ceiling remains entirely unornamented.

Boffrand was also active for the ducal family in Lorraine from 1708. He took over the expansion of the palace in Lunéville and the construction of a hunting lodge in La Malgrange from 1710. The interior decoration created for La Malgrange following his ideas has not survived, however, blueprints based on his room designs do exist, made by a biographer of Boffrand in the 19th century. One of the blueprints depicts the bedroom of the duchess and does not conceal its origin in Boffrand's studio. The framing of the mirror above the chimney, as well as the division of the boiserie by means of inserted rosette fields, is thus closely comparable with the variant executed in the parade bedroom for Anne of Bavaria in the Petit-Luxembourg. The similarity is also obvious in the blueprint with the depiction of the chimney wall in the *Grand Appartement* at Malgrange, as the over-door refers to the very similar frame in the northern antechamber at Nymphenburg palace. The decorative field above the chimney, can be recognised in Boffrand's design for the cabinet for the Duchess of Lorraine in the palace at Lunéville. Although created a decade later, the presentation drawings for Lunéville have fortunately been preserved. They are characterised by the colour scheme and the depiction of all four walls of a room. Different shades of grey denote surfaces and plasticity, yellow indicates the planned gilding, pink the surfaces for paintings, and light blue the position of mirrors. Small brushstrokes in various colours evoke the marbleising of the chimney mounting and the even wall surfaces in grey are meant to be covered with textiles. This canon of colours, as well as the large number of sheets, characterises the designs by Boffrand for widely varying series of rooms, such as

for the Duchess of Lorraine in Lunéville, for the Duke of Maine in the Arsenal in Paris, and for the Prince-Bishop von Schönborn in the Würzburg Residence, which I will return to later.

The commission for the Duke of Maine was the last job in which Effner must have participated. Boffrand received it in 1713. Once again his proposal for the *salon* depicts arcades that produce the unification of the room's shell. The trapezoidal fields between the arches are imaginatively filled with painting, a design that recurs in the Hôtel du Soubise 20 years later. Boffrand's work, therefore, can be traced very well in its development.

EFFNER IN BAVARIA

It is no surprise when Boffrand's characteristic drawing technique reappears in the designs by his *dessinateur* – Effner – of many years, particularly when Max Emanuel himself, according to his own declaration, had especially appreciated the drawings of the French architect. Soon after returning to Bavaria, the Elector had a wing of the Dachau palace rebuilt by Joseph Effner, starting in 1715. Only one single sheet from Effner's designs for the project until the Second World War has survived; in its form and content, it remains entirely in the tradition of his teacher and evidences identical graphical qualities. Peter Volk perceptively recognised in the overall design of the staircase hall, but above all in the division of the walls, an adaptation of the main staircase in Petit-Luxembourg in Paris 'that extends to the smallest details of the stucco ornaments'. From a purely formal viewpoint, the employment of Composite capitals on the pilasters and the keystones with accompanying trophy decoration above the arch crown match those in Paris. The keystones in Dachau, however, refer in their appearance as agrafes with shell ornamentation more to the related examples in the *salon* of the Petit-Luxembourg. In addition, the motif of the *corniche* in the staircase is similar: the helmets grouped in pairs above the capitals and the crossed palm and olive tree branches stand out as notable examples. In Dachau and in Paris the staircase hall is terminated above by a torus, although stucco sculptor Guillielmus de Grof executed a reed bundle continuously extending around the wall. Finally, one must note that the entire design of the walls is realised in stucco in both cases.

We must recall the observation by Peter Volk on the appearance of the stucco decoration filling the surfaces and carried out by the stucco artisan de Grof. In comparison to Paris, where surface and plastic decoration exist in a well-balanced relationship full of tension, in Dachau, the trophy decoration extends in the pendentive fields above the arches in a strange manner. This horror vacui seems to be due to the realisation by de Grof. Effner's design, for the staircase evidences the very French accenting of the decoration, concerning the trophies placed to the sides of the keystones, as well as the ornament of the *corniche*.

From the staircase one proceeds to the great hall. Here too the stucco decoration, created under Effner's direction, reveals who its' designer had worked with for many years. It has not survived. Effner bordered the mural painting from the Renaissance in the upper zone, which was to be preserved with a strongly structured moulding. He placed archivolts, which bent off at the impost and continued horizontally, above the round-arch doors and niches inserted in the narrow side of the room and above the window niches from the 16th century, which he narrowed. In this manner, trapezoidal fields were created, recalling those from the salon of the Petit-Luxembourg. On the long side of the room he added lesenes with a round internal field next to the window openings, thus providing the larger arches with a stabilising base. Such flanking lesenes were employed by his teacher in the design for the Arsenal. In order to preserve the painting on the narrow sides of the room without disturbing them, Effner did not continue the large arches of the long wall, as would have been theoretically possible. In this way he deviated from an important principle of Boffrand, who always unified window, door, and chimney axes, such as in the *salon* of the Petit-Luxembourg, by means of arcades of uniform height on all the walls. Apart from this exception, the idea of covering a room's walls exclusively with white stucco decoration, unusual for French architecture, can be found in Boffrand's work as well.

While in Dachau the main rooms are documented or preserved, at Nymphenburg the living rooms have survived instead. When Max Emanuel escaped to Brussels in 1704, the first northern pavilion, which

Figure 1. Nymphenburg palace, Small Gallery, overdoor by Effner. (source: Bayerische Verwaltung der Staatlichen Schlösser, Gärten und Seen)

should have contained his apartment, was left as an unfinished building shell. On his return it seemed appropriate to apply the new *manier* of interior decoration he had become acquainted with, and learned to appreciate, in France. Effner began his plans in 1715 and construction was initiated by 1716 at the very latest. A few examples should suffice to demonstrate to what extent Effner drew from the formal language of his teacher in Nymphenburg as well. First of all the complete wainscoting of the walls in white and gold stands out fundamentally, while the ceilings remain unornamented and in white. The characteristic solution for the arches with the flanking lesenes, as in the Paris Arsenal, likewise resonates in Nymphenburg. The over-doors of the Small Gallery (Fig. 1) make reference to Paris (Fig. 2) and to Lorraine as well. It is no surprise then that the panels in the Northern Gallery of the Nymphenburg palace parallel Boffrand's designs for the first bishop's apartment at the Würzburg Residence. First drawn in 1723 for Johann Philipp Franz von Schönborn, the composition is modified in the details, nevertheless they unmistakeably refer to Boffrand, who must have created something similar in Paris before 1715 and was the common source of this invention. The principles of Boffrand's decorative art echo in Nymphenburg clearly too, extending from the decorative system in its overall principles, to the abstract appearance of individual elements, and finally to ornamental details. The close formal and artistic similarity between the room shells is reinforced by the fact that the client appreciated Boffrand's

Figure 2. Hôtel du Petit-Luxembourg in Paris, bedroom, overdoor by Boffrand. (source: Martin Pozsgai)

style strongly. The rooms' decoration provides the conclusive stylistic insight that Effner was influenced by Boffrand's formal language to an extent which would only have been possible in years of work in the studio of the Parisian architect.

Endnotes

1. This article does not include notes, since extensive documentation is found in my doctoral thesis completed at the Free University Berlin. I refer, therefore, to its publication, in press and planned for June 2012: Martin Pozsgai, *Germain Boffrand und Joseph Effner. Studien zur Architektenausbildung um 1700 am Beispiel der Innendekoration* (Germain Boffrand and Joseph Effner, Studies on Architectural Training Around 1700 Using the Example of Interior Decoration), Berlin, Gebr. Mann Verlag.

Architecture and Territoriality in Medieval Europe

SESSION CHAIR:

Max Grossman (University of Texas at El Paso, U.S.)

Scholars of medieval European architecture have traditionally focused on the monuments of major metropolitan centres, especially cathedrals, palatial complexes and fortifications. This tendency has dominated the field since its origins and, unfortunately, has fostered a myopic and sometimes anachronistic view of medieval building practices. In particular, it has distorted our understanding of the architectural patronage of political regimes, which not only commissioned impressive structures in cities, but also erected numerous rural edifices throughout the territories under their control, including bridges, gates, fountains, hospitals and mills.

Although much of this vast production was strictly utilitarian in nature, many buildings in the countryside or in small population centres were designed and executed with strategic objectives in mind. Tuscan communes, for example, typically commissioned architecture within their subject territories that adhered to an official typology and/or iconography, which often determined the choice of materials and the design of arches, windows, cornices and battlements; thus, they unified their territories visually, delimited their borders with neighbouring states, and projected the political unity and social cohesion of their citizen residents.

In fact, policies throughout medieval Europe used architecture to demarcate territory and consolidate authority. Robert Branner famously argued that King Louis IX of France promoted the spread of Gothic architecture to the south and west of Paris in order to proclaim his rule over his newly expanded kingdom. Caroline Bruzelius asserted that the Angevins adopted a similar architectural strategy in Southern Italy. In the twelfth century, the many regional styles of Romanesque architecture (Norman, Burgundian, Aquitanian, Rhenish, Lombard, Roman, etc.) corresponded geographically to areas of political control or influence. Even castles, the most practical of edifices, were often designed according to certain criteria or adorned with esoteric iconographic motifs that advertised the authority of a particular government.

This session invites participants to investigate the architecture of territoriality in Europe during the Middle Ages. Papers addressing questions of patronage (seignorial, communal, ecclesiastical or private), historiography, iconography or ideology are especially welcome.

CROSSING BORDERS AROUND 800:
CHARLEMAGNE'S PALATINE CHAPEL AT AACHEN

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As one of the most famous examples of medieval architecture, the Palatine Chapel at Aachen remains fixed in the minds of most art historians with at least some interest in the architecture of the Middle Ages. Still, in the kind of art history where periods and period-styles were the most obvious categories to apply as classification tools, this fascinating building from around 800 never found its proper place. Several factors should be taken into account when we consider this problem. One is that of all of the palace complexes which were constructed and decorated by Charlemagne, or rather at his instruction, Aachen is the one which is best preserved, or of which, at least, important structures can still be partly recognized. Also, of those other palaces we have hardly any reliable information about the chapels which were incorporated within them. This has perhaps resulted in a somewhat lopsided general view of such structures, since the knowledge and the remains as well as the archeological evidence of Carolingian palace complexes in Frankfurt, Ingelheim, Paderborn, Nijmegen – for instance – is very scant and of very poor quality compared to the Palatine Chapel in Aachen.

Another element which has prevented a proper evaluation of the importance of Aachen, compared with several of the other places just mentioned, is the historical position of Charlemagne himself and the position with which history rewarded him, long after the demise of his kingdom and empire. It seems that his famous biographer Einhard, in his *Vita Karoli*, has been one of the first to paint an image of his late patron, in which the eventual results of his military and diplomatic actions, and the gradual rise of his stature, culminated in his coronation as emperor on Christmas of the year 800 in the basilica of St. Peter's in Rome. For Einhard, Charlemagne's success was a natural and almost inevitable outcome of his excellent policies. It is this historical view that seems to have favored the tendency to place most of the art and architecture of the era of Charlemagne within the interpretation model of the so-called 'Carolingian Renaissance'.

Modern historiography of the period and new research have gradually brought about important shifts in our understanding of the Carolingian era and have posed new research questions, which now seems to paint a rather different view of the life of Charlemagne than the one which has dominated the art historical literature for so long. Studies such as *Charlemagne. The Formation of a European Identity* by Rosamond McKitterick and publications by Janet Nelson, Rudolf Schieffer and others are available and they should be compared with the models and interpretations employed in the history of art and architecture.

Instead of resulting from one specific concept of imperial policy, the Palatine Chapel at Aachen reflects the manifold traditions that Charlemagne tried to unite as he brought together his vast empire. His architectural patronage was not aimed at one specific territory but at various regions and territories. While step by step assembling a kingdom that would eventually be blessed by the imperial title, Charlemagne gradually mastered the strategies through which he would pursue his political goals, the methods for presenting himself, as well as the ways in which architecture could be applied as a means to those ends. Building a new identity, both dynastically and by imposing royal authority over local and regional nobility and leaders, was an immensely difficult task, and it demanded new approaches. Architecture was of crucial importance to Charles, but one should not assume that a blueprint was available to guide him and his court in their building program.

One of the most uncertain elements of the Aachen Palatine Chapel is the date of its planning and construction, which of course took a number of years. Scholars are in disagreement over the building chronology, with some dating the beginning of the construction around 768, when Charles became the sole leader of the kingdom after his brother died, and others supporting a date for the termination of the construction around 813. Charles himself died in 814, of course. Recently debate again heated up after a dendrochronological date of a foundation stake was set at 798 plus or minus 5 years, implying that construction could not have begun prior to 793. Another dendrochronological date places the end of construction in 803 (plus or minus 10 years). These analyses result in a construction phase between 793 and 813. Yet, to paraphrase a German critic of this view: one can hardly imagine that the palatine chapel was not yet finished during Charles' yearly stay at Aachen around Christmas and Easter. I relate this opinion here since it depends upon an interesting but implicit assumption: Charles must have had a prestigious and functioning palace complex at Aachen which he could use for receiving foreign envoys, before the end of the 8th century, and the fact that he remained in Aachen longer and more frequently than in his other palaces apparently points to the fact that his

whole palace complex must have been finished by that time. Some data should be taken into account here. Charlemagne stayed in Aachen during Christmas in the years 768, 788, 795, 796, 798, 799, 802, 804, and from 806 every year until his death.

Without discussing here all the relevant arguments there is a much more general element which scholars hardly ever seem to take into consideration. During much of the Middle Ages and well beyond, monarchs, dukes, counts, abbots and communities of monks as well as bishops, must have simply accepted the fact that renovating an older palace or residence, or a monastic church or cathedral, would result in a construction period of several years (perhaps some ten or twenty years), and that construction of completely new buildings would have naturally caused some annoyance. These negatives were apparently accepted and, indeed, for us historians of such architecture it is important to be aware that all such planning and construction phases resulted in a worksite that may have hampered the use of the building. Yet we know that during those often long periods of construction, the buildings were already in use!

Apart from the dendro dates there are not many reliable contemporary sources which may help in this debate. In a letter of 798 Alcuin mentioned that the columns in the chapel were in place, which must mean that construction had started several years earlier.

It is important to be aware of the fact that not a single architectural model was followed in Aachen. Rather, architectural concepts from various earlier buildings were adapted or cited. The ground plan was based upon that of S. Vitale in Ravenna (first half of the 6th century). However, important differences can be discerned also: the interior space of S. Vitale is very different since the inner octagonal structure is surrounded by open niches with columns. In addition, its architecture was planned as an unbroken unity from floor to ceiling. In Aachen the ground floor supports the upper level on large, angled piers with heavy arches. The inner structure follows the octagonal concept of S. Vitale, but each pier doubles its corners on the outside, resulting in a sixteen-sided exterior wall.

In Aachen the ground floor is treated almost as a basement for the upper structure. This is not expressed on the exterior, but is clearly visible inside. The chapel features tall arches that rise high above the level of the gallery, which surrounds the inner octagon on the second floor. The openings of these arches are articulated by pairs of columns at two levels, four columns in each arch. Several other column shafts have been used in other arrangements; some of these shafts have been preserved. Thus, a total of 32 column shafts were used to decorate the interior octagon in Aachen and to impress the visitor with an architectural motif that was borrowed from buildings elsewhere. The crowning of the upper column pairs is striking, since the capitals do not seem to fit under the arches very well. Very likely, such column pairs supported large arches in the exterior walls of Roman bath complexes, but probably more to the point are the upper windows in several exterior walls of Hagia Sophia in Istanbul, like those in the original entrance wall. There two column pairs are also superimposed on top of one another, separated by a horizontal beam, whereas in the Palatine Chapel in Aachen small arches support the upper sill. The same concept was employed in Hagia Sophia at the entrance to the Baptistery.

The fact that the ground-plan of the Palatine Chapel at Aachen is based upon that of S. Vitale in Ravenna, is usually explained as a citation of the architecture of one of the most important church buildings of the Byzantine Empire, Hagia Sophia, of course. In this view S. Vitale should be understood as a readily available model of a Byzantine church, since according to several authors Hagia Sophia itself would have been nearly impossible to cite because of its great distance from Western Europe. The use of the motif of the window divided by columns, however, indicates that a direct architectural quotation of Hagia Sophia was indeed possible.

The column shafts themselves are equally interesting, since they are made of classical, that is antique, marbles and granite. Despite the fact that during the French occupation in 1794 the columns were removed and transported to Paris, enough of the shafts were returned to Aachen (and several written sources help us), that we can confidently state that several kinds of classical marble and granite were present in the Carolingian structure. Egyptian grey granite shafts, as well as red granite, the blue and white marble called *bigio antico*, are either mentioned or are present today. The 32 shafts in the octagon are 12 roman feet tall and 1.5 in diameter (or 3.57m versus 0.44 centimeter). In addition, two dark-green porphyry column shafts were placed elsewhere in the chapel, and they still exist. These must have had a height of 8 Roman feet and a diameter of 1 Roman foot; in the 20th century, they were slightly shortened.

Einhard, of course mentioned the columns in his *Vita Karoli*. According to him Charlemagne had this material transported from Rome and Ravenna, since he could not find such columns elsewhere. A letter sent by Pope Hadrian to Charlemagne seems to confirm this, but although the pope granted permission to take away mosaics and marble from the imperial palace in Ravenna, he did not indicate to which palace this material was to be transported – Aachen, Ingelheim or someplace else – so this source does not help us much with Aachen. That the column shafts in Aachen are classical, Roman columns, however, cannot be disputed, regardless of where they came from.

When we consider the three major elements I have discussed thus far – the concept of the ground-plan of S. Vitale in Ravenna, the way the pairs of columns are placed in the window-arches of Hagia Sophia in Constantinople, and the classical origin of the

column shafts – these items do not seem to have resulted from a single, clearly formulated program for a monumental edifice that was somehow intended to express the ideology and ambitions of Charlemagne. But they were not chosen at random either. The use of these columns in Aachen has been interpreted, for instance, as a means to rival the Lombard buildings that he had seen on his travels, since the Frankish culture did not offer sufficient means to equal such architecture. Instead of interpreting the three concepts as expressions of something else – the wish or need to refer to a specific tradition, for example – which somehow reduces these fascinating elements to illustrations of something else – we should accept them for what they are: the means to express things that otherwise could not be expressed, or at least not very well. No guides exist for how to express ambition or for how to use specific means to shape it, nor are there preset rules for how to formulate such ambition.

Various levels of understanding and meaning presented themselves to Charles and his court, all to be considered and to be treated in the proper way and with the respect, diplomacy, superiority or whatever way was needed in specific circumstances. This implied that persons of various social backgrounds, subjects newly received in the kingdom (and later in the Empire), high-ranking regional leaders but also foreign or ecclesiastical envoys and dignitaries, had to be approached and treated according to their status and importance. Politics were shaped along the way, since no clearly defined and delineated program existed to secure the vast part of Europe which gradually came to be controlled in some way, nor did models exist for how to treat opponents, popes and bishops, dukes and other high-ranking noblemen. The realm ruled by Charles during and after many years of war did not suddenly become one state, but instead should be understood as a conglomeration of semi-autonomous territories, which were governed by lower-ranking leaders. The transition from all those rather independent territories into a kind of kingdom under one ruler did not follow a model or a guide, since political precedents for territory-building were completely lacking.

The Carolingians modified or built *ex novo* a number of regional palace complexes, such as the ones in Nijmegen, Frankfurt, Ingelheim, Paderborn and Aachen. A fascinating feature of those palace complexes and their chapels is that they were never designed and decorated in the same way. These edifices were meant to serve various purposes, and the need to impress must have been a high priority. It would have been important to impress local and regional leaders, as well as envoys coming from far away, papal messengers and the pope himself. A fundamental aim of these building efforts must have been to demonstrate that the principal ruler – the king, that is – possessed the means to build on a monumental scale and to acquire prestigious and sometimes striking materials. Just as Roman emperors projected their power through their building activities in Rome and elsewhere, Charlemagne's program for building palaces throughout his realm was part of his strategy for demonstrating his power.

In Aachen the palace complex was laid out in such a way that the Palatine Chapel and the large audience hall were connected by a long corridor made of stone, allowing Charles to stride ritually from one building to the other. Ingelheim may have also offered enough space for public ceremony and representation, but this would hardly have been possible in Paderborn. Still, the formation of identities by means of the architecture of the palace complexes, including the chapels, was as essential as it was difficult. Crossing borders architecturally was a crucial element of Charles' politics. He had to win over local and regional leaders, show them the benefits for themselves and their peoples when they were incorporated within the larger realm, while retaining some kind of regional identity. Could this have played a role in the rather diverging architecture of the most important palace complexes?

Meanwhile, architecture provided the most impressive means for reaching across the familiar borders and convincing envoys and ambassadors from the Byzantine court, for instance, that Charles' power and his position as king (and from 800 onwards, as emperor) should be taken seriously. One wonders if the choice to build one of the most striking palace complexes in Aachen was inspired by the fact that Aachen could be considered home territory. No potentially hostile or envious regional aristocratic families had to be won over here, and this set the stage for ambitions and statements of power that reached across borders to powerful leaders elsewhere. Gradually, strategies for applying architecture were developed, hence the differences among building dates and the variety of architectural motifs. Just as military expansion eventually led to the creation of a frontier structure, the borders and limits of kingdom and empire were secured and sealed within the architecture of the Palatine Chapel at Aachen. The palace complexes were, above all, monumental, and they were not subject to defensive requirements. The need to express power and authority was certainly a decisive factor in the architecture of the Palatine Chapel in Aachen.

THE TERRITORY OF THE FRIARY[1]

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Go to Venice, Florence, or Naples. Looming over the urban landscape will be a Franciscan or Dominican church: Sta. Chiara in Naples, Sta. Croce in Florence (both Franciscan), or SS.mi Giovanni e Paolo in Venice (Dominican). These massive churches are only the most visible part of the diffused and capillary presence of friars in medieval cities, however: mendicant convents were points of departure (and training) for ministry *in* the city, not only through public preaching but also through visiting lay parishioners in their homes. Friars undertook an aggressive outreach to lay communities that stretched from hovel to palace, actively externalizing religious practice so that it was no longer confined to the traditional space of the church or to religious processions.[2]

The spiritual authority of mendicants was in large part derived from their adoption of apostolic poverty, which inspired claims to a closer, purer, relationship with God. Because of their poverty, the prayer of friars was considered a particularly effective aid for the soul in Purgatory, and prayer became an important medium of exchange in the economy of salvation that dominated many aspects of medieval life.[3]

Friars thus activated private and public space for religious purposes. In co-opting existing public space for preaching, or in creating new piazzas for this purpose, they reached out to the public in new ways, incorporating external pulpits into the facades of churches (reconstructed at Sant'Eustorgio in Milan) and setting out an architectural scenography that emphasized the themes of penitence and the afterlife. In many locations, friars used portable wooden pulpits that could be used either outside or within the church. By the 1230s friars were conducting 'full service' sacramental operations,[4] and these at times took place outdoors: in the public spaces of the piazza and market as well as the private space of homes. The creation of piazzas for preaching was often assisted by communes or laymen: in 1233, for example, the citizens of Parma created a plaza for Dominican preaching,[5] a phenomenon repeated in many cities, perhaps most notably at Sta. Maria Novella in Florence, where two piazzas were created, one in 1244 and one in 1287.[6]

Although the pastoral activity of visiting homes might initially appear to have little to do with mendicant spaces, the presence of friars at the bedsides of the ill and dying helped shape the content of wills, thus enabling the donation of funds and land for construction. Nicole Bériou has even suggested that friars may well have been instrumental in the revival of will-making in the thirteenth century.[7] But the practice and consequences of visiting laymen in homes alarmed the secular clergy, and became the inspiration for the ribald tales of Boccaccio, Chaucer, and other authors; literature provides the best evidence for this practice in action.[8]

In taking on the activities of outdoor preaching and visiting homes, friars effectively destabilized the secular and regular clergy. Their acquisition of the right to administer the sacraments and bury patrons in their cemeteries and churches within twenty years of their founding (i.e. by the mid-1220s) encroached on the prerogatives and income of parishes. The donations of grateful and devoted patrons, as well as requests for intercessory prayers (both of which were formalized and legalized through the vehicle of the will), deflected numerous types of resources away from the parish and cathedral.[9] Aggravating the situation were the additional rights that friars had acquired to hear confession (1221).[10]

Starting in the 1230s and 1240s, the hostility of the secular clergy to the rapidly growing popularity of the mendicant orders began to affect the physical structures of the mendicants: friars were increasingly obliged to become 'architecturally self-sufficient,' moving their ministry indoors,[11] therefore building structures that could serve the needs of their own expanding religious communities (housing, teaching and liturgy) as well growing numbers of lay followers (services, preaching, and burial). Friaries were also centres of teaching and training for preaching and the other activities related to their ministry, such as receiving confessions and offering penance.

Through their innovative spiritual and social engagement with the people and spaces of cities, friars thus created a new form of urban institution that was reflected in both interior and exterior spaces. But by the middle of the thirteenth century, this phenomenon was placing considerable and varied types of stress, not only on the secular clergy, but also on townspeople and city governments. Friars competed with residents and traditional urban institutions for physical space (lots and houses), and, as Charlotte Stanford has demonstrated for Strasbourg, they sometimes came to occupy too large a proportion of urban centres, depriving the city of taxable property and locations for housing and markets.[12] As noted, friars competed with local priests for the devotion of the public and for financial resources in the form of customary oblations, and their convents challenged the

hegemony of bishops as the centre of spiritual life in the medieval city. Because of the perceived (and compelling) power of mendicant prayer for the fate of the soul in Purgatory, friars in particular acquired vital roles in funerals and burials, and so much so that over the course of time their churches and cloisters became vast enclosed (*urban*) cemeteries.

Attacks on mendicants by the secular clergy erupted in the 1250s, but the evident hostility that had already emerged in previous decades was perhaps a factor in the friars' adoption of the more formalized institutional architecture of monasticism (cloisters, chapter houses, dormitories, refectories, cloisters, and enclosed choirs), by c. 1240. Monastic types of spaces were an architectural language that helped friars assert authority and permanence in the face of threats that threatened their extinction.

But institutional architecture needed to be reconciled with another commitment: that of institutional poverty. By the late thirteenth century, these two factors in combination created the primary identity of mendicant architecture: large (sometimes extremely large) buildings characterized by (sometimes ostentatious) austerity. The Preachers, as a clerical order, were (as usual) in the forefront, adopting the architectural typology of monasticism as early as the late 1220s.[13]

The large new mendicant complexes, however, were inserted into cities that were already crowded. The 'monasticization' of mendicant residences required funds, and there was also an urgent need for property, often obtained by donations, exchanges, and the purchase of houses. Both land and funds for construction frequently came from pious donors who asked for certain considerations in return: burial in church or cloister and in the habit of the order, a family chapel, space for votive paintings or altars, and intercessory prayer.

Thus, while mendicant convents were the point of departure for engagement with the public outside, their unique economic circumstances meant that the public in turn affirmed its presence *inside* the convent, often via private memorials. Lay interventions within mendicant convents became a central feature of mendicant space (although these monuments have largely been obliterated by nineteenth- and twentieth-century restoration). The friary was thus permeable communal space 'colonized' by laymen, and the construction of mendicant churches was available as a negotiable container for lay interventions.

PREACHING AND PULPITS[14]

'Nothing is more effective in bringing penitence than preaching,' stated Humbert of Romans, Minister General of the Dominicans.[15] By the middle of the thirteenth century, piazzas for preaching were added to mendicant convents, usually (but not always) in front of the church. This occurred especially in towns where communes had a vested interest in supporting friars, as in Florence. In creating their own exterior spaces for preaching, friars sited convents so that outdoor preaching could be part of a larger spatial and structural concept; they conceived preaching spaces as theatres. When possible, as at Sant'Eustorgio in Milan, the pulpit was inserted into a façade, sometimes in a corner to enhance acoustics. There is evidence of portable wooden pulpits, some of which had wheels and could be rolled like wheelbarrows. The notorious Fra Mino of Sta. Croce in Florence used a portable pulpit (*portatura pulpiti*), created at great expense, both in the piazza and inside the church.[16] As is well known, friars preached in the *volgare* in order to communicate effectively, a departure from the tradition of the Latin sermon that had remained inaccessible to the broad range of the public. The use of vivid everyday stories from saints' lives, codified in the *Legenda aurea,* brought preaching into a direct and accessible 'story' mode for laymen. Although there is little surviving evidence, one might ask whether friars may not also have used portable images, in the form of scrolls like the *exultet* rolls, or larger linen paintings that could be rolled out as illustrations for sermons.

Mendicant *piazze* were not neutral spaces: their positioning and 'spatial framing' was often intended to reinforce the messages of sermons. At Sta. Maria Novella the design of the west façade included a row of tomb niches that folded around the right flank of the church to become an integrated element of the cemetery (the Chiostro de' Morti). A preacher standing in his pulpit in front of the church would therefore have been framed by tombs, providing a vivid reminder of the fragility of life, the inevitability of death, and the need to prepare the soul through penitence and confession. Tomb niches were systematically integrated into the design of façades (and the flanks) of many churches, as at San Domenico in Prato. Dominicans seem to have been more systematic and formal in their integration of tomb memorials into the areas dedicated to preaching, but the construction of memorials as part of the construction of a church could also dominate interior space, as at Dominican friary of Roscommon, Ireland. Franciscans and Dominicans approached their preaching in public spaces differently, however, and with considerable consciousness of each other's practice. Humbert of Romans stated:

> Not every place is suitable for solemn preaching, for one must not preach in secret assemblies as do the heretics, but in public places like our Lord… Public places and crossroads where men carry on business and employ themselves in worldly affairs, and other places whose secular use makes them unfit for this ministry ought not to be used for preaching.[17]

In noting that not every place was suitable for preaching, Humbert was perhaps remarking discreetly on the practices of Franciscans, who preached in markets, along streets, at crossroads, and even, as was the case with Saint Anthony of Padua, from trees.

As in many other aspects of mendicant planning, San Domenico in Bologna perhaps established the pattern.[18] Here outdoor pulpit and piazza were integrated with burials. In October 1240, the Preachers purchased land in front of the church to create the piazza.[19] The pulpit is mentioned in the *Sepultuario* of 1291 as located on the north side of the façade, presiding over the open space in front that was filled with a systematized cemetery of parallel rows of burials.

The 1291 *Sepultuario* of the Dominicans in Bologna also mentions a *gratam feream* under the pulpit, perhaps used for the exposition of condemned heretics. Their display may also have functioned as another type of visual prop for the preacher, who could thus present a compelling reminder of the errors of heresy. The work of preachers in stimulating contrition was thereby enhanced by various types of 'visual aids' in a scenography of elements developed to illuminate concepts of sin, doctrinal error, penitence, death, and burial. Voice *and space* functioned symbiotically to enhance and emphasize the fundamental message of the preacher: piazza, pulpit, iron grate, and tombs formed part of an integrated whole.

The integration of pulpits into urban spaces was a major part of the activation of the public spheres of the city for religious purposes. Activating urban spaces went beyond pulpits and visiting homes, however. By the fourteenth century, the urban network of streets was also enlisted for the parading of heretics on the backs of donkeys, a feature of urban spectacles that involved the mendicant orders.[20]

REORDERING CIVIC SPACE

After the Peace of Constance of 1183, communes increasingly affirmed their sovereignty and identity by creating communal palaces with piazzas (Bologna, for example).[21] By c. 1230 the tendencies towards the centralization of medieval cities began to be undermined, however, by the foundation of friaries on the fringes of urban agglomerations. Friaries and the communities that developed around them often became centrifugal forces, at times shifting focus away from communal or ecclesiastical centres of power.

Communes often supported friars because they brought honor and glory to their cities. In Italian cities, often fraught with strife between the emerging communes and entrenched episcopal authority, the friars offered an alternative to the parish clergy and the hegemony of bishoprics. As a result of the thirteenth-century 'mendicant revolution,' there was a rapidly changing equilibrium of collaboration, exchange, and rivalry that played out differently between the traditional and the new, emerging religious institutions; each city absorbed (or not) the mendicants in its own way and for its own (often fluctuating) spiritual or political ends. The established secular clergy, especially cathedral and parochial priests, were profoundly involved in all these processes, sometimes as enthusiastic collaborators, sometimes as spectators, and more often, as the thirteenth century proceeded, as entrenched enemies of the intrusions of friars.

Communal *piazze* were for the public performance of civic life; they represented not only a physical claim to urban space but also a reactivation of the ancient practice of using the outdoor public realm for political and mercantile purposes. Friars did the same for religious life by taking it outside: they activated the urban *piazze* that set off the communal or episcopal palaces to engage open space as a field for spiritual action. Whereas early Christianity had internalized religion by moving ritual practices to strictly reserved interior spaces,[22] friars renewed social, externalized, ritual practices of the ancient world by restoring religious life to external space. For along with public preaching, friars also offered outdoor confession and absolution. One of the earliest examples is the piazza created on the east side of Sta. Maria Novella in 1244 (the Piazza Vecchia) to accommodate the dense crowds attracted by the preaching of Peter of Verona (Peter Martyr).[23] After 1287 the commune authorized a new, larger, piazza to the south, the Piazza Nuova, provided in perpetuity for the use of the Preachers.[24] At Cortona, the friars were tightly linked to the creation of the central piazza and commune in the 1240s and given permission to preach there and in the area in front of the Pieve of Sta. Maria.[25]

In the second half of the thirteenth century, the mendicant piazza also became the site for the public condemnation of heretics. In 1245 Florence the sentence condemning the Baroni and confiscating their possessions was read in the Piazza Vecchia of Sta. Maria Novella.[26] The Franciscan Inquisition did the same in Orvieto,[27] and in 1325 Florence, the sentence against the noble Altafronte was pronounced from the external pulpit of Sta. Croce.[28] The infamous Inquisitor Fra Mino in 1332 preached on the fate of seven accused heretics in the *paratura pulpitum et bancarum* outside Sta. Croce.[29] Yet the culmination of this preaching, the execution of the heretics, normally took place in the communal piazza instead. In this way, mendicant houses were insulated from the ultimate consequences of accusations for heresy. In Bologna, for example, the execution of two heretics in 1299 occurred in the central piazza, and although much of the public was enraged against the Preachers who had pronounced the sentences, the convent was physically disassociated and safely out of the immediate range of public anger.

Thus, for the friars' relations with the public, the already existing 'voids' of civic space were—at least in the early decades of the thirteenth century—as important as the 'solids' (internal spaces) of churches. Friars affirmed the place of the sacred in the open spaces of the city—in piazza, market, and street, in short, *in the world*—activating them as places in which religious

activities took place and salvation could be achieved. Public space acquired a valence that merged the practical and functional with spiritual life.

Concepts from the marketplace, including competition for customers, became part of the mentality and language of preaching, a process that has been termed 'market-place thinking' on the part of the friars. The intimate relationship between preaching and the marketplace is also suggested by the process of assimilating the spaces of social and commercial life with those of religion. Francis, after all, began his adult life as a merchant, and sermons used the metaphor of Christ as a merchant for souls. Federico Visconti, Archbishop of Pisa, spoke in these terms when preaching in San Francesco in Pisa.[30] It was sometimes suggested that God established a relationship of exchange with mankind that could be described as a system of credit.[31] The ease with which metaphors connected spiritual to financial transactions smoothed the passage of spiritual matters to those of property and construction. Archbishop Visconti, in a sermon on Saint Francis, described him as a 'merchant for souls.' Friars used this type of market-place language about themselves: Humbert of Romans suggested that Preachers should emulate merchants *pro lucro animorum,* and Guibert of Tournai stated that 'Christ comes like a merchant to do business… for in the manner of a merchant or one working for money he brought precious goods in worthless cloths, that is, a kingdom in poverty, consolation in grief, plenty in hunger…'.[32] In the fourteenth century Aldobrandino Cavalcanti, the distinguished Dominican theologian, continued to promote this idea, describing Christ as the good merchant. And of course the concept of Purgatory, so close to the concerns of the medieval lay public, is closely related to the concept of double-entry bookkeeping, the debits (sins) versus the credits (good deeds, prayers, etc.) in an accounting system that must have been based on that of numerate merchants in the marketplace.

The new religious orders were both the product of and helped to transform the emerging political, social, and economic structures of the thirteenth century. They transformed cities by actively inserting religious experience into the public spaces of markets and city squares, at the same time that they brought their mission into the domestic spaces of homes. The economic choices of the new orders meant that they depended primarily upon donations from patrons, communal governments, and confraternities for financial support; in return the friary, in a *quid pro quo* process of reciprocal services, packed their churches and cloisters with memorials of all kinds: family chapels, votive and altar paintings, tombs and coats of arms. The sacred space of the mendicant convent thus came to mirror the social and economic hierarchies of the city.

Endnotes

1. The observations in this essay are based on my forthcoming book, *Friars and the Medieval City: Preaching, Building and Burying.*

2. Starting in the 4th century, cities became theatres of Christian ritual involving the clergy in processions. Each parish also had external rituals within its area. See John Baldovin, *The Urban Character of Christian Worship: the Origins, Development, and Meaning of Stational Liturgy*, ser. *Orientalia Christiana analecta* 228 (Rome: Pont. Institutum Studiorum Orientalium, 1987), passim. In contrast to this type of hierarchical public cult, the preaching of friars focused on an appeal to the individual conscience and personal conversion.

3. For a recent analysis of the importance of intercessory prayer (albeit in a study largely confined to its practice within the Cistercian order), see Erin L. Jordan, "Gender Concerns: Monks, Nuns, and the Patronage of the Cistercian Order in Thirteenth-Century Flanders and Hainaut," *Speculum* 87 (2012), 62-94, esp. 80-83.

4. Though as Rusconi notes, there was considerable regional variation: "De la prédication à la confession: transmission et contrôle des modèles de comportement au XIII siècle," *Faire croire. Modalités de la diffusion et de la réception des messages religieux du XIIe au XVe siècle* (Rome: École française de Rome 51, 1981), 260-62.

5. William A. Hinnebusch, *The History of the Dominican Order. Volume I: Origins and Growth to 1500* (New York: Alba House, 1966), 260.

6. On the piazzas at Sta. Maria Novella, see for example Elizabeth B. Smith, "Saint Maria Novella and the Problem of Historicism/Modernism/Eclecticism in Italian Gothic Architecture," *Medioevo: il tempo degli antichi. Atti del convegno internazionale di studi, Parma, 24-28 settembre 2003* (Milan: Electa, 2006), 480, 487.

7. Nicole Bériou, "Introduction," *Économie et religion. L'expérience des ordres mendiants (XIIIe-XVe siècle)* (Lyon: Presses Universitaire de Lyon, 2009), 19.

8. Joan Evans is one of the few scholars to utilized descriptions of mendicant churches in sources such as "Piers the Ploughman's Crede" to the analysis of friars' churches: *English Art 1307-1461* (Oxford: Oxford University Press, 1949), 205ff.

9. There is a considerable literature on the controversy; see among other sources Rusconi, 279-89. The classic study is Michel-Marie Dufeil, *Guillaume de Saint-Amour et la Polémique universitaire Parisienne, 1250-1259,* (Paris: A. and J. Picard, 1972).

10. Marian Michèle Mulchahey, *"first the bow is bent in study—" Dominican education before 1350* (Toronto: Pontifical Institute of Mediaeval Studies, 1998), 53. On the role of friars as confessors, see *Dalla penitenza all'ascolto delle confessioni: il ruolo dei frati mendicanti (Atti del XXII Convegno internazionale, Assisi, 12-14 ottobre, 1995),* (Spoleto: Fondazione italiano di studi sull'alto medioevo, 1996), passim. See also R. Rusconi, "I Francescani e la confessione nel secolo XIII," *Francescanesimo e vita religiosa dei laici nel '200 (Atti dell'VIII convegno internazionale di studi francescani, Assisi, 1980)*, (Spoleto: Fondazione italiano di studi sull'alto medioevo, 1981), 251-309, esp. 261-67.

11. Jean-Pierre Rénard notes that these were built *ad capiendos homines in praedicationibus*: *La formation et la désignation des prédicateurs au début de l'Ordre des Precheurs* (Fribourg: Imprimerie St. Canisius, 1977), 71.

12. Charlotte Stanford, "Architectural Rivalry as Civic Mirror: The Dominican Church and the Cathedral in Fourteenth-Century Strasbourg," *Journal of the Society of Architectural Historians* 64 (2005), 186-203.

13. The Franciscan movement was much slower in this regard because it began as a lay movement and was only fully clericalized in the late 1230s.

14. Well before the arrival of the Friars there had been much debate over who had authority to preach. By the twelfth century, canons regular and Benedictine monks were often in conflict with secular clergy over this issue, especially in parishes under their jurisdiction with the right of *cura animarum*. See Rénard, 37-44. Although Saint Jerome had stated that the central task of monks was prayer and penitence, not preaching, by the central Middle Ages ordained monks nonetheless insisted upon the right to preach and played a central role in promoting and publicizing the aims of Gregorian reform through public sermons.

15. Humbert of Romans: *De eruditione praedicatorum*, in *Opera de vita regulari* (Rome: A. Befani, 1888-1889), 2:376: '*nihil autem tam valet ad hujusmodi poenitentiae consummationis accelerationem, sicut praedicatio.*'

16. Girolamo Biscaro, "Inquisitori ed eretici a Firenze (1319-1334)," *Studi Medievali* 6 (1933), 166-67.

17. Humbert of Romans, *Treatise on Preaching*, ed. Walter Conlon (Westminster Md: Newman Press, 1951), 56.

18. Dominicans had received papal authorization to bury laity starting in 1220: Hinnebusch, I, 63.

19. Venturino Alce, "Documenti sul convento di San Domenico in Bologna dal 1221 al 1251," *Archivum fratrum praedicotroum* 42 (1972), 39-41.

20. Biscaro, passim.

21. Maureen Miller, *The Bishop's Palace* (Ithaca: Cornell University Press, 2000), 180ff.

22. Eamonn Canniffe, *The Politics of the Piazza (Design and the Built Environment)* (Aldershot: London and Burlington, VT, 2008), 39.

23. Henry Charles Lea, *A History of the Inquisition in the Middle Ages* (New York: Russell & Russell, 1955), II, 211.

24. Enrico Guidoni, "Città e ordini mendicanti. Il ruolo dei conventi nella crescita e nella progettazione urbana del XIII e XIV secolo," *Quaderni medievali* 6 (1977), 75, n. 7.

25. Giuseppina Inga, "Gli insediamenti mendicanti a Cortona," *Storia della città* 9 (1978), 44.

26. Lea, 1955, II, 212.

27. Carol Lansing, *Power & Purity. Cathar Heresy in Medieval Italy* (Oxford: Oxford University Press, 1998), 137-38.

28. Roberto Davidsohn, *Firenze ai tempi di Dante* (Florence: R. Bemporad & Figlio, 1929), 168-69.

29. Biscaro, 166.

30. Bériou, 165-67.

31. Bériou, 164, n. 23.

32. David D'Avray, *The Preaching of the Friars. Sermons Diffused from Paris before 1300* (Oxford: Clarendon Press, 1985), 208-09.

ROMANESQUE ARCHITECTURE IN NORTHWEST ITALY: DECONSTRUCTING THE "LOCAL SCHOOLS"

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Ever since its invention, Romanesque architecture was never restricted to distinct 'cultural islands' or centres of seignorial patronage, as it had been, by and large, during the Carolingian Renaissance; rather, it was a truly widespread trend involving all social classes.[1] It emerged during a synchronic period, chiefly in regions which had been under the sway of the Carolingians, though sometimes only marginally, such as in Catalonia, Lombardy and Saxony. At its genesis, Romanesque architecture was a phenomenon that tended towards particularism and polycentricity, as it was influenced by the growth and often rapid development of the places where it had taken root. For this reason, the dialectic between its distinctive features and its numerous variants became quite chaotic. In fact, it was only towards the middle-twelfth century that standardised Romanesque forms began to emerge. Identifying the distinctive features of the so-called 'Romanesque schools' is a particularly difficult task, which scholars have struggled to accomplish for many years. Thanks to an increased number of archaeological excavations, they have recently broadened their investigations of various regions and focused increasingly on the period after the eleventh century[2]. While in recent years we have been able to improve our knowledge of virtually all aspects of Romanesque architecture, the crucial theme of the regional schools remains, even today, one of the most fundamental. Since we know very little about the builders and masons who were active during the Romanesque period, classification based on local schools is still quite useful for tracing a 'history of architecture without architects.' However, it can be very difficult to verify the existence of an individual local school or to identify common features among buildings within a specific geographical area.[3]

RECENT DEVELOPMENTS: A NEW HISTORIOGRAPHICAL APPROACH?

Voices have been raised emphasising the need to develop new research approaches that use more modern methods to interpret and synthesize data. One thinks, for example, of the meticulous, methodological approach that Elaine Vergnolle has recently applied to the whole of France.[4] It is clear that research on Romanesque architecture can only evolve if we are able to link local building features (restricted to certain areas) to the broad interregional spread of ideas and models, builders, construction techniques, and certain types of patronage. From a historiographical point of view, these phenomena are especially problematic. Several recent studies have examined the development of certain specific areas that underwent an autonomous process of architectural development.[5]

Identifying regional 'Romanesque schools' inevitably poses the problem of ascertaining and assessing to what extent they were subject to outside influences. The complex web of external forces and native cultural matrices greatly complicates our interpretation of local schools. Obviously, studies should not be based upon existing regional boundaries, but must refer to territories which for institutional and geographical reasons became well-defined independent areas between the tenth and twelfth centuries. Although Italian monographic studies are once again focusing on Romanesque religious architecture, the overall bibliographic scenario is still fixated on *modern* regions which, as we all know, were non-existent in the Middle Ages.[6] Even now, this anachronistic regional approach is adopted not only for editorial reasons, but also for financial motives, since its use increases the possibility of receiving research funding from local governments. In fact, administrative and territorial factors often play a greater role in the assignment of geographical content than actual history.[7]

THE COMPLEXITIES OF ROMANESQUE ARCHITECTURE AND THE TERRITORIAL CONTEXT

Recent studies of Italian Romanesque architecture have made it possible to identify the factors that render it difficult to identify local schools. In the north, the only regions without a detailed, comprehensive classification of Romanesque architecture are Piedmont and Emilia-Romagna, where, however, numerous studies have updated our understanding of specific territories.[8] One such study, by Fulvio Cervini, exposes the bias faced by the Liguria region, which has been unable to enter many of its most significant medieval monuments into the cannon of Romanesque art (Arthur Kingsley Porter cites only a single Ligurian building).[9] Historians blame this exclusion on the lack of a unique architectural style and to the fact that, unlike Lombardy and Tuscany, there are no iconic signature buildings in Liguria. Yet, a review of this argument reveals that in the past, most of Liguria's medieval heritage was, in fact, demolished. Despite the widespread destruction, the academic community in Liguria

has always striven to understand the region's cultural history in order to assign it the importance it deserves—starting with Pietro Toesca, who in 1927 identified the unique characteristics of 'several large constructions [that are] not lacking in originality.'[10] Thus, even Liguria has had problems defining the geography of its Romanesque architecture. It has often been assumed that Genoa was the capital of the historical territory (and no one doubts the hegemony of the great Tyrrhenian port city in the twelfth century), but in the duecento 'the growing political influence of the dominant centre led to the formation of a territorial state and to the export of [the city's] cultural models' to the rest of the region.

Unlike Liguria, the regions of Lombardy, Tuscany and the Veneto have always been the protagonists of studies on medieval architecture, especially Romanesque architecture.[11] From the nineteenth century onwards, the extensive exploration of Romanesque architecture in Lombardy led to the development of a vast bibliography. The trend continues even today, despite the fact that the complex and multifaceted features of the Lombard style have made it difficult to define its geographical and cultural parameters with any precision. The genesis of the architectural term 'Lombard' has a tortured terminological history. For example, in English and French the adjective 'Lombard' is used to translate both *lombardo* and *longobardo*.[12] In the early-twentieth century, Porter's three-volume work entitled *Lombard Architecture* immensely improved our knowledge and understanding of Romanesque architecture in northern Italy. In some respects his work, although published during World War I, has remained unsurpassed. In the last two hundred years, a legion of scholars has created and promoted the myth that 'Lombard Romanesque architecture' was a visual system with extremely homogeneous features that was systematically exported by technicians and craftsmen all over Europe. Recent studies on Lombard Romanesque architecture still centre around dioceses and cities and often focus on very specific topics such as the acquisition of materials, which creates a clear-cut separation between the north and south of the region.[13]

Research on the Romanesque architecture of Piedmont stems from the historiographical tradition established by Paolo Verzone, who in the 1930s used Porter's work as a basis for a more detailed study of several cities, including Piedmont, Novara, Vercelli and Milan, as well as more thorough studies of certain territories.[14] The book *Piemonte romanico* focuses on Romanesque architecture, painting and sculpture in Piedmont, certain geographical areas, corresponding to contemporary administrative districts, have been the subject of monographs—on the province of Asti, for example.[15] Numerous studies have investigated the region of Monferrato and the major construction site of the rectory in Vezzolano. The word 'school' was revived for this region by Carlo Tosco, who studied its buildings and decorations and reviewed the recent historiography, while Michele Vescovi explored the area's territorial and cultural importance through its different dioceses and political regimes.[16]

TOWARDS A ROMANESQUE LANDSCAPE: PATRONS AND ARCHITECTURE

Although many scholars hope for the revival of an interregional and European network focusing on the connections among different art forms as they relate to the organisation of building sites, we will need to change gears and operate on a smaller scale if we are to reconstruct the rather complex dynamics of patronage. Although several major clients, for example Guglielmo da Volpiano, commissioned works all over Europe, in many cases only more narrowly circumscribed studies can reveal the choices and intentions of patrons and their influence over specific regions. In Piedmont, we are familiar with the role played by Landolfo, Bishop of Turin from 1010 to 1038, who commissioned several architectural renovations, expansions, as well as new buildings all over the region. One thinks of the churches in Testona, Collegno, Cavour, Chieri and Pagno, which have several features in common, such as a basilican plan with a nave terminating in a single hemicycle, two aisles, and a crypt to the east. The works commissioned by such patrons as Bishop Anselmo in Aosta, Landolfo II in Brescia, and Primo in Acqui are very similar.[17]

Studies of the diocese of Ivrea highlight the particular role of Bishop Warmondo, who initiated a very ambitious architectural and artistic project inside the cathedral that was abruptly interrupted and no longer survives, although traces still remain on the apse walls. His desire to merge various mediums within the fabric of the cathedral was consistent with his larger architectural strategy for his diocese. Thus, the Canavese district is one of those areas with common features, 'which reveal the desire of builders to serve local regimes.'[18] Obviously, certain ideas and motifs were exchanged with other territories, but the uniformity of style within the Canavese district is undeniable—a strong and distinctive trait that contributed to the seigniorial 'brand' of Ivrea.

Towards the end of the tenth century, a standard church type became common in the diocese: a single nave chapel with a semicircular apse adorned above with small 'coupled' arches resting on corbels. Although this was a widespread solution in Lombardy and throughout Europe, it still lacked any endemic features. These appeared during the first half of the eleventh century, when many religious buildings were endowed with independent campanili that stood alongside their facades. In the Canavese district, the churches with such campanili had two things in common: they were old buildings and they were all located within a small area. The basic church-campanile model, which had elements reminiscent of certain French churches,[19] may have been adapted from the large building site of the cathedral in Ivrea and, more indirectly, from the abbey church of Fruttuaria, which was influenced by the Burgundian trends that emerged during the Cluniac reforms.

While the eleventh century was a period of great expansion and construction in the Ivrea region, its decline in the 1100s paved the way for the creation of new territorial boundaries, such as Monferrato – the 'rising star' of the Romanesque firmament in the twelfth century. However, it was not only bishops who commissioned religious Romanesque buildings. In some cases, as in the Susa Valley, seigniorial patrons intervened directly, so that the role of the bishops was subsumed by local lords (*arduinici*), who chose their own architectural types for religious parish buildings and large monastic establishments (such as Sacra di San Michele and San Giusto di Susa). Two trends characterised Romanesque architecture in this region: a plebeian network of centuries-old churches with similar building elements; and monastic architecture sponsored by prominent, high-status patrons in which most of the important stylistic and constructive changes were adopted.[20] The architectural types built in the diocese of Turin were not really affected by this diverse clientele; the first Romanesque architecture in the Susa Valley had the same features as the churches commissioned by Bishop Landolfo (masonry patterns and a crypt) and, more generally, the models of Lombard architecture—proof that masons travelled extensively and were the true protagonists of this architectural renewal.

This marginal diversity depended upon contingent phenomena related to environmental factors. In the alpine region, stone was the most common construction material, while bricks were used mostly for decoration. Meanwhile, on the Torinese plain, spoliated bricks from earlier monuments were often recycled for new structures. The many Romanesque buildings still standing (from the middle-twelfth century) include a group of churches with similar features: large halls or tripartite naves divided by quadrangular piers, irregular masonry walls reinforced by large quantities of mortar and decorated with simple designs consisting of blind arches (confined to the cornices). In the Susa Valley the ambitious project for the renovation of the Sacra di San Michele abbey church, founded between 983 and 987, began in the early-twelfth century and marked the advent of a brand new type of labour organisation. The worksite had a complex managerial hierarchy that extended from the supply of materials to the assembly and transportation of ashlar to the worksite, which was difficult to access because of its topography.

The construction expertise behind the undertaking was not local. Since the architectural model derived from the cathedral of Piacenza and a highly skilled *maestro* named Nicolò was involved in the construction, it seems likely that stonemasons were brought in from various Romanesque building sites in Emilia-Romagna. Yet, the trilobed profile of the apse (due also to the static conditions of support for the artificial base) appears to be reminiscent of the regions of Catalonia and Aquitaine, where the Sacra abbey had vast estates. The stone base of the church, which was intentionally built so that the edifice would have a longitudinal layout, was also functional, insofar as it emphasised the path used by the faithful to reach the sanctuary of the archangel Michael. The international worksite exploited the many quarries in the region, and it was precise design criteria that determined the choice of the colour and texture of the stone that was extracted.

An excellent example of the interrelationship among architecture, territory and local government is provided by the diocese of Albenga in Liguria. Here a group of buildings all had common features which were, however, unlike those of the cathedral. Several of them exhibit nothing of the Antelami-style building techniques used by the master masons of the cathedral, and the buildings appear to have been impervious to the choices made in the Genoa area. This architecture included not only religious buildings on the plain of Albenga, but also residential settlements, road networks and bridges—for example, the 'Pontelungo bridge'.

The remarkable boom in construction in the Albenga region reflected the dynamism of the city's medieval commune, especially after 1250, when secular authorities made nearly all the decisions about architecture, especially during the planning of important works in the region, such as the *villenove* (new towns) of the territorial state: Villanova (1250), Cisano (1274), Pogli and Borghetto (1288). Before the eleventh and twelfth centuries, it was the old ecclesiastical, secular, and monastic authorities, with their varied and multifaceted choices, who influenced the architectural landscape: from the small church of Santa Croce, subordinate to the abbey of Gallinaria, to the church of San Fedele, with its campanile.[21] The surviving architectonic remains must be analysed synchronically with the residential and defensive structures throughout the territory if we are to identify similarities among materials and building techniques, and the involvement of various masons. One thing is certain. These structures are radically different from San Michele with its Antelami-like language, reflected in its plan, elevation and sculptural programme; yet they do exhibit specific solutions which during the same period began to spread throughout the regions of Liguria and Provence, in the wake of Genovese expansion.

In his discussion of Romanesque architecture in Lombardy, Paolo Piva argues that it is difficult to establish what was local versus what was inspired by a regional or international Romanesque model. He states that the 'fundamental coherence of its technical and formal vocabulary' was local in nature while 'the heterogeneity of its design and structural solutions' was derived from more remote sources.[22] The availability or non-availability of certain materials determined specific technical solutions. Although dividing the region into north and south is rather simplistic—stones in the north and bricks in the south—we should keep in mind the numerous influences and variables that derive from different construction techniques.

The particular conditions of each region, the financial capabilities and limitations of patrons, and the simultaneous use of materials

from disparate sources should alert us against oversimplification and generalisations with regard to Romanesque worksites. Although the amazing technical expertise of craftsmen, say, in the Como diocese resulted in highly impressive and masterfully executed stone architecture, recent studies have brought to light the impressive expertise of stonemasons working on churches in the area of Bergamo.[23] A detailed analysis of the cathedral walls reveals two distinct construction phases: the squared sandstone blocks of the first phase (1137); and the much rougher, less homogeneous limestone ashlar of the second phase (executed in the middle-twelfth century).

Similar materials were used in another building commissioned by the bishopric: the church of San Giorgio di Almenno (middle-twelfth century). A thorough survey of the religious edifices in this area (Canzanica, Bonate Sotto, Grignano) points to a revival of stone carving techniques and a notable independence from the architectural traditions of Bergamo, which dominated the choices of the various patrons of this region. In fact, the area is populated by many different types of religious buildings—Benedictine monasteries, Cluniac priories, parish churches and vicarages—demonstrating, in this case, how analogous architectural choices can override the ostensible differences among such diverse patrons.

RESEARCH POSSIBILITIES AND SUGGESTIONS FOR DEBATE

A study method based on the tripartition of the medieval social structure would appear to be the best choice for Romanesque architecture because it reflects a collective representation, the image the community had of itself—an image that developed in the Middle Ages and continued well into the modern age. According to this image, Christian society was traditionally divided into three groups: those who prayed, those who worked, and those who fought (*oratores, laboratores* and *pugnatores*). Any broad interpretation of the dynamics of Romanesque architecture should be based upon research and analyses that consider these three different facets (religion, work and defence) if we are to reconstruct the interwoven organisation of the territory.

We must keep in mind, however, that in medieval construction, materials played a key role in architectural design. The extensive use of a specific building technique in a given area depended upon the availability of the materials employed by specialised local master masons. In some cases, innovative elements were introduced—for example, the use of stone elements in construction sites where bricks were widely used. The Romanesque dichromatic decorations that characterised certain regions, especially in the Mediterranean, were re-employed with great technical precision in certain areas.

As a result, the best and most comprehensive approach to research on Romanesque architecture involves comparing studies of the historical landscape of a certain area with studies of the material and technical elements of that area's architecture. The surviving archaeological evidence would reveal very interesting novelties with regard to the clients' choices, the use of materials, and specific building techniques. It would also confirm the presence of craftsmen specialised in working with materials, executing sculpture, and constructing masonry walls. This investigative method would enhance and substantially improve our knowledge of the Romanesque landscape and address the complexities that have emerged from specific individual studies.

Endnotes

1. Carlo Tosco, "Romanico," in *Enciclopedia dell'arte medievale* (Rome: Istituto Treccani dell'Enciclopedia Italiana, 1999) 171-81; idem, "Arthur Kinsley Porter e la storia dell'architettura lombarda," *Arte Lombarda* 112, no. 4 (1995) 74-84; Anna Prache (ed.) *Initiation à l'art roman, architectue et sculpture* (Paris: Zodiaque, 2002).

2. Auguste Choisy, *Histoire de l'architecture* (Paris: Baranger, 1899); Arthur Kingsley Porter, *Lombard Architecture* (New Haven-Oxford: Yale University Press, 1915-1917); Paolo Verzone, *L'architettura religiosa dell'Alto Medioevo nell'Italia settentrionale* (Milan: Officine grafiche "Esperia," 1942); Hans Erich Kubach, *Architettura romanica* (Milan: Electa, 1972).

3. Carlo Tosco, "Il Monferrato come scuola architettonica: interpretazioni critiche di un tema storiografico," in *Monferrato arte e storia* 9 (1997) 45-77.

4. Elaine Vergnolle, *L'art roman en France. Architecture-Sculpture-Peinture* (Paris: Flammarion, 1994).

5. Nigel Hiscock (ed), *The White Mantle of Churches. Architecture, Liturgy and Art around the Millenium* (Turnhout: Brepolis, 2003).

6. *Italia romanica,* ser. (Milan: JacaBook,1978-1989) illustrated what had been produced in France in the series published by Zodiaque, the tradition described by René Crozet and Viollet-Le-Duc before him. René Crozet, *L'art roman* (Paris: Presses Universitaires de France, 1962); Rosa Tamborrino, "Viollet-le-Duc, le «Annales archéologiques» e i romantici scientifici," in Enrico Castelnuovo and Giuseppe Sergi (eds.), *Arti e storia nel Medioevo. Il Medioevo al passato e al presente* (Turin: Giulio Einaudi editore, 2004) 439-64; idem (ed.), *Eugène Viollet-le-Duc. Gli architetti e la storia. Scritti sull'architettura* (Turin: Bollati Boringhieri, 1996).

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BUILDING THE TERRITORY:
THE ARCHITECTURAL STRATEGY OF A LATE MEDIEVAL CASTILIAN FAMILY[1]

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Territoriality has been defined as a primary geographical expression of social power,[2] which is a suitable interpretation in discourse regarding the Late Middle Ages, when possession of the land was not only the source of an economic and social position, but also associated with juridical status. Exertion of control over an area required the development of various strategies to manage people, resources, and communication systems in that area. The aim of this paper is to analyse the architectural policy of one of the most important families in Late Medieval Castile, the Velasco, as part of their larger territorial strategy.

Palaces, fortresses and towers are symbols, or the visual crystallisations of power in space, and these monuments were designed to suggest certain ideas and to create in the viewer particular effects.[3] Buildings can be used both to mark symbolically and to articulate space, so they must be studied as pieces of a bigger puzzle, in which everything is linked with its surroundings.

The Velasco family was aware of the power of architecture and they used it to control territory, to make the family present within its domains, and to display in each case the most appropriate image of the lineage: an image of military control, of political power, or of religious prestige.

THE POLITICAL AND TERRITORIAL RISE OF THE VELASCO FAMILY

The Velasco was one of the most important families of the Castilian nobility during the Late Middle Ages. They are considered to be an example of the so-called 'new Trastamar nobility'[4] that rose to power following the victory of Henry II in 1369 in the civil war against his half brother, Peter I, the legitimate king. Certainly they were supporters of Henry II of Castile and they received many privileges from the kings, such as land, positions and titles. Nevertheless, the Velasco family's political and social rise, and their territorial expansion, started almost a hundred years earlier, at the end of the thirteenth and beginning of the fourteenth century.[5]

There is not time to outline here how the Velasco family became a leading force in Castile during the fourteenth and fifteenth centuries. However, it should be mentioned that although Sancho Sánchez de Velasco (†1315) was the first member of the family who rose to a certain political importance, it was his grandson, Pedro (I) Fernández de Velasco (†1384), who initiated the real ascendancy of the Velasco family, as a supporter of Henry II during the civil war. Subsequently it was Pedro's descendant Pedro (III) Fernández de Velasco (†1492) who led the family to the highest point of its political and social influence. He was married to Mencía de Mendoza, the daughter of the Marquis of Santillana, and he thus formed ties to the Mendozas, one of the most powerful lineages in late medieval Castile. He was also named Constable of Castile in 1473, a title which meant that he was the leader of the armies and the most important person in the court after the king.

The Velasco family started to form its dominion from its original nucleus in the mountains of Burgos, in the *merindad* of Castilla-Vieja.[6] This administrative district had gained some independence from the rest of the *Adelantamiento*, and the Velascos, named governors by the king, exerted juridical power and completely controlled the area, especially some of the valleys,[7] which were important points of communication between the plateau of Castile and the Cantabrian coast.

From this territorial centre, the Velascos expanded their dominion by buying land, receiving royal donations and gaining control of towns and villages through marriages.[8] This expansion was consistently managed from the beginning, and they were able to establish an extensive and contiguous dominion, thanks to a well-defined and unchanging territorial policy, despite the fact that it was implemented by different leaders of the family over the course of two centuries.

Pedro (I) Fernández de Velasco strengthened the position of the family in the area of Castilla-Vieja and the mountains of Burgos through various royal donations. He received Briviesca (1366) – which connected the Velasco's territory to the cereal producing region of La Bureba – and Medina de Pomar (1369), the main town in Castilla-Vieja and the most important junction in the system of routes linking Castille and the Cantabrian and Vizcaian ports. In 1379 he also received Herrera de Pisuerga, which had a privileged position between Tierra de Campos, where the Velascos had some possessions, and the Cantabrian coast.

His son Juan Fernández de Velasco did not receive important lands from the king, but he played a fundamental role in the expansion of the dominion by actively purchasing territories, as well as towers and fortresses.[9] He followed the guidelines

established by his father, focusing on the areas of Castilla Vieja and La Bureba, and linking the ancient properties in the mountains with the new expansion zones and the lands around Frías and Belorado; these were coveted towns whose acquisition completed his control over the commercial roads.

Following a century of continuous augmentation of the family's dominion, Pedro (II) and Pedro (III) Fernández de Velasco began to focus on uniting and consolidating the estate. They acquired the towns of Haro, Belorado, Cerezo, and Frías from the king, and as a consequence, they achieved complete control over the whole north-south axis of the oriental slope of Burgos and over the communication links between the centre of the Peninsula and the Cantabrian Coast, as well as between Burgos, La Rioja and Navarra.

CREATING A CENTRE: PALACES AND CHAPELS (C. 1370 AND C. 1470)

During the political and economic rise of the Velasco family, there were two turning points that occurred when the family reached a new status that was reflected in its architectural patronage[10]: at the end of the fourteenth century, with Pedro (I) Fernández de Velasco, and at the end of the fifteenth century, with Pedro (III) Fernández de Velasco.

Pedro (I) brought about a great increase in the family's stature, thanks to his support for Henry II, who rewarded them with the towns of Briviesca and Medina de Pomar, where the family then built two fortified palaces[11] that were the seats of their power and control over the territories. Medina de Pomar was converted into the heart, both geographical and symbolic, of the Velasco realm, and the buildings there were the emblematic monuments of the family until the last decades of the fifteenth century.

The palace of Medina de Pomar was built between 1369 and 1380[12] and was designed as a castle with a long central building joining two towers, conforming to the idea of the tower-house or *donjon*.[13] These models were completely suitable to the image of military power that the Velascos wanted to project when their policy was focused on extending and consolidating their domain. However, inside the building there were Islamicate features associated with luxury and richness, such as carved wooden ceilings and stuccoes, and structures that conveyed political power, such as the *qubba*.[14] These features played an important role in creating an image designed to confirm the legitimacy of the Velasco and in showing off their new social status.

The image that was projected by the palace of the Velascos in Medina the Pomar was complemented by the Monastery of Saint Clare, founded by Sancho Sanchez de Velasco in 1313, when the town was still a royal property. Pedro (II) Fernández de Velasco established the family mausoleum there, thus linking the lineage to the Franciscan order and to Medina de Pomar. This was completely restructured in the seventeenth century but its original characteristics can be deduced from later funerary chapels of Pedro's descendants.[15] It consisted of a centralised plan with a small transept, and it was covered by a star vault. These features were adopted by successive generations for their own architectural programmes.

This was true of Pedro (III) Fernández de Velasco, who for political motives changed residence and moved to Burgos, the nearest royal city, from where he could both control the family's territory and consolidate their position at court. In Burgos, Pedro (III) Fernández de Velasco and Mencía de Mendoza,[16] his wife, created a new centre for their dominion and implemented a building programme similar to that of their predecessors in Medina de Pomar—that is, a palace and a funerary chapel.

The new palace, started around 1476,[17] was a new representational space for the family, built in accordance with their new status,[18] so that their dominant position in the city and their links with the king[19] would be strengthened. The plan of the palace was quadrangular, set around a courtyard with a double gallery with segmental arches; and it has traditionally been attributed to Simon of Cologne. It is beyond my purview here to analyse this palace and its features, which derived from various artistic traditions. However, two aspects of the building should be highlighted: first, its apparently fortified exterior, not so common in urban palaces; and second, its façade. Its exterior, with its two square towers and small apertures, may be interpreted as an iconographical reference to Medina de Pomar. Of course, this type of palace was not uncommon in the architectural milieu of fifteenth-century Castile; but the Constables chose it from among a range of possibilities, so that it may be understood as expressing a desire to link their new foundation with the most emblematic building of the family. Nevertheless, this tendency toward continuity is nuanced with regard to the façade, where the arms of the Velasco and Mendoza families are prominently displayed together with the personal emblems and insignia of Pedro and Mencía, who are cited in a prominent inscription as the builders of the palace.

This dynamic of continuity and rupture, of emphasising their integration into the lineage while expressing their individual achievements, is also apparent in their funerary chapel. This chapel employed some of the same architectural features seen in Medina de Pomar (centralised plan, transept, star vault), but its construction implied a break in the family funerary tradition in Medina de Pomar.[20] It should be noted that this chapel was planned and built by Mencía de Mendoza, who perhaps wished to stress through the architecture the new position attained by the Velasco family after becoming relatives of the Mendozas.[21] Pedro (III) and his wife thus created a new centre, with new iconic buildings for the family, and thus presented themselves as 're-founders' of the dynasty.

DEMARCATING AND DOMINATING THE REALM: A CENTURY OF TOWERS (1370-1470)

Having power over a space implies not only imposing military control over it, but also being present within it through a strategy of visual domination, and this was carried out by the Velascos in their territories through the use of a specific architectural type: the tower. Towers were military buildings *par excellence*, although their function was transformed in the Late Middle Ages, when they came to be used mostly for residential purposes and for their symbolic significance. These buildings were no longer used to resist attack, but they were constructed as symbolic guarantors of peace,[22] emblems of nobility and evidence of military control. Moreover, they also had an important practical aspect: they were used to control passes and trade routes and to collect tolls and taxes on merchandise.

The architectural features of towers were mostly defensive, but they also had decorative features that revealed the wealth and prestige of their owners, including banners and coats of arms, prominently displayed above.[23] These heraldic adornments contributed to the role of these buildings as markers of territorial control.

The Velasco family exploited both aspects of their towers, which were on the one hand symbolic, visual representations of their power and, on the other, practical instruments for controlling routes and collecting taxes. In addition, they used towers to help them gain access to desired territories and to maintain their power in the territories they already possessed.

The tower was the preferred building in the architectural programme of the Velascos during a specific period. Pedro (I) Fernández de Velasco may be credited with starting the family's tower-building binge, which reached its peak with his grandson, Juan Fernández de Velasco, and then ended in the next generation, with Pedro (II) Fernández de Velasco, who shifted his territorial and architectural interests from expansion to articulation. This period, between 1370 and 1470, coincides with the expansion and consolidation of Velasco territory, as has already been shown, and in that context, the tower was the most suitable architectural form.

Approximately 20 towers[24] that were built or restored by the Velasco family survive today. They are square-shaped, robust buildings, with few windows, and they are almost completely devoid of elements of comfort such as chimneys and latrines; thus, they were clearly not designed to fulfill any residential functions. Carved coats-of-arms and blazons are the only decorative features, and these are normally situated in the windows, in the upper parts of the towers. Of course, these coats-of-arms would have been complemented with emblems painted on wood or other ephemeral materials, which would have completed the role of the towers as heraldic symbols or markers of territorial possession.

Pedro (I) Fernández de Velasco was responsible for the real political ascendancy of the family, as well as for the creation of a great and powerful dominion. He developed his architectural patronage by constructing and marking the places that had been given to him by the king, and the areas where felt the need to reinforce his authority. These places included Quecedo and Quisicedo, towns of *behetría*,[25] which means that juridical power still belonged to the king, and the exercise of power was not uncontested; and Quincoces, which was originally under the control of the Salazar, an enemy family that had been expelled from the area by the Velascos.

Pedro constructed towers and marked them with his coat of arms in strategically important places where he needed to project his power over the surrounding land. However, his son, Juan Fernández de Velasco, the driving force behind the territorial expansion of the family, developed an extensive programme of tower construction throughout his lands, which was complemented by the purchase of towers in areas that he aspired to control. Almost all of the surviving towers that were built or bought[26] in Juan Fernández de Velascos's time still have the family emblem in their upper windows—visual references of the newly extended limits of the dominion.

Pedro II Fernández de Velasco changed his territorial and architectural interests. He did not continue the geographical expansion of his father, but instead consolidated the territory and built architectural monuments within it. He is known to have constructed only one tower, that of Castrobarto, which still displays the family emblem in a window; and he purchased other towers,[27] in order to complete the territorial programme developed by his father.

CIVIC ARTICULATION OF THE TERRITORY: RELIGIOUS AND CHARITABLE FOUNDATIONS (1420-1470)

Pedro II Fernández de Velasco consolidated the dominion with the acquisition of the towns of Frías and Belorado, and he strengthened the political position of the family when he assumed the title "Count of Haro". During this new phase of the lineage, the most representative buildings (the palace and the family mausoleum), had already been erected in Medina de Pomar, and the family's military and juridical control were on firm ground; so building new towers was no longer suitable or necessary. At this stage, it was necessary to develop the territory and religiously unite its inhabitants while increasing the family's prestige and legitimising its supremacy. Thus, the family began to commission hospitals and monasteries rather than military structures.

During Middle Ages, hospitals were places where acts of charity were performed, and they served both a religious and a propagandistic function. In addition, they were used to address the problem of poverty, which started to be perceived as a threat

to the stability of society.[28] Pedro (II) Fernández de Velasco and his wife, Beatriz de Manrique, developed a complex programme to contain this problem as well as to alleviate the unfortunate consequences of usury within their territories. Their programme centred on the construction of a hospital in the heart of their domain, Medina de Pomar, and on the foundation of *arcas de misericordia*, institutions that were similar to the *Montes di pietá*.[29]

In 1434[30] Pedro and his wife began the process of founding a hospital in Medina de Pomar, called 'of the Holy Cross.' This hospital was connected to the Monastery of Saint Clare, whose abbess was its principal manager. The structure is poorly preserved, but its main architectural features, which link it with the Velascos other monuments[31], can still be discerned. These include ribbed vaults, the segmental arches of the cloister and, of course, the abundant use of the emblems of the Velasco and Manrique families, and of the cross of Saint Andrew, who was considered the family protector.

Another strategy used to articulate the territory and reinforce the family's political control was the foundation of Franciscan convents.[32] This is a complex phenomenon that deserves a more thorough study, so a few observations will have to suffice. The lands donated by the Velascos for the establishment of Franciscan convents were carefully chosen. The most important of these institutions were the great convent of Saint Clare in Medina de Pomar, linked to the family's iconic palace and funerary chapel, and two other Franciscan foundations in Briviesca. In fact, Franciscan convents can be found in almost every town in a strategic position or with symbolic value for the family, like Herrera de Pisuerga, important for its control over routes used by seasonal livestock, and Fresneda and Belorado, key points of communication between Castile and the Cantabrian ports.

CONCLUSION

The Velascos used architecture as a means of exerting symbolic control over their territories and as a form of propaganda for legitimising their power and consolidating their authority. They developed a coherent and consistent territorial policy that was reinforced and visually manifest through their architectural patronage, and they chose building types and decorative features that were suitable for their objectives and priorities.

Endnotes

1. This paper has been developed thanks to a fellowship of the project "Art Space and Mobility in Early Ages of Globalization" of the Kunsthistorisches Institut in Florenz, sponsored by the Getty Foundation. It is also integrated in the research project "La génesis del Estado Moderno y el palacio especializado: Castilla y Granada en la Baja Edad Media" (HAR2009-08901).

2. Robert D. Sack, *Human territoriality. Its theory and history* (Cambridge: Cambridge University Press, 1986), 5-27. See also Setha Low and Denise Lawrence-Zuñiga (eds.), *The anthropology of space and place. Locating culture* (Oxford: Blackwell, 2003).

3. Alain Salamagane, "Le symbolisme monumental et décoratif: expression de la puissance seigneuriale," in *Seigneurs et seigneuries au Moyen Âge. Actes du 117e Congrès National des Sociétés Savantes* (Paris: Édition du CTHS, 1995), 441-57; Marie-France Auzépy and Joël Cornette, "Lieux de pouvoir, pouvoir des lieux," in their *Palais et Pouvoir. De Constantinople à Versailles* (Saint Denis: Presses Universitaires de Vincennes, 2003), 5-31.

4. See Salvador de Moxó, "De la nobleza nueva a la nobleza vieja" in his *Feudalismo, señorío y nobleza en la Castilla Medieval* (Madrid: Real Academia de la Historia, *Cuadernos de Historia. Anexos de la revista "Hispania"* 3 (1969), 1-31, 195-210. Focusing on the Velascos, see Esther González Crespo, *La elevación de un linaje nobiliario en la Baja Edad Media: Los Velasco* (Madrid: Universidad Complutense de Madrid, 1980). A nuanced approach in Marie-Claude Gerbert, *Les noblesses espagnoles au Moyen Âge* (Paris: Armand Collin, 1994).

5. Ibid. and Cristina Jular-Alfaro, "Dominios señoriales y relaciones clientelares en Castilla: Velasco, Porres y Cárcamo (siglos XIII-XIV)," *Hispania* 192 (1996), 131-71.

6. The *merindades* were political and administrative districts in the north of Burgos, governed by the *merinos* in the name of the king of Castile.

7. Cf. Esther González Crespo, *op. cit.* and Alfonso Franco, "La formación del patrimonio de la Casa de Velasco (siglos XIII al XV), *Boletín de la Real Academia de la Historia*, 206, no. 2 (2009), 231-54. The strategic importance of this area has been studied by José Ortega, *La transformación de un espacio rural: las Montañas de Burgos* (Valladolid: Universidad de Valladolid, 1974), 129-32.

8. Esther González Creso, *op. cit.* Alfonso Franco, *op. cit.* and "El gobierno y la administración de un señorío. El modelo de los Velasco (1368-1470)," in José María Mínguez and Gregorio del Ser (eds.), *La Península en la Edad Media. Treinta años después. Estudios dedicados a José Luis Martín* (Salamanca: Universidad de Salamanca, 2006), 137-42; Rafael Sánchez Domingo, *El régimen señorial en Castilla la Vieja. La casa de los Velasco* (Burgos: Universidad de Burgos, 1999).

9. Towers and fortresses have been analysed in France as a means of penetration into the territories. See Hervé Mouillebouche, *Les maisons fortes en Bourgogne du Nord du XIII au XV siècle* (Dijon: Presses Universitaires de Dijon, 2002); and Élisabeth Sirto, *Noble et Forte Maison* (Paris: Picard, 2007). This is the key to interpreting the towers bought or built by Juan Fernández de Velasco along the Cantabrian coast.

10. For the patronage of the Velasco family, see Yarza Luaces, *La nobleza ante el rey* (Madrid: El Viso, 2003); Felipe Pereda, "Mencía de Mendoza (+1500) mujer del I Condestable de Castilla," in his *Patronos y coleccionistas. Los Condestables de Castilla y el Arte* (Valladolid, Universidad de Valladolid, 2005), 11-119; Alonso Ruiz, *La Arquitectura Tardogótica en Castilla: los Rasines* (Santander: Universidad de Santander, 2003); *ídem*, "Palacios donde morar y quintas donde

holgar de la Casa Velasco durante el siglo XVI," *Boletín del Museo e Institución Camón Aznar* 83 (2001), 5-34; *idem,* "Arquitectura y arte al servicio del poder. Una visión sobre la casa de Velasco durante el siglo XVI," in Pereda (et al.), *Patronos y coleccionistas*, *op. cit.*, 123-206.

11. There are no remains of Briviesca, only some descriptions by travellers. See Del Val, "Briviesca y sus cercanías," *Semanario Pintoresco Español* (1842), 308-10. Medina de Pomar has not been intensively studied. See Rodrigo Amador de los Ríos, *Burgos, España, sus monumentosy artes. Su naturaleza e Historia* (Barcelona: Daniel Cortezo y cía, 1888); Fernando Chueca, *Historia de la arquitectura española. Edad Antigua y Media* (Madrid: Dossat, 1965), in two chapters "mudejar", 465-512 and "arquitectura militar", 513-41; and more recently Miguel Sobrino, "El alcázar de los Velasco, en Medina de Pomar (Burgos). Un espacio áulico andalusí en el Norte de la Vieja Castilla," *Loggia* 11 (2001), 10-21.

12. It was built by Pedro Fernández de Velasco and his wife, María Sarmiento between 1369 (when Medina de Pomar came to his property) and 1380, date of the *mayorazgo* where this palace is mentioned (A.H.N., nobleza, Frias, C.234, D.5-8). Moreover, the badges displayed inside the palace reinforce this chronology. See Miguel Sobrino, *op. cit.*

13. Similar fortified houses are preserved in the Genevois (Savoie), for example the *maison forte* d'Alex and the *château* de Sallenôves. Both have a ground plan similar to that of the palace, with central loggia flanked by towers, following a north-south axis (Élizabeth Sirot, *op. cit.*, 43-58).

14. The hypothesis about the *qubba* is from Miguel Sobrino, *op. cit.*, 10-21; and following him, Ruiz Souza, "La planta centralizada en la Castilla Bajomedieval: entre la tradición martirual y la *qubba* islámica. Un nuevo capítulo de particularismo hispano," *Anuario del Departamento de Historia y Teoría del Arte* 13 (2001), 9-36; *idem,* "Al-Andalus y la Cultura Visual. Santa María la Real de las Huelgas y Santa Clara de Tordesillas. Dos hitos en la asimilación de al-Andalus en la reinteriorización de la Corona de Castilla," in *El legado de al-Andalus. El arte andalusí en los reinos de León y Castilla durante la Edad Media* (Valladolid: Fundación del Patrimonio Histórico de Castilla y León, 2007), 205-43; and Antonio Almagro, *Palacios medievales hispanos. Discurso de ingreso a la Real Academia de Bellas Artes de San Fernando* (Madrid: Real Academia de Bellas Artes de San Fernando, 2008).

15. For an interpretation of these chapels within the family's building tradition, see Felipe Pereda and Gutiérrez de Ceballos, "*Coeli enarrant gloriam dei.* Arquitectura iconografía y liturgia en la capilla de los Condestables de la Catedral de Burgos," in *Annali di Archittetura* 9 (1997), 17-34; and Begoña Alonso, *Arquitectura Tardogótica, op. cit*, 152-70.

16. The principal role of Mencía de Mendoza in the patronage of the family has bee stressed by Felipe Pereda, "Mencía de Mendoza (+1500), *, op. cit.* Felipe Pereda and Alfonos Rodríguez Gutiérrez "Coeli enarrant gloria dei", *op. cit.* and M. Concepción Porras, "La capilla de la Purificación en la Catedral de Burgos. Mirar desde el Humanismo, ver la Antigüedad desde la forma", *Boletín del Seminario de Arte y Arqueología. Arte* 74 (2008), 67-88.

17. Alberto Ibáñez, *Historia de la Casa del Cordón* (Burgos: Caja de Ahorros de burgos, 1987), 38-47.

18. The Velasco family already had a palace in Burgos, the so-called Cantarranas House, which was thought to be inadequate as a space representative of the new status.

19. The Velasco's palace was also used as royal residence.

20. Among the rules of heritage imposed, there is one which specifically established Medina de Pomar as the obligatory burial place for all the heirs. In the case of Pedro (III) Fernandez de Velasco, the obligaton was not respected because of the the main role of Mencía de Mendoz, who constructed the chapel and ordered the burial of the Constable there. Nevertheless, all their successors were buried again in Medina de Pomar.

21. Cf. Felipe Pereda and Alfonso Gutiéerez, "coeli enarrant gloria dei,"*op. cit.*, 17-34; and Felipe Pereda "Mencía de Mendoza (+1500), *op. cit.,* 49-52.

22. Cf. André Debord, *Aristocratie et pouvoir, op. cit.* and Alain Salamagne, "Le symbolisme monumental", *op. cit.*

23. Ibid., *op. cit.* 451-57, highlights the importance of the colors, the materials and shine, which transformed the military buildings into representative emblems.

24. Carazo, Castrobarto, Castrovido, Castrovido, La Riba in Espinosa de los Monteros, Extramiana, Quecedo, Quincoces de Yuso, Quisicedo, Robredo, Valdenoceda, Valpuesta, Villasana de Mena, Miraveche. Also preserved are Mosterio de Rodilla, Montelaegre, Grisaleña, Itero del Castillo, Olmos de la Picaza and La Publa de Arganzón, but for the moment there are no references in the sources or artistic remains proving any architectonic intervention of the Velasco family.

25. The *behetrías* are lands that belonged to a lord, but whose juridic powers were still the king's. The workers had also some rights over the land and the power exerted by the lords was complex and normally shared between two or more lords. Cf. Cristina Jular "Dominios señoriales y relaciones clientelares en Castilla: Velasco, Porres y Cárcamo (siglos XIII-XIV)," *Hispania* 192 (1996), 131-71; *idem*, "Nobility and Patronage: The Velascos, a case of study," in her *Land, Power and Society in Medieval Castile. A study of "Behetria" Lordship* (Turnhout: Brepols, 2009); and Carlos Estepa, *Las behetrías castellanas* (Valladolid: Junta de Castilla y Leon, 2003).

26. They are in Espinosa de los Monteros, Extramiana, Robredo, Valdenoceda and Valpuesta.

27. In Villaverde, Cerezo de Rio Tiron and Olmos de la Picaza

28. The use of hospitals to control poverty is included in the study by Pablo Ortego on Mendoza family. See Pablo Ortego, "El patrocinio religioso de los Mendoza: siglos XIV y XV," *En la España* Medieval 31 (2008), 275-308. For the hospitals of the Velasco family in their political and territorial context, see Alfonso Franco, "La asistencia hospitalaria en los Estados de los Velasco," *Historia, Instituciones, Documentos* 13 (1986), 63-88. For the "Arcas de Misericordia," see Javier Castaño, "Crédito caritativo en la Castilla de mediados del siglo XV: Los estatutos de las 'arcas de misericordia' y la 'usura judía'," in Paola Avallone, *Prestare ai poveri. Il credito su pegno e i Monti di Pietá in area Mediterranea (secoli XV-XIX)* (Naples: Consiglio Nazional de Ricerche, 2007), 101-45.

29. Javier Castaño, "Crédito cartiativo en Castilla," *op. cit.* 101-45.

30. See César Alonso de Porres, "El Hospital de la Vera Cruz," in *El Monasterio de Santa Clara de Medina de Pomar. Fundación y Patronazgo de la Casa de*

Velasco (Burgos: Asociación de Amigos de Medina de Pomar, 2005), 332-59.

31. See Begoña Alonso, *La arquitectura tardogótica*, *op. cit.*, 29-30. She stresses how the Velasco family used Late Gothic features for their constructed image.

32. For a more detailed study of the relationship between the Velasco family and the Franciscan order, see Andrés Ordax, "El cristoncentrismo franciscano a fines de la Edad Media y su reflejo en la iconografía de los Condestables de Castilla," in *Homenaje al profesor Hernández Perera*; Pereda Espeso and Gutiérrez de Ceballos, "*Coeli enarrant gloriam dei*. Arquitectura, iconografía y liturgia en la capilla de los Condestables de la Catedral de Burgos," *Annali di Archittetura* 9 (1997), 17-34; F. Pereda Espeso, "Mencía de Mendoza (†1500), mujer del I Condestable de Castilla," in his *Patronos y coleccionistas*, *op. cit.*, 11-119; and E. Paulino Montero, "Patrocinio religioso, patrocinio artístico e identidad familiar a fines de la Edad Media. El caso de los Fernández de Velasco," in *Ehumanista. Revista de Estudios Ibéricos* (forthcoming).

CONNECTING TERRITORIES:
STRATEGY, POLITICS AND SYMBOLIC MEANING OF BYZANTINE BRIDGES

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Roughly speaking, a bridge became the birthplace of the Byzantine Empire. At the Milvian Bridge, just outside Rome, Constantine the Great overwhelmed his rival Maxentius in 312 und thus made himself Emperor of the West. His victory was attributed to the aid of the Christian God, who sent to Constantine a vision with a cross accompanied by the text 'By this conquer'.[1] As a consequence, Constantine, together with the Emperor of the East, Licinius, issued an Edict of Toleration, which proclaimed Christianity an official religion. In 324, Constantine became the sole ruler over the vast Roman Empire. Aware that he could not control the ample territory of his realm from Rome, Constantine established a new capital in the East and gave it his own name: Constantinople. For over one thousand years this 'New Rome' remained the focal point of the state, which continued to see itself as the Roman Empire and its citizens as Romans. As such, it retained and perpetuated Roman traditions, combining them with Christian belief. In addition to its political, geographical, economical, technical and cultural power, which during the eleven centuries of its existence underwent profound transformations, Byzantium considered itself the centre of the world, primarily because of its conviction that it enjoyed the perpetual protection of the Christian God, whose sole representative on earth was the Byzantine Emperor. Considering this conspicuous world view and building on the statement of Peter Bishop that 'all bridges… embody and express, constrain and develop a certain kind of world view,'[2] the present study investigates the particular significance and meaning that bridges assumed in Byzantine times.

It is generally accepted that the Byzantines continued the Roman tradition of bridge construction, and as a matter of practice they typically reused or reconstructed Roman bridges. This basic assumption raises the crucial question: Can we actually speak of 'Byzantine bridges'? Drawing upon archaeological evidence as well as written and iconographical sources, this question has a positive answer. On the one hand, the Byzantines established new technologies in bridge building which predated similar developments in Western Europe by centuries; on the other hand, they formulated a particular understanding of the significance and meaning of bridges on multiple levels: political, strategic and symbolic.

The reasons for the continued use of the Roman bridges in Byzantium are manifold. Most importantly, they were functional and crucial elements within the extensive Roman road system—a dense network covering the whole Empire. The Byzantines inherited and utilised the Roman roads and in the course of time, within the ever-shrinking frontiers of their realm, adapted them to changing circumstances and needs.[3] Unchanged remained, however, the enormous political, military, economic and social significance of the road network and, along with it, the bridges, which, over the centuries, continued to help define and dominate territorial space.

Furthermore, Roman bridges were appreciated and admired for their technical and artistic value. For example, Procopius described the Augustan Bridge at Narni as '…a very noteworthy sight; for its arches are the highest of any known to us'.[4] In this context, bridges were considered a testament to the achievements of the old days and an allusion to the glorious and prosperous past which the Byzantines claimed for themselves—in other words, as symbols that spanned both the past and the present.

While continuing to use and repair Roman bridges, the Byzantines also built new ones. Most Byzantine bridges erected between the fourth and the sixth century are so similar to their Roman predecessors with respect to both typology and engineering that it may be more accurate to speak of 'Roman bridges constructed during Byzantine times' than of 'Byzantine bridges'.[5] At the same time, the Byzantines improved and adapted the Roman bridge model in accordance with the technical achievements of their own period. The most important innovations were structural, as Byzantine architects recognised that the stability of construction depended not only on strengthening the abutments and the piers, but also on lightening the superstructure.[6]

They achieved this weight reduction using various methods. First, the typical Roman semi-circular arches were replaced by segmental arches.[7] Second, in order to reduce the load on the arches and to save building material, the Byzantines used a hollow chamber system. Thus, cavities were cut into the interior masonry above the arches and piers, and arranged obliquely with respect to the longitudinal axis of the bridge.[8] Moreover, the exposed upper part of the piers was endowed with four parallel, slot-like hollow spaces running the entire length of the structure, directly beneath the pavement.[9]

In summary, the Byzantines renovated the Roman bridge model and developed it into an almost modern structure, which was of a type that did not come into use in Western Europe until the late medieval period.[10]

The next question that deserves our attention concerns the particular significance and meaning that bridges assumed in Byzantine times. An analysis of their ornamentation, which bears testimony to the specific concerns of the patrons and the reception of the monuments by contemporary viewers, serves as a useful starting point. Although the state of preservation of Byzantine bridges is often poor, there is enough evidence to indicate that, as in Roman tradition, the Byzantines adorned them with sacred symbols and inscriptions—the primary difference being the 'semantic' transformation of the sacral connotations from pagan to Christian.[11] The famous bridge built by Emperor Justinian I between circa 560 and 562 over the river Sangarius[12] may be cited as an example that fully continued the tradition of its Roman predecessors. The bridge, which stood on the main military road from Constantinople to the eastern provinces, impresses even today with its well-preserved monumental structure.[13] Like other markedly public places, the bridge bore an inscription which served to protect, perpetuate and embellish the memory of its patron. Although the inscription itself has disappeared, its text—an epigram by the sixth-century poet and historian Agathias—appears in a 10th-century treatise by the emperor Constantine Porphyrogenitus.[14] Following Roman tradition, the epigram cites the strength and structural stability of the bridge at a potentially dangerous crossing and praises the emperor for its construction. The triumphal character of the inscription was mirrored by a monumental arch erected at the western end of the bridge. At the eastern end, a large apsed structure, which possibly served as a religious shrine, served as a decorative parallel to the arch opposite.[15] The Christian identity of the site, however, is unambiguously reflected in the relief crosses adorning the keystones of the arches.

As on other Byzantine secular monuments, the cross was the favoured Christian symbol for embellishing bridges, yet it may have served additional purposes.[16] Apart from their decorative value, they may have been deployed as apotropaic symbols that invoked protection for the bridge and travellers. Studying secular and sacred monuments from the fifth and sixth centuries, Slobodan Ćurčić observed that the protective role of crosses was linked to their placement at points of structural vulnerability. He proposed that the position of the crosses illustrates 'reliance on the miraculous power of the cross to ensure the structural stability of the building'.[17] In fact, relief crosses were often placed at salient structural points, such as on keystones, the springing of arches, or the ashlar of buttresses or piers. At other times, they were prominently displayed on the superstructure.[18]

In addition, crosses—especially those placed in highly visible locations—may also have served to announce the Christian identity of the site, as James Crow argued in his study of the decorations of Byzantine city walls and the aqueduct-bridges in Thrace. Thus, crosses adorning bridges would have confirmed to travellers that these were Christian monuments, located within a Christian empire, and that they were protected by Christ Himself.[19]

Monumental inscriptions adorning bridges reveal further information about the structures' setting in space and time as well as about their relationship to both patron and beholder. Such inscriptions fulfilled a variety of functions and reinforced and exceeded, to some degree, the functions of the Christian crosses. In the case of Justinian's bridge over the Sangarius, the epigram praising the emperor for his achievement serves as a metaphor for his presence in this part of the province and as a perpetual reminder of the powerful of the Byzantine state. The fact that Justinian was a Christian emperor ruling over a Christian territory was accentuated by the crosses.

Our understanding of bridges as 'conceptual structures' can be deepened if we consider the relationship between the textual content of inscriptions and their three-dimensional setting on the monuments. The fifth- or sixth-century Karamağara bridge in Cappadocia had preserved its original inscription *in situ* until 1975. Its single pointed arch of 14.5 m spanned the rocky gorge of the Arapkir Çayı (Fig. 1).[20] The eastern, downstream side of the bridge was adorned along its entire length by a monumental Greek inscription culminating in an encircled cross on the keystone. The inscription draws our attention, first for its visual prominence, and second for its symbolic position on the structural portion of the monument, which it seems to embrace protectively. The role of the inscription as protector is further emphasised by its text, cited from Psalm 120:8: 'The lord shall preserve thy going out and thy coming in for now and for evermore, amen, amen, amen'. Commonly found on the lintels of
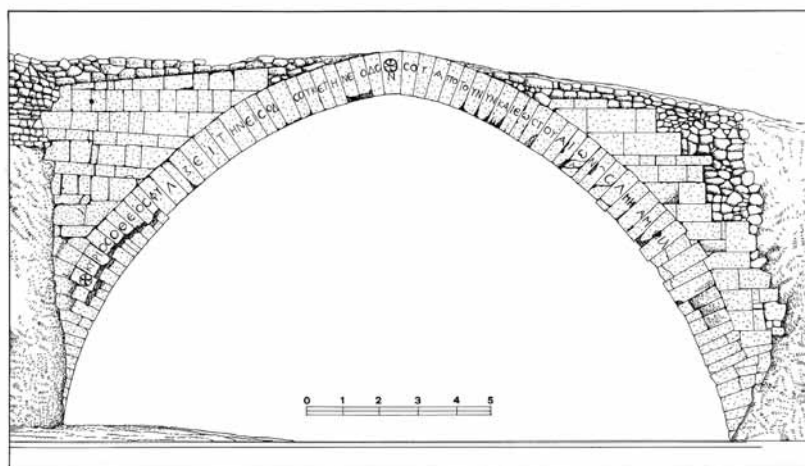
Figure 1. Karamağara Bridge in Cappadocia, fifth or sixth century. (source: Vittorio Galliazzo, *I ponti romani, I: Esperienze preromane, storia, analisi architettonica e tipologica, ornamenti, rapporti con l'urbanistica, significato* (Treviso: Canova, 1995), fig. 39)

dwellings, especially in Syria, this verse was regarded as a magical formula with the power to bring good luck and to avert evil spirits. By adorning their doors with words from the Bible as well as religious symbols, the Christians also proudly proclaimed their faith.[21] Since bridges, like doors, are both liminal and symbolical, the ornamentation of the Karamağara bridge may be thus understood as projecting the Christian identity of a site that was protected by God.

To sum up, as on other Byzantine buildings, inscriptions on bridges served various purposes related to both content and location, and their presence transformed and enhanced the meaning of the monument. In addition to their ornamental function, inscriptions were meant to imbue the structure with twofold protection: by invoking the name of God, and through their placement at key structural points. Above all, inscriptions served to commemorate the patron in perpetuity: on the one hand, by situating him within the local landscape; and on the other, by acting as visible signs of a permanent Christian empire.[22]

The religious function of bridges was further reinforced by the existence of Christian buildings either on top of the structures or nearby. For example, at the western end of a stone bridge on the Siberis, Justinian built a church to protect travellers during winter;[23] and Constantine's Bridge in Mysia was crowned with a church dedicated by Saint Helena to Emperor Constantine I.[24] The previously discussed apsed structure at the eastern end of the Justinian's bridge over the Sangarius, which might have served a similar function, gives us an idea of how such religious structures may have looked. The bridge on the river Alpheios in Karytaina, Greece still preserves its chapel, built onto the west side of the second pier. As an inscription relates, the bridge was restored in 1440 by Raoul Manuel Melikes in order to assure travellers safe passage over the river. The 'pious man' probably also added the chapel, where passersby could stop and pray for absolution.[25] These examples affirm the evidence found in the ornamentation—namely, that the safety of the structure as well as of the travellers could only be granted by the Christian God Himself and by His saints, imparting the bridges with sacral meaning.

Two monastic foundation charters shed additional light on these concepts. The first—the testament of the monk Nikodemos for the monastery of *Nea Gephyra* near the city of Sparta, Greece, dated 1027—begins with a reference to the construction of an 'all-holy new bridge' over the river Eurotas.[26] The construction of a church dedicated to Jesus Christ on the left side of the bridge ensured the divine protection of the edifice. Additionally, the founder's charter entrusts the structure's earthly protection to the emperor, whose representatives are called upon to guard the independence of the monastery from the local bishop. The urgent need for divine and earthly protection surely arose from the bridge's great significance: first because it was a monastic foundation, which was visually emphasised by the engraving of the charter onto one of its blocks; and second, because of the access it gave to the adjoining territory. As Armstrong, Cavanagh and Shipley have shown, 'the revenue from the bridge was probably the main, and possibly the only, source of income for the monastery, so that only the continued possession of it would ensure the survival of the religious foundation.'[27] Their research has further indicated that the construction of the bridge promoted settlement in the area east of the river, which before the 11th century was uninhabited.

Figure 2. Arrival and reception of the princess, fol. 3v, Vat. gr. 1851, 12th century, Biblioteca Apostolica Vaticana. (source: Helen C. Evans and William D. Wixom (ed.), *The Glory of Byzantium: Art and Culture of the Middle Byzantine Era A.D. 843-1261* (New York: Abrams, 1997), 191)

Income for the monastery and safe-passage for travellers were also provided by two bridges mentioned in a second foundation document, from 1152, the *typikon* of the *Sebastokrator* Isaac Komnenos for the monastery of the Mother of God *Kosmosoteira*, near Bera.[28] The founder entrusted the protection and maintenance of the bridges to the prior of the monastery. Again, divine power functioned as the main safeguard. The text explicitly mentions that one of the bridges was dedicated to the Mother of God and was endowed with Her icon, 'as an object of worship for those who are passing across, and as the prayer of my wretched soul.'[29] Isaac continues by associating the bridges that he donated for the salvation of his soul to the future bridge he must cross to the 'eternal dwellings', thereby emphasising the conception of bridges as a sign of liminal transformation.[30]

Similar associations can be found in Byzantine artworks, where representations of bridges are, admittedly, extremely rare; nevertheless artworks contribute significantly to our understanding of how contemporaries conceived the symbolical meaning of bridges and interpreted their design. The common feature shared by all contemporary images of Byzantine bridges that are known to me is that they emphasise the charged symbolism of the bridge-motif denoting transition while downplaying topographical accuracy.[31]

This argument was articulated in exemplary fashion by Cecily J. Hilsdale in her discussion of a miniature painting in the Vatican Greek Manuscript 1851 (Fig. 2).[32] The book was created as a welcoming present for Agnes, the daughter of King Louis VII of France, who arrived at Constantinople in 1179 to marry the heir of the Byzantine throne, Alexios. The gift contained a poem written in Greek and accompanied by lavish illustrations narrating the transformation of the princess from young Western betrothed to Byzantine *augusta*. The full-page miniature on the third folio[33] is divided into three registers depicting Agnes's arrival and reception in Byzantine territory as well as her socio-political transformation. The illumination is dominated by the central panel, which exhibits a white bridge adorned with crosses and statuary which spans over a watery landscape surrounded by domestic and religious buildings. The register above depicts the Western princess twice: on the left, where she is dressed in the rather modest garb of her homeland, standing in front of her Western entourage and welcomed by Byzantine women, who appear also on the right, where Agnes is depicted in larger scale wearing elaborate Byzantine attire. In the bottom register she is represented a third time, sitting frontally on a throne in the ceremonial clothing of a Byzantine *augusta*, surrounded by Byzantine ladies. According to Hilsdale, the bridge serves as a visual sign of the entry into Constantinople and as a symbolic threshold marking both spatial and temporal divisions. It effectively conducts the upper narrative from left to right, so that the betrothed 'has truly arrived only once she has crossed the bridge and changed into the dress that visually asserts her new role as a Byzantine *augusta*.'[34] Her new identity is fully manifested in the lower register, where she is enthroned beneath the bridge, almost as if it crowns her head. The image invokes 'her new home and the new ties that will be created through her.'[35] The Christian affiliation of the site is emphasised by the axial alignment of the figure of the princess with the cross at the centre of the bridge, and with a purple cross crowning the upper border of the miniature.

As a sign of transition and transformation, one may also cite the bridge depicted in a ninth-century copy of the *Homilies* (sermons) of Gregory of Nazianzus (folio 440r),[36] which brings us back to the starting point of my talk: the Milvian Bridge in Rome. Enframed by Constantine's dream on the top and by Helena's discovery of the true cross in Jerusalem on the bottom, the middle register of the full-page miniature exhibits Constantine's victory over Maxentius at the Milvian Bridge with the aid of the Cross. The miniature introduces a text narrated by 'Solomon' describing 'an ideal ruler type who saw the light, and awoke to forsake the profane for the God-fearing life,'[37] This transfiguration paralleled Constantine's conversion narrated in the scenes grouped together: the ruler who 'awoke' for Christianity, his transformation visualised through the bridge, and the manifestation of the true religion; thus, Constantine's cross of victory is related to the true cross and emphasises the triumph of the Christian Byzantine state.[38]

In closing, we can conclude that Byzantine bridges inherited their political, military, economic and social significance from their Roman predecessors and that they assumed specific meanings, according to the Christian dominated world view of the Byzantines. As a part of the road network, these impressive architectural monuments connected the lands of the Empire physically, and their decoration with Christian symbols and texts identified these territories as belonging to a proudly Christian state. Moreover, Byzantine bridges can be seen as symbolic connectors of opposed spheres joining barbarian and Byzantine, pagan and Christian, human and divine.

Endnotes

1. Eusebius, *Vita Constantini*, I, 28, Averil Cameron and Stuart G. Hall, trans., *Eusebius, Life of Constantine* (Oxford: Clarendon Press, 1999), 81.

2. Peter Bishop, *Bridge* (London: Reaktion Books, 2008), 214.

3. On Roman roads and their adaptation by the Byzantines, the most recent overview is Klaus Belke, "Communications: Roads and Bridges", in *The Oxford Handbook of Byzantine Studies*, ed. Elizabeth Jeffreys et al. (Oxford: University Press, 2008), 295-308.

4. Procopius, *De bellis*, V, xvii, 11, Henry B. Dewing, trans., *Procopius, History of the Wars III*, books V and VI (Cambridge, Mass.: Harvard University Press, repr. 1961), 166-67.

5. Vittorio Galliazzo, *I ponti romani*, I: *Esperienze preromane, storia, analisi architettonica e tipologica, ornamenti, rapporti con l'urbanistica, significato* (Treviso: Canova, 1995), 91, 96.

6. Galliazzo, *Ponti romani*, I, 96.

7. Of the large number of examples, I refer to the 360 meter-long Limyra Bridge in Lycia (modern southwest Turkey) from the sixth-century, which exhibits 26

segmental arches with a ratio of 5.3 to 1. Static analysis of the bridge has shown that the structure could support a weight of 30 tons on one arch and on the remaining surface could carry additionally a load of 500 kilograms per square metre, Wolfgang W. Wurster and Joachim Ganzert, "Eine Brücke bei Limyra in Lykien," *Archäologischer Anzeiger, Deutsches Archäologisches Institut* (1978), 288-307, esp. 296-99, figs. 12-14. See also, Galliazzo, *Ponti romani*, I, 98; Friedrich Hild and Hansgerd Hellenkemper, *Lykien und Pamphylien, Tabula Imperii Byzantini* 8 (Vienna: Austrian Academy of Sciences, 2004), 430-31, fig. 217.

8. For example, the Macestos bridge over Susurluk Çayı in modern northwest Turkey, dated to the fourth or to the sixth/seventh century. See Theodor Wiegand, "Reisen in Mysien," *Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung* 29 (1904), 254-339, esp. 300-01, plate XXIV; Frederick William Hasluck, "A Roman Bridge on the Aesepus," *The Annual of the British School at Athens* 12 (1905-1906), 184-89, esp. 187-88; Wurster and Ganzert, "Brücke bei Limyra," cit. n. 31; Galliazzo, *Ponti romani*, I, 97; and the Kemer Bridge over Koca Çayı in Lycia, probably built at the end of the sixth century—see Wurster and Ganzert, "Brücke bei Limyra," 304-07, figs. 18-20; Galliazzo, *Ponti romani*, I, 97, fig. 41; Hild and Hellenkemper, *Lykien und Pamphylien*, 915-16.

9. For example, the Aesepus Bridge over the river Gönen Çayı in Mysia (modern northwest Turkey), which was dated by Hasluck to the early-fourth century and by Galliazzo to the second half of the fifth/first half of the sixth century. See Hasluck, "Roman Bridge on the Aesepus"; Wurster and Ganzert, "Brücke bei Limyra," cit. n. 31; Vittorio Galliazzo, *I ponti romani*, II: *Catalogo generale* (Treviso: Canova, 1994), 417, no. 865; Galliazzo, *Ponti romani*, I, 97, fig. 42.

10. Galliazzo, *Ponti romani*, I, 91, 98.

11. Galliazzo, *Ponti romani*, I, 102.

12. Modern Sakarya in western Turkey. On the bridge: Michael Whitby, "Justinian's Bridge over the Sangarius and the Date of Procopius' de Aedificiis," *The Journal of Hellenic Studies* 105 (1985), 129-48; Galliazzo, *Ponti romani*, I, 94-95; Klaus Belke, "Justinians Brücke über den Sangarios," in *Bizans ve Çevre Kültürler*, ed. Sema Doğan and Mine Kadiroğlu (Istanbul: Arkeoloji ve Sanata Yayınlan, 2010), 89-99.

13. Overall length 429 m, width 9.85 m, height 10 m.

14. On the written sources concerning the bridge, see Whitby, "Justinian's Bridge," cit. n. 10.

15. The function of the apsed structure as a religious shrine has been proposed by Whitby, "Justinian's Bridge," 129 whereas Galliazzo, *Ponti romani*, I, 95, 533 considers it typical for Roman tradition.

16. On the different purposes of Christian decorative elements on the aqueduct bridges in Thrace, see James Crow, "The Christian Symbols and Iconography of the Aqueducts of Thrace," in *The Water Supply of Byzantine Constantinople*, ed. James Crow et al. (London: Society for the Promotion of Roman Studies, 2008), 157-80, esp. 163-68.

17. Slobodan Ćurčić, "Design and Structural Innovation in Byzantine Architecture before Hagia Sophia," in *Hagia Sophia from the Age of Justinian to the Present*, ed. Robert Mark and Ahmet Ş. Çakmak (Cambridge: University Press, 1992), 16-38, esp. 17-21.

18. Galliazzo, *Ponti romani*, I, 92.

19. James Crow, "Fortifications and Urbanism in Late Antiquity: Thessaloniki and Other Eastern Cities," in *Recent Research in Late-antique Urbanism*, ed. Luke Lavan (Portsmouth, RI: Journal of Roman Archaeology: Supplementary Series, 42, 2001), 89-105, esp. 96-97; Crow, "Christian Symbols", 164-66.

20. Karamağara Bridge over Arapkir Çayı, a tributary of the river Euphrates in modern eastern Turkey, was submerged in 1975 by the Keban Dam. On the bridge, Friedrich Hild, *Das byzantinische Straßensystem in Kappadokien* (Vienna: Austrian Academy of Sciences, 1977), 145, fig. 7; Friedrich Hild and Marcell Restle, *Kappadokien, Tabula Imperii Byzantini* 2 (Vienna: Austrian Academy of Sciences, 1981), 142, 200; Galliazzo, *Ponti romani*, I, 92, fig. 39.

21. William K. Prentice, "Magical Formula on Lintels of the Christian Period in Syria," *American Journal of Archaeology* 10 (1906), 137-50, esp. 137.

22. On the functions of inscriptions on secular and sacral buildings in Byzantium, see Amy Papalexandrou, "Text in Context: Monuments and the Byzantine Beholder," *Word and Image* 17 (2001): 259-83; Eadem, "Echoes of Orality in the Monumental Inscriptions of Byzantium," in *Art and Text in Byzantine Culture*, ed. Liz James (Cambridge et al.: University Press, 2007), 161-87; Liz James, "'And Shall these Mute Stones Speak?' Text as Art," in *Art and Text in Byzantine Culture*, ed. Liz James (Cambridge et al.: University Press, 2007), 188-206; Crow, "Christian Symbols," esp. 162-68.

23. Procopius, *De aedificiis*, V 4, 1-4.

24. Anna Comnena, *Alexias* VI, 13, 2.

25. Latest, with further references, Nikolaos K. Moutsopoulos, "Byzantine Bridge, Karytaina, Greece," in *Secular Medieval Architecture in the Balkans 1300-1500 and its Preservation*, ed. Slobodan Ćurčić and Evangelia Hadjitryphonos (Thessaloniki: Aimos, 1997), 334-35.

26. Stephen Reinert, trans., "Nea Gephyra: Testament of Nikodemos for the Monastery of Nea Gephyra near Lakedaimon," in *Byzantine Monastic Foundation Documents*, ed. John Thomas and Angela Constantinides Hero (Washington, D.C.: Dumbarton Oaks, 2000), 323-25. On the bridge, Gabriel Millet, "Église et pont à Byzance," *Byzantina-Metabyzantina* 1.2 (1949), 103-11, esp. 103-04; Dionysios Zakythinos, "Kastron Lakedaimonos," *Hellenika* 15 (1957), 95-111; Pamela Armstrong, William G. Cavanagh and Graham Shipley, "Crossing the River: Observations on Routes and Bridges in Laconia from the Archaic to Byzantine Periods," *The Annual of the British School at Athens* 87 (1992), 293-310, esp. 298-300, 304-05.

27. Armstrong, Cavanagh and Shipley, "Crossing the River," 300.

28. Nancy Patterson Ševčenko, trans., "Kosmosoteira: Typicon of the Sebastokrator Isaac Komnenos for the Monastery of the Mother of God Kosmosoteira near Bera," in *Byzantine Monastic Foundation Documents*, ed. John Thomas and Angela Constantinides Hero (Washington, D.C.: Dumbarton Oaks, 2000), 782-858, esp. 827-28, cf. Peter Soustal, *Thrakien, Tabula Imperii Byzantini* 6 (Vienna: Austrian Academy of Sciences, 1991), 200-01.

29. Patterson Ševčenko, "*Kosmosoteira*," 828.

30. Ibid.

31. Cecily J. Hilsdale, "Constructing a Byzantine 'Augusta': A Greek Book for a French Bride," *The Art Bulletin* 87, no. 3 (Sep. 2005), 458-83, esp. 468.

32. The manuscript is held in the Biblioteca Apostolica Vaticana, Vatican City. Latest, with further references: Hilsdale, "Constructing a Byzantine 'Augusta,'" on the miniature on folio 3v, esp. 467-70, fig. 9.

33. The miniature visualises the text written on the opposite folio 3r, Hilsdale, "Constructing a Byzantine 'Augusta,'" 467-68.

34. Ibid., 470.

35. Ibid., 471.

36. The Codex graecus 510 which was produced in Constantinople for the Emperor Basil I and his family between 879 and 882 is currently in the possession of the Bibliothèque Nationale in Paris. Extensive publication with further references: Leslie Brubaker, *Vision and Meaning in Ninth-Century Byzantium: Images as Exegesis in the Homilies of Gregory of Nazianzus* (Cambridge: University Press, 1999), on the miniature of folio 440r, esp. 163-69, fig. 45.

37. Brubaker, *Vision and Meaning*, 169. The text is the 'Metaphrase of Ecclesiastes' attributed to Gregory Thaumaturgos, and narrated by 'Solomon' in the first person singular.

38. Ibid., 165.

Worship, Liturgical Space and Church Building

SESSION CHAIRS:

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Church architecture is the outcome of an encounter between different tensions: the self-representation of a community and its ecclesiology; the society's theological culture; the architectural culture of the patrons, the designers and the builders; the relationships between the figurative arts and the arts of celebration; and the relationship between the community and its institutional, economic, and landscape contexts.

In recent histories of church architecture, the history of forms and techniques has been increasingly accompanied by a focus on the history of liturgy and religiosity: the performance of the rites, with their functional and symbolic implications, is currently regarded as a decisive factor in modelling architectural space. "Liturgical space," with its history of celebration, has gained an interdisciplinary place in the reconstruction of the circumstances surrounding ecclesiastical architecture.

This session aims to draw up a balance of the relationships between the history of architecture and the history of western Christian liturgies (and of Catholic and Reformed liturgies in particular), with a diachronic and interdisciplinary approach. The session's focus will be the liturgical reforms seen as driving, or accelerating, "reforms" in architectural space. Obviously, the liturgical aspect does not resolve the interpretation of church architecture: contributors are asked to investigate the sources that can help gain an understanding of the actual role of rites and the liturgy in establishing the churches' architectural program, and the mutual interaction with other factors.

Scholars are invited to address such focal points as the liturgical reforms of the second millennium of Western Christianity: the Gregorian Reform (eleventh century), the Lutheran, Calvinist and Anglican Reforms in north-central Europe, the Catholic Reform (or Counter Reformation) in Mediterranean Europe, the Liturgical Movement in the Christian churches of the twentieth century, the Second Vatican Council, and the current "Reform of Reforms" proposed in certain quarters of the ecclesiastical world.

Contributors are asked to concentrate on analyzing specific sources relevant to the topic (such as ecclesiastical archives, technical archives, or correspondence), and on a wide-ranging comparison of the available historiography, where possible suggesting new interdisciplinary routes to achieving a wider understanding of church architecture as a complex cultural phenomenon.

THE RENAISSANCE CENTRALLY PLANNED CHURCH AS LITURGICAL SPACE: SOME PROBLEMS

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I.

According to common belief, the well-known boom of centrally planned churches in Renaissance Italy happened against all liturgical expertise. The dean of post-war research in this field, Rudolf Wittkower, diagnosed a general failure of the centrally planned church that he traced back to what he saw as a fundamental dilemma: on the one hand, such churches would have asked the high altar to be placed in their geometrical centre to satisfy the logic of their architectural form; on the other hand, such a request would have been rejected by the clergy, as it might have complicated the separation of clerics from laymen or would have left all the space behind the altar unused. Thus, the result was unsatisfactory from either a formal or a functional point of view.[1] This putative dilemma, is in turn, grounded in two theoretical suppositions: first, the ideal of the centrally planned form, as influentially formulated by Jacob Burckhardt, comes to fulfilment in the all-round symmetrical building, completely free of any emphasis of direction; second, the assumption, seemingly liturgical, but in principle equally formal in nature, is that the logical place of the high altar, in a centrally planned church, had to be its architectural focus.[2] It is, however, a fact that no connection of this kind has ever been formulated in contemporary architectural theory. On the contrary: whereas Alberti remains silent about the position of the high altar in round or polygonal temples, Filarete put it into the eastern cross arm in all the centrally planned churches he designed for his ideal city of Sforzinda. Moreover, in the description of his project for the Church of the Ospedale Maggiore in Milan, he let it lean against the flat rear wall adding the clear-cut statement: 'come deve stare' (as it has to be).[3] The most thorough theoretical treatment of the subject has been given, as is well known, by Francesco di Giorgio in the second main version of his treatise where he explicitly referred to a discussion in progress as intangible, however, by other sources.[4] He discusses four arguments each in favour of a central and peripheral position of the main altar without mentioning, remarkably, the possibility of a separate main chapel to be attached to the centred building itself. At the 'circunferenzia a la porta opposita' the high altar would keep the greatest distance to the entrant, enhancing the deference of the latter, and could be glimpsed only from the front. Moreover, it had the advantage of a short distance to be covered by the priests and to differ conspicuously from pagan custom. In churches with more than one door, however, the high altar could be put in the centre, keeping equal distance from them all and underlining thus the singularity of this point; interestingly however, it is not so much from the church's structure but from the position of the entrants that Francesco argues. In addition, God's presence among all human beings and Christ's being 'among two or three assembled in his name' (##) could be expressed by a centrally-placed high altar. Francesco denies any of these arguments to be conclusive, leaving the decision up to the reader.[5] Within the context of a concrete building project, however, it is the artist who should decide the question, not the clergy. Later authors such as Serlio or Cattaneo do not tackle the problem systematically. Accounting for the model-book-like character of their treatises, they give one or more different solutions in each of their plans.[6] In any way, there's no indication that they regarded a central positioning of the high altar as an ideal. Looking at architectural practice, there's one example of a high altar placed in the geometric centre of a structurally autonomous church., This didn't happen in a new construction, but during the 1452-54 restoration campaign of the Paleochristian Church of Santo Stefano Rotondo, the type of which, a rotunda with de-ambulatory, may have contributed to this choice.[7] Among the earliest centrally planned churches of the epoch built anew, with the single exception of Filarete's Milanese church project, we don't know where the high altar was to go and if this had even been thought about in the stage of planning. Only from circa 1470 onwards was there enough evidence on this point. The result is clear: It was never in the centre, but always shifted to one side, often to the periphery of the space. What impact did this preference have on the centrally planned church as such? First, we have to distinguish here between 'monocellular' and 'multipart' buildings, in Serlio's terms: *temp(l)i d'un corpo solo* and *temp(l)i a più membri*.[8] Burckhardt stated that in the latter the rear arm or conch could be used as a chancel saving the unity of the plan, whereas, in the former an annex ('besonderer Anbau') had to be added.[9] Matters are more complex, however: the additions, Burckhardt alluded to, did much more than failing to house the main altar *and* the choir of the church's clergy. Liturgically speaking, these were two different entities, whereas spatially they often turned to be interrelated in a way that does not allow a

clear-cut architectural separation from one another. This was especially the case when the clergy was to be accommodated with the choir. The limited number meant that the annex remained in clear spatial subordination to the centred main space.

Some examples dating from the years around 1500 may serve to shed light on the problem, and I'll focus on 'monocellular' churches for the sake of greater succinctness. The communal pilgrimage church of Santa Maria dell'Incoronata at Lodi, founded in 1488 to a design by Giovanni Battaggio, is an octagon with niches and topped by a clerestory. In 1690, a chancel was added to house the main altar and the choir.[10] As shown by a plan from 1560c., originally all eight niches of the octagon had the identical form of trapezoids narrowing towards the outside. The high altar was bigger than the others, but had the same position leaning against the rear wall.[11] The choir was accommodated in a chamber over the porch of the main portal, as we're told by a hitherto unknown visitation report of 1579.[12] This arrangement, widespread among nuns' churches, but rather uncommon for secular clerics, had obviously the purpose to keep the perfect centrality of the church's interior intact. It required a small amount of clerics, as was the case in the early years of the *Incoronata*, with no more than four chaplains doing service. In 1554, however, further donations had already made their number triple.[13] Nevertheless, it took more than 130 years until a choir chapel was added, and likewise housing the high altar with the miraculous image. The new stalls could accommodate fifteen clerics.

Other centrally planned churches were planned from the beginning, with a greater choir chapel in immediate proximity to the main altar. In some octagons such as San Magno in Legnano (started in 1506) one niche was simply enlarged to become a proper chapel: as the arcade opening towards the choir-chancel corresponds exactly to its pendants in the other principal directions, the integrity of the centred main hall remains undisturbed.[14] All the more interesting, is the case of the Madonna dell'Umiltà at Pistoia, begun in 1495 to a plan of Giuliano da Sangallo.[15] The monumental octagon, surrounded by flat niches on six sides and a huge vestibule on the seventh opens towards a square, barrel-vaulted chancel containing stalls for a clergy of no less than 23 members. The main altar housing the miraculous image, is arranged under the connecting arch. It works like a barrier between main space and choir, the latter being a retro-choir, as had become widespread in the course of the fifteenth century. Other than the smaller niches, the arch cuts recklessly into the upper storey, mutilating its pilasters and the large window. There are prominent models of this strange solution, namely the Pantheon and Florence Baptistery, held to be at the time, a rededicated ancient temple. In both cases, the chancel was widely construed as a later addition.[16] Quoting this seemingly inelegant solution, it clearly highlights how Sangallo faced a centred building 'ideal'.

Besides these three ways of dealing with the problem of where to put the high altar in a centrally planned church, there was a wide range of individual solutions. As it is impossible to give a comprehensive view here, I will limit myself to the case of Santa Maria della Sughera at Tolfa, started in 1508 at the expense of the Sienese banker Agostino Chigi and inhabited by Augustinian monks. Initially the church was a small, simple octagon without niches to which a nave was added in 1560.[17] The octagon is divided into a choir and a congregational space by a wall. The main altar, with the tabernacle and the miraculous image, has been set against this wall in a way that, the priest, i.e. the protagonist of the liturgical event, comes to stand in the centre of the octagon rather than the alter.[18] Clearly, this solution was feasible only in a church of small congregations, as it was enlarged significantly only some fifty years after its erection.

The need to be careful as not to overestimate the relevance of the high altar's placing, is shown by a highly interesting source from the construction of Galeazzo Alessi's church of Santa Maria di Carignano in Genua. In 1568, Alessi was asked by his construction supervisor Doggio, where the altar had to go and if the celebrating priest was to face the congregation or turn his back on it. Alessi's succinct answer was that this fell outside his responsibility and that he, Doggio, should ask the priests who had to decide about the mobile things within the church.[19] Obviously, he was not much interested in the question.

II.

To supplement a centrally planned church with an annex for the choir could, however, be a reasonable option only if the latter did not exceed a certain size. If it became as large as the laymen's space or even larger, the idea of a centred structure would be compromised such as not to make much sense any more. This might have been one of the reasons – besides the efficacy of existing building traditions – why greater collegiate and monastery churches were hardly ever conceived centrally in plan. The few exceptions to the rule – half of which remained on paper – may validate what has been contended so far.

The hitherto barely noticed church of San Bernardino at Vicenza was founded in 1451 as the church of a slightly older convent of the Poor Clares.[20] The edifice, built in the gothic idiom, then current in the region, is an octagon with three polygonal chapels and a sixteen-sided clerestory. What is highly uncommon, for a centrally planned church, is that it lacks a vault, a feature certainly to be read as a gesture to conform to the Franciscan ideal of poverty. Behind the sanctuary there is the Nuns' choir, a rectangular space, more or less as long as the laymen's church, and connected to it only by a grilled opening above the high altar that allowed the sisters to attend the Eucharist visually and acoustically. Essentially, this arrangement was widespread among Italian women's

cloisters. Normally, however, two rectangular spaces followed suit.[21] In adopting a centred plan for the layout of the outer church, the anonymous Vicentine architect took advantage of the almost total separation of the two spaces, as it prevented the choir from unbalancing the interior of the centred part. This solution was copied in the church of the Poor Clares, of Santa Chiara at Casalmaggiore, in 1504.[22] Its virtues become clear when compared to the Nuns' church of San Benedetto in Bergamo, designed by Pietro Isabello, and begun in 1504 or 1522.[23] It is a cross-domed building with two portals put at right angles, one in the West, orthogonally to the liturgical axis, the other on the south, accessible via a small cloister. The choir, designated for no less than 27 nuns, is on a gallery upon two columns in the southern arm and continues above the adjacent angular chapels. In this way, the idea of a centrally planned building is largely counteracted, being discernible, as it is, only by glimpsing through the arcades, but not really visible or even dominant.

The only case of a centrally planned church, the construction of which was at least begun is Santa Giustina in Padua. In 1498 the chapter of the important Benedictine monastery approved the project for a new, larger church designed by the monk architect Girolamo da Brescia.The convent's chronicler Giacomo Cavazza described the church in 1606, as an octagon with four 'arms' attached to the orthogonal and two smaller chapels put at angles in each of the diagonal axes.[24] The old tower, the chapel of St. Luke, and the choir constructed in the 1470's were to be retained. Although due to the Procrustean bed, in which the church found itself between these structures, and with the moat of the Paduan fortifications and the monastery with its newly-built cloisters, then any desired enlargement only proved possible by a one-sided amplification, which entailed a shift of the axis towards the North so that it didn't coincide with the choir but more or less with the tower. It must have been a strange ensemble, the construction of which started in 1501 but was stopped following heavy criticism three years later. The centred structure of the building was clearly due to the fact that a longitudinal enlargement was blocked by the adjacent building.[25] When in 1515/16 it became possible to fill in the moat the church was dislocated to the North and planned as a huge basilica.

More difficult to assess is the case of the Carthusian Church of Sant'Andrea, on the Isola della Certosa near Venice. We don't know much about this church as it was destroyed in the 19th century. The only extant sources to inform us about its structure are some exterior views and a plan.[26] Unfortunately, they do not tell us to which degree the laymen's hall, laid out according to the scheme of a cross-domed church, was separated from the adjoining choir of the monks. From the exterior, a break doesn't appear discernible between the two parts of the church.

All the more interesting, are two proposals for centrally planned churches at male monasteries, by Antonio da Sangallo the Younger. For the projected, but never realized reconstruction of San Marco in Florence, he designed a squarely encased octagon with deep niches.[27] In the northern niche, a passage opens towards the choir. As it is no larger than a portal or a side altar, it leaves the centrality of the space undisturbed. The choir itself is interestingly conceived like a theatre *all'antica*, horseshoe-shaped with the apex pointing towards the church. The stalls are disposed along the periphery of the space and face, a proper *scaenae frons,* is decorated with pilasters and niches. The requirement to leave the spatial connection between church and choir as small as possible, allows the choir a particularly effective configuration. Our second example is Santa Maria di Monte Moro outside Montefiascone. The church began in 1524 as an octagon with niches and clerestory, to which a round chancel housing a miraculous image is added.[28] Sangallo himself, is documented as a consultant no earlier than 1538; his extant plans deal with the addition of a monastery to be put upon a slope circa 6,70 metres to the East of the church framing the latter like a pearl in its setting. Antonio developed a number of ideas for integrating the choir; the last and most interesting one is by Uff, in about 1275.[29] His idea was to insert a small rectangular *coretto* into the surging slope, which could be intended for private devotion. Above it, the *coro grande* for the collective liturgy, was to be housed within the monastery complex, conducted around the rear half of the round chancel in the form of a deambulatory. Neither from the inside nor outside would the two choirs upset the equilibrium of the two centred spaces within the church.

Given these sophisticated solutions, it may come as a surprise that during the last third of the sixteenth century, the simple juxtaposition of a centrally planned main space and quite a long chancel-plus-choir, experienced a certain boom, especially within the Reform Order of the Barnabites and within the *oeuvre* of the monch-architects Giovanni Ambrogio Mazenta and Lorenzo Binago. However, as has been shown by Stabenow, the reasons lay less in the wish to create a perfectly centred plan but in the history of the congregation in which two centrally planned churches (Santa Maria di Canepanova at Pavia and Santa Maria di Carignano at Genua) occupied posts of distinction.[30] The Barnabites, then, had no scruples to compromise the centrality of the churches through the planning of long additions for choir and presbytery.

The need for larger choirs was certainly important, but not the only liturgical obstacle, a centrally-planned church could encounter. Others could include the intention to accommodate a certain number of private chapels and the demand to realize a building of greater magnitude. The latter was particularly true with 'monocellular' – or, to put it in Sinding-Larsens terms – 'compactly-centralized' structures:[31] the larger the area of a building to be covered, the larger the technical and financial impact, if this had

to be effected by a single dome. This could be the reason why there was only one cathedral laid out on a central plan during the Renaissance: the one at Montefiascone. As the centre of a relatively young and very small diocese it had to accommodate only a limited number of people; nevertheless, the large octagon started in 1496 suffered a delay in building activity and was not completed before the late seventeenth century.[32]

To sum up: It seems that liturgical reasons could indeed obstruct the decision in favour of a centrally planned church, but they didn't do so principally, but under the particular contingencies and actualities of each single building task.

Endnotes

1. Rudolf Wittkower, "Carlo Rainaldi and the Architecture of the High Baroque in Rome," *Art Bulletin* 19 (1937), 242-313; idem, *Architectural Principles in the Age of Humanism* (London: Tiranti, 1962), 2.

2. Jacob Burckhardt, *Geschichte der Renaissance in Italien* (Stuttgart, ²1878), 91; see also Joseph Braun, *Der christliche Altar in seiner geschichtlichen Entwicklung*, 2 vols. (München, 1924), I, 393.

3. Filarete (Antonio Averlino), *Trattato di architettura*, ed. by Anna Maria Finoli and Liliana Grassi, 2 vols., (Milano: 1972; Trattati di architettura 2), 315. See also Amedeo Belluzzi, "Le chiese a pianta centrale nella trattatistica rinascimentale", in Bruno Adorni (ed.), *La chiesa a pianta centrale. Tempio civico del Rinascimento* (Milano: 2002), 37-47, 41.

4. Francesco di Giorgio Martini, *Trattati di architettura, ingegneria e arte militare*, ed. by Corrado Maltese and Livia Maltese Degrassi, 2 vols. (Milano: 1967; Trattati di architettura 3), II, 408f.

5. Christoph L. Frommel, "Kirche, Kunst und Denkmalpflege: zum Problem des Hochaltars von S. Stefano Rotondo," *Kunstchronik* 40 (1987), 81-98, 94, wrongly claims that Francesco favored explicitly a central position of the altar within a centrally-planned church, a position followed by Jörg Traeger, *Renaissance und Religion. Die Kunst des Glaubens im Zeitalter Raphaels* (München: 1997), 347. For the opposite view see already Jürgen Zänker, *Die Wallfahrtskirche Santa Maria della Consolazione in Todi* (PhD diss. Bonn University, 1971), 61, und Belluzzi 2002 (as note 3), 40.

6. Sebastiano Serlio, *Quinto libro d'architettura di Sabastiano Serlio bolognese, nel quale se tratta de diverse forme de Tempij sacri secondo il costume Christiano, & col modo Antico* (Paris: 1547), passim; Pietro Cataneo, *I quattro primi libri di architettura* (Venezia: 1554), 44r.

7. Frommel 1987 (as note 5).

8. Serlio 1547 (as note 6), 19r.

9. Burckhardt ²1878 (as note 2), 91.

10. On the *Incoronata* see, among others, Rosa Auletta Marrucci, "Il Tempio dell'Incoronata di Lodi", in Eadem (ed.), *L'Incoronata. Il Tempio di Lodi* (Lodi: 1995), 19-137; Elisabetta Susani, "Santa Maria Incoronata a Lodi", in Adorni 2002 (ed., as note 3), 118-129.

11. Ibid., 124.

12. Deinde visitatus fuit chorus, qui constructus est sup(er) porticu [*sic*] portae maioris.' See Niebaum (in press).

13. Paolo Camillo Cernuscolo, *Relatione delle rendite, et obligationi, che tiene la Chiesa della Santissima Incoronata, et Sacro Monte della Città di Lodi, et delle cose notabili dalla loro fondat(io)ne sino all'anno 1642*, Ms. Biblioteca Comunale di Lodi, ad ann. 1488. Am 31. Januar 1554 standen nicht weniger als dreizehn Priester als Kapläne und Sänger auf der Gehaltsliste der zuständigen Scuola dell'Incoronata.

14. For Legnano, see the only and not quite appropriate monograph: Marco Turri, *La Basilica di San Magno a Legnano* (Bergamo: 1974). A plan of the church before the enlargement of 1911-1914 is reproduced in Heinrich Strack, *Central- und Kuppelkirchen der Renaissance in Italien* (Berlin: 1882), Bl. 6.

15. Amedeo Belluzzi, *Giuliano da Sangallo e la chiesa della Madonna dell'Umiltà a Pistoia* (Florenz: 1993; Saggi e documenti di Storia dell'architettura 17).

16. Ibid., 61f. The chancel of San Giovanni has been interpreted as a later addition already by Giovanni Villani: ,al tempo che 'l detto Duomo fu tempio di Marti, non v'era la detta agiunta [...].' Giovanni Villani, *Nuova cronica*, hg. v. Giuseppe Porta, 3 Bde., Parma 1990/91 (Biblioteca di scrittori italiani), I, 90 (II.33); see also Gerhard Straehle, *Die Marstempelthese: Dante, Villani, Boccaccio, Vasari, Borghini. Die Geschichte vom Ursprung der Florentiner Taufkirche in der Literatur des 13. bis 20. Jahrhunderts* (München: 2001), 18 u. 148. Still Vincenzo Borghini refers this as the *opinio comunis* of his time, not shared by himself however. See ibid., 207 m. Anm. 389.

17. Natalina Mannino, "Il Santuario di Santa Maria della Sughera a Tolfa", *Quaderni dell'Istituto di Storia dell'architettura,* n.s. 23 (1993), 19-38; Eadem, *Santa Maria della Sughera a Tolfa. L'architettura di un santuario mariano*, w.p. 1997.

18. The original altar has been dismantled in the meantime. Mannino (1993), 19-38, 22 u. 32, Anm. 38, imprecisely states that the aedicule was erected 'al centro dell'ottagono', a point belied by her own section (ibid., 31, Abb. 18) and by inspection on the spot.

19. In 1568 construction manager Angelo Doggio asked the architect Galeazzo Alessi, ,dove debbe essere il loco dell'altare, e se 'l sacerdote celebrando deve guardare il popolo o vero darli le spalle'. Alessi's answer was succinct: He declared this problem not to be his field and refered Doggio to the 'reverendi', who had to decide over the 'cose mobili' in the church. See Christof Thoenes, "S. Maria di Carignano e la tradizione della chiesa centrale a cinque cupole", in *Galeazzo Alessi e l'architettura del cinquecento* (Genova: 1975), 319-325, 412-417, here 319.

20. See Renata Fochesato (ed.), *Santa Chiara in Vicenza, complesso monumentale e Istituto Palazzolo. Storia e restauro* (Vicenza, 2002); Niebaum (in press).

21. See Caroline A. Bruzelius, "Hearing is Believing: Clarissan Architecture, ca. 1213–1340", *Gesta* 31/2 (1992), 83-91, esp. 87-91, and especially Carola Jäggi, *Frauenklöster im Spätmittelalter. Die Kirchen der Klarissen und Dominikanerinnen im 13. und 14. Jahrhundert* (Petersberg: 2006; Studien zur internationalen Architektur- und Kunstgeschichte 34), 247-252. Further examples are given in Niebaum (in press).

22. *Santa Chiara in Casalmaggiore: un complesso monastico tra storia e futuro* (Cremona: 1987).

23. Luigi Angelini, „L'architetto bergamasco Pietro Isabello e sue opere in Bergamo", in *Saggi di storia dell'architettura in onore del Professor Vincenzo Fasolo* (Roma 1961 = *Quaderni dell'Istituto di storia dell'architettura* 31–48 [1961]), 131-144, ivi 132-134. Mario Locatelli, *Bergamo nei suoi monasteri. Storia e arte nei cenobi benedettini della Diocesi di Bergamo* (Bergamo: 1986), 308-343. Monica Resmini, "L'insediamento dei monasteri femminili a Bergamo nel secondo Quattrocento e la costruzione di San Benedetto", in Renata Salvarani and Giancarlo Andenna (eds.), *La regola e lo spazio. Potere politico e insediamenti cittadini di ordini religiosi* (Brescia: 2004), 237–253.

24. Giacomo Cavazza (Cavacius), *Historiarum coenobii D. Justinae patavinae libri sex* (Venezia: 1606), 257f.; Guido Beltramini, "Architetture di Andrea Moroni per la Congregazione Cassinese: due conventi bresciani e la basilica di Santa Giustina a Padova," *Annali di architettura* 7 (1995), 63-94; Barbara Kilian, *S. Giustina in Padua. Benediktinische Sakralarchitektur zwischen Tradition und Anspruch* (Frankfurt a. M.: u.a. 1997), 104f.; Niebaum (in press)

25. Ibid.

26. John McAndrew, „Sant'Andrea della Certosa," *Art Bulletin* 51 (1969), 15-28.

27. On this project Gustavo Giovannoni, „Progetti sangalleschi per S. Marco di Firenze", in *Atti del I° Congresso* (1938), 231-235, and especially Manfredo Tafuri, *Ricerca del Rinascimento. Principi, città, architetti*, Torino 1992, 189-198. On Uff A 1363 see also Christoph L. Frommel and Nicholas Adams (eds.), *The Architectural Drawings of Antonio da Sangallo the Younger and His Circle*, 3 vols. (London/New York, The Architectural History Foundation: 1994ff.), vol. II (2000).

28. Fabiano T. Fagliari Zeni Buchicchio, „Dal Duomo di Montefiascone a San Giovanni in Val di Lago: architetture rinascimentali e chiese a pianta centrale intorno al Lago di Bolsena," *Bollettino di Studi e Ricerche* 4 (1989), 81-97, 85 and 91, n. 27.

29. Christoph Jobst, in *The Architectural Drawings* II (as note 27), 227.

30. Jörg Stabenow, „La pianta centrale nell'architettura di un ordine religioso: i Barnabiti tra Cinquecento e Seicento", in Francesco Repishti and Giuseppe M. Cagni (eds.), *La pianta centrale nella Controriforma e la chiesa di S. Alessandro in Milano (1602)* (Rome: 2003 = *Barnabiti Studi* 19 [2002]), 133-155; Idem, *Die Architektur der Barnabiten. Raumkonzept und Identität in den Kirchenbauten eines Ordens der Gegenreformation 1600–1630* (München/Berlin: 2011), esp. 125-143.

31. Staale Sinding-Larsen, „Some functional and iconographical aspects of the centralized church in the Italian Renaissance", *Acta ad Archaeologiam et Artium Historiam Pertinentia* 2 (1965), 203-252.

32. Hans Ost, „S. Margherita in Montefiascone: A Centralized Building Plan of the Roman Quattrocento," *Art Bulletin* 52 (1970), 373-389; Fagliari Zeni Buchicchio 1989 (as note 28), 89f.; Idem, "Il soggiorno di Sanmicheli nello stato della chiesa", in *Michele Sanmicheli. Architettura, linguaggio e cultura artistica nel Cinquecento*, (Milano: 1995), 38-53; Giancarlo Breccola, *Santa Margherita. Guida di scoperta* (Montefiascone: 2008).

HIGHBROW AND POPULAR:
LITURGY, DEVOTION AND DESIGN IN SANTINI AICHEL'S NEPOMUK CHURCH IN ZD'ÀR

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INTRODUCTION

It has been widely studied how the renewal of religion, after decennia of religious conflict, has been one of the driving forces behind the architecture of the seventeenth century and, in fact, accounts for its most wondrous projects. Within the peninsular homeland of the Baroque, the call for buildings, that could attract believers and satisfy a revised liturgy of the Church, was stringent in areas such as Bohemia and Moravia, where the fault lines of the European conflicts were the most painfully felt. While liturgy was refocused on Eucharistic devotion and on sermons, building practice had to accommodate mass, communion, and preaching in spaces that deployed the full repertoire of architectural and decorative effects, in order to create a theatre of salvation. I will try to expose some of the driving forces behind what may be regarded as the excessive forms of the Bohemian Baroque in what follows.

After the Catholic victory of the White Mountain, near Prague, in 1620 — so little appreciated by the Czechs even though brought about by Our Lady herself — for Rome, Bohemia became the focus of an ambitious campaign to restore Catholicism, and to turn the turbulent region into — with the words of Cioran — 'une nation enceinte de Dieu'.[1] In Prague Jesuits circles and the episcopate, the idea grew of the city as a New Rome, in the middle of the newly re-conquered lands. A plate in the doctoral thesis of Johann Friedrich von Waldstein, the later Archbishop of Prague, showed the map of Europe with all human figures in their devotion facing Prague, which was described in the text as '… the very centre of Christianity which had earlier been tinted by the blood of martyrs'.[2]

ARCHITECTURE AND RE-CATHOLICISATION

During the decennia following that Catholic victory, the most important patrons were Jesuits and generals who had been generously remunerated and often recently ennobled for their loyalty to the Catholic cause. Both groups opted for a triumphal embracing of the *stile all'italiana*, preferably of the Roman type. Italian architects were invited to Prague and plans were commissioned in Roman studios such as Carlo Fontana's. Count Czernin even sent his secretary to Rome to look for an architect. Although, as his secretary stated in a letter, "(in Rome) they all consider themselves Gianlorenzo Berninis, and wish to be paid accordingly".[3]

Financial considerations led Czernin and many others to decide in favour of the North-Italian immigrant architects in Prague. They also provided the architectural expression of what was a thorough Jesuit takeover of the city: the establishment of the Clementinum, the gigantic Jesuit college in the Old City. In the other part of the city, Malá Strana, the college was sited ostentatiously smack in the middle of the old market square. This arrogant presence, like Jesuit literature, was not taken well by Bohemian intellectuals. The book *Vê^cny pekeln'y ^zalá^r* (The Eternal Prison of Hell),[4] with its sickening illustrations, gave the protestant Bohemian a preview of his destiny in hell. It was branded 'the most horrible of all books' by eighteenth-century Czech men of letters.[5] These words express more than personal disgust: in the seventeenth century, Bohemians still cherished memories of the previous golden age and were hardly at peace with the obscurantism of their epoch. The words though, also illustrate the deep-rooted contrast between Czech culture and the imported Counter-Reformation.[6]

That is why the re-catholicisation of Bohemia alters its appearance in the final decades of the seventeenth century. Rather than making use of the well-oiled centralist and repressive Jesuit administration, more subtle and local weapons became necessary. 'Jamais par la violence on n'entre dans les coeurs', Molière wrote.[7]

SANTINI'S DOMESTICATION OF THE IMPORT BAROQUE

By the time that the Czech architect of Italian origins Johann Santini Aichel started designing his major works at Zd'ár, on the border of Bohemia and Moravia, in the actual Czech Republic, he had become the favourite architect, not only of the Bohemian Cistercians, but also of the Benedictines and Pre-monstratensians. These orders had impressive antecedents in the Bohemian and Moravian lands, going back as far as the tenth century, but during the Counter-reformation they had been marginalized by the newly arrived Jesuits and by foreign, mostly Italian bishops.[8] Yet, by the late seventeenth century, it had become clear to part of the Catholic forces at work in Bohemia that much like re-catholicisation, *manu militari* had proved inadequate. A predominantly

Italian rhetoric in architecture and the arts did not suffice anymore. The abbots of the century-old religious communities with a strong autochthonous base, recognized the opportunity to regain the central role they had once played. Opposing enlightened patriotism to Jesuit imperialism, the Cistercians' and Benedictines' early-eighteenth-century writings and buildings aimed at reconstructing their core historical presence and importance. This recreation of their identity was realised both at a popular and at a scholarly level. Prestigious historical publications and building campaigns complemented refined methods for promoting the resurgence of Catholicism rooted in local traditions, both devotional and architectural.[9]

He had a mixed background, his grandfather originated from the north of Italy, but Santini had also integrated well in Czech society as in the Italian artists' community in Prague.[10] With his hybrid architectural fusions and spatial compositions, which combine Italianate Baroque with Bohemian late-Gothic references and regional traditions, Santini could become a principal actor in this clash of forces within the Roman Catholic camp. As I argued at length elsewhere, from his very first work for the Cistercians — the restoration of the abbey church in Sedlec — he realised the *stile all'italiana* within the Bohemian Gothic architectural traditions, complementing the ideological goals of his abbot patrons.

DESIGNING AND BUILDING THE CHURCH

At Zd'àr, the construction of the church started in 1719 and was part of an extensive building campaign by the Cistercian abbot Václav Vejmluva. His middle class entrepreneurial spirit turned the waning monastery into a well-run company, and into a basis for his artistic and would-be aristocratic aspirations. Therefore, he combined a sense of cultivated patron-ship with the qualities of a manager: he oversaw a large-scale farm, that bought cattle from as far as Switzerland,[11] and controlled various economic activities, such as lodging houses, blast-furnaces, forestry, hunting, and breweries — beer having always been a profitable business in the Czech lands.

Santini's collaboration with Vejmluva spanned nearly his entire career. He started working for the abbot in 1709 and continued to do so until his untimely death, aged 46, 1723. His commissions for the Zd'ár abbey included new monastic buildings, restoration work for the abbey church, a school for young aristocrats with luxurious stables, a grave yard for the monks, a farm in the form of a lyra, various parish churches, and a lodging house on a W-shaped plan(the first letter of the abbot's name in its then spelling), and a first indication of the man's fascination with cryptic meanings and of his fixation on his own name.

Two large coloured drawings, showing plan and façade, document the original project of the church, but hardly any document covers the later stages (Fig. 1).[12] We do know that, once the groundwork was finished, the first stone was laid in 1720, even before the beatification of the patron saint, in 1721. The volume was ready by 1722. The finishing of the interior decoration, and the construction of the highly expressive outer walls of the site, all following Santini's design, were to continue to John of Nepomuk's canonisation in 1729.[13]

The reasons for the establishment of the chapel are clear. In previous years, the Nepomuk cult had successfully expanded in Bohemia, and by 1719 the process of beatification of the medieval martyr had started. Clearly, Vejmluva did not want to miss the chance to identify his abbey with John of Nepomuk, a thirteenth-century Cistercian from the monastery that had once founded the colony in Zd'ár. According to popular belief, Nepomuk had been thrown off the Charles Bridge into the Moldau after he had refused to speak to the reputedly godless King. When the Bohemian demand for canonisation necessitated a miracle, Nepomuk's grave was opened. Rather remarkably, not
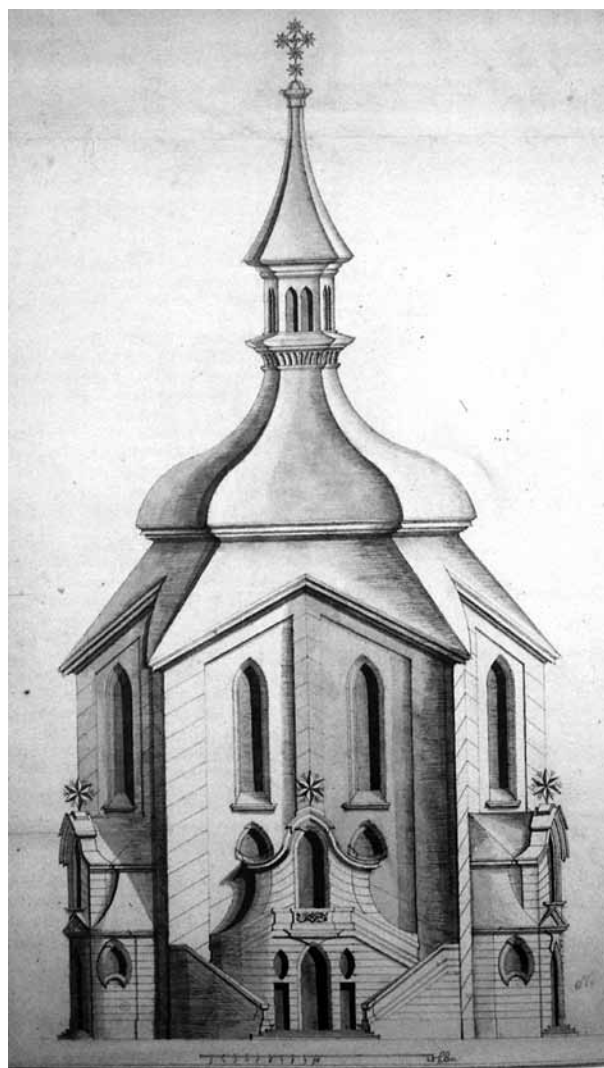
Figure 1. Johann Santini Aichel, Façade of the Church of Saint John of Nepomuk, Zd'ar, 1719. Coloured drawing, pen, ink and pencil on paper. (source: Brno, Moravske Galerie - photograph: Dirk De Meyer)

only his skeleton was found, but also his tongue… imbued with lifeblood and prosperously red. Confronted with the wondrous, illustrated reports of this finding, Rome remained somewhat sceptical, yet, finally, there was good tactical reason to canonize this most popular object of Bohemian folk devotion.

It was most probably the abbot himself to elaborate on the overall shape of the building: a five-pointed star, the Nepomuk symbol par excellence, with five oval volumes embedded between its points. In the interior, one of the five ovals serves as the entrance porch; the five points create four curved triangular chapels and the altar space. A number of eighteenth-century documents indicate that Vejmluva's contribution went further than the usual drafting of an iconographic programme.[14] Tenacious Nepomuk symbolism was to extend even beyond the church walls: a commemorative publication published in 1735, on the occasion of the five-hundredth anniversary of the founding of Zd'ár, mentions that Vejmluva wanted to see the church built 'like a star in the midst of five other stars'".[15]

The church is indeed surrounded by a double undulating wall of which the outer shell has ten sharply protruding corners, which come across as the built equivalent of spear points. Internally, this construction forms a cloister with five chapels on a pentagonal plan and five smaller square chapels, one of which serves as the entrance porch. The pentagonal chapels project the five-pointed plan of the church outward, while the square ones echo the five-lobed structure of the oval chapels and entrance porch. The presence of the protective wall follows the tradition of the *Gnadenburg*, a defensive medieval typology for religious complexes that the frequent changes of religion in the area had kept alive well into the seventeenth century. Although still astonishingly expressive, if not expressionist, the current cloister is a weakened version of the original design, which was severely damaged by fire. This is in particular the case for the hyper-complex roof forms of the chapels: truncated five-sided pyramids on pentagonal bases. They held large five-pointed stars and were crowned with statues and large obelisks. These in turn supported sizable metal structures of three-dimensional six-pointed stars.[16]

AN ABBOT'S EXUBERANT ICONOGRAPHIES

A star as the basis for a ground plan, was not entirely unusual in Bohemia: one of the earliest examples had been the star-shaped Renaissance-style hunting lodge on the White Mountain near Prague — also designed by an amateur, Archduke Ferdinand II. Yet, what makes the star-shape at Zd'ár out of the ordinary is the obsessive resort to the star in every part both of plan and elevation of the building, of its surrounding walls, of structure and decoration. The five-, six-, eight- and ten-pointed stars all have complementary meanings, referring to Nepomuk, Marian and Cistercian iconography.[17]

Apart of the stars, it is the saint's tongue that is most manifest: the believer enters the church over a step-stone in the form of a tongue and, once inside, discovers it manifestly in the summit of the central vault. This presence is elucidated in the consecration sermon of the church, which was pronounced by Jakub Pacher, a priest and friend of Vejmluva's. Its meticulous descriptions make this text an exceptional document of liturgical and emblematic Baroque thinking in Central Europe. The author explains: 'Through the tongue, which did not allow itself to be moved to speak, and, hidden in the mouth, did not reply to the question of the godless king, St. John triumphed', and Pacher also describes the tongue as 'a sharp, two-edged sword, which was not, however, drawn from the scabbard.'[18]

The ogival forms of Santini's gothic-like windows in the gable ends above the access porches appeal to the pious imagination: the window has the same relationship to the gable end as a sword to its scabbard.[19] The principal object of the cult and also the saint's spiritual weapon — the tongue as a heavenly sword — is determinedly monumentalised in the building of the chapel. This is in accordance with the importance which is ascribed to it within Bohemian devotional practice — an exceptional importance, as is evident from Pacher's rhetorical question: 'If the sword of David was brought into the holy place as an eternal memorial, and was kept there as a precious treasure together with the cloak and tunic of the King, amongst the holy objects, how many times more is the same treatment deserved by that secret sword — the most holy tongue of our glorious conqueror, St. John'.[20]

However, the abbot's appetite for symbolisms went even further. In the same sermon Pacher explains: 'I will only point this out: Wejmlvwa contains five Vs. Five Vs and five points symbolize the five rays of a star which, when they are linked together, form a five-pointed star. So in fact his family name itself forms a star.'[21] A figure has also been inserted in the text in order to make this even more obvious: 'VVeimlVVVa' written in a circle forms a five-pointed star. Hence, the overall form of the church is equally an exuberant heraldic fantasy of an abbot who had previously added Nepomuk stars to his own coat of arms.[22]

Even by the standards of the rest of Europe in early eighteenth century, this might have come across as a somewhat outdated pastime. Yet it shows us a glimpse of the world to which these abbots belonged. We need to understand this background in order to grasp fully the meaning of such a building, and of learned Central-European Baroque culture in general — in the last days before its crumbling under Enlightenment rigor. These clerics belonged to the last generation that strived for a major erudite reform through the Christian cabbala, before this enterprise blended into occultism. Their aspiration of a symbolically even

richer and more mystical interpretation of Christianity, using aspects of the Judaic Kabbalah, had been cherished in Europe and especially in the German lands, including Bohemia, throughout the sixteenth and seventeenth centuries by humanists, theologians and natural philosophers such as Johannes Reuchlin, Cornelius Agrippa von Nettesheim and Christian Knorr von Rosenroth. After the exacting repression by the Counter-Reformation, it had revived specifically in circles of Central-European Cistercians. The German translation of John Dee's *Monas Hieroglyphica* of 1680, for instance, had been dedicated to Bernardus Rosa, the Cistercian abbot of nearby Grussau, in Silesia, then under the Bohemian Crown. Vejmluva's interest in the cabbala is supported by the presence of several cabbalistic texts in the monastery library. Research into the monastic archives revealed the peculiar custom among these abbots of sending each other chronostic birthday greetings with cabbalistic symbols.[23] In what seems most like a surprising baroque variant of the poetry of Van Ostayen or Marinetti, the verses are bent into circles, a mitre, a six-pointed star and a five-leaved flower.

In the same consecration sermon quoted previously, Gematria is scarcely restrained. Gematria was the secret teaching of the cabbalists, which interprets numbers as words and words as numbers, and which establishes a relationship between words with identical numerical equivalents. We learn how 'through cabbalistic calculation, the expression *Adornas Weymluwa*' equals 1722, the year of the consecration of the church and of the canonisation of St John of Nepomuk.[24] At various instances Pacher's sermon is pervaded by that number: 'In te (beate NEPOMVCene) speraVI, Vt non ConfVnDar' is a chronogram which yields the number 1722. Elsewhere in the text, the typography of Pacher's exclamation "VIVe DIV wenCesLae wejMLVwa!" is stretched to obtain the blessed number once again.[25]

ELITE ESOTERICISM AND POPULAR BELIEF

On the Green Hill near Zd'ár, looming semiotic indigestion is avoided by means of a tightly restrained composition. Overcharged with iconography and personal ambitions, the final architectural form, however, is a most direct, simple form that appeals not only to small circles of erudite clerics, but also to large sections of the local populace. In order to penetrate to that popular reading of the building — which is, we should not forget, a pilgrimage church — there is at least one given that should not be ignored. Even as late as the eighteenth century, in Bohemia, 'that wondrous land through which you must pass but where you must not tarry, lest you be enchanted, bewitched, doomed',[26] as Apollinaire would write, folk religion was still full of ghosts and magic.

Driving out demons, by, among other things, honouring household-saints, was still a common practice in Bohemia and Moravia.[27] This could be the case because there was a well-defined relationship between these daily practices, devotion, and the Christian cabbala. The function of the cabbala was not only to provide for the highest super-celestial magic, but also to ensure, at all levels, the protection of the celebrant against demons. As Frances Yates wrote, 'it (was) an insurance against demons.'[28]

A Bohemian pilgrim came to visit the church at Zd'ár not merely to honour his beloved saint: he was also seeking protection from him against evil forces. As is mentioned in the sermon, Nepomuk would 'be the enemy of your enemies, and the torturer of your

Figure 2. Interior view of the Church of Saint John of Nepomuk, Zd'ar, 1719-1722. (source: photograph: Dirk De Meyer)

torturers'. We can now grasp a further reason for the peculiar shape of the church. In this religious context, the five-pointed star was perfectly appropriate: the pentagram, originating from druid and magical culture, and perpetuated into Christianity by Christian cabbalists, had stood since time as immemorial protection against evil, bewitching forces.[29] The chapel acts as a giant *Drudenfuß*, or pentacle.

EPILOGUE

Crucial to this building are its multiple layers and possible keys of lecture: Santini's small pilgrimage church at Zd'ár is a formal experiment that originated in local building traditions and in high-brow divertissements; it fused old forms of belief with new liturgical practice. It was intended to captivate both erudite interest and popular imagination. Its design referred to two worlds, two traditions: to the remnants of a medieval, fanciful tradition linked to Gothic and geometrical proportions, as well as to the persuasive, rhetorical post-Tridentine visual culture of Baroque allegory. Both worlds came together in a new ideological context. Something of this kind was able to happen because the status of language had undergone drastic transformations in the previous century (Fig. 2). 'Meaning was not enshrined but manufactured; it was made, remade, and unmade by the competing wills of independent minds who also favoured the vernacular.'[30] The abbots diligently loaded architecture with meanings which reflected both liturgical shifts and zestful erudition, but which above all met their strategic concerns and therefore imply the possibility of a popular reading. The visual culture of this dense network of Catholic devotion, which impregnates the Bohemian landscape with its countless chapels and places of pilgrimage, are tailored to the sophisticated desires of the monastic clerks, but also to the bigotry of the middle and lower middle classes in towns and villages, and to the popular myths of the rural population. The ecstatic sanctuaries of Bohemia are far distant from the metaphysical Renaissance domes under which, according to Wittkower, 'a Barbaro could experience a faint echo of the inaudible music of the spheres':[31] the heavenly harmony is shot through with dissonances and with the Stravinskian rhythms of folk music.[32]

Endnotes

1. E.M. Cioran, *Des larmes et des saints* (1937), in *Oeuvres*, Paris, Gallimard, 1995, 315.

2. Statni knihovna CSR v Praze, thesis sheets, no. 463. (1661)

3. Z. Kalista, *Korrespondence císare Leopolda I s Umprechtem-Janem Cernínem z Chudenic.* Prague, 1936.

4. J. Manni, *Vê^cny pekeln´y ^zalá^r.* Prague, 1701 Czech translation of: J. Manni, *La prigione eterno del'inferno.* Venice, 1673.

5. "...das schrecklichste aller Bücher", J. Dobrovsky, *Geschichte der böhmischen Sprache und Literatur.* Prague, 1791-92. Recent ed.: *Dêjiny ceské reci a literatury.* Prague, 1936, 164.

6. Even for many Bohemian Catholics it was impossible to consider the period after 1620 without seeing in it the unpalatable humiliation of their own nation. To the eighteenth-century Bohemian the previous century was one of obscurantism, after the classicist, humanist sixteenth century, to which the adjective 'golden' had been granted. "Die schlacht am Weisen Berge 1620, lähmt und entkräftet die ganze bömische Nation am Leib und Seel," wrote Dobrovsky; *ibid.,* 160.

7. Molière, *Le dépit amoureux.*

8. For an example of a Jesuit take-over of a crucial part of Prague, see: Dirk De Meyer, *Il ponte Carlo e la controriforma a Praga*, in: Donatella Calabi e Claudia Conforti, (a cura di), *I ponti delle capitali d'Europa; dal Corno d'Oro alla Senna.* Milano, Electa, 2002, 130-141.

9. For a more detailed analysis of the abbots' publications and strategies, see De Meyer 1997, esp., 173-283.

10. Cf. on the Santini family: Dirk De Meyer, *I Santini-Aichel un caso di migrazione di architetti nella Praga barocca*, in: Stefano Della Torre, Tiziano Mannoni, Valeria Pracchi (a cura di), *Magistri d'Europa; eventi, relazioni, strutture della migrazione di artisti e costruttori dai laghi Lombardi.* Como, NodoLibri, 1997, 237-248. And, more in general, on the Italian architects' community in Prague: Dirk De Meyer, *'Patria est ubicumque est bene': les architectes italiens à Prague au XVIIe et au début du XVIIIe siècle*, in: *Les étrangers et la ville.* Paris, Maison des Sciences de l'Homme, 1999, 345-357.

11. Cf. a letter of abbot Tyttl of Plasy, 1725, cit. in Michael Young, *Santini-Aichel's Design for the Convent of the Cistercian Monastery at Plasy in Western Bohemia.* East European Monographs, Boulder / Columbia University Press, New York, 1994, 10.

12. Brno, Moravska Galerie, drawing collection, coll. Grimm, B14 812 and 813.

13. Metodêj Zemek and Antonín Bartusek, *Dêjiny Zd'áru nad Sázavou II/2, 1618-1784* (The history of the city Zd'ár nad Sazavou, vol. II/2; 1618-1784). Brno/ Zd'ár nad Sázavou, Musejní spolek/MêstNV ve Zd'áre, 1970, 345. For a more detailed building history, see: De Meyer 1997, 327 ff.

14. Vejmluva's contemporary, Karl Cern'y, the dean of Caslau, commented on the church in a sermon and described it as the work of the "erfinderischen Scharfsinns", the inventive acumen of Vejmluva. And in 1783, the last abbot of Zd'ár, in a report on his investigations in the since lost monastery archives, confirmed that Vejmluva "worked out, with his own hands, the design for a church in the form of a five-pointed star, which was later erected under the meticulous supervision of the experienced architect Santini." Cf. Otto Steinbach, *Diplomatische Sammlung historischer Merkvürdigkeiten aus dem Archive des graeflichen Cisterzienserstifts Saar in Mähren.* Prag/Wien/Leipzig, 1783, 302.— For Cern´y's preachings, see: Bohumír Lífka, *Minulost a prítomnost knizní kulury ve Zd'áre nad Sázavou.* Brno, 1964, 70.

15. Alberik Rebmann, *Sara Pêt set let stará* (Zd'ár five hundred years old). Litomys^l, Jan Kamenick´y, 1735.

16. No drawings of the wall by Santini have survived, but an engraving and two sketches that date from before the fire of 1784 show the convoluted shapes. It is unclear whether all decorative elements, especially those on the engraving, were permanent. For a detailed description, see: De Meyer 1997, 352-356.

17. For a more detailed discussion, see: De Meyer 1997: 333-344.

18. Jakub Felix Jan Pacher, *Risus Sarae sive gaudia dedicationis ecclesiarum... dedicata*. Brunæ (Brno), 1723. Reprint in: Alois Pichta (ed.), *Slavnostní rec k svêcení kostela sv. Jana Nepomuckého na Zelené hore blíz mêsta Zd'áru dne 27.9.1722; Ze sborníku 'Risus Sarae' z r. 1723 prepsal, upravil, predmluvou a poznámkami opatril Alois Plichta*. Zd'ár nad Sázavou, 1968, 24.

19. Cf. also J. Neumann, *Das ikonografische Programm der Wallfahrtskirche St. Johannes Nepomuk auf dem Grünen Berg*, in *Imagination und Imago. Zum 65. Geburtstag von Kurt Rossacher und zum zehnjährigen Bestandjubiläum des Salzburger Barockmuseums* (red. Netopil en Wagner). Salzburg, Verlag der Salzburger Barockmuseums, 1983, 253.

20. Pacher 1723 [1968]: 32.

21. Pacher 1723 [1968]: 38.

22. Vejmluva seems to have been aligning himself with exquisite Roman Baroque experiments, such as the unbuilt church of Pietro da Cortona in honour of the Chigi Pope Alexander VII in the form of the Chigi *monte paschi*, or some of the artistic production of the Barberini pontificate.

23. The original cards have since been lost, but transcriptions by abbot O. Steinbach survive in: Brno, Archív mêsta Brno (City Archive of Brno), sbírka Mitrovského [Mitrovsky coll.], cf. Bohumír Lífka, *Minulost a prítomnost knizní kulury ve Zd'áre nad Sázavou*. Brno, 1964, 68 and 140, note 109.

24. Pacher 1723 [1968]: 38.

25. *Ibid*.

26. Guillaume Apollinaire, *L'Otmika* (1903), in *L'Hérésiatique et Cie* (1910). Published in: *Oeuvres completes* (M. Décaudin, ed.). Paris, 1965; vol. I, 156. My translation.

27. In an eighteenth-century guidebook, the British author expressed amazement over the fact that these religious practices, which are "normally typical of ignorant simpletons of the lowest order", were here spread across all layers of society. Cf. Moore, *Lettre d'un voyageur anglais*. Fr. ed., 1781, 347-350. My translation.

28. Frances A. Yates, *The Occult Philosophy in the Elizabethan Age*. London, Warburg Institute, 1979. I consulted the French transl.: *La philosophie occulte à l'époque Élisabéthaine*. Paris, Dervy, 1987, 74.

29. In plate III of his *Amphitheatrum Æternæ Sapientiae*, Heinrich Khunrath shows the five-pointed star and adds the following caption: "Behold the SIGNACULUM which vanquishes and makes the enemies flee! The wondrous PENTACULUM of the five hieroglyphs." H. Khunrath, *Amphitheatrum Æternæ Sapientiae*. Hanau, 1609. Cf. Matila C. Ghyka, *Le nombre d'or; rites et rythmes pythagoriciens dans le développement de la civilisation occidentale*. Paris, Gallimard, 1931; vol. :II, 73-74.

30. Giancarlo Maiorino, *The Cornucopian Mind and the Baroque Unity of the Arts*. University Park/London, Pennsylvania State University Press, 1990, 157.

31. Rudolf Wittkower, *Architectural* Principles in the Age of Humanism, in 'Studies of the Warburg Institute', (London) 1949, vol. 16. Revised ed.: London, Academy Ed., 1988, 129.

32. For the reference to Stravinsky, and much more, I am indebted to Gerard van Zeijl.

FORM AND REFORM:
ROMAN CATHOLIC CHURCH ARCHITECTURE IN BRITAIN
AND THE LITURGICAL MOVEMENT BEFORE VATICAN II

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In the decades before the Second Vatican Council, Roman Catholic Church architecture in Britain had begun to manifest the themes then current within the European and American Liturgical Movement discourse, relating to the architectural design of church buildings. In contrast, liturgical forms and rites had not changed significantly in Britain. In this paper, we suggest that liturgical change was not decisive in the transformation of modern church architecture away from traditional norms, but instead that new spatial forms may have informed future liturgical change. Looking at key churches built prior to the inception of Vatican II, we describe how experimental design did not simply prefigure the liturgical changes enacted in the Council, but can be seen as part of a widespread drive by clergy and laity to transform liturgical worship in the Catholic Church.

In contrast to many in France, Germany and the USA, which had developed more overtly experimental agendas, most parishes and dioceses in Britain were content to maintain customary liturgical norms, paying close attention to canon law and liturgical rubrics. Consequently, changes to liturgical practice in the years prior to the Council were small and incrementally realised, reflecting closely developments in canon law, although it should be added that diocesan structures (and therefore attitudes to innovation) varied greatly.[1] Nonetheless, the predominant attitude in Britain was of ultramontanism in worship, tempered by each bishop's vision of Catholicism. In church architecture, a 'compromised' modernity emerged as a negotiated settlement between modern architects and the Roman Catholic Church in Britain at that time. Even if a bishop showed a preference for modern architecture, the adherence to canon law and papal statements often prevented liturgical innovation.

Two different cases exemplify this. In the diocese of Westminster, in the late 1950s, Cardinal Godfrey took great personal interest in new church buildings, endorsing particular architects and commenting on designs. Architects sent their plans to him with trepidation and explanations for any degree of novelty. When the architect Archard proposed a very modest modernising design for St Joseph, Carpendar's Park, he was called to discuss the design in person. He was then compelled to rework the design to satisfy 'our own ideas of what a Catholic place of worship should be'. Justin Alleyn's church of St Raphael, Hayes, was also modified by the Archbishop with the addition of aisles, which the architect had apparently hoped to omit; this building is a typical compromise between a modern style and traditional form.[2] Westminster in the 1950s was a difficult place for radical experimentation.

At the other extreme at this period, was the diocese of Liverpool, where Archbishop Heenan in 1961 approved the radical new Cathedral design by a non-Catholic, Frederick Gibberd. Heenan was a great promoter of modern architecture. The diocese had a Sites and Building Commission since 1947, whose remit included checking all church plans, and from his appointment in 1957 Heenan would attend in person. Architects would go to the committee to explain their proposals. Even in this case, however, it was very hard for architects to have innovations permitted. A design for any building or artwork that was perceived as traditional, or where something similar had been permitted before, would be readily accepted, but if an architect could not appeal to recent precedent, he had to argue convincingly for his ideas. Plans with liturgical innovations therefore required special knowledge and effort to gain approval.

It is revealing, then, to compare two cases where permission was sought to have a Blessed Sacrament chapel, which would house the tabernacle away from the high altar. It seems that in both cases, the reason was to enable Mass to be said, facing the people at some future time when it would be permitted. The first such application was by Weightman & Bullen for their church of St Ambrose in 1958, where it was proposed that the chapel should project from the wall behind the altar. This was refused without explanation and the space was finally used as a lady chapel.[3] Even though the usual purpose of removing the tabernacle was to allow the priest to say Mass facing the people across the altar, the architects' proposal shows the priest in the traditional position.[4] The altar's central position on its platform might suggest that the intention was to allow for a changed orientation later; the fact that the platform itself was at the rear of the sanctuary also suggests that what this orientation might mean for the liturgy, had not yet been thought out in detail.

A similar innovation was proposed by the same architects, as part of a much more radical circular plan for St Mary's, Leyland, in 1960, with a large Blessed Sacrament chapel projecting out at the opposite side to the entrance. This time, rather than dismissing

it altogether, the commission noted that it was not currently allowed, but suggested 'that an Indult or ruling on this matter should be obtained from the Sacred Congregation [of the Vatican] before proceeding further'. Within two months, the Vatican sent special permission and the project was passed (Fig. 1).[5]

What was different here? The answer must be the client. The parish priest was Fr Edmund Fitzsimons, a Benedictine monk. He had been on a tour of modern churches in France, Switzerland and Germany organised by a group of lecturers on church architecture at Birmingham University, and he went to talks organised by the non-denominational New Churches Research Group. He had also written to Benedictines in America, who sent him details of completely centralised circular churches they had already built there.[6] He could therefore draw on a wide knowledge of existing practice beyond Britain, convincing the commission that, though what he wanted broke the rules, it was nevertheless widely accepted. The building was not completed until 1964, when its liturgical innovations were only just gaining wider acceptance in Britain. Fitzsimons had consulted a leading proponent of Liturgical Movement ideas in Britain, Fr J. D. Crichton, who had sent him plans of his own earlier radical church of the Holy Redeemer in Pershore, which we'll see in a moment.

Figure 1. St Mary, Leyland, by Weightman & Bullen, opened 1964. (source: photograph by Robert Proctor)

Significantly, both of these cases were in the diocese of Liverpool, where Archbishop Heenan took a personal interest in modern church architecture. The architects, Weightman & Bullen, and the clients, the parish priests, showed a knowledge of the Liturgical Movement and a reforming desire to modify the conventional space of the Catholic parish church. At St Ambrose, Speke, the principle of 'active participation' endorsed by Pope Pius XII was emphasised in other ways, particularly through its 2.7 metre wide processional aisles intended to allow the whole congregation to participate in processions, such as that on Palm Sunday.[7] At St. Mary's, Leyland, the high altar was placed in the centre of a circular plan, and it was clear that Mass was intended to be said from behind it – not only had the tabernacle been removed, but the candlesticks were designed to be placed on the floor. The first plan for this building was submitted to the diocese in July 1960 – only a month before Frederick Gibberd's almost identical plan for Liverpool Metropolitan Cathedral was chosen, by Heenan in a competition. Yet the liturgy had barely changed by the time it opened: the consecration Mass of 1964 was said entirely in Latin, while a commentator explained the ceremony to the congregation in English.[8] By then Liverpool Metropolitan Cathedral was under construction, and the Vatican had not yet issued its guidelines for implementing the Second Vatican Council's Constitution on the Sacred Liturgy of the year before.

The well-informed priest introducing his architects to new liturgical ideas, appears to have been a common occurrence in the production of new forms of ecclesiastical design. In 1957 at Our Lady of Fatima, Harlow, the parish priest Francis Burgess wanted to say Mass facing the people and to place the tabernacle away from the altar. This proposal was evidently motivated by an understanding of the Liturgical Movement, as he also requested a curtain to conceal the tabernacle during Mass so as to prevent devotion to the Blessed Sacrament and encourage the congregation to pay attention to the liturgy. However, the bishop of Brentwood stopped these plans, citing Pius XII's speech to the Congress on Pastoral Liturgy at Assisi of 1956, on maintaining devotion to the Blessed Sacrament and the tabernacle on the high altar.[9] Despite this setback, the church, designed by Gerard Goalen as early as 1954, followed a T-shape to ensure the congregation were all close to, and therefore in principle engaged with, the sanctuary. There were no side chapels at all on the original plan, suggesting complete focus on the Eucharist. There was a freestanding central altar, and two ambos for reading the Epistle and Gospel in English at a time when this was not normally allowed in Britain. At its opening in 1960, the tabernacle on the altar was kept low and tall candlesticks were placed on the floor so that, though not yet permitted, Mass could be said facing the people in future. Goalen applied the knowledge he gained in this situation to the churches he went on to design in the 1960s. St Gregory in South Ruislip, for example, was the first church in the Westminster diocese to be built for the revised liturgy after Vatican II, designed in 1965, with a parabolic plan centering the congregation on the freestanding altar, the tabernacle placed behind it.

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One of the earliest examples of Liturgical Movement Catholic churches after the war was the church of Holy Redeemer, Pershore, built by J. D. Crichton. Crichton was a major contributor to British awareness of the Liturgical Movement, especially through his involvement in the Society of St Gregory. This society was a national group which promoted Gregorian Chant in the liturgy, and by the 1940s had developed a keen interest in liturgical studies. Its quarterly magazine was renamed *Liturgy* in 1944, and was edited by Crichton from 1952. Crichton was one of the few British representatives at the Pastoral Congress on the Liturgy at Assisi of 1956, where liturgical reformers debated the new ideas. Later Crichton became one of the chief interpreters of Vatican II for Catholics in Britain. In an article for the Society of St Gregory, as early as 1943, he described his 'dream-church' using concepts which later became familiar in Vatican Council documents. He wished to build a circular church, with a U-shaped seating plan so that the congregation, embodying the *ecclesia,* could gather around the altar, a sunken sanctuary, the altar designed for Mass facing the people, and the tabernacle in a separate chapel behind.[10]

In the following decade, Crichton had the opportunity to build a church of his own in his rural parish at Pershore. Bishop Rudderham of Clifton insisted on a traditionally-minded architect, Hugh Bankart, but though the building was architecturally conventional, its liturgical elements embraced reform from the moment of its design in 1957. Altar and font formed the poles of the church; the sunken baptistery also held the church's holy water stoups, as a reminder of baptism at the point of entry. Apparently for the first time in Britain, in a parish church, the tabernacle was placed in a separate chapel, and the altar rails were removable in anticipation of a time in which they were no longer required. The altar stood in the middle of the *predella*, though at first Mass was said in the conventional way. The congregation extended around it, the use of chairs rather than pews giving the possibility of a less formal arrangement. The bishop expressed his dissatisfaction with the layout, but knowing Crichton's committed and intellectual stance on the new liturgical thinking, evidently was not inclined to stand in his way.[11] Because of its priest, this church attracted much attention after Vatican II, with, for example, the first televised broadcast of the new rite of Mass from here in 1969.

One early visitor to this church was the architect, Austin Winkley, who described its innovations in a Catholic newspaper in 1958. He was already aware of the new principles that had directed this building, and admired it as one of the first British churches to apply them in practice. Winkley was too young then to be given a commission, but by the time the Vatican II reforms were under way, he was a more established architect and beginning to find work carrying out church reordering. His influential church of St Margaret at Twickenham of 1966, marked a culmination of post-conciliar thought about parish church design, with a radical parish priest and congregation (Fig. 2). The raked, fan-shaped plan and island sanctuary developed earlier ideas about the new type of liturgical space. The tabernacle was originally proposed to be completely removed from the nave and placed in the weekday chapel, although Heenan, now Archbishop of

Figure 2. St Margaret, Twickenham, by Austin Winkley, opened 1969. (source: photograph by Robert Proctor)

Westminster, demanded it be placed between the two, so as to be visible throughout the church.[12] At Twickenham, the architect deployed an expert knowledge of liturgy and theology alongside the parish and particularly the priest Fr Dommerson, but it was a knowledge he had acquired from exemplary churches such as Pershore before Vatican II. In general, therefore, at least in the spatial arrangement and setting of liturgy, Vatican II evidently acted merely as an approbation of an existing reforming tendency rather than as a reform in itself.

The years before Vatican II, then, saw growing awareness of the Liturgical Movement in its applications to church architecture amongst clergy and architects, pushing at the boundaries of what was considered acceptable by Church hierarchies. The reform of space preceded the reform of liturgy, making the old liturgy before Vatican II seem increasingly out of kilter with the intentions of the architecture that contained it. Architects and their priestly clients in Britain were already designing churches , which, not only embodied within their form some of the anticipated liturgical reforms of the Second Vatican Council, as we can see now, but even instigated and promoted the very idea of reform itself.

Endnotes

1. See for example, Joseph Rykwert, „Passé Récent et Problèmes Actuels de l'Art Sacré", in D. Mathew, I. Evans, J. Fitzsimons and others, *Catholicisme Anglais* (Paris: Éditions du Cerf, 1958), 291-298 (297); and, for a detailed description of liturgical developments in England, J. D. Crichton, „The Liturgical Movement from 1940 to Vatican II", in J. D. Crichton, H. E. Winstone, and J. R. Ainslie (eds.), *English Catholic Worship: Liturgical Renewal in England Since 1900* (London: Geoffrey Chapman, 1979), 60-78.

2. Westminster Diocesan Archives.

3. Liverpool Diocesan Archives.

4. Weightman & Bullen Archives, Liverpool.

5. Liverpool Diocesan Archives.

6. Parish Archives of St Mary, Leyland.

7. *Catholic Building Review: Northern Edition*, 1958, 64.

8. Parish Archives of St Mary, Leyland.

9. Brentwood Diocesan Archives.

10. J. D. Crichton, „A Dream-Church," *Music and Liturgy* (June 1943), 71-5.

11. Archives of the Holy Redeemer parish, Pershore.

12. Parish Archives of St Margaret, Twickenham, London; Austin Winkley, interview with Robert Proctor, London, 8 December 2011.

BENEDICTINE THOUGHT AS A CATALYST FOR 20TH CENTURY LITURGICAL SPACE THE MOTIVATIONS BEHIND DOM HANS VAN DER LAAN'S ASCETIC CHURCH ARCHITECTURE[1]

Caroline Voet & Yves Schoonjans

The act of making contact with space has a universal character and through this unity it can be the principle for a necessary and generally recognised formal language. The power of this principle, despite its material affiliation, is so vital and so eminent that our conceptions can only barely approach it, and this experience to me seams the deepest emotion of beauty.[2]

(Dom Hans, letters to Nico, 21 April and 5 July 1940)

Nowadays, the Dutch architect and monk Dom Hans van der Laan (1904-1991) is known in the architectural scene through his 1977 manifesto 'Architectonic Space', in which he directly intertwines his design philosophy of the 'plastic number' with practical design tools in architecture.[3] Based on this philosophy, he builds four convents, which he sees as specimen or testing grounds.[4] Van der Laan's work is almost always regarded as purely architectonic and mathematical. His plastic number has a life of its own as a proportion system, being tested by architects and mathematicians.[5] This is also true for his biographer Richard Padovan, who in 1994 produces the first comprehensive monograph on Van der Laan.[6] Although the communication between the two - a learning process for Padovan - runs dry when he fails to understand the underlying religious concepts.[7] Nevertheless, when researching Van der Laan's notes and communication, it becomes evident that his Benedictine background and his liturgical ideas are the central driving force behind the formulation of his architectural manifesto. This paper will present liturgy and architecture as intertwined concepts in Van der Laan's thinking, offering another reading of the 'Plastic Number' and 'Architectonic Space', while also opening it towards liturgical space in general and sacredness in architecture.

The main question dominating Van der Laans life is: how can I know things as they are?

His search starts at an early age. Although his first goal is to become an architect, it is to no ones surprise when in 1927, he abandons his architectural studies in Delft, to enter the Catholic Benedictine Sint-Paulus Abbey in Oosterhout. He is brought up in an environment where faith is the driving force behind all actions and meaning of life. Around the kitchen table, his father and his artist friends discuss texts from Dionysius or the book *L' Oraison* by Donna Cecilia Bruyère, the abbess of Solesmes.[8] Van der Laan is intrigued by the way in which they aim to link their art with their faith. Oosterhout, in those days a vibrant young community of 150 monks under Abbot De Puniet, offers him the opportunity to immerse fully in his search for faith and art. Following the rules of Saint-Benedict, all thoughts and actions are centred around the concept of 'ora and labora', a continuous balanced relationship between pray and work. The Benedictine way of life is closely-related to the intertwined relationship between mystery and matter. Nature is regarded as un-orderly, as a part of the mystery that cannot be grasped by our mind. Man honours God with concrete things, actions and words. These elements are defined through a clear order as a rhythmical organisation of the day with seven moments of prayer or the Gregorian chant. There are specific times dedicated to study, manual labour and arts. Van der Laan is initiated in the Benedictine Neo-Thomist tradition and thoroughly studies the writings of Dom Guéranger and Dom Delatte and their commentaries on the old church fathers.[9] Although a Twentieth Century architect, main references for the development of his thoughts are Plato and Aristotle, which Van der Laan studies through the works of Thomas Aquinas. He is mostly interested in the process of cognition, and how they link this to order and proportion. When he is put in charge of the vestment workshop, he sets himself the goal to rationalise the process of creation, the making of concrete things which honour God. He designs and makes numerous liturgical garments, based on traditional Greek and Roman tunics and capes with basic proportions. Soon he is responsible for the sacristy, applying the same method to all the liturgical objects as goblets and chandeliers. Concerning church architecture, Van der Laan is critical about the un-going 'modern' Thomist approach introduced by Maritain and propagated by, for example, Father Hoenen or Father Doodkorte. In 1940, he writes to his brother Nico: 'I don't like the whole orientation of the work. … Don't you believe that Father Hoenen honours that modern power performances too much. These thoughts lead us further from our goal'.[10] He disapproves of the moral emphasis, searching for more universal values. 'Being a monk', he states in the same letter to his brother, 'is as the formal expression of glory. Dom Delatte wants the glory of the earth to be objective, formal and expressed. No subjectivism, no individuality'.[11] It is this objectivism that Van der Laan strives for in his church designs. For him it is the key in expressing the glory of the earth. It is in this way that we have to understand his reflections on the texts of Dom Delatte and the new insights they give him. As he explains to his biographer Richard Padovan, there is a difference between 'the natural spatial phenomenon as it is and the

space as we humans perceive it'.[12] He further explains: 'I separate these two spatial phenomena one from the other and I call the first objective because it concerns everybody, and the other subjective because it concerns myself'.[13] He devotes himself to finding a relationship between this subjective and objective world, analysing the intuitive process of cognition, that interweaves the concrete sensorial perception and the abstracting intellect. Our senses intuitively absorb information from the environment, which is then filtered and abstracted by our ratio. Where the experience in this is subjective, the ratio continuously gives an objective and abstract ground to the things in order to make them understandable. Van der Laan sets himself the goal to dissolve this difference. He aims to bond the surrounding space and the space of our experience. Only then, he believes, we are enabled to experience through our senses the space as it is.[14]

To achieve this bond, Van der Laan starts from the fact that everything is interrelated. The transformation of phenomena, from the sensorial to the abstract ratio is achieved by establishing relationships. Intuitively, we place ourselves in relation with the surrounding and we read our surrounding by relating objects to each other. Relationships are being constructed through comparison and differentiation. When we understand by looking, we intuitively do this by measuring out. Intuitively we estimate sizes by choosing a yardstick as a base for the 'counting' of space. Natural space consists of endlessly continuous quantities. Although, we grasp things through our intellect, we abstract them in discrete quantities or whole, commensurable numbers. Measuring the continuous quantity of spatial dimensions is done through counting. As Gottfired Kruitzer points out, in his 2011 article in Thematismos: 'Measuring becomes counting through pacing out'.[15] In the process of relating oneself to a space, one is constantly rounding off.

According to Van der Laan, all artificial things that are made, our 'human artefacts' as architecture, have an essential task here. He defines the fundamental function of architecture through its direct connection with the process of cognition: architecture has to make space readable, and by this eligible. To 'inhabit' a space [bewonen] is to relate oneself to a space, through 'counting' that space. He describes this as the 'expressiveness' of architecture, as its most essential element. 'Expression serves to open the forms to the intellect'.[16] In liturgy, this relationship, this 'hunger for true knowledge', is directed towards the divine, towards God. Liturgy is there to bond, to enter into a relationship with God. In his last book, 'The Form-Play of Liturgy', he defines three hierarchical worlds of forms: nature, society and liturgy, one crowning the other. For Van der Laan there is a strong resemblance between the three, based on analogy and not through identification.[17] Society and liturgy both originate in nature as created by God. By this, he means that they are 'deformations' of the natural world, made by the human intellect and craftsmanship. In this sense, a church for Van der Laan, is analogous to a house, meaning that it essentially *is* a house. He explains:

'A church is an architectonic space, but without any social destination. It is only a space to be in, to move and speak in, a living space in the most general sense of the word: a space that we naturally need to situate ourselves in natural space and to feel at home'.[18]

A space, a church, becomes a house when one can relate oneself to it, when there is a bond between this space and our experience space. 'A house is the reconciliation of the objective and the subjective space'.[19] It is the task of the artist or architect to define an order in nature so that it can be read and understood. Van der Laan defines this order as the 'embodiment' of the artificial process of counting, of imitating abstract number. As such, in defining Van der Laan's work, it is important to accept a Neo-Platonist undercurrent as being inherently present: proportion is a universal foundation for everything. What is different is the fact that Van der Laan's does not ascribe the expression through the plastic number to 'an imitation of nature' or to 'an imitation of the divine', as is often done with the golden section or *Divine Proportione*. Van der Laan links it to human sensory perception. The process of 'rounding off' is a process of abstraction, guided by ones perception, ones ability to differentiate sizes. Van der Laan empirically defines several margins or limits that interrelate forms: 1:50, 1:4 and 1:7 as minimal and maximum limits.[20] He develops a series of eight measures interrelated by the plastic number 3:4. Designing within the series enables the architect to interrelate all the building parts through whole numbers. This aspiration for a clear reading of a space is mostly true for church architecture, where the bond between the intellect and the senses is analogue to our bond with God.

In 1936, he proposes to alter a barn church in Zierikzee into a basilica, in his opinion the archetypical form of all church types.[21] The classical composition comprises of a high central nave with two lower side aisles, a half round choir apse on the east side and a narthex at the entrance. For Dom Hans, these annex spaces are essential spatial elements. For understanding the whole building, it is essential to grasp through ones experience the primary relationship between solid and void, between mass and space. It is this first experience that gives an orientation of the space to come. He further suggests a stripping away of all ornamentation. Walls need to be left bare and are roughly plastered in white. He designs the altar as a massive stone block, here still situated in the apse. This project is not realised, but from the 1940s onwards, he makes more then 20 alterations of this type, where the altar is situated in the middle of the church. Although it is important to understand that beyond the place of the altar in the liturgy, it is by the architecture in its totality that the churchgoer understands and relates oneself to the divine and to God.

Already from 1939, Van der Laan leads discussion groups, in order to rationalise the process of designing and making. His search

for proportion is often criticized for being very dogmatic and formally rigid. He does not seem to succeed in explaining that his persistency is not on the rigid use of numbers itself, but on the interrelation of those numbers in function of its essential role in understanding the world and the divine. When in 1946, he is asked by Mgr. Baeten, the Bishop of Breda, to lead a course on religious architecture, he is expected to teach about the history of church buildings and liturgy.[22] But to Mgr. Baeten's surprise Van der Laan focusses on investigating the hierarchical relationship between building parts according to the plastic number.[23] After the first lecture, Mgr. Baeten suggests that guidelines for church design should be determined by liturgical requirements and traditions. Van der Laan openly rejects this directive in the introduction of his second lecture:

> It might have surprised you to some extent that last time I immediately expressed my feelings towards Mgr., when his Excellence pointed out that the liturgical regulations are of great importance for the design of our churches. I would not have reacted so promptly if I would not have feared the opinion, that those regulations should equally be laws for the architects. I namely believe that the search for such directives in the liturgy is the consequence of a total lack of insight in the own legislation of architecture. As profane architecture has found refuge for its design in material, technical and practical demands, so the church architecture has thrown itself towards a kind of liturgical suitability (*doelmatigheid*), in which we later will recognize the illusion.[24]

Also his mentor Granpré Molière, protagonist of the Delftse School, is critical about his approach. In a letter Van der Laan defends himself:

> Our human intellect occurs through the senses that receive their impressions through the visible and natural things and especially in this I would aim to find the reason for us working '***ad similitudinem naturalium***' when it concerns creations of art, because we are soul and body, it is necessary for our intellect, that receives its light from the divine intellect, to be 'informed' by the making of things. ... The word *informari* is from Saint Thomas. So for us, the visual things receive a function by the intellectual light to 'inform' our intellect. As such they exceed our intellect, and carry within them the origin of our knowledge to which we want to return through our artificial creations '***ad similitudinem operamur***'.
>
> You do not have to be shocked by such a manner of presentation, but understand that by looking at the things around us, we people, shed a light that comes directly from God. The whole world of sacraments is based on this. ...'[25]

Only after 1960 is Van der Laan able to define his own architectural language, suitable to express his thoughts. His 1953 proposal for the church in Oosterhout is rejected by his own Benedictine community. He is at the same time not accepted in the architectural scene of these days, which he criticizes himself. While church architecture, in the Netherlands at the end of the 1950s, starts to follow the rest of Europe in its search for more modern expressions, Van der Laan still focuses on the basilica type. He scorns Le Corbusier's Ronchamp and he is personally offended when Michel Andrault and André Prat win the 1955 competition for a church in Syracuse, Sicily.[26] Their challenging and monumental cone-shaped building of glass and concrete, stands very far from the modest classical volumes centred around a traditional square, introduced by Van der Laan's pupil Jan de Jong. Finally, in 1957, van der Laan receives the confidence from prior Truijen of the monastery Sint-Benedictusberg of Vaals, only just founded from Oosterhout, to build the crypt and church there, (Fig. 1). Here for the first time he introduces an even more

SPATIAL CELL

Space as a 3dim construct.
Spatial effect.

INTERFERANCE
RESONANCE

Spatial matrix.

Immediacy of the material.
Tangeability.
Shadow and light.

3/4

1   4:3   7:4   7:3   3   4   16:3   7

Plastic number series

Study: Caroline Voet
Original plan: Dom Hans van der Laan Archives, Sint Benedictusberg, Vaals, The Netherlands
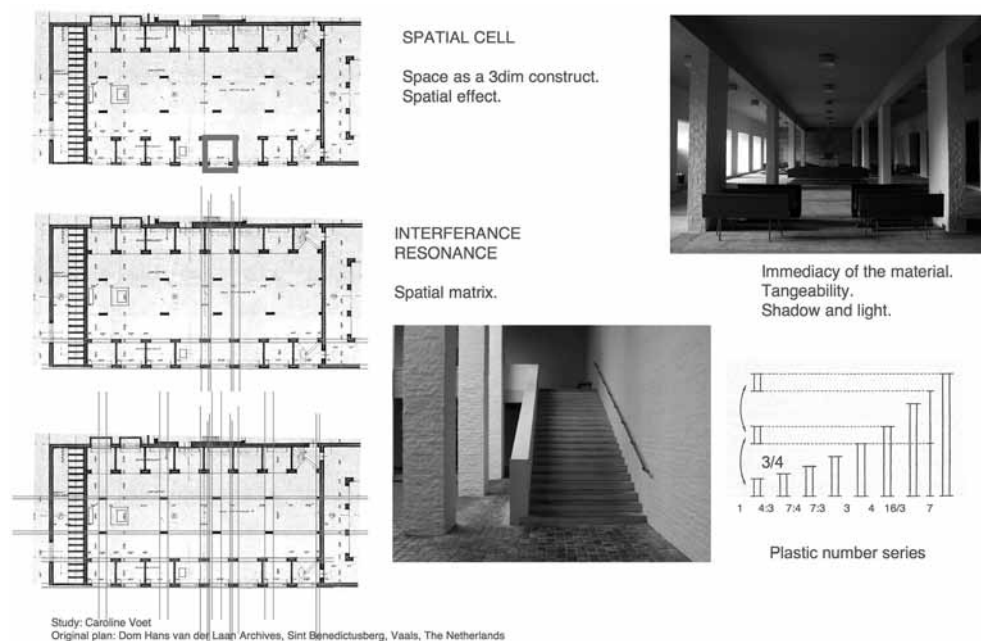
Figure 1. Dom Hans van der Laan, Sint-Benedictus Abbey, crypte (1958-1961) and atrium (1968).

radical ascetic language. It is a minimal space constructed of masonry and concrete heavy walls and repetitive column series. Because of the lack of ornamentation, the building parts are defined by clear lines between mass and void. Windows are squared rhythmical openings with the same dimensions inside and out. The use of simple material finishings, wood, paint or roughcast with plaster in complementary grey colours, enhances the sensorial qualities of the materials, rendering the space extremely tangible. The focus moves from the building material to matter and is enhanced by the light. Because of the articulated series of openings, daylight illuminates the space through different intensities. It creates patterns of its own through a pronounced light/ dark shadow play. Because of the rough finishing of the spaces, the light plays with the effect of the subtle topography of the surfaces, bringing the architecture to life. This church architecture does not rely on religious symbolism for the production of meaning, instead it thrives on a different type of spirituality beyond liturgy through its affective qualities. Here, Dom van der Laan's aim is to create an architecture that induces an immediate sensorial experience, which directly feeds into an intellectual assessment. It allows for the reading of space through the senses. The reading of the space though, is enhanced by a methodology more profound then the materiality of the space, such as its proportion. Already in my article for the 2009 conference in Ourense, I focussed on these tectonic qualities of his architecture: sacred space through a formal focus, but one that draws upon ones physicality or corporeality of space. [27] I referred then to the term 'inherent sacredness', introduced by Rudolf Stegers in 2008, defining a contemporary architecture that focuses on 'emphatic immersion' through materiality and proportion.[28] I did focus then on this spatial *affect*, or emotional effect inflicted by material qualities. It is more the proportion than materiality though, that Van der Laan induces the dynamic spatial effect. It is because of the conscious use of several rhythms that the shift from mass to a spatial matrix is achieved. Nevertheless, he does not have the right vocabulary to express his design methodology in relation to his philosophy. His 1960 publication *Le Nombre Plastique* still focuses a lot on the proportional system itself, and the role it plays informing the human intellect. [29] It does not succeed in interrelating the senses and the ratio.

SUPERPOSITION

Polyrhythmic space defined by several series and their spatial superposition. Effect of simultanity. A space that unfolds as one moves through it.

Generic studies of rhythms and intensities.

One space is always in a relation of overlap with adjacent spaces and the whole.

WHOLENESS

3D study based on Dom Hans van der Laan's plans and measurements on site, Caroline Voet

Figure 2. Dom Hans van der Laan, Roosenberg Abbey of the Mariazusters of Franciscus, Waasmunster, Belgium, 1972-1975.

When in 1965, Nicolas De Wolf (1931-) is appointed Abbot in Vaals, things start to change. Van der Laan has become more and more critical about the newly established Dutch congregation of Benedictine monasteries, Oosterhout, Egmond and Doetinchem, defining them as being too experimental.[30] In 1967, he writes to his sister Sr Lutgarde that '… neither the one who made them, nor those who have to experiment with them know exactly what they are about'.[31] The current ideas in Vaals is very different. Abbot Nicolas de Wolf had been studying theology in Nijmegen. There, only a few years before, professor Schillebeeckx (1914-2009), a student of Chénu and Congar, introduced the *Nouvelle Théologie*, which was not only directed towards the truth itself, but also focussed on human experience.[32] In his courses on dogmatic theology, Schillebeeckx thought about Thomas Aquinas and Thomism, aiming at a reconciliation with the phenomenology of Husserl. Dom de Wolf brought this current idea to Vaals, and motivated the monks to study this interrelation between the world, the intellect and the senses. Van der Laan, spending a lot of time in Vaals because of the construction of the crypt and the church, and was introduced to new ideas. Central source of

inspiration in the *Nouvelle Théologie* are the texts of Maurice Blondel (1861-1949) of which the first is the 1893 thesis *L'Action*. In 1966, Van der Laan writes to his friend Dom Botte:

'At the moment I'm reading an article by Maurice Blondel, that appeared in the magazine 'La Nouvelle Journée' August 1921, called 'Le process de l' intelligence'; It is for the first time that I read something like this. All our architectural work only receives its value against this background.'[33]

When Vaals votes against the Dutch congregation, aiming to remain united with Solesmes, Van der Laan formally requests to be transferred to Vaals. It is only after moving there in 1968, that he encounters the right climate and time to really engage with his philosophy of space. It is the perfect breeding ground for Van der Laan to bring his design system, as is described by professor Vandeputte from Leuven, to the level of a philosophy that unfolds architecture through a phenomenological – genetic discourse.[34] Blondel opens up the doors towards a new understanding of religiosity lying in the order of intentionality and a reality existing within relations. It helps Van der Laan to re-interpret Thomas's concept of '*cogitativa*' or intuitive knowledge.[35] The focus is displaced towards the knowledge of the 'material singular'.[36] Blondel defines the meaning of *l' action* as:

'… One needs to see in it an enlightening source of universal synthesis. Exactly because the difference between notional knowledge, which is a means of analysis, of opposition and individuality, the action implies a complete coincidence, always effective';[37]

Van der Laan transposes this concept to the plastic number, as a mediator between the act of living and the abstracting intellect. The act of living (*wohnen*) is the synthesis, the first ordering of space according to perception. It is anchored in the concrete and singular reality, which cannot be grasped through our intellect, that works through a process of analysis.[38] The plastic number places the analysis within the perspective of the synthesis. Through the plastic number, it is possible to generate an actual concrete reality, which is a relation of relations. It is through this perspective that he incorporates phenomenological concepts. Van der Laan is mostly interested in Bollnow's 1963 book *Mensch und Raum*.[39] Bollnow introduces concepts such as 'the inside in relation to the outside', and different layers of experience fields around a person. Van der Laan adopts these, interweaving these experience fields directly with different interrelated scales of architectonic space. He introduces the concept of nearness, which defines the essential space to mass relationship of 1:7 from the point of view of human perception. It defines a first *cella*, a unit from which the other spaces grow. Not through the relation of juxtaposition, but through relationships of what he calls 'superposition'.[40] His manner of designing also changes. His church-design sketches do not start from a clearly predefined form or proposition. They can be read more as generic studies of rhythms and lines, of intensities. One space is always in a relationship of overlap with adjacent spaces and the whole. This can be experienced fully in his later work, for example the Roosenberg Abbey in Waasmunster (Fig. 2). Here a plan or a wall is built out of several series, each with its own rhythm related to the open/closed relationship and its influence on the neighbouring space. His buildings do not have a classical symmetry. The spatial construction is not instructed by a structural logic. Dom van der Laan's buildings are a three-dimensional matrix of rhythms: a polyrhythmic space defined by several series and their spatial superposition. The result is a dynamic layered architecture that induces an effect of simultaneity and unfolds as one moves through it. The spaces are experienced as a continuous unity, not as a succession of parts. Christopher Alexander refers to this as the experience of 'wholeness'.[41] This wholeness, as an invitation to engage and interact with the whole space and all its layers, is the most important characterization of Van der Laan's architecture.

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14 November, 2009), see: www.arquitecturareligiosa.es (note 23).

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All letters and original texts by Dom Hans van der Laan are courtesy of: Van der Laan Archives, Sint-Benedictusberg (VDLA).

Endnotes

1. This paper is part of the doctoral research 'Spatial Systematic in the work of monk - architect Dom Hans van der Laan', conducted at Sint-Lucas School of Architecture Brussels/Ghent, Belgium & Arenberg Docotral School, Catholic University of Louvain, Belgium. The promoters of the research, supported by the Van der Laan Archives, Benedictusberg Vaals (The Netherlands) and the Van der Laan Stichting (The Netherlands), are Prof. Dr. Yves Schoonjans and Prof. Dr. Luc Verpoest.

2. Dom Hans van der Laan (VDL), letter to Nico, 5 July 1940, copy VDLA, 2: 'De acte, het contact nemen met de ruimte heeft een universeel karakter hen door die eenheid kan het beginsel zijn van een noodzakelijk algemeen te erkennen vormentaal. De kracht van dit beginsel ondanks zijn materiële verwantschap, is zoo vormentaal (?) en eminent dat onze concepties er slechts aan kunnen tippen en de gewaarwording lijkt mij ook de diepste schoonheidsemotie.'

3. VDL, *De Architectonische Ruimte* (Leiden: Brill, 1977). The book is translated in English (by Richard Padovan, 1983), French (by Dom Xavier Botte, 1989), German (by Ulrich Hahn, Anne Tebartz -Van Elst and Kees Van Biesen, 1992) and Italian (by Luigi Filipetto, Sinai Edizioni, Milano, 2000).

4. The four main convents are: Extensions at the Abbey Sint-Benedcitusberg, Vaals, The Netherlands, 1957-1986 (crypt, church, guest wing, atrium, library, gallery), Abbey Roosenberg of the Mariazusters of Franciscus, Waasmunster, Belgium, 1972-1975, Motherhouse of the Mariazusters of Franciscus, Waasmunster centre, Belgium, 1978-1985, Jesu Moder Marias Kloster, Mariavall, Tomelilla, Sweden, 1991-1995 (only first part realized).

5. See for example: Godfried Kruijtzer, *Ruimte en Getal, Het Plastisch Getal en het Gulden Snedegetal* (Amsterdam: Architectura en Natura, 1998), or: A. G Shannon; P. G Anderson; A. F. Horadam, "Properties of Cordonnier, Perrin and Van der Laan numbers", *International Journal of Mathematical Education in Science and Technology* 37 (7) (Oxfordshire: Tayler & Francis, 2006), 825–831, and: A. R., Buitrego, "Los Numeros morficos en secundaria," *Suma+ 57* (Barcelona: Revistasuma, February 2008), 55-64, http://revistasuma.es/IMG/pdf/59/SUMA_59.pdf.

6. Richard Padovan, *Dom Hans van der Laan, Modern Primitive* (Amsterdam: Architectura & Natura, 1994).

7. See for example, Padovan, Richard, letter to Dom Hans van der Laan, 2 January 1984, in which he admits that he does not fully understand the concept of 'objectivity' and hence will focus on the proportion in his dissertation.

8. VDL, letter to his brother Nico van der Laan, 14 March 1983, 7, VDLA.

9. As a reference for Thomas Aquinas, the Benedictines in Oosterhout used: Saint Thomas d' Aquin*, Somme Theologique, La Pensée Humaine*, traduction par Wébert, J. O.P. (Paris: Editions du Cerf, 1930), and: Saint Thomas d' Aquin, *La Vertu*, traduction par Bernard, R. O.P., (Paris: Editions du Cerf, 1953). On the cogitativa, also see: Henri-Dominique Gardeil, *Initiation à la filosofie de Saint Thomas D'Aquin* (Paris: Les Editions du Cerf, 2007).

10. VDL, letter to his brother Nico, 21 April 1940, Van der Laan Archives (VDLA).

11. VDL, letter to his brother Nico, 21 April 1940, VDLA.

12. VDL, letter to Richard Padovan, 2 August 1983, copy VDLA.

13. VDL, Letter to Richard Padovan, 26 October 1983, copy VDLA.

14. VDL, first gathering Studygroup Leiden, September 1939, VDLA.

15. 'Meten wordt tellen door afpassen.' This wonderful quote is taken from Godfried Krujitzer in: Malschaert, Theo en Oldenburger, Juliet, "Interview met Godfried Krujtzer", *Thematismos 8*, (Amsterdam: Van der Laan Stichting, najaar 2011), 33.

16. VDL, letter to Richard Padovan, 2 August 1983, copy VDLA.

17. Richard Padovan, *Dom Hans van der Laan, Modern Primitive* (Amsterdam: Architectura & Natura, 1994), 44.

18. VDL, *Vormenspel der Liturgie*, (Leiden: Brill, 1985), 89.

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21. Church Sint-Willibrord Zierikzee, 1936.

22. Begijnhofkring, 20 meetings in Breda between April 1946 and March 1947.

23. VDL, *De verhouding*. Lezing voor de Werkgroep Kerkelijke Architectuur, 25 mei 1946, VDLA.

24. VDL, Third lecture, 27 April 1946, 1, VDLA.

25. VDL, letter to Professor Granpré Molière, 19 September 1946, Oosterhout, 2, copy VDLA.

26. Sanctuary of the Madonna delle Lacrime (Our Lady of the tears).

27. Caroline Voet, Yves Schoonjans, "Architectonic Space as a contemporary interpretation of connaissance poetique within sacred architecture" (conference

proceedings for the *International Congress of Contemporary Religious Architecture, Between the concept and identity, Communications II,* Ourense, Spain, 12-14 November, 2009), see: www.arquitecturareligiosa.es (note 23).

28. Rudolf Stegers, *Sacred Buildings, a Design Manual* (Basel: Birkhäuser, 2008), 33: '(...) their explorations of space, emancipated from functional requisites, produce forms that operate using religious phenomena (...) Extreme materiality in solid, heavy, opaque tectonic objects on the one hand, or extreme immateriality as loose, light, lucid, spheroid objects on the other: both with the intend of emphatic immersion rather then distanced reception, for engaging with rather than comprehending.' He refers to spatial artists whose work is attributed to Minimal Art, Arte Povera an Land Art, but also to the quasi-sacral museums by for example Peter Märkli (La Congiunta Museum and Foundation in Giornico, Switzerland, 1992) or Tadao Ando (Langen Foundation Museum near to Insel Hombroich, Germany, 2004). I also refer to the more recent museums of Sanaa (New Museum of Contemporary Art, New York, 2007) or Peter Zumthor (Archdiocese Museum, Cologne, Germany, 2007).

29. VDL, *Le nombre plastique, Quinze leçons sur l'ordonnance architectonique* (Leiden: Brill, 1960).

30. Michel Remery, *Mistery and Matter. On the relationship between liturgy and architecture in the thought of Dom Hans van der Laan OSB* (Leiden: Brill, 2010), 105.

31. VDL, letter to his sister Sr Lutgarde van der Laan, 23 April 1967, VDLA.

32. Schillebeeckx, *Op zoek naar een levende God*, Inaugural Speech, Nijmegen, 1959

33. VDL, letter to Dom Botte from Zevenkerken, 25 January 1966, VDLA: 'Je lis maintenant un article de Maurice Blondel, qui a paru dans la revue 'la journée nouvelle' en aôut 1921 intitulé 'Le procès de l'Intéligence'. C'est pour la première fois que je lis quelque chose pareil. Tout notre travail d'architecture ne prend sa valeur que contre tel background.'

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36. see for example: George P. Klubertanz S. J., "Der Hl. Thomas und Die Erkenntnis der Einzeldinge,", in Klaus Bernath, *Wege der Forschung,* Band 538: Thomas von Aquin II, Philosophische Fragen, (Darmstadt: Wissenschaftliche Buchgesellschaft, 1981), 42-74.

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37. Blondel, Maurice, Le Procès de l'intelligence, Bloud et Gay, Paris, 1922, p254 (a volume uniting several studies published in La Nouvelle Journée between August 1920 and August 1921. Quote partly underlined by Dom Hans van der Laan: 'Il faut y voir une source éclairante de synthèse universelle. Précisément parce qu'à la difference de la connaissance notionelle qui est un moyen d'analyse, d'opposition et d'individualisme, l'action implique un concours total et toujours effectif.'

38. based on a conversation with Anton van Hooff, 13 July 2011, Aachen, see also: Hooff, Anton van*, Over wonen en meten, ontwerpen als menselijke handeling*, lecture at the Van der Laan dag, Boxtel, January 2011.

39. Otto Friedrich Bollnow, *Mensch und Raum* (Stuttgart: W. Kohlhammer GmbH, 1963). Van der Laan explains this in a letter to Richard Padovan, 26 October 1983. He would have received the book in 1966 from Granpré Molière.

40. To find more information on the practical application of the design method, see: Caroline Voet, "The poetics of order. Dom Hans van der Laans Architectonic Space", *Architectural Research Quarterly* (Cambridge: Cambridge University Press), accepted.

41. Christopher Alexander, *The Nature of Order: An Essay on the Art of Building and The Nature of the Universe* (Berkeley, CA: The Center for Environmental Structure, 2004), Vol. I.

REDISCOVERING ARCHITECTURE'S ROLE
IN THE PROCLAMATION OF SACRED SCRIPTURES

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Profound reverence of scripture is an integral part of Christian religious life. The act of reading sacred texts has always required an appointed place, which has come to be considered sacred as well. These places constructed within the worship space — *ambo*, *pyrgus*, *pulpit*, and *lectern*, have attained powerful significance over the past two millennia. In the twentieth century, as new scholarship led the reform of worship rituals within the Roman Catholic Church — with active participation of the people requiring a new design for liturgical spaces — the rite of reading sacred texts and the role of the ambo enjoyed a short-lived resurgence. Liturgical reforms formulated by Vatican II established the ambo as one of the two main focal points of the sanctuary, the other being the altar.

While the altar has been thoroughly explored, in terms of its architectural, liturgical, and mystagogical significance since Vatican II, the ambo, despite an initial burst of interest, has never received the attention it is due. Contrary to the desire expressed at the Council to revive the central role of scripture in the life of the Church, the rite of reading sacred texts and the design of the ambo have now entered a period of decline. It is remarkable that liturgists in all Christian traditions have overlooked this development. This omission reflects a lack of awareness of the significance and meaning of a deeply rooted rite and its place within a church's worship space. The chief purpose of this paper is to examine the *genius loci* of the word of God in the Liturgy of the Word and consider the important role of the ambo in facilitating public proclamation. Throughout history, public proclamation has been a profound and recurring event with a definite spatial dimension, often occurring in a privileged place, which helps to bring God's presence to his people.

ORIGINS AND DEVELOPMENT

Since Apostolic times, the Liturgy of the Word and the Liturgy of the Eucharist have been regarded as a single celebration.[1] No liturgy was without the reading of the sacred scriptures. In ancient times, the assembled people of God, was the privileged place for the proclamation of his Word, and Christians have faithfully carried on this tradition as an essential part of their liturgies. The Church Fathers consistently emphasized the importance of scripture and the early Church gave the Word of God a prominent place within their worship spaces. The architectural solution was to elevate this place above all, in order that the Word could be carried to all parts of the church building. It was because of this elevation that the place itself acquired the name 'ambo', from the Greek verb *amboien,* which means, "to mount up." R. Kevin Seasoltz reminds us that, 'The admonition which the bishop addresses to candidates for the lectorate also alludes to the fact that the Word should be proclaimed from a high place, so that it may be heard by all.'[2] Notwithstanding this acoustical reason, the importance of the Word has always emphasized the dignity of the ministers who proclaim the Word of God, and the place from which they do so.

The locations of the ambo and its adopted forms have varied over the course of the Church's history. It was after the first millennium that two ambos appeared. The *Ordo Romanus II* instructs the sub-deacon to read the epistle from the ambo, but not from the highest step when there is only one ambo, as this is reserved for the Gospel proclamation. From the twelfth century, it was common for large churches to keep one ambo for the gospel reading only, and the other for the epistle.[3]

In the Middle Ages, with the enclosure of the choir, a monumental structure, the *jubé,* was developed. It was a place elevated well overhead. From there, the epistle and the gospel were read.[4] It was also during this era that the pulpit was developed, a large and often imposing structure located in the middle of the nave for preaching. This new element brought on the decline of the ambo. It was the liturgical renewal movement that began in the late nineteenth century, combined with Vatican II, that provided meaningful criteria for the construction and use of ambos.

The new liturgical reform was challenged by the reality that traditional patterns of worship are difficult to break. Beginning with Dom Prosper Guéranger's re-founding of the Abbey of Solesmes in 1837, and culminating in the work and promulgations of the Second Vatican Council in 1965, there was a period of intense study of liturgy aimed at faithful reform of existing practice. The central concept of the liturgical reform movement was that of the liturgy as the communal celebration of the church's sacraments. With the Vatican II came a new Christian architecture, and a rebirth of art for the liturgy. The council outlined the

new worship space within the more complex task of finding the true meaning of the liturgy. The challenge for architects, together with liturgists, was to design a space that aided the participation of the congregation in the liturgy, so as to form a true *ecclesia*, or gathering of the faithful community (as opposed to an atomized congregation of individuals at prayer). This required uncovering the origins of Christian worship, so as to give people an experience of its power. It also initiated the search for a new church design template.

One area in urgent need of attention was the Liturgy of the Word. Various factors weakened its place in church worship from the second millennium up to the last century. Many liturgists agree that the rite and, the place of the Word generally, had fallen into a state of shameful neglect.

> The place of the Word in the church and in prayer has been an object of embarrassing concealment: hidden away in a marginal space and veiled by a proclamation reserved and incomprehensible. The eclipse of the ambo, which is configured in this manner, has left the field open for hegemony of the pulpit, in which the internal drama of the Word was absorbed by an urgent need for a clear explanation.[5]

To be in tune with this complex re-invigoration, it was necessary to carry out an effective revival of the liturgical drama of the Word and push to restore its place in the celebration of the Mass. Among the first and simplest reforms was the celebrants facing the congregation when reading scripture.[6] The use of vernacular language made the message that God speaks accessible to all — not only to Latin-trained clergy. The theological argument proposed that recovering the sacramentality of the Word of God is the strongest way to relocate it within worship actions. Louis-Marie Chauvet says, 'each time the assembly in church proclaims and hears the Scriptures as being his very word, it is his spokesperson, his representative, therefore his sacrament.'[7] The Word of Scripture, when it is proclaimed in the liturgical celebrations, is one of the mysterious ways the real presence of God exists among his people.[8] This reminder of the dignity of the word of God called for a place of proclamation in the church which favours the proclamation of His Word. The reappearance of the ambo facilitates a rediscovery of the centrality of scripture to the building up of Christian life.[9]

THE EXPERIENCE OF THE PLACE

Reading sacred texts in the Jewish tradition was, and is still, an action that involves the whole body, in a way where the reader expresses in movements the rhythm of the text. In the same fashion, the ritual action of the Liturgy of the Word has a particular dynamic that delivers a multi-sensory experience to its participants. If that moment brings remembrances of the past, and an emotional-religious significance brought by the body and the voice of the lector, then it acquires a symbolic character: the voice of God. The ambo enters into that liturgical event in order to enhance the presence and the power of the individual who has the role of embodying the word. From a phenomenological perspective, the ambo should relate to what happens in a given space; it necessitates liturgical action.

Pamela Klassen says, 'ritual spaces are "a focusing lens" and ritual is a "controlled environment" in which the powerful uncontrollability of everyday life is acknowledged by the attempt to control it via performed actions.'[10] During the Liturgy of the Word, the ambo becomes the focus while the general direction of the overall event is maintained throughout the whole of its enacting. The ambo is not an artefact, but the locus of an event. Therefore, the important question is: How then can the ambo be transformed in our understanding from passive church furniture to something that is regarded as a centre of activity, a source of the inspiration, and key to engaging today's worshippers in a hermeneutical response? The answer is only through the liturgical experience because its symbols not only direct us to meanings, but can also make present the very experience that is symbolized. The symbolic action that we find in the Liturgy of the Word, when the lector proclaims from the ambo, is the coincidence of the sensible act of reading-listening and the non-sensible act of manifesting the sacramental presence of Christ. This experience of discovering, uncovering, and revealing indicates that there is more than one meaning to be experienced in the liturgy, and therein lies the mystery that forces us to recognize it.

THE SIGNIFICANCE OF THE PLACE

After centuries of neglect, with the promulgation of the Constitution on the Sacred Liturgy in 1963, the understandable proclamation of Sacred Scriptures is regaining its place as a living and life-giving component in all the Church's rites. The Council returned to the principal of no liturgical action without the Word as part of it.[11] The ambo has been restored as the table of God's Word.[12] The work of the *Concilium*,[13] the first instruction *Inter oecumenici*, and the *Novus ordo* pointed to a complete renewal of the liturgy with a strong emphasis on the Liturgy of the Word as well as the Eucharist.[14] However, it is not clear whether this ensures the recuperation of the status of the ambo as a historically rooted element of church design and liturgical practice. In the way it is described, it seems to be a new structure, disconnected from the tradition of the Church. A great deal of attention is paid to the altar and its removal from the back of churches, but little consideration is given to the ambo, thereby

making it an afterthought that poses a creative problem, rather than a possibility for innovative expression of the church's tradition. The positive aspects of these first norms were that its unique dignity was reinforced by directives that indicated that there ought to be only one such structure in the sanctuary,[15] and that it should be elevated and fixed, designed so as to indicate that it is one of two tables.[16] Theological notes indicate that the proclamation of the Word from a single ambo is a metaphor for the one Word of God in which Christ is present and continues his ministry of salvation, sanctifying worshipers,[17] and embodying the unity of the witness of scripture. A criticism that could be levelled at the process of developing these norms is that they fail to consider the phenomenological aspects of the ambo, its potential as a work of sacred art, and its symbolic content.

From a liturgical-theological perspective, post-Vatican II documents confirm that the proclamation of the Word and its place, having its own dignity and uniqueness, is independent of the celebration of Eucharist. The stress is, therefore, upon its being a place of liturgical action and not on its being furnishing.[18] This is, in part, confirmed in the *Ordo of Dedication*,[19] since the principal part of the rite for dedicating the ambo is the first proclamation of the Word of God from it.[20] It is surprising that there are no rubrics to indicate that the ambo is signed with the cross, sprinkled with holy water, or incensed. It is only the proclamation of the Word of God that dedicates and blesses the ambo, but it is never clearly expressed to the assembly in the prayers of the ordo.

Post-Vatican II ideas concerning the ambo can be summarized by saying that the ambo is not simply a place to keep the scriptures; it is a place to proclaim the Word of God. It is related to the altar in that it shares the sanctuary area. (Fig. 1)

Only some Episcopal conferences demonstrate a progression in their theological and hermeneutical insights, as well as discussing practical considerations—updated to fit with realities that were never taken into account before, such as having sound equipment and providing accessibility to all. The bishops of France issued the first document, and it expresses not only the spirit of the Vatican II, but has considerations of the psychology of worship and an appreciation of modern architecture.[21] Also, one can see the influence of the Paris diocesan commission on sacred art, with its series of publications on ambos built during the last decade.[22] The Irish document published a year later was much more focused on the ambo, and is noteworthy in its consideration of the ambo's phenomenological significance and the different scenarios it envisions for carrying out the Liturgy of the Word. A small 1966 publication was greatly enlarged into a pastoral directory issued in 1972. A third edition was published in 1994.[23] Nevertheless, it is remarkable that few ambos in Ireland can be considered good examples of this new thinking.

After these first two documents there is a gap of 20 years in which most of the churches built were guided in their design by the General Instruction of the Roman Missal alone, leaving full creativity (or lack of) in the hands of the liturgical commissions in charge of approving church building projects. Although Germany has had several of the most influential figures in liturgy with Romano Guardini, and in liturgical architecture with Rudolf Schwarz, the first norms only came out in 1988.[24] Nevertheless, their influence has not been negligible. The norms are full of remarkable insights. It is the first and only document where the ambo is included in the list of objects of art, requiring that it be an expression of the liturgical action. The influence of these norms can clearly be seen in the ambos of new German churches.[25]

Figure 1. *Chapel Cardinal Flannigan Basilian Centre*. Toronto, Canada (ca. 1985). Architects: Rambusch Co.

Figure 2. Ambo. *Chiesa di Padre Pio*, San Giovanni Rotondo, Italy (2004). Artist: Giuliano Vangi.

Despite being so close to the Vatican, it took 400 years for the Italian bishops to write new norms.[26] Nevertheless, the new norms (created almost 30 years after the Vatican II) have had a positive influence upon liturgists, architects, designers, and artists.[27] Resulting in the most expressive ambos being found in Italy. (Fig. 2) The impetus given by the diocese of Rome's celebration of the end of the second millennium prompted the construction of 60 new churches in Rome, and in these new buildings the results of the new norms are well demonstrated.[28]

The North American norms—a document theologically and liturgically well grounded, has had a strong influence across the whole of the United States.[29] It has incorporated all the new reflections on phenomenology and architecture. Nevertheless, the area dedicated to the ambo does not provide any exceptional insight. There are no outstanding examples of ambos in United States as works of art. However, the merit of American church architecture can be found in the experimentation in the placement of ambos within liturgical space.[30]

The last norms analyzed in this study were those issued by the Catholic Bishops' Conference of England and Wales in 2006.[31] They are the first norms that clearly place the ambo in the same category as the altar, following the lead of *Sacrosanctum Concilium*. It is the most complete document related to the ambo and covers many of the aspects discussed in this paper. The influence of this document, being so recent, cannot yet be evaluated.[32]

These new Episcopal standards take into account the space required for the ritual actions around the proclamation of the Word, such as processions, incensing, and recognize that place and event are bound together intrinsically. These norms have also reinforced the idea that the ambo must only be used for the reading or singing of scripture, the homily and intercessions. The cantor, song leader, commentator, and reader of announcements should not use the ambo.

The documents of the Church after Vatican II show a true reverence for the ambo. They clearly express the idea that it is from the ambo that the Christian assembly receives spiritual nourishment from Christ through his Word. The importance of its location, design, and its dignity, arises from it being a place of encounter. The faithful establish such a relationship with the ambo from which they hear the scriptures as God speaking to each one of them.

CONCLUDING THOUGHT

Liturgical-architectural configurations are intended to encourage worshipers into active participation rather than limit their role in the liturgy. The architectonic arrangement of the ambo should enhance the understanding of the liturgical event. I am convinced that the ambo as venue, regardless of contemporaneous liturgical evidence, may reveal to us a significant understanding relevant to liturgical theology, devotional practices and liturgical design — much more so than historical studies have done. The ambo is a standard element in our churches deriving from long tradition and is often perceived as a vestigial furnishing when it is not. The ambo is designed as a ritual-architectural 'stage' for the reiteration and re-enactment (commemoration) of the sacred drama of Christ's life, passion, and resurrection. For all sacred ritual there is a sacred space. From early times, churches were built to enact liturgical rites. The ambo provides a perfect stage setting for the Liturgy of the Word.

Endnotes

1. Josef A. Jungmann, *The Mass of the Roman Rite: Its origins and Development*, trans. F.A. Brunner, vol. I (New York, NY: Benziger Brothers, 1951), 391-393.

2. R. Kevin Seasoltz, *The House of God: Sacred Art and Church Architecture* (New York, NY: Herder and Herder, 1963), 190.

3. One ambo for the gospel reading, and other for the epistle can be found in the Basilica of *San Lorenzo fuori le mura* and in the Basilica of *San Clemente*, both in Rome.

4. One of the most exquisite examples is the *jubé* of *Saint-Etienne-du-Mont* in Paris.

5. 'Il posto occupato dalla Parola nella chiesa nella preghiera è stato oggetto di un imbarazzante occultamento: nascosta in lontani recessi spaziali e velata da una proclamazione riservata e incomprensibile. L'eclissi dell'ambone che si è in questo modo configurata ha lasciato campo libero a un'egemonia del pulpito, nella quale l'interna drammatica della Parola era per così dire assorbita da un'imperiosa necessità didascalia.' [My translation] Giuliano Zanchi, „L'ambone nella drammaturgia liturgica: Elementi di teologia e criteri di estetica," in Goffredo Boselli (ed.), *L'Ambone: Tavola della parola di Dio* (Magnano: Edizioni Qiqajon, 2006), 203.

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7. Louis Marie Chauvet, *The Sacraments: The Word of God at the Mercy of the Body*, trans. Madeleine Beaumont (Collegeville, MN: Liturgical Press, 2001), 25.

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9. Giuliano Zanchi, *La forma della chiesa* (Magnano: Edizioni Qiqajon, 2005), 71.

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11. Annibale Bugnini, *The Reform of the Liturgy, 1948-1975* (Collegeville, MN: Liturgical Press, 1990), 46.

12. Catholic Church, *Book of Blessings: for Study and Comment by the Bishops and the Member and Associate-Member Conferences of the International Commission on English in the Liturgy* (Washington, DC: International Commission on English in the Liturgy, 1987), no. 1181.

13. The *Concilium* was a series of commissions guided by a group of *periti* and other advisors established by Pope Paul VI.

14. Two literal tables: altar-table and altar-ambo were designed by Waldemar Kuhn in 1966 for the *Heilig-Geist Kirche* in Emmerich, Germany. He brought this idea to the limits.

15. Catholic Church and International Committee on English in the Liturgy, *General Instruction of the Roman Missal*, no. 309.

16. Catholic Church., *Lectionary of the Roman Missal* (Collegeville, Minn.: Liturgical Press, 1965), no. 10, 32.

17. Ibid., no. 4.

18. Such as the ambo designed by Mauro Galantino for the Church of *Gesú Redentore* in Modena, Italy (2008).

19. Congregation for the Sacraments and Divine Worship, „Ordo dedicationis ecclesiae et altaris," in *The Rites of the Catholic Church*, ed. International

Committee on English in the Liturgy. (Collegeville, MN: Pueblo Pub. Co., 1991), no. 53.

20. The altar is given a stronger symbolic presence with its anointing.

21. Commission Episcopale Française de Liturgie, „Le renouveau liturgique et la disposition des églises.", Centre National de Pastorale Liturgique, (1965). http://www.ceremoniaire.net/pastorale1950/docs/disposition1965.html (accessed May 1, 2009).

22. Commission diocésaine d'Art Sacré de Paris, „Création d'un nouvel ambon," (2005). http://catholique-paris.cef.fr/655-Creation-d-un-nouvel-ambon.html (accessed 11/10/08). It is worthwhile to mention the ambo of *Saint-Pierre de Montmartre* in Paris designed in 2005 by J.P. Froidevaux, and the one at the *Saint-Étienne de Metz* by Mattia Bonetti in 2006.

23. Irish Episcopal Commission for Liturgy, *The Place of Worship: Pastoral Directory on the Building and Reordering of Churches*, 3rd ed. (Dublin, Ireland: Veritas Books; Carlow Irish Institute of Pastoral Liturgy 1994).

24. Deutsche Bischofskonferenz and Liturgische Kommission, *Leitlinien für den Bau und die Ausgestaltung von gottesdienstlichen Räumen Handreichung der Liturgiekommission der Deutschen Bischofskonferenz; 25. Oktober 1988* (Bonn: Sekretariat der Deushchen Bischofskonferenz, 1994).

25. A good example can be found at the *Jesuitenkirche* in Mannheim, Germany (2003).

26. I am referring to the *Instructionum fabricae et supellectilis ecclesiasticae* by Cardinal Charles Borromeo. His contributions are of great interest because he composed norms for church buildings and their furniture in 1577. These norms were universally accepted in the Roman Catholic Church and were an anticipation of the different episcopal norms regarding church buildings in the twentieth century.

27. Chiesa Cattolica Italiana. Commissione Episcopale per la Liturgia. CEI, „La progettazione di nuove chiese", Conferenza Episcopale Italiana, (1993). http://www.segni-del-9cento.it/UploadFiles/ADEGUAM31_05_96.doc (accessed April 1, 2006)

28. Chiesa Cattolica Italiana. Commissione Episcopale per la Liturgia. CEI, „L'adeguamento delle chiese secondo la riforma liturgica", Conferenza Episcopale Italiana, (1996). http://www.intratext.com/X/ITA0027.HTM (accessed April 1, 2006)

29. United States Conference of Catholic Bishops, „Built of Living Stones: Art, Architecture, and Worship", United States Catholic Conference, (2000). http://www.usccb.org/liturgy/livingstonesind.shtml (accessed April 1, 2006)

30. Cf. Christ the Light, Roman Catholic Cathedral, Oakland, United States (2008). Architects: Skidmore, Owings and Merrills Craig Hartman.

31. Catholic Bishops' Conference of England and Wales, *Consecrated for Worship: A Directory on Church Building* (London, UK: The Catholic Truth Society and Colloquium, 2006).

32. Previous to this document is the remarkable work done at the Brentwood Cathedral in Essex, England by the architect Quinlan Terry.

Clerical Ties:

Architectural Networks and Networking in the Colonial Mission Field, 1500-1960

SESSION CHAIR:

Alex Bremner (University of Edinburgh, U.K.)

The first EAHN International Meeting in Guimarães (2010) hosted a Roundtable session entitled "Setting a Research Agenda for Colonial Architecture and Urban Planning: Current and Emerging Themes and Tools." One of the key points to emerge from this session was the need to investigate further notions of agency and networking in relation to architectural production in European empires. It was acknowledged that the tendency of post-colonial theory had been to homogenise and/or essentialise the "coloniser," leaving little if any indication of the precise motivations, agendas, and allegiances (even nationalities) of those involved in the European colonial project. However, there were many different and oftentimes conflicting agencies bound up in the imperial enterprise, including missionaries, merchants, soldiers, administrators, educators, and explorers. Although these agencies had overlapping interests, they did not necessarily view empire or colonisation in the same way. This often led to conflict and division within the colonising power itself. A more complex and nuanced understanding of these agencies (and actors) vis-à-vis architecture is now required.

Among the more prominent if understudied of these agencies was Christianity in the guise of missionaries. Operating at what was considered to be the frontier of European civilisation, missionaries worked to transform the non-European world in very specific and identifiable ways. Architecture was nearly always instrumental in this process. Such men often relied upon local and extended ecclesiastical networks as conduits through which to exchange architectural knowledge. For example, the networks through which Anglican clergymen communicated ideas about architecture during the nineteenth century were global in extent, giving their buildings a remarkable degree of consistency wherever they were found. The transmission and maintenance of this knowledge then became crucial to how the colonial Church of England as an organisation signalled its purpose and intent.

This session seeks contributions dealing specifically with networking and its effects within colonial church and missionary organisations in European imperial contexts—i.e., how networking was fundamental to the spread and consolidation of particular architectural forms and spaces. Submissions from all periods and places in European missionary and colonial church history are invited. Applicants are asked to consider how global and missionary Christianity acted as a form of agency in its own right, thereby both complicating and stratifying our understanding of the "coloniser" and colonial society through built form.

BETWEEN PRINCIPLES AND MEANS:
THE TRANSFORMATION OF FRENCH CATHOLIC CONVENT ARCHITECTURE IN NEW FRANCE

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FRANCE/QUEBEC: CATHOLIC CONVENT THEORY

The fragile political and economical context of New France restricted the religious communities' mission and their architectural expression. Between 1608 and 1760, New France experienced two colonial programmes where continental ambitions confronted a limited settlement and marginal mercantile profitability, notably in comparison with the non-conformist English colonies of the northern Atlantic Seaboard. Following the British Conquest between 1759 and 1867, the former French and Roman Catholic inhabitants found themselves under a Protestant King who was ambivalent concerning their faith, rights, and culture.

The unexpected and imperfect local conditions to be found in New France – economically, socially and politically – framed the spiritual and social commitments of the Augustinian and Ursuline orders of nuns, affecting directly the architectural design of their monasteries, hospitals, and schools. While vernacular architecture is conceptually bound to local resources – material, labour and climate – the Roman Catholic French models display a similar adaptation where principles and means outline the recurrent dilemmas of architectural design at the periphery of the Western world.

NEW FRANCE: TEMPORAL AND SPIRITUAL MISSIONS

The proposed narrative adopts Anthony D. King's theoretical framework for colonial cities.[1] The scale and nature of the settlement, as well as the architecture built in colonial territories, were bound to the political and economic project established for the control and exploitation of resources. Commercial and settlement colonies attempted to balance local opportunities for natives and settlers with the international trade interests of metropolitan merchants and their representative overseas. Within King's explanation, closely tailored to the endeavours of Protestant nations such as England and the Netherlands, the role of Roman Catholic Religious Orders in Latin colonies – Spain, Portugal and France – adds another cultural and spiritual dimension to the mercantile speculations behind each colonial project.

The beginning of the 17th century saw the opening up of the North American continent to European settlement, about 50 years after the time of the earliest explorers. During the first quarter of the century, private interests and royal support established an array of small English, French, Dutch, and Swedish colonial outposts. Samuel de Champlain, founder of Acadia in 1604 and Quebec City in 1608, had travelled in both the Spanish West Indies and Mexican territories where we witnessed forms of colonial development, trade, and the religious conversion of natives to Catholicism. The French colonial effort would combine a similar programme in order to raise both commercial and cultural interest for the New World.

In 1635 the Jesuit Father Le Jeune urged his fellow countrymen to appeal to native peoples. A hospital and seminary for girls would showcase, he believed, Western civilisation superiority and lead Amerindians to appreciate the Catholic Faith and French customs. This was considered a pleasing project for the 17th-century mystical aristocratic and urban elite. Supported by networks of nobles and wealthy merchants, the Augustinian and Ursuline Sisters were sent to New France in 1639 to implement Le Jeune's vision.

From as early as 1608 the colony was intended as a private monopoly for mercantile opportunists and a mission field for benevolent private and religious organisations. Buildings serving these two programmes adapted French vernacular practices, incorporating many changes with respect to the severe weather conditions. Soon the utopian missionary work faced its first test, including a decimated native population, an under developed economy (for the lack of settlers), and military and political instability.

Indeed, both enterprises were far from disappointing in terms of trade, religious conversion, and development. Within one generation, both institutions redefined their mission in response to the small European population while still staying true to their spiritual engagement. The modernisation of the French State under Colbert and Louis XIV meant that a royal colony, directly under the King's authority, would become stronger and more lucrative.

Between 1663 and 1759, settlement policies were established and the planning of Quebec City, Trois Rivières, and Montreal, as well as the construction of royal and religious institutions and urban houses, reflected the new scale of metropolitan ambitions.

Several religious communities were involved in education (Jesuit, Seminary, Ursulines), charity, health (Augustinian, Saint-Joseph Sisters) and conversion of natives peoples (Jesuits and Franciscans). Gradually each one reoriented its mission toward settlers and reinforced their social role.

The British Conquest of 1759 marked another phase in the colonial development of Canada. The initial policy, between 1763 and 1774, expected a swift transition to a Protestant Settlement colony with waves of new Settlers moving North or from the British Isles. Very few settlers came, and the growing instability in the thirteen colonies favoured a practical agreement with the Quebec Act of 1774, recognizing French laws and property rights which allowed the Roman Catholic faith to remain in place. Whether benevolent or tactical, the political compromise offered Roman Catholic institutions and communities a right to exist that was enlarged in the 1840s through other parts of the British Empire.

In Lower-Canada, the current province of Quebec, failed political reforms in the 1830s allowed the Catholic Church to become the main national institution for French Canadian, like its counterpart in Ireland. Religious communities were again involved in the development of education, health, and social work. Older communities like the Augustinian and Ursuline Sisters found a new impetus for their respective missions.

The Roman Catholic Church, with its international network, became an alternative choice for the French Canadian population in order to realize its national aspirations. The spiritual and social renaissance was complemented with several French religious orders immigrating to Canada. As in the earlier colonial period, old and new communities balanced direct services to the inhabitants with the larger mission of converting North America to Roman Catholicism.[2]

The Canadian Confederation of 1867 confirmed the 1840s compromise in which French Canadians of Roman Catholic confession would remain a majority in their own province. This political order strengthened the national role of the Church at least until 1959, when the *Révolution tranquille* secularized much health, educational, and social institutions traditionally supervised by religious communities since the country's foundation.

HÔTEL-DIEU DE QUÉBEC

The upper town of Quebec City in the 1620s quickly became the seat of Royal and religious authority, while the lower town sheltered traders and craftsmen. The Château Saint-Louis, where the Governor resided, faced the Franciscan Recollet Brothers. The Bishop's modest cathedral shared the main square with the Jesuit College. The Hôtel-Dieu was given a large piece of land next to the third road connecting the lower and upper sections of the settlement.
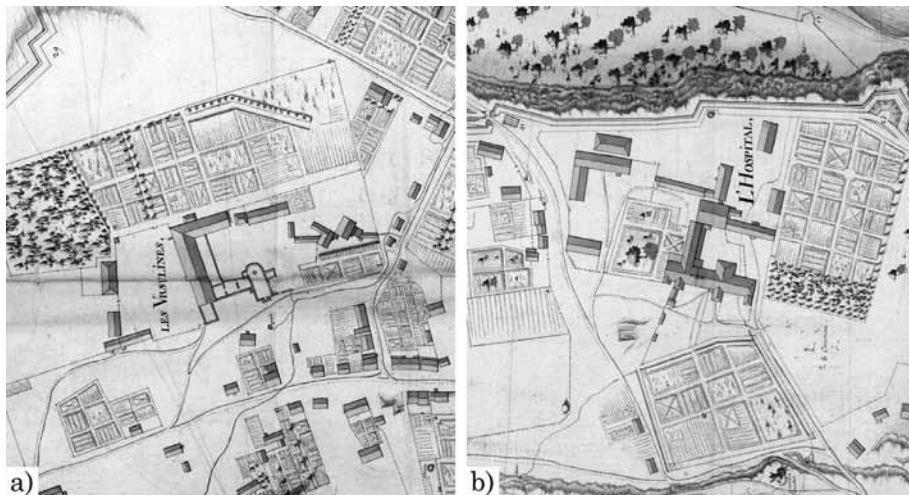
Figure 1. Excerpts from Quebec City plan drawn by R. de Villeneuve circa 1691-92: a) Ursulines Convent after 1686 fire with ruins still visible; b) Hôtel-Dieu prior to De la Joüe's 1694 project. (source: Robert de Villeneuve, "*Plan de la ville de Québec en la Nouvelle France où sont marquées les ouvrages faits et a faire pour la fortification, par le Sr de Villeneuve, ingénieur du Roy*," Archives Canada-France, http://bd.archivescanadafrance. org/acf-pleade-3-images/img-viewer/FRCAOM/ FRCAOM_03DFC_439A/viewer.html)

The first Hôtel-Dieu was a large two-storey stone house built in 1639-44 under the financial assistance of the Duchess D'Aiguillon without consulting the three founding sisters. Costly and poorly built, it prompted Augustinians to move to a healthier site in Sillery, a hamlet west of Quebec City, where Jesuits were able to gather native people. Little is known of this temporary hospital. Nevertheless, the Sisters quickly returned to their urban site to resume construction after the Iroquois menaces.

Over one decade, buildings were erected according to the needs and evolved as a vernacular farmhouse (Fig. 1b). No specific plan was followed until 1654 when a real hospital was erected according to medieval European tradition in similar fashion to the Hôtel-Dieu de Beaune. The *salle des malades* (sick room) was a direct extension of an adjacent church that organized the interior

spatial hierarchy and acted as a public entrance on a main road. This chapel was also the interface between the monastery and the hospital, a feature that survived – to some extent – in the current Hôtel-Dieu.

From 1663, the colonial population grew steadily under the new optimistic political context and the hospital undertook extensive improvements including a new sick ward and an apothecary in 1672. In 1681, the Hôtel-Dieu was topped with a new slate Mansard roof. This significant architectural *geste* was a pragmatic answer to enlarge an existing building but also a striking way to affirm the Hôtel-Dieu's affiliation to metropolitan ideas as slates were expensively imported from France.

By late 17th century, a steady decrease in missionary works, paired with increased service to settlers and soldiers, led colonial and military administrators to fund the hospital now considered as a public utility.[3] Many extensions thinned down the original layout as new rooms did not have direct visual contact with the chapel and the later was not considered as the main entrance anymore.
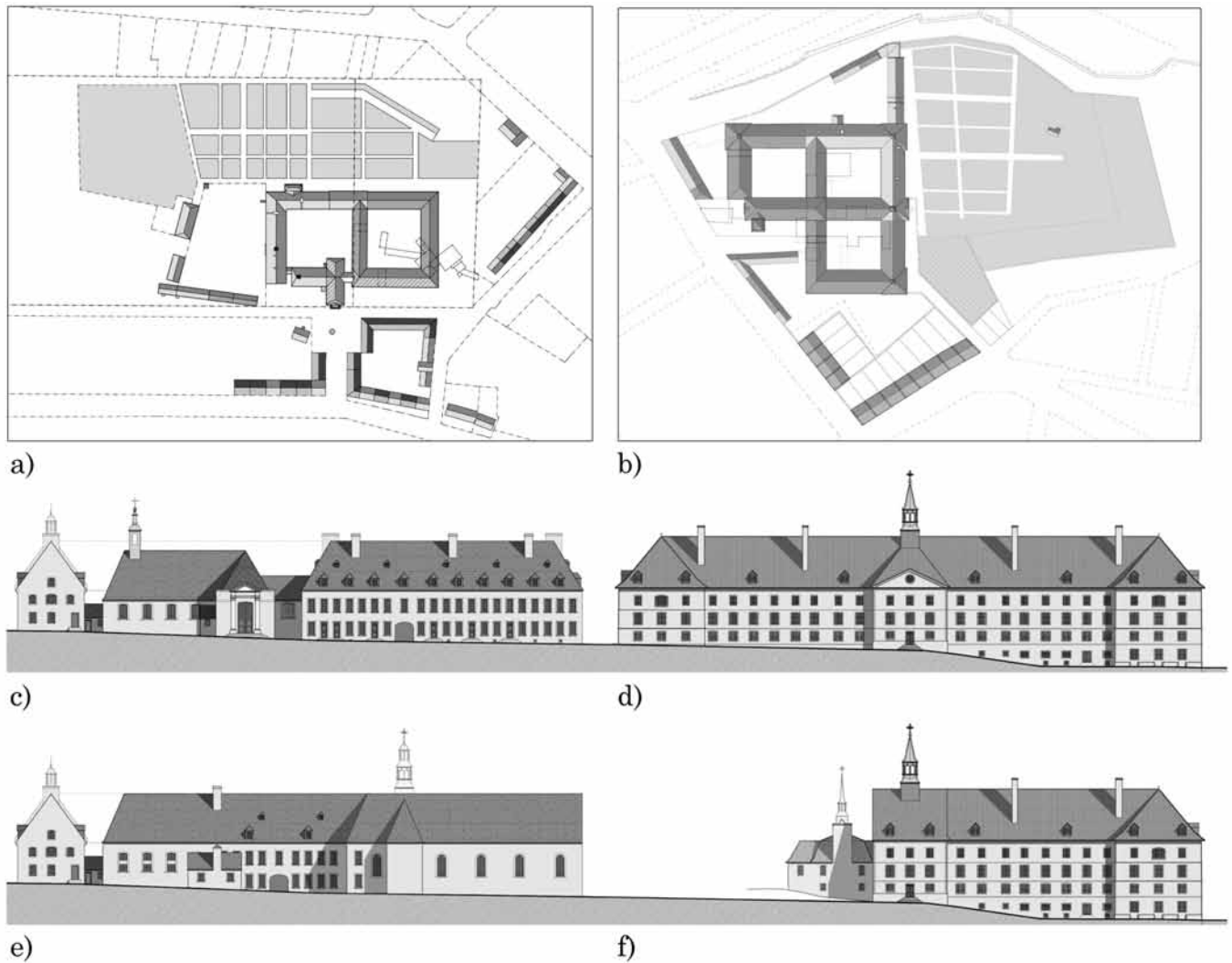
Figure 2. Reconstitutions of Augustinians and Ursulines metropolitan projects; red buildings were built, blue/gray proposed, hatched abandoned: a) Ursulines project circa 1715-17; b) Augustinians project circa 1694; c) Ursulines convent reconstituted main façade circa 1715-17; d) Augustinians convent proposed main façade circa 1694; e) Ursulines convent main façade as built circa 1754; f) Augustinians convent main façade circa 1698. (source: Author's own work)

The newly built Hôtel des Invalides in Paris in 1674 – seen as a key prototype – had an enduring influence over the Hôtel-Dieu expansion projects as royal grants became predominant. Affiliation to this prestigious institution was enhanced when architect François de la Joüe[4] prepared plans for a new architectural program in 1694. Different specialized wings were organized according to a grid and centred on a public chapel. The Sisters took an active role in the design process, providing an architectural program based on codified spatial relationships found in Northern French monasteries. Their vernacular practice, imbedded in the medieval tradition, survives in later reconstruction projects from late 18th century.[5] Though the original plans and scale model were burned, it is still possible to get an idea of the general layout from 18th-century accounts, surveys, and extension projects. If

fully completed, the new Hôtel-Dieu would have been built around a cloister and two other courtyards, one for laymen and the other for soldiers (Fig. 2b).

The newly planned Hôtel-Dieu with its metropolitan style ranked among the largest buildings in colonial Quebec City and featured finely composed facades, full-scale cloister arcades (a unique feat in New France), and a panoramic setting in a large geometric garden similar to the Invalides. Its large tripartite palatial eastern facade, topped with steeples, was designed to overlook the St. Charles River, the expanding lower town, and the royal wharfs (Fig. 2d).

Unfortunately, the project was impeded – like many other large scale French colonial endeavours – by costly labour, poorly adapted building processes, resources drained by defensive works, and unfavourable policies after 1746. Only two wings and two corner pavilions were erected under the French regime, as original vernacular buildings survived and enclosed loosely the cloister in a fashion devoid of any contemplative qualities (Fig. 2f). The Swedish traveller Pehr Kalm recorded in 1749 that the Augustinians made extensive use of verandas oriented toward the vast openness of the Laurentian landscape[6], underlining a departure from European tradition.

The French colonial archives, digitized in 2004, show several examples of institutional building planned on a grand plan yet built in a piecemeal fashion. The Hôtel-Dieu, both during the last decades of the French regime, after the fire of 1755, and with the substantial enlargement of 1825, displays such a pattern of building according to resources and needs.

During the 19th century, hospital architecture evolved rapidly with new ideals of control and sanitation. These were introduced in the second large expansion of the Hospital in 1892 based on European precedent for fireproofing, heating, and cooling. But the Augustinian Sisters remained faithful to the central location of the chapel and the layout around courtyards.

URSULINE'S MONASTERY

The Ursulines shared with the Augustinian Sisters a similar transition from their initial modest vernacular premises (Fig. 1a) to a building representing the 'ideal convent' in late 17th century. They also overcame the problem of limited means, partly because their generous benefactors in France had fewer contacts with the French Court and Madame de la Peltrie, the temporal founder, who had to fight with her family for control over her wealth.

After failure to reform native girls through Western education, the mission was converted into a leading French female education institution for noble ladies modelled after Saint-Jacques Convent in Paris. However, limited royal grants to schools in a highly militarized colony such as Quebec were not enough to support metropolitan ambitions, and two major fires during the course of the 17th century left the community crippled with debts. Nevertheless, these unfavourable conditions did not shake the will of the Ursulines to undertake a major architectural project with mild optimism.

In similar fashion to the Hôtel-Dieu, the Ursulines' project revolved around a central chapel facing a public square on the road leading to the Château Saint-Louis (Fig. 2a). The first stage, as envisioned by the French-born Mother Marie de Jésus after the 1686 fire, forced the merger of the rebuilt monastery into a unified complex. The sacred space segregated the nuns' quarters from the boarding school in two distinct courtyards. The Ursulines – assisted by a group of Jesuits and seminary building experts in Quebec – appeared more pragmatic than their Augustinian counterparts during the planning stages. Their preference to design the buildings themselves, leaving the technical details to a royal engineer, gave them full control over the budget, rather than having to employ an architect who may have been bound to insist upon a more formal solution. Learning from previous disasters, the revised plans implemented fire containment devices such as separated wings, covered passageways, and firewalls, giving a distinctive vernacular expression to what was otherwise considered a prestigious project.

However, beyond these practical compromises, the complex's spatial organization – a decisive factor in architecture – could still be traced back to the Ursulines nascent tradition and their materialized affiliation to the Parisian parent monastery. The classically symmetrical layout, and peculiar two-storey stone portal, reminiscent of Ursuline convents in the metropolis, were shared by other establishments in places such as Trois Rivières (1699) and La Nouvelle-Orléans (1727). Striking resemblances between contemporary Ursuline convents in provincial France[7] and North American foundations would require comparative studies to understand if a codified prototype was at work, such as that seen in Jesuits architecture all around the world.

Like many architectural endeavours in New France, French settlers of noble extraction promoted the Ursulines' reconstruction scheme. However, initial success in securing generous donations from the Court were not enough to prevent distinctive architectural features being discarded. The new nuns' choir was converted into classrooms in 1694 after less than five years of liturgical use, while the unaffordable cut-stone ornaments were never realised. Even so, the Ursulines – under the strong leadership of their Parisian-born Mother Superior, Lemaire des Anges– came nearer to completing their project than the Hôtel-Dieu: three wings were done and the chapel and the large parlours were under construction in 1715-17 (Fig. 2c).

The sudden death of Mother des Anges and her replacement by a Canadian-born nun finally put the metropolitan vision to rest.

A latent antagonism between French and Canadian mentalities emerged; this new, more pragmatic, Mother Superior questioned the project's feasibility. The new chapel and parlours were demolished, deemed both too costly and too large for the harsh winter climate[8]. The revised project was reduced to one large courtyard to be used as a playground. The new chapel and choir were reoriented toward a connecting street, while utilitarian buildings filled the square once designed to showcase a fine classical church portal (Fig. 2e). Like the Augustinians, the Ursulines' contemplative needs also found their way outside the cloister in a large vegetable garden dedicated to meditation.

The Ursuline Sisters – still closely tied to the convent of Saint-Jacques under British rule – never revisited their original project when their institution expanded again in the second half of the 19th century. Revolution in France had an enduring impact on financial, legal, and cultural aspects of their educational work. It also challenged their very existence, now caught between an obsolete if coherent young tradition and new ideals imposed by the British middle-class families sending their daughters to be educated.

By the 1830s, the outdated Roman Catholic boarding school type dwindled with Anglican and Protestant institutions coming in its place. In this sense, the Ursuline community's successful revival of the scheme envisioned by Chaplain Thomas Maguire[9] may be seen as an act of *Realpolitik*. Though it gave a much-needed impetus in modernizing and effectively restoring the institution's prestige, it failed to address fundamental contradictions in its architectural intentions. In this regard, the design and location of the new wings display an indifference towards the historical section of the monastery – a fact for which, paradoxically, the heroic historiography of the first Ursulines has tried to compensate.

RETROSPECTIVE

Anthony King's framework suggests that institutional architecture, both civic and religious, underlines a reference to metropolitan models in order to promote prestige and authority whether dealing with native inhabitants in a commercial colony or immigrants in a settlement colony. Albert Memmi has come to a similar observation about French architecture in colonial Tunisia[10]: urban planning and architecture are concrete manifestations of a cultural superiority that legitimized the colonial power's economic and political dominion.

The Augustinian Sisters were a well-established religious order with origins in early medieval times when they settled in French Canada. Recognition of their work as a public utility by both France and Britain, the royal grants they received, and the close ties with noble circles through Cardinal de Richelieu's niece, placed them several steps ahead of other organisations and their projects in New France. As hospital administrators, the Sisters had enough power to elaborate a monumental project with the support of all governors, which attracted some criticism from their Jesuit counterparts who compared their efforts to 'a large bird cage they won't be able to fill'. Even so, these architectural feats were achieved in the context of considerable privation, as testified by the bare walls and the austere way of life the Sisters chose to adopt, all in the name of keeping the debt-crippled institution afloat.

Nevertheless, their wisdom in addressing well-known problems with practical answers in an unforgiving context put their project on a solid footing. The choice of Invalides – actively promoted by the Royal government – as an architectural prototype for Hôtel-Dieu proved pertinent because its inherent qualities of spatial organization provided the hospital with a coherent grid through which it was able to evolve until 1954.

However, the Ursulines' mission and monastery followed a different path. As a young international teaching community, stemming from the Counter-Reformation and dedicated to evangelization, they shared many values in common with the Jesuits and often collaborated with them when facing complex problems. Less bound to tradition, they adapted themselves through different political and social trends when favourable to their spiritual engagement. For these reasons, when the initial project was deemed unrealistic, they promptly set their minds on procuring a smaller building which would address both local conditions and their limited budget. As a matter of fact, the community was free from debt by 1734. Because of this, the well-respected Ursulines had restored their prestige by the early 19th century, thus securing their educational role among the emerging bourgeoisie elite.

The evolution of both the founding female convents in colonial Quebec City, which shared a common missionary origin stemming from Father Le Jeune's call, reveals a parallel pattern of intention to adapt French building practice, whether in a vernacular medieval tradition or in the newly classical models developed under Louis XIV's reign, including the necessary adaptation to the political and economic constraints of the Saint Lawrence colony. A first choice appears in the architectural references of French- and Canadian-born Sisters, which partly explain the transition from one ideal architectural plan to one tangible built space. Another point is the financial support provided by French patrons for both monasteries. In the one case State subsidies enforced the replication of metropolitan references while, in the other, locally funded initiatives favoured an emerging local building tradition. The British Conquest, following the Quebec Act of 1774, did not condemn the two monasteries. However, with the French Revolution of 1789, both events gradually forced the two communities over 60 years to confront their cultural and financial isolation from France and to accept their Canadian fate in their membership, practices, and architecture.

A comparison with other colonial religious premises, as well as those in France, would likely highlight the balance between replication and adaptation. The Augustinian Hôtel-Dieu should be compared with the demolished one in Montreal as well as the French institution of Guingamp (1676). The Ursuline monastery, with it shifting mission from conversion to education, should be analysed in comparison to the Trois Rivières monastery (1699) and the Parisian House of Saint Jacques that remained the source of Sisters and their methods until the French Revolution.

The cultural background of the British colonial period challenged the French tradition and heritage. Both monasteries displayed a need for practical solutions congruent with local tradition, but in trying to renegotiate their social position in a British colony, they also necessarily adopted new methods, manners, and architectural references. Here, again, a comparative analyse with contemporary Roman Catholic hospitals and boarding schools, in Ireland in particular, would probably reveal the references of this new social order.

The study of religious architecture in Canada, generally speaking, has tended to assess those common features – style, layout, construction method – that underlined the connections between the Great Wild North and the developed Western World, whether transatlantic or from the United States. Our hypothesis here is that the replication and adaptation between formal foreign references and local practice is revealing for what it has to say about the structure of colonial authority: political, economic, and cultural. This provides an interesting framework to discuss the nature of architectural design in emerging societies, between recognising and achieving similar solutions as sign of "progress", and the need to innovate in providing a practical answer to local conditions, thus supporting a new cultural expression.

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4. François de la Joüe was a reputed architect and stonemason active in Quebec City during the late 17th century. Little is known about his formative years, however, surviving plans and buildings testify great technical skills and mastery of classic architectural composition rules. He was often involved in large scale government project and Augustinians were among his regular clients. His daughter Françoise later joined Hôtel-Dieu.

5. Augustinians preserves in their archives an uncredited project from 1799 showing a contemporary radial plan with wings housing sick bays linked to a central chapel.

6. Pehr Kalm, *Voyage de Pehr Kalm au Canada en 1749*, trans. Jacques Rousseau and Guy Béthune (Montreal : Cercle du Livre de France, 1977), 228-30.

7. Beaugency (1629) and Guingamp (1654-1666) convents were built in the same period and feature wings arrangement, proportions and floor plan similar to Ursulines north american monasteries. Many architectural details shared in La Nouvelle-Orléans and Québec City planned projects can be traced back to Couvent Saint-Jacques in Paris, a renowned Ursulines institution which kept close ties with New France.

8. George Louis Lemoine et al., *Les Ursulines de Québec depuis leur établissement jusqu'à nos jours; Tome 1* (Québec : C. Darveau, 1863), 107-8.

9. Chaplain Thomas Maguire (1776-1854) was a prominent American Catholic priest of Irish descent active in Province of Quebec and known for his intellectual gifts and boiling temper. He founded many institutions while keeping close ties with Ireland, France and Rome and supporting the Canadian cause. He was chaplain at Ursulines convent from 1832 to 1854 where he's remembered for his pioneering work in the field of history.

10. Albert Memmi, *Portrait du colonisé* (Paris : Petite Bibliothèque Payot, 1973).

FROM THE ALPS TO THE INDIAN OCEAN: TRANSNATIONAL CHURCH ARCHITECTURE AND THE BENEDICTINE MISSION IN EAST AFRICA, 1880s-1960s

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KULTURKAMPF, COLONIALISM, *MISSIONSFRÜHLING*:
EARLY STAGES OF THE BENEDICTINE MISSION IN EAST AFRICA

The missionary activities of the Protestant and Roman Catholic churches were intended as long-term enterprises, from the 16th century, leading many Europeans to far-away regions. The great distances between headquarters and 'mission fields', just as the aim of staying on the ground, demanded far more resources than individuals or an informal network of like-minded enthusiasts could raise. Institutionalising the missions was inevitable. Religious orders and missionary societies were essential actors influencing decisively the historical development of the missions according to their own institutional logics.[2] Secularization had destroyed the rich culture of Catholic monasteries in Germany. Even so, from the 1820s religious life evolved and a new landscape of orders was established. Still, these reorganised communities (as well as the old) descended into the *Kulturkampf*, dramatically changing the relations between state and Church from 1870 to 1890. The politico-cultural climate of these two decades was governed by substantial repressions against the Roman Catholic Church. Also, in Bavaria, the smouldering conflict was intensified. Certainly, the confrontation was not as tough as the one in Prussia, even if the House of *Wittelsbach*'s tradition of a state church was at risk.[3]

For this reason, in Germany Roman Catholic missions were not possible until the 1880s, when transformed political and social conditions allowed the so-called *Missionsfrühling*. These developments may be understood as an intentional reaction on the part of the Church to the previous conflict. After that, Catholic mission organisations rushed to provide evidence of their loyalty towards the state and its colonial project. The interest of Roman Catholics in Germany to the missions significantly increased from 1884, when the empire joined the colonial powers, acquiring its first *'Schutzgebiet'* in East Africa. Getting involved with the missions was an effort to make peace with the *Kaiserreich*. As the Roman Catholics did not wish to be seen falling behind the Protestants, both mission groups experienced a boom from the middle of the 1880s. This missionary wave was connected to the emergence of a great number of missionary societies, associations, and mission houses in Europe. For the Roman Catholic missions, the newly established religious orders became the most important organisational structure.[4]

In 1884, *St. Ottilien* was the first modern mission house founded in Germany. Indeed, today's 'Congregation of the Missionary Benedictines' came into being at a difficult moment. Moreover, Josef Amrhein (1844-1927), the founder, was a foreigner born in Switzerland. This gifted young man spent some years in Florence, Munich, Paris, and then Karlsruhe studying the arts, before he decided in favour of a spiritual life. Thus, in 1868, he started his theological studies in Tübingen. Two years later, he entered the Benedictine order at the monastery of Beuron, where he was ordained priest in 1872.[5] Unfortunately, Father Andreas did not succeed in convincing the abbot '… that monasticism coupled with missionary work was an ancient Benedictine tradition which deserved to be renewed.'[6] And so, Amrhein established his own mission house. After getting in touch with a secular priest in the Diocese of *Regensburg*, who helped him to buy the old monastery of Reichenbach, Amrhein's first attempt at founding the order was made in Bavaria. Due to several problems, in 1887 his so called *St. Benediktus-Missionsgenossenschaft* moved to Emming in Upper Bavaria. The new mother house took the name *St. Ottilien,* after the 16th-century chapel that originally occupied the site. From this first church of the community the first Benedictine missionaries were sent out to the German colony East Africa in November 1887.[7]

GLOBAL ASSIGNMENT: CATHOLIC MISSIONARY ORDERS AS TRANSNATIONAL ORGANISATIONS

Patrick Harries and David Maxwell have stated that 'by their nature, missionary societies have been transnational, global institutions working together beyond national borders, attaching little importance to imperial boundaries and building bridges to Africa and other continents – bridges conveying mutual exchange of images, ideas and objects.'[8] Both historians have promoted research on missionary history that challenges the image of Christian missions as European institutions, forcing a foreign religion on African people, as well as disputing the notion of a dichotomy dividing Europe and Africa which classified human action according to racial characteristics. Missionary societies were the first organisations recruiting members from different countries, operating in diverse areas, and following varying sovereigns. In Africa, they have been operating for about 500 years. During this

period, the encounter of Europeans and Africans created a world of multifaceted interactions. [9]

Historian Ursula Mettele is in broad agreement with these findings, using the example of the Protestant Moravian Church. What kinds of transboundary institutional and organisational correlations are developed by a missionary society? Is a religious organisation really able to implement the symbolic production of an 'imagined community beyond the nation'? Studying the Moravians, she has argued that a variety of transnational structures and processes can be developed. Still, not every cross-border phenomenon is to be labelled a kind of 'transfer'. To include informal connections as much as the consolidation of organisational structures, Mettele suggests concentrating on a history of relations, analysing the social spaces constituted in each case. The transnational social space of the Moravian Church, for instance, resulted from specific communicative and interactive practices as well as from common patterns of representation mediated by their publications. However, it was an imagined system. [10] 'Relations emerge from the minds of the actors. As long as the notion of community was alive among the members, global connections existed and functioned, despite great spatial distances and obstacles to communicate.' [11]

However, there are many opportunities to conceptualize history beyond the nation state, such as the perspective of a 'transnational' history. This approach has already contributed to a revival of colonial history and could do the same to mission history. So far, most studies in this field have followed national and denominational borders, losing sight of the transnational character of the missions. 'The missionary endeavour was linked to, and affected, social processes both at home and abroad. Thus, although the mission movement is transnational, it articulates with local and national processes.' [12] From Mettele's point of view, the establishment of transnational social spaces historically becomes most evident regarding the universal practices of Roman Catholicism, especially the organisational forms of its religious orders, their ways of communicating and organising their global mission activities. With this in mind, the Missionary Benedictines of *St. Ottilien* may also be considered a transnational organisation constituting common patterns of representation and transnational social spaces by communicating and interacting beyond political, social, and cultural boundaries. [13]

In order to enlarge the home base of its missionary engagement, from 1901 the *St. Benediktus-Missionsgenossenschaft* developed a monastic network extending over Bavaria, founding subsidiaries in Lower Franconia, Lower Bavaria, and Munich. Most supporters and benefactors of the mission were located in this region. Nevertheless, the relations reached out early beyond nation-state boundaries. Because the founder was Swiss, from the beginning many candidates from Switzerland joined the order. In 1908 a second 'mission field' was established in Corea. In times of political and economic crisis, the translocal, transregional,

and transnational network served the community as an essential resource. After the First and during the Second World War, it was expanded by developing branches in Switzerland, Venezuela, and the USA that were to provide financial aid for the missions. Just as in East Africa, new stations and subsidiaries were founded, for example in Peramiho and Ndanda. At home, missionary magazines, associations, and missions museums had been established to represent the community, to attract new blood, and to raise financial aid. By the 1920s at the latest, the Benedictine mission was relying on a global network to orchestrate its activities. One activity that demonstrated the efficacy of these relations was building churches. [14] (Fig. 1)

BENEDICTINE CHURCH BUILDING: A TRANSNATIONAL PROJECT

The first church to be built was the one at the German mother house in *St. Ottilien*. In 1897, architect Hans Schurr (1864-1934), student and co-worker of Georg von Hauberrisser (1841-1922), was tasked with drawing up a plan for the abbey church. As customary in Bavaria at the time, this large-scale project was operated by Italian and Tyrolean guest workers. Meanwhile, financial problems threatened the works which could only be safeguarded by issuing bond certificates amounting to 5 or 10 marks to the people of the area. Even so, in March 1899, the construction of the church was finished. However, furnishing was still provisional. Funded by individual benefactors

Figure 1. Model of a Church at Peramiho Abbey (source: Photograph taken by Christine Egger, March 2011)

and innumerable readers of the mission magazine '*Heidenkind*', the interior decoration contained numerous allegories on the Benedictine mission, dragged on many years. For example, in 1933 a new throne for the abbot was added. Its ivory inlays were made from the tusk of an elephant, by then kept in the mission museum as illustrative material for future missionaries. Consecrated to the Sacred Heart of Jesus in 1903, the cathedral represented not only the core of *St. Ottilien*, but the entire community and its global activities. Borrowing from Cistercian Gothic, its architecture refers to Amrhein's basic idea of a missionary society following the example of the medieval Benedictine order, considered as an important broker of culture and religion in Europe.[15]

St. Joseph's Cathedral in Daressalam was the first important church building project by the mission in East Africa. The site, overlooking the Indian Ocean, had been offered by the German colonial government, free of charge, but under the condition that an imposing monument was built. However, fiscal constraints meant that erecting two churches at the same time was impossible for the community; moreover, European benefactors had to be found. After one year the amount obtained was enough to start construction, based also on plans by Hans Schurr. This is another reason why the neo-Gothic architecture of the church is highly reminiscent of *St. Ottilien*. In May 1898 the foundation stone was laid. Four '*Baubrüder*' were put in charge of the construction, with many local workers and volunteers, especially the boys and girls of the boarding school, helping to erect the building. The furnishing was also constructed on the ground, while other parts were prepared in Europe, for example the roof in *St. Ottilien* and the altarpiece in Beuron, and shipped over. But the expenditures remained surprisingly low, partly because the first altar was donated by the Goan population, the bells by a German benefactor, and the high altar by the German emperor himself. Thus, the Benedictine church became a famous landmark of the colony German East Africa.[16]

Later, the Bavarian subsidiaries emerged as architectural role-models for the cathedrals of Peramiho and Ndanda. In 1904, high above the town of *Vilshofen*, the monastery *Schweiklberg* was built. In this context, according to the plans of the architect Michael Kurz (1876-1957), who had worked for Hauberrisser and Schurr, from 1905 to 1911 an Art Noveau abbey church was established. In 1913, the abandoned abbey *Münsterschwarzach* was turned into the third Missionary Benedictine monastery in Europe. There, another major church building project, intended by the architect Albert Boßlet (1880-1957), was conducted between 1935 and 1938. Boßlet's buildings stand out due to their Cubist elements, exterior simplicity, and Romanising designs, fitting perfectly, if unintentionally, in the monumental architecture of the National Socialist regime.[17] 'In a time, when the state began, to turn itself into God, the convent decided for a Romanising style, the style of theocracy … Provided with such self-respect and missionary enthusiasm, the brothers took these plans and ideas to Africa …'[18]

The cathedrals of Peramiho and Ndanda were built in the 1930s and 1940s. After the stations had been elevated to the rank of abbeys in 1927, they were to become more spacious and representative, and, due to the war in Europe, preferably at no cost. Brother Adelhard Pfister (1907-1986) from Münsterschwarzach, who had worked for Boßlet before, drew the plans for Ndanda. Based on his experiences and the ideas of some Swiss architects, he created a church of a dimension nobody had ever seen in the region south of Daressalam. All lay brothers, the members of the parish, and lots of pupils, helped to construct the building between 1935 and 1938. Concurrently, the church in Münsterschwarzach was built and, without any doubt there are analogies with its plans, especially the interior decoration. However, from outside the building reminds one much more of Schweiklberg. The blueprints for Peramiho, made by Brother Gislar Stumpf (1903-1983), were deliberately modelled on his Franconian home monastery and the Benedictine Abbey *Einsiedeln* in Switzerland where the new bishop Gallus Steiger (1879-1966) had been consecrated in 1934. In agreement with the architect Hans Burkhard (1895-?) in St. Gallen, and under direction of Brother Alto Götz (1914-1978), the cathedral was as well constructed by the

Figure 2. Wall Painting by Father Polykarp Uehlein, Songea Cathedral (1995) (source: Photograph taken by Christine Egger, March 2011)

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lay brothers, local co-workers, and many pupils between 1943 and 1948. Bricks were fabricated in Peramiho, timber was felled in the surrounding woods, and steel was offered by Ndanda Abbey, where the projected new monastery, again as result of the war and the strained relations with the English government of East Africa, could not be realised for some time.[19]

Benedictine church building in East Africa also included many smaller churches. Oftentimes the brothers responsible for erecting buildings either adapted plans from Europe or recombined their elements, creating a common formal vocabulary. Onion domes or neo-Baroque interior decorations were an unusual exception. Where financial means did not allow, the construction of less complex buildings was carried out. For this reason, the carpentry of Ndanda Abbey produced the so called '*Peterkirchen*', developed by Br. Petrus Fetsch (1919-1995). East African influences may not be detected until the 1960s, when the Second Vatican Council preached the acculturation of Christianity. For the first time, this new conception of the Roman Catholic Church found its way into Benedictine churches in East Africa in terms of the art of Father Polykarp Uehlein (*1931), who, soon after his arrival in the 'mission field' in 1963, started to colour the cathedral of Ndanda and many other churches in independent Tanzania with expressive wall paintings. Not until then could the carvings of local artists follow.[20] (Fig. 2)

TRANSNATIONAL CHURCH ARCHITECTURE: MISSIONARY BENEDICTINE REPRESENTATIONS AND SPACES

'By experience of most people, regardless if Christians or not, the most important Christian place of memory is … the church in your village or urban district.'[21] Although churches are physical structures -- evidence expressed in stone, masoned places of memory -- at the same time they constitute meeting places for their parishes and are social spaces for these imagined communities. In Europe, building churches hit its first peak in the Middle Ages with the construction of imposing Romanesque and Gothic cathedrals, huge monastic churches dominating entire regions, and countless small chapels and village churches representing the faith of the common people. During the Renaissance and Baroque periods, many churches were rebuilt, while the next climax of new constructions arrived in the 19th and 20th centuries. Embodying Christianity's institutional claim to power, church buildings constitute political places of memory, at the same time preserving the history of Christianity. 'Always, the church is constitutively connected to a particular community. By its centrality and attractiveness, it decisively accounts for shaping this community as such, and keeps it grounded and brings about a sense of identity.'[22] Still, only the people may give religious life and meaning to a church.[23]

For the Benedictine mission in East Africa of the 1880s to the 1960s, churches were of quite similar importance. Their history and architecture indispensably connected the buildings to the Congregation of the Missionary Benedictines of *St. Ottilien*. To construct cathedrals, churches and '*Buschkirchen*' in Europe and East Africa, the community used its translocal, transregional and transnational networks '… [that] were constituted by, and constitutive of, a global missionary culture. Missionary culture involved production and exchange of forms of aesthetic practice ranging from literary genres… to music and visual culture.'[24] A transnational architectural aesthetic was an essential link for the transnational imagined community of the Benedictine mission. In this way, building churches was an important common pattern of representation, both at home and in the 'mission field'. Particularly, the construction of cathedrals had a political meaning, being a show of force of the religious order. At the same time, all church buildings in East Africa made their contributions to the missions, visualizing Roman Catholicism and establishing new social spaces of missionary communication and interaction. Without East Africans taking their notions of faith into the churches, however, the Benedictine mission would have failed completely.[25]

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15. Cf. Claudius Bals and Walter Sedlmeier (eds.), *Die Klosterkirche der Erzabtei St. Ottilien*, (St. Ottilien: EOS, 1994). Brigitte Huber, *Das Neue Rathaus in München. Georg von Hauberrisser (1841-1922) und sein Hauptwerk,* (Ebenhausen bei München: Dölling und Galitz, 2006). Meinrad Dufner, "Als kundige Baumeister haben wir den Grund gelegt. Vom Kirchbau der Missionsbenediktiner", in: Godfrey Sieber and Cyrill Schäfer (eds.), *Beständigkeit und Sendung. Festschrift St. Ottilien 2003*, (St. Ottilien: EOS, 2003), 427-28. Maria Hildebrandt, *Lebendige Steine. Baugeschichte und Baugeschichten der Erzabtei St. Ottilien*, (St. Ottilien: EOS, 2007), 163, 187-254. René Del Fabbro, *Transalpini. Italienische Arbeitswanderung nach Süddeutschland im Kaiserreich 1870-1918*, (Osnabrück: Rasch, 1996).

16. Cf. Siegfried Hertlein, *Ndanda Abbey. Part I: Beginning and Development up to 1932*, (St. Ottilien: EOS, 2008), 119-122. Meinrad Dufner, "Als kundige Baumeister haben wir den Grund gelegt. Vom Kirchbau der Missionsbenediktiner", in: Godfrey Sieber and Cyrill Schäfer (eds.), *Beständigkeit und Sendung. Festschrift St. Ottilien 2003*, (St. Ottilien: EOS, 2003), 428.

17. Cf. Meinrad Dufner, "Als kundige Baumeister haben wir den Grund gelegt. Vom Kirchbau der Missionsbenediktiner", in: Godfrey Sieber and Cyrill Schäfer (eds.), *Beständigkeit und Sendung. Festschrift St. Ottilien 2003*, (St. Ottilien: EOS, 2003), 434. Meinrad Dufner, *Abteikirche Münsterschwarzach*, (Münsterschwarzach: Benedict Press, 1989). Martin Freundorfer, "Geschichte der Abtei Schweiklberg," in Christian Schütz and Martin Freundorfer (eds.), *O lux beata trinitas. Hundert Jahre Kloster Schweiklberg 1904-2004*, (Passau: Dietmar Klinger, 2005), 27-66. Ulrich Coenen, "Landesbaurat Albert Boßlet. Biografie," archINFORM, http://www.archinform. net/arch/6178.htm.

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19. Cf. "Geschichte. Bau einer Kathedrale", Abtei Peramiho, http://www.peramiho.org/de/abbey/geschichte1m. html. "Geschichte. Kirchweihe und Jubiläum", Abtei Peramiho, http://www.peramiho.org/de/abbey/ geschichte1n.html. "Bilder vom Bau", Abtei Peramiho, http://www.peramiho.org/de/abbey/00vor1939. html. Siegfried Hertlein, *Missionsabtei Ndanda. Wirken gestern und heute*, (St. Ottilien: EOS, 2007), 21-22. Meinrad Dufner, "Als kundige Baumeister haben wir den Grund gelegt. Vom Kirchbau der Missionsbenediktiner", in: Godfrey Sieber and Cyrill Schäfer (eds.), *Beständigkeit und Sendung. Festschrift St. Ottilien 2003*, (St. Ottilien: EOS, 2003), 434.

20. Cf. Meinrad Dufner, "Als kundige Baumeister haben wir den Grund gelegt. Vom Kirchbau der Missionsbenediktiner", in: Godfrey Sieber and Cyrill Schäfer (eds.), *Beständigkeit und Sendung. Festschrift St. Ottilien 2003*, (St. Ottilien: EOS, 2003), 439-40. Bruno Franzen, *Africa, Tanzania, Polykarp*, (Zürich: Carta, 1998).

21. Etienne François, "Kirchen", in Christoph Markschies et al. (eds.), *Erinnerungsorte des Christentums*, (München: C.H. Beck, 2010), 707.

22. Etienne François, "Kirchen", in Christoph Markschies et al. (eds.), *Erinnerungsorte des Christentums*, (München: C.H. Beck, 2010), 714.

23. Cf. Etienne François, "Kirchen", in Christoph Markschies et al. (eds.), *Erinnerungsorte des Christentums*, (München: C.H. Beck, 2010), 707-724.

24. Hilde Nielssen et al., "Introduction", in Hilde Nielssen (ed.), *Protestant missions and local encounters in the nineteenth and twentieth centuries. Unto the ends of the world*, (Leiden: Brill, 2011), 8.

25. Cf. Hilde Nielssen et al., "Introduction", in Hilde Nielssen (ed.), *Protestant missions and local encounters in the nineteenth and twentieth centuries. Unto the ends of the world*, (Leiden: Brill, 2011), 1-22.

"YOU CAN BE PROUD OF THIS BEAUTIFUL EDIFICE": BUILDING THE WALLACE MEMORIAL CHURCH IN LUBUMBASHI (DR CONGO), 1924-1932[1]

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INTRODUCTION[1]

On 30 January 1931, Morris W. Ehnes, the then treasurer of the Board of the Congo Evangelistic Mission of the Methodist Episcopal Church in New York, congratulated Mrs. Helen Springer, wife of one of the most prominent missionaries of the congregation in Africa, on the finishing of the Wallace Memorial Church in Lubumbashi, the mining city in the Katanga province formerly known as Elisabethville.[2] 'You have reason to be proud of this beautiful edifice,' wrote Ehnes, 'because it is one of those outstanding buildings which is much like the cathedrals which are built by another communion'.[3] In his praise, Ehnes was implicitly referring to the Roman Catholic cathedral located in close proximity of the Methodist church, the building of which had just started a couple of years earlier at the initiative of Monseigneur Jean-Felix de Hemptinne, the notorious head of the congregation of the Benedictines.[4] Anyone walking through the city, even today, cannot but be struck by the dialogue between these two imposing edifices in brick - one neo-gothic, the other neo-roman in style.

The building of the Wallace Memorial Church, however, was not a straightforward attempt by the Methodists to outrival the Roman Catholic Church. It fact, it was a far more complex enterprise, involving a variety of stakeholders each negotiating their position within a changing (geo)political and religious context in the Belgian colony.[5] As such, our reconstruction of its building history brings to the fore clerical ties within the Methodist networks that link Katanga to South Africa, the United States, and Belgium. By highlighting the difficulties of the Methodist Episcopal Church to obtain a plot on which to build the Wallace Memorial Church, as well as to find the necessary funding, and by unravelling the discussions regarding the church's design, we will use this case to discuss the colonial built environment as the product of a complex agency that cannot be grasped by looking exclusively at the colony-*métropole* relationship nor understood via essentializing categories of colonizer-colonized.[6]

FORGING THE CONGO LINK[7]

While the foundation of the Methodist Episcopal Church goes back to 1784, it was not until 1884 that the church first sought to expand its activities in to the continent of African.[8] Only years later would the link with the Congo be forged. Called back to the United States in 1906 for a furlough, the missionary John McKendree Springer, residing in what was then Southern Rhodesia, decided, against the advice of his Cape Town based superiors, to return to New York via 'la route la plus directe', crossing the African continent on a diagonal route from East to West, passing via Katanga. Before leaving for the States, Springer and his wife Helen had not only founded a church in Broken Hill (today Kabwe, Zambia), and travelled all the way up to Kambove in the Congo to negotiate the future establishment of missionary posts with the colonial administration,[9] but were also active in Angola.

It was not until 1911 that the dynamic Springers travelled back to the Congo. It would take several more years before the Board of the Methodist Episcopal Church granted him permission to establish missionary posts in the region, thereby creating a network covering a territory from Katanga to the former Rhodesia, Mozambique, and South Africa. Developing activities first in rather remote settlements, the Methodists soon moved to the emerging urban centres in Katanga, Lubumbashi and Likasi. Throughout the 1920s, it remained undecided whether they should focus their activities primarily in Lubumbashi, which had become the administrative capital of the Katanga province, or rather in Likasi, where the *Union Minière du Haut Katanga* was expanding its activities, attracting a large African labour force that constituted a potential target troup for their missionary activities.[10]

As they were lacking adequate infrastructure to accommodate their expanding activities in both cities, the Methodists planned to build a large church in each. In Lubumbashi, where they had been operating since 1917, the building only enabled them to seat a congregation of 300 people.[11] In Likasi, there was no building available at all. 'If Methodism is going to do its job here in any adequate fashion', wrote the local treasurer Roy S. Smyers to his superiors in 1926, 'we must have these buildings soon'.[12] Ambitious plans were formulated, the church in Lubumbashi being planned to accommodate a congregation of 1100 souls, surpassing by far in size any edifice the Methodists had constructed in Africa.[13]

IN SEARCH OF A PLOT

The discussion of building a new Methodist church in Lubumbashi occurred when the city, founded in 1910, was undergoing a significant urban transformation. In 1922 the then governor-general, Maurice Lippens, decided to demolish the existing native quarter that had emerged adjacent to the quarter reserved for Europeans in order to create a buffer zone between the *ville européenne* and the *cité indigene*.[14] Plans were drawn for a new African quarter separated by a 700 meter wide *cordon sanitaire* from the city center, which was now delineated by a street tellingly named *Avenue Limite Sud*.

For some years, the Methodists had been occupying a plot of land on the corner of the *Avenue Limite Sud* with the *Avenue Leopold II* on which a church, school, and boys' houses had been built in 1917. Other structures belonging to the congregation, such as the pastor-teachers' houses, were located on nearby plots.[15] The congregation also tried to obtain an option on plots adjacent to the one they occupied on the *Avenue Limite Sud,* in contemplation of building their new church there. Yet, with the introduction of the *cordon sanitaire* in the urban landscape of Lubumbashi, they were no longer entitled to erect their new church within the boundaries of the *ville européenne* as it was intended to serve primarily the African population.

The Methodists themselves were eager to build their new church within the limits of the new native town in order to be in direct contact with their target audience. Their request to do so, however, was declined by the *Commissaire du District*, leaving no other option than to build in the *zone neutre*, where the colonial government was planning to erect the prison, a medical laboratory, a hospital for Africans, and a market place. Initially, they were also declined this option.[16] It would take the help of the representative of the protestant churches in Belgium, Henri Anet,[17] before the government officially decided to grant the Methodists a substantial plot in 1926 of 1.44 hectares in the *zone neutre*, opposite the site they already occupied.[18]

PLANNING A LANDMARK

Even if it was located in the *zone neutre*, the site granted by the government was full of potential. It terminated the vista of a secondary avenue of the city centre, so that the future building *de facto* would occupy prominent position in the urban landscape of the *ville européenne* (Fig. 1). From the very beginning, Springer had emphasized that given the visibility of the church, it was essential to conceive of the church as a landmark building. As late as 1927, when various design proposals were already under discussion, he rearticulated his view clearly on the matter:[19]

> I think it is conservative to say that no other building in Elisabethville will be so much and so constantly in the public eye as will this church building. It will be visible from the train as it approaches Elisabethville from the south and from the main motor road of the suburbs to the south as well as from considerable parts of Lubumbashi and particularly from every part of the native town, and it will stand at the head of one of the important secondary streets in town. It is encumbent upon us, therefore, and very important from every point of view that when completed this church should be satisfactory from the point of view of capacity, of a worshipful appearance, from unity of design and of building lines and from its total effect.

Because of this overall visibility of the church – a viewpoint which in fact was questioned by some of the missionaries actually residing on the ground- Springer even advised to give a particular attention in the design to the side of the church oriented towards the native town. Following a comment on the design made by Mr. Black, the consulting architect of the Board of Foreign Missions in New York,[20] the solution he proposed was to make the rear façade more 'churchly', which consisted of relocating the tower 'more appropriately somewhat back and toward the native town.'[21] This suggestion implied rethinking the hierarchy of the front and back façades of the building in relation to the Methodists' target audience.[22]

Springer's preference for an imposing edifice was shared by the Board of the Methodist Episcopal Church in New York. Reverend Thomas S. Donohugh, with whom the missionaries from Katanga corresponded on the matter, had been very explicit on the issue already in 1924, when confronted with a modest design for the new church in Lubumbashi, submitted by the local missionaries and drawn by Mr Brown, a British architect active in South Africa.[23] Donohugh vehemently rejected what he called a 'barndoor

Figure 1. The Wallace Memorial Church, ending the vista of the Avenue Kasa Vubu, situation anno 2005. (source: Photo Johan Lagae, 2005)

church', arguing that it was 'too suggestive of some of our poor types in this country to recommend itself for an important town like Elisabethville. It simply represents the usual British idea that any sort of a building is good enough for Africans.'[24] Instead he suggested that the help of a Belgian architect should be sought in order 'to have something which will be approved by the best Belgian taste.'[25] Hence, Springer and bishop Johnson who was passing through Lubumbashi during one of his travels, approached Charles Hendrickx, a locally residing architect of some reputation.[26] That Hendrickx had already designed the Roman Catholic cathedral in Lubumbashi in 1919, might have informed the Methodists' choice. However, they were soon to regret this. For Hendrickx failed to engage with the commission, not meeting his deadlines for procuring sketch designs which were desperately needed for fundraising - a reluctance that some Methodists viewed as a plot instigated by Monseigneur de Hemptinne.[27] Hendrickx moreover completely ignored the limited financial resources mentioned in the brief, finally presenting preliminary drawings for edifices that completely surpassed the ideas of even the most ambitious among the Methodists.

The impasse was partly dissolved when in the course of 1925, Mr Frank B. Wallace, a Detroit based entrepreneur, donated the considerable amount of 100,000 US$ to the Methodist Episcopal Church. If this generous gift solved the financial issue for the building operations in Katanga, it also implied the need for investing in architectural quality, as Wallace wanted the money to be used to erect buildings which could serve as memorials for his parents and deceased brother.[28] The Wallace fund thus helps explain why the Methodist Church in Lubumbashi became one of the most prominent religious edifices of the congregation in Africa, both in size and architectural grandeur.

AMBITION VERSUS PRAGMATISM

By 1927 no real advance had been made, putting the local missionaries in an awkward position *vis-à-vis* the colonial government that had granted them the plot of considerable size for free.[29] Desperately needing a new building to accommodate their services, the locally residing missionaries were willing to opt for a pragmatic position and settle for an architecturally modest, if large enough building. Yet, the Board of Foreign Missions in New York, as well as Springer, still pushed for a building that would be 'an ornament to the city.' The discussion went beyond mere issues of style and appearance, as the colonial tripartite of State, Church, and Commercial Enterprise was becoming less favourable of the Methodists' cause. Throughout 1920s, Monseigneur Jean-Félix de Hemptinne competed bitterly with the Methodists for the souls of Elisabethville's Africans, trying in particular to expand the grip of the Benedictines in the domain of education. Government officials as well as the mining industrials also started to harass the Protestants, assuming they were fostering African syncretic sects such as *Kimbanguism* and *Kitawala*, which formed a potential threat to the colonial order.[30] On a regular basis, the Methodists consulted the Brussels based representative of the protestant churches in the Congo, Dr Henri Anet, in order to help negotiate their position *vis-à-vis* this growing anti-Anglophone climate in the colony and Katanga in particular.[31]

As working with Hendrickx was going nowhere,[32] the local missionaries, initially against the advice of the Board, turned for help to a one Mr Haas - an American engineer who was overseeing major construction work for the mining industry in Katanga and who was also 'a friend of the Mission.'[33] Haas was soon assisted by Victor Longfield, an American missionary who arrived in Katanga in 1927 at Springer's request. Springer considered Longfield's expertise as a carpenter and designer of cars an asset for the construction work at hand in Katanga.[34] Together with his wife, Longfield visited Belgium on his way to Africa, in order to improve his French under the guidance of the Anet family. His encounter with medieval cathedrals in Europe left a strong mark on the American's mind, impacting directly on the project for the Wallace Memorial Church. 'As a result of visiting many of the European cathedrals and considering the building materials at hand,' Longfield informed the Board, 'I have developed a design in Gothic, which will use very acceptably the bricks made here, combining with them a cut stone effect for window and panel trimming.'[35] Longfield's choice for a neo-gothic appearance was not driven by a particular ideological agenda, as was the case with de Hemptinne who deliberately had his cathedral designed in a neo-roman style,[36] but rather was based on an attempt to appeal simply to 'the esthetic sense of the Belgians and townsfolk rather than the natives, for we are many generations ahead of the native conception of architecture.'[37] In discussions with the Board, Longfield continuously defended his proposals with pragmatic arguments, stressing the official obligation to build with fireproof materials, the need to construct in a structurally sound way, and to take into consideration available local building expertise. Only when it came to the choice of the roof material did he give in to the Board's emphasis on architectural beauty. Instead of cladding the roof with cheap sheets of corrugated iron, in the end more expensive asbestos cement slates with a tile print were used to give the church a more dignified look.

'A THORN IN THE FLESH'

Construction on the Wallace Memorial Church only started in 1928, with the laying of the corner stone taking place on 11 August 2009, in the presence of Bishop Johnson and a large attendance (Fig. 2).[38] When finished in 1930, the Wallace Memorial Church

started to gain considerable acclaim. Longfield reported that 'the whites as well as the blacks are enthusiastic, especially as it resembles the European cathedrals,'[39] also informing the Board that for the Catholics it constituted 'a thorn in the flesh.'[40]

While the Board of Foreign Missions was satisfied with the overall end result and congratulated Longfield on a mission accomplished, it was nevertheless somewhat divided, Donohugh writing to Springer that 'a number who have seen the photographs feel that the building is too elaborate and imposing and that it is likely to arouse criticism.'[41] This discomfort was enforced when it became clear that the total cost of the building was more than double the initial budget.[42] In his defense, Longfield developed a comparison with other religious edifices that had just been built in Lubumbashi, arguing that despite their similar building costs none of them could match the Wallace Memorial Church. The new native church of the Roman Catholics he considered 'a warehouse,'[43] while in his opinion the recently finished Jewish synagogue lacked adequate 'size and looks.'[44]

These comments point out that Longfield, not being a trained architect, held rather conventional ideas on religious architecture, as by the late 1920s, a more progressive strand of religious architecture having emerged *en métropole* was being

Figure 2. "Laying of the corner stone of the Wallace Memorial Church, Likasi [sic]". The event took place on 11 August 1929. (source: AUMC, Mission Albums Africa #14, p. 156, cliché 99810 - courtesy of UMC archives)

introduced in the colony, replacing the widely used neo-gothic style. Both the new Roman catholic church of Saint-Jean in the native town, an art deco inspired project with a concrete structure designed in the late 1920s by architect Julien Caen, and the synagogue, a brick edifice built in 1929 according to plans of architect Raymond Cloquet, who was one of the pioneers of modern architecture in the Congo, testify to this phenomenon.[45] To this day, these four religious edifices, the Wallace Memorial Church, the Cathedral, the church Saint-Jean and the synagogue, all dating from the 1920s, form important landmarks in a city that has recently been described as a 'open air architectural museum.'[46] From a historical perspective these edifices remain significant first and foremost because they illustrate the extent to which the urban landscape of Lubumbashi at that time was a contested space, with each of the various communities within the city's colonial society vying to mark its presence in stone.

Yet by the time construction of the Wallace Memorial Church started, the Methodists had been losing their foothold in Katanga. The Belgian government had strengthened its control on what had been until then a rather open-minded, cosmopolitan city. It not only restricted migration into the Congo, but also downplayed the use of English in everyday parlance, thus handicapping the Anglophone Methodists. During the 1920s, the UMHK changed its labour policy, training Congolese workers rather than recruiting labourers from the South, which had always constituted the most significant target group for the Methodists.[47] In 1929 Jean-Félix de Hemptinne launched his vehement public attack on the Protestant Missions in the Congo, leading to a three year open conflict between both religions.[48] In the aftermath of the 1929 crash of Wall Street, a strong economic crisis hit the Belgian Congo, leading to a major exodus in the early 1930s that turned Elisabethville into a 'ghost city' for years to come.[49] If the Methodists had every reason 'to be proud of this beautiful edifice,' it was an irony of history that precisely when the Wallace Memorial Church was finished, the souls to be converted were becoming increasingly hard to find.

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Endnotes

1. This paper is mainly based on information collected in the archives of the United Methodist Church held at Drew University, Madison, New Jersey (hereafter AUMC). A part from the Annual Reports and some administrative files, we consulted in particular the correspondence of the various actors involved in the building history of the Wallace Memorial Church: Robert Guptill, Roy S. Smyers, John McKendree Springer, and Victor Longfield. We also browsed the seventeen albums with photographs on Africa held in the collection. Unfortunately, no architectural drawings subsist of the various preliminary projects nor of the church as built. Our efforts of tracing archives in Lubumbashi remained without result. I thank David Maxwell (Keele University) for having initiated me in the UMC archives at Drew. A couple of months after I had executed my research in the archives in the autumn of 2008, Jeff Hoover, an current member of the Methodist Church in Katanga and history professor at the University of Lubumbashi, consulted largely the same files and wrote his own version of the building history of the church in the context of the centenary of the Methodist church in Katanga. See Jeff Hoover, "'To build an institutional church', ou la 'cathédrale' protestante : la construction de la Wallace Memorial Church (1925-1932)" (paper presented at the international conference *Lubumbashi, cent ans d'histoire. Littérature, cultures urbaines, débats intellectuels*, University of Lubumbashi, 9-11 September 2010). I thank Jeff Hoover for the exchange of information on the subject.

2. We will use the contemporary denomination Lubumbashi throughout this paper to refer to Elisabethville, except when quoting from the correspondence.

3. Letter of Morris W. Ehnes to Mrs. Helen Springer, 30 January 1931 (AUMC, #656).

4. Described by some as the 'Lion of Katanga', Jéan-Felix de Hemptinne was one of the most powerful men in Katanga at the time. In August 2010, one of the major avenues in Lubumbashi was named after him, testifying to his historical importance and the fact that he remains part of the collective memory of the city's inhabitants.

5. The Annual Reports provide information who were the missionaries working in the various missionary posts in Katanga and Africa. At the time of the design and construction of the Wallace Memorial Church, the main protagonists residing in the area were Robert Guptill, Roy S. Smyers and, from 1927 onwards, Victor Longfield. Although he played a key role in the whole affair, John M. Springer only stayed in Lubumbashi for a brief period, in the early 1910s, residing in the 1920s alternatively near Likasi, as well as in the former Rhodesia and in the United States. In this period, Bishop Eben Samuel Johnson was the main representative of the Methodist Episcopal Church in Africa. Thomas Donohugh was one of the Secretaries of the Board of Foreign Missions of the Methodist Episcopal Church, based in New York, with whom the local missionaries corresponded on the affair. Dr. Henri Anet, the representative of the Protestant Churches in the Congo, who ran an office in Brussels, also played a crucial role.

6. As such, this article ties in with some earlier texts we have written on the urban history of Lubumbashi, see a.o. Johan Lagae, "From 'Patrimoine partagé' to 'Whose Heritage'? Critical reflections on colonial built heritage in the city of Lubumbashi, Democratic Republic of the Congo," *Afrika Focus* 1 (2008), 11-30; Johan Lagae and Sofie Boonen, "Un regard africain sur le paysage urbain d'une ville colonial belge. Architecture et urbanisme dans le 'Vocabulaire de ville de Elisabethville' d'André Yav," in Bogumil Jewsiewicki et. al. (eds.), *Lubumbashi 1910-1920. Mémoire d'une ville industrielle* (Paris: L'Harmattan, 2010), 107-124.

7. For sources on the topic, see John McKendree Springer, *Pioneering the Congo* (New York: Katanga Press, 1927); J. Tremayne Copplestone, *Twentieth-Century Perspectives. The Methodist Episcopal Church 1896-1939*, (New York: The Board of Global Ministries UMC, 1973). For a specific historical survey regarding the activities in Katanga, see Jeff Hoover, "Les origines de l'église méthodiste-unie au Congo, 1886-1944," in Jeff Hoover et. al. (eds.), *L'Eglise méthodiste-Unie au Katanga. Hier, Aujourd'hui, Demain. 100 ans du Méthodisme au Katanga* (Likasi : Presses de l'Université Méthodiste au Katanga, 2010), 1-38.

8. Around that time, other, mainly British protestant congregations such as the Baptist Missionary Society or the Livingstone Interior Mission had already been exploring for some years possibilities of founding missionary outposts in the Lower Congo region in order to reach the Stanley Pool area from which one could navigate the Congo river upstream, into the 'Heart of Darkness.'

9. At the time, Congo was still under Leopold II's rule and called *Etat Indépendant du Congo*. Only in 1908 would it become a Belgian colony in the true sense of the word.

10. As late as 1927, Roy S. Smyers informed the Board of Foreign Missions in New York that 'it looks to me as if Elisabethville will be less important as a customs and forwarding center than it is now,.' Because the Union Minière du Haut Katanga was investing heavily in an enormous plant at Panda, near Likasi, in his opinion the power balance between the two cities was going to shift. Letter of Roy Smyers to Thomas Donohugh, 8 July 1927 (AUMC, #657). From 1923-1924 onwards, the Union Minière du Haut Katanga restricted access to the African mining workers for the Methodists, while granting the Benedictines privileges. See Copplestone, op. cit., 922-925.

11. The Methodists thus were forced to hold two services on Sundays with 'people sometimes sitting on the outside.' Moreover, as they started to reach a larger group within the European community of the city, they were also confronted with a need to build a chapel to hold services for whites. Letter of Roger Guptill to Thomas Donohugh, 6 March 1925 (AUMC, # 654).

12. Letter of Roy Smyers to Thomas Donohugh, 10 July 1926 (AUMC, #656).

13. In that respect, it is interesting to compare the Wallace Memorial Church with the Hartzell Memorial Church in Luanda, Angola. Also designed in a neo-gothic style, this edifice was far more modest in size. See photographs of original drawings (AUMC, Mission Albums Africa #11, 142-148). The 1928 Annual

Report of the Board of Foreign Missions of the Methodist Episcopal Church also indicates that in the then Rhodesia, almost no proper building for religious services were available.

14. See Fernand Grevisse, *Le Centre Extra-Coutumier d'Elisabethville. Quelques aspects de la politique indigène du Haut-Katanga industriel* (Brussels : Institut Royal Colonial Belge, 1951). Lippens had discovered the planning principle of spatial segregation during his travels to Johannesburg.

15. See "Gifts of all land held by Congo Mission Conference of Methodist Episcopal Church in the Katanga Province of the Belgian Congo (compiled by John M. Springer, fall 1927)" & Records of property on Foreign Fields (AUMC, file 2525-3-3:07).

16. Commenting upon this bizarre situation of not being allowed to build anywhere in the city, Robert Guptill cynically suggested to the government that they 'might [then] go [perhaps] to heaven with it but [that they] preferred to let that time come unannounced sometime later.' See letter of Robert Guptill to Thomas Donohugh, 6 March 1925 (AUMC, #654).

17. On the role of Anet in the affair, see the correspondence between Donohugh and Anet in files of the Bureau des missions protestantes du Congo belge (1920-1949) (AUMC, file 1183-6-3:14). For a more general overview of Anet and his activities, see also Gösta Stenström, *The Brussels Archives 1922-1968: Bureau of Protestant Churches and Missions in Central Africa, Brussels* (Uppsala: Uppsala University, 2009), passim. The correspondence suggests that Charles Hendrickx, the architect that the Methodists had in the meantime approached to design the church, was also instrumental in obtaining the plot.

18. See "Elisabethville property, 1.44 hectares in Neutral Zone. Extrait du contrat de cession de terres" (AUMC, #657). The sole restriction for receiving the land for free was that they could only use it to build a 'chapel and a school' and that these edifices had to be constructed within a reasonable amount of time, otherwise they would lose the right on the land. The latter was a general rule in the building regulation of the Belgian Congo, with which the Methodists were quite familiar through previous experiences. 'Usually it is necessary to start building within a year of the beginning of a contract. […] On several occasions we have asked for land from the government through the CSK [Comité Spécial du Katanga] which is the government agency for land operations, have received a land, paid rent, and then had to relinquish it –at the government's request, because we found that we did not have the time or the money to fulfill the conditions.' Letter of Roy Smyers to Thomas Donohugh, 2 April 1926 (AUMC, #656).

19. Letter of John M. Springer to Roy S. Smyers, May 25th, 1927 (AUMC, #213). As mentioned, no drawings of these preliminary designs subsist in the archives in Drew, and our search in Lubumbashi also remained without result.

20. Acting as the consulting architect of the Board of Foreign Missions, Black gave advise on the various design proposals for the Wallace Memorial Church. Black had a long experience of building missionary architecture in China, where he had coordinated the Foochow Construction Bureau. For some general guidelines on the architecture of Methodist churches, see E. Benson Perkins & A. Hearn, *The Methodist Church Builds Again. A Consideration of the Purpose, Principles, and Plans for Methodist Church Building* (London: The Epworth Press, 1946); William H. Leach, *Protestant Church Building. Planning, Financing, Designing* (New York: Abingdon-Cokesbury Press, 1958).

21. Letter of John M. Springer to Roy S. Smyers, 25 May 1927 (AUMC, #657).

22. Smyers replied that he was not sure the suggestion to relocate the tower made real sense, as the width of the *zone neutre* was quite considerable and there was no road to the native town directly from the position of the church. Moreover, the Africans did not live exclusively in the native town, as domestic servants, the numver of which Smyers estimated at 2000 in all, resided in the European town 24/7. Finally, he countered the assumption that the church would be "more in the public eye than any other". Letter of Roy Smyers to Thomas Donohugh, 8 July 1927 (AUMC, #657). In the final design that got actually built, the back façade no longer is given a prominence, as its author, Victor Longfield, also argued that 'the majority [of the natives] came by way of the roads and the town proper, as many of them are house attendants.' Letter of Victor Longfield to Thomas Donohugh, 28 September 1927 (AUMC, #220).

23. The correspondence is not entirely clear on the origin of this design proposal, yet some letters indicate that it might well be due to a suggestion of the American Board Church in Johannesburg, see letter of Donohugh to Roger Guptill, 13 August 1924 (AUMC, #654).

24. Letter Thomas Donohugh to Roger Guptill, 19 January 1924 (AUMC, #654).

25. Letter Thomas Donohugh to Roger Guptill, 8 May 1924 (AUMC, #654).

26. Hendrickx had entered the service of the colonial Public Works Department in Elisabethville around 1919, the year in which he also made the design for the Roman Catholic cathedral at the request of Jean-Félix de Hemptinne. Hendrickx' award winning 1925 competition project for the city's Palace of Justice was never executed. See Johan Lagae, "'Kongo zoals het is.' Drie architectuurverhalen uit de Belgische kolonisatiegeschiedenis 1920-1960" (PhD diss., Ghent University, 2002).

27. 'I almost think Hendricks [sic] is being kept home by our R.C. friends influence as he had a big row with Hendricks [sic] when he found out that he was drawing our plans.' Letter of Roger Guptill to Thomas Donohugh, 24 June 1924 (AUMC, #654).

28. Letter John Springer to Frank B. Wallace, 9 July 1925 (AUMC, #656).

29. 'Delays in getting plans to meet everyone's approval might be explicable,' Roy Smyers wrote to the Board in New York, 'but we certainly cannot afford, in my opinion, to let the Government think that we are taking oterwise than seriously the obligations which we, as the suppliants and the receivers of a favor, have undertaken.' Letter of Roy Smyers to Thomas Donohugh, 8 July 1927 (AUMC, #657).

30. For a concise historical sketch of the situation, see Bruce Fetter, *The Creation of Elisabethville 1910-1940* (Stanford: Stanford University, 1976), 104-105. It should not be to be forgotten that it in 1921 Simon Kimbangu had been transported from the Lower Congo region to Elisabethville, to be imprisoned. For a historical synthesis on *Kimbanguism* and *Kitawala*, topics on which there exists a large literature, see Isidore Ndaywel è Nziem, *Histoire générale du Congo*

(Paris: Duculot, 1998), 415-428.

31. On this anti-American climate, see Letter of Thomas Donohugh to Roy Smyers, 15 October 1926 (AUMC, #656). On the negotiations by Anet, see references note 17.

32. In the end, Hendrickx tried to sue the Methodists for not complying to agreements made.

33. Letter Roy Smyers to Thomas Donohugh, 12 November 1926 (AUMC, #656); As Haas preferred working under the radar, Smyers asked his fellow missionaries 'not to mention the names of any who are helping on plans.' Letter Roy Smyers to fellow missionaries, 10 December 1926 (AUMC, #656).

34. The Longfield files contain detailed information on the selection process, illustrating the role of Springer (AUMC, #220). A part from the Wallace Memorial Church, Longfield was tasked to build a residence for the Methodists in Likasi.

35. Letter of Victor Longfield to Thomas Donohugh, 28 September 1927 (AUMC, #220). In a previous letter dating from 8 May 1927, to which he attached a sketch of the main façade and of the ground plan, Longfield already had given some explanations regarding his design that was a further development of Haas' scheme: 'The front elevation gives the typical three entrance style, with a large window in the tower to eventually be on the balcony level. The lines of the front are long to get the effect of great height. The pitch of the roof is raised in order to use a wooden truss formation in the open, giving a ceiling effect very similar to the skeleton frame work of a native building.'

36. De Hemptinne, who thought of himself as the successor of the *moines bâtisseurs* of the Middle Ages, departed from the conventional practice among the Benedictines of using a neo-gothic style for religious buildings, and instead returned to a style that evoked the souvenir of a 'christianisme primitif' that was more rural than urban in its view on the world. For a detailed reconstruction of the building history of the cathedral and a discussion of the ideology underlying the choice of its building style, see Nicolas Esgain*, La vie quotidienne à Elisabethville (1910-1932). Emergence d'une culture urbaine* (Thesis, Catholic University of Louvain-la-Neuve, 1997), 49-61.

37. Letter of Victor Longfield to Thomas Donohugh, 28 September 1927 (AUMC, #220). As no drawings of Hendrickx' design subsist, it cannot be established to what extent the neo-gothic style was already present in his proposal and thus another source of influence for Longfield's design.

38. On the occasion, Springer noted that the building was becoming a 'thing of beauty and will be in itself a sermon to the passers by.' Letter of John M. Springer to dr. Edwards, 26 August 1929 (AUMC, #213). That year, Christmas was even celebrated in the open air space delineated by the enclosure of the rising walls.

39. Letter of Victor Longfield to Thomas Donohugh, 6 June 1930 (AUMC, #220).

40. Letter of Victor Longfield to Thomas Donohugh, 20 August 1929 (AUMC, #220).

41. Letter of Thomas Donohugh to John Springer, 29 August 1930 (AUMC, #656).

42. The extra costs were due to a number of reasons. Because of the sloping topography of the terrain, the number of bricks used in the lower part of the building had augmented considerably. The changes in style also required extra brickwork of a more difficult nature, creating surpluses in the work of African labourers, the hourly cost of which had been greatly underestimated. Finally, the use of more noble materials such as asbestos cement slates for the roof also played a substantial role in the rise of costs.

43. Letter of Victor Longfield to Thomas Donohugh, 6 June 1930 (AUMC, #220).

44. Ibid.

45. For a discussion of these edifices in the 1920s urban landscape of Elisabethville, see Johan Lagae, "Bouwen in 'Le Katanga ultra moderne.' Koloniaal architectuuraal patrimonium in Lubumbashi, Democratische Republiek Congo," *Monumenten en Landschappen* 2 (2008), 29-54.

46. Marc Pabois et.al., *Lubumbashi. Capitale minière du Katanga, 1910-2010* (Lubumbashi: Hall de l'Etoile, 2008).

47. On the labour policy of the Union Minière du Haut Katanga, see a.o. John Higginson, *A Working Class in the Making. Belgian Colonial Labor Policy, Private Enterprise, and the African Mineworker, 1907-1951*, The University of Wisconsin Press, Wisconsin, 1989.

48. On the Hemptinne's attack, launched in one of the leading local newspapers, *Essor du Congo,* and the response of the protestants, see Gösta Stenström, op. cit., pp. 261-266.

49. In a letter to Longfield of 21 April 1931, Donohugh expressed his concern on the situation writing that they hoped 'the exodus from Elisabethville will prove to be relatively temporary, although we are all greatly concerned about the far reaching effects which the development of the mines in Northern Rhodesia is bound to have on all that part of Africa.' On the situation in Katanga during the economic recession, see Octave Louwers, *Le problème financier et le problème économique au Congo belge en 1932* (Brussels : Institut Royal Colonial Belge, 1933); Jean Stengers, *Combien le Congo a-t-il coûté à la Belgique?* (Brussels : Académie Royale des Sciences coloniales, 1957).

The Spoils of Architectural Training: Studying School Manuals, Teaching Handbooks and Exercises Sheets in Europe (Eighteenth to Nineteenth Centuries)

SESSION CHAIR:

Valérie Nègre (CNAM (CDHTE-HTTP) / Ecole Nationale Supérieure d'Architecture Paris, France)

Although the study of architecture magazines and periodicals has sparked renewed scholarly interest during the last decades, the wide range of "training documents" published for educational purposes by institutions educating architects, civil and military engineers in Europe has never been subject to scrutiny. In addition to royal and private academies in the eighteenth century and the wide adoption the Beaux-Arts school's ateliers system in the nineteenth century, architecture was also taught in other institutions such as engineering schools, regional schools of architecture, schools for applied arts as well as other professional institutes. All of them prepared their students to design various types of projects according to the professions to which they designated themselves. Within this frame, a large range of manuscript and printed material among which school manuals, teaching handbooks, graphic models sheets, exercise handouts and three-dimensional models, was used to frame and to shape a common body of references to the various building trades. While recent historiography reveals a multiplication of studies in the field of architecture publications, no study has ever been undertaken at large on this grey educational production which often remained uncatalogued in schools' archives when not scattered away with the closure of the institutions. This lack of research can be partly explained by the short-lived nature of this material, either manuscript or modestly lithographed in the own schools' print shops, which was often updated and reprinted according to changes in the educational programs. Nevertheless, the study of this mere "body of knowledge" and common references seems pivotal to us. Its recording and analysis will enable to envision the full realm of architectural training as a global and collective process associated with scholarly knowledge such as geometry, sciences of engineering or art history. It will also replace the training process at the heart of the act of architectural teaching and educating.

The purpose of this session is thus to share about the still marginal place of training publications produced in Europe (including the ones issued by small or local institutions). We invite papers that will discuss the state of research and the methodological challenges regarding this complex and manifold material such as: how to tackle the corpus of educational publications in order to create a "global listing of teaching material"? How to analyse these tools (drawings, scrapbooks, models) and methods (principles, examples, demonstrations...)? How architectural and technical design and invention were taught?

LEARNING FROM *GREEN-GRAY* EDUCATIONAL LITERATURE: THE PRODUCTION OF FRENCH MILITARY SCHOOLS (1748-1848)

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This paper deals with military instruction in France during the first half of the nineteenth century, at the time of the French Ministry of War's ambitious project to set up printing presses in all the military schools. As early as 1820, the school of military engineering at Metz was equipped with a lithographic press. It is important to realise just how early this was, considering that the technique of lithography had only recently been invented in Germany. But, as always in the field of iconography and reproduction techniques, the Army reacted very rapidly.[1] The first lithographic press installed in Metz was used to print blank exercise sheets 'for exercises of repetition, to reinforce technique' as well as instruction manuals. There would be much to say about the production and distribution of blank exercise sheets in French military schools but, in this short study, I will concentrate on a single type of material: the teaching manuals produced in the lithographic shops and their surprisingly wide distribution in the public sphere.

The goal of this paper is thus twofold. First, to illustrate how the establishment of these printing shops in French military schools in the nineteenth century led to the creation of new intermediate layers of archival material useful to the study of the history of architecture and the history of architecture books. While the manuscripts that were still occasionally used to prepare publications were generally produced in a single copy, the numerous teaching manuals, that were updated annually, or even biannually, in the schools' lithographic shops, provide an entirely new body of material with which to study editorial processes. The paper also aims to shed light on the specificity of the French context in the early nineteenth century and show how technical, educational and editorial renewal, spurred on by a strong nationalistic sentiment, transformed inexpensive lithographic military manuals into a widely popular patriotic literature.

THE TECHNOLOGICAL IMPETUS

The first lithographic experiment launched in Metz in 1820 was soon followed by further ministerial action. An official decree of 1832 announced that 'The establishment of a lithographic workshop in each artillery school was deemed suitable to supply all types of instruction by using the facilitated reproduction techniques to publish, at very low cost, the reports, programs, drawings, books of exercises and all sorts of objects that are often not available to the officers, being unable to procure them[2]. The first lithographic presses have been agreed for the schools of La Fère, Toulouse and Douai after the officers in each school have studied, in Paris, the procedures of the art that they are then charged to demonstrate in their respective garrisons.'[3] The setting up of lithographic shops in a wide range of military educational institutions such as the school of military engineering at Metz, the regimental artillery school at La Fère, the military college at Toulouse (Sorrèze) and the School of Mines at Douai was of pivotal importance. As well as establishing a new printing culture within teaching institutions, it also allowed a selection of the most technically gifted officers who were then sent to other schools to spread the new technique. In the decade 1830-1840: 'the minister ordered that for the establishment of lithographic processes in the other schools, officers would be sent from schools that were already equipped […] they would be selected from those who best understood and practiced this new industry'.[4] Finally, in August 1836, following an inspection by the *Génie*, a circular from the Direction of Personnel at the Ministry of War approved the publication of a totally new series of academic programs comprising 'instruction manuals for practical school as well as model sheets and charts'.[5]

Besides fostering intense competition between military institutions, this technological innovation greatly increased the stocks of the usually modest military school libraries so that they had to install new cabinets for libraries and models of plaster and wood: 'the schools will be provided with a military library of the sciences and the arts […] with a cabinet of models and reliefs containing the most important objects for the service of the two arms and with a complete lithography (that is to say, a lithographic shop)'.

LITHOGRAPHY ON THE SCHOOL PREMISES

The establishment of lithographic shops in military schools did not change the actual training methods which had, since the foundation of the Royal engineering School at Mézières in 1751, been based on learning through 'copying and repeating' models that were either written or built. Since the earliest discussions on military instruction, much attention has been given to the exercises

used in the applied studies and to the copying of models from handbooks during what was called the 'classroom sessions': 'it is by means of these instructions that they had to copy and by the large number of drawings that were annexed that the trainee, aided also by the explanations given in the study rooms learned […]'.[6] Nicolas de Chastillon, the first director of the school at Mézières, wrote several courses in manuscript, one of which was '*Le traité des ombres pour le dessin géométral*' (A treatise on shadows for geometrical drawing); numerous copies of it were to be found in all school archives, attesting to its wide circulation. So the replacement of manuscript courses by lithographed ones did not change the internal training systems of the schools.

One important effect of the introduction of lithographic shops in schools was the radical modification of the speed of production, as well as the cost and diffusion of training material; this led to a wide and rapid standardization of the students' military knowledge. On the one hand, the application of copyrighted teaching methods through lithographed handbooks of equal shape, format and content contributed to establishing a common body of knowledge that was taught almost simultaneously in all schools. The young engineers under training were, moreover: 'expressly forbidden to perform other work or to employ other devices than those mentioned in the handbooks. It is also forbidden to attempt any improvement or try new devices without prior authorization from the General Inspector'[7]. On the other hand, this inexpensive and simple reproduction method progressively involved teachers in producing and updating their own manuals by writing directly in cursive letters on the lithographic stone - erasing or adding as necessary. The courses of instruction given by Henri Noizet de Saint-Paul (1796-1858) and Louis Cosseron de Villenoisy (1821-1903), for example, were regularly updated in this way in the printing shops of Metz and Saint-Cyr. This practice, although still rare in the first half of the century, became widespread after 1871. Such instructors as Paul Emile Delair (1837-1904) updated their courses every semester in the school lithographic presses (Fig. 1).

Another important effect of the introduction of lithographic methods was the authorized marketing of the new training material, for the first time in the history of military instruction. The 1832 decree stated that all exercise and classical handbooks 'could be sold, at a modest price, to military students and, more broadly, to all officers of the two arms (that is, infantry and cavalry) including those not in the schools'. Sold first as lithographed handbooks in their original format, they were soon included in the publishing program of the Parisian *Dépôt général des fortifications*. Changing the format of the military handbooks, the *Dépôt* printed them as a 'collection of large in-folio plates with captions and instructive notes'.

This semi-public production that was constantly being updated, re-edited and sold outside the military schools had an immediate double impact; in terms of the updating of technical knowledge, on the one hand, for previously it was often necessary to wait years before an author re-edited a work, when its printing and publishing were costly. The military libraries acquired few new copperplate books, and had books that were mostly out of date[8]. It was only in the manuscript textbooks that one found the latest teaching. In terms of speed of distribution, on the other hand: the practice of the manuscript copying of the courses by the pupils, current before the introduction of the lithographic presses, was subject to much uncertainty. Some copies were incomplete or only partially copied, the drawings were simplified, there were mistakes - both of copying and of comprehension - and, of course, copies were

Figure 1. Paul-Emile Delair, Cours de fortification permanente, Metz, Lithographie de l'école d'application du Génie, August 1881. (source : Ecole Militaire, Paris, A. VI. 274 bis)

lost. It is interesting to read an apostil by General Augoyat, written on the first page of a manuscript text (The Temporary Fortification of Metz) that was copied out by Capitaine Lemut in 1824; the general wrote: 'I acquired this manuscript in Paris,

from the family of Commandant Chambaud, killed before Algiers in 1830. Before returning to the Dépôt, I sent it to the *École d'application*, where they took a copy'.[9] In 1834, the nine French artillery schools (Lyons, Douai, Arras, Metz, Strasbourg, Besancon, Montpellier, Toulouse and Rennes) as well as the engineering school of Metz all had a library, physics and chemistry cabinets, a museum of weapons and small models and collections of maps and drawings of all sorts[10].

But despite this openness to military and paramilitary circles, the two formats used for this first lithographic production were not well adapted for the general public. The first, produced by the school presses for the pupils, was not bound, while the second, published in the form of large plates engraved by the *Dépôt des fortifications*, was intended to be kept in a portfolio. Their circulation and introduction to public and private libraries was, in fact, limited.

THE RENEWAL OF MILITARY LIBRARIES IN NINETEENTH CENTURY FRANCE

The public reception of this literature of military instruction would have remained, generally very modest, if this period had not also been one of an intense wish to reform the regimental schools used for instructing the soldiers of the engineering regiments quartered in the garrison towns. On 14 July 1836, a new regulation on instruction in engineering regiments stipulated that in each school, as well as three civilian teachers in charge of primary instruction - drawing and mathematics - an engineering guard would be specifically charged with 'the library, the models cabinet and the furniture of the rooms[11]. Two years earlier, in the *Journal of the military sciences of the Army and of War* (*Journal des sciences militaires des armées de terre et de guerre*) Henri de Calais had already pled for the modernization of the stocks of military libraries and the broadening of the subject-matter.[12] Then, in 1840, Ferdinand Durand published a work entitled '*De la nécessité de fonder des bibliothèques militaires*' (Of the necessity to establish military libraries) in which he noted the importance of setting up military libraries, not for the use of officers, but of non-commissioned officers and soldiers of the regimental schools[13]. He complained of the inadequate resources of the garrison libraries, noting that one could not give 'the name of library to the dozen books and the notebooks for learning to read, the illustrated bibles and the simplified books which are given to the schools'.[14] This opinion was echoed in many publications of the first half of the nineteenth century and it led to the progressive establishment of libraries in diverse military schools and more improvised places such as the 'cannonball workshop' of Blaye in about 1830. The Ministry of the Navy took part in a movement to establish and spread military instruction. On October 30, 1839, a ministerial decision taken by Guy-Victor Duperré, a minister in the Soult government, set up nautical libraries on board all warships at such ports as Brest, Toulon, Rochefort and Lorient, in the forges of la Chaussade in the Nièvre and at the Nantes cannon foundry at Indret. As a result of Duperré's efforts in metropolitan France, many military libraries were also established in the French protectorates and the colonies, at the instigation of Marshall Soult, Minister for War. In Algeria, sixteen military libraries were founded in 1842. This movement of reform accelerated with the decision on December 10, 1860 to establish military libraries in all garrison towns and it was completed shortly after defeat in the Franco-Prussian War, with the official institution, on 1 June 1872, of garrison libraries annexed to public libraries by General Courtot de Cissey.[15]

THE EDITORIAL RICOCHET

This wind of renewal of military science that was blowing in France reached its peak in the last quarter of the nineteenth century; it resulted, by an effect of ricochet, in making the fortune of several large Parisian publishing houses. Already the main courses at the engineering school of Mézières, notably those of Henri Louis Auguste Noizet de Saint-Paul and Simon François de Gay de Vernon had been published in the last years of the eighteenth century. Seeking to revamp their military catalogue to provide books for the new libraries, several publishers quickly understood what an editorial fortune the lithographed textbooks represented. While the great military printers of the modern period often operated with geographers and scientists such as Melchior Tavernier, Nicolas de Fer and later Claude Antoine Jombert, the publishing houses of the early nineteenth century followed the lead of the teachers at the *grandes écoles*. Some of them were founded by ex-officers such as Jean Corréard, the author of a historic essay on artillery in the fifteenth century. Their sphere of activity was also very wide. As well as the publishers serving the schools, like Verranois which, in the middle of the eighteenth century at Mézières, was printing instructions exclusively for the engineering school, popularising publishers now appeared. Magimel was the first: a small private enterprise in the early years of the nineteenth century, Magimel was associated with the paper-maker Pochard. Magimel, printer to the King and to the Emperor, specialized first in publications dealing with military operations of the Napoleonic army. Magimel's association with the publishers Anselin and Pochard, in about 1810, resulted in the creation of a vast publishing enterprise based on the publication of textbooks for the military schools. The 'catalogue of military books, registers and reports for the accounts of the various corps at the bookshop Magimel-Anselin et Pochard at 9 rue Dauphine in Paris' published in 1816 already mentioned several works by teachers including a 'General Essay on Fortifications' (*Essai général sur les fortifications*) by Henri Bousmard

and a 'Treatise on Subterranean Fortification' (*Traité de fortification souterraine*) by CL Gillot. The publications of the following decades indicate the exponential increase of this register of publication with, notably but among many others, the 'Elementary course on fortification' (*Cours élémentaire de fortification*) by Nicolas Savart, the 'Summary of Fortification for Infantry Students' (*Résumé de fortification à l'usage des élèves d'infanterie*) by Victor Joseph Zaccone and 'The Instructions for Defilating for the Practical School of the Royal Staff Corps' (*L'instruction pour le défilement ( ) à l'usage de l'école d'application du corps royal d'Etat-Major*) by Jean-Baptiste Imbert and the 'Essay on the Defense of states by fortification; by a former student of the l'Ecole polytechnique' (*Essai sur la défense des Etats par les fortifications par un ancien élève de l'Ecole polytechnique*) by Franciade Fleurus Duvivier. The association of Magimel, Anselin and Pochard continued after the death of Magimel himself in 1822; Anselin and Pochard bought his editorial stock. Anselin, especially, worked actively on several editorial projects. In the editor's preface to a textbook by Duvignau, he wrote '*This general officer had a son that we have unsuccessfully looked for in the hope of obtaining from him information about his father. We regret that we have been forced to abandon the project that we had developed, of putting a biographical note at the head of the 'Mézières exercise'.*[16] In the second half of the nineteenth century, the torch of the publication of military textbooks was taken up by Jean Dumaine and then by Louis Beaudoin. Louis Beaudouin was one of the first publishers to include photographs in his books, particularly photographs of the cavalry school exercises.

Figure 2. Alexandre Ratheau, Instruction sur la fortification des bourgs, villes et châteaux par Albert Dürer, Paris, Charles Tanéra, 1870. (source : Ecole Militaire, Paris, A. VI. 229)

It is also at this period that *Le Spectateur militaire* was founded by Maximilien Lamarque, Nicolas Fririon, Mathieu Dumas, Jean-Jacques Germain Pelet and Bernard Valazé, as publicity for the work of the military publishers. Indeed, Pelet and Valazé were both teachers at military schools, respectively Toulouse and Paris. Publishing many specialized articles and book-reviews on publications and reported on the main instructional publications, including those on campaign and permanent fortification, Dufour's Memorial of War and the fortification elements of Saint-Paul.

This is how, in the nineteenth century, the study of lithographed military textbooks and their various versions, published in deluxe editions, as off-prints in *Le Spectateur militaire* and through the private publishing houses, totally revitalised military literature. While there subsisted a certain legacy of the historic military treatises of the *ancien régime* in the form of historiographical re-readings of the works of Dürer, Vauban, Clairac and Bélidor by Alexandre Félix Ratheau, teaching at the school of St Cyr, the catalogues of the large bookshops specialized in military art were dealing with a new type of book (Fig. 2). The 'military textbook', an analysis of the lessons given in the *grandes écoles* and of which the primary sources, in the form of lithographed texts, were an important, unexploited corpus of what could be called '*verdigris*' literature of which there is no equivalent in the history of architecture or the history of publishing.

Endnotes

1. Military officers showed the same reactivity with photography a decade later. See for example the nineteenth century series 1K and 2K in the archives of the
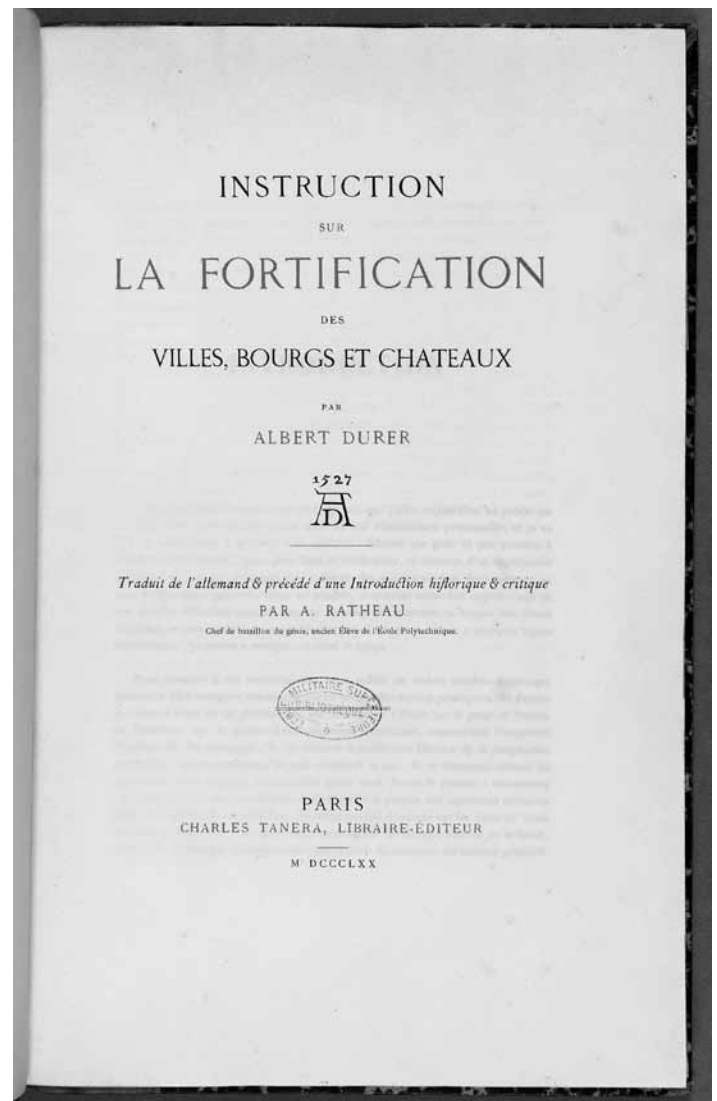
Service Historique de la Défense at Vincennes.

2. Hermann Cotty, *Supplément au dictionnaire d'artillerie*, Paris, Anselin (1832), 342.

3. Cotty (1832), 345.

4. Cotty (1832), 1094.

5. SHD Archives (Vincennes), 1V0 21, n° 18. Nicolas-Joseph Maison, *Circulaire portant envoi du règlement sur l'instruction des régimens du Génie*, August 18 1836.

6. Citat in Antoine Picon, 'Les exercices dans les écoles d'ingénieurs sous l'Ancien Régime et la Révolution,' *Histoire de l'éducation* (1990), 46, 53-109.

7. SHAT Article 18, 1 VO21, pièce 18. *Nicolas-Joseph Maison, Règlement sur l'instruction des régiments du Génie,* 14 juillet 1836, Paris, Imprimerie Royale, Août 1838, 23.

8. The catalogue of books kept in the library at Metz in 1799 attests of the presence of many outdated books compared to recent publications. , SHD, 1V O 2, pièce 109. « Catalogue par ordre alphabétique des ouvrages de la bibliothèque collationné le 20 prairial an 7 de la République, M. Catoire, le 8 juin 1799 »

9. Lemut, *Fortification passagère, par Lemut aîné,* Metz,1824. SHD Library, Mss Gen n°164.

10. Agnès Boishult, *Contribution à l'histoire des bibliothèques de cercle d'officiers*, mémoire d'étude, Lyon, ENSSIB, janvier 2011, 11.

11. Nicolas-Joseph Maison, *Règlement sur l'instruction des régiments du Génie, 14 juillet 1836, Paris, Imprimerie Royale*, August 1838, 14. SHAT Article 18, 1 VO21, pièce 18.

12. Henri de Calais. « Mémoire sur l'établissement d'académies militaires en France »*, Journal des sciences militaires des armées de terre et de mer,* t. V, n°13 (january 1834), 38-49.

13. Ferdinand Durand, De la nécessité de fonder des bibliothèques militaires, Paris, Jean Dumaine, 1845.

14. Durand (1845), 14.

15. Victore Saussine, *Dictionnaire de législation et d'administration militaires, Article Bibliothèques militaires, Paris,* Vve Berger-Levrault et fils, *1845.*

16. Bernard Duvignau, *Exercice complet sur le tracé, le relief, la construction, l'attaque et la défense des fortifications*, Paris, Anselin, 1830, ix.

HANDBOOKS, TEXTBOOKS, MANUALS: RE-READING CLASSICAL SOURCES ON THE 'SCIENTIFICATION' OF BUILDING KNOWLEDGE IN THE NINETEENTH CENTURY

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INTRODUCTION

"Dogmatic, boring, conservative" is the dictum given for textbooks that Thomas S. Kuhn established for the history of science for decades.[1] However, since the 1990s this notion has been challenged: recent research has underlined the importance of textbooks for the production of new scientific knowledge and the emergence of scientific disciplines.[2] This re-evaluation forms the starting point of our line of argument – focusing on polytechnic textbooks for building sciences of the nineteenth century. Against the background of the emergence of such an institutional polytechnic tradition in the first half of the nineteenth century, we discuss the structures of polytechnic textbooks.

The strategies of polytechnic knowledge production can be identified as processes of 'historicising', formalisation and economisation in respect to the field of building in the nineteenth century. Using Jean Rondelet's *Traité de L'Art de Bâtir* as an example, these strategies are explained.[3]

Focusing on the first decades of the nineteenth century, the processes of polytechnic 'scientification' of building, define this newly academic field as an encyclopaedic one. During the 1850/60s one can observe a change in the self-understanding and self-conception of this approach to building. It is reflected in many ways by the organisation of the Zurich Polytechnic School, founded in 1855. Furthermore, the change influenced the conception of polytechnic textbooks on building, as well as the strategies of knowledge production. Changes will be analysed by some textbooks written by teachers of the Zurich School of Architecture (*Bauschule*). In respect to the formerly constitutive processes of 'historicising', formalisation, economisation, aims of knowledge production and distribution began to undergo changes. Such bodies of building knowledge shifted away from their polytechnic roots – nonetheless they were still important for the daily practice of an architect. Thus, the novel genre of textbooks on building site supervision are sketched to illustrate links between science and practice.

Despite these allowances, the aim of this paper is clear: to re-establish handbooks on building as a source and means of 'scientification' of the field.

THE EMERGENCE OF THE POLYTECHNIC TRADITION

Founded in 1793/94 the École Polytechnique in Paris, was the institutional birthplace of the 'polytechnic tradition'.[4] Its foundation was influenced by two contemporary concepts: bureaucratic elites and the liberal bourgeoisie, both evaluated the development of institutions for technical education as the "royal road of industrialisation".[5] Scientific and technological knowledge was thus seen as a chance to take the industrial lead from the British. The general idea of social and economic progress received its corollary in the educational model of the École Polytechnique, which was shaped by mathematicians and natural scientists such as Gaspard Monge. Mathematics and the natural sciences dominated the polytechnic curriculum, whereas practice-oriented bodies of knowledge remained outside. This model was based on the assumption that the curriculum at the École Polytechnique imparted abstract, theoretical knowledge, which should serve as the foundation for applied sciences, and would allow graduates to solve problems in practice.[6] As such, contemporary figures regarded architecture and engineering as applied natural sciences. Such a didactic conception was appropriate to the contemporary structure of French academic institutions; where the majority of École Polytechnique graduates attended, thereafter, existing or newly established specialist schools. The German polytechnic institutions could only emulate the model to a limited extent in the nineteenth century, as they lacked associated specialist schools. By establishing so-called *Vorschulen* (preschools), they tried to unite the French structure into one institution. The curriculum at these preschools focused on mathematics, natural sciences and a number of general subjects, whereas the subsequent polytechnic curricula focused primarily on practice-orientated knowledge. An examination of the early curricula of polytechnic schools reveal that the subjects of architecture and engineering often only diverged during the last year of study with a number of separate construction projects. Thus, it might be stated, that early polytechnic curricula preserved the totality of the field of building. Contemporary criticism of this polytechnic education concept focused on two aspects: firstly, an argument ensued over the apparent lack of connection between the curricula of the preschools and those of the individual polytechnics. A second

charge was that the teaching was too practical and not scientific enough. A fundamental reform was seen as the way to solve this problem, and it found its first manifestation at the polytechnic school in Karlsruhe in the 1840s. The successful reform created a new image for polytechnic education – characterised by a close and systematic combination of basic scientific disciplines and practical courses.[7] Furthermore, the schools started to establish scientific research as an independent endeavour. Architecture and engineering were no longer therefore, considered applied natural sciences but took on lives of their own.[8] In the mid-nineteenth century this polytechnic model was most clearly embodied in the schools of Karlsruhe and Zurich.

The oscillation in the polytechnic education between theory and practice is also reflected in contemporary polytechnic textbooks. They addressed students and practitioners alike and focused on disciplinary as well as on non-scientific practice. This concept reflected the contemporary conception of social and economic progress, in which technological and scientific development played a fundamental role. Standing in stark contrast to the dominant neo-humanist ideals of education of the nineteenth century, this conception allowed the polytechnics to secure and increase their social status.[9] The nexus between scientific methodology and practical relevance in polytechnic textbooks became ever stronger, not only because of their enlarged audience. The practice of building itself became a key source for the production of new scientific knowledge – clearly shown, for example, by the development of graphic statics by the Zurich professor Carl Culmann.[10] Thus, polytechnic textbooks were a double expression of the relationship between theory and practice, but they would also play an important role in the emergence of separate disciplines of the nineteenth and early twentieth century.[11]

POLYTECHNIC 'SCIENTIFICATION' OF CONSTRUCTION KNOWLEDGE

The task of building construction was the focal point of the process of 'scientification' in the polytechnic tradition, beginning in the very early nineteenth century – prominently expressed in Friedrich Schinkel's famous dictum 'architecture is construction'.[12] In this respect Rondelet's *Traité* could be said to especially mark the emergence of academic textbooks on polytechnic building.[13]

The *Traité* represents the first attempt of an encyclopaedic polytechnic textbook on building construction structured and systematised solely according to aspects of building construction.[14] Three central processes influenced Rondelet's representation of knowledge: formalisation, economisation and historical inclusion of the bodies of knowledge themselves.

'Formalisation' applied to aspects of mathematical and experiment-led production and the representation of polytechnic construction knowledge. (Fig. 1) The importance of such formalised construction knowledge, for the subsequent emergence of modern civil engineering science from the second half of the nineteenth century onwards, is evident and well known in the field of construction history.[15]

'Economisation' – the *commodification* of building construction – was deeply rooted in a wider process of societal *commodification*.[16] Furthermore, by the end of the eighteenth century, access to labour force had radically diverged from the model of absolutist corporatism. 'Work' had attained a new level of monetisation. This economic re-evaluation played an important role in ensuring the physical concept of [labour] 'force' to become a central concept by the late eighteenth century. Physical measurability and the monetisation of (the labour) force formed mutually stabilising discursive elements.[17] They characterise Rondelet's geometrical method of cost calculation, whose principle aim was to overcome existing local and regional constraints.

'Historicising' focuses on the importance of historical bodies of knowledge for the construction practice in the nineteenth century. Its integration into polytechnic textbooks were based on the concept of *historia magistra vitae*. Historical knowledge was regarded as indispensable
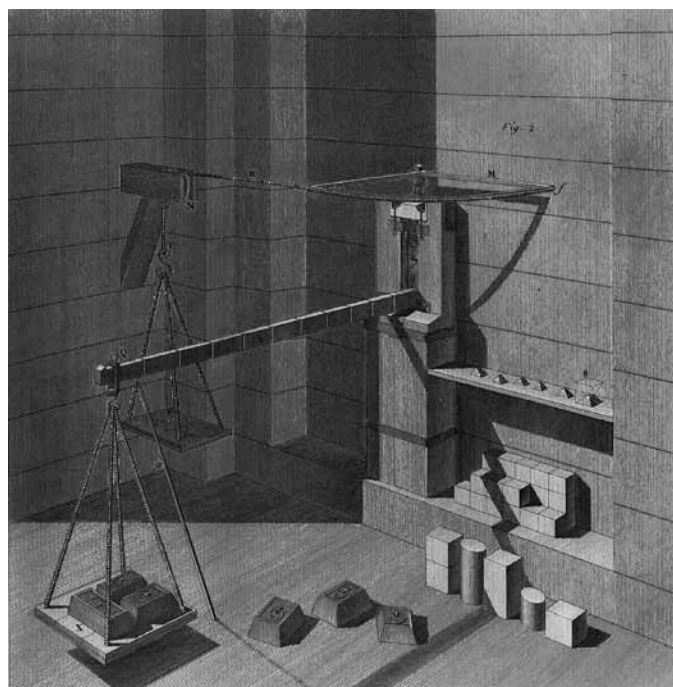
Figure 1. Rondelet's own experiments on the strength of building materials were based on his own invention and new machine. Experiment-led production of new polytechnic knowledge regarding building materials was an essential task in the 'scientification' process as such bodies of knowledge traditionally were tacit ones. (source: Jean Rondelet, *Theoretisch-praktische Anleitung zur Kunst zu bauen*. In fünf Bänden. Mit den 210 Kupfern der Pariser Original-Ausgabe. Nach der sechsten Auflage aus dem Französischen (Leipzig and Darmstadt: Karl Wilhelm Leske, 1833-36), plate VII)

for human designs on the future.[18] Natural history had an enduring methodological influence on the newly emerging academic domains of knowledge regarding the man-made world. Around 1800, the idea of evolution and Carl von Linné's botanical classification model, had been brought together and unified, to form the basis of a theory of invention. Referring to Rondelet's *Traité,* Valérie Nègre said, 'history might serve to show one system predates another.'[19] The concept of an evolutionary model of history is illustrated by many aspects of Rondelet's textbook.[20] His model of invention appears to be grounded in the theoretical principle of 'transfer'. Stated in general terms: any new use of a material is facilitated by transferring existing knowledge onto the constructive techniques of how that material was previously used. This form of transfer is the *conditio sine qua non* for the introduction of new building materials. Because new building techniques and materials had no other existing contemporary sources of knowledge to draw upon,[21] the process of 'historicising' was considered a sensible strategy of invention.

The strategies described were formative for the process of polytechnic knowledge production on building construction and its recording in textbooks during the first half of the nineteenth century. Even the relevant textbooks used for teaching at schools of architecture retained an encyclopaedic character; an example being Ludwig Friedrich Wolfram's *Vollständiges Lehrbuch der gesammten Baukunst.*[22] During the second half of the nineteenth century this character loosened, the strategies of 'scientification' and the aims of knowledge-recording also changed. The latter aspect can be highlighted in textbooks written by teachers at the Zurich Polytechnic School. Furthermore, the function of textbooks for the establishment of new disciplines may be clarified.

'HISTORICISING' – POTENTIAL BODIES OF KNOWLEDGE

Tracking the process of 'historicising', one can observe two shifts in the 1850/60s: on one hand the actual relevance of historic bodies of building knowledge became a potential one; on the other hand authors focused more and more on the aesthetics of architectural forms. These shifts caused different strategies of knowledge production and recording:

The Zurich professor of structural theory and construction materials, Ernst Gladbach published a number of books on the 'Swiss Style' between 1868 and 1893,[23] which are relevant examples of historical bodies of construction knowledge.[24] Gladbach's interest in vernacular architecture focused on securing implicit knowledge, as he believed that 'these structures are not only of interest for Switzerland but can rather serve more generally as models for all times.'[25] A new strategy for the 'production' of knowledge accompanied the approach. It was based on the contemporary methods of historic building research that Gladbach became acquainted with while contributing to his Uncle Georg Moller's publication, *Denkmäler der deutschen Baukunst* (1815– 51).[26] An individual's own 'visual perception' – the academically trained view of the architect, formed the basis for the findings and documentation. 'Documentation' in this context means firstly to sketch the construction on the basis of measurements with tools like cords and measuring sticks, secondly to edit the sketches and finally to publish them, accompanied by an introductory text. Furthermore, Gladbach's field studies can be closely connected to the methodology of 'hiking through a field of knowledge' as propagated by the Munich professor for cultural history, Wilhelm Heinrich Riehl. Research on the folk-life (*Volksleben*) was, in Riehl's opinion, to a lesser extent about the analysis of written sources and more about anthropological observation.[27] In Gladbach's research, the analysis of written sources scarcely played a role. The reason for this was not only his wish to use time economically and to analyse as many buildings as possible; in Gladbach's works, historic bodies of knowledge lose their contempory nature. This is mirrored by the ambivalent character of his published drawings on the 'Swiss Style'. While on the one hand he presents precise drawings of construction details, on the other hand he uses a crude manner of representation in his efforts for the appreciation of vernacular architecture.

Historic bodies of knowledge were especially important for the teaching of subjects on aesthetics. In this respect, the Zurich school played an important role: its *spiritus rector*, Gottfried Semper, explained architectural aesthetics in his book *Der Stil*, by referring to actual scientific theories of optics and physiology, but he remained unique in this respect.[28] More typical were textbooks based on results of art history and archaeological research.[29] *Die Baukunst in ihrer chronologischen und constructiven Entwicklung* by Georg Lasius is a valid example. In comparison to Gladbach's textbooks, the translation of the research into the 'language of architects' is constitutive. Thus, on the first glance, Lasius' textbook seems to be presenting scientific knowledge. Nonetheless, its central concern was the formulation of a doctrine of aesthetic taste, intended for application to contemporary building tasks – without which, architecture could not achieve its 'sanctification' (*Weihe*).[30] In an age of different tendencies in the architectural mainstream, the historic canon of forms served as guidance – but guidance based on individual preferences of the author.

FORMALISATION – NOVEL MATERIALS AND THE ROLE OF EXPERIMENTS

In the early nineteenth century, knowledge on building materials was still largely based on 'unsecured experiential' knowledge of craftsmen. With the emergence of new building materials and the advent of large construction companies, organised in an 'industrialised' manner, secured and formalised material knowledge gained significance.[31] Soon, material testing laboratories were

established at polytechnic schools. One such laboratory was the *Eidg. Anstalt für die Prüfung von Baumaterialien* established by Ludwig Tetmajer at the Zurich Polytechnic School in 1880 (Fig. 2). This laboratory not only published the test results by order of awarding authorities and industry;[32]) but Tetmajer also planned a multi-volume textbook based on the results of the tests entitled *Die Baumechanik. Auf Grundlage der Erfahrung*.[33] The series title already makes a stand against contemporary efforts to achieve 'scientification' of building knowledge, (which concentrated on theory and mathematics). Instead, Tetmajer emphasised the importance of the experiment, something that had already been well established in the natural sciences. Moreover, the former student of Carl Culmann argued in his textbook for the idea of an application-oriented science.[34] Tetmajer's strong emphasis on applicability is explained by the target audience of the book, as well as the close relationship of the publication to his teaching at the Zurich Polytechnic School. The first volume of the series, *Die angewandte Elasticitäts- und Festigkeitslehre*[35] (1889) covered a section of Tetmajer's lectures on structural mechanics at the School of Architecture.[36] Tetmajer did not complete the other intended volumes, but there were two revised editions of the first volume in 1904 and 1905.[37] The close connection of theory and experiment set a precedent. In the early twentieth century, the Zurich professor, Emil Mörsch, established an application-oriented theory for reinforced concrete whose success was mainly based on its verification by experiments.[38] At the same time, Tetmajer's concept affected the establishment of new disciplines. While initially professors of the chemical department taught technology of building materials at the School of Architecture and the School of Engineering, Tetmajer focused the subject towards a increased constructional approach, which was taught by civil engineers.
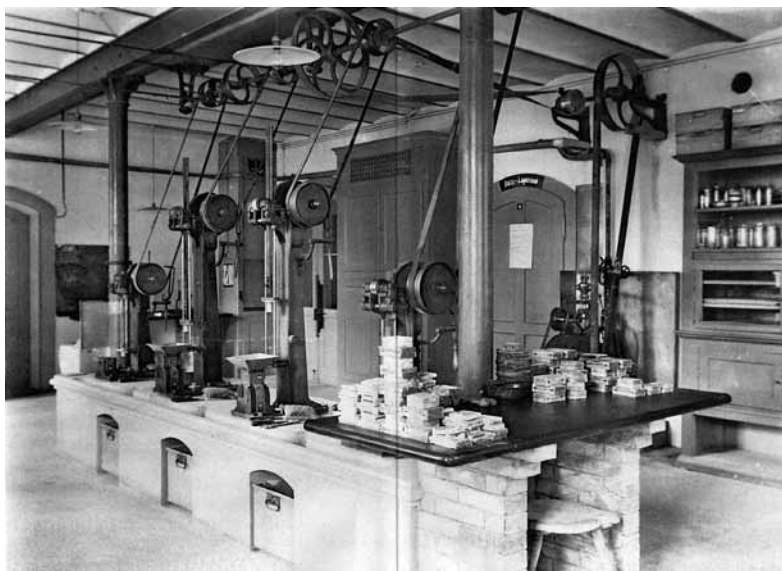
Figure 2. Laboratory for the testing of cement, photo circa 1890s. The Eidg. Anstalt für die Prüfung von Baumaterialien with its systematic testing contributed considerably to the quality of Portland cement. This in turn was one of the main foundations for the introduction and establishment of concrete construction in Switzerland. The testing results were also used to review theoretical derivations on concrete construction. (source: Ludwig Tetmajer, *Bericht über den Neubau, die Einrichtung und die Betriebsverhältnisse der schweizer. Materialprüfungs-Anstalt*, 2nd rev. ed. (Zurich: self-published 1896), plate 11)

ECONOMISATION – SUBORDINATE FOR SCHOOL, DECISIVE FOR PRAXIS

The discursive process of economisation originates in the late eighteenth century. Next to Rondelet's *Traité,* a number of other works mirror the growing importance of this idea in the first half of the nineteenth century. One could name various books on cost-estimation, and ones which treat the entire building process such as Franz Sax' *Bau-Technologie und Bau-Oekonomie*.[39] Sax explicitly mentions the need of economical elements in textbooks on building.[40] However, looking at textbooks written by teachers at the Zurich School of Architecture, economic inventories of building knowledge seem to play a subordinate role. One could speak of a continual exclusion of such matters – a development also mirrored in the curriculum of the school itself. This shift may be an effect of the harsh criticism on the commercialisation of *Baukunst* made by Semper,[41] but it also correlates with the emergence of polytechnic books on building construction, which were not intended to serve as textbooks to be used at school, but rather to be used in practice. The inherent idea of self-teaching is the crucial difference.[42] The emergence of this concept reflects a contemporary bias: matters relating directly to the building process are considered to be better communicated in books focusing solely on the practice, not those including any theoretical inventories of knowledge. An author making this exclusion very clear is Josef Emil Zeller. He published two books he intended to be an explanation of and guidance for the building process: *Das Gesamte in der Bauführung* in 1843 and *Der Bauführer* in 1867.[43] Not only did he state 'that the relevant subject [construction site supervision] is not being taught' at schools such as the Polytechnic School in Zurich', but he also pointed out that a 'graduation' of the book has to take place in practice.[44] Nevertheless, he still considered the content to be part of the polytechnic inventory of knowledge on building.[45] Economisation as a concept appears in a number of ways within Zeller's books: He linked his books to the genre of handbooks on cost estimation,[46] in which the economic re-evaluation of 'work' can be observed mo prominently. Likewise, he considered the

physical measurement of building materials and the labour force to be the key for an explanation of the building process. However, he took the idea further when speaking about 'the different trades and their smooth interlocking' and therefore stressing the importance of the building process.[47] Economisation can only be reached by communicating an understanding of what might be the result of a decision. It is his first and foremost aim to teach the practicing architect the 'optimal' processes for a building site. Zeller's books were the starting point for a number of publications on construction site supervision, inheriting the same characteristics. These books were not only a reaction to chances in praxis, but they also proved the importance of textbooks for the production of novel inventories of knowledge and the influence of books for institutional teaching. Not only was the role of construction site-supervision first described, as a self-contained duty with correlating bodies of knowledge, but the books could also be linked to the new self-contained subject of construction site-supervision at the higher technical schools, which became increasingly important over the nineteenth century.[48]

CONCLUSION

By tackling such a range of different books, the scope of this paper may seem rather broad. However, due to the variety of progress made in the nineteenth century, and due to the continuous oscillation of building knowledge between 'theory' and 'practice', such a broad approach is crucial.

Explanations are deduced from the perspective of historical science, although it is also necessary to include a non-disciplinary context. For instance, in the case of Rondelet's *Traité,* such an approach reveals a precise understanding of his specific strategies for the 'scientification' of building knowledge. Moreover, dealing with a number of textbooks allows an insight into the process of knowledge production in academic fields. If sufficient sources are available, a deeper re-construction and understanding may be made possible as to how textbooks are produced. Furthermore, in the particular case of architecture, textbooks can be characterised as 'open' – they do not necessarily represent valid knowledge of an academic community as a whole, but only the author's point of view, as exemplified by Lasius' book.

Even though the issues addressed here can only be discussed briefly, the evidence is set out: especially in the case of – in modern terms – applied sciences where a re-evaluation of these textbooks is fruitful. It therefore becomes apparent that such textbooks could be considered as 'interesting, open, and stimulating'.

Endnotes

1. Cf. Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962).

2. Cf. e. g.: Andres Lundgren and Bernadette Bensaude-Vincent (eds.), *Communicating Chemistry. Textbooks and Their Audiences, 1789–1939* (Canton/Mass.: Watson Publishing, 2000).

3. On Jean Rondelet see: Robin Middleton and Marie-Noelle Baudouin-Matuszek, *Jean Rondelet. The Architect as Technician* (New Haven and London: Yale University Press, 2007).

4. See Uta Hassler, "Die polytechnische Tradition der Bauforschung," in id. (ed.), *Bauforschung. Zur Rekonstruktion des Wissens* (Zürich: vdf, 2010), 80-131.

5. "Königsweg zur Industralisierung" Wolfgang König, "Ingenieur, Abschnitt 6. Ausbildung," in *Enzyklopädie der Neuzeit 1450–1850, vol. 5*, edited on behalf of the editorial board by Friedrich Jaeger (Stuttgart and Weimar: Metzler, 2007), 976.

6. Cf. Jean Dhombres and Nicole Dhombres, *Naissance d'un nouveau pouvoir: Sciences et savants en France, 1793-1824* (Paris: Payot, 1989).

7. Cf. Wolfgang König, "Spezialisierung und Bildungsanspruch. Zur Geschichte der Technischen Hochschulen im 19. Jahrhundert," *Berichte zur Wissenschaftsgeschichte 11* (1988), 219-25; Klaus Mauersberger, "Die Entwicklung der technischen Hochschulen und ihrer Ausbildungskonzeptionen im 19. Jahrhundert," *Dresdner Beiträge zur Geschichte der Technikwissenschaften* 17 (1989), 18-36.

8. Cf. Mathias Heymann, *"Kunst" und Wissenschaft in der Technik des 20. Jahrhunderts. Zur Geschichte der Konstruktionswissenschaft* (Zürich: vdf, 2005), 39-82.

9. Cf. Wolfgang König, "Spezialisierung und Bildungsanspruch. Zur Geschichte der Technischen Hochschulen im 19. Jahrhundert," *Berichte zur Wissenschaftsgeschichte 11* (1988), 219-25.

10. In the preface to *Die Graphische Statik* Culmann stated, "it has cost us untold trouble to acquire the necessary prerequisite knowledge for our students, so that the school might declare geometry a compulsory subject... to the engineer, and even the technician, a knowledge of geometry is of no less importance than that of analytic. As he has always to cope with the representation of spatial forms, how useful it would be, if his powers of spatial perception have been formed to the extent, that he can, with ease, complement flat projections to bodies and perceive spatially the work to be executed in buildings and machinery in their entirety." *"Unsägliche Mühe hat es uns gekostet, die nothwendigen Vorkenntnisse bei unseren Zuhörern zu erlangen, zu erlangen, dass man von der Schule aus die Geometrie der Lage obligatorisch erklärt werde... Für den Ingenieur, für den Techniker überhaupt, ist die geometrische Bildung nicht minder wichtig als die analytische; hat er es doch immer mit der Darstellung räumlicher Gebilde zu thun, wie nützlich ist es, wenn sein räumliches Anschauungsvermögen einigermassen ausgebildet worden ist und er mit Leichtigkeit flache Projectionen zu Körpern ergänzen kann und das Ganze auszuführender Bauwerke und*

Maschinen räumlich durchblickt." Carl Culmann, *Die graphische Statik* (Zürich: Meyer & Zeller, 1866), VIII.

11. Cf. e. g.: Torsten Meyer, "Technologie," in *Enzyklopädie der Neuzeit 1450-1850, vol. 13*, edited on behalf of the editorial board by Friedrich Jäger (Stuttgart and Weimar: Metzler, 2011), 442-65.

12. *"Architectur ist Construction."* Handwriting of Schinkel quoted according to: Goerd Peschken, *Das Architektonische Lehrbuch.* Series: Karl Friedrich Schinkel. Lebenswerk (München: Deutscher Kunstverlag, 1979), 115.

13. In more detail cf. Torsten Meyer, "The Science of Building as Polytechnic Discipline in the 19th Century," in *Proceedings of the 4th International Congress on Construction History* (Paris: 2012), in press.

14. Valerie Nègre, "Some Considerations on Traité de L'Art de Bâtir by Rondelet and the Technical Literature of his time," in Werner Lorenz, Karl-Eugen Kurrer and Volker Wezk (eds.), *Proceedings of the 3rd International Congress on Construction History* (Berlin: NEUNPLUS1, 2009), vol. 3, 1094.

15. Cf. e. g.: Karl-Eugen Kurrer, *Geschichte der Baustatik* (Berlin: Ernst & Sohn, 2002).

16. Cf. Joel Mokyr, "The European Enlightenment and the Origins of Modern Economic Growth," in Jeff Horn, Leonhard N. Rosenband and Merrit Roe Smith (eds.), *Reconceptualizing the Industrial Revolution* (Cambridge/Mass. and London: MIT Press, 2010), 65-86.

17. Cf. Thomas Brandstetter, *Kräfte messen. Die Maschine von Marly und die Kultur der Technik* (Berlin: Kadmos, 2008).

18. Cf. Reinhart Koselleck, "'Erfahrungraum' und 'Erwartungshorizont' – zwei historische Kategorien," in Reinhart Koselleck, *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten* (Frankfurt/Main: suhrkamp, 1989), 349-75.

19. Valerie Nègre, "Some Considerations on Traité de L'Art de Bâtir by Rondelet and the Technical Literature of his time," in Werner Lorenz, Karl-Eugen Kurrer and Volker Wezk (eds.), *Proceedings of the 3rd International Congress on Construction History* (Berlin: NEUNPLUS1, 2009), vol. 3, 1094.

20. Jean Rondelet, *Theoretisch-praktische Anleitung zur Kunst zu bauen. In fünf Bänden. Mit den 210 Kupfern der Pariser Original-Ausgabe. Nach der sechsten Auflage aus dem Französischen* (Leipzig and Darmstadt: Karl Wilhelm Leske, 1833-36), vol. 1, 1.

21. Cf. Andrew Saint, *Architect and Engineer. A Study in Sibling Rivalry* (New Haven and London: Yale University Press, 2007).

22. Ludwig Friedrich Wolfram, *Vollständiges Lehrbuch der gesammten Baukunst.* 3 vol., (Stuttgart and Vienna: Hoffmansche Verlagsbuchhandlung, 1833-38).

23. Cf. Ernst Gladbach, *Der Schweizer Holzstyl in seinen cantonalen und constructiven Verschiedenheiten vergleichend dargestellt mit Holzbauten Deutschlands* (Darmstadt: Köhler, 1868); Ibid, *Die Holz-Architectur der Schweiz* (Zurich: Orell Füssli, 1876); Ibid, *Der Schweizer Holzstyl in seinen cantonalen und constructiven Verschiedenheite*n. 2nd series (Zurich: Schmidt, 1883); Ibid, *Charakteristische Holzbauten der Schweiz vom 16. bis 19. Jahrhundert, nebst deren innerer Ausstattung* (Berlin: Claesen, 1893).

24. Cf. Knut Stegmann, "Analyzing Historical Timber Structures – A Case Study on Ernst Gladbach (1812–1896) and his Research on the 'Swiss Style'", in *Proceedings of the 4th International Congress on Construction History* (Paris: 2012), in press.

25. Ernst Gladbach, *Der Schweizer Holzstyl in seinen cantonalen und constructiven Verschiedenheiten vergleichend dargestellt mit Holzbauten Deutschlands* (Darmstadt: Köhler, 1868), s. p. (preface).

26. Cf. Georg Moller (ed.), *Denkmäler der deutschen Baukunst*. 3 vol. (Darmstadt: Leske, 1815–51).

27. Cf. Wilhelm Heinrich Riehl, *Die Naturgeschichte des Volkes als Grundlage einer deutschen Social-Politik. 4th volume: Wanderbuch.* 2nd edition (Stuttgart: Cotta, 1869), 1-41.

28. Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten oder Praktische Aesthetik. Ein Handbuch für Techniker, Künstler und Kunstfreunde*, 2 vols. (München: Friedrich Bruckmann,1860/63).

29. See Petra Brouwer, *De wetten van de bouwkunst. Nederlandse architectuurboeken in de negentiende eeuw* (Rotterdam: NAi Uitgevers, 2011), 205-299.

30. Georg Lasius, *Die Baukunst in ihrer chronologischen und constructiven Entwicklung. Dargestellt und erläutert durch eine Auswahl charakteristischer Denkmale vom Alterthum bis auf die Neuzeit* (Darmstadt: Carl Koehler, 1863-1868), VI.

31. Concrete companies, for example, began to carry out systematic experiments. Cf. Knut Stegmann, Das Bauunternehmen Dyckerhoff & Widmann – *Zu den Anfängen des Betonbaus in Deutschland 1865–1918* (Tübingen/Berlin: Wasmuth, 2012), in press.

32. For instance publications on the testing of steel, steel wire ropes or hydraulic binders. All published by Ludwig Tetmajer in the series of the laboratory *Mitteilungen der Anstalt zur Prüfung von Baumaterialien am eidgen. Polytechnikum in Zürich*, 1884ff.

33. Cf. Ludwig Tetmajer, *Die angewandte Elastizitäts- und Festigkeitslehre*. 2nd revised edition (Leipzig and Wien: Franz Deuticke, 1904), s. p. (Preface of the 1st edition).

34. He would "leave the common path [in order to] ... harmonise the relevant theoretical analysis with reality by using applicable coefficients and then shape them to a form convenient for application." Er weiche *"von den gewöhnlich betretenen Wegen ab, [... um] die Ergebnisse der einschlägigen theoretischen Untersuchungen durch Einführung passender Koeffizienten mit der Wirklichkeit in Übereinstimmung, sodann in eine für die Anwendung bequeme Form zu bringen."* Ludwig Tetmajer, *Die angewandte Elastizitäts- und Festigkeitslehre*. 2nd revised edition (Leipzig and Wien: Franz Deutike, 1904), s. p. (Preface of the 1st edition).

35. Cf. Ludwig Tetmajer, *Die Baumechanik. 2nd volume, 1st half: Die angewandte Elasticitäts- und Festigkeitslehre* (Zürich: Zürcher und Furrer, 1889).

36. The lecture is also documented by an autograph: cf. Ludwig Tetmajer, *Bau-Mechanik. Als Manuscript autographiert*. Diverse volumes (Zürich: self-published 1877/78) and Ibid: *Die angewandte Elastizitäts- und Festigkeitslehre*. 2nd revised edition (Leipzig and Wien: Franz Deuticke, 1904), IX.

37. Ludwig Tetmajer, *Die angewandte Elastizitäts- und Festigkeitslehre*. 2nd revised edition (Leipzig and Wien: Franz Deuticke, 1904) and 3rd revised edition (Leipzig and Vienna: Franz Deuticke, 1905).

38. Mörsch's theory mainly spread through his textbooks. See e. g. Emil Mörsch, *Der Eisenbetonbau. Seine Theorie und Anwendung.* 2nd revised edition (Stuttgart: Konrad Wittwer, 1906).

39. Franz Sax, *Bau-Technologie und Bau-Oekonomie*, 4. vols. (Wien: Anton Doll, 1814). Common books on cost estimation at the time are e.g.: August Friedrich Triest, *Handbuch zu Berechnung der Baukosten für sämtlichen Gegenstände der Stadt- und Landbaukunst*, 18. vols. (Berlin: Duncker und Humblot, 1824-31); J. Manger, *Hülfsbuch zur Anfertigung von Bau-Anschlägen und Feststellung von Bau-Rechnungen* (Berlin: Ernst & Korn, 1853).

40. *"Bey dem Ueberflusse an Baubüchern scheint es doch noch an einem brauchbaren Inbegriffe für Baukünstler und solche Personen zu fehlen, welche sich ausschließlich den Baugeschäften widmen."* ("despite the abundance of books on buildings, architects and other such persons seem to be lacking a useful embodiment that is solely dedicated to the *Baugeschäfte*"). Franz Sax, *Bau-Technologie und Bau-Oekonomie* (Wien: Anton Doll, 1814), vol. 1, 3.

41. Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten oder Praktische Aesthetik. Ein Handbuch für Techniker, Künstler und Kunstfreunde*, 2 vols. (München: Friedrich Bruckmann,1860/63), vol. 1, XII.

42. Cf. Christoph Rauhut, "Handbooks on Construction Site Supervision in the 19th Century", in *Proceedings of the 4th International Congress on Construction History* (Paris: 2012), in press.

43. Josef Emil Zeller, *Das Gesamte der Bauführung* (Stuttgart: Wachendorf'sche Buchhandlung, 1843); Josef Emil Zeller, *Der Bauführer* (St. Gallen: Altwegg-Weber z. Treuburg, 1867).

44. *"auf den Schulen, wie namentlich auch im Polytechnikum in Zürich, [wird] der fragliche Gegenstand nicht gelehrt"* Josef Emil Zeller, *Der Bauführer* (St. Gallen, Altwegg-Weber z. Treuburg: 1867), 6, see also 283–4.

45. Josef Emil Zeller, *Der Bauführer* (St. Gallen: Altwegg-Weber z. Treuburg, 1867), 6.

46. Josef Emil Zeller, *Das Gesamte der Bauführung* (Stuttgart: Wachendorf'sche Buchhandlung, 1843), 4.

47. *"Die verschiedene Gewerke und ihr richtiges Ineinandergreifen"* Josef Emil Zeller, *Der Bauführer* (St. Gallen: Altwegg-Weber z. Treuburg, 1867), 275.

48. Cf. Christoph Rauhut, "Handbooks on Construction Site Supervision in the 19th Century", in *Proceedings of the 4th International Congress on Construction History* (Paris: 2012), in press. In regards to higher technical schools cf.: Eckard Bolenz, *Vom Baubeamten zum freiberuflichen Architekten* (Frankfurt a.M. et al: Peter Lang, 1991), 182–93.

TEACHING THROUGH IMAGES:
JULIEN GUADET'S THEORY COURSE AND HIS PEDAGOGICAL DRAWINGS AT THE ECOLE DES BEAUX-ARTS IN PARIS

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The history of the Ecole des Beaux-Arts of Paris focuses less on academic lectures than on workshop training, wherein student projects are clearly viewed as the most representative medium of architectural education. A number of courses (architectural theory, history and construction) have nevertheless drawn the attention of researchers, who have tried to understand specific teaching methods by focusing on the work students were required to complete as examinations[1]Lectures that were gathered in books are often better known than those that remain unpublished. But while these printed sources help to know contents of a lecture, they provide little information as to the pedagogic methods used by lecturers. Recent research on the history of education has shown the importance of looking into teaching aids used in lectures (duplicate copies, plate portfolios or images shown during lectures) to understand how teachers orally pass on their knowledge.[2] These sources, as well as the drafts prepared by teachers or notes taken by students—which weren't always preserved—point to the lecture as the 'production site' of 'knowledge in process.'[3]

In that respect, the architectural theory course for which Julien Guadet (1834-1908) was tenured from 1894 is of interest. It is often referred to in Guadet's book *Eléments et Théorie de l'Architecture* that was subsequently published (in 4 volumes, 1901–1904), based on his teaching experience.[4] But several teaching aids relating to Guadet's lectures allow for a better insight into the substance and spirit of his pedagogy. It is especially the case of twenty or so large drawings kept in his personal archives that were apparently meant to be shown in the lecture hall.[5] These graphic plates give a good idea of the role of images in Guadet's course. The professor talked about this in his opening lecture: 'Teaching theory, as I see it, will be most difficult if I cannot show you what I may want to tell you on clearly visible, large-scale drawings'.[6]Obviously, these plates are not the sum total of the course's images, but since they were specifically designed for Guadet's lectures, they do represent a very significant part of the whole. The present text aims at looking into the pedagogical role of these drawings, as a support to Guadet's teaching objectives, while also analysing their role in the gradual construction of knowledge, for which the course served as a ground for experimentation.[7]

THE RENEWAL OF TEACHING AIDS AT THE ECOLE DES BEAUX-ARTS

At the end of the nineteenth century, there were practical hindrances to the use of images during oral lectures, which Guadet pointed out as soon as he occupied the theory chair. In particular, he deplored the absence of a 'portfolio of drawings' associated with the course, which he deemed a 'peculiar anomaly, while many drawings are shown in architecture courses given at colleges less focused on architecture'. [8]Guadet was probably challenging his predecessors at the theory chair (Jean-Baptiste Lesueur and Edmond Guillaume)[9]in order to emphasize the impression that the 'course still needed to be created'.[10] Yet, the absence of drawings was actually due to varying cultures and methods amongst the teachers regarding their approach to practical examples shown during oral lectures: plaster casts of sculptures or building fragments, models, drawings on the blackboard, lithographs pinned to the wall, drawings or photographs propped on easels, lantern slides projections. [11]Evidently, the wide range of means reflects the fact that teaching aids were generally well-adjusted to the nature of the subject or field: anatomy and perspective are not taught with the same means as history or theory for instance. Teachers also chose the range of the teaching aids they used, and knowing what a teacher really showed his students, or how, is not easy. Although most specific pieces (for instance plaster casts, restoration works made by students) shown during lectures could be found in the collections of the Ecole des Beaux-Arts, teachers did not mind resorting to their personal resources, asking for loans as part of their professional remit, or even buying or designing themselves the documents they needed.

Guadet's preference for large-format drawings should be compared with other educational aids used in the late nineteenthnineteenth century, not only at the Ecole des Beaux-Arts but also in other schools teaching architecture. The use of photographs and then projected images is perhaps one of the most significant novelties in pedagogical practice. For instance, in the construction courses at the Ecole des Beaux-Arts, while the use of models was widespread in particular for stereotomy, the usefulness of photographs was recognized ever since the middle of the nineteenth century. As soon as he was appointed in 1865, Pierre Jacques

Elphège Baude asked for photographs that display 'the structure of buildings with details that even the most accurate drawing could not show, and with indisputable authenticity'. [12]The end of the nineteenth century was marked by the introduction of projected images at the Ecole des Beaux-Arts by two teachers in architectural history, Lucien Magne and Paul Boeswillwald, who used them in their courses, probably to provide authentic images of the buildings they were studying.[13] This choice had both intellectual and concrete consequences, given the operation of the projector, its cost and also the setting up of lantern slides collections. Lucien Magne implemented his course at his own expense,[14] but when the Ecole des Beaux-Arts bought a new device in 1894 it was gradually embraced by other teachers.[15] Yet, despite the importance of such innovations, other types of teaching aids remained widely used, as shown by some architecture courses outside the Ecole des Beaux-Arts.[16] So for example, students at the Ecole Polytechnique and Ecole Speciale d'Architecture were still provided with a portfolio of printed drawings.[17] When Guadet talked of a 'portfolio' during his opening lecture, was he alluding to such documents or to a collection of drawings? In any event, there were links between his courses and the pedagogical tradition of the Ecole Polytechnique embodied by Léonce Reynaud, as shown by the distinction between 'elements of architecture' and 'elements of composition' drawn by Guadet during his courses.[18] But how do these links stand out in iconography?

The twenty or so pedagogical plates found in Guadet's archives clearly correspond to a series of drawings performed in 1895, when he was preparing his course.[19] He entrusted a first-year student from his workshop, Henri Prudent (1868-?), with their execution.[20] Whether they are or not the sum total of Guadet's plate production, the drawings that were preserved are all related to the 'elements of architecture' he taught in first-year course and then in the first volume of *Eléments et théorie de l'architecture*. Although diverse in dimensions, these large-format cards show line drawings that were obviously meant to be visible to a distant observer, in accordance with the objectives set by Guadet in his opening course. Simplicity of images prevails over any other consideration, to such an extent that some of these may seem perfunctory, once out of their context.

FROM ANALYTICAL ILLUSTRATIONS TO GRAPHIC DEMONSTRATION

Guadet's drawings can be identified by studying them from the perspective of *Eléments et Théorie de l'architecture*, which helps to situate them in Guadet's course[21] and to understand the approach supporting them, even though the book provides a later version of this approach. The drawings cover a wide range of topics listed in the programme, from 'wall openings' (12th session) to stairs (33rd session), with a prevalence of arches. The latter were the subject of four lessons, and the related drawings make up about half of all drawings preserved. Yet, it is sometimes difficult to identify a drawing, due to differences with the images of the book, scattered throughout several different chapters. The plate gathering drawings of woodwork and of wooden entablature—the Tuscan order of the 'House of the Gladiators' in Pompeii—is interesting in that respect but also on account of its material condition. Why is it halved? Is it because the images were reallocated to separate lessons between two course cycles or due to self-censorship, with one half of the sheet subsequently deemed inadequate?[22] Whatever the reason for the plate's modification, it demonstrates the 'dynamism' of the course, where images always underpinned the developments of ideas.

Comparing the drawings used for Guadet's lectures to the images in *Eléments et Théorie de l'architecture* also provides precious help to define the nature of these drawings. At first, the images of the book can be classified in distinct categories: descriptive figures similar to dictionary illustrations (to provide visual vocabulary and terminology), examples of construction and analytical figures. The drawings shown during oral lessons belong to the two last categories, but include less examples of building than 'theoretical figures,' as Guadet called them[23]. For instance, the plans of the Nymphaeum in Nîmes or the St-Front's Cathedral in Périgueux were used for a lecture on arches. Likewise, the elevation of the courtyard of the *Palazzo della Cancelleria* in Rome was shown during the course on porticos. The plans of the Parthenon, meant to illustrate the antique order, provided an unusual representation as both the ground plan and the plan above the architrave are superimposed. Guadet most likely illustrated his courses with other images, provided they met his own readability criteria. This is suggested in his book, which includes some of the restoration work he realized when he stayed in Rome, as well as plans of buildings he was in charge of.

Typically the graphic plates that Guadet ordered to be made were designed to meet specific pedagogic goals. Some of these can be compared to images published beforehand, especially some plates on arches, whose presentation seems to draw influence from the illustrations in Reynaud's *Traité d'Architecture*. But most drawings designed by Guadet for his course appear to be original creations, produced specifically for his classes. Moreover, their analytical function often encourages a constructive approach of architecture. For instance, the plates relating to the Doric order exemplify Guadet's inclination to prioritize 'reality' over 'image' .[24] This is demonstrated by two details on the Temple of August Piety in Rome, which Guadet regarded as 'the synthesis of the Antique order.'[25] His line drawing, without shading, diverges from the traditional approach at the Ecole des Beaux-Arts, probably in order to adapt to demonstrations on stage but also to promote rationalist views, as had become customary in the approach to orders at the time. At first glance the irregular height of courses in the column shafts may go unnoticed, but in Guadet's reasoning

it was closely associated with their tapered profile: 'this is what construction requires: the column is heavier at the bottom, lighter at the top: larger—thus heavier—blocks are easier to handle close to the ground than at great height.'[26] Other plates were also evidence of Guadet's interest in the construction process: one showed the centrings and boxes used to form Roman concrete arches; another illustrated the construction of a bonded arch to prove that an arch's springer belongs primarily to the wall.

Several plates display in particular a layout of compared drawings which afforded a visual demonstration of Guadet's approach. The best example of this was probably the 'wall openings' plate: to show how shapes were developed with the 'basic' means used to overcome the 'limited width' of lintels,[27] Guadet superimposed several drawings of lintels with similar spans but with broadened openings, first by way of slanting abutment, then thanks to corbels. Guadet's drawings would sometimes be laid out to show opposing examples—those to follow and those not to follow on logical grounds.[28] When he showed on a single plate the various shapes of columns supporting groined vaults (Fig. 1), all drawings were not of equal significance. Figures A, B, C and D illustrated the idea that 'the edge of the arch must be extended by that of the column,'[29] their differences hinging upon the presence of cross-springers. In contrast, figure E showed a structure to be avoided, as 'nothing is more irrational and unpleasant as groined arches that begin or end with nothing.' [30]

A GROUND FOR PEDAGOGICAL EXPERIMENTATION

Comparing Guadet's graphic plates with his books also shows that, from one artifact to the other, there could be significant discrepancies in the representation of the same image. Generally these were of two types. Some images were modified to improve their pedagogical value, such as the drawing that demonstrated the mechanic properties of domes. As explained by the matching text and image

Figure 1. The various shapes of columns supporting groined vaults: pedagogical plate designed by Julien Guadet for his Theory course. (source : Cité de l'architecture et du patrimoine, Paris, Centre d'archives d'architecture du XXe siècle)

in *Eléments et théorie de l'architecture*, the aim was to demonstrate the stability of each course by examining the behavior of the arch stone. To what extent was it detrimental to understanding that the drawing shown during lectures did not include any representation of the bonding and that it isolated the arch stone? The sketch showing another stone and the representation of stress—probably subsequently added—would seem to point out that very problem, which the book later addressed by including a more detailed figure.

On the contrary, the differences between the images of the book and the plates used for lectures might indicate that lectures were the place to experiment ideas and representation. In that respect, Guadet's drawings on the origins of the Doric entablature are interesting: they provide an insight on his contribution to this much debated topic at the end of the nineteenth century, while also demonstrating how his own approach to the subject changed. Like Viollet-Le-Duc before him, Guadet thought that the 'uselessness of friezes'[31] proved the hypothesis of the transposition of wooden architecture into stone but disagreed with the widespread identification of triglyphs as reminiscences of the wooden siding at the end of floor girders. Drawing from Euripides, Guadet envisioned a Greek temple flanked with walls rather than porticos and considered friezes as types of openings meant to provide the inside of the building with light. To him, the entablature was the result of 'a genuine timber-framed wall with columns (triglyphs) and windows (metopes), a sill plate (taenia), an upper sill (fillet) and rafters (mutules)'.[32] Two plates in Guadet's lectures provide a graphic representation of this theory (Fig. 2), which Guadet contrasted in his book with Reynaud's 'commonly accepted' representation.[33] In that respect, it is most interesting to examine the form Guadet gave to this basic version of stud-triglyph, which is vertically grooved on its four sides. That interpretation, stemming from his considerations on triglyphs considered as
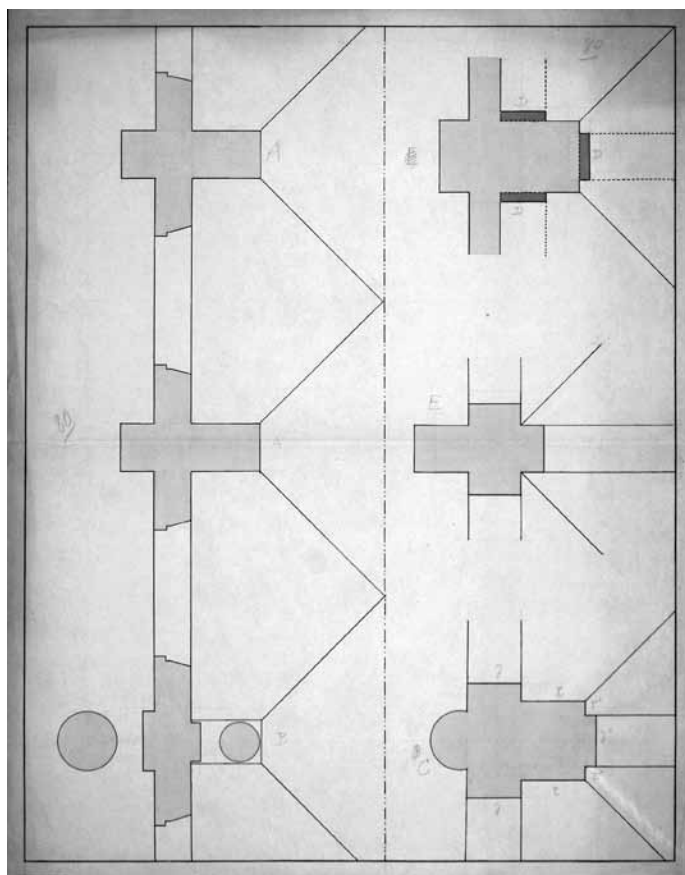
'load-bearing elements, just like columns, here highlighted by flutes' [34] was also part of a visual demonstration strategy. The illustrations subsequently published in his book sharply differed on that matter: they depicted a more conventional looking element, a plain rectangular stone decorated only on its external side.

In light of these observations, this last plate could probably summarize all the topics covered by the present contribution. To begin with, the differences between the drawing displayed on stage and its version published in Guadet's book tend to show lectures as a place to experiment pedagogical approaches, both through ideas and images. This observation is especially relevant in this particular polemical case.[35] Comparing the drawing plate with the illustrations of *Eléments et théorie de l'architecture* also sheds light on the complexity of its graphic structure and, more widely, on the specificity of the teaching aids

Figure 2. The origins of the Doric entablature: pedagogical plate designed by Julien Guadet for his Theory course. (source: Cité de l'architecture et du patrimoine, Paris, Centre d'archives d'architecture du XXe siècle)

used for lectures. It often seems more fruitful, from a pedagogical angle, to combine several drawings on a sheet than to scatter them as small vignettes within the text of the book. The existence of image-based thinking is unquestionable; the moderate use of graphics went together with a visual demonstration strategy. Obliterated, so to speak, by the publication of *Eléments et Théories* the graphic plates, now 'recovered' from Guadet's archives, provide an insight into Guadet's pedagogical approach not through the fixed printed form of a book[36]but as a developing process associating images with ideas. Beyond Guadet's case, the questions addressed in this contribution should doubtless lead to reconsidering the role of the Ecole des Beaux Arts amongst architecture teaching sites undertaking pedagogical experimentation in the late nineteenth century.

Endnotes

1. Cf. Jacques Lucan, *Composition non-composition. Architecture et Théories, XIXᵉ-XXᵉ siècles* Lausanne: Presses Polytechniques et Universitaires Romandes, 2009), 135-171; Simona Talenti, *L'histoire de l'architecture en France: émergence d'une discipline (1863-1914)* (Paris: Picard, 2000); Antonio Brucculeri, *Du dessein historique à l'action publique: Louis Hautecœur et l'architecture classique en France* (Paris: Picard, 2007), 279-296; Antonio Brucculeri, "Renewal and Tradition in the Teaching of Building Construction in the Ecole des Beaux-Arts of Paris: the Course of Edouard Arnaud. 1920-1934," in *The Second International Congress on Construction History* (London: Construction History Society, 2006), vol. 1, 417-440.

2. Cf. works on the history of education carried out by the *Institut National de Recherche Pédagogique*. Regarding the present contribution, see Annie Bruter, "Le cours magistral comme objet d'histoire," *Histoire de l'éducation* 120 (2008), 5-32.

3. Annie Bruter ("cours magistral", 7) defined the course as a "site for knowledge production". In his book on orality, Françoise Waquet also defines the course as a provider of "knowledge in process". Françoise Waquet, *Parler comme un livre: L'oralité et le savoir (xviᵉ-xxᵉ siècle)* (Paris: Albin Michel, 2003), 274.

4. This book is largely a product of the course Guadet gave as the theory professor at the Ecole des Beaux-Arts of Paris from 1894. But the book's subject matter was also fuelled by his previous experience as a studio-master in one of the three official workshops at the School since 1871.

5. Cité de l'architecture et du patrimoine, Paris, Centre d'archives d'architecture du xxᵉ siècle, 80 IFA 22.

6. Julien Guadet, *École nationale et spéciale des beaux-arts. Cours de théorie d'architecture. Leçon d'ouverture, le 28 novembre 1894* (Paris: Delarue, 1895), 17.

7. The present contribution, deriving from ongoing research on Julien Guadet's teaching develops an idea already tackled in "De l'amphithéâtre à *Éléments et théorie de l'architecture* : le cours de théorie de Julien Guadet, un lieu de production du savoir," in Guy Lambert and Estelle Thibault (eds.), *L'atelier et l'amphithéâtre: Les écoles de l'architecture, entre théorie et pratique* (Wavre: Mardaga, 2011), 99-127.

8. Guadet, *Leçon d'ouverture,* 16-17.

9. Jean-Baptiste Cicéron Lesueur (1794-1883) was tenured lecturer at the Chair of Theory from 1853 to 1883 with an interruption from 1863 to 1874, due to the reform of the Ecole des Beaux Arts. He was replaced by Edmond Guillaume (1826-1894).

10. Guadet, *Leçon d'ouverture,* 8.

11. Ancient sources often provide more information on the material aspect of courses for painters than for architects: see Alexis Lemaistre, *L'École des beaux-*

arts dessinée et racontée par un élève, (Paris: Firmin-Didot, 1889). See also Lyne Therrien, *L'histoire de l'art en France: genèse d'une discipline universitaire*, (Paris : Éditions du CTHS, 1998); Talenti, *L'histoire de l'architecture en France;* Trevor Fawcett, "Visual Facts and the Nineteenth-Century Art Lectures", *Art History* VI 2 (1983), 442-460; Robert S. Nelson, "The Slide Lecture, or the Work of Art History in the Age of Mechanical Reproduction", *Critical Inquiry* XXVI 3 (2000), 414-434.

12. Archives Nationales (Arch. Nat.), Paris, AJ[52] 978, letter from Elphège Baude to the director of the Ecole des Beaux-Arts, 9 December 1865. A State Engineer (Ingénieur des Ponts et Chaussées), Pierre Jacques Elphège Baude (1826-1871) also contributed to architecture courses at the Ecole des Ponts et Chaussées : first as a tutor, then as Reynaud's assistant professor. He took over from Reynaud in 1869.

13. Lucien Magne (1849-1916) was appointed at the Chair of "General Architectural History" in 1891, while Paul Boeswillwald (1844-1931) was the first professor at the new Chair of "History of the French Architecture in the Middle-Age and Renaissance" established in 1892. Cf. Talenti, *L'histoire de l'architecture en France.*

14. Lucien Magne bought a lantern slide projector and took on its operating costs at first (Arch. Nat., Paris, AJ[52] 976). He also set up a personal lantern slides and glass plates collection, that is now preserved at the Musée des Arts et Métiers (among 3,500 plates not currently available for consultation). This collection was probably also used at the Conservatoire National des Arts et Métiers (CNAM), where he taught "applied arts".

15. Lantern slides projections were immediately embraced for a few lectures by Louis de Fourcaud, aesthetic and art history professor, Henry Lemonnier, history professor, and Felix Julien, perspective professor.

16. Exchanges between Architecture Schools, Engineer Schools and the CNAM show that these transfers related to the methods and substance of the courses. See Jean-Philippe Garric (ed.), *Bibliothèques d'atelier: Édition et enseignement de l'architecture, Paris 1785-1871* (Paris: INHA, 2011) or online: http://inha.revues.org/3185; Guy Lambert and Estelle Thibault (eds.), *L'atelier et l'amphithéâtre: Les écoles de l'architecture, entre théorie et pratique* (Wavre: Mardaga, 2011).

17. At the Ecole Polytechnique, this porfolio is made of plates drawn from Reynaud's *Traité d'architecture*. See Estelle Thibault, "Continuité et transformations d'un dispositif pédagogique. Enseigner l'architecture à l'École Polytechnique (1867-1910), " in Lambert and Thibault (eds.), *L'atelier et l'amphithéâtre,* 131-172. Graphic models sheets then in use at Ecole Spéciale d'Architecture are reproduced in Frédéric Seitz, *Une entreprise d'idée. L'École spéciale d'architecture. 1865-1930* (Paris: Picard, 1995).

18. Given at the Ecole Polytechnique and the Ecole des Ponts et Chaussées, Léonce Reynaud's course had in fact, through his books, a large echo beyond these schools. His *Traité d'architecture*, first published in 1850-1858, remained a reference work at the Ecole des Beaux-Arts in the late nineteenth century. See Jacques Lucan, *Composition*.

19. During his first year as a tenured lecturer, Guadet's lectures probably consisted in conferences rather than courses.

20. Arch. Nat., AJ[52] 974, letter from Guadet to Bomier, 28 mars 1895. Admitted to the Ecole des Beaux-Arts in 1890 and graduate in 1897, Henri Prudent was again employed by Guadet in 1900, as assistant inspector for the *Bâtiments civils et Palais Nationaux*, for the rebuilding of the *Théâtre français*.

21. See *École nationale et spéciale des beaux-arts. section d'architecture. Cours de théorie de l'architecture, M. Guadet professeur. Première année*, (Paris: Imprimerie nationale, 1895). This programme describes the 35 sessions of the course.

22. These images are not all published and the illustrations likely to match the drawings are included in two distinct chapters, respectively relating to the Tuscan order (book IV, chapter VII) and attics construction (book V, chapter II).

23. In his drafts for *Eléments et théorie de l'architecture*, Julien Guadet calls "theoretical figures" such analytical sketchs. (Cité de l'architecture et du patrimoine, Paris, Centre d'archives d'architecture du xxe siècle, 80 IFA 19).

24. "starting the course with the orders, that's teaching images; starting with walls, that's teaching reality." Julien Guadet, *Eléments et théorie de l'architecture* (Paris: Librairie de la Construction moderne, Aulanier et Cie éditeurs, vol 1, 1901), 98.

25. Guadet, *Eléments et théorie*, vol 1, 332. These two drawing were carried out from restoration work Guadet made when he was boarder at the French Academy in Rome.

26. Guadet, *Eléments et théorie*, vol 1, 328.

27. *École nationale et spéciale des beaux-arts. section d'architecture. Cours de théorie de l'architecture, M. Guadet professeur. Première année*, 6 (12th session of the course).

28. In his book, Guadet asserted the following confrontation : "after having shown what is right, it may be useful to show what is not." Guadet, *Eléments et théorie*, vol 1, 222.

29. Guadet, *Eléments et théorie*, vol 1, 584.

30. *Ibid*.

31. Guadet, *Eléments et théorie*, vol 1, 339.

32. *École nationale et spéciale des beaux-arts. section d'architecture. Cours de théorie de l'architecture, M. Guadet professeur. Première année*, 8 (16th session of the course).

33. This loan to Reynaud is not explicitly mentioned. Guadet, *Eléments et théorie*, vol 1, 342, Fig. 238.

34. Guadet, *Eléments et théorie*, vol 1, 341.

35. These observations could also apply to University courses, as some of those now carry significance in scientific discussions. More widely, this pedagogic approach should be viewed as a place for controversies. See Bruter, "cours magistral", 30-31.

36. Republished several times (5th edition in 1929), Guadet's book remained a reference work in the 1960's in architectural education.

A TEACHING HANDBOOK BY AN ENGINEER OF THE LATE NINETEENTH CENTURY IN ITALY

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The paper aims to analyse the teaching handbook of an engineer, Raffaele Folinea, Professor of 'Technical Architecture' from 1887 to 1924 at the School of Application for Engineers of Naples. The text –a lithographed publication – is the summary of his lectures, essentially intended to students of the school of Naples. Folinea taught future engineers the basics of architecture, still recovering 'Durand method' of teaching based on the architectural elements. The importance of designing the plan of a building clearly shows a clear debt to the French architect. But even within a very technical manuscript, there are several theories on aesthetic considerations. The study of 'Technical Architecture' courses and, particularly, of the lecture notes by Folinea, will allow to better understand the architectural training of civil engineers in Italy in the late nineteenth century. The same engineers who will be responsible for the transformation of most cities during the XXth century. (Fig. 1)

THE ARCHITECTURAL EDUCATION OF ENGINEERS BETWEEN THE NINETEENTH AND THE TWENTIETH CENTURY

The Casati law of 1859 led to the creation of Schools of Application for Engineers. The School in Turin, opened in the same year, was the first one of that kind and was followed by the Schools in Milan, Naples (in 1863) and Palermo (opened in 1866), etc.[1] The Schools of Application in Italy were deeply influenced by the French teaching model that architect Durand had used with his engineering students between the eighteenth and the nineteenth century, and from the very beginning they dealt extensively with architecture and the history of architecture.[2] In 1865 a new 'Architecture section' was inaugurated at the Technical Institute of Milan and integrates the more traditional ones of mechanical or civil engineering. Its explicit aim was to train civil architects. A famous architect, Camillo Boito, was the driving force behind this educational transformation. He was born in Rome but his education took place between

Figure 1. Portrait of Folinea (source: E. Mandolesi, "Cento anni d'insegnamento dell'architettura nelle scuole d'ingegneria", *Atti del convegno dei docenti di discipline architettoniche delle Facoltà di Ingegneria*, edited by Istituto di Architettura e Urbanistica dell'Università degli studi di Trieste (Trieste: n.p. 1964), 73-108)

Padua and Venice and he was professor at the Academy of Fine Arts in Milan. Boito mainly drew inspiration from German polytechnics and tried to provide a possible solution to the eternal competition between architects and engineers, with the idea of creating a new professional figure of the artist–scientist through the activation of the Architecture section, where he would teach for no less than 43 years.[3] However, it seems that this initiative did not really reach its goal: in forty years only 46 civil architects graduated in Milan.[4] The School of Application for Engineers of Naples would not be more successful, with its five-year course in civil Architecture, inaugurated in 1876: between 1887 and 1903 the people who graduated in architecture were 46, whereas the people who graduated in Engineering were 777.[5] The difficulty of the professional education of the civil architect in the Schools for Engineers is surely one of the reasons why that degree course was not very successful. Young students prefer a solid civil engineer education or the more artistic option, at academies or institutes of art, even though by attending them students can only obtain a title of 'professor of architectural drawing', with no possibility to sign projects (decree of 1887) .[6]

In order to provide a better training in architecture for civil engineers, in 1876 the new set of rules of the Schools of Application introduced a subject which dealt extensively with architecture.[7] From that moment on, engineering students attended the scientific courses at the faculties of Mathematics for the first two years, and then the School of Application for three years. The new course, entitled 'Technical Architecture' was for students of the second and third year and had a rather general and multidisciplinary

approach, because it had the difficult aim of completing the technical–scientific training of students with more artistic skills and feelings.[8] This course consisted of different disciplines: from drawing to the history of architecture, from composition to restoration or town planning, with the aim of providing all the tools that are potentially necessary to future civil engineers, in order for them to work at the architecture project and to get as many jobs as possible, both public and private.

THE 'TECHNICAL ARCHITECTURE' COURSE

The first courses of Technical Architecture were initially taught by famous people in the field of architecture, in many cases architects with a successful career in teaching at academies or institutes of art, with the aim of maintaining a collaboration relationship with them. This was the case of architect Fortunato Lodi, holder of the chair of the first course of Technical Architecture at the School of Application of Bologna (in 1877) and at the same time in charge of the course of Architecture at the Academy.[9] Architect Giovan Battista Filippo Basile, who was in charge of the course of Technical Architecture at the School of Application of Palermo between 1876 and 1890, had taught for many years at the same School for Engineers (where he had taught courses of History of Architecture) and at the Institute of Fine Arts (where he had held the chair of Descriptive Geometry and Decorative architecture from the second half of the century onwards).[10] The experience of Guglielmo Calderini in Rome was not much different, since the architect, before being appointed holder of the chair of the course of Technical Architecture by the School for engineers in Rome around 1891, had taught many architecture disciplines, history of art and ornamental design at the Academy of Perugia and the University of Pisa.[11]

Also at the School of Application of Naples the professor who held the course of Technical Architecture had some experiences at the university and at the Institute of Fine Arts, where he was Honorary Professor.[12] However, the case from Naples was slightly different, because Raffaele Folinea - who first was collaborator of Travaglini at the course of Civil constructions, and then acted as his temporary substitute, and finally became the holder of the chair of the course of Technical Architecture approximately from 1887 - was not an architect but an engineer who obtained his degree from the School of Application of Naples. He also attended the courses of the Institute of Fine Arts and went to the studio of architect Alvino.[13] As we will see, his main training will lead him to a more schematic and scientific way of teaching, compared to many of his colleagues.

In some places the course was initially called 'Practical Architecture' in order to highlight the pragmatic approach of the discipline, and drew inspiration from the French polytechnics (and in particular from the famous lessons of Durand) for a general organization based on the study and the analysis of the constituent elements of buildings. The result of that is a kind of teaching which is based on a typological analysis together with technicalities and positivist formulas to be applied to architectural planning. Of course this general scheme was not always followed. In Palermo, Basile could not do without a preliminary section on the History of architecture, which is dealt with in a well-organized and extensive way (from Egyptian to Renaissance architecture). Calderini instead organized his course of Technical Architecture at the School in Rome, in the same years, carrying out a more pragmatic analysis of the architectural structure. The historical profile of architecture, a subject that a man born in the first half of the nineteenth century could never leave out, is in the third and last volume of his lecture notes.

Basile assigned two architecture projects to his students, who could choose from simple and quite 'ordinary' types (from the café to the third-class station, from the house of a shopkeeper to a tailor's shop), while Calderini, on the other hand, provided examples of monumental and public architecture to his students (from churches to theaters and markets), and probably he was
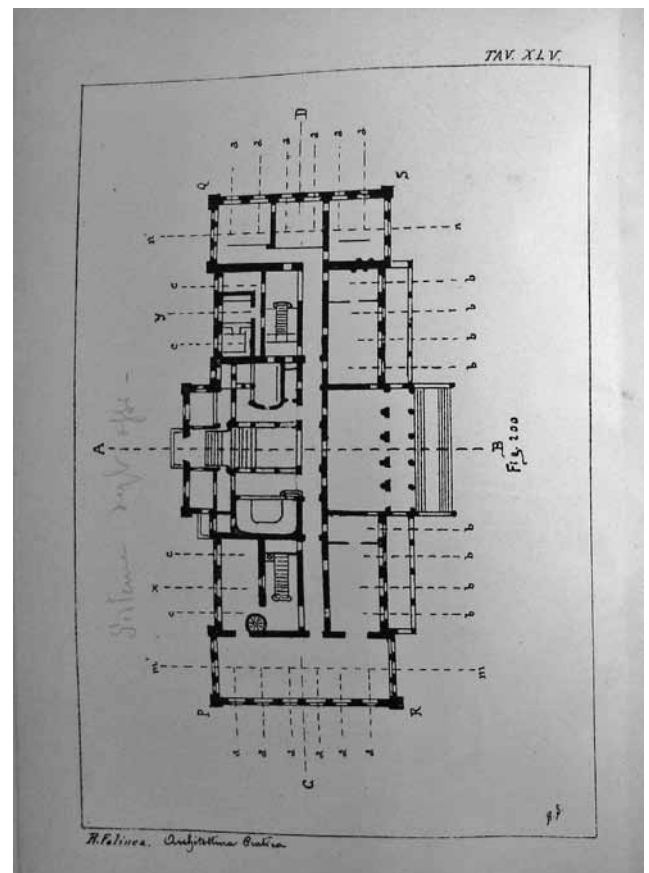
Figure 2. The system of axes. (source: Folinea, *Riassunto delle lezioni di Architettura Pratica per gli alunni del 2° corso della R. Scuola d'Applicazione per gl'Ingegneri in Napoli* (autografate per cura dell'alunno Sav. Ragno), (Napoli: np., 1891-92),table XLV, fig. 200)

sure that the graduates of the Schools of Application will have great opportunities and important jobs, in a period of transformation of the town, at the end of the nineteenth century. Despite the similarities between these courses offered in a recently unified Italy, every professor organized his course in a personal way, since the definition of Technical architecture remained quite vague and ambiguous, leaving many doors open. And maybe this is one of the reasons that explains the profound need of almost all teachers to draft publications or at least lecture notes that could be useful to their students. Whether it be Basile, Calderini or Muggia[14] of the School of Bologna or Donghi in Padua (author of the famous 'Manuale dell'architetto'[15]) or Folinea and Camillo Guerra[16] in Naples, all the professors of these years between the nineteenth and the twentieth century believed in the educational importance of a rigorous handbook for their students, as relevant as possible to the course offered. Besides it seems that there were some exchanges between the different Schools for engineers, as proven by the fact that lithographed copies of these courses were found in the libraries of these schools. For instance the catalog of the library of the School for Engineering in Bologna included the three volumes of Calderini, and in the School of Padua there was a copy of the lecture notes of Folinea, etc.

THE LECTURE NOTES, THE DRAWINGS AND THE MODELS FOR THE COURSE OF TECHNICAL ARCHITECTURE

The lecture notes of the courses of Technical Architecture held at the end of the nineteenth century were usually handwritten, sometimes by students, and then lithographed in order to enable their diffusion. The text seems to reproduce the popular language of the oral presentation, but the general approach and the order of the subjects that were dealt with are rarely explained. In these first handwritten lecture notes there are hardly ever tables of contents or summaries. It was not surprising to find out that the course also made use of some illustrations, which were often reproduced as volume enclosed to the theoretical course. Some period photographs show these illustrations, such as the didactic pictures drawn by Michelangelo Giarrizzo between 1886 and 1890 for Professor Basile, which were hung in the drawing room.[17] They were illustrations on the history of architecture (from Egypt to the sixteenth century), with some references to more theoretical or technical subjects (the theory of pillared arches, distribution in modern buildings or the size of rooms and the study of sanitary fixtures, etc.). Also the old photographs of the Hall of Models and casts of Naples show some framed illustrations, probably used for exercises of drawing and technical architecture. In some libraries, such as the library of the faculty of Engineering in Bologna, some illustrations were found, which were from the Laboratory of Technical Architecture and represented architectural orders or some historic buildings of the Renaissance that students were supposed to redesign.[18] Together with these bi-dimensional representations, the professors of Technical architecture also make use of some collections of plastic models or casts, some of which are still kept inside today's faculties of Engineering. The different models were aimed at explaining and showing those building elements upon which the didactics of architecture was based. Not being objects to copy, but examples for students from which they could elaborate their own architectural-building projects, these models used by Folinea in Naples- bought from the Polytechnic of Turin and designed by engineer Curioni[19] - only featured some typical building details (vaults, coverings, foundations, etc.) and never represented whole and real buildings. Later on the School of Application of Naples completed the Turinese collection, obtaining more models from the Polytechnic of Darmstadt, in the first years of the twentieth century.[20] So it is clear that teaching architecture always meant to start from the disassembling of the artefact in its constituent elements, considered as autonomous and independent elements, in the disassembling and reassembling process, inaugurated by architect Durand at the École Polytechnique in Paris, which enabled to transform the elaboration of an architecture project into a procedure based on a rational and easily transmittable method.

'RIASSUNTO DELLE LEZIONI DI ARCHITETTURA PRATICA' BY R. FOLINEA

The lecture notes of Professor Folinea are published in 1891-92 with the title 'Riassunto delle lezioni di Architettura Pratica per gli alunni del secondo corso della R. Scuola di Applicazione per gl'Ingegneri in Napoli'[21]. They consist of two lithographed volumes with the handwritten notes of a student, which probably reproduce in a faithful way the lessons held by the professor from 1887. Only three examples of this handbook are in Italian Libraries: the first at the Faculty of Engineering of Naples the second at the library of Campobasso and the third at the library of Padua.[22] The text, 560 pages in total, includes many references to the pictures on the 179 illustrations that complete the work. The course of Calderini in Rome follows a conceptual procedure that an engineer-architect should bear in mind when designing any building (first the planimetric composition, then the study of the building and finally the study of decoration). The succession of the chapters (and of the lessons) of Folinea, instead, does not always seem to follow a clear logic. The subjects and the analysis levels are quite heterogeneous. Starting from the typological classification of buildings in thirteen categories, Folinea examines the supports of architecture structures, the different types of plan of a building, the distribution principles, the facades, and then considers the 'Beauty of buildings', moving on to a quick examination of architectural orders and, in a way which is not very gradual and sequential, dealing with the technical features

of materials. For instance the chapter on 'Natural stones' follows the chapter on 'Architectural orders'. Perhaps this course organization can be interpreted as a result of the difficulty of the professor in reaching a balance between an artistic approach and scientific knowledge. These lecture notes of Folinea, and the same goes for the lecture notes of Calderini and Basile, lack an organic vision of building and aesthetic problems. But Folinea has a more scientific and logical mind, compared to some of his colleagues. So the rigor with which he analyzes the building elements is also used by the teacher to rationalize as much as possible the matters that are linked to form and aesthetics. Drawing inspiration from theorists, such as Milizia and Durand, Folinea writes 13 pages on the definition of beauty,[23] as a result of the application of 'some factors' that are precise and identifiable: eurhythmy, symmetry, character, decoration and unity.[24]

Also for the facades of buildings the engineer tries to identify the general principles that should be followed in order to reach aesthetics. But in the end the lesson is based on formulas that are too precise and too little flexible to 'obtain the beauty of buildings', for instance stating that 'single isolated pillars should never be used, whereas using pilasters and responds helps break the monotony of long facades'.[25]

Despite the analytical and rigorous approach applied to all fields of architecture, both building and formal fields, Folinea was still linked to a classicist tradition that made him prefer ancient and Renaissance styles, completely denying baroque architecture, which he considered an expression of decadence. The professor considered too often the historic styles of the past as simple formal examples that can be taken as models by future civil engineers. The way he considered baroque explains very well his limited analysis, that only takes into account aesthetic matters of form and decoration (a term that is often repeated in his text), without looking for its real founding principles. Also the advice which he gives to his students is influenced by this deeply formal approach, that considers the architecture of the past as a repertoire of models that should be imitated: 'For the different buildings of modern architecture it is better to use continuous rectilinear pediments and not broken pediments [such as in baroque style] which are not justified by the type of building and which have a trite effect'[26].

Folinea got stuck on aesthetic matters (which, for him, are decorative matters), but he examined the planimetric composition of buildings in a better structured way, because he thinks that it is at the basis of a correct planning. Folinea analysed the planimetric structure of historic buildings and tried to draw from that 'principles that seem to be general and systematic'[27]. Like Calderini, the professor from Naples identified different categories of plans: the Palladian system (that Calderini calls symmetrical), the English one, that Folinea also defined incorrect, the polygonal model, the grid system, the system of axes (Fig. 2), 'also called perspective' and finally the radial one (the only one which is not mentioned by the architect from Rome). Folinea highlights the advantages and the disadvantages of each solution, providing suggestions on the model to be used for a certain type of building. However both teachers show clearly their preference for the 'perspective' model, a model which is very similar to the traditional beaux-arts structure, based on two perpendicular axes. The final goal was always to teach the planning rules to students, firmly believing, according to a 'Durand' approach, that architectural composition is a logical procedure that can be perfectly transmitted. Thanks to this confidence Folinea does not limit the object of his reasonings, analyses and exercises to the residential building (as many of his colleagues would do), but he would take into consideration all architectural programs, including the public and monumental ones. The influence of the French culture is clear also in this field. Folinea insists a lot on the notion of character, that he defines as the imprint that should be given to a building in order to reveal its goal to the observer. He concludes that 'who designs buildings should not forget that a cathedral, a church … should inspire holy and mystical feelings in the heart of the spectator'.[28] And also when he expresses his opinion, according to which the structure of buildings should not be masked but should be in harmony with their decoration, the engineer proves that he interpreted well the French rationalist thought. But it is a pity that, afterwards, he once again expresses aesthetic judgements on the decadence of art after Augustus and on the 'tasteless manner'[29] of 'barbarians' or on the 'strange and exaggerated forms'[30] of Baroque. In his evaluations of historical examples he still mainly considers formal characteristics, hardly considering the methodology. Nonetheless it is worth mentioning that during his long career as a teacher at the School of Application of Naples, Folinea trained many generations of engineers and civil architects who later became the actors of the transformation of the town of Naples and of an entire region that gravitates around it. His denial of eclecticism, clearly expressed in the chapter that deals with the different historic styles, is not really counterbalanced by a clear suggestion on the style to be adopted in modern buildings. The debate on the national style of a recently unified Italy - a subject that is often discussed during that period, with two opposite points of view, the medieval side (led by Boito) and the Renaissance side - is left open by Folinea. So we can conclude that in his lessons Folinea, with the objectivity that is typical for an engineer (the same objectivity that was also shown by professor and engineer Muggia in Bologna between 1892 and 1935), tries not to give very precise indications on the style to be adopted, but only on the elements architecture is made of. Of course this approach translates into many different styles that the young graduates from Naples or Bologna will promote in their career as designers.

An analysis of the lithographed manuscripts and later on of the typescripts[31] of the courses of Technical Architecture distributed in the various Schools of Application for Engineers was carried out partially, see the extremely interesting work by Bettazzi and Lipparini, but there is still a lot to be done. A precise and systematic analysis of the didactic contents of the architecture courses for engineers would help us better understand not only the training of designers (such as Pierluigi Nervi, Camillo Guerra, etc.) but also the transformation of the architecture of towns between the nineteenth and the twentieth century.[32]

Endnotes

1. For the history of the Schools of Application for Engineers in Italy, see M. Minesso, "L'ingegnere dall'età napoleonica al fascismo", in M. Malatesta (ed.), *Storia d'Italia, Annali 10, I professionisti*, (Torino: Einaudi, 1996), 261-302.

2. For the role of architecture in the Schools of Application for Engineers see E. Mandolesi, "Cento anni d'insegnamento dell'architettura nelle scuole d'ingegneria", in *Atti del convegno dei docenti di discipline architettoniche delle Facoltà di Ingegneria*, edited by Istituto di Architettura e Urbanistica dell'Università degli studi di Trieste (Trieste: n.p. 1964), 73-108; M. B. Bettazzi, et al., "Alle radici delle discipline: l'Architettura nelle Scuole di Applicazione fra Otto e Novecento", in S. D'Agostino (ed.), *Storia dell'Ingegneria. Atti del 3° Convegno Nazionale* (Napoli: Cuzzolin, 2010), 675-685; M.B. Bettazzi and P. Lipparini, (ed.), *Attilio Muggia. Una storia per gli ingegneri* (Bologna: Editrice Compositori, 2010) ; F. Rispoli (ed.),. *L'insegnamento della storia dell'architettura nelle Facoltà di Ingegneria* (Potenza: L'Aquilone, 2002).

3. See C. Boito, *Condizioni presenti degli architetti in Italia,* in *Questioni pratiche di Belle Arti, Restauri, concorsi, legislazione, professione, insegnamento,* Milano 1893.

4. See M.L. Giumanini, "Storia, curricula studiorum e studenti della Scuola d'applicazione per gli ingegneri e gli architetti dell'Università di Bologna (1877-1899)", in A. Buccaro (ed.), *Storia dell'Ingegneria. Atti del 1° Convegno Nazionale*, (Napoli: Cuzzolin Editore, 2006), 315-324; M.Boffito, "La didattica del disegno di architettura tra Otto e Novecento", in S. D'Agostino (ed.), *Storia dell'Ingegneria. Atti del 2° Convegno Nazionale*, (Napoli: Cuzzolin, 2008), 867-874.

5. For information on the School of Naples see G. Russo, *La Scuola d'Ingegneria in Napoli, 1811-1967*, (Napoli, np., 1967).

6. See R. Gabetti and P. Marconi, "L'insegnamento dell'architettura nel sistema didattico franco-italiano", *Controspazio* (1971).

7. M. Minesso, "L'ingegnere dall'età napoleonica al fascismo", in M. Malatesta (ed.), *Storia d'Italia, Annali 10, I professionisti*, (Torino: Einaudi, 1996), 261-302.

8. A comparative analysis of the courses of Technical architecture was carried out by B. Bettazzi, "Architettura e didattica nelle Scuole per Ingegneri", in M.B. Bettazzi and P. Lipparini (ed.), *Attilio Muggia. Una storia per gli ingegneri*, (Bologna. Editrice Compositori, 2010), 161-180.

9. B. Bettazzi, "Architettura e didattica nelle Scuole per Ingegneri", in M.B. Bettazzi and P. Lipparini (ed.), *Attilio Muggia. Una storia per gli ingegneri*, (Bologna. Editrice Compositori, 2010), 161-180.

10. For the teaching activity of Basile in Palermo see M. Giuffrè and G. Guerrera, *G.B.F. Basile. Lezioni di Architettura* (Palermo: L'Epos, 1995).

11. See E. Mandolesi, "Cento anni d'insegnamento dell'architettura nelle scuole d'ingegneria", in *Atti del convegno dei docenti di discipline architettoniche delle Facoltà di Ingegneria*, edited by Istituto di Architettura e Urbanistica dell'Università degli studi di Trieste (Trieste: n.p. 1964), 73-108; also see the three handwritten volumes by Calderini that are kept at the Dore library in Bologna: G. Calderini, *Architettura tecnica* (Roma, Laudi litografo, n.d.), 3 vol; G. Calderini, *Primo corso di architettura tecnica: compendio delle lezioni date nella Regia Scuola di Applicazione per gli ingegneri di Roma,* Roma: Laudi, 1892).

12. For information on the School of Naples see the works by Buccaro: A Buccaro, A. and F. De Mattia, (ed.), *Scienziati_artisti, formazione e ruolo degli ingegneri nelle fonti dell'Archivio di Stato e della Facoltà di Ingegneria di Napoli*, (Napoli: Electa, 2003); A. Buccaro, "L'insegnamento dell'architettura tecnica nella Regia Scuola d'Ingegneria di Napoli", in G. Mazzi et al. (ed.), *Daniele Donghi. I molti aspetti di un ingegnere totale*, (Venezia: Marsilio, 2006), 219-232; A. Buccaro, "Nascita e tradizione dell'Architettura per gli Ingegneri nella Scuola napoletana di Ponte e Strade", in A. Buccaro et al. (ed.), *Storia dell'Ingegneria. Atti del 1° Convegno Nazionale* (Napoli: Cuzzolin Editore, 2006), 213-222; A. Buccaro and S. D'Agostino (ed.), *Dalla Scuola di Applicazione alla Facoltà di Ingegneria. La cultura napoletana nell'evoluzione della scienza e della didattica del costruire*, Benevento, Hevelius, 2003. See also: G. Mainini, "La didattica dell'architettura" in A. Buccaro and S. D'Agostino (ed.), *Dalla Scuola di Applicazione alla Facoltà di Ingegneria. La cultura napoletana nell'evoluzione della scienza e della didattica del costruire*, (Benevento: Hevelius edizioni, 2003), 271-283; F. Mangone, "Gli studi di architettura e di ingegneria a Napoli tra XIX e XX secolo", in A. Buccaro and S. D'Agostino (ed.), *Dalla Scuola di Applicazione alla Facoltà di Ingegneria. La cultura napoletana nell'evoluzione della scienza e della didattica del costruire*, (Benevento: Hevelius edizioni, 2003), 161-173.

13. There are no in-depth studies on Raffaele Folinea. In any case see F. Viola, "18. Raffaele Folinea" in A. Buccaro et al. (ed.), *Scienziati_artisti, formazione e ruolo degli ingegneri nelle fonti dell'Archivio di Stato e della Facoltà di Ingegneria di Napoli*, (Napoli: Electa, 2003), 292-294; F. Viola, "L'architettura delle scuole di ingegneria tra Otto e Novecento: i progetti per il Politecnico di Napoli", in A. Buccaro and S. D'Agostino (ed.), *Dalla Scuola di Applicazione alla Facoltà di Ingegneria. La cultura napoletana nell'evoluzione della scienza e della didattica del costruire*, (Benevento: Hevelius edizioni, 2003), 359-373.

14. A. Muggia, *Lezioni di Architettura Tecnica esposte dall'ing. Attilio Muggia nel 1° corso della R. Scuola d'Applicazione per gli Ingegneri*, (Bologna, 1894)

15. D. Donghi, *Manuale dell'architetto*, (Torino: Utet, 1893-1938).

16. C. Guerra, *Architettura tecnica*, (Napoli: Tipografia Gambardella, 1935).

17. See R. La Franca, "Le Tavole di Michelangelo Giarrizzo", in M. Giuffrè and G. Guerrera, *G.B.F. Basile. Lezioni di Architettura* (Palermo: L'Epos, 1995), 19-20.

18. See R. Inglese, "Il Fondo dei Libri rari del Dipartimento di Architettura e Pianificazione Territoriale", in M.B. Bettazzi et al. (ed.), *Attilio Muggia. Una storia*

per gli ingegneri, (Bologna: Editrice Compositori, 2010), 230-232.

19. For the models of Curioni and those that were bought by the School of Naples, see: E. Benvenuto, "L'arte del fabbricare", in Politecnico di Torino (ed.), *Capolavori di minuseria al servizio della scienza delle costruzioni. La collezione ottocentesca di modelli di Costruzioni della R. Scuola di Applicazione per Ingegneri in Torino*, (Torino: C.E.L.I.D., 1989) 25-33; A. Dameri, A. "La Regia Scuola di Applicazione per gli Ingegneri di Torino: didattica e sperimentazione fra Otto e Novecento" in A. Buccaro et al. (ed.), *Storia dell'Ingegneria. Atti del 1° Convegno Nazionale*, (Napoli: Cuzzolin Editore, 2006), 347-357; F. Viola, "Il sussidio dei modelli nella progettazione architettonica", in *Scienziati_artisti, formazione e ruolo degli ingegneri nelle fonti dell'Archivio di Stato e della Facoltà di Ingegneria di Napoli*, (Napoli: Electa, 2003), 315-316.

20. These models are still kept in the Faculty of Engineering of Naples.

21. R. Folinea, *Riassunto delle lezioni di Architettura Pratica per gli alunni del 2° corso della R. Scuola d'Applicazione per gl'Ingegneri in Napoli (autografate per cura dell'alunno Sav. Ragno),* (Napoli: np., 1891-92).

22. A copy of another text by Folinea is at the Provincial Library of Foggia and was catalogued under the title *Architettura pratica* (np, np, nd).

23. R. Folinea, *Riassunto delle lezioni di Architettura Pratica per gli alunni del 2° corso della R. Scuola d'Applicazione per gl'Ingegneri in Napoli (autografate per cura dell'alunno Sav. Ragno),* (Napoli: np., 1891-92),156-168.

24. Ibid.,156.

25. Ibid., 52.

26. Ibid., 66.

27. Ibid, 83.

28. Ibid.,157

29. Ibid., 176.

30. Ibid, 138.

31. For example C. Guerra, *Architettura tecnica*. (Napoli: Tipografia Gambardella, 1935).

32. See A. Aveta, "Architetti e ingegneri nelle trasformazioni della città di Napoli agli inizi del XX secolo", in S. D'Agostino (ed.), *Storia dell'Ingegneria. Atti del 3° Convegno Nazionale* (Napoli: Cuzzolin,2010), 697-710.

Theoretical Issues

Regionalism Redivivus
Do We Need a Closer Look?

SESSION CHAIRS:

Ricardo Agarez (The Bartlett, University College London, U.K.)

Nelson Mota (TU Delft, The Netherlands / University of Coimbra, Portugal)

Regionalism has had an intense if unbalanced existence in architectural history. Eclectic, romantic, nationalist, historicist, critical, resistant – numerous titles have been used to position design practices that engage with local and regional elements, originated in both formal and informal custom. Among these categories, critical regionalism (CR) had widespread impact and, thirty years on, still influences architectural debate. Although critiqued and questioned, it has become an umbrella-term and a benchmark against which complex and diverse local practices are hastily asserted.

CR helped set the ground for a moralism of *good* and *bad*, *avant-garde* and *populist* use of regional features in design work – according to which critical is progressive, worthy of study and praise, while *uncritical* (eclectic, romantic, literal) is retrograde, and not equally relevant. This moral distinction and its insistence in binary oppositions bring about the ambivalent character of CR both as a "revisionary form of imperialist nostalgia", "often imposed from outside, from positions of authority" , and as a theory reverent towards attitudes of peripheral challenge to central hegemonic power.

Notions of *negotiation*, *interchange*, *assimilation*, *hybridity*, and *contamination* linking modernism and regionalism have recently been introduced to complement the established view of *antagonism* between the two. More and more investigations show evidence of *conciliation* and blur conventional readings of *opposition*. The aims and ambitions of regions and local communities, however, remain hidden in generally centralized accounts. How were these formulated, and transferred to building practice? How were the cultural frames of metropolitan practitioners projected onto peripheral contexts? To what extent were local actors permeable to central agents? We welcome papers that bring about discussion on the multiple facets of regionalism in Europe, and extend its boundaries. Regionalism studied in local sources or seen from the local standpoint, as well as constructed and issued from the centre. Regionalism observed in objects of the everyday built by locals, as much as in acknowledged works by central designers and agencies. Regionalism incorporating pastiche and nostalgia, familiar imagery and popular self-interpretation, discussed at the same level as cosmopolitan regionalism employing abstraction and exclusive references. Regionalism explored in its shades of grey, beyond the conventional black-and-white reading it has generally had from architectural history.

GRASS-ROOTS MODERNISM:
THE AUSTRIAN SETTLEMENT AND ALLOTMENT GARDEN ASSOCIATION

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Until the beginning of the 20th century Vienna, the capital of the Austro-Hungarian empire had rapidly grown during the second wave of industrialization.[1] People lived in dire housing conditions for decades and the practice of "Bettgehen" was common as tenement buildings were subject to wild speculation.[2] WW I however aggravated these circumstances. In search of food and shelter, utter poverty fostered co-operation: the urban poor, many of them unemployed, built rudimentary shacks and small gardens on Vienna's periphery. The land on which they built, was in most cases never purchased or even negotiated for, but merely appropriated.[3] Any building material that could be found in the surrounding areas was used to build make-shift shelters. From the beginning the settlers tilled vegetables and kept small animals to ensure the survival of families. This practice was an extension of the use of civic parks for inner city small gardening during WWI.[4] When space in the city became too scarce, informal settlements with small gardens emerged on the outskirts of Vienna. These included a range of ephemeral and sedentary usages; while some people cultivated small gardens or bred animals, others started settling illegally in their allotment gardens. Soon, the practice of settling led to an informal exchange of knowledge, influenced by the discourse on garden cities and allotment garden villages that had sprung up all over Europe.

NATURE, FOOD AND THE NEW NATION

The end of WWI was determining for the settlement movement in many ways. On one hand, Austria suffered from an extreme economic crisis, on the other hand, this crisis left room for progressive ideas to quickly gain momentum. The settlement movement itself however, stood larger than ever by the end of the war; from 13 clubs and 2.000 members in 1916 it had grown to more than 40.000 members in 1918. A formalized institution was thus aspired.

Great achievements resulted from a demonstration in April of 1921 when settlers expressed clear demands to the city. In particular these demands concerned the expropriation of owners of large estates on whose land settlements had been built. In addition, they demanded the municipal support in man-power, in particular bureaucratic staff. The settlers also required financial support for building materials and machinery. On banners they wrote: "What you give to the settlement, you will save in unemployment supports" and "Give us land, wood and stone and we will make bread from it!"[5] The architect Adolf Loos issued an article in the *Neue Freie Presse* stating that in a reduced Austrian state with all its crown lands lost, the settlers enabled substantial distribution of produce within the city. In his essayistic manner, which often spoke to issues of everyday life and style, Loos opened his article by bemoaning the fact that with the war lost, the famous Austrian cuisine had become impossible to maintain. "A nation's nourishment is determined by the foodstuffs that the cultivated land supplies. This is why every nation has its own character in diet, its own cuisine," Loos wrote.[6]

> There was much talk about the Austrian cuisine. But only today do we become aware, that this cuisine was only possible, because an amalgamation of states [*Staatengebilde*], called Austro-Hungarian monarchy, endured for centuries.
>
> Moravia, Poland and Hungary supplied flour, South-Hungary and Bohemia, plums, Bohemia and Moravia, sugar. Nature had equipped the non-German countries in a wasteful manner; wide plains, black soil, blazing sun. Everything that once nourished us, we have lost.[7]

But Loos certainly had a solution to the problem at hand; and it involved, as he suggested in another one of his famous articles on the Austrian settlers, adapting. "Now, we are asked to relearn," he wrote.[8]

> We have to create our own national cuisine. The Bohemian dumpling, the Moravian "Buchtel" [a type of plum jelly-filled doughnut], the Italian Schnitzel (frittura) all things that have belonged to the iron stock of Viennese cuisine for centuries, must be replaced by local food products.[9]

The settlements, Loos claimed, were the solution; they would supply the Viennese with locally grown foodstuffs, and settlers would also sustain their own food consumption regionally.[10] But however twisted this argument was, in its amalgamation of nationhood, lost civic pride and imperial entitlement mirrored in the culture of regional cuisine his economic argument had some grounding in reality. Not only was Vienna painfully experiencing the loss of the crown lands in distribution of food, which was only increased by the general economic downturn, it also could not expect any support from the nearby Austrian counties and

federal states. In fact, the same day an article authored by "an informed source," stated that multiple Austrian counties had issued ordinances to keep foodstuff within their boarders, because Vienna had, due to her high purchasing power, depleted them from their own goods.[11] In addition, the article made the argument, that the country could no longer sustain the capital, when prices were low in rural areas and wages high in the capital. Denying the capital its foodstuffs was the only option to raise rural wages. Loos' argument therefore was a potent one; it not only spoke to possibilities of an autonomous capital, it also tied it to urban economics and cooperation. In addition, it emphasized the importance of the settlers' self-sustainability by underwriting that the allotment garden did not only save the people, "it also saved the state."[12]

The same day, a legislation that had long been supported by the social democrats was finally passed in the city council, providing an extensive building fund to the settlements. The mayor of Vienna, Jakob Reumann, assured the settlers of his full support and granted them the construction of additional settlements, quick expropriation proceedings of lands the settlers had occupied during the war, distribution of all necessary building materials through the cooperatively owned *GESIBA* and machines and tools. In addition, various municipal entities were founded that provided staff to assist the settlers, such as a building bureau and *Siedlungsamt* (settlement office) were Adolf Loos was active. Thus Austrian architects were looking for local solutions to local problems while elsewhere[13] a largely national debate on the potential of modern architecture was shifting towards international aspirations.

For Loos, who by 1921 had been active in the settlement movement for a couple of years, this meant that what he had conceived in diagrams could finally become reality; through the combination of self-help and state assistance the settlers would "learn how to live." In Loos's vision, this process would be closely linked to rural farm living. In this seminal article Loos wrote:

> Those who want to settle have to relearn. We must forget the urban dwelling-living. If we want to move to the country, we have to take lessons from the farmer and see how he does it. We have to learn how to live.[14]

Crucial to living inspired by the farm was the conception of the primary unit, the *Wohnküche* – a kitchen where all aspects of daily life could take place and which was located on one level and in close proximity of the garden and the barn. Not lastly because of that, however, there was also need for private space for sleeping and intimacy, which distanced the settler from the aspects of daily life. Thus Loos proclaimed the strict segregation of living and sleeping areas within the settlers' house, as was common in Austrian farm-houses as well.

On the other hand, Loos, as one of the core pioneers of modern architecture, naturally introduced radically new aesthetics for his own settlement schemes, for example his patented *Haus mit einer Mauer* (house with one wall), which he employed in a settlement at Heuberg. This scheme not only adhered to core modern design aesthetics (e.g. volume, rather than mass, balance rather than symmetry, and of course the exclusion of applied ornament), but it also sought to minimize costs and meet the needs of the common man. Most remarkably, the scheme was sensitive to economical organization, not only spatially, but also financially. In fact, Loos's modern designs proper were often points of friction between the architect and the settlers, as settlers were reluctant to abstain from tri-angled gable roofs and other folkloristic elements. Eventually, these disagreements would lead to Loos' early retirement from the settlement movement; but he was not there yet, he was still conceptualizing life in the settlements.

For example, in a settlement's plan (Fig. 1), dated 1918, Loos's great care for the organization of relationships between home and land on a large scale becomes apparent. Although his modern functionalism did not only include systematizing the lives of people, it expanded to the life of animals and plants as well. Buildings were arranged on a rigid grid
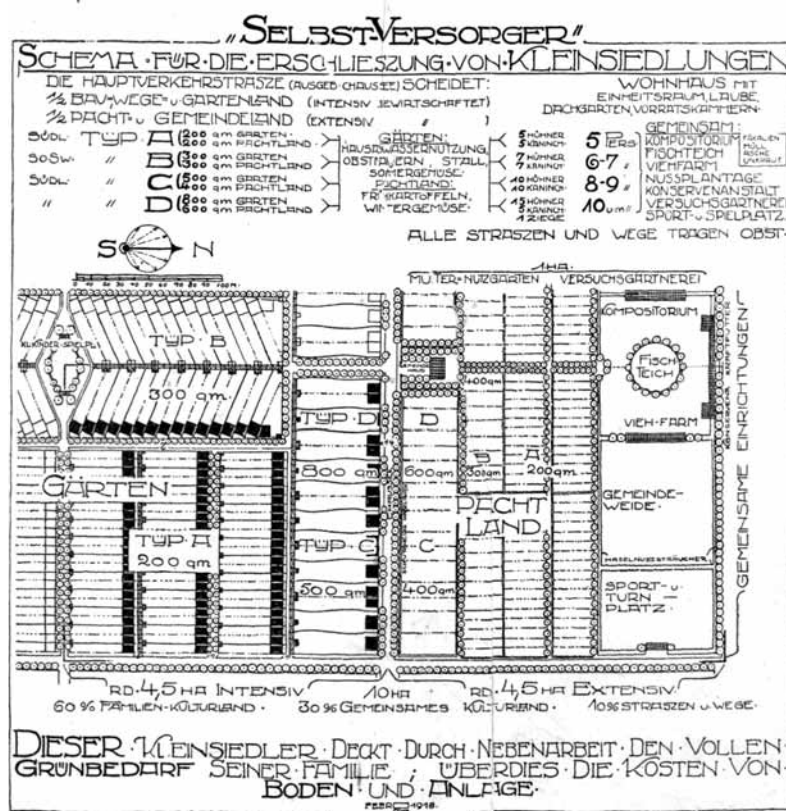
Figure 1. "Model Settlement, Adolf Loos," Vienna, 1918. (soucre: Museum Albertina Archive, Vienna)

system, minimizing costs for roads and infrastructure due to close proximity. They all consisted of a primary unit for cooking and living, an alcove, a green roof and a room for storing canned goods, but they varied according to family sizes. Adjacent barns were arranged accordingly – the size of the family determined their consumption of food, and thus the size of the barn. Comparing houses of type A, C, and D, Loos specified that while type A households could hold five chicken and five rabbits, a house of type C would have 10 chicken and 10 rabbits. Houses of Type D had 15 chicken and only five rabbits but an additional goat.

On the question of farming in small gardens, Loos indicated that while the gardens adjacent to the houses would be used for intensive farming, the larger pastures should be farmed inoffensively, so that the ground would not become less fertile. Loos also inscribed which types of produce were suitable for which areas; due to water access (often through wells) gardens featured fruit trees and grew summer vegetables, while larger pastures were used to plant spring potatoes and winter vegetables.

As over-ambitious as some of this might sound, Loos's plan showed an early dedication to employing modern functionality in understanding the aptitude for certain plants and animals for the projection of rural life in urban and thus scarce unbuilt areas. On the other hand, these projections were precursors, although in a much smaller scale, of studies on the life of animals and plants in order to integrate them into larger labour processes. In the 1930s similar studies, though focused on increasingly industrialized agricultural production, would be carried out by the Dutch moderns in *De 8* and *Oupbow*.[15]

Loos proudly wrote at the bottom of his chart; "all streets and paths carry fruit." In some settlements there would be fishponds, as he had indicated, goat and sheep pastures, where children played and even greenhouses. "This small settler covers by his extra work the full 'green demand' of his family as well as the costs of soil and the (entire) facility,"[16] Loos concluded. Out of their own power, settlers had ensured their survival. Throughout the years, they would even develop schemes inscribing precisely how densely produce could be grown and how most effectively it should be arranged, eventually inspiring economic schemes that consciously utilized settling as employment strategies.[17]

TECHNOLOGY, LABOUR, COMMUNITY AND AN ECONOMY BASED ON USE-VALUES

In opposition to Marxian theories of modern society in which men were alienated from one another, the economist and secretary of the Austrian settlement movement, Otto Neurath, developed theories on communal economy based on Ferdinand Tönnies' *Community and Society*.[18] This meant that Neurath believed that local economies and communal bonds were possible even as modern society increasingly industrialized. These theories were extensions of Neurath's studies on war economy, which he had conducted during WW I when he had served as the director of the *German War Museum*. It was then that he recognized that the state of emergency "gave primacy over the demand of profit: [in which] war economies happened to provide … laboratory conditions for … forms of use-value oriented approach to economic organization."[19] In 1919, Otto Neurath returned to Vienna, after his short imprisonment for his fiery participation in the Bavarian Communist Republic. Upon his return, and in his new function as secretary of the settlement movement, Neurath conceptualized organizational schemes that allowed for an economy based on the state of emergency and community.[20]

While Loos had already inscribed communal facilities, used by all settlers collectively in settlements, (e.g. zone for composting, a fishpond, a proper cattle farm, plantation grounds for nuts, a facility for canning goods, an experimental plant nursery, and a sports and playgrounds), Neurath was instrumental in making these come to life on a large scale. First and foremost this meant the organization of rallies, prolific publication activities – the printing and dissemination of newspapers, manifestos and catalogues – as well as the conception of exhibitions and fairs. With the support of the city of Vienna, the Austrian Settlement and Allotment Garden Association was also able to institute its own classes and ultimately even a settlement school in which workers were trained in canning, horticulture and the keeping of animals; lectures on architecture and building were also given, by some of Austria's most prominent architects, many of whom had been active in the settlement movement early on, e.g. Adolf Loos, Margarete Schütte-Lihotzky and Josef Frank. This involvement of architects and other city officials was arranged through various co-operative and public entities. In addition, the co-operatively owned GESIBA, the *Gemeinwirtschaftliche Siedlungs- und Baustauffanstalt* (Co-operative Economic Institution for Settlement and Building Materials) was created, which acted as a co-operative developer and managed the production and supply of building materials, tools and machinery.

The four principles derived from communal economy that came to ultimately govern the settlements were the settlers' shared infrastructure, collective ownership over all communal facilities and a contribution to the building process by unpaid work, which fed into the fourth and most important of the settlers' core issues: their autonomy from the city, while working closely together with it. So while the city prepaid ninety percent of all building costs in 1923 for example, the settlers' unpaid construction work (1,000 – 3,000 hours) was recognized by the city as an equivalent of a ten percent financial contribution.[21]

Drawing on the settlements Hoffingergasse and Rosenhügel's graphic content (Fig. 2), co-operative processes of organization were also employed during construction. They begun in laying down shared construction infrastructure, and extended to joint

excavation of foundations, the erection of houses and the simultaneous upkeep of small gardens. Communal facilities were built collectively by men and women: club houses, laundry facilities, libraries, theatres, kindergartens, but also parks and communal meadows, ponds, primary and secondary circulation. Skilled labourers were active in workshops, attending to work that required the abilities of a carpenter, trained brick mason or such like. Women were generally equally involved in the settlement's overall realization, but their duties seem to have been more focused to the gardens' construction and upkeep.

Figure 2. Settlers at work, 1920s. (source: [left] Viennese Film Archive — [right] Online Archive of Settlement at Rosenhügel)

Equal participation of all members throughout the building process was in some cases ensured by a lottery held at completion of the settlement. In this lottery workers entered their name into a pot and according to their family's size a house was given to them. Everybody who had put a minimum of 1500 hours of labor into the settlement's construction procedure was granted a house. Once the houses were distributed, each settler was given an *Anteilsschein*, a share of all communal infrastructure entitling the family to use all communal facilities. This share also bound the family to secure the infrastructure's upkeep. With state assistance tram- and train-lines were laid down to shorten travel times into the city.

By the mid 1920s additional groups, centered around specific interests, emerged due to former association and cooperation in building and construction; music clubs, hiking clubs, even military and children's clubs. The production of the settlements had yielded a new urban consciousness amongst the formerly poor and unemployed, creating a network of communities bound by common as well as diverse interests.

CONCLUSION

Throughout this paper, I have tried to describe the local and international forces by which the Austrian settlers achieved alternative models of modern living, which were quite durable and successful. Thus, the question remains why this episode – and there were many more like it, in Germany, Sweden, England, etc. – is downplayed in the historiography of modern architecture. I have given partial reasons, some having to do with the Austrian architects' focus on national and rural issues, which are not necessarily associated with what came to be know as *the International Style*.[22] But there were also other reasons why the settlement practices all over modern Europe did not make it into the big historiographies, for example the conscious employment of "slow technologies," which capitalized on combating unemployment. Differently than some modern German and French architects (e.g. Gropius, Muthesius, Le Corbusier) who strongly advocated for using prefabricated elements and Fordist production methods in designing schemes for the modern metropolis, Viennese architects perceived the construction of settlements as opportunity for employment, making the most of local resources even if that meant increased labor-time.[23] At settlement Altmannsdorf-Hetzendorf for example, settlers burned bricks locally from the earth dug up for foundations. Small gardeners, on the other hand, used waste products from the neighboring industries[24] for the construction of houses, and manure was saved as fertilizer. In addition, in the Austrian settlements informal exchange and barter of building materials, garden supplies and services was common. All of these practices, hardly bring to mind core agendas of modern architecture and urbanism, yet they concerned core modern architects and were employed in settlements, which by all means looked at least quite modern.

It is most important to understand however, that although many of these practices grew out of a state of emergency, they were chosen consciously. They were preferred over other options, for rational, economic reasons. In addition, they were backed by elaborate social and socialist theories and counter capitalist alternatives had been selected. I would thus argue that the most important reason, why the Austrian settlements did not make it into the historiographies of modern architecture, is because they advocated for an urbanism based on life planning in general and human happiness.[25] Thus differently than many of the famous modern studies of the 1930s on housing, which utilized top-down planning methods, architectural and regional schemes for the Austrian settlement movement incorporated top-down and bottom up building techniques at the same time.

In looking back on his involvement with the settlers, Otto Neurath wrote in 1937 in response to the proposals of CIAM IV:

> City planning and home planning are concerned with life planning in general. The reason for this is that architects are people whose profession it is to make the entire lives of human beings as happy as possible and that their theoretical view is not only founded on principles which determine certain technical functions but also on ideas of happiness of human beings as a function of architectural activity.[26]

Although this notion towards urbanism did not make Neurath popular at CIAM IV, it did not only ensure housing, work and survival for 50.000 families in Vienna in the interwar period, it granted them long-term comforts that endure until today.[27]

Endnotes

1. http://www.statistik.at/, 1857: 676.500, 1880: 1.162.000, 1900: 1.769.000, 1910: 2.000.000.

2. "Bettgehen," the English "hot-bed," is the practice of sharing beds in shifts.

3. Otto Neurath, *Österreichs Kleingärtner- und Siedlerorganisation*, (Vienna: Kommissionsverlag der Wiener Volksbuchhandlung, 1923), 5. *Mochten Getreidelieferanten, Munitionserzeuger, Kanonengießer Riesengewinne einstreichen, es schien dem Ganzen dienlich; aber daß Spekulanten Boden brachliegen lassen durften, weil einmal damit Geschäfte zu machen seien, das wurde nicht mehr anerkannt, solange der Druck des Krieges stark war. So kam es, saß auf brachliegendem Land, auf Bauplätzen, aber auch auf anderem landwirtschaftlich ungenügend genutzten Boden mit und ohne Zustimmung der Eigentümer Kriegsgemüsegärten entstanden.*

4. I had often heard about the fact, that "Kriegsgemüsegärten" (war-time produce gardens) emerged during WW II in Viennese parks, but had never found any proof this existed already during WW I until I found a postcard dated, 1916. It reads: "Woman at War – Cultivating produce in civic parks," collection of the author. *Die Frau im Kriege, Gemüseanbau in städtischen Parkanlagen.*

5. O. Neurath, *Kleingärtner- und Siedlerorganisation*, 15. *Mit Wagen, Automobilen, und Musik rückten die Kleingärtner und Siedler an, die im Zuge charakteristische Tafeln mit ihren Forderungen trugen: Was ihr den Siedlungen gebt, erspart ihr an Arbeitslosenunterstützung.Gebt und Land, Holz und Stein, wir machen Brot daraus.*

6. Adolf Loos, "Der Tag der Siedler," *Neue Freie Presse*, April 3, 1921, 10. *Die Ernährung eines Volkes wird bestimmt durch die Nahrungsmittel, die das bebaute Land liefert. Jedes Volk hat daher eine eigene Ernährungsart, seine eigene Küche.*

7. A. Loos, "Der Tag," *Neue Freie Presse*, 10. *Man sprach sehr viel von der österreichischen Küche. Aber erst heute werden wir gewahr, dass diese Küche nur dadurch möglich war, daß ein Staatengebilde, daß man die österreichisch-ungarische Monarchie nannte, durch Jahrhunderte bestand. Mähren, Polen und Ungarn lieferten das Mehl, Südungarn und Böhmen Pflaumen, Böhmen und Mähren Zucker. Die Natur hatte die nichtdeutschen Länder in verschwenderischer Weise ausgestattet. Weite Ebenen, eine schwarze Ackererde, brennende Sonne. Alles was uns einst ernährte, haben wir verloren.*

8. A. Loos, "Der Tag," *Neue Freie Presse*, 10. *Und da heißt es umlernen.*

9. A. Loos, "Der Tag," *Neue Freie Presse*, 10. *Wir müssen uns eine eigene nationale Küche schaffen. Die böhmischen Knödel, die mährische Buchteln, die italienischen Schnitzel (frittura), lauter Dinge, die jahrhundertelang zum eisernen Bestand der Wiener Küche gehörten, müssen durch heimische Nahrungsmittel ersetzt werden.*

10. Eve Blau, *The Architecture of Red Vienna* (Cambridge and London: MIT Press, 1999), 98.

11. Mitteilung von Unterrichteter Seite, 'Der beabsichtigte Abbau der Länderabsperrung für Lebensmittel,' *Neue Freie Presse,* April 3, 1921, 11.

12. Loos' economic assessment had some grounding in reality, since the settlers' gardening activities had yielded 1000 wagons of produce annually, which, in 1918, still had to be imported, according to the Associations chairman, Adolf Müller, Adolf Müller, 'Geleitwort,' *Österreichs Kleingärtner- und Siedlerorganisation,* (Vienna: Kommissionsverlag der Wiener Volksbuchhandlung, 1923), 9. Adolf Loos, "Der Tag der Siedler," *Neue Freie Presse*, April 3, 1921, 10-11.

13. I am thinking in particular of debates of the German Werkbund and later CIAM.

14. Adolf Loos and Opel, Adolf, *Trotzdem, 1900-1930*, (Wien: G. Prachner, 1982), 165-170.

15. Cornelis Van Eesteren and the group around de 8 carried out meticulous studies, measuring all aspects of farm and settlement life, providing dimensions of farm equipment like feeders, but they also paid attention to the animals' dimensions and proportions as such.

16. As inscribed in the chart, ALA 17, Adolf Loos Inheritance, Albertina Museum Archives, Vienna. *Dieser Kleinsiedler deckt durch Nebenarbeit den vollen Grünbedarf seiner Familie; überdies die Kosten von Boden und Anlage.*

17. *Die Bundesregierung und die Stadt Wien, Austria is helping her unemployed to help themselves, Österreich hilft seinen Arbeitslosen sich Selbst zu helfen. Die Randsiedlungsaktionen der Bundesregierung und der Stadt Wien.* (Wien: Wiener Siedlungsgesellschaft m.b.H, 1936?)

18. Ferdinand Tönnies and Charles Price Loomis, *Community & society (Gemeinschaft und Gesellschaft)*, (East Lansing: Michigan State University Press, 1957).

19. Neurath, Otto, Thomas E. Uebel, and R. S. Cohen. *Economic writings selections 1904-1945*. (Dordrecht: Kluwer Academic, 2004), 9.

20. For a close reading of Neurath's ideas on community and society consult

Nader Vossoughian and D'Laine Camp. *Otto Neurath: the language of the global polis*. (Rotterdam: NAi Publishers, 2008).

21. O. Neurath, *Kleingärtner- und Siedlerorganisation,* 25. *Wenn Bund und Gemeinde 90 der Baugelder zur Verfügung stellten, konnte der Siedler die restlichen*

10 Prozent in Geld und Arbeit leisten, womit er den Baugenossenschaften überlegen war, welche nur Geld aufzubringen bereit waren.

22. I am referring here to the Philip Johnson and Henry Russell Hitchcock's book with the same name, which arguably played a role in emptying the modern debate centered around social issues and promoting it as stylistic debate.

23. This practice was continued through Red Vienna on a large scale.

24. Interview, Settlers of Simmeringer Haide, December 2011, unpublished.

25. Otto Neurath, "Visual Representation of Architectural Problems," *Architectural Record*, July 1937, 56-61.

26. O. Neurath, "Visual Representation," *Architectural Record*, 57.

27. Many of the allotment garden and settlement communities exist until this day.

NATIONAL UNITY THROUGH REGIONAL DIVERSITY: ARCHITECTURE AS POLITICAL REFORM IN YUGOSLAVIA, 1929-1941

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INTRODUCTION: A COUNTRY OF INVENTED REGIONS

When in 1929 King Alexander I dissolved the Parliament and abolished the Constitution of the Kingdom of Serbs, Croats and Slovenes, it was only the final act in a long-lasting political drama which had started back in 1918. The new kingdom was a highly centralized state, burdened by endless disputes between Serbian and Croatian elite over political dominance and power. The Kingdom eventually succumbed to virulent ethnic nationalisms and democratic breakdown in 1928. Ten years after it had been created, it became clear that the new country—born out of the tidal wave of enthusiastically promoted equality between Serbs, Croats and Slovenes—was about to tear itself apart. Hence, the King's Dictatorship was aimed at beating ethnic unrest and obliterating ethnic differences. The King and the regime tactically induced a new political and cultural paradigm of 'integral Yugoslavism' and banished the nominal use of the names of Serbs, Croats and Slovenes. The new ideological course was given a considerable impetus when the name of the country was changed into the Kingdom of Yugoslavia, to leave not a trace of its constitutive ethnic groups or historical sentiments. At the same time, the country became internally divided into new regional units, which replaced former historical provinces.[1]

The new composition of the state was based on a rather novel administrative division into nine regions or provinces (*banovine*), which were named mainly after major Yugoslav rivers.[2] These regions became the nucleus of a new national paradigm with huge ideological loadings.[3] Recalling the scope of the administrative division in the revolutionary France of the 1790s, the new regional composition was clearly aimed at creating a modern state, unified in the idea of a single, homogeneous Yugoslav nation. However, a potential threat of maintaining political centralism which had caused the political crisis, was managed by stressing the diversity, and not sheer unity, as the key component of the new Yugoslav identity; yet, it was the diversity of regions, not of ethnic groups. In the new ideological perspective, Yugoslavs were seen as ethnically homogenous but culturally different; nevertheless, it was believed the differences had stemmed more from geography, rather than history. On the one hand, the geographical 'naturalness' of new regions promoted the natural (as opposed to the historical) framework of national identity; on the other hand, though, the newly-imposed differences acted as a fiendish scheme of substituting the traditional ethnic divisions—which indeed plagued the entire history of Yugoslavia—by a politically innocuous concept of diversity. Just as the pre-1929 Yugoslav national identity had been officially proclaimed as the unity of three ethnic groups (Serbs, Croats and Slovenes), the new concept of the nation retained the notion of diversity but instead of people, the focus was shifted to regions.[4]

ARCHITECTURAL IMAGINATION OF YUGOSLAV REGIONALISM

Over the course of the early 1930s, it was crucial for the regime to gain control over the political process of regionalization which led to the new concept of national identity. The major role in this process was in the domain of architecture, conceived, interpreted and utilized as regional, in a variety of instances. Architecture played a major part in the regionalist campaign, starting from the scholarly discourse of ethnography, anthropology and architectural history—which provided a sort of epistemological basis for Yugoslav regionalism—and ending in an unprecedented scale of new constructions, which expressed the visual language of the new nation.

The regionalist architectural paradigm was mainly based on the already developed discourse of Yugoslav geography and anthropology as outlined by Jovan Cvijić. Apart from being a world-distinguished scholar, he was the author of *La Péninsule Balkanique* (1918), one of the most meritorious works for the regionalist imagination of Yugoslavia. While writing about common racial origins and cultural descent of Yugoslavs, he considered geographical (and not historical) factors decisive for the 'psychical character of peoples',[5] influencing the whole generation of scholars, among whom were architects and architectural historians. They believed that aside from folklore, the most distinctive characteristics of several Yugoslav regions he had constructed were 'different types of traditional houses and buildings'.[6] Consequently, scholars developed the classificatory systems of distinctive Yugoslav regions using a variety of building types: from the Dinaric log cabin and the half-timbered Moravian house, to the Adriatic Littoral and Pannonian houses. Importantly, the architectural system of national diversification remained congruent with

the post-Vitruvian tradition of seeing architecture as determined by local context. Thus, the environmental basis of Yugoslav architectural regionalism provided a sort of intra-disciplinary legitimization of the regionalist paradigm of identity, placing architecture beyond the threat of seeing it as obedience to political ideology.

Regionalist narratives soon spilled over from scholarly discourse into extensive, state-sponsored architectural programme. A map drawn by architect-trained scholar Aleksandar Deroko is but one example of this representative culture used to bolster new regional identities (Fig. 1). Presented as diachronically almost fixed phenomena,[7] newly-proclaimed different building types had a huge impact on the ongoing process of visualizing the nation through the conceptual model of the 'unity of diversities' or 'uniting decentralization'. In the decade that preceded World War II, the Architectural Department of the Ministry of Engineering of Yugoslavia[8] produced a variety of blueprints for different architectural projects, which were primarily concerned with social housing and communal infrastructure.[9] The centralized production of regionalist styles was quite similar to the contemporaneous practice in Germany which, to a certain extent, was an ideological underpinning of a much broader cultural paradigm of *Heimat*,[10] where many schools, military barracks*,* resorts for *Kraft durch Freude* or even the least utilitarian objects as substations and telephone exchanges, were planned and executed in one of the established regional styles.[11] In a very similar manner, the Yugoslav Ministry produced a range of projects for schools, post offices and rural houses, literally inventing a couple of regionalist styles which unambiguously corresponded to the already established rhetoric of regionalism.

Figure 1. Schematic representation of the most common types of traditional country houses in different parts of Yugoslavia. (source: Aleksandar Deroko, Narodna arhitektura. 2, Folklorna arhitektura Jugoslavije (Belgrade: Naučna knjiga, 1964)

Some of the most illustrative examples of the newly-constructed architectural regionalisms are small post offices designed in several variants by the same Ministry in 1931 (Fig. 2).[12] Each architectural type was styled in different 'regional' idioms, and among them four were of exceptional interest. The first one was conceived as a rather cubical structure roofed by curved clay tiles, and it was distinguished by a porch topped by a simple wooden arcade which probably referred to the vernacular heritage of Kosovo or Macedonia. On the other hand, the shape of the windows almost exactly matches the local building tradition of the eastern Balkans, clearly suggesting that the design was perhaps to represent the 'central Yugoslav type' as defined by Jovan Cvijić. The second type was also executed in several variants, all of which distinguished by white stone cladding akin to the littoral architecture of the Adriatic. Surely, such a type might have been considered as representative of the Littoral and Zeta Departments (*banovine*). The third and the fourth regional types are interesting too, the former distinguished by the features of the plain 'Pannonian' vernacular, and the latter by the traditional folk architecture of Serbia Proper and Slavonia. The fact that the sheets with all these designs were stamped by labels with an empty space left to be later inscribed by a particular location of a building (which would actually be erected according to the design), clearly shows that they were initially conceived as ready-made models. It is beyond doubt that these regional types were part of the architectural imagery of Yugoslav identity, constructed out of different regions, as sanctioned by political authorities.[13]

Another example is a bulk of local railway stations designed and built by the same Ministry for parts of the country lacking railway infrastructure.[14] There were also plans for the Ministry to produce different blueprint plans for households in the countryside, 'according to predefined [architectural] types designed in response to the building traditions of each region, albeit technically advanced.'[15] Curiously, the very idea of architectural 'type' suitable for highly generalized conditions of a region or province utterly opposes the common practice of design process, where local conditions dictate all sorts of constraints.

Importantly, such a centralized and state-imposed practice was a textbook example of a common twentieth-century cross-national phenomenon of architectural regionalism that

Figure 2. Designs for different post offices in the Kingdom of Yugoslavia, the Architectural Department of the Ministry of Engineering, 1931. (source: The Archives of Yugoslavia, the Ministry of Engineering, no. 62, the Collection of Plans no. 349)

is usually 'imposed from outside, from positions of authority'.[16] In this perspective, the question of the architectural nature of regionalism seems irrelevant, even though Yugoslav regionalisms are neither critical[17] nor constructive.[18] Despite the fact that in a strict sense Yugoslav architectural regionalisms were firmly attached to the tradition of the so-called romantic or nationalistic

regionalism,[19] it seems the deeply-entrenched presumption about the alleged opposition between centralism and regionalism—in terms of both attitude and policy—needs to be revised. I am going to discuss how the discourse of regionalism was constructed and employed in order not to support the identities of Yugoslav regions, but to tacitly reinforce their unity and political centralism. The current idea of the 'unity of diversities' was, indeed, 'designed to foster even greater centralization'[20] which, of course, further propelled old ethno-nationalisms.[21]

ARCHITECTURAL IMAGERY OF YUGOSLAV PROVINCES

Perhaps the most conspicuous examples of the paradigm of 'unitary centralization' are two groups of buildings. The first represents a series of royal mansions built for the Yugoslav ruling dynasty Karadjordjević in the early 1930s. Another group consists of several administrative seats of the newly-established regional departments (*banovine*).[22]

The architectural imagery of the Drava Province (which covers the territory of Slovenia) is best seen in a royal hunting lodge in Kamniška Bistrica, designed by Jože Plečnik in 1932. Despite the claims that it was to correspond to the alpine surroundings and mountainous milieu,[23] the architecture of the lodge is detached from local building tradition. Set on a massive base of stone, it is a wood-lined brick building with curiously arranged vertical planks. Its low slope roof and projecting eaves are more akin to the Mediterranean tradition than that of the Slovenian Alps, distinguished by steep roofs and wooden porches.[24] Instead of representing an authentic vernacular tradition of the region—as one might view it if the building is seen as a curious example of romantic regionalism—Plečnik's architecture seems to have symbolized an idealized image of the Drava Province, stretching from the Alps, the Great Pannonian Plain and the Adriatic coast.

The similar regionalist approach took place in Han Pijesak (today in Bosnia and Herzegovina) in the Drina Province, where an old mansion was reconstructed to suit the needs of royal hunting resort. The existing building was restyled as a curious combination of a log cabin and the so-called Oriental house, symbolically representing the identity of the province. Even the small details were employed to tell the story of the province's bucolic identity, like the walls of the drawing room covered with 'boards made of oak, elm, sycamore and walnut wood'.[25]

The King's rustic lodge in Demir Kapija (1930-34), set amidst a farm in the southernmost part of the Vardar Province (which covered Macedonia and parts of Serbia and Kosovo), was designed to represent the region as a hybrid between different vernacular idioms. The half-timbered building was painted white and distinguished by a porch, an arcade and a pyramid hip roof covered with curved earthenware tiles.[26] At the same time, the government announced a competition for the administrative seat of the same province to be erected in its capital Skopje. The architecture of the winning entry imagined the Vardar region as a realm of ancient Slavic tradition and a modern Yugoslav region in sharp contrast with the oriental urban culture of the local Albanians and Turks.[27] Since it was the region marked by disputes between Serbian, Bulgarian and Greek nationalism, it had to be represented as simultaneously modern, de-Orientalised and Slavicised.[28] This is the context of the contemporary accounts which perceived the palace as a 'modernist edifice with some elements borrowed from the old architecture of Skopje',[29] which practically meant the appropriation of the traditional vernacular idiom, already de-Orientalised and Yugoslavised by contemporary scholars.[30]

A few years later, the littoral region of Yugoslavia got its architectural imageries too. A royal seaside villa in Miločer (in Montenegro) was built in 1932-34, soon to become an epitome of the virile identity of both the Zeta and Littoral Provinces.[31] The architecture of the villa, styled to resemble the local tradition, lent an aura of a rather primitive rusticity, reinforcing the contrast between the local vernacular (interpreted as peculiarly Slavic) and the Italianate architecture of historic Dalmatia and Montenegro.[32] A difference of style and meaning was crucial for the Yugoslav symbolic re-conquest of the region, formerly ruled by Austria and Italy.[33] At the same time, such an interpretative scope reinforced the geographic (instead of historical) determinism of architecture, as the key principle of current architectural theory of the time. This was the ideological context for the royal villa in Miločer to be understood as a means of constructing national identity through regional representational tactics. The villa was, in a sense, a modern representation of a widely discussed littoral type of architecture in Yugoslavia which, according to contemporary scholars, distinguished the whole region 'from Istria to the far end of the Montenegrin coast'.[34] With its stone being quarried out of different places in the region, the villa indeed summed up—virtually and symbolically—the identity of the region. The apparent irony that the villa itself was made of reinforced concrete and only clad in stone clearly represents the underlying rationale, common for all examples discussed: the architectural regionalism had more to do with the politics of invention than with interpretation of regional styles, forms and tectonics.

A rather virile identity of the Zeta Province itself, which straddled Montenegro, Herzegovina, Kosovo and South West Serbia, had striking architectural images too. The best examples are the administrative seat of the Province in Cetinje[35] and King Alexander I's royal house in Rijeka Crnojevića.[36] These buildings from 1930-32, designed by the King's favourite architect Nikola Krasnov, were distinguished by stone cladding and a rather primitivist detailing. Both were strategically conceived as archaising structures

which connoted primordial, Dinaric identity of the region as opposed to historical, 'superficial' and 'undomestic' Montenegrin or Italian traditions. In the context of the former capital of Montenegro, which was marked by a pastiche of the *neo* historical styles, the robust and coarse façades of these new buildings were quite telling. They were deftly conceived in order to symbolically annul the Montenegrin sovereignty over the region, which was officially transferred to Yugoslavia in 1918.

A similar shift of identity can be traced in the architectural representation of the neighbouring Littoral Province. It was initially planned for the new seat of the province, conceived as a rigid Bauhaus-styled structure, to be juxtaposed to the ancient palace of Diocletian in Split (today in Croatia).[37] Such a decision immediately caused deep resentments; the most problematic issue concerned placing a radically modern building in the midst of historical setting, yet the polemic was hardly a matter of professional judgments only.[38] After 1929, the architectural language of modernism had indeed become a 'new style' for the new Yugoslav regime, a perfect means of propagating the new political course and its ardent anti-historical sentiments.[39] At the same time, in the context of the recently conquered Dalmatia, the same style might well have served to strengthen its modern Yugoslav character and what was believed to be the superiority of Slavs over Italians and Austrians, the former rulers of the region.

The same identity-construction process was simultaneously taking place in North Eastern part of the country, where the historical heritage of Austro-Hungarian culture was being obliterated from the newly-established Danube Province. The province itself was to become a symbol of the new, prosperous and modern country. Given the fact that this region—which mainly covers northern parts of Serbia—was particularly exposed to Yugoslavisation (due to many Germans and Hungarians who had lived there for centuries),[40] it is clear why its architectural representation was not only a matter of professional judgement. The prize-winning design of 1930 by Dragiša Brašovan had a robust appearance, with rough brick façades simultaneously connoting the local vernacular tectonics as a contrast to the historicist urban setting of Novi Sad, the capital of the region where it was later erected as the 'biggest building in the Balkans'.[41] In the Vrbas Province too, a similar process of substituting the former Austro-Hungarian to Yugoslav identity took place at the same time, when a huge provincial seat was built in Banja Luka (today in Bosnia and Herzegovina). Its massively decorative, motley architecture had many different folkloric ornaments interpreted as familiar to the province's multiethnic population, to both Serbs and Croats, as well as the Orthodox, Catholics and Muslims.[42] In this way, the architectural imagery of the region was constructed as simultaneously 'domestic' and transethnic, with *fakeloric*[43] elements used as the ideological loading of the official doctrine of the 'national oneness'.

Each of the newly established regions had its own distinctive architectural images, yet all referred one to another, clearly suggesting that it was their unity, and not diversity, which formed the basis of their meaning. Seen as integral parts of the Yugoslav whole, these different regional identities simultaneously testified to the naturalization of the nation and its regional diversification. In the economy of identity, the architecture was a very critical and powerful tool.

CONCLUSION

The problem of the Yugoslav political transition of the 1930s is perhaps best seen in the architectural representations of the state's new regions. This brief but wide ranging architectural history is manifested in a dizzying array of instances: from a series of typified projects for local post offices or schools which emulated newly forged regional styles, the strikingly emphatic idioms of administrative seats of these new provinces, to royal summerhouses and hunting lodges, scattered throughout the country. While connoting the naturalness of each regional identity, the architectural imaginations of Yugoslav regions intentionally relied on a set of images imposed by the highly centralised state authorities, which actually reinterpreted and reinvented certain historical traditions to suit ideological agenda of the 'unity in diversities' paradigm.

Despite differences in the 'tectonic' and 'scenographic',[44] as well as the constantly changing attitudes towards local geographic and cultural conditions, the architectural construction of Yugoslav regionalism had a common denominator: each region was imagined to represent differential quality, being clearly opposed to another. The significance and meaning of each unequivocally depended on another and, importantly, on the sum total of all regional identities. A paradox that lies at the heart of Yugoslav architectural regionalism is that all regional identities—imposed from the centre and at the same time represented as autochthonous—were in fact highly manufactured from the already canonized regional styles of historical provinces. While pleading regional authenticity, the architectural constructions of Yugoslav regions were actually detached from local contexts, inasmuch as they spoke in favour of political ideology rather than about architectural autonomy.

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Endnotes

1. On the regionalization of the Kingdom of Yugoslavia, the Royal Dictatorship and its political implications, see: John R. Lampe, *Yugoslavia as History: Twice there was a Country* (Cambridge: Cambridge University Press, 2000), 163-8; Holm Sundhaussen, *Geschichte Serbiens 19.-21. Juhrhunderts* (Wien: Böhlau, 2007), 290 ff.; Stevan K. Pavlowitch, Serbia: the History Behind the Name, London: Hurst, 2002), 111-38.

2. The new administrative units were: the Danube (*banovina* or Province) with the seat in Novi Sad, the Sava (Zagreb), the Drava (Ljubljana), the Vrbas (Banja Luka), the Drina (Sarajevo), the Zeta (Cetinje), the Morava (Niš), the Vardar (Skopje), and the Littoral (*Primorska*) (Split). The capital city of Belgrade, however, acquired a special administrative status.

3. See: J. R. Lampe, *Yugoslavia as History*; Dejan Djokić (ed.), *Yugoslavism: Histories of a Failed Idea, 1918-1992* (London, Hurst: 2003); Jovo Bakić, *Ideologije jugoslovenstva izmedju srpskog i hrvatskog nacionalizma: 1918-1941* (Zrenjanin, Gradska narodna biblioteka: 2004).

4. The internal homogenization of an ethnic group usually comprises its functional and qualitative diversification, too. See: Philippe Poutignat and Jocelyne Streiff-Férnat, *Théories de l'ethnicité* (Paris: PUF, 1995).

5. Jovan Cvijić, *Balkansko poluostrvo i južnoslovenske zemlje*. vol. 2 (Belgrade: Geca Kon, 1931), 1.

6. J. Cvijić, *Balkansko poluostrvo i južnoslovenske zemlje* , 4.

7. Aleksandar Deroko, "Estetika kuće u polju", *Umetnički pregled* 1: 5 (1938), 143.

8. See: Snežana Toševa, "Organizacija i rad Arhitektonskog odelenja Ministarstva građevina u periodu između dva svetska rata", *Nasleđe* 2 (1999), 171-81.

9. See: Aleksandar Ignjatović, *Jugoslovenstvo u arhitekturi 1904-1941* (Belgrade: Gradjevinska knjiga, 2007), 374-7.

10. See: Elisabeth Boa and Rachel Palfreyman, *Heimat—A German Dream: Regional Loyalties and National Identity in German Culture, 1890-1990* (Oxford: Oxford University Press, 2004).

11. See: Winfried Erdinger, "A Hierarchy of Styles: National Socialist Architecture Between Neoclassicism and Regionalism", in *Art and Power: Europe Under the Dictators 1930-45* (London: Thames and Hudson, Hayward Gallery, 1996), 322-5; Barbara Miller-Lane, *National Romanticism and Modern Architecture in Germany and the Scandinavian Countries* (New York: Cambridge University Press, 2000); Heidi Fuchs, *Kraft durch Freude: Modernity, Leisure, and Social Politics in Nazi Germany* (Amherst, MA: Amherst College, 2007); Winfried Erdinger, *Bauen im Nationalsozializmus - Bayern 1933-1945* (Munich: Prestel Verlag, 1993); Eric Sorm, *The Culture of Regionalism: Art, Architecture and International Exhibitions in France, Germany and Spain, 1890-1939* (Manchester: Manchester University Press: 2011).

12. The architects in charge were Jezdimir Denić and Dragutin Maslać from Belgrade, see: The Archives of Yugoslavia, the Ministry of Construction, no. 62, the Collection of Plans, 349.

13. A similar practice took place in the contemporaneous Germany. See: W. Nerdinger, *Bauen im Nationalsozializmus — Bayern 1933-1945*, 325; William J. R. Curtis, "Totalitarian Critiques of the Modern Movement", in *Modern Architecture Since 1900* (London: Phaidon Press, 1996), 357.

14. See: Aleksandar Kadijević, *Jedan vek traženja nacionalnog stila u srpskoj arhitekturi (sredina XIX veka - sredina XX veka)* (Belgrade: Gradjevinska knjiga, 1997), 183.

15. "U Ministarstvu građevina osniva se Odeljak za uređenje i izgrađivanje sela", *Politika*, October, 26. 1940.

16. Keith Eggener, "Placing Resistance: A Critique of Critical Regionalism", *Journal of Architectural Education* 55:4 (2002), 228-37 (228).

17. See: Alexander Tzonis and Liane Lefaivre, "The Grid and the Pathway," *Architecture in Greece* 15 (1981): 164–78; Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance," in Hal Foster, ed., *The Anti-Aesthetic: Essays on Post-Modern Culture* (Seattle: Bay Press, 1983), 21; "Prospects for a Critical Regionalism," *Perspecta* 20 (1983) , 148; *Modern Architecture: A Critical History* (London: Thames and Hudson, 1985), p. 327.

18. In his account on "Constructive Regionalism" Anthony Alofsin has put it: '[A] true constructive regionalism would respond to local colours, materials, and customs; it would embrace tradition and transform tradition [...] it would foster craft and push the limits of technology; it would speak to the individual search for

the universal.' Cited from: A. Alofsin, "Constructive Regionalism", in Vincent Canizaro, ed., *Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition* (New York: Princeton Architectural Press, 2007), 369-73 (372).

19. See: Wim Denslagen, "Architecture, Critical and Uncritical", *Romantic Modernism: Nostalgia in the World of Conservation* (Amsterdam: Amsterdam University Press, 2009), 179-81.

20. Sabrina P. Ramet, *The Three Yugoslavias: State-Building and Legitimation, 1918-2005* (Bloomington, IN: Indiana University Press, 2006), 81.

21. It is beyond reasonable doubt to maintain a belief that 'one of the mainsprings of regionalist culture is an anti-centrist sentiment': K. Frampton, "Prospects for a Critical Regionalism", 152; or an 'anti-centrist consensus': K. Frampton, *Modern Architecture*. And neither is likely to regard architectural regionalism as an 'aspiration for some kind of cultural, economic and political independence': K. Frampton, "Prospects for a Critical Regionalism", 152.

22. Five administrative seats of *banovine* were built out of nine of them. See: A. Ignjatović, *Jugoslovenstvo u arhitekturi 1904-1941*, 388-90.

23. The Archives of Yugoslavia, 74-295-435.

24. Andrej Hrausky, et al., *Plečnikova Slovenija* (Ljubljana: Galerija DESSA, 1997), 48-53; Damjan Prelovšek, "The Royal Hunting Lodge Kamniška Bistrica", *Piranesi* 1: 2 (1992), 12-18.

25. The Archives of Yugoslavia, 74-387-576.

26. See: the Archives of Yugoslavia, 74-392. Cf. Mile Radenković, "Kraljevsko, a sada makedonsko", *Politika*, April 30, 2008.

27. Victor Roudometof, ed., *The Macedonian Question: culture, historiography, politics* (New York: Columbia University Press, 2000).

28. On the ideology and politics of the architectural culture in interwar Macedonia see: Kokan Grčev, *Arhitektonskite stilovi vo makedonskata arhitektura od krajot na 19 vek i periodot megu dvete svetski vojni* (Skopje: Institut za folklor "Marko Cepenkov", 2003).

29. "Novo Skoplje", *Politika*, December 17, 1930.

30. A. Ignjatović, *Jugoslovenstvo u arhitekturi 1904-1941*, 186-9, 393-7.

31. The architect in charge was Dragomir Tadić from Belgrade, see: The Archives of Yugoslavia, 74-285-420; 74-286; 74-388-579; 74-389-579; 74-390-580.

32. A. Ignjatović, *Jugoslovenstvo u arhitekturi 1904-1941*, 380-6.

33. Aleksandar Deroko, *Folklorna arhitektura u Jugoslaviji* (Belgrade: Naučna knjiga, 1974), 77.

34. A. Deroko, *Folklorna arhitektura u Jugoslaviji* ,78.

35. See: Ivan Marković, "O arhitekturi zgrade Kraljevske banske uprave Zetske banovine", *Novopazarski zbornik* 28, (2004), 115-30.

36. The Archives of Yugoslavia, 74-392-583.

37. Žarko Domljan, "Arhitektura XX stoljeća u Hrvatskoj", in Zoran Manević *et al.*, eds., *Arhitektura XX vijeka* (Belgrade: Prosveta; Zagreb: Spektar; Mostar: Prva književna komuna, 1986), 41.

38. On the competition for the Littoral *banovina* see: Davorin Tušek, *Arhitektonski natječaji u Splitu 1918-1941* (Split: Društvo arhitekata, 1994), 66-70.

39. A. Ignjatović, *Jugoslovenstvo u arhitekturi 1904-1941*, 386-8.

40. See: Lj. Dimić, *Kulturna politika Kraljevine Jugoslavije 1918-1941*, 40-51.

41. Donka Stančić and Miško Lazović, *Banovina* (Novi Sad: Prometej, 1999), 57-8.

42. On the architecture of the Vrbas *banovina* in Banja Luka, see: Siniša Vidaković, *Arhitektura javnih objekata u Banjaluci 1918-1941* (Banjaluka: Akademija umjetnosti Republike Srpske, 2006).

43. The term 'fakeloric' appeared in the 1970s in the literature to suggest a 'fake folkloric' appropriation of vernacular traditions in modern culture; it the context of interwar Yugoslavia the term was first used in Andrew B. Wachtel, *Making a Nation, Breaking a Nation: Literature and Cultural Politics in Yugoslavia* (Stanford, CA: Stanford University Press, 1999), 112.

44. As related to the firm outlines of critical regionalism established by Kenneth Frampton. By juxtaposing the tectonic and tactile to the scenographic, Frampton has reinforced the supposed architectural autonomy putting the tectonic (that is the presentation of a structural poetic) and the tactile aside from politics and ideology: 'Despite the critical importance of topography and light, the primary principle of architectural autonomy resides in the *tectonic* rather than the *scenographic*.' K. Frampton, "Towards a Critical Regionalism", 16-30 (27).

AFRICANICITY AND COLONIAL ARCHITECTURE:
THE RESPONSE OF THE COLONIAL PLANNING OFFICE (1944-1974)

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Portugal's colonial policies during the *Estado Novo* regime from the Second World War onwards began to incentivise emigration to the Portuguese African territories. The resulting concentration of new arrivals from Portugal made the housing shortages in the colonies more visible. The responses by the regime up to 1974, the year of the revolution that put an end to the dictatorship, were to evolve in accordance with international policies (which tended towards advocating the formation of new countries) and the architectural culture of the period (which was to become increasingly permeable to local cultures).

Up until World War II, the homes occupied by European settlers in Sub-Saharan Africa, where the Portuguese colonies were located, were similar in form and conditions of salubrity to local traditional housing. In an initial phase the regime began to address this situation for reasons of both morale and public hygiene. The increase in the number of civil servants transferred in the 1940s to Angola and Mozambique in particular accelerated the construction of State-developed housing, introducing questions of the rationalisation of resources. The strategy applied included distinguishing between the building of housing for civil servants working in the diverse sectors (health, the judicial system, administration and the military) and the housing designed for working settlers and the indigenous populations, who were later referred to as 'economically weak' (or similar terminology).

Generally speaking, the strategy committed to the single-family home set in new residential neighbourhoods that were peripheral to the urban centres, reflecting influence by the Garden City theories and promoting low-density built complexes.

Backing the policies outlined in the metropole, the colonial governments likewise began to implement measures aimed at resolving the housing problems. It was recognised that 'economical housing – which in Europe and America has given rise to vast and complex legislation […] – possesses special characteristics that would be advantageous to define in greater detail'[1]. Even if the definition of standard designs was accepted (Fig. 1), diversity was still favoured as a response to regional specificities.

In an initial phase that continued the territorial occupation begun during the First Republic (1910-1926), the stylistic options included establishing a colonial house inspired by traditional Portuguese styles. One of the earliest reports of houses 'decorated in the Portuguese style'[2] dates from 1926 and refers to the new city of Huambo (Angola, later called Nova Lisboa and now renamed Huambo). In 1940, at the Exhibition of the Portuguese World in Lisbon, a prototype for a colonial house (designed by Vasco Regaleira) was shown in the colonial section. At the same event, which celebrated Portugal's isolation at a time of world war, two nuclei were exhibited: one of Portuguese villages and another showing African indigenous villages. In this context, the imaginary of the popular architecture of the Portuguese village was crossed with the proposal for the future Portuguese settlers in the African colonies. The Regaleira house was considered appropriate for both the African continent and southern Portugal. In the re-creation of the indigenous settlements, a certain figurative primitivism was favoured, including a reproduction of the *cubata* hut, that was based on the colonial experience of many Portuguese settlers from the late nineteenth century onwards. Earlier, at the Angola Fair in 1938, the Indigenous Art Pavilion had featured a precise reproduction of a *typical* African construction, thus establishing a *type* that was to become well known in the metropole and colonial societies.

Figure 1. [left] Projeto Casas para Funcionários África, 1944 (source: P35vol100-proc98.2.1 Arq. Histórico Ultramarino, Photo: Hugo Coelho)

Figure 2. [right] Mário de Oliveira. "O "Habitat" nas zonas suburbanas de Quelimane: um caso positivo de formação de sociedades multirraciais", in *Geographica*, ano 3, n. 3, Julho de 1965, Lisboa: Sociedade de Geografia de Lisboa, 70-71.

It was the responsibility of the Gabinete de Urbanização Colonial (GUC, Colonial Planning Office), which began operating in January 1945, to define housing typologies in accordance with the profiles of the population groups they were meant for. The early experiences of this team, which reported to the Colonial Ministry, were compiled by one of its leading architects, João

António Aguiar, in 1952 in his publication, *L'Habitation dans les pays tropicaux.* A year before the office's name had been changed to Gabinete de Urbanização do Ultramar (GUU, Overseas Planning Office) and the ministry was also renamed Overseas Ministry.

Aguiar's book compiles documentation on the housing produced in the overseas provinces until then.[3] This knowledge is used to define more refined models, be it in terms of the programme and materials, the formal aspect or climate-appropriate solutions. Three conferences were held at the 21st Congress of the *Fédération Internationale de l'Habitation et de l'Urbanisme* in Lisbon. The *Organisation des communautés* conference dealt with the design of 'indigenous residential units' for 5000 to 15,000 inhabitants that served as 'satellite cities' to the main consolidated urban centres. The second conference, *Disposition des logements,* looked at the dwelling's internal organisation. Parallel to this, the problem of housing for Africans and European was considered from the perspective of building materials and methods, orientation, costs, aesthetics, etc. It was here that distinctions were made between residential programmes for working settlers, civil servants (single and multiple-family housing), weekend housing and housing for the indigenous populations (detached houses and collective housing blocks). Each programme was demonstrated on the basis of standard designs. The final part, *Considérations d'hygiène dans les logements*, looked at climactic factors: protection from the sun through shade-providing elements in the façades, natural and artificial cooling, etc.

The Portuguese began to consolidate their own specific housing programmes in the fifties, achieving homogenous production in terms of functional structure and building materials even where diverse stylistic inspirations were followed. There was a general preference for an *African Portuguesism*. However, in most new neighbourhoods, the designs continued to result from a reworking of the traditional colonial house, making use of the exterior veranda and the steep and overhanging roof, where ventilation and cooling elements, applied to both the roofs and the spans, became new common features.

After publication of the book, a competition was launched in 1953 for the housing of rural families transferred from Portuguese rural environments to the overseas territories by the Direcção Geral de Fomento do Ultramar (Directorate General for Overseas Promotion). The aim was to find a functional and aesthetic solution for the house of the Portuguese settler. The development of two typologies was required, 'whereby we would recommend a decidedly rustic and traditional composition ideally adjusted to the settler's character and personality'[4].

Most of the participating architects had links to the GUU and were therefore familiar with tropical territories and the image that was to be defined in projects developed by the State. The proposals were meant for immediate use by the technical brigades in Limpopo (Mozambique) and Cunene (Angola). The conclusions assessed the designs on the basis of the area/comfort ratio and the use of traditional tropical architectural elements, such as verandas. While the capacity to transfer stylistic identification with the metropole to the African terrain was praised, the peculiarities of the location had to be taken into account[5]: 'Portuguese house? Yes, but characterised by having its material function totally adjusted to new conditions… Portuguese house? Always! But overseas Portuguese. Thus we choose welcoming and cool, safe, proper, where every nail's in the right place and every soul finds repose'[6].

In his submission to the Overseas Minister at the time[7], one of the participants, the architect Mário de Oliveira, explained that in his proposal 'the architectural characteristics are not distant from those in which the settler developed his character and personality'[8]. To him this was the 'adjustment of the settler to the environment' by means of an architecture with which he was familiar.

The architects were therefore involved in reproducing in Africa metropolitan housing models as a way of maintaining a strong emotional link between Portugal and its overseas territories. Nevertheless, it was the principles of adaptability to the climate that influenced the main design decisions, while respecting requirements of economy and good sense and taking the colonial reality into account (resources, labour, etc.).

Those same principles dominated the work carried out locally by the Juntas Provinciais de Povoamento (Provincial Settlement Boards) set up in 1961 by Adriano Moreira. The philosophy followed by the board for Angola, for instance, was based on the idea that it was 'important to give settler families a house that was not only a shelter but also a powerful element in their fixation'[9].

The settlers were not exclusively European. The immigrant communities also included populations from other regions under Portuguese administration, such as the Cape Verdean emigrants who were encouraged to spread across the African territories. Designs (most of them already implemented) were divulged that could be reproduced, as in a good practice manual. These designs shared the same pragmatic approach based on economicist ideals (in form and content). Policies making the beneficiaries of the housing responsible for conservation and improvement were implemented. Quality proposals with a strong modernist expression were also published.[10] However, designs that revealed a certain 'non-Corbusian' modernity dominated and gave greater specificity to the projects sponsored by the Portuguese State, the result of the singularity of the experience of the architects in public service.

During this process of *tropicalisation* one witnessed a significant shift in paradigm in stylistic terms. A very specific typology – housing for members of the military – took on particular importance in this decade because of the outbreak of the colonial wars.[11] This was a parallel programme to which the architects of the Direcção de Serviços de Urbanismo e Habitação da Direcção Geral de Obras Públicas e Comunicações (DSUH/DGOPC, the housing and urban planning office of the public works and communications department), which succeeded the GUU after the latter was deactivated, also dedicated themselves. They responded to the new organicist demands that revised the modernist discourses, preferring L-plan organisation and the use of local materials.[12] The influence of the publication of *Arquitectura Popular em Portugal* in 1961, which presented a comprehensive survey of regional constructions in Portugal, was now making itself felt.

Together with the promotion of housing for European settlers, there also emerged the house designed specifically for indigenous communities; here the Africanisation process became more patent in the architectural expression. By the end of the fifties this was one of the central programmes for architects working for the official *Estado Novo* organs. The approaches evolved from figurative, and literal, interpretations to the introduction of industrial materials in the designs. The general arrangement of the indigenous house was crossed with the vernacular consciousness of modern thought, which encouraged the architects to gradually take note of its existence. Interest in the topic derived from the descriptions of the traditional African house and began to emerge in areas of study that were marginal to architecture, such as anthropology, ethnology and geography.

Portuguese Guinea is generally considered a forerunner in this development, not only thanks to the pioneering studies of Orlando Ribeiro (1947), but also for the publications sponsored by the Centro de Estudos da Guiné Portuguesa. Particularly noteworthy is *A Habitação Indígena na Guiné Portuguesa* (Indigenous Housing in Portuguese Guinea) by A. Teixeira da Mota and Mário Ventim Neves (Bissau, 1948), which presented a survey of the main types of native housing. It also included a study on hygiene by the physician Fernando Simões da Cruz Ferreira, which confirmed that traditional housing did not provide protection against endemic diseases.

Parallel to these studies, the indigenous housing scheme of Santa Luzia was erected on the outskirts of the Guinean capital as the result of a State-sponsored initiative. The development's grid-like structure already reflected the desire to regularise the local settlements. The house represented a simplification of the traditional residence, based on a rectangle with an outside veranda.

In 1958 the realisation of a new urbanisation plan for Bissau brought Mário de Oliveira to the Guinean capital. During his stay there he surveyed the 'main native urban concentrations' (Oliveira, 1962) and studied and characterised the traditional housing of diverse Guinean ethnic groups living on the city's periphery. His studies were reflected in the Urbanisation Plan for the Popular Neighbourhoods of Bissau (1959), which proposed the regularisation of the design of three residential schemes based on existing structures, complete with social, commercial, educational and sports facilities. The layout was an approximation to the Garden City ideals, and a distancing from the orthogonal composition of Santa Luzia, opting for a more organic design. Three new housing types were offered (detached, semi-detached and terraced houses) based on a quadrangular module with one side roughly eight metres long in plan and having four rooms and an axial corridor. They were surrounded by a veranda and had a four-sloped roof. The kitchen was outside. Once again, the typology was a simplification of the functional plan of traditional houses. The houses were to be built by the future residents using local techniques and materials. This was the first time a typology was developed that interpreted the elementarity of the ancestral model.

When Oliveira published his *Problemas Essenciais do Urbanismo do Ultramar* (Fundamental Problems of Urbanism in the Overseas Territories), based on his Bissau experiences, the Statute of Indigenous Populations[13] had already been abolished. This was reflected design-wise in the application of ideas of multiracialism in the colonial cities. The objective was taken to the extreme during the elaboration of the Master Urbanism Plan for the Mozambican town of Quelimane, also drawn up by Oliveira. It recognised the existence of a housing problem amongst the 'economically most fragile living in the peripheral urban zones'[14]. The argument was made that 'each habitat should slowly evolve as the cultural-economic process develops'[15], thus ruling out the possibility of rapid transformation of modes of dwelling. This approach made it possible to value certain compositions of traditional settlements, leaving it to the State to "produce hygienic housing – of the *palhota* (thatched hut) type – allowing for the provision of comfort in the space of each habitat, and stimulating and incentivating the natives to understand the problems of hygiene and culture"[16] (Fig. 2). Without losing its primitive elementarity, the house took on the role of civilising environment and there was commitment to the idea that it served as a vehicle for initiation of the African populations in the western lifestyle.

Housing for populations living outside the urban agglomerations was another side of the problem. Here one sought to act pragmatically, involving the future beneficiaries in the building of their houses and encouraging the use of local materials (economical, available and easy to use). The circular plan was reintroduced, "inspired by the cylindrical form of the gentilic dwellings in many villages […] and taking into account the traditional housing aspect"[17].

While changes were being introduced in African architecture itself, owing to the adoption of *more progressivist practices*

introduced by colonisation, other studies also proliferated, such as that conducted by the ethnographer José Redinha in *A Habitação Tradicional em Angola – aspectos da sua evolução*[18] (1973). The research focused on the urban milieu, on Luanda's *musseque*, which represented the 'ultimate ethnical cycle of the native house'[19]. The ideal dwelling in the 'current phase of the housing problem' should be limited to the 'ground-level building with its yard and annexes'; solutions built over height were not recommendable given that 'multi-storey building (…) [was] contrary to the native lifestyle'[20].

The building of elementary single-storey dwellings to house the local populations was adopted as a preferred programme by the *Estado Novo*. In Portuguese Guinea, the implementation of a standard house with a rectangular plan developed by the military that competed with models designed by the architects coincided with the outbreak of the colonial war.[21]

The direct inspiration from the indigenous house was one of the solutions developed by the DSUH/DGOPC architects. In 1964 three low-cost housing types were developed for São Tomé and Príncipe from traditional house models.[22] They favoured the use of wood and pre-fabricated elements (spans, doors and windows). They were slightly elevated on stilts and accessed via a veranda. The structure was studied so as to make it possible to add on new programmatic modules. Detached and semi-detached units were possible.

The decade, however, favoured the introduction of new technologies, and so one witnessed the updating of the indigenous house through alterations to the building systems. In Angola, Fernão Lopes Simões de Carvalho and José Augusto Pinto da Cunha carried out a similar experiment for the new Ilha de Luanda neighbourhood. In the new patio houses for Luanda fishermen's families, the local flavour is an abstraction to which both traditional and contemporary contributed. The neighbourhood followed an orthogonal plan respecting the prevailing winds, although Simões de Carvalho later developed more organic schemes closer to indigenous layouts, making it implicit that, in this field too, it was important to learn from tradition.

FINAL CONSIDERATIONS

With the establishment of the *Estado Novo*, the new housing needs in Portuguese Africa required a rethinking of the housing strategies. The *indigenous* populations were to be given housing developed by the State. Initially, the State followed the example of the large corporations operating in the colonies that built housing for their workers. The experimentations resulting from the diverse readings of traditional African houses (in Cape Verde, Guinea, São Tomé, Angola and Mozambique) progressively led to an architecture of compromise that was *Africanised*. Beyond the necessary realism, there were also ideological motives that the *Estado Novo* designs could not ignore, given that the house served as a civilising vehicle.

For the "civilised" populations, the elevations of the houses designed by architects working for the GUU maintained a certain stylistic unity that indicated the transfer of a Metropolitan imaginary to the colonies. Traditional components, such as porches and tiled roofs, were *tropicalised*. The designs met the minimum functional requirements for being built in these regions: protection of façades against the sun and cross ventilation. Housing complexes were laid out in accordance with the prevailing winds, a common strategy in urban planning for the region.

Parallel to this, in the house for the working settler, which was designed for rural population groups transferred from the metropole to the overseas colonies, the traditionalist repertoire was highlighted despite the search for a solution that could accentuate the "settler character". Even at this tardy stage, the aim was to establish an overseas model analogous to the *Portuguese House (Casa Portuguesa)*.

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Endnotes

1. Ruy de Sá Carneiro, *Projecto de diploma legislativo elaborado pelo governo de Moçambique com o objectivo de promover a construção de casas económicas nos centros urbanos da referida colónia, à Direcção Geral da Fazenda das Colónias* (17 de Junho de 1941), unpaged.

2. Carlos Roma Machado, "Início e Fundação da cidade de Huambo", *Boletim da Agência Geral das Colónias* (Ano 2, Janeiro 1926, nº7), 56.

3. Housing developed by the Portuguese State and complexes built by large Portuguese companies with bases in Africa to house their workforce.

4. *Concurso para trabalhadores colonos*, Comissão júri, eng. Mário José Ferreira Mendes; arq. Fernando Assis, eng. Ilídio Barbosa (Limpopo); eng. Viriato da Fonseca (Cunene) [1953], 1.

5. 'The participants interpreted, successfully, traditional composition, not as the transplantation of a Trás-os-Montes house or an Algarvean house (which would be absurd and was never requested) and they merely suggested a type of local house that would resolve, with local materials and processes, new problems and requirements that were also local (…) now closer to their future condition of resident settled in a rural settlement on the banks of the Cunene or Limpopo' (*Idem*: 8).

6. *Idem*: 9.

7. The Overseas Ministry was then held by Manuel Maria Sarmento Rodrigues.

8. Oliveira, Mário de. *Carta ao Ministro do Ultramar*, Lisboa: 27/10/1953, 2.

9. Junta Provincial de Povoamento de Angola. *A habitação em núcleos de povoamento* (Luanda: Edição da Junta Provincial de Povoamento de Angola 1964), unpaged.

10. Six houses by Fernão Lopes Simões de Carvalho for Quilunda (Angola, 1964).

11. Angola (1961), Guinea (1963) and Mozambique (1964).

12. Residential complexes for lieutenants, sergeants and officers and housing blocks for privates (European and indigenous) at the *Estação Rádio-Naval* that Luiz Possolo designed for Maputo (then Lourenço Marques) and Luanda (1959-1960). António Saragga Seabra designed a similar programme for Mindelo, Cape Verde in 1961-1963. These projects were carried out within the DSUH/DGOPC.

13. The Statue of Indigenous Populations (*Estatuto do Indigenato* in Portuguese) was a legal code that formalised a racial hierarchisation that served to structure the political and moral order in the colonies.

14. Mário de Oliveira, "O «Habitat» nas zonas suburbanas de Quelimane: um caso positivo de formação de sociedades multirraciais", *Geographica* (ano 3, n. 3, Julho de 1965, Lisboa: Sociedade de Geografia de Lisboa) 65.

15. *Idem*, 67.

16. *Idem*, 68.

17. Junta Provincial de Povoamento de Angola. *Reordenamento rural e desenvolvimento comunitário* (Luanda: Edição da Junta Provincial de Povoamento de Angola, [1966]) unpaged.

18. Translation: The Traditional Dwelling in Angola – Aspects of its Evolution.

19. Redinha, José. *A Habitação Tradicional em Angola: aspectos da sua evolução* (2ª edição, Luanda: Fundo do Turismo e Publicidade de Angola, 1973) 36.

20. *Idem,* 42.

21. In 1970, a work group led by the architect António Moreira Velosa produced a model that updated the indigenous lifestyle, bringing it in line with international standards. Based on a rectangle measuring 12.80 x 12.20 m, the house was more permeable and presented areas of transition between the interior and the exterior that sought to rework African lifestyles.

22. Alfredo Silva e Castro, a young architect working for the DSUH/DGOPC, designed the proposal developed in 1964. A small number of houses was actually built but has since been demolished.

REGIONALISM AND NEOREALISM IN MODERN ITALIAN ARCHITECTURE, 1925-1955

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In the years following the Second World War, modern Italian architects embraced a heightened sensitivity to local conditions as an essential component of their approach to design. Although this turn to a newly vital regionalism developed within the architectural discourse, it coincided with the emergence of a new language of cultural expression that quickly came to be known as Neorealism. Exemplified by films such as Rossellini's *Roma, città aperta* and De Sica's *I ladri di biciclette* as well as novels such as *Il sentiero dei nidi di ragno* by Italo Calvino, Neorealism was defined by the rejection of grand historical narratives, elaborate settings, and sophisticated editing techniques, in favour of the direct and continuous narration of stories taken from the everyday life of ordinary Italians.[1] Through these new subjects and new techniques, Rossellini, Calvino, and their peers aimed to engage the difficult reality of post-war Italy as both an escape from the myths of Fascism and a contribution to the construction of a new society.

Like most such terms, Neorealism was the invention of critics, who already by 1947 were using it to describe the films and novels made in the immediate aftermath of the collapse of the Fascist regime and the end of the war. The term quickly gained popularity and was soon adopted to describe the broader culture of post-war, post-fascist Italy. By the mid-1950s, Neorealism was even being used to describe the architecture produced during the decade immediately following the war. Writing in 1956, for instance, the young Aldo Rossi and Guido Canella described the post-war work of the architect Mario Ridolfi as "immersed in that atmosphere of modern Rome that Neo-realist cinema and literature had so well penetrated,"[2] and in 1958 the architect Paolo Portoghesi published a critical survey of post-war Italian architecture entitled "From Neorealism to Neoliberty."[3]

The popularity of Neorealism as a descriptor for post-war Italian culture lay in the way that it neatly demarcated that culture from Fascist culture across a broad spectrum of issues, from the societal role embraced by filmmakers, authors, and architects, to the formal and structural techniques those figures adopted in order to realize that role. Within the architectural discourse, Neorealism is particularly significant for the way in which it was taken up by younger architects such as Rossi and Portoghesi to cordon off the architecture of the decade immediately following the war as a distinct practice no longer valid in the era of the Economic Miracle, that period of remarkable prosperity that began in the 1950s. For its proponents and those who followed them, Neorealism served effectively to quarantine the work of the post-war years from both the Fascist culture that came before it and the consumer culture that came after it.

Contrary to this view, this paper will show that Neorealist architecture is properly understood not so much as a distinctively new mode of working but rather as a reorientation of already existing lines of research and debate. Between 1930 and 1960, Italian modernists such as Franco Albini and Mario Ridolfi devised a language of architecture that focused on defining a precise balance between the culture and traditions distinct to Italy and the possibilities and challenges of modernity. Although they tied this language explicitly to Fascism during the 1930s, after the war these architects proposed an alternative language based on an entirely different understanding of the conditions of Italian modernity and the appropriate tension between the weight of the past and the pressures of the present. Throughout the entire period, however, Italian modernists maintained a resolute commitment to a modern practice. What changed after war was not their commitment to modernity but rather their vision of the society in which they worked, a change that demanded they re-evaluate both the cultural foundations and intended audience of their practices. In this sense, Neorealism describes the embrace of a new subject, the ordinary Italian, and a new tradition, the vernacular, as the basis of modern practice, and not, as it is widely held, the complete rejection of modernity itself.

As it has been defined by critics and historians, Neorealist architecture is exemplified by the Tiburtino quarter in Rome, a housing estate designed between 1949 and 1954 by a team of architects lead by Mario Ridolfi and Ludovico Quaroni (Fig. 1). Containing about 750 residences in a combination of apartment buildings and row houses, the quarter sits on an 8.5 ha site approximately 7 km east of the centre of Rome.[4] The Neorealism of Tiburtino is always defined in purely formal terms: The buildings of the quarter are characterized by highly variegated rooflines, distinctive facades, the irregular placement of each building with respect to its neighbours, and exterior details that divide the larger blocks into smaller, visually distinct units. Although the buildings lack any overt historical features, their detailing and overall composition combine to evoke the feeling of Rome's older neighbourhoods. In effect, the quarter aims to efface its recent construction and extend the aura of history from the *centro storico* to the periphery

of the growing capital in order to create an ambience already familiar to the residents.

The Tiburtino quarter illustrates the regionalism central to Neorealism, which celebrated local dialects and traditions over and above any imagined national identity in all its incarnations. Italian architects' interest after the war in identifying the distinctive features of the locale in which they were working and incorporating those features into their current project was driven by several factors, including their desire to distance themselves from the nationalizing myths of the Fascist regime and ambition to engage a broader audience through their work. This latter ambition figured especially prominently

Figure 1. View of the Tiburtino quarter, ca. 1956. (source: *Casabella-continuità* n. 215, April-May 1957)

in the imperatives articulated by INA-Casa, the new parastatal agency that sponsored the construction of the Tiburtino quarter as part of a nationwide campaign to construct working-class housing initiated in 1949.

When the war in Europe ended in May 1945, much of Italy lay in ruins. While actual reconstruction began as soon as fighting ended, it took several years before the Italian government instituted national policies to direct and support that reconstruction. Although this delay was in large part an unavoidable result of the process of rebuilding the Italian political system, it meant that Italian architects were left without any means of contributing on a large scale to the reconstruction. That changed in early 1949, when the first government of the new Italian republic approved the law entitled *Provvedimenti per incrementare l'occupazione operaia, agevolando la costruzione di case per lavoratori*. Popularly known as the *Piano Fanfani* and the *Piano INA-Casa*, this law brought into being a new agency, INA-Casa, to organize and direct a seven-year plan to boost employment through the construction of working class-housing.[5] The plan was such a success that in 1956 it was extended for an additional seven years, ultimately sponsoring the construction of approximately 350,000 residences.

In general, the centre-right government led by Alcide De Gasperi that came to power in the new republic pursued a relatively laissez-faire approach to reconstruction. As a result, the only way that Amintore Fanfani, the Minister of Labour and Social Services, was able to gain support for the passage of his plan was to present it as a means of boosting employment as well as addressing the housing shortage. These dual aims are clearly reflected in the title of the law and also shaped the execution of the plan under the direction of Arnaldo Foschini, the man appointed to direct INA-Casa. A well-established Roman architect who had come of age professionally during the 1930s, Foschini firmly believed that contemporary practices needed to be deeply rooted in Italian architectural traditions, and he recognized in the *Piano Fanfani* a means both to revitalize the architectural profession and to propagate his conservative design philosophy.

Not long after work began on the first projects sponsored by the *Piano Fanfani* in the summer of 1949, Foschini instituted a national competition to establish a roster of architects and engineers eligible to participate in the plan. This was intended primarily to speed up the planning and design process, but it also provided the opportunity for INA-Casa to articulate and disseminate specific architectural standards. In the fall of 1949, the agency published a booklet of guidelines for architects entering the competition. Entitled *Suggerimenti, norme e schemi per la elaborazione e presentazione dei progretti*, the booklet includes the rules of the competition, a selection of schematic plans, and three "exemplary" projects, as well as a brief text describing the aims of the plan and presenting a number of 'recommendations' for architects.[6]

Although the schematic plans and illustrated projects in the booklet are instructive, the text stands out for the directness with which it urges architects to pay close attention to local conditions. Among the recommendations, for instance, is the following:

> The house must be … pleasant and comfortable; it must be made to correspond to our ways of life. These, in their fundamental aspects, are often derived from a tradition that varies from region to region and is almost always the result of circumstances that are still valid. Above all the careful consideration of local problems (ways of life, local traditions, climate, latitude and altitude, local building materials, products, works, construction methods, and utilities) from every point of view is recommended.[7]

Within the post-war context, the booklets' promotion of the 'careful consideration of local problems' was clearly intended as a

critique of pre-war modern architecture. This is made explicit in a subsequent recommendation:

> The house must contribute to the formation of the urban environment—keeping in mind the spiritual and materials needs of man, of real man and not an abstraction; of a man who neither likes nor understands the indefinite and monotonous repetition of the same type of house, among which he cannot even distinguish his own except for the number; who does not like a strict checker-board arrangement but an environment that is both peaceful and vibrant.[8]

'There will be,' continue the authors,

> the conditions of the terrain, the sunlight, the landscape, the vegetation, the pre-existing buildings, and the sense of color to suggest the compositional arrangement that will give the residents of these new urban nuclei the impression that there is in them something spontaneous, genuine, and indissolubly fixed to the place where they rose.[9]

Rarely has a critique of modern architecture been presented with such verve, nor the principles of regionalism extolled in such compelling terms, and as the Tiburtino quarter shows, many Italian architects saw their work for INA-Casa as a means of engaging a broader, working–class audience by addressing their practical necessities and by formulating a more familiar architectural language. At the same time, however, there were other models for architects looking to re-orient their work in the wake of the war, models such as Giuseppe Pagano, who did not see the 'careful consideration of local problems' as antithetical to modern architecture. Trained in Turin, where he began his architectural career, Pagano moved to Milan in the early 1930s to take over the direction of the journal *Casabella* along with Edoardo Persico. As architect and editor, Pagano played a leading role in the debates over Rationalism, the Italian variant of modern architecture, that occurred during the late 1920s and 1930s, advocating forcefully for Rationalism and manoeuvring effectively to gain power within the increasingly institutionalized hierarchy of the architectural profession.

From the mid-1930s, however, Pagano became increasingly critical of his contemporaries, both conservative architects such as Marcello Piacentini, who provided monumental neoclassical structures for the regime, and his fellow modernists such as Giuseppe Terragni, whose *Casa del fascio* in Como he believed was as excessively formalist as anything by Piacentini. Pagano's critique of both Rationalism and neoclassicism is exemplified by the exhibition he organized for the VI Triennale di Milano in 1936, entitled "Functionality of the Rural House."[10] In this exhibition, Pagano and his collaborator Werner Daniel presented a collection of photographs they had taken of rural vernacular buildings, which they believed offered an alternative model for modern Italian architecture, one that emphasized everyday functionality rather than a mythic classical spirit as the essence of Italian architecture.

Just how Italian architects took up Pagano's ideas after the war is illustrated by the Cesate quarter, which, like the Tiburtino quarter, was sponsored by the *Piano Fanfani* and is frequently cited as an example of Neorealist architecture (Fig. 2). Located approximately 15 km northwest of Milan, the Cesate quarter contains 594 residences in two-story row houses and a single four-story apartment block on approximately 20 ha.[11] The quarter was designed between 1951 and 1956 by a team of architects comprising Franco Albini, Gianni Albricci, Ignazio Gardella, and the members of the firm BBPR: Lodovico Belgiojoso, Enrico Peressutti, and Ernesto Rogers. In their first plan for the quarter, prepared in January 1951, the architects proposed a strict orthogonal array of rectangular, two- and four-story housing blocks typical of pre-war Rationalism. Over the course of the next six months, however, Albini and his colleagues engaged in an intensive process of re-imagining the quarter that yielded an entirely different plan. In the

Figure 2. View of the Cesate quarter, ca. 1956. (source: *Casabella-continuità* n. 216, June-July 1957)

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revised plan, the architects replaced the grid of rectangular blocks with a field of irregularly dispersed residential nuclei, which are indicated on their preliminary sketches by lightly traced circles that neatly emblematize the function of the undetermined architectural forms that the architects now proposed as the most basic element in the re-imagined quarter.[12]

The significance of the revised plan lies in its new organizational geometry, which resulted from the architects re-thinking of the function of the quarter. Specifically, in the revised plan the architects responded to the fact that the quarter was set far out from Milan and would be inhabited almost entirely by people new to the area. As a result, it needed to function as a self-sufficient community, not only in providing services such as a child-care and schooling as well as food and entertainment, but also in creating a tangible social network. Because the quarter was intended for a total population of almost 6,000, the architects broke it down into an array of smaller, more easily discernible clusters that would provide a kind of infrastructure to support the formation of neighbourhood bonds. Although the geometry of these nuclei in the final plan is far different from their early iterations as circles, the architects formulated a plan that deployed their standardized designs for the individual houses to create an array of nuclei that effected the closeness of the lightly-traced circles on the early plans.

As they did in the overall plan, the architects also incorporated distinctive regional features into their designs for the row houses in the quarter. The row houses that define the piazza at the centre of each residential nucleus, for instance, have a lively configuration of porches and windows that is far removed from any historic detail even as it echoes the irregularity and informality of vernacular environments. The architects also adopted the tall narrow windows and low arches typical of Lombardic architecture for the other residences, but transformed them through their placement on the façade and arrangement in sequence across adjacent row houses. As in the plan, the architects were careful not to mimic regional motifs, but instead to re-deploy specific features that they believed had continued validity and could be effectively transformed. Located on the far outskirts of Milan, in an area almost completely devoid of activity, Cesate was a quarter constructed *ex novo*, a fundamentally modernist creation. The challenge for the architects was to root that new settlement deeply in its place in order to provide a familiar foundation for its inhabitants to lead their modern lives.

Together, the Tiburtino and Cesate quarters show how modern Italian architects after the war embraced regionalism as a key principle with which to re-orient their practices to accommodate the very different conception of modernity then emerging, a conception that celebrated diverse individuality rather than the mass uniformity prized by the Fascist regime. Neorealism as it is exemplified by these projects points then to the necessity to recognize regionalism and modernism as two distinctly different modes of thinking, each operating along an independent axis of concerns. With the former focused on accommodating existing conditions and the latter concentrated on articulating new possibilities, regionalism and modernism may seem inherently opposed. The Neorealist architecture of post-war Italy shows, however, that under the right conditions they can be mutually reinforcing. Indeed, the development of Neorealism highlights precisely how deeply intertwined regionalism was with modern architecture from its inception in the 1920s.

The Tiburtino and Cesate quarters also reveal the difficulty of ascertaining the ideology of any specific regionalist practice. Despite the rhetoric celebrating modern architecture as progressive international phenomenon, regionalism as an organizing principle is in fact without a fixed ideological intent. Much like modernism itself, regionalism can be deployed in the service of both democratic and totalitarian regimes and as the rationale for both progressive and conservative aesthetic practices. Because of its distinctive ambience and powerful evocation of vernacular Roman architecture, the Tiburtino quarter is often both criticized for misleading its inhabitants and celebrated for offering them a haven from the modern metropolis. As such, it is often taken as emblematic of a broader turn away from modernity within the Italian architectural discourse. But the quarter does not deceive its inhabitants. While its high degree of architecture articulation borders on melodramatic, the Tiburtino quarter manifests its architects' desire to shape a comfortable environment, one that would modulate the harshness of the modern metropolis and allow the inhabitants to maintain their way of life even as they started a new life in the quarter. Likewise, the Cesate quarter, so different in its organization and appearance, embodied the same desire to accommodate the unevenness of Italian modernity, with its deep divide between the country and the city, the farm and the factory, hand-made and machine-made. In the wake of the war, Italian modernists abandoned the oppositional attitudes that had powered Fascism in favour of tactics of engagement. Regionalism provided them one such tactic.

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Endnotes

1. The films are Roberto Rossellini, *Roma, città aperta* of 1945 and Vittorio De Sica, *I ladri di biciclette* of 1947. The novel is Italo Calvino *Il sentiero dei nidi di ragno*, first published in 1947 by Einaudi Editore, Turin.

2. Guido Canella and Aldo Rossi, "Architetti Italiani: Mario Ridolfi," *Comunità* 41 (1956), 55. Original Italian: "Questi edifici [The blocks at viale Etiopia] portana nel colore gli accenti drammatici della tavolozza di un Guttuso e sono immersi in quella atmosfera della Roma moderna che cinema e letteratura neo-realista hanno così ben penetrato."

3. Paolo Portoghesi, "Dal neorealismo al neoliberty," *Comunità* 65 (1958): 69-79.

4. Luigi Beretta Anguissola, ed., *I 14 anni del piano INACASA* (Rome: Staderini, 1963), 254.

5. The most detailed source of information about the *Piano Fanfani* is Luigi Beretta Anguissola, ed., *I 14 anni del piano INACASA* (Rome: Staderini, 1963). Another important and more recent volume is Paola Di Biagi, ed., *La grande ricostruzione: Il piano INA-Casa e l'Italia degli anni cinquanta* (Rome: Donzelli, 2001).

6. *Piano incremento occupazione operaia. Case per lavoratori. Suggerimenti, norme e schemi per la elaborazione e presentazione dei progetti. Bandi dei concorsi* (Rome, 1949).

7. *Piano incremento occupazione operaia.*, 8-9. Emphasis in original. All translations are mine unless noted otherwise. Original Italian: 'La casa dovrà essere ... gradevole ed accogliente; dovrà farsi amare corrispondendo alle nostre abitudini di vita. Queste, nei loro aspetti fondamentali, derivano spesso da una tradizione che varia da regione a regione ed è quasi sempre effetto di circonstanze precise tutt'ora valide. / Si raccomanda pertanto l'attenta considerazione del problema locale sotto ogni punto di vista (abitudini di vita, trazioni locali, clima, latitudine ed altitudine, materiali da construzione locali, prodotti dell'artigianato, maestranze, sistemi costruttivi, riscaldamento).'

8. *Piano incremento occupazione operaia.*, 10-11. Emphasis in original. Original Italian: 'La casa dovrà contribuire alla formazione dell'ambiente urbano—tenendo presenti i bisogni spirituali e materiali dell'uomo, dell'uomo reale e non di un essere astratto; dell'uomo, cioè, che non ama e non comprende le ripetizioni indefinite e monotone dello stesso tipo di abitazione fra le quali non distingue la propria che per un numero; non ama le sistemazioni a scacchiera, ma gli ambienti raccolti e mossi al tempo stesso.'

9. *Piano incremento occupazione operaia.*, 10-11. Original Italian: 'Saranno dunque le condizione del terreno, il soleggiamento, il paesaggio, la vegetazione,

l'ambiente preesistente, il senso del coloro a suggerire la composizione planimetrica affinchè gli abitanti dei nuovi nuclei urbani abbiano l'impressione che in questi sia qualche cosa di spontaneo, di genuino, di indissolubilmente fuso con il luogo sul quale sorgono.'

10. The Italian title of the exhibition is "Funzionalità della casa rurale," and the exhibition was accompanied by a catalogue: Giuseppe Pagano and Guarniero Daniel, *Architettura rurale Italiana* (Milan: Ulrico Hoepli, 1936).

11. Anguissola, 212. As orginally planned was to be approximately 30% larger, both in area and in the number of residences, than it was finally completed. This reduction, which occurred quite late in the planning process severaly impacted the architects plans for the quarter.

12. The various plans and sketches that the architects prepared during this process are held in the collections of Studio Albini, Milan, and the Centro studi e archivio della comunicazione at the Università di Parma.

FALE SAMOA AND EUROPE'S EXTENDED BOUNDARIES: PERFORMING PLACE AND IDENTITY

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INTRODUCTION: PERFORMANCE, PLACE AND IDENTITY

Kenneth Frampton's examples in *Towards a Critical Regionalism* are located in culturally coherent regions of sedentary cultures and have little obvious relevance in impermanent and migratory contexts. Yet, to re-trace Europe's imperial boundaries may help hone regionalism's concepts and generate new constellations.

For nearly a century, Pacific houses travelled within Europe's extended boundaries to be displayed in imperial fairs, or in parks and museums. Three Māori *wharenui* (meeting houses), remaining in London, Hamburg and Stuttgart, and a Samoan *fale tele* (council house), exhibited in 1924 at Wembley, were instrumental in performing European and Pacific identities. Even today, Pacific houses not only signify but *per/form* (fully provide) identities in the global leisure industries – according to inconsistent, even conflicting values. While they are deeply implicated in tensions between the local and the global, such binaries blur in non-European contexts and interesting questions arise from the dynamic fuelling the use of "decorative", iconic Samoan forms.[1]

Our paper investigates exchanges between three regions, worlds apart, with shared histories. We first explore notions of place and identity at exhibitions featuring *fale Samoa* in the USA, Europe and New Zealand. Then, we address aspects of Critical Regionalism relevant to (post)colonial contexts and, finally, we discuss exhibitions as performative practices. We deliberately see-saw between diverse geographical, theoretical and political positions, to generate relational spaces that transcend geo-political boundaries yet remain local and specific.

EUROPEAN BOUNDARIES AND DIS/CONNECTIONS

As British, German and American traders, bureaucrats and military rubbed shoulders in Apia, Samoa, in the 1890s, 'interparochial' differences produced conflicts for Samoans and non-Samoans alike.[2] In this situation, Samoa-based trader, Harry Moors took three large *fale* and a group of 'Samoans' to the 1893 Chicago World's Fair.[3] Non-Samoans described how the 'Samoans' erected and inhabited the *fale*, gave demonstrations of weaving, and provided seemingly spontaneous performances at their 'village'. Joseph Smith observed the 'cool and pleasant' climate inside the *fale's* 'primitive' architecture during the hot Chicago summer, the builders' 'leisurely methods', and their insistence on doing their work 'in their own way or not at all'.[4] What builders and village inhabitants, or even visitors, thought and felt is unrecorded.

International exhibitions in Europe and America generally had an 'overwhelming effect [...] on those who visited'.[5] During the 1900 *Exposition Universelle de Paris,* writer Paul Morand became a "traveller within", dreaming of Africa, Polynesia and Asia as he traversed the exotic villages at the Trocadero.[6] While the exhibition succeeded in constructing imperial subjects as travellers (through 'a paradoxical combination of escapism and search for the authentic, a kind of flight whose ultimate goal is knowledge of self and world'), it failed, in some colonists' opinion, 'to convey a proper image of the empire'.[7] Uneasy and unstable configurations arose from the combination of commerce, education, propaganda and spectacle. While the efficiency of the colonies might not have been rendered to everyone's satisfaction, the staged contrast between advanced architecture and technology and, at the other end of a sliding scale, 'primitive' architectures and artefacts illustrated progress and underdevelopment.

Germany had little involvement in colonialism until 1884 did not hold international exhibitions until much later. However, Samoan troupes had repeatedly performed in *Völkerschauen* before Western Samoa became a German Protectorate in 1899. Subsequently, in the 1901 and 1910 shows at Frankfurt, Cologne, Berlin and Munich, Samoans were promoted as 'new compatriots' from the colonies. The Samoans, for their part, regarded their involvement as status-enhancing internally, and relationship-building externally. Thus, Tamasese Lealofi II, who competed with Mata'afa Iosefo for the title of *tupu*, reportedly said that he was 'glad to travel to Germany and to meet the Emperor and the other German rulers'.[8] In a photograph, Tamasese stands amongst his performers, in front of three thatched houses that bear little relation to a *fale tele*. In other pictures, *pola* (Samoan "Venetian blinds"), clumsily attached to the "*fale*", still indicate the style of the dwelling as a 'basic anthropological category'.[9]

In 1914, New Zealand annexed Samoa on Britain's request. Promptly, at the 1924 British Empire Exhibition in Wembley, New Zealand presented itself as a British Dominion and an imperial power in the Pacific region in its own right, exhibiting a *fale*

and the *wharenui* Mataatua next to the New Zealand pavilion (Fig. 1). Reputedly 'an excellent example of the Samoan's art in house building and … one of the best of its kind',[10] this *fale* had been commissioned by the New Zealand Department of External Affairs and built in Mulinu'u under Mata'afa's supervision. It was then dismantled for shipping, each separate piece marked to enable someone familiar with the construction to re-erect it in England.[11] The government, however, decided not to send 'Native troupes' to Wembley, for fear of 'the unsettling and bad after-effects which invariably follow on the return of the participants'.[12] Thus, the *fale* was accompanied not by its *tufuga* (master builders) or Samoan performers, but instead by Charles Reed, a trader from Apia like Moors, and 'his half-caste wife' (Fig. 2).[13] An image in the London Illustrated News shows the latter and two European visitors inside the *fale* during construction.[14] 27 million people came to see the 'empire "reproduced in miniature" (British Empire)', with the fale placed on a 'map of the world that could be strolled in a well-planned afternoon'.[15]

Figure 1. The New Zealand Pavilion at the 1924 British Empire Exhibition, flanked by Mataatua *wharenui* (left) and the *fale* from Mulinu'u (right). (source: Anonymous, Archives New Zealand)

The 1940 Centennial Exhibition in Wellington show-cased New Zealand's 'island territories' in the Government Pavilion. As in Wembley, a *fale tele* was commissioned, to be built in Samoa according to contractual specifications and the architect's measurements.[16] The *tufuga* then erected the *fale* in Wellington and stayed in attendance during the session, led by Sergeant Fitisemanu. At the end of the exhibition, the *fale* was sold to Mr. H.J Kelliher of Auckland and re-erected by the *tufuga* at his estate on Puketutu Island.

New networks of flows (of people, objects and information) and industries changed knowledge modes, governmental rationalities, anthropological assemblages and exhibitions after WWII. Not surprisingly, the exhibition of a *fale* at the Tropical Islands Resort (TIR) in Brandt (60km southeast of Berlin) in 2005 significantly differs from earlier exhibitions in some respects. Nonetheless, it also shares important features with its predecessors and, again, the tension between local and global contexts and customs shaped its conception, production and reception. An evocative description of the cascading associations triggered by the image of a Samoan dancer opens Cordula Grewe's book *Schau des Fremden.* They rely on stereotypes, secreted by centuries of contact between Europe and the Pacific (earthly paradise, noble savages, tribal villages, and sexual freedom),[17] and 'embedded in a long history of colonialism, collecting, and exhibiting'.[18] Not only Colin Au and the TIR management used them: The Samoan Government and Tourism Association
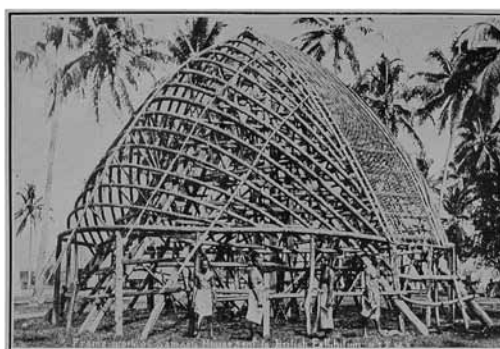
Figure 2. [top] Framework of Samoan House sent to British Exhibition, Samoa 1924. (source: Handbook of Western Samoa, 1925) — [bottom] Charles Reed and "Mosooi", his 'half-caste wife', with kava bowl in front of the *fale Samoa* at the 1924 British Empire Exhibition. (source: Anonymous, Archives New Zealand) Since the *fale* did not fit onto the allotted site at the exhibition, Reed severely reduced its size and the *fale* lost, in the process, its typical ridge (*taualuga*) and curved apses (*tala*).

(STA) collaborated. They gave the resort's representation of Samoa – with the *fale* 'compressed in closest proximity' with houses from Borneo, Bali, Thailand, Kenya and the Amazon, and surrounded by eateries, swimming pools, and the Tropical Rainforest – not only authenticity, but legitimacy.[19]

Despite the TIR website's nostalgic references to village communities and extended families, nothing on the German side of the collaboration matches Samoans' awareness of shared histories and genealogies (*gafa*). In the Pacific, connections of family and individuals with their place furnish identity – and many Samoans include German ancestors. From that perspective, Germany lies within the extended boundaries of Samoa and the Pacific – but one can also get the feeling of being within Europe's extended boundaries in Samoa. By contrast, at the resort on the doorstep of the reinstated capital, Berlin, Samoa is a far-away South Seas island. A collective forgetfulness, following the WWI loss of German colonies, makes it easy to remain unaware of historical connections.

CRITICAL REGIONALISM: BUILDING, PLACE, RELATIONSHIPS

Forgetfulness might explain short-fallings in architectural theories of region, with their moral distinctions and oppositional schemes that would seem oddly out of place in Apia. Keith Eggener notes that Critical Regionalism, which engages 'monumental binary oppositions' such as 'traditional/modern, natural/cultural, core/periphery, self/other', is, 'at heart, a postcolonialist concept'.[20] Yet Frampton, who refers repeatedly to 'world culture' (*singular*, versus 'universal civilisation'), generally assumes stable boundaries and timeless attachment to place. He bypasses Paul Ricoeur's political considerations of Empire, to the extent of editing out reference to 'struggles for liberation' that lay claims 'to a separate personality'.[21] When reconsidering the universal/particular dialectic at the core of Critical Regionalism, then, a closer attention to the shifts of Empire through various forms of (post)colonialisms would highlight changing identities – not only of the colonial subjects rediscovering the 'roots of their nation',[22] but also of the actual or former colonisers.

The etymology of *regio* (introduction by decree of a significant discontinuity into natural continuity')[23] is pertinent here. In the Pacific, we can see how taught, tense lines, entirely discontinuous with geographical or cultural articulations, delimit imperial territories. On a 1985 map in *Der Spiegel*,[24] Samoa is squared in not only by the independent nations of Tuvalu, Fiji, and Tonga but also by American, French and New Zealand territories. Speaking here of regionalism as the expression of a national sense of reality misses the point. Noumea and Tahiti are still part of France, but Western Samoa fell within extended European boundaries only for approximately six decades.[25] The "Europe" to which Samoa belonged was, apart from its manifest impact, also 'something like an imaginary entity that has some relation to the real but is also at the same time phantasmal'.[26] Like Dipesh Chakrabarty, by *provincializing Europe* we want to de-centralise and re-order origins of knowledge and re-balance the 'asymmetric ignorance' of each other's life practices, which causes European or western concepts to act as inadequate 'silent referents' for historical narratives anywhere.[27] Critical Regionalism can be one of those referents,[28] when it fails to reflect the shifting perspectives of global involvements and mutual relationships in a changed sense of region.[29]

Motivations, restrictions and desires enter into relationships of exchange, and into the contexts in which houses were exhibited within the European imperial region, from all sides, and they need to be given equal attention.

EXHIBITION AS PRACTICE: THE TECTONIC AND THE SCENOGRAPHIC

Frampton's binary opposition between tectonic and scenographic establishes a potentially productive field of tension. It can, however, also prevent the understanding of local and regional practices on their own terms. In our context, the distinction is not even stable: in international exhibitions, buildings from the colonial regions of Empire were often exhibited inside exhibition halls – starting perhaps with that model of a Carib Hut at the 1851 Crystal Palace described by Semper. Thus, architecture's tectonic was inserted into the scenographic – an increasingly common strategy today, as more and more exterior is interiorized in glassed-over immunizing islands.[30] Exhibition halls, in our context, have always been scenographic and iconic machines turning architecture into spectacle or education, placing their objects within larger narratives of native habitats. TIR's narratives certainly emphasise the traditional nature of the *fale* but, equally, an 'experience of technical spectacle belongs centrally to [its] spirit'.[31] The ex-Cargolifter hangar, higher than the Statue of Liberty, has been described as the 'world's largest self-supporting hall, a giant palace of gloss',[32] while the Amazon and Kenya huts and the *fale* reinforce media representations of exotic primitiveness. Few might notice the tectonic similarities between *fale* and hangar, which are immediately overshadowed by overt iconicity.[33] TIR is thus a perfect illustration of the deceptive visuality Frampton attributed to scenography as 'mere appearance'.[34] However, the deception here extends equally to the tactile, the tectonic and the place-form.

In any event, Frampton's polemics against scenography had a historically specific target; there are other definitions. Ruth Padel, for instance, emphasises the connection of the *skēnē* with temporary dwelling, with things that are 'flimsy, but crucially important

– for a while'.[35] From a Samoan perspective, scenography is a useful concept, as it deals with the public visual display of important cultural objects, placing them in context and relationships. When their display in performance is narrated in *gafa*, the performers are made to (re)connect with each other – the scenographic has a performative function. Tamasese Lealofi II, standing in front of '*fale*' in a Zoological Garden, (also) positions himself in a different context from what the organisers and the visitors may imagine. Objects like the *fale* are then not proxies for people but create, together with the people, a space of performance – not as a spectacle on stage but as a regular part of life. In this space, appearance matters and decoration (*decorum*) is a contribution to the *vā* – the relational, in-between space that must be elaborated and made beautiful (*teu le vā*). In this context, even partial architectural elements, such as the *pola* installed on the temporary structures of the 1910 *Völkerschau*, could principally produce a temporal and relational space of appearance. If it was not enacted properly in Frankfurt or Berlin, then this was not due to the structures' lacking durability. Rather, it was caused by a lack of attention to all of their registers that turns objects into proxies for people, and dioramas into proxies for place. Then, the *skēnē* ceases to be a space of appearance and becomes a painted surface in the Western traditions, giving rise to representation alone. Critical Regionalism, with its emphasis on European architectures of durability, can only take limited account of temporal architectures and space. When it collapses relational, temporal and performative aspects into its "scenographic" category, it loses relevance for critique elsewhere. Critical Regionalism is then, like any other global theory producing totalising visions, 'likely to be at odds with the meanings which the inhabitants … place on the buildings themselves'.[36]

A file documenting the entire 1940 Wellington Centennial Exhibition tells of some moving moments when New Zealand officials (some Māori) became peripherally but sympathetically involved in the Samoans' families' fates, and organised a programme of sight-seeing and entertainment for the Samoans before they returned to the 'Territory'. But there was a line that could not be crossed. When Fitisemanu used a high Samoan title as part of his name, he triggered a correspondence between Samoan Administration and Department of External Affairs in which 'the [bad] effect of popular adulation on Fitisemanu and other Samoans' became an issue. Fitisemanu was 'an extremely popular figure at the Exhibition, and to a very large extent' responsible for the exhibit's success. However, he had to be prevented 'from being carried away by the attention he [was] receiving'.[37] Even though he was seen fit to lead the Samoan party, his participation in wider relational networks shaping and actualising identities was curtailed. Rodney Harrison observes that '[o]n the colonial peripheries, material culture forms a conduit for cross-cultural negotiation' and objects are not 'what they were made to be, but what they become in the process of creative recontextualisation'.[38] Their significance in social life is critically important. The invisible and non-negotiable line drawn by the colonial Secretaries reduced the Samoans' opportunities to re-author and re-contextualise the objects exhibited. This, in turn, limited their ability to activate a relational space, a region that would have allowed them to articulate a past, present and future 'here' through their spatial activities.

Such activities are also performances and connected with Judith Butler's notion of performativity: stylised repetitions of acts, which succeed due to the accumulated force of authority. In the space between cultures with different constraints and prescriptions, this force of authority is necessarily undetermined. Performativity and agency are difficult to assess. When "spontaneous" events occurred at Chicago 'wherever the villagers happened to be', and the latter 'became performers because of the spectators' perception that the private lives of the village residents were a part of the village display',[39] performance and performativity were articulated differently from how they would have been in Samoa. Nicky Gregson and Gillian Rose, who have examined notions of performance and performativity in the context of critical geography, argue that 'spaces too need to be thought of as performative, and […] more needs to be made of the complexity and instability of performances and performed spaces'[40] – particularly in cross cultural relational spaces, we would add.

CONCLUSION: NETWORKS OF CONNECTION

The problem of asymmetrical knowledge is widespread. Duanfang Lu argues that multiple modernities and alternative spatial systems exist, which do not, or not in the same way, repudiate 'traditional restrictions and decoration'.[41] If Critical Regionalism is to have purchase beyond Europe, these must be engaged to revisit core architectural values, practices and institutions – in a project of producing 'entangled modernities', a 'space of entanglement' (Therborn) shared by different but inter-related knowledges and practices.

People and objects circulating between metropolitan and colonial nodes of regional networks of connection can then all be acknowledged as shaping relationships. When we hear those 'responsible for building particular cultures', architects amongst them, 'rather than imposing formulas upon them, we might come to understand better the richness of internal, local discourses in their full range and complexity'.[42] It is an urgent task at this moment, as rival powers China and US insist on the Pacific region's geo-strategic importance to their national economy and security.[43] China has vastly expanded its sphere of influence throughout

the Pacific, financing, for instance, the Government building in Apia, an eight-story structure with a *fale*-shaped roof on its top floor. Caught in the confrontation between super powers, 'existing nation-states' might turn to Critical Regionalism to form loose associations and 'act together in order to shift global balances of power'.[44]

A re-articulation of political aspects that Frampton edited out of Ricoeur might help understand such situations better. Ricoeur observed that postcolonial communities' struggle for independence involves the 'substitution of personality that the colonial era had given rise to'. There will probably always be questions about a pre-conquest 'profound personality' and a concern with its integrity, which will interact with global desires for authenticity in different ways. Ongoing transactions have already re-shaped European *and* Samoan perceptions, giving rise to a re-conceptualisation of existing, and the creation of new objects and performances for display in the Pacific and Europe. From this, new relationships and configurations arise. By opening up and extending the boundaries of region (geographically) and architecture (disciplinarily), for instance, temporality and relationality offer fruitful nodes for critical engagement.

More research is needed to get a sense of how, from a Samoan perspective, (post)colonial relationships translate into building practices and how, in the other direction, metropolitan practitioners operate in the peripheries of Empire. We know, for instance, that the production of *fale* for customers overseas has radically changed the *tufuga's* contracts.[45] Research in this vein would help free research "anywhere" from an essentially European theoretical skeleton.[46] Finally, a radical symmetry of knowledge and interest would allow us not only to understand the travel of people and objects from already well-known European perspectives. Samoans' contributions to shared knowledge are likely to address what Europeans have overlooked for centuries. From this extended perspective, we can begin to understand how the *fale* that were brought to Europe are seen in and from Samoa (in and from the Pacific). Such mutually complementary understanding could give a new meaning to the expression 'global village'.

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Endnotes

We gratefully acknowledge Benita Simati and Ross Jenner's support.

1. Frampton rejected eclectically 'appropriated alien, exotic forms'. Frampton, Kenneth. "Towards a Critical Regionalism." In *Postmodern Culture*, edited by Hal Foster. 16-30. London: Pluto Press, 1989. 37.

2. Robert Louis Stevenson, *A Footnote to History: Eight Years of Trouble in Samoa* (New York: Charles Scribner's Sons, 1895; repr., Digitizing sponsor: Google; Book from the collections of: University of California). 288. Cf. Meleisea, Malama. *Lagaga: A Short History of Western Samoa*. Suva: University of the South Pacific, 1987. 89-124.

3. The Samoan government refused to allow Samoans to travel with Moors. He therefore engaged mostly other Islanders. Harry J. Moors, *Some recollections of early Samoa* (Apia, Samoa: Western Samoa Historical and Cultural Trust, 1986), 106.

4. Smith quoted in Johnston, "Representing the Pacific," 114, 11. If, as was widely reported, one of the *fale* indeed belonged to Mata'afa, then his participation and expectations – of which there is no record – would be very relevant.

5. William Schneider, "Colonies at the 1900 World Fair," *History Today* 31, no. 5 (1981): 32. The numbers of visitors are staggering: in Paris in 1900, a total of 50 million people visited, almost twice as at Chicago.

6. Cordula Grewe, „Between Art, Artifact and Attraction," in *Die Schau des Fremden: Ausstellungskonzepte zwischen Kunst, Kommerz und Wissenschaft*, ed. Cordula Grewe (Stuttgart: Steiner, 2006), 22. – Morand passed his days 'in that Arab, Polynesian, negro town, which stretched from the Eiffel Tower to Passy, a quiet Paris hillside suddenly bearing upon its back all Africa, Asia …' Morand in Anne Maxwell, *Colonial Photography and Exhibitions: Representations of the*

Native and the Making of European Identities (London: Continuum Intl Pub Group, 2000), 21.

7. Grewe, "Between Art, Artifact and Attraction," 21; Joseph Chailley-Bert in Schneider, "Colonies at the 1900 World Fair," 36.

8. *Kleine Presse*, 28.6.1896, in Jutta Steffen-Schrade, „Exkurs: Samoaner im Frankfurter Zoo," in *Talofa! Samoa, Südsee - Ansichten und Einsichten*, ed. Gerda Kroeber-Wolf and Peter Mesenhöller (Frankfurt: Museum für Völkerkunde, 1998), 383.

9. Mesenhöller, "Ethnography Considers History: Some examples from Samoa," 44.

10. Memorandum Secretary, Administration of Western Samoa, for Secretary, External Affairs, Wellington. 25.9.1923. IT EX 87/20.

11. Memorandum Secretary, Administration of Western Samoa, for Secretary, External Affairs, Wellington. 25.9.1923. IT 1 EX 87/20.

12. Memorandum Secretary, Department of External Affairs to Secretary, Samoan Administration, 25.5.1923; Memorandum Secretary, External Affairs, for His Excellency, Administrator of Western Samoa, 25.1.1923; both IT 1 EX 87/20.

13. Memorandum Secretary, Administration of Western Samoa, for Secretary, External Affairs, Wellington. 25.9.1923. IT 1 EX 87/20.

14. 'Without a Single Nail! Building a Samoan "Fale" at Wembley' by Steven Spurrier, in *The Illustrated London News* (May 24, 1924, 933).

15. Scott Cohen, "The Empire from the Street: Virginia Woolf, Wembley, and Imperial Monuments," *MFS Modern Fiction Studies* 50, no. 1 (2004): 85, 88. 'To visit the Exhibition is to visit every Continent of the earth'. Lawrence quoted in ibid., 89.

16. 13.5.1939. IT 1 495 / EX 87/20/7; Assistant Secretary to Secretary, Samoan Administration, 1 August, 1938. IT 1 495 / EX 87/20/7.

17. For a Samoan response to these stereotypes, see Fana'afi, Aiono Le Tagaloa. "Bekenntnisse einer Fledermaus." In *Talofa!*, ed. Kroeber-Wolf and Mesenhöller. 164-81. – For further details of Tropical Islands Resort, see A.-Chr. Engels-Schwarzpaul, "A warm grey fabric lined on the inside with the most lustrous and colourful of silks": Dreams of airships and tropical islands," *The Journal of Architecture* 12, no. 5 (2007); A.-Chr. Engels-Schwarzpaul and Keri-Anne Wikitera, "Take me away … In search of original dwelling," *Interstices - Journal of Architecture and Related Arts* 10 Adam's House in Paradise (2009).

18. Grewe, "Between Art, Artifact and Attraction," 10-11.

19. The genealogy is unmistakeable: Dürbeck argues that current tourism still profits from the dualistic stereotypes of the Pacific in the *Völkerschauen*. Gabriele Dürbeck, "Samoa als inszeniertes Paradies: Völkerschauen um 1900 und die Tradition der populären Südseeliteratur," in *Die Schau des Fremden,* ed. Cordula Grewe (Stuttgart: Steiner, 2006), 94. – TIR's *Tropical Village* includes 'authentic houses from 6 tropical regions of the world', 'constructed on site at *Tropical Islands* by craftsmen from their respective home countries'. — Tropical Island Management GmbH, "The Tropical Village," http://www.my-tropical-islands.com/village/index-e.htm.

20. Keith L. Eggener, "Placing Resistance: A Critique of Critical Regionalism," *Journal of Architectural Education (1984-)* 55, no. 4 (2002): 234. 'Critical Regionalism' refers to Frampton's ideas as developed in Western architectural discourses. A focus on European concepts tends to diminish their relevance to extra-European contexts (see Alan Colquhoun, "The Concept of Regionalism." In *Postcolonial Space(s)*, edited by Gülsüm Baydar Nalbantoglu and Chong Tha Wong. 13-23. New York: Princeton Architectural Press, 1997).

21. 'The fight against colonial powers and the struggles for liberation were, to be sure, only to be carried through by laying claim to a separate personality: for these struggles were not only incited by economic exploitation but more fundamentally by the substitution of personality that the colonial era had given rise to. Hence it was first necessary to unearth a country's profound personality and to replant it in its past in order to nurture national revendication.' Paul Ricoeur, "Universal Civilization and National Cultures," in *History and Truth* (Evanston (Ill.): Northwestern University Press, 1992), 277.

22. See Mark Crinson, "Singapore's moment: critical regionalism, its colonial roots and profound aftermath," *The Journal of Architecture* 13, no. 5 (2008): 588. *Provincializing Europe* has affinity with Stevenson's notion of interparochial differences which imply, despite their limiting self-interest, plural ways of understanding. See Dipesh Chakrabarty, *Provincializing Europe: Postcolonial thought and historical difference* (Princeton, NJ: Princeton Univ Pr, 2008). 96.

23. *Regere fines* means the tracing of 'limits by straight line', the 'delimitation of the interior and the exterior' by an authority 'invested with the highest powers'. Émile Benveniste, *Indo-European language and society*, trans. Elizabeth Palmer (London: Faber and Faber 1973). 311.

24. *Der Spiegel,* no.44 (1985), 228.

25. German Protectorate from 1900; annexed by New Zealand in 1914; mandated to New Zealand by the League of Nations from 1920 to 1962.

26. Dipesh Chakrabarty, "In Defense of Provincializing Europe: A Response to Carola Dietze," *History and Theory* 47, no. 1 (2008): 86. A 'certain version of "Europe," … continues to dominate the discourse of history … In other words, the global condition for the production of history had this element of inequality about it' (86-7).

27. Chakrabarty, *Provincializing Europe,* 6, 28. This would interrupt the sequence 'first in the West, and then elsewhere' (6). The inequality in the production of history has an equivalent in the production of regions: what 'lies beyond the center is by definition peripheral. No matter how vital, the peripheral is other than, deviant from, and lesser than the center'. Eggener, „Placing Resistance," 232.

28. Eggener, "Placing Resistance," 228. Jacobs, who attempts also to present the views of 'those marked as Other', expands colonized peoples' repertoire of available attitudes – yet this repertoire still appears strangely bound to Chakrabarty's 'silent referents'. Jane Margaret Jacobs, *Edge of empire: postcolonialism and the city*, (New York: Routledge, 1996).

29. Gayatri Spivak's use of Critical Regionalism points at the political implications of regionalism's going 'under and over nationalisms' to re-invent the state beyond the nation state. Judith Butler and Gayatri Chakravorty Spivak, *Who sings the nation-state? Language, Politics, Belonging* (New York: Seagull Books, 2007). 08, 94 and 118.

30. See Peter Sloterdijk, *Im Weltinnenraum des Kapitals* (Frankfurt: Suhrkamp, 2005).

31. Grewe, "Between Art, Artifact and Attraction," 15. The opposition echoes that of the Trocadero villages and the Eiffel Tower in 1900 Paris.

32. Andrew Eames, "Welcome to Germany's pleasure dome (21 May)," The Sunday Times, http://travel.timesonline.co.uk/article/0,,10290-2187529,00.html.

33. The hangar connotes technology and progress – the *fale* imaginary islands' balmy breezes, and a utopian way of life. Both are double-apse buildings and their structural frameworks share similarities. See Buck, Te Rangi Hiroa. *Samoan Material Culture*. edited by Bulletin 75 Honolulu: Bernice P. Bishop Museum, 1949; and http://www.baukunst.tuwien.ac.at/abk/texte/skelettbauweisen/b-fale_tele.html.

34. Frampton, "Towards," 29.

35. Ruth Padel, "Making Space Speak," in *Nothing to Do with Dionysos? Athenian Drama in Its Social Context*, ed. John J. Winkler and Froma I. Zeitlin (Princeton (NJ): Princeton University Press, 1990), 341. 'Flimsy' is a relative term. In Samoa, 'space is indissolubly linked to time'. Tcherkézoff, Serge. *First Contacts in Polynesia-the Samoan Case (1722-1848): Western Misunderstandings About Sexuality and Divinity*. Canberra: Anu E Press, 2008. 136, 201.

36. Anthony King quoted in Eggener, "Placing Resistance," 235.

37. Memorandum for Secretary, Samoan Administration, from Acting Assistant Secretary, External Affairs, Wellington, 12.1.1940. IT 1 495/ EX 87/20/7

38. Harrison, "Consuming Colonialism," 56-7.

39. Gertrude M. Scott, 'Village Performance' quoted in Johnston, "Representing the Pacific," 113.

40. Nicky Gregson and Gillian Rose, "Taking Butler elsewhere: performativities, spatialities and subjectivities," *Environment and Planning D: Society and Space* 18(2000): 433.

41. Duanfang Lu, "Architecture, modernity, and knowledge," *Fabrications* 19, no. 2 (2010): 146.

42. Eggener, "Placing Resistance," 235.

43. See Tisdall, Simon. "China Syndrome Dictates Barack Obama's Asia-Pacific Strategy." In *The Guardian* (2012). http://www.guardian.co.uk/commentisfree/2012/jan/06/china-barack-obama-defence-strategy.

44. 'David Laguardia, "Who Sings the Nation-State? [Review] Judith Butler and Gayatri Chakravorty Spivak, London–New York–Calcutta, Seagull Books, 2007," *Lectora*, no. 15 (2009): 352. Pollock, Bhabha, Breckenridge and Chakrabarty register a need to ground a 'sense of mutuality in conditions of mutability', 'to learn to live tenaciously in terrains of historic and cultural *transition*'. Pollock et al., "Cosmopolitanisms," 580.

45. Sala Pio Tagiilima stated in an interview that the work for the TIR *fale* was done on a *palagi* (non-Samoan) contract, as the builders had to leave the country and could not act within a Samoan framework. Vitale Feaunati, a *tufuga* involved in the construction and re-assemblage at TIR, commented that Samoan building techniques were disregarded. 'What they actually wanted was just the look ... It's meaningless to the *Fa'a-Samoa* [Samoan way].' Interviews, 2006 and 2009.

46. Chakrabarty. *Provincializing Europe,* 29.

Open Session:
Memory, Identity and Community in Architecture and Urbanism

SESSION CHAIR:

Susan Klaiber (Independent Scholar, Switzerland)

MUNICIPIUM AUGUSTUM VEIENS: CONTINUITY AND CHANGE

Elisa Cella & Alessandro M. Jaia

Sapienza Università di Roma, Italy

'Roma domus fiet; Veios migrate, Quirites / Si non et Veios occupat ista domus'[1]: the sarcastic epigram, reported by Suetonius (Suet VI, 39) to illustrate popular dissent provoked by the construction of Nero's Domus Aurea, shows us how the *Municipium Augustum Veiens* was perceived, a little less than a century after its foundation by Augustus: a place close and spacious enough to receive citizens in danger, as it happened to the Romans fleeing after the Gauls' attack.

Before it had this role in the imagination of Julio-Claudian poets and citizens, the over 200-acre plateau located between the Piordo ditch and Valchetta stream, the current site of the excavation missions of the Department of Ancient Sciences of "Sapienza" University of Rome, was the place of the Etruscan city of Veii, the secular enemy of Rome. As we know, the control of crossings and salt mines along the *ripa dextra* of the Tiber river caused a long series of conflicts, mentioned by Titus Livius (Liv. I, 15) as already having begun during the age of Romulus, definitively resolved in 396 BC with the conquest and looting of the city after a 10-year siege. About these facts, Livy himself warns that sometimes the narration turns to elements closer to legend: the image of the city razed to the ground, according to the literary parallel with Troy, and totally abandoned until the re-founding of Augustus seems to be one of these.

The archaeological reality is actually different. The recent excavations conducted in the central city area have highlighted a residential district that lived uninterruptedly, among appropriate and successive modifications, from the sixth to the second century BC, when a rich *domus* used until the middle imperial age was founded[2]. This discovery, along with other important indicators[3], allows us to reshape the traditionally accepted framework for Roman Veii, as already seen by Ward Perkins[4]. The idea of a 'complete eclipse' of a century and a half starting from the end of the third century BC, based on the silence of epigraphic and literary sources[5], seems to be fading. The political-institutional break-up operated after the Roman conquest certainly caused a progressive housing rarefaction in the urban area of Veii, including the abandonment of large parts and the zoning change of entire sectors; this happened only partially, favouring a widespread settlement of the recently annexed land by allotting plots of land to Roman citizens and those from Veii who had switched to the Roman side[6]. The wide availability of *ager publicus* in Veian farmland was the basis of the further assignment of lots to Caesar's veterans (Cic. *Ad Fam* 17, 2), which is rightly considered the immediate antecedent to the acquisition, by the will of Augustus, of the municipal dignity, through a similar allocation of plots to veterans from the legion XXII Deiotariana[7].

The aim of Augustus' choice is plain: the case of the Etruscan city of Veii and its transformation into *Municipium Augustum Veiens* clearly shows the imperial will to preserve past memories by embodying them into a new urban project. We can include this case among his masterworks in terms of propaganda: it reflected a new political and social order avoiding the obliteration of monuments, keeping their memory alive through the inclusion of the ancient urban plan in the new one. As we well know, it is a program that starts with the names of the *princeps* offices and, referring to the iconographic level, spreads over the public and private spaces of the Roman world[8], finding its most striking realization in the statues of the two *exedrae* of the Forum of Augustus in Rome[9]. The recovery of the memory of archaic Veii is already shown in the name of the municipality itself[10]: for its formal name Augustus did not choose the tribal name, as it would have probably been quite hard for the new settlers to recognize themselves as *Veientes stricto sensu*, but he made reference to the origins of the ancient city, still alive and active in common practice, as the verses of Suetonius demonstrate.

The field studies conducted over the past years have widely enriched our knowledge of the topography of the *Municipium Augustum Veiens*. After the publication of J. B. Ward-Perkins's monograph, conducted as part of the British School at Rome Southern Etruria Survey project during the 1950s and 1960s[11], and after the analysis of archival documents[12], as well as historical and epigraphic data and materials stored at the Vatican Museums[13] related to the re-discovery of Veii in modern age, in 1996 the University of Rome La Sapienza started the Veii project. It is now still active, with four main excavation sites in the urban area. As part of this project, the sector "Ancient Topography" worked in the field, with excavations and surveys, in close collaboration with a team from the University of Salento, directed by Prof. M. Guaitoli, which realized a new photogrammetric mapping finalized to the archaeological investigation of the urban area (Fig.1)[14]. It is an analysis that has been crucial for the reconstruction of the urban plan of the *Municipium*. The care put into tracking contours (with the equidistance of 1 metre) has allowed the soil

morphology to be read in great detail, in order to record the anthropic impacts on the ground, while the photo-interpretation and the aerophotogrammetrical mapping of archaeological traces visible on the field, identified thanks to photographs taken from 1930 to 2002, made it possible to map the smallest marks of archaeological interest in detail. The landmarks relating to all the phases of the urban area have been collected, such as the necropolis units and the grid road, including the long main axis for crossing in the NE-SW direction of the plateau, which has been recognized in its full extent.

In particular, the accuracy of the photo-interpretation has been verified by the excavations, while some of the key public monuments of the Julio-Claudian town have been identified or defined in their structure: the forum, the public baths and the

theatre[15]. The existence of other buildings is recorded only in epigraphic sources: the temple of Mars[16], an altar to the *Victoria Augusta*[17], the *porticus Augusta* of Tiberian age[18], a building of unknown function of Claudian age, to which can perhaps be attributed a group of statues now at the Vatican Museums[19], the *Schola Fortunae Reducis*, which we know had a *porticus* adorned with statues[20].

The research conducted so far has shown that the efforts in the town-planning of the new *municipium* of Veii was mainly oriented towards the creation of the central public district with the prearrangement of basic infrastructures in much of the plateau occupied by the ancient Etruscan city. If in the central area the type of the buildings, typically related to the Roman town planning practices, marks a strong discontinuity from the Etruscan phase, which in many cases had even been obliterated by huge levelling works, in the rest of the plateau much of the old road grid has been reconstructed, even in the basic lines. However, huge levelings were also made in this case, significantly smoothing the original altimetric unevenness of the plateau. The connection to the rest of the territory was improved through the construction, where necessary, of new bridges to facilitate the crossing of ditches and streams. The line of the walls was neglected as it was no longer necessary, even if it remained throughout the Roman age as the tangible sign of municipal identity.

The Augustan project to repopulate the entire plateau was not successful, as shown by two digs made since 2002 in the western sector of the urban area (Campetti): there a spontaneous exploitation with related cemeteries along

Figure 1. Aerophotogrammetrical mapping of the central area of the city. In light grey the roads and the buildings identified by photo-interpretation of the archaeological traces visible on the field. (source: after Guaitoli, "Veio," 2003, 170)

the most important roads took place, leaving wide open spaces which have not been organized. Here succession of the several historic urban landscapes of Veii is clear. In a dig (Fig. 2, nr.1) made at the highest altitude level of the area, the key road of the Augustan reorganization was found to be the last phase of a path in use since the proto-historical ages.

Originally, it was a deep natural fissure of the plateau, probably an ancient ditch bed, embedded in high lateral ridges with eighth-century BC huts on the top. During the sixth century BC the road was partially raised, levelled, and covered with tiny pebbles (*glarea*). The slopes were re-covered by a terracing wall in squared blocks, about three metres high. The terrace so created was used for the construction of a public building - probably a temple - whose foundations are still in place, and which were later subjected to radical acts of spoliation. A side street, also covered with *glarea*, led to the upper level and to the temple. During the fourth to third centuries BC the area hosted a pottery workshop. During the Augustan age impressive filling work allowed the reset of the gradients of the previous phases and the road paving; among these paved roads we can consider the side road discovered in the excavations, which leads to a large suburban villa.

These works allowed the slopes to be smoothed significantly, prepared the road grid for the development of the city. The execution was very accurate, respecting the construction requirements specified by Vitruvius, with a powerful concrete embankment covered by paving. Along the south side of the road itself a wide socle was made, of the same width as the street, marked by tuff

bases put at a constant distance, used perhaps for the parking of wagons and herds. The impression is that this huge area, whose traces have been identified from aerial photographs for hundreds of metres, could also be used for the positioning of the goods during market days. Along the north side of the road ran, without interruption, a sewer which is in turn the main backbone of the water drainage of the plateau. At the southeast corner of the junction between the main and the side road there is a building in *opus reticulatum* whose stables and *thermae* were found. The other side of the side road hosts the related cemetery, dated to the first - middle Imperial age.

The second excavation (Fig. 2, nr.2), conducted in the same area but closer to the centre of the Roman city, confirmed this interpretation pattern. The difference in height between the top of the road and the upper level was resolved either by major work of filling and leveling, or by dividing the building, which faces the road, into several levels. Stables open at the street level, while a staircase leads upstairs, where rooms resting on the hilltop are located. Again, on the other side of the road we found the traces of burials contemporary to the building, such as the parts of a funeral monument in *opus testaceum* of the Hadrianic age, and the fragment of a *lex funeraria* of the Trajanic age, with the provisions of the deceased.

The Augustan will for the urban organization of this sector of the town is clearly shown, and is demonstrated by the careful restoration of the Etruscan routes, which used the natural and most practicable ways, with the addition of the system of sewers. However, this project was soon frustrated, as the evidence of the private houses with stables along the streets and the buildings of productive and agro-pastoral character testify, together with the related cemeteries, according to the typical use of the agricultural and suburban landscapes of the Roman world. The excavation thus confirms the hypothesis already made about the real limits of the municipality[21]: at least three sides are defined, two made by the limits of the plateau itself (SW and NE) and a third (W), corresponding to two

Figure 2. Veii: in black, the line of the Etruscan city boundary walls, the central *axis* and the road network. 1-2. Excavations at Campetti; 3. Baths; 4. Theatre; 5. Forum. In grey, the area occupied by the *Municipium Augustum Veiens*. (source: re-edited after Liverani, *Municipium Augustum Veiens*, 1987)

deep valleys directed respectively towards the Valchetta ditch, on the north, and Piordo stream, on the south. The pattern now displayed seems to confirm the image of Veii given to us by Propertius (Prop. 4, 10, 27-30) in the second half of the first century BC, despite all the limitations connected to an archetypical description of a landscape of ruins[22].

These new data clarify the relationship between the extent of the Etruscan and Roman city: the latter is actually much smaller compared to the former, though, as we have seen, the project was different, providing everything for the urban development of the entire plateau. From this point of view we can analyze the function of the old walls as a powerful memory of the Etruscan city, which does not constitute the real limit of the Roman city, but the administrative one, reflected in a unique way during the Imperial age on the definition of the municipal status.

The urban plateau of Veii was strengthened, probably at the end of the sixth century BC, with a huge system of fortifications. The walls, investigated in different sectors of the city, are built with squared tufa blocks arranged in alternating rows along the length and width, 'head and cutting', according to the typical Etrusco-italic use. The thickness varies from 1.6 to 2.1 metres, and the assumed height reaches six metres[23]. The effectiveness of the walls can be properly understood by considering the uneven morphology of the plateau: the paths heading from the centre of the city towards the city gates ran deeply cut in the tuff layer guaranteeing a further impenetrable defence to the accesses. Anyone who managed to pierce one of these gates would have been forced to walk hundreds of metres without any protection against the attacks of the defenders.

The epigraphic sources of the Roman age (first through third centuries AD) testify to the key role, in terms of identity, of the Etruscan walls, on which the internal division of the citizens of the *municipium* was based, defined as *municipes intramurani* and *municipes extramurani*. This definition, which assigns equal rights of citizenship both to those who are resident outside the walls
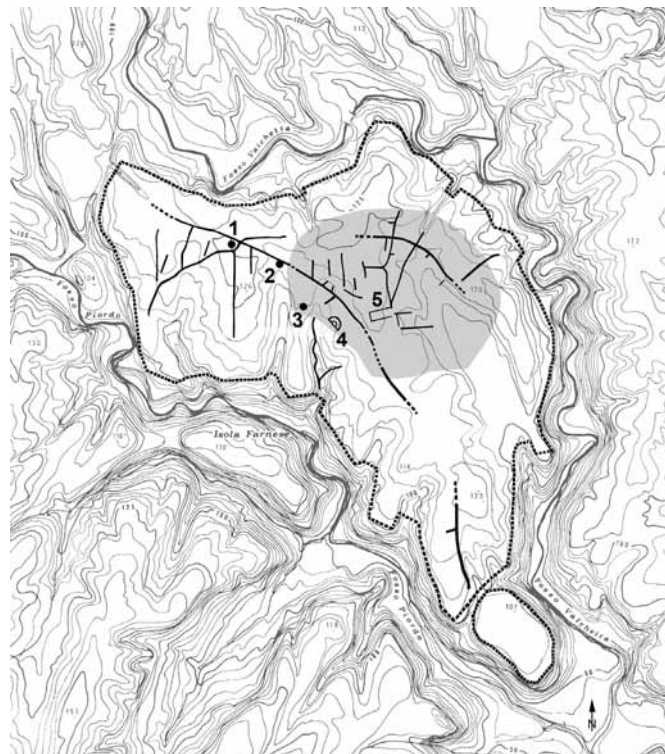
(or to a group of them) and within them, is not attested elsewhere. Further, this division has long been debated without finding a convincing answer.

Recently the identification of the *extramurani* with Caesar's veterans assigned plots of land in the territory of Veii (Cic. *Ad Fam.* 17, 2) has been proposed; they obtained the maintenance of full municipal status when the Augustan *municipium* was created[24]. Their 'moral' status as Caesar's veterans and the proximity in time of their settlement[25] would allow them to achieve, for example, what Virgil, estranged from his land, did not receive. A difficulty for this interpretation so far has been the missing connection between the Etruscan line of the walls and the Roman urban area, which forced us to establish just an evocative connection, charming but completely irrational, with a significant topographical element of the landscape. We believe we have shown that this lack of connection is due to the lack of success of the re-establishment of Veii, which actually involved, as a project, the re-occupation of the entire plateau of the Etruscan town, considering the walls as the administrative boundary. This limit, within which mostly new settlers were established, including veterans of Augustus, had to decay rapidly. However, the equality defined at the moment of the foundation between the new citizens and the veterans of Caesar, probably largely settled in the territory, was kept.

The framework outlined so far has shown the idea we started from, that the case of *Municipium Augustum Veiens* illustrates how the perception of an urban plan as a living memory of a past cultural identity is not only an issue of modern times. The case of Veii, however, also illustrates the dynamics that led to the development, in the modern age, of memory as a cultural process of identity re-appropriation.

This process took place through subsequent modifications - as many as the changes of the European *Zeitgeist* have been - and saw the first actions essentially marked by the looting of the ancient marbles and bricks for their reuse as construction materials. Between 1369 and 1370 we are informed of the transport of materials from Veii to Orvieto for the construction of the Cathedral, and the firm success of this activity is recorded in the excavation licenses granted in 1627, showing an attention to the ancient Veii eminently based on utilitarian purposes, as still attested in 1705[26].

It is likely, however, that already in 1568 Cardinal Alessandro Farnese had made excavations to find materials to enrich his collections, a venture proving a change in the way of looking to past memories, anticipating by almost a century the huge excavations prompted by Cardinal Flavio Chigi in the urban area.

The digs of the eighteenth century were thus made to feed the blooming market of antiques collecting: in 1773 and in 1787 new research was carried out in the central area, undertaken both by internationally renowned entrepreneurs, like Gavin Hamilton, and makeshift ones, such as local landowners. In the nineteenth century the materials found during the Giorgi excavations found their natural place in the Vatican Museums, enriched at that time by the statues and inscriptions coming from Veii, and in the reuse of several columns in the public and sacred buildings of Rome such as the Basilica of St Paul outside the Walls and the portico of Palazzo Wedekind in Piazza Colonna, the new site of the papal post office.

However, these are the same years of the birth of a new and more scientific approach to antiquities, mainly thanks to the surveys of Gell and Nibby and the activity of Lanciani, whose actions, in 1889, led to archaeological mapping based on a cadastral map[27]. These are the most direct antecedents of the research – now conducted according to modern archaeological criteria – on the changes that occurred in the urban area of ancient Veii, whose memory and identity are the subject of the Veio Project and are protected by the establishment, in 1998, of the Park of Veii.

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Endnotes

1. 'Rome is becoming one whole house; migrate to Veii, Quirites / if that house does not soon seize upon Veii as well'.

2. Maria T. D'Alessio, "Macchiagrande-Vignacce," in Anna M. Sgubini Moretti (ed.), *Veio, Cerveteri, Vulci. Città di Etruria a confronto* (Roma: L'Erma di Bretschneider 2001), 17-22.

3. Such as pottery workshops and sanctuaries.

4. John B. Ward-Perkins, "Veii: the historical topography of the Ancient City," *Papers of the British School at Rome* 29 (1961), 55.

5. Paolo Liverani, *Municipium Augustum Veiens. Veio in età imperiale attraverso gli scavi Giorgi* (*1811-1813*) (Roma: L'Erma di Bretschneider 1987), 143.

6. This led to the creation of the *Stellatina*, *Trementina*, *Sabatina* and *Arnensis* administrative districts.

7. Liverani, *Municipium*, 1987, 144.

8. Paul Zanker, "Immagini come vincolo. Il simbolismo politico augusteo nella sfera privata," in Andrea Carandini, Rosanna Cappelli (eds), *Roma. Romolo, Remo e la fondazione della città* (Roma: Electa Mondadori 2000), 84-91; Paul Zanker, *Augusto e il potere delle immagini* (Torino: Einaudi 1989).

9. Ugo Fusco, "Ricostruzione dell'esedra occidentale del Foro di Augusto," in Andrea Carandini, Rosanna Cappelli (eds), *Roma. Romolo, Remo e la fondazione della città* (Roma: Electa Mondadori 2000), 223-4. In the Forum, Augustum placed two series of marble portraits with the members of the *gens Iulia* and the protagonists of the origins of Rome.

10. For the analysis of the criteria adopted in formal city names see John C. Mann, "City-Names in the Western Empire," in *Latomus* 22 (1963), 777-782.

11. Ward-Perkins, *Veii*, 1961; for the *Ager Veientanus* see Anne Kahane, Leslie Murray Threipland, John B. Ward-Perkins, "The ager veientanus survey north and east of Veii," *Papers of the British School at Rome* 36 (1968), 1-318.

12. Filippo Delpino, *Cronache veientane, storia delle ricerche archeologiche a Veio. I. Dal XIV alla metà del XIX secolo* (Roma: Consiglio Nazionale delle Ricerche 1985).

13. Liverani, *Municipium*, 1987.

14. Marcello Guaitoli, "Veio," in Marcello Guaitoli (ed.), *Lo sguardo di Icaro. Le collezioni dell'Aerofototeca nazionale per la conoscenza del territorio* (Roma: Campisano editore 2003), 167-177.

15. This had been known before thanks to the surfacing pillars of the *summa cavea* along a rural path.

16. *CIL* XI 3801.

17. *CIL* XI 3780.

18. *CIL* XI, 3784.

19. As noticed in Liverani, *Municipium*, 1987, 32 most of the imperial portraits and some statues date to Claudian age. Some of them can be probably related to the same complex, maybe the *augusteum*.

20. *CIL* XI, 3810.

21. Ward-Perkins, *Veii*, 1961.

22. 'Heu Vei veteres! Et vos tum regna fuistis et vestro posita est aurea sella foro: nunc muros pastoris bucina lenti cantat, et in vestris ossibus arva metunt (Alas, ancient Veii, you were also a kingdom then, and a golden throne was set in your forum: now the horn of the careless shepherd sounds within your walls, and they reap the harvest over your bones)'. These verses initiate a literary *topos* soon followed by others (see also Luc. *Phars*, VII, 391-393, and Flor. I, 6,10-11).

23. The unevenness of the margins of the plateau created some problems during the realization of the defensive line, while offering the chance to multiply the effects of the defense. On slight slopes it was necessary to increase the height of the walls, reinforced on the inside by a massive embankment; on marked slopes a level ground was built, in order to give a base for the structure, maintaining the steepness outside and bringing on the inside the existing terrain altitude; if the geological tuff layer was exposed, the structure was founded on it, increasing the defensive capabilities through the careful smoothing of the outer surface of the tufa wall. Thanks to these expedients height of the defenses was doubled, further protected by removing the harshness and the natural grips facilitating the climbing of the enemies.

24. Gianluca Soricelli, "Intramurani/extramurani," in Elio Lo Cascio, Giovanna Di Nerola (eds), *Forme di aggregazione nel mondo romano* (Bari: Edipuglia 2007), 59-69, with previous bibliography.

25. The letter in which Cicero mentions their settlement dates to 46 BC, while it seems that the creation of the *Municipium* took place between 27 and 1 BC.

26. In the Campetti dig the proof of the demolition of the main road during the fourteenth century came to light, exploited as a quarry perhaps by the inhabitants of the nearby village of Isola Farnese, who left the side road intact to allow the transport of the materials to the modern village.

27. For a complete study on the modern history of the ancient Veii see Delpino, *Croncahe*, 1985; "I rilievi archeologici di Veio della Collezione Lanciani. Appunti su Francesco e Ludovico Caracciolo," *Bollettino d'Arte* 76 (1991), 161-176; "L'esplorazione di Veio in un progetto del 1909," in Stefano Bruni (ed.), *Etruria e Italia preromana. Studi in onore di Giovannangelo Camporeale* (Pisa: Serra, 2009), 313-317; Paolo Liverani, "Excavations in Etruria in the 1880s: the case of Veii," in Ilaria Bignamini (ed.), *Archives & excavations: essays on the history of archaeological excavations in Rome and southern Italy from the Renaissance to the nineteenth century* (London: British School at Rome, 2004), 267-280, and Liverani, *Municipium*, 1987, 16-142 for the statues at the Vatican Museums.

THE URBAN GRID PLAN IN DOWNTOWN NAPLES AND THE ARAGONESE DYNASTY
A CASE OF EARLY MODERN GREEK REVIVAL?

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Whatever the form chosen for a city looks like, it usually reflects the precepts on health which govern a society as a whole. This must have especially applied to the foundations of ancient Greek cities, whose rise is dated between 750 and 550 BC with the expansion and migration of Greek settlers, mostly to Asia Minor, Cyprus and Italy. A major change in the rules of founding new colonies took place at the end of the seventh century, when the expansion of settlers primarily increased towards the vast territories of Sicily and Italy. It is around this period that the Greek inhabitants of Kyme decided to found a 'New City', *Néa-pólis*, in one of the large bays of the northern coast of the renowned Gulf. According to Strabo[1] the inhabitants of Kyme were Ionians, originating from the city of Chalkis on the large island of Euboia (Book V, 4, C243: 'its founders are considered to be Chalcidians', and again about Naples, Book V, 5, C246). But on the other hand an Attic origin of the settlers from Kyme is apparently asserted by Velleius Paterculus[2]. Ionic Chalkis was a member of the Attic League, guided by Athens: Attica itself was Ionic[3].

The centre of Naples is thus an original urban plan of archaic imprint, whose concept dates with high probability to the fifth century BC at the latest, and which has not yet been adequately considered in all its implications by historians of urbanism, despite (and maybe also because of) the numerous recent discoveries in the area of the port. The plan's origins have not been completely explained, and interpretations of its roots in the ancient theoretical tradition are divided between disparate hypotheses. For theoretical insights we have only Vitruvius's chapter with two schemata of an 'ideal' city that he attached at the end of his First Book *De Architectura*, perhaps inspired by now-lost or partially extant Greek treatises and thus reflecting the rules to observe for new foundations - such might have been Aristotelian, Asclepian or Hippocratic works. It is in the first reliable Renaissance Italian printed edition of the text, by Fra' Giocondo[4], in a chapter providing two very precise woodcut illustrations, of which one is entitled 'De electione locorum ad usum communem civitatis'[5]. This edition is by far more reliable than that of Sulpicio da Veroli.

Per Gustav Hamberg has proposed that knowledge of Hippocrates's *Perì aéron, hydáton, tópon*[6], or in general of climatic, hygienic, social theories and their concept of health (*hygieia*), could have been a major preoccupation of the Ionian philosophers and architects of the archaic and classical period; these theories are only hinted at by Vitruvius, but not taken into consideration. But they certainly experienced a long duration[7] and also remained a preoccupation of early modern city builders. If we look at Fra' Giocondo's above-mentioned plan for the ideal ancient city we can observe how the Vitruvian *schémata* must have undergone a transformation around 1500, giving birth to a sort of *applied* modern revival of ancient theory. Already Francesco di Giorgio had analysed the multiplicity of forms for a fortified city in his numerous treatises, composed approximately between 1475 and 1495. Knowledge of Hippocrates's work is due to numerous manuscripts circulating in Europe (several of which were in the Veneto, where Giocondo came from): the first printed editions originated from them, with the title *De aeris* etc., in Rome in 1525.

But the veritable experimental case was the new Aragonese plan for Naples, implementing a slight extension of the ancient Greco-Roman eastern settlement, and a major extension in the western sector with the inclusion of new late mediaeval fortifications (primarily the Castelnuovo). But, beside such issues of natural growth of the ancient capital, how did it differ from the ancient examples?

THE ANCIENT CONTRIBUTION TO URBAN PLANNING THEORIES

The original street grid in Naples had been designed by the Greeks between around 600 BC (the earlier settlement of Parthenope, present hill of Monte di Dio), or 500[8], and circa 420 BC (according to some earlier scholars). Its regularity has been variously explained: in this regard we might refer to Frank Kolb, who stated that also in Magna Graecia the 'Ansiedlung erfolgte im westlichen Mittelmeerraum planvoller und auf der Grundlage einer deutlich fortschrittlicheren politischen und sozialen Ordnung'[9]. The foundation was due to the rise to power of the tyrant Aristodemos of Kyme (ca. 550-490 BC), who compelled numerous oligarchic parties to move away and migrate either to the neighbouring, flourishing Capua, an ancient Etruscan foundation, or to a new city, to be founded *ex novo*[10]. The new city would thus also perpetuate the religious tradition dominating in Kyme itself: especially thanks to the introduction of the cult of Demeter into Naples, to whom a temple was dedicated at precisely the highest part of the downtown (Sant'Aniello a Caponapoli area), i.e. on the former acropolis. And still according to Vitruvius, Book I, 7, 1,

the 'temples of the gods, protectors of the city', in fact, 'should be on some eminence'. Also, for Vitruvius, the temple of 'Hercules should be near the circus': and in Naples it is witnessed in the *regio Herculanensis Furcillensis*, today around Via Forcella[11].

Going back to the foundation of the city, we place it at about the same time as philosophical-medical Ionian theories and those of the Asclepian-Hippocratic school were spreading from Kos over the entire Hellenised part of the Mediterranean, or even in the same years Hippocrates was writing (his birth date is usually placed around 460 BC). While this suggests that there might be a link between medical sciences and urban planning, there are still some issues to clarify. Do hygienic theories correspond to the plan at all?

Let us consider the contents of Hippocrates's work. Toward the beginning of his treatise, in chapter III[12] he considers the situation of cities exposed to hot (mostly southern) winds blowing between dawn and the setting of the sun during the winter; if these winds constantly attack them and they are sheltered from the northern winds, in these cities the waters will doubtlessly be plentiful, brackish, run on the earth's surface, be hot in the summer and cold in the winter. The inhabitants will have a 'wet head', which will be full of phlegm, their entrails will be frequently disturbed by the abundant phlegm which runs down into them from the head. They will be flabby in their appearance (or *physique* - complexion) and poor in eating and drinking. Inhabitants with a weak head will hardly be good drinkers, because drunkenness causes them even more disagreeable after-effects. We will find in this city the following endemic diseases, especially among women: they will particularly suffer from fluxes or haemorrhages; and there will be sterility of the highest rate among them, because of their diseases and 'frequent abortions'. Cities facing the cold winds on the contrary, which blow between the summer sunset and the summer dawn, are a different case. If the winds are persistent and there are shelters from the southern hot winds, they will show following characteristics: hard, cold and sweet waters; the men will be sinewy and tense, thin and dry and 'their digestive organs are costive and hard in their lower parts'[13]. These characteristics will make people melancholic or bilious and their heads healthy and dry (deprived of liquids). But they will suffer from frequent pleurisies, among other diseases, which is also stated by Francesco di Giorgio Martini in his evidently Vitruvian *Trattato d'architettura*[14]. Vitruvius however - surprisingly - does not tell us anything about the pernicious effects of the wind *Auster*, though Hippocrates considers it hurtful, whereas again Martini states the same as Hippocrates in *Trattato*: 'Li venti australi molto perniziosi et infermi sono'[15].

But according to Hippocrates[16] in such cities as facing the west, and sheltered from winds blowing from the east, and which the hot winds and the cold winds from the north scarcely touch, the inhabitants find themselves in a very unhealthy condition: as 'the waters are not clear', 'they are likely to be pale and sickly'[17]. And 'the winds that do prevail insistently are very rainy, such being the nature of westerly winds'. As it is still well known today, bad weather reaches all the Mediterranean areas, as an ancient Italian saying states ('da Occidente') from west and this must have been the case in antiquity too: large amounts of wet air enter into the Mediterranean by passing over the Iberian peninsula and moving east. This applied to Attica, and the Ionian islands as well, where Hippocrates was born, to the Asian coast where the Greeks founded powerful cities, and of course to the Tyrrhenian coast, where they also settled from 800 BC on and where most of the cities had to face, of course, the 'dangerous' western atmospheric perturbations[18].

In chapter XXIII Hippocrates[19] expresses, if any, a preference for territories which are open, rough, bare, oppressed by hard winters but burnt by the rays of the sun, etc.: there 'you will see men who are hard, lean, well articulated, well-braced and hairy; such natures will be found energetic, vigilant stubborn and independent' and 'of more than average intelligence'[20]. The dryness of such territories seems to him at least a guarantee for good health (if not for more).

To draw some conclusions, the erratic material of Hippocrates's extant writings, however, clearly shows that he generally considered the aggression of winds on cities as a threat to their survival, or at least to their good health. There seems to be basically no wind exposure which he would ever consider an advantage for human settlements: all winds are harmful. The location of the first settlement Megarís, later of downtown, on the shore of a rather enclosed bay, with rather high mountains on the main southern side (Mount Faito - Sorrento peninsula, 1131 metres; Capri, 590 metres) and with fairly high hills protecting the city from north and northwest likewise (fig. 2[21]), immediately north of the original city walls perimeter, could be considered favourable. But we also know that the original, apparently earliest (mid-eighth-century) foundation of the Greeks on that same coast was Kyme, a city on a high hill facing west; therefore it is hard to say, whether principles of hygiene governed part of this early foundation (or similarly early ones). Only the case of the latter's offspring city, Naples, seems to fit the idea of being sheltered from the winds. Evidently the downtown shape presents itself as a multiply protected inclined high plain, sloping towards south-southeast and, correspondingly, to the Notos and Euros winds (south and southeast). Its borders are characterised by precipices, which are still preserved in the drastic hill steps located between the historical centre and the surrounding plain or the sea.

The area immediately in the vicinity of the harbour was as usual not included in the early colony; which is very important because Aristotle also stresses the need, for any state, of 'harbours conveniently situated with regard to the city, so as not to form part of

the same town and yet not to be too far off'. In fact a harbour zone which today finds itself very much in the centre of downtown, Piazza Nicola Amore, was surely a sacred area of the harbour[22], although eccentric to the city; maybe a *temenos*, from a later period (Temple of the Isolympic Gods), probably dated from the fourth century. Here, around the year 2 BC, a larger portico had replaced the dock-like structures which had been used earlier as landing facilities for deliveries of merchandise sent to and from the manufactures of the area; this portico was then one of the major *gymnasia* witnessed by archaeological evidence.

The ancient Greek walls drew the contours of the city already in a very exact, approximately rectangular way, and thus it had to remain just the same for most of its history: therefore it is understandable that they were partially reused by the Aragonese refurbishment, or expansion, of bulwarks and walls, as George Hersey precisely demonstrated over thirty years ago. The superior *platea*, Via Sapienza-Via Anticaglia and Santi Apostoli, the inferior one (San Biagio dei Librai and Vicaria Vecchia) and the central one (Via dei Tribunali) cross the city in the W-E axis (actually ENE-WSW) and are 185 metres (= one *stadion*) distant from one another. The *vici* cut in approximately the N-S direction 37 metres apart from one another: each block is in fact a precise quadrangle with the proportion of 1:5. We get a glimpse of the territorial situation, with its complex orography, from many historical views of the city and from a fresco in Anguillara Sabazia[23]. Or again from Julius Beloch's map, showing most of the orography (fig. 2). As it could also be shown after excavations in archaic Priene in Asia Minor[24], the orthogonal plan could be chosen independent of the flatness of the territory and even of an approximately regular form of the city perimeter: Priene developed on a terraced space as well, like the later Akragas (Sicily, founded 582 BC)[25]. Shortly after the foundation of Naples, even Aristotle would express a preference for terraced or sloping grounds, 'having regard to [...] health (for cities whose site slopes east or towards the breezes that blow from the sunrise are more healthy, and in the second degree those that face away from the north wind [...]); and among the remaining considerations, a sloping site is favourable both for political and for military purposes'[26]. Furthermore, 'a citadel city is suitable for oligarchy and monarchy, and a level site for democracy'[27], which also applies to the New City as opposed to 'tyrannical' Kyme. Aristotle paid attention to city walls as well, 'suitable both in regard

Figure 1. Reconstruction of the Aragonese walls in Naples. (source: Leonardo di Mauro, *Mura e torri di Napoli*, exhib. catalogue - Napoli, Castelnuovo, maggio-giugno 1997, ed. L. Di Mauro, (Napoli: Electa Napoli, 1997))

to the adornment of the city and in respect of military requirements, especially the new devices recently invented'[28]. The walls of the Greek classical period also used to include some agriculturally useful territory within the city. This applies to the Aragonese plan as well.

WHOSE IDEAS?

Whose intentions could have been expressed through the Quattrocento debates or their elaboration? In part they can reflect those of the humanists who guided the architects, such as Fra' Giocondo, himself an expert of ancient theories and one of the best translators and interpreters of inscriptions, manuscripts and texts[29]. Francesco di Giorgio and Giocondo were guided through the Campanian remains, partly undergoing excavations already (beside Kyme even Paestum was preserved and mentioned by the humanist Pietro Summonte, an acquaintance of Giocondo[30]). In fact the latter could produce his good Vitruvius edition on the basis of an intense intellectual exchange with Martini. According to Maltese, Giocondo, a good Latinist, might have even offered to Martini a 'reduced' Vitruvius, in bits and pieces, for the use of an 'illiterate' artist[31].

Figure 2. Julius Beloch, Naples map, nineteenth century and superimposed Greek, also showing the highest of the surrounding hills. On the bottom right: reconstruction of the shore line from the Greek period on. Triangles: Roman ruins located outside the Greek walls; all numbers are underground stations. (source: Vittoria Carsana et. al., "Evoluzione del paesaggio costiero tra Parthenope e Neapolis," *Méditerranée* 1, n° 112 (2009), 14-22)

Fra' Giocondo had interestingly gained himself an incontestable reputation as a city wall builder, which he would later enjoy in his appointment for Treviso, following his time at the Neapolitan court[32].

The refurbishment of the city walls (Fig. 1) implied at the same time the deliberate re-use of the ancient ones (which is not obvious), with an evident intention to exploit their possibilities and potentials. In terms of protection from the wind, it intentionally reproduced the same conditions of the fifth century BC. Even the small extension of the city towards the west, the port and the royal palace, was characterised by shelter from the northwestern winds, due to the high hill of Vomero (Fig. 2) just behind the new district. At the same time, the refurbishment was an occasion to cleverly rethink the function and plan the immediate outskirts of the city, which had inevitably expanded several hundred metres outside the eastern wall, towards the countryside and the roads leading to the cities of Capua and Nola. The harbour area was kept topographically separated from the city completely according to Aristotelian principles, and was even divided from it by the city walls. Large squares got sited immediately near the renovated walls: in the west, one of them was the monumental Largo di Monteoliveto with the church Sant'Anna, in which no less than the portraits of two princes of Aragon, the future king Alfonso I and his father Ferdinando I were sculpted in 1492. As Hersey wrote, as a result of the works for the magnificent wall building campaign, which lasted from 1484 to 1485[33], 'many new houses and streets were built', in the neighbourhood of Porta Capuana and near the Piazza Formello, the churches of San Giovanni a Carbonara, San Martino, San Benedetto and San Pietro ad Aram got included inside the new circuit. Piazza Forcella became the Nolan Square, a sort of entrance to the decorative, lavish and recently refurbished Nolan Gate.

Before concluding, we should also recall that there was a king involved in the project, Alfonso II of Aragon. The entire territory (and public health) of his capital were at stake, whether as memory of antiquity and its ideals or not. It is no coincidence that, according to Summonte, Alfonso should effect the 'più necta et polita città' in Europe (! neatest and cleanest, literally: grinded, '(aliarum pace dixerim) di tutta Europa') through his urban reform.

In fact there are wind roses not only in all the Vitruvian editions and copies of this period, but also in a manuscript treatise by Francesco di Giorgio, the *Magliabechiano II. I. 141* in Florence, f. 5[34]; this specific manuscript and its copy in Naples were finished by 1492, and Giocondo was requested to realise another copy of it, on behalf of the Aragonese court, as the payments of the local *tesoreria* witness[35]. There are therefore at least two pieces of evidence regarding concerns about urban health in the context of the Neapolitan theoreticians in the 1490s. Aristotle, again, in his *Meteorologica*, had discussed the wind rose[36]. On the other hand, there is no evidence yet of Giocondo's participation in a new urban plan[37]. He delivered drawings for a geometry treatise, which only might have been used for city plan schemes[38]. Summonte, moreover, in his letter to Marcantonio Michiel mentions him, referring to the Poggioreale palace[39], where he was asked to plan the water supplies of the entire area. Martini was similarly interested in the characteristics of water wells in Campania: in San Germano he praises the wells of sulphur waters[40].

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Endnotes

1. Strabo, *Geographika*, which I consult in the most recent Italian edition, translator and editor: Nicola Biffi, Bari: Edipuglia, 2006, 31: Naples 'più tardi ricevette un nucleo di coloni calcidesi e alcuni coloni provenienti da Pithecussa e da Atene'. See also Julius Beloch, *Le fonti di Strabone nella descrizione della Campania* (Roma: Salviucci, 1882).

2. Bruno D'Agostino, Daniela Giampaola, "Osservazioni storiche e archeologiche sulla fondazione di Neapolis", in W. V. Harris, E. Lo Cascio (eds.), *Noctes Campanae, Studi di storia antica e archeologia dell'Italia preromana e romana in memoria di Martin W. Frederiksen* (Napoli: Luciano, 2005), 49-72, 63: 'origine attica'.

3. Alfonso Mele, *Il commercio greco arcaico* (Napoli: Jean Bérard, 1979), 32.

4. Vitruvius, *De architectura libri decem* (Venezia: De Tridino, 1511), 12. Online: http://digi.ub.uni-heidelberg.de/diglit/vitruvius1511

5. According to Vincenzo Fontana, *Fra' Giocondo Architetto* (Vicenza: N. Pozza, 1988), 27, the tables of Giocondo's Vitruvius distinguish platea (Greek: *plateía*) from angiportus or vicus (Greek: *stenóporon*), 'lo stesso autore latino distaccandosi dall'uso romano del suo tempo', which with Vitruvius did not essentially distinguish between them (Lat.: *decumani-cardines*).

6. And in Venice later, 1526 by Aldo Manuzio, then in Basle 1529 both in original Greek and Latin, translated by Janus Cornaro (= Simon Haynpol; 1500 Zwickau- † 1558 Jena); corrected: *ΙΠΠΟΚΡΑΤΟΥ ΠΕΡΙ ΑΕΡΩΝ ΥΔΑΤΩΝ ΤΟΠΩΝ. ΠΕΡΙ ΦΥΣΩΝ. Hippocratis Coi De aëre, aquis, & locis libellus*; and the *Hippocratis Coi ... Opera quae ad nos extant omnia*, Venice ap. Erasmum, 1546; then in Paris, Gorbin, 1557, *...liber olim mancus, nunc integer: qui Galeno, De habitationibus et aquis, et temporibus et regionibus inscribitur: ab Adriano Alemano ...illustratus* (with commentary). Or later in Lyon, apud Antonio Vincenti 1562, 83 ff.

7. The Campanian case of the healer Saint Felix Medicus, in Nola in the fourth century, witnesses to this as well. See on this subject: *Wunderheilungen in der Antike*, exhib. catal., Humboldt-Universität zu Berlin, ed. by Tomas Lehmann (Oberhausen: Athena, 2006).

8. Giampaola-D'Agostino, "Osservazioni,"2005, 49: the earliest date for findings in the city necropolis near Castel Capuano, but also the possible date of the expulsion of a nucleus of Cymaean aristocracy by its king Aristodemos.

9. Frank Kolb, *Die Stadt im Altertum* (München: Beck, 1984), 102.

10. According to Ettore Lepore, "Napoli Greco-romana: La vita politica e sociale," in *Storia di Napoli*, vol. 1 (Napoli: Società Editrice Storia di Napoli, 1967), 139-42.

11. This identification went back already to Flavio Giordano (a fifteenth-century lawyer, author of a manuscript city guide; excavations in this area have confirmed this hypothesis).

12. Hippocrates, *Ancient Medicine. Airs, Waters, Places. Epidemics 1 and 3. The Oath. Precepts. Nutriment*, (Cambridge, Mass.: Harvard University Press, 1962), 75.

13. Hippocrates, *Airs, Waters, Places*, 1962, 77.

14. Francesco di Giorgio Martini, repr. in C. Maltese, *Trattati di architettura ingegneria e arte militare*, ed. Corrado Maltese with transcription by Liliana Maltese Degrassi, 2 vols, (Milano: Polifilo, 1967), II, 308.

15. Maltese (ed.), *Trattati*, 1967, II, 308: 'perniziosi alli omini, e non solo nelle parti d'Italia, ma quasi generalmente per tutto, altro dire non si può se non che quelli dal mare oceano, overo dalla Barbaría [i.e.: northern Africa excluding Egypt]', or in general from the Mediterranean, transport a lot of dangerous vapours, 'overo dal mare Mediterraneo non piccola quantità di maligni vapori seco condichino'. The south wind, 'austro [...] causa diverse egritudini, così borrea in le aere suttili molte pleuresi e catarri discendenti produce'.

16. Hippocrates, *Airs, Waters, Places*, 1962, 83 (Chapter VI.).

17. And furthermore 'have deep, hoarse voices, because of the athmosphere, since it is usually impure and unhealthy in such places'.

18. See, with regard to the effects of winds in modern urban societies: Qing Li, 'Effect of forest bathing trips on human immune function', *Environ Health* 15 (2010), 9-17.

19. Hippocrates, *Airs, Waters, Places*, 1962, 137.

20. This sounds to me like a typical description of the landscape of an Aegean island or its coasts, and of course its Greek inhabitants.

21. Julius Beloch, *Campanien, Geschichte und Topographie des antiken Neapel und seiner Umgebung*, (Breslau: Morgenstern, 1890), final plate, not numbered.

22. Daniela Giampaola, "Il paesaggio costiero di Neapolis tra Greci e Bizantini," in *Napoli la città e il mare. Piazza Bovio: tra Romani e Bizantini* (Napoli: Electa, 2010), 17-26, 18.

23. Image from Daniela Giampaola, "Il teatro e la città storia e trasformazioni di un comparto urbano," in Ida Baldassarre, *Il teatro di Neapolis, scavo e recupero urbano* (Napoli: Università Orientale, 2010), 21-34, fig. 10. But compare also later maps by: Lafréry 1566; Bertelli 1570; Hogenberg 1572.

24. Joachim Raeder, *Priene. Funde aus einer griechischen Stadt* (Berlin: Gebr. Mann, 1983).

25. A complete map in Jos De Waele, *Acragas, die historische Topographie des griechischen Akragas auf Sizilien* (,s-Gravenhage: Staatsuitgeverij, 1971).

26. Aristotle, *Politik*, in *Werke in deutscher Übersetzung*, ed. Ernst Grumach, (Berlin: Akademie Verlag, 1967), vol. 9 (1330a35) 585.

27. Aristotle, *Politik*, 1967, (1330b20), 587.

28. Aristotle, *Politik,* 1967 (1331a9), 591. See also Kolb, *Stadt im Altertum*, 1984, 128, 'Befestigungsmauern sollen schmücken und schützen'.

29. The results of his archaeological investigations have been known since at least Matvej Gukovskij, "Ritrovamento dei tre volumi di disegni attribuiti a Fra' Giocondo," *Italia medievale ed umanistica* VI (1963), 263-269. And Maria Mikhailova, "Bridges of Ancient Rome: Drawings in the Hermitage Ascribed to Fra' Giocondo," *The Art Bulletin* LII (1970), 250-264.

30. Roberto Pane, *Il Rinascimento nell'Italia meridionale* (Milano: Edizioni di Comunità, 1975), 63-71, 70: 'In Pesto […] le mura antiche sono intiere, per una gran parte con le torri, e dentro sono tre tempi, di opera dorica. Vedesi poco lontano da Pesto la vetusta città Velia' (writing in 1524); Elea-Velia was thus known already.

31. As proposed by Vincenzo Fontana, "Fra' Giocondo e l'antico," in Gianfranco Spagnesi (ed.), *Antonio da Sangallo il Giovane: la vita e l'opera* (Roma: Centro di Studi per la Storia dell'Architettura, 1986), 423-444, 429 on the score of Maltese I, XXXI.

32. The map is in a manuscript, early sixteenth century, reproduced by Fontana (1988), fig. 83.

33. George Hersey, *Alfonso II and the Artistic Renewal of Naples* (New Haven: Yale University Press, 1969), 44 and 46.

34. Martini (1967) I, f. 5; and commentary LX-LXII.

35. Fontana, *Fra' Giocondo*, 1988, 31; Erasmo Percopo, "Nuovi documenti sugli scritti ed artisti dei tempi aragonesi," *Archivio storico per le provincie napoletane*, XIX (1894), 380-382, 380, and XX (1895), 317-326. The Florentine *Magliabechiano* is a copy dated around 1492, whereas a 'testo base' of it was in Naples, and in Naples itself a *bella copia* was transcribed by Fra' Giocondo (but lost, 'oggi scomparsa e che comunque ignoriamo'): Martini (1967) I, LXI.

36. Aristotle, *Meteorologica*, in *Werke in deutscher Übersetzung*, ed. Ernst Grumach, Bd. 12, Teil 1, (Berlin: Akademie Verlag, 1970), 60.

37. On this problem see: Enrico Guidoni, "La scala a chiocciola di Fra' Giocondo (ma l'urbanistica rinascimentale, Napoli, Vitruvio e l'utopia non c'entrano)," *Storia della città*, 12 (1987), 44, 3-5.

38. These are Uffizi 3936A-3943v, and outside of the series 4123A (Fontana, "Fra' Giocondo,"1986, 427).

39. Pane, *Il Rinascimento*, 1975, 70: 'e sopra tutti ebbe [Alfonso] qua [Poggioreale] il bono e singulare Fra' Iocundo'.

40. Meaning either the ancient name of Cassino, or San Gennaro (misspelled by the copist) Vesuviano, on Vesuvius: Martini (1967) II, 307.

EARLY ORTHOGONAL SETTLEMENTS IN THE WESTERN MEDITERRANEAN AND THE CULTURE-HISTORY PARADIGM

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WEST MEETS EAST:

THE HISTORIOGRAPHY OF PLANNED SETTLEMENT IN THE ARCHAIC MEDITERRANEAN

The inhabitants of Abdera in Thrace constituted in Western history one of the first groups to which was attributed a collective reputation for being stupid and dumb—an image re-discovered in Europe through the satire of Christoph Martin Wieland (1733-1813).[1] In the opening pages of his admirable work *Die Abderiten...*, Wieland narrates an attempt from Klazomenai, of the 12 Ionian cities, at settling in the eponymous native Thracian settlement between 656 and 652 BC.[2] (Fig. 1) The attempt is traditionally recorded as unsuccessful, as 'barbarian' Thracians did not want emergent cities nearby. Fleeing the Ionian conquest of Cyrus the Great in 545 BC, residents from Teos are believed to have settled in this unfinished and uninhabited settlement area a century later. They defended themselves so successfully against the 'barbarians' that they, instead of the Thracians, came to be known as the Abderites in history. However, instead of the wise social character they carried from Athens to Ionia and then to Thrace, their nature changed to the one portrayed by Wieland as stupid and dumb, following the much-criticised model of European identity construction against 'the barbarian other'.[3]
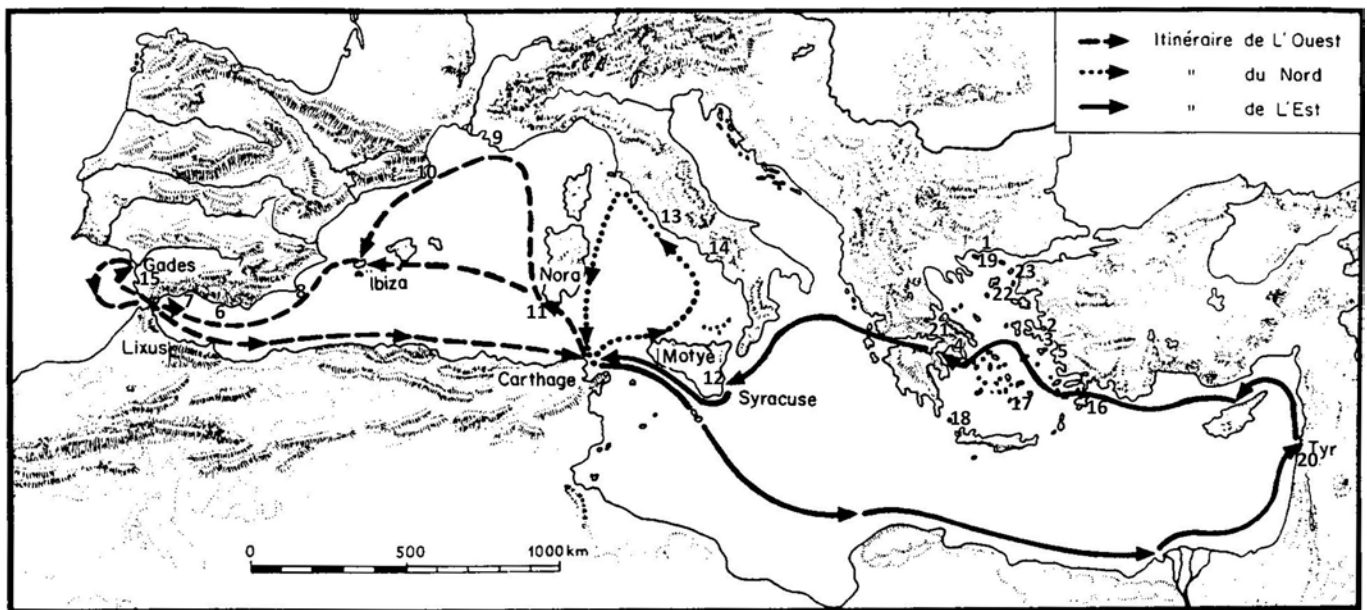
Figure 1. Location of the major settlements in the order of their reference in the text: 1. Eastern Abdera, 2. Klazomenai, 3. Teos, 4. Athens, 5. Priene, 6. Western Abdera, 7. Malaga, 8. Cartagena, 9. Marseille, 10. Empúries, 11. Sulcis, 12. Megara Hyblaea, 13. Rome, 14. Naples, 15. Doña Blanca, 16. Rhodes, 17. Thera, 18. Kythera, 19. Thasos, 20. Al Mina, 21. Kabeirion, 22. Lemnos, 23. Samothrace. (source: Base map from Colette Picard, "Les navigations de Carthage ver l'Ouest. Carthage et le pays de Tarsis aux VIIe-VIe siècles," in Hans Georg Niemeyer (ed.), *Phönizier im Westen: die Beiträge des Internationalen Symposiums über "Die phönizische Expansion im westlichen Mittelmeerraum" in Köln vom 24. bis 27. April 1979* (Mainz am Rhein: von Zabern, Madrider Beiträge 8, 1982), 170, fig.1 Les itinéraires phéniciens de la Méditerranée.

The appearance of the tumulus type of burials in the Archaic cemetery of Abdera, dating to the seventh and the early sixth century BC, has been among the material evidence for a settlement from Teos where some twelve tumuli mark the Archaic necropolis. This contemporary inference is based on the same hypothesis as Wieland's: that settlers from Teos would normally continue, in their new homeland, with their earlier cultural traits that would, thus, be recognizable in our day with their trace in the material culture. In a similar line of thought, Graham identifies the *prostas* type of fourth-century BC houses at Abdera, in whose layout

the short Ionic foot unit was used, as belonging to the Priene type, and explains its occurrence by Abdera's connection with the Ionian cities of Asia Minor.[4] The reconstruction is based on housing remains unearthed in the centre of the later settlement area in the south of Abdera, which importantly suggested a grid-iron layout that extended to the whole settlement area,[5] which was walled in the mid-seventh century BC.[6]

Our century finds a developed theoretical and methodological background for such identification of ethnic identity with material culture in the *Kultur-Gruppe* concept of the settlement archaeology approach authored by the German nationalist Gustav Kossinna (1858-1931).[7] His influential work later developed into the neo-Marxist socio-historical evolution theory of his student, Vere Gordon Childe (1892-1957).[8] This theory importantly suggested two revolutions along the evolutionary path from 'barbarism' to 'civilization', the Neolithic and the urban revolutions, the latter producing an urban lifestyle which 'has long been equated with the essence of being civilized'.[9] Childe started out with a largely linguistic characterisation of the ethnic equivalent of an archaeological culture to trace population movements along this evolutionary trajectory. This line of thought would connect the Thracian Abdera with a second Abdera, corresponding to modern Adra between Malaga and Cartagena along the southern Mediterranean coast of Spain, where we may then expect to find an archaeological culture similar to the one carried over to the Thracian Abdera from the homeland in Asia Minor.

Indeed, Greek presence is well-evidenced in this western part of the Mediterranean, especially in settlements founded from Massalia (modern Marseille) which was itself founded by the Phocaeans from western Asia Minor in the mid-sixth century BC.[10] An example is Ampurias (modern Empúries) to the north of Costa Brava, Barcelona. Ampurias consists of remains from a Roman settlement with grid plan next to an old native settlement and a new Greek one. The fifth-century BC remains from the latter have an orthogonality that has been accepted among the distinguishing characteristics of Greek settlements which co-existed with Phoenician ones in this part of the Mediterranean. Important in this regard are the Greek geographer Strabo's (64 BC– 23 AD) remarks about a certain Mainaka/Mainake as 'the most westerly Phocaean colony in the Mediterranean, and this would be supported by the regular or "Greek" urban layout, in contrast to the Phoenician, that is to say irregular plan of neighbouring Malaka'.[11]

Dommelen observes how the former type of settlements are generally taken as urban in character from their foundation onwards, thus introducing an urban lifestyle, and therefore civilization, into the western part of the Mediterranean.[12] The author explains such association of Greek settlement in the western Mediterranean with civilization by the Eurocentric conception of civilization in western thinking, especially in the nineteenth century when European colonization was defined as a *mission civilisatrice*, with Greece as the 'birthplace of the European spirit'.[13] Later scholarship has taken regular land divisions and the grid plan, which appear as consistent aspects of Greek settlements in South Italy and Sicily, as the main indicators of that spirit in material culture for attributing urban status to these settlements, thus associating them with the idea of civilization. In the specific context of the Iberian Peninsula, Aubet attributes the general adherence to the distinction made by Strabo between 'planned' Greek and 'irregular' Phoenician settlement layouts to an influential Hellenocentric school of traditional text-based historiography led by Adolf Schulten (1870-1960) in the absence of archaeological evidence for Greek settlement south of Ampurias.[14]

Fumadó Ortega attributes this method of distinguishing Greek 'urban' settlements from Phoenician/Punic 'trading posts' on the basis of their orthogonality to an Orientalist and Classicist prejudice concerning a lesser capacity in the peoples of the East for rationalizing the urban and architectural space which are, instead, accepted as the exclusive prerogative of the Greco-Roman civilization.[15] The author cites the British historian and archaeologist Francis John Haverfield (1860–1919) who associates straight lines to logical and formal thinking as the mark dividing 'even the simplest civilization from barbarism. The savage, inconsistent in his moral life, is equally inconsistent, equally unable to "keep straight", in his house-building and his road-making'.[16] Among his examples, Haverfield compares a proverbially direct Roman road, whose few curves were not seldom formed by straight lines joined together, with a British road that curled as fancy dictated, following contours of the land, and only by chance stumbled briefly into straightness.[17] So archaeological remains that show a long straight line or several correctly drawn right angles surely dated from a civilized age.

Importantly in this regard, Dommelen cites, among other examples, the Phoenician settlement at Sulcis on Sardinia for its dense fabric consisting of two streets, intersecting at a right angle and lined by tightly packed houses with several rooms as the main morphological characteristics that give the settlement an 'urban appearance', as in Toscanos near Malaga from at least the mid-eighth century BC onwards.[18] Additional 'urban' features of the latter settlement are an enclosing defensive ditch and an industrial periphery, which are all related to the Levantine tradition of urban architecture and layout.[19] The author importantly adds the *tophet* to the list of indicators of an urban lifestyle as it documents religion institutionalized in the form of an open-air sanctuary unique to Phoenician settlements in the central Mediterranean, consisting of an enclosure with cremation urns containing remains of stillborn babies, infants and animals.

In some Greek settlements of the same area such as Megara Hyblaea, on the other hand, the plots of land divided by the grid plan were so large as to suggest a combination of housing with cultivation.[20] In a way reversing the 'urban' Greek vs. 'travelling' Phoenician dichotomy, the author contrasts this rather 'un-urban' appearance with the 'more urban' Phoenician settlements in the central Mediterranean, explaining the former by 'the simple reason that monumental architecture and densely built *insulae* were just emerging or did not exist at all in eighth-century Greece and Ionia: the Greek settlers who arrived in Sicily and South Italy simply did not come from a background that was as urbanized as the Levant'.[21] On the other hand, the 'more urban' appearance of the Phoenician settlements in coastal southern Spain and on the central Mediterranean islands may not be also taken directly as a reflection, in the material record, of their urban character due to the difference in their context from 'the Levantine setting of urban centres that were well integrated in regional settlement systems'.[22] The author takes their 'urban appearance' as signifying the presence of Phoenician or Levantine settlers who simply brought with them the architectural and settlement traditions characterizing the urban lifestyle in their homeland.

There would appear a significant exception to these general observations about archaic Greek and Phoenician settlement in the central and western Mediterranean: Carthage, the only western Mediterranean Phoenician settlement that ranks as a 'city', according to Niemeyer[23] and Lancel[24] among others, for which a material indication is the famous Salammbô *tophet*,[25] the best-known example of this sanctuary type.

EAST MEETS WEST:
THE ARCHAEOLOGY OF PLANNED ARCHAIC SETTLEMENTS IN THE MEDITERRANEAN

Salammbô (1863) is also a sensational historic novel by Gustave Flaubert (1821-1880) named after the peaceful and confused daughter of the aristocratic Carthaginian general Hamilcar Barca, a virgin princess of Tanit.[26] The novel opens with a feast in the luxurious urban mansion of Hamilcar where the destruction of the tastefully designed garden in front of the terrified eyes of Salammbô starts the revolt of the mercenaries after fighting for Carthage in the First Punic War with Rome. In the later pages of the novel, this 'civilized' image of Carthage is gradually destroyed through striking descriptions of Carthaginian cruelty and violence that terrifies the supposedly 'barbarian' mercenaries who witness crucified lions and especially the ceremony of child sacrifice. As importantly underlined by Toumayan, the result is 'a rigorous equivalency or symmetry of the Carthaginians and of the mercenaries'[27] instead of a blurring of the distinction between 'civilization' and 'barbarism' or a glorification of the Barbarians. Thanks to the setting of the novel in the period of the Punic Wars, this result may be extended to the 'civilized' Rome and its 'Oriental other' Carthage as transposed and translated into victorious Rome's (and implicitly the West's) metanarrative 'to question the entire metaphysical economy (of civilization) on which such distinctions rest'.[28] The archaeological remains from Carthage function in a similar way for the architectural and urban dichotomies (of a civilized/planned Greek grid city vs. barbarian/unplanned Phoenician trading post, etc.) produced by the same metanarrative.

Razed to the ground and ploughed over after being evacuated and set on fire in 146 BC with the orders of the Roman general Scipio Africanus the Younger (185-129 BC) in the Third Punic War, a short-lived Roman *colonia Iunonia* was established in Carthage in 122 BC, and named after the Latin name for Tanit, *Iuno caelestis*. The new Carthage founded on the same spot in 49-44 BC is among the examples cited by Haverfield for Late Republican and Early Imperial Roman town-planning, as distinguishing itself from other towns by its very long and narrow oblong *insulae*, finding its only close parallel in Naples.[29] According to the author, due to the Greek origin and character of Naples, these narrow oblongs had been supposed to represent a Greek arrangement, although they do not correspond to anything that is known in the Greek lands, either in the Hellenistic (which he calls Macedonian) or in any earlier period.[30] So, dating from the Caesarean or Augustan period at the latest, the case of Roman Carthage forms an important abnormality for Haverfield, for which he mentions the physical character of the site's steep downhill slope towards the coast as one of the probable reasons.[31]

Later German excavations revealed that the *insulae* of Roman Carthage overlay and follow roughly the size and exactly the orientation of a pre-existing Punic orthogonal grid.[32] This orientation 'was determined by a scheme set out in the Archaic Punic period, following the line of the coast in an orthogonal plan which contrasts with the irregular, adaptable, fan-like division of the hills in the Punic period'.[33] During the Augustan re-foundation, this coastal alignment was extended onto the entire urban area by positioning the *groma* and the *decumanus maximus* axis in alignment with an urban axis in the Punic layout which intersected with the lower orthogonal arrangement of the coastal plain at right angles, determining also the orientation of the Punic buildings since the fifth century BC. The Punic urban layout, however, had a second system of parallel streets adapted to the terrain as were Haverfield's British roads, which 'vanished without a trace in favour of a strictly enforced master-plan'.[34]

Further research on the rural and urban centuriations of Roman Carthage led some scholars to argue that they were deliberately oriented to sunrise at the summer solstice, out of respect for the power of the Punic goddess Tanit (or Astarte) in the form of

the Roman Juno Caelestis.[35] Citing Hyginus, Trousset notes the rarity of this orientation, corresponding also to the sunset at the summer solstice, in the Roman urban grid as the Romans are known to have regarded the orientation of the sunset as the most dangerous possible.[36] Such a symbolic reference to a destroyed predecessor is noteworthy, especially in the light of Scipio's *devotio* of 146 BC that prohibited re-settlement over its obliterated remains. As to the dating of those remains themselves:

> an archaic residential quarter where several houses, apparently organized in some sort of insula, had been built wall to wall between parallel streets or lanes as early as the late eighth century BC. ... From the very beginning there seems to have existed a kind of land register and it is remarkable – even if a typical urban feature – how the boundaries of the property as well as the street grid had been maintained for centuries. [37]

Additionally, the sloping Mago and Byrsa districts of pre-Roman Carthage also feature rectangular building blocks in a grid-iron plan, which are argued to have developed from orthogonally-planned large mansions that replaced the Archaic industrial quarter in the area from the middle of the fifth century BC onwards.[38] In addition to the above-mentioned Sulcis on Sardinia and Toscanos near Malaga along the Mediterranean coastline of Andalusia, such large and luxurious dwellings in a uniform orientation and along a regular pattern of streets indicating a careful organization of the inhabited space through initial town planning were attested in the Phoenician settlements dating to the second half of the eighth century BC at Morro de Mezquitilla, Chorreras, Castillo de Doña Blanca and Cerro del Villar.[39] The latter in the mouth of the river Guadalhorce in the bay of Malaga is characterized by 'its regular layout of large rectangular buildings marking out streets crossing each other at right angles surrounded by workshops, dwellings, and open spaces, striking examples of which are porticoed streets with shops'.[40] These characteristics support Aubet's identification of the site with the above-mentioned Mainaka/Mainake but as a Phoenician settlement, which is archaeologically attested in addition to the dedication of the island to Noctiluca, the moon in 'a Latin transcription of the Dea Caelestis who appeared in the Iberian peninsula as a late assimilation of Tanit or Astarte'.[41] According to Aubet, the Greek association since Strabo has no solid foundation except in the ancient and modern Hellenocentric bias about archaic settlement regularity.

When taken together, these examples dissociate Greek settlement and the grid plan in the ancient central and western Mediterranean, calling for further research on Phoenician settlement types, which may also have implications for the settlement history of the eastern Mediterranean. A starting observation in this respect may be the location of all the mentioned Andalusian settlements at the mouth of river valleys, like Montilla, Cerro del Prado, Baria-Villaricos, Almuñecar-Sexi, and Abdera.[42] In this way, this brief survey on early orthogonal settlements, which started in a Northern Thracian Abdera, concludes in a western Mediterranean Abdera.

THE AEGEAN BETWEEN THE EAST AND THE WEST

Contrary to the possibility suggested earlier on the basis of linguistic parallelism for a Greek foundation, the Andalusia Autonomous Government-supported Adra cultural heritage recuperation project website cites the first century BC historians Artemidoros of Ephesos and Strabon among the authors who refer to the Phoenician foundation of the western Abdera in the eighth century BC.[43] In fact, while attempting to interpret the Abdera foundations myth, Xanthopoulou reverses the linguistic evidence by mentioning (though without suggesting) the possibility of an attempt by Phoenicians to develop an emporium at the Thracian Abdera.[44] This takes us back to our starting evidence, of tumulus burials and a grid plan, as the material indication of settlement from the western Asia Minor at the Thracian Abdera. In addition to the above examples evidencing a planned layout pre-dating that in the Greek settlements in the same area, the necropolis of Las Cumbres associated with Castillo de Doña Blanca has the earliest tumulus type of burials dating to the end of the eighth century BC with grave-goods including Phoenician items.[45] There are other tumulus necropoleis at various locations in the area along the Andalusian coast.

In fact, Coldstream begins to trace the modern journey of the idea of Phoenician settlement in the Aegean from an uncritical nineteenth-century belief in ancient Greek authors who refer to permanent Phoenician settlements on various Aegean islands (Rhodes, Thera, Thasos and Kythera among others) from Herodotus onwards to explain any seemingly oriental features in early Aegean art.[46] The eventual Hellenocentric reversal culminated in the 1960s after the discovery of Al Mina, with the argument that 'after the Greek Dark Age, the recovery of contact with the Orient should be attributed almost entirely to the initiative of the Greeks [settled in emporia] in the Levant'. [47] The author himself is of the opinion 'that nowhere in the Aegean did the Phoenicians form a separate community; on the contrary they mixed quite freely with the locals'.[48] However, there do exist sanctuaries in the Aegean that are associated with Phoenicians, such as those dedicated to the mystery cult of the *Kabeirioi*, in Boeotia 8 km west of ancient Thebes on mainland Greece and on the islands of Lemnos and Samothrace across the Anatolian shore. 'The name comes from the Semitic root *kbr* meaning "mighty"'.[49] On the Island of Thasos, on the other hand, are remains from a sanctuary dedicated to the chief Phoenician divinity Melqart.

In addition to these sanctuaries, settlement remains on topographically similar island sites at the mouth of river valleys in western

Asia Minor encourage further search for archaeological evidence of Phoenician presence in the Aegean. However, until that endeavour is accomplished with success, this paper will remain a text-based exercise towards the removal of ideological biases, ancient and modern, hindering research on population movements in the ancient Mediterranean.

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UNIFYING THE COMMUNITY:
THE EVOLUTION OF CENTRALIZED SPACE IN HUNGARIAN CHURCH ARCHITECTURE 1900-2010

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The role of the German architectural theorist Leonhard Christoph Sturm (1669-1719) is determinant in the design of centralized churches from the eighteenth century onward – several research projects have shown the practicality of his approach in respect to liturgy and building constructions. The international impact of the ideal Greek-cross layout designs of Sturm is outstanding, and it deeply affected architectural practice in the Pannonian Basin. Significant research has dealt with the role of this theme in the history of eighteenth-century architecture; among the most recent research, the works of Harasimowicz[1] are prominent, since he extends the analysis of Sturm's impact to central Europe as well. Some effects appearing in Baroque architecture[2] have been pointed out by Hungarian researchers in their works connected with Protestant church architecture; concrete analyses concerned Late Baroque churches with a Greek-cross layout.[3] At the turn of the twentieth century, special significance was ascribed[4] to the architectural relations of this particular form of church, but the extension of the question of centralized spaces to the twentieth century truly came to the foreground just with the analysis of contemporary church architecture at the turn of the millennium. Although the significance of the centralized space emerged already because of the renewal of sacred space[5] already in the 1940s, the development was suppressed for decades by the political changes after 1945. Modern research also includes Catholic[6] churches next to Lutheran[7] and Calvinist[8] church architecture – pointing out the universal impact of the spatial arrangement.

Centralized spaces were common in church architecture in historic times. The easily comprehended and unified interior with its volume suggesting monumentality became a beloved church type of the second half of the nineteenth century. At the turn of the century, the centralized church applied in representative constructions of the Catholic Church was a citation of the Pantheon in Rome, symbolizing the thousand-year-old history of Hungarian Christianity. Besides the symbolic explanation, the urban situation of these churches also resulted in the adoption of this beloved form of space. The more significant public institutes were given separate building sites in the newly built up areas according to the practice of that era. Usually a momentous main road led to the site, or a public park created in front of them emphasized the scenographic aspects of the design. Churches were designed with centralized layouts not only because of the ideas represented by the spatial arrangement but in several cases by right of their urban settings.

In the southeast part of Budapest, the first plans for the Magyarok Nagyasszonya Church created for the new workers' residential district represented a variation with a row of domes (Ödön Lechner, 1914) but after construction was postponed due to World War I, a church of reduced size with a more rational floor plan came into existence based on a new competition in 1927 according to the plans of Jenő Kismarthy-Lechner. The entrance hall of the neoclassical church with Greek-cross layout opens up with an enormous row of pillars towards the park in front of it. The space unified under the overpowering dome is magnificent – the richly formed spatial element of the altar is placed opposite the entrance. While in the competition of 1914 only two plans (the one with two domes by Ödön Lechner, and the other octagonal by Iván Kotsis) adopted the Greek-cross layout arranged for an enormous central space, in the competition of 1927 the centralized spaces had become the preferred solution. The unified, non-hierarchical space symbolized the reform movement of the church based on communities. The competition in Székesfehérvár organized two years later represents the acceptance of this type of space. The plans of 1929 are predominantly centralized. In addition to the realised design of Gáspár Fábián, most of the runners up also used central spaces. The imprecise competition brief partly contributed to this: it emphasized the centralized composition by the urban situation of the site and required the enclosure of a cultural centre and parish at the side of the church. In this manner the formation of the building volume and the space covered by the dome demanded a more complex architectural composition.[9]

The complex functional floor plan was frequent among the Hungarian church constructions of the twentieth century. The newly built spiritual centres (significantly supported by the state) provided more functions (church, parsonage, office, congregational hall, school). The appearance of housing wings providing the financial background for the construction became more common – the Budapest-Kelenföld Calvinist church (1928-9) centre designed by István Medgyaszay (Benkó) is a fine example of this. The urban block was characterized by the tower on the main axis with a square-plan church behind it. The arrangement of

pews surrounds the communion table from three sides and the enormous choir orients the space to the pulpit on the axis. The community space was placed in the basement here due to the scarce space available. The composition represents the Plate III version of the work of Sturm's *Architectonisches Bedencken von der Protestantischen kleinen Kirchen Figur und Einrichtung* of 1712. Medgyaszay (who also designed Catholic churches) was familiar with the church architecture reforms of his era: the thin reinforced concrete membrane of the dome was applied for the first time in a church in Rárósmulyad (1908-10). The octagonal church quotes the intellectuality of the Arts and Crafts movement since it was composed as a total artistic unity where the floral motifs from vernacular life are recognizable by the users of the space.

The Calvinist church of Susán in Hódmezővásárhely (József Borsos, 1910) with a severely unified appearance applies folk ceramic art in a mixture of brick elements on the facade. The peculiarity of the spatial form arises from the urban situation, since the church stands among family houses at a street intersection. The form of space is unique, as the communion table and the pulpit are in the corner while the square space widens with wings surrounding the tower. This small church is the realization of Sturm's L-shaped ideal plans.

The Lutheran church of Gyula Sándy in Diósgyőr-Vasgyár (1935-8) with a Greek-cross layout and central dome (Fig. 1) or in Győr-Nádorváros (1941) applies progressive structural constructions. The temples of Bálint Szeghalmy can be considered as similarly rich engineering works where – behind the exterior surface of Roman style – beautiful, partly opened timberwork can be found above the octagonal space of the Calvinist church of Hévíz (1938-98).[10]

The early churches of Pál Szontágh can be characterized by the same intention of composing central spaces, but here we can find other interesting cultural references as well: the entrance of the churches in Borsodnádasd (1934) and Somsálybánya (1942) are created from the massive, wall-like body of the tower and the arched gate and bell-windows are sunk into it. So beyond the use of brick, here we can find connections to German Protestant building practice of the 1920s, reflecting the architecture of Otto Bartning, Dominikus Böhm and even that of the expressionists (Michael Kurz, Ernst and Günther Paulus, Hans Hertlein).[11]

Centralized space that placed the sacred acts in the focus of the congregation were also prevalent in the Catholic church at that time – the leaders of the Hungarian reform movement were familiar with the impact of Rudolf Schwarz[12] and with the idea of the 'Communio Raum'. However the usage of central spaces follows the traditional longitudinal principle – this conservative approach to space was more accepted, even if the form of the building was improved in several cases.

Figure 1. Diósgyőr-Vasgyár, Lutheran church (1935-8) Architect: Gyula Sándy. (source: Magyar Építészeti Múzeum ltsz. 2001.17.17.)

Before the beginning of World War II, centralized space had also appeared in the separate church type of memorial churches and cemetery chapels. The series of these monumental architectural works created from massive, geometric forms began with the memorial temple of Aladár Árkay in Mohács (1932-53). The construction works of the Church of the Holy Land in Budapest (1939) designed by Farkas Molnár was also set back by World War II: here the elliptic layout of the domed space would have been encircled by chapels presenting the sites of the Holy Land.

A significant political change occurred in Hungary after the end of World War II. Church construction was suspended for nearly 40 years – special exceptions were demonstrative manifestations of the state authority. Construction resumed in the years of the democratic transition of 1989. The creation of communities and the definition of their situation in the new world order became important for the people freed from long-term ideological suppression. Besides longitudinal plans, centralized plans were also emphasized in all denominations.
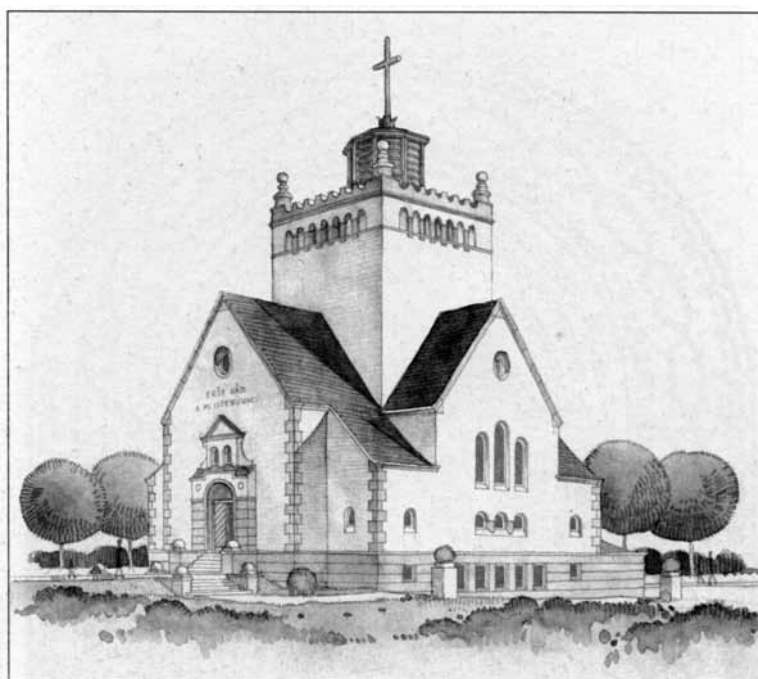
The adoption of the octagonal form appeared first in the Greek-Catholic church inspired by Byzantine architectural models. Parallel with historic examples Ferenc Török designed an octagonal space for the church of Edelény (1977-83), expanded with a further volume at the space of the altar. The same central space dominates the Greek-Catholic church of Nyíregyháza (1993), where the building complex is constructed from massive blocks in an additive hierarchy. The exterior of the building is much more important than the archaic atmosphere of the interior: the octagonal space dominating the building volume is completed with forms of pitched roofs both at the entrance and at the altar space. This composition of the organization of volume connections was outstanding at the time and later became a recurring conceptual method in the works of Török and his followers. It refers to the religious duality of Greek-Catholics: to the spiritual mixture of the Byzantine rite and the authority of the Pope. This mutual influence is much clearer in the Greek-Catholic church of Fehérgyarmat (1996-9) designed by Mihály Balázs. The exterior of the building is dominated by the cylindrical volume of the church space, which is composed with a circular layout. In the middle of the dome of the octagonal roof structure, seated onto four high wooden supports, the image of Christ the Pantocrator can be seen. The liturgical space is completed by the space of the altar where the supplementary functions (such as vestry, assembly hall, room for religious education) are placed in a three-naved layout system. The typical basilica-like section is easily recognized in the sculptural intersections of the eastern façade. György Csete applied the octagonal shape in his churches designed for the Calvinist Church with a different intention. The layout shape converging to the circle is an ancient symbol quoting the shape of the yurt, the movable house from the Migration Period. His churches represent a direct connection with this form: the church of Kőszeg (1993-6) has a simple timber structure, but the later church of Debrecen-Tégláskert (2005-6) already displays complicated three-dimensional grating. The pulpit and the communion table take their place in the middle – perfectly materializing the spiritual idea in which the Word and the memory of the Last Supper are delivered surrounded by the congregation. The same centralizing intention guided Imre Makovecz at his churches built around the millennium. In the churches of Százhalombatta (1996-8), Csíkszereda (2003-4) and later Kolozsvár (1997-2008) the altar increasingly neared the centre. The space surrounded by the choir emphasizes the liturgical acts in focus, the dome with the opeion in the middle opens up towards the sky.

Nevertheless, the space surrounded by the choir is a characteristically Protestant legacy in Hungary. The spatial division also appears in small churches and expands their capacity, although it sometimes narrows the space excessively. In the Calvinist chapel by Ernő Kálmán in Budapest (1998-2002) the square space containing the pulpit is vertically lengthened and surrounded by the choir. Examples for this solution can be found among the French Huguenot churches. The belt-like choir zone is functionally reasonable and it divides the space well from the viewpoint of usage; hence its adoption is justified even in the case of smaller churches. The Calvinist church by István Lengyel in Debrecen-Tócóskert (1994-7) represents the shape of a floor plan inscribed in a circle. The pews are positioned fan-like around the pulpit – recalling again the German examples of the 1920s-1930s. The divided ceiling above the clear, white, transparent space also reflects the orientation of the space.

The hierarchic arrangement of sacred space oriented towards the altar also characterizes central spaces. The combination of centralized volume and longitudinal layout presents the most complete solution. The circular-shaped Lutheran church spaces of Tamás Nagy give a centralized impression, but the rows of pews are arranged perpendicularly to the main axis. In the case of the small church in Sopronnémeti (1994-7) the architectural composition still presents a perfect circle, but in the church of Balatonboglár (1993-9) a lengthening is already visible: the space becomes elliptical along the axis from the entrance to the altar and the senses even complete the space. The congregation hall is sunk into the hillside located on the border of the nature conservation area. The row of windows runs around on top of the architrave; looking through these the believers can only see the foliage of the trees. The architectural formation of the space is intentionally calm and puritan, aiming to draw attention to the picture of nature changing through the seasons. (Fig. 2) The masterpiece of the roof structure, which floats in light just above the congregation, celebrates the joy of creation. Sturm's centralized ideal plans aimed to meet

Figure 2. Balatonboglár, Lutheran church (1993-9) Architect: Tamás Nagy. (source: photo by József Hajdú)

complex functional needs and to create a rational spatial form according to the building structure. The success of the spatial compositions lies in the idea of the community. Today the role of the community of individuals that is the basis of the Christian churches has moved into the foreground again, and this equally in the Catholic and in the Protestant churches. Tamás Czigány created a space for this small but essential element when designing the chapel (2010) near the ancient hill of the thousand-year-old basilica of Pannonhalma. On the main axis of the structure, divided into nine bays floating above the square space, stands a simple table; the congregation of 10-12 people can gather around it to find Christ among themselves in the silence of the surrounding woods.

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10. The theoretical and practical relations of church architecture are discussed in relation to the Lutheran and Calvinist churches in the overview study: János Krähling, "A 20. század magyarországi evangélikus templomépítészete a rendszerváltásig," in János Krähling and Zorán Vukoszávlyev (eds.), *Új evangélikus templomok (New Lutheran Churches)* (Budapest: Luther Publisher, 2008).

11. Cf.: Walter Zahner, "La construcción de iglesias en Alemania durante los siglos XX y XXI – Church-building in Germany during the 20th and 21st centuries," in Esteban Fernández Cobián (ed.), *Arquitecturas de lo sagrado – Memoria y proyecto* (Ourense: Netbiblo, 2009), 38-71.

12. Albert Gerhards, "Die Form des liturgischen Raumes: Erfahrungen mit Communio-Räumen" in Giorgio della Longa, et al., (eds.), *Architettura e Liturgia nel Novecento 4. Esperienze europee a confronto* (Venezia: Stella Edizioni, 2006), 129-141. See also the study discussing the theme of central and longitudinal spaces: Esteban Fernández Cobián, "Pianta longitudinale vs. pianta centrale: una lettura dalla Spagna" in della Longa, *Architettura e Liturgia*, 15-19.

Politics and Architecture:
Definitions, Methods, Possibilities

SESSION CHAIRS:

Christine Stevenson (Courtauld Institute of Art, University of London, U.K.)

Leslie Topp (Birkbeck College, University of London, U.K.)

Analysis of the intersection between architecture and politics is central to the interdisciplinary project of current architectural history. Yet the ways in which we define the "political" and the aspects of politics with which we engage vary widely. For some, especially historians of modern architecture, a political analysis means the dissection of discourses of knowledge/power, or the spectacle, as instantiated in buildings, and architectural or urbanistic culture more generally. Others investigate the ways postcolonial theory might illuminate not only the emergence of "hybrid" architectures, but those same architectures' (paradoxical) alignment in the service of the hard polarities of party politics, too. Studies of earlier periods have considered architecture's mobilization in the service of the state, the city, and other claimants to authority, and have examined the ways in which the "jurisdiction", that form of property which is at once a territory and a power, or a privilege, was affirmed and secured through architectural means. Others engage with politics as an arena of conflict between ideologies (or less coherent bundles of ideas and aims) within which architecture and its destruction are used as tools or weapons; or with the fine grain of legislation around property ownership, planning and infrastructure in which the state and the built environment are inseparably implicated. The importance of specificity and care in the delineation of the particular geopolitical conditions is widely accepted, but less attention is perhaps paid to the fluidity of these conditions and their internal contestation.

Close attention to what, exactly, we are doing when we engage with architecture in political context, or with a politics of architecture, can reinvigorate the discussion. We invite abstracts for a roundtable consisting of brief (circa tenminute) position papers presenting a methodological approach to the analysis of architecture, design, landscapes or cityscapes in political context, illustrated by one or two examples. (Paired papers will each be followed by open discussion, with the chairs providing a summary analysis at the end of the session.) Because the aim is to enable fruitful dialogues, papers originating in work on any period, ancient to modern, and any part of the world are welcomed.

SHORTCOMINGS OF POLITICAL CONTROL ON ARCHITECTURE IN TOTALITARIAN REGIMES: THE EXAMPLE OF SOCIALIST ROMANIA AFTER THE SECOND WORLD WAR

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European totalitarian regimes of the twentieth century have considered architecture as a means of propaganda. Subject to the control of the regime, architecture and town planning had to convey official ideologies professing the complete destruction and reconstruction of existing social orders, and were employed for the indoctrination of populations.[1]

Based on my research on the Romanian regime of the 1950s, this paper aims to illustrate that the "facade" that this regime revealed, one consisting of iconic buildings and of a set of precepts concerning architectural and urban form, were peripheral to or even contradicted by its position on issues intrinsically related to architecture, such as housing provision and town-planning decisions. Ever since the publication of Richard French and Ian Hamilton's *The Socialist City: Spatial Structure and Urban Policy*, in 1979, scholars have increasingly questioned the existence of a "socialist city" where a "classless" social structure really converged with spatial organisation: examples include Jay Rowell's work on Eastern Germany, and Lydia Coudroy de Lille's on Poland.[2] Among architectural historians, Anders Åman illustrated in 1992 how similar ideologies engendered different architectures in several popular democracies of Eastern Europe during the Stalinist era; Barbara Miller Lane had already shown, in 1968, that Nazi control over architectural creation had been a lot less efficient than previously considered, mostly because the political instructions given in this area were often vague and contradictory.[3]

My method has been to consider the entire set of political decisions and policies concerning housing, in order to evaluate their impact on architectural production and on the actual evolution of the city. In this case of Romania during the first half of the 1950s, I have focused on the contradictions and inconsistencies among architectural guidelines and housing construction policies. My demonstration comprises two parts: firstly I present the construction of an official paradigm regarding urban and architectural form, and secondly, I analyse the building policies that aimed to reduce the housing shortage.

A "SOCIALIST" / SOVIET TOWN PLANNING MODEL FOR BUCHAREST

On the wake of the Second World War, the Romanian Workers' Party seized political power with the support of, and close direction from, the USSR; in December 1947 the Romanian People's Republic replaced the monarchy. The Romanian Gheorghe Gheorghiu-Dej, leader of the Party, became leader of the state, but the transformation of the country after the war, the so-called "sovietisation", resembled a Soviet colonisation.[4]

Beginning in 1949, the idea of a new master plan for Bucharest was associated with the materialisation of the new political order. But what was a "socialist city" like, besides the fact that it had to follow the Soviet experience?

In 1945 and 1946, the Soviet architect N. P. Balinchin, who visited the professional association of Romanian architects, presented a first model of "the conception of Soviet town planning". Taking into account the characteristics of the city of Bucharest, he proposed a scheme consisting of a series of concentric zones increasing in height and density from the periphery to the city centre. By 1949 Romanian architects like Gustav Gusti and Titu Evolceanu were promoting this "Soviet model of town planning" in their publications.

In 1952, an official decree concerning the "socialist reconstruction of Bucharest" introduced a new design model, which a commission composed of government officials and architects was called to turn into a new master plan. Another official Soviet representative, an architect called Zvezdin, had introduced this model based on the Stalinist doctrine of "socialist realism". In this discourse, the ubiquitous ideological interpretations assimilated the urban form of the city of Bucharest to the "class warfare" between an urban, densely-built, luxurious, and bourgeois centre, and an impoverished working-class periphery of rural character, lacking infrastructure. This Stalinist model for the "reconstruction" of Bucharest consisted of monumental housing blocks (*kvartaly*) that had to follow "the best examples of classical, Soviet or national architecture" and to run along major avenues (*magistraly*), thus replacing the existing built structure to a large extent.

DEALING WITH THE HOUSING SHORTAGE

In 1948, Romania was a rural and highly agricultural country where 76.6 per cent of the population was still living in the countryside. Therefore the Workers' Party gave priority to industrial development, leaving very limited funds for the construction

of housing. In reality, the state did not manage to build systematically the dwellings needed for the workers in the new factories, as Gheorghe Gheorghiu-Dej himself admitted on 13 November 1952, at a Party plenary session.

In this context, in 1949 the Romanian government decided to revitalize housing construction by encouraging self-building, which was also a national tradition. Moreover, a policy launched in 1951, and which came into effect in 1953, offered state help for self-building, in urban areas, of individual homes and small blocks of privately-owned flats. Individuals or "co-operatives" assembling several applicants who were employees of the same institution could receive loans, free plots of land, and "technical support" from the state. In theory, this kind of help was intended for underprivileged workers, but in practice, as the Archives of the City of Bucharest reveal, relatively wealthy employees of ministries and of other governmental and planning institutions of the socialist state took advantage of it. This individual and co-operative housing generally met a high level of comfort, being exempted from the area limitations imposed on all other housing types. Architects working in public design centres conceived them as "special" standardized projects, or as original designs; and sometimes added decoration of "national" or "classicist" inspiration, in conformation to the official architectural paradigm.

BUCHAREST MASTER PLAN ADAPTATIONS

As a result of these policies, between 1951 and 1955, the most important contribution to housing construction, adding up to about 68 per cent of the new homes in all urban areas, was self-built, without any help from the state.[5] In Bucharest, this contributed to the perpetuation of a dominant tendency of the interwar period, that is, the un-planned expansions of a low-density urban structure.

As far as the "social reconstruction" of the capital city was concerned, in 1953 a first town-planning scheme envisaged the building of 25,000 housing units annually, with state funding. However, these estimates proved to be overly-optimistic, and in 1956 they were dropped to between 5,000 and 6,000 flats per year. In reality, between 1948 and 1958, a total of only 11,728 flats were built by the state; but official discourse and all publications of that period vaunted these realizations, while the figures concerning self-building were completely absent from the published statistics.

In 1954, demolitions were forbidden, in order to preserve the existing housing reserve, and the government decided that the state and the co-operatives had to build first in the available plots situated at the periphery of Bucharest, which already had infrastructure. As a consequence, dwellings of a high standard were built in the unfinished housing districts designed in the interwar period.

CONCLUSIONS

I can conclude that the rapport between the "political" and architecture should be regarded as multifarious. Even if policies and political decisions concerning design and planning were imposed from the top, in practice they were interpreted and applied by professionals or politicians who had to deal with the very concrete conditions of housing shortages and post-war penury. The study of the construction of official paradigms as well as their implementation must therefore take into account the persons who took part in their formulation, spreading, interpreting, and adapting. In the case of socialist Romania, the diachronic analysis also points to the inconsistency of the Soviet models explainable by the series of different Soviet representatives who introduced them.

Moreover, the "political" proves to affect building practice through different channels and types of discourse, including a multitude of public policies that can be uncoordinated. These potentially conflicting initiatives can engender different or even opposing practices, which can go as far as contradicting the official, political position. In this respect, the Romanian example reveals how traditions contravening the official ideology of a Stalinist-like regime were perpetuated after the war, among them the single-family home inhabited by its owner; self-building; the unplanned low-density expansion of the city; privileged access to housing for certain social categories; and the prestige of city districts created in the interwar period.

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Endnotes

1. Carl Joachim Friedrich and Zbigniew Brzezinski, *Totalitarian Dictatorship and Autocracy* (Cambridge, Mass.: Harvard University Press, 1956), 88.

2. R. A. French and F. E. Ian Hamilton (eds), *The Socialist City: Spatial Structure and Urban Policy* (New York: John Wiley & Sons, 1979). Jay Rowell, *Le totalitarisme au concret. Les politiques du logement en RDA* (Paris: Economica, 2006); Lydia Coudroy de Lille, "L'Habitat urbain polonais pré et post-socialiste", *Annales de la recherche urbaine* 92 (2002), 25–32; Lydia Coudroy de Lille, "Introduction", *Histoire urbaine,* 25 (2009), 5–13.

3. Anders Åman, *Architecture and Ideology in Eastern Europe during the Stalin Era. An Aspect of Cold War History* (Cambridge Mass.: Architectural History Foundation and MIT, 1992); Barbara Miller Lane, *Architecture and Politics in Germany 1918–1945* (Cambridge, Mass.: Harvard University Press, 1968).

4. Balás Apor et al., *The Sovietization of Eastern Europe. New Perspectives on the Postwar Period* (Washington DC: New Academia Publishing, 2008); Keith Hitchins, *Rumania 1866–1947* (Oxford: Oxford University Press, 1994), 89–90.

5. From 1951 to 1955, almost 7 per cent of individual and co-operative housing in urban areas received public loans; the remainder, about 25 per cent, was built by the state. *Statistical Yearbook of RSR,* 1965.

Neither 'Modernism' nor 'Avant-Garde': A Roundtable Discussion in Honour of the 90th Birthday of Alan Colquhoun

SESSION CHAIRS:

Patricia Morton (University of California, Riverside, U.S.)

Can Bilsel (University of San Diego, U.S.)

In his introduction to *Modern Architecture*, Alan Colquhoun summarizes a paradox of the Modern Movement: it is characterized by resistance to industrial capitalism and nostalgia for a pre-industrial community and by a simultaneous belief that the architect as "seer" can predict and create the forms of an industrial age, an "architecture conscious of its own modernity." Colquhoun notes Peter Bürger's distinction between an "avant-garde" (which sought to change the status of art within bourgeois capitalism) and "modernism" (which attempted to change art's forms), but he finds the boundary between them difficult to draw in architecture, for Europe's most polemically avant-garde architects combined utopia and aestheticism. That "modernism" and "avant-garde" can be used interchangeably in architecture suggests a disciplinary opening for architectural history.

This roundtable invites participants to explore the space between "avantgarde" and "modernism" as interpretive categories, and asks if these terms, as canonically defined in architecture, have continued relevance to the discipline. Participants may explore a range of questions raised by Colquhoun's analysis, engage the dialectic of the European avant-garde as defined by Manfredo Tafuri, Francesco dal Co and others, or reflect on the applications of ideology critique to a geographically expanded field. Given the diverse conditions of the production of "modernism" globally, does the concept of the "avant-garde" have application outside Western Europe? What does the binary of traditional/modern mean in colonial contexts where nostalgia for tradition may refer to indigenous and/or metropolitan culture? Why does the discipline find it impossible to give up the myth of the master architect who intuits the architecture of his time, revealing a near "Oedipal relation" (in Benjamin Buchloh's words) with "the parental avant-garde" and the pioneers of modern design? What terms have been most productive in expanding the geographic, discursive, and disciplinary frameworks of recent modern architectural history?

RED HERRINGS

Arindam Dutta

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In interview, Paul Rabinow once asked Michel Foucault if architecture could be the instrument of social liberation; in other words, what did he think of that long history of modernist architects proposing the better management and amelioration of social life. Foucault's answer was to the first question was categorical: no. To the second, he was more qualified, but hardly more encouraging: there could be no one to one relationship between an instrument, a technique, a form, an institution, a law, and the social effects that it could produce. Architects – or other professions – could try to engineer practices of freedom, but if these work at all, this is not due to some inherently superior features but due to contingency, a circumstantial alignment with particular practices that may emerge at particular historical junctures. When situations change, forms can be used in ways directly opposed to their original intentions, or in completely new and unexpected ways. (We could give the example of Mies's Tugendhat house, abandoned by its rich Jewish owners within eight years of its completion, then used by the Gestapo and the Messerschmitt aircraft design bureau during the war, then used by the Red Army to keep horses, and then in communist Czechoslovakia as a dance school and psychotherapy clinic, now just renovated and reopened, conceivably to fuel global tourist traffic.) Thus, no matter how ethical, considered, or complexly determined the design approach and hope for success – we can sense Foucault getting quite indignant at this point – "it cannot succeed." From almost any other standpoint except perhaps that of the architect alone, it is therefore no use to think of relative or practical successes. Everything can be undone. More to the point: that may well be a good thing. "After all, the architect has no power over me. If I want to tear down or change a house he built for me, put up new partitions, add a chimney, the architect has no control."[1] There is no architecture that is inherently liberating or ameliorating, on the other hand there is no architecture that is inherently oppressive either. "It can never be inherent in the structure of things to guarantee the exercise of freedom. The guarantee of freedom is freedom… where liberty is effectively exercised… this is not owing to the order of objects, but… owing to the practice of liberty." To the lazy reader this may sound like tautology, but in fact what is being described is something like the ipseity of power. Foucault went further. In the modern period, architecture was not one of those technologies that were critical in what he called governmentality, even when it concerned that abstract entity over which architects claimed to have some expertise: space. "It was not architects but engineers and builders of bridges, roads, viaducts, railways, as well as the polytechnicians – those are the people who thought out space."

In reading the collection of Alan Colquhoun's essays compiled in 1983 under the title *Essays in Architectural Criticism: Modern Architecture and Historical Change*, it seems to me that a strong thrust of this early work comprises in refuting the techno-determinism prevalent within both contemporary architectural practice and estimations of modern architecture. There is a steadfast refusal to overdetermine architectural problems or architectural resolution, or for that matter, even technological problems as demanding the kind of methodology evinced in the "laws" of physics, mathematics, or natural science. It is hard, on balance, to sense any over-riding manifesto in these erudite essays, covering as they do a wide range of subject matter – in this respect Colquhoun's epistemological modesty is to be perhaps distinguished from his fellow British expatriates in America, Banham, Rowe, Frampton. But a hard-nosed, commonsensical, sensibility is evident, particularly when poised against the idea of so-called "objective" or functionalist theories of design. Architecture consists in a "displacement"[2]: we hear an echo of Freud's quite technical use of this word, later employed by Derrida and others to great effect. Rather than presenting the organic expression of a given technology, program, or content, figuration or form derives from a host of reflexive or irreducibly aesthetic factors, even in those claiming themselves functionalists: thus we see a study of historicity in Corbusier, the propositions for type by Tomas Maldonado. If I were so brave, I would venture that one sees I this interest in figuration an analytical arc that cuts all the way from gestalt theory to the semiology of his own time. As works of architectural criticism, this also means preferring particular architects or buildings over others: thus Le Corbusier trumps Hannes Meyer, in that for the latter "architecture should become like machinery, unconsciously following the dictates of an implacable economic destiny."[3] Corbusier, on the other hand, transcends that organic reduction into a conscious, poetic, rule system. The success of architecture does not lie either in producing particular social effects, or worse still, in realizing some innate tendency of a technology or technological moment.

I list these two critiques of determinism – Foucault's and Colquhoun's – because in some senses they lay out the defining agon of the historian's craft. Both take a studied distance from an easy identification of form with historical exigency, rather

opening out the way, more so perhaps in Foucault's case, to a radical embrace of contingency. At the same time, these two critiques are not directed towards the same end, nor are they of the same species or theoretical regimen: one devalues the place of architecture in power, the other reflects back on its specificity, without much speculation to efficacy beyond the aesthetic. While the architectural critic may eschew determinism, he does not forego intentionality: the author-function remains front and center, as does a hierarchy of more versus less successful objects, if not authors. For Foucault, power happens at a place where non-intentions intend. In this situation, architectural 'modernism' is a red herring when it comes to looking at the relationships between architecture and modernity. The relationships between states, populations, flows of finance, industrialization, legal frameworks, empire, technological discovery and transfer, networks of expertise, the status of cultural practice, the perduring embrace of 'religion' – all of which affect architecture – are complex, and privileging a narrow band of avant-gardist actors does one little service in terms of the myriad stories that could be written. What would it be to open up each of these fronts of inquiry without the residual bad conscience of centering architectural intentionality? We could take the Tugendhat house again: why should we privilege bourgeois living – the 'point of origin' to which the present-day ruin has been restored – as opposed to the historiography of storing horses in wartime? Couldn't the latter provide us with equally fascinating architectural stories, one that patently involves, no less, the Tugendhat house? What kind of methods, styles, flourishes would be necessary? Can we today, wherever we are, particularly within architectural schools, lay out our premises, our techniques, our moves, with some degree of candidness, without concern as to what the architects will make of it?

It may appear that my words here are primarily aimed at the tendentiousness of situating architects at the center of historical narratives of architecture – the place where the historian reveals a tacit complicity with the critic. That would not be inaccurate, but in actuality I wish to point to quite another problem: the author-function of the historian or theorist itself. It could be argued that a sanction for the kind of historians' work that I am suggesting here – was itself contingent upon the 'modern'. Modernity, in other words, might be defined as that fabulous contract where the power of critique could be brought to bear on the subject-technologies or biopolitical mechanisms of what we call modernization. Foucault is right in stating that architects do not write power in the way that polytechnicians do; paradoxically, it is through this very power of critique, this process of "damage control," that *both* architects and historians acquire their professional purchase or license. Events are no more comprehensively recuperable by the historian in retrospect as they are predictable in advance either by various kinds of author or in the nature of things. The work of architecture is in some senses like that of the historian: their role is to produce narratives for modernity, "grand narratives" or metanarratives (I remind you that Lyotard used this phrase less in the sense of progressivism than in the sense of an ability for critique) whose work is to transcode the effects of modernization into the agon of elective affinities, as if the result of choices made. A series of such agonistic institutions or media can thus be concatenated whose super-instrumentality is to delineate the limits of mere instrumentality, to tell us that techno-determinism is not adequate to humanize the world and its multiple inhabitants. Foremost here is the liberal university – which we must distinguish from primary schools or polytechnics – but there is also the museum, the so-called fifth estate of the press, and so on. It would be relatively easy to prove that the tremendous post-WWII professionalization of the humanities and the social sciences, and in this I include architecture – I can show you documents – as presenting a kind of structured alibi for a new, modernizing, technocracy. At best a narrative convenience, 'modernism' was useful to the extent that it produced a phantasmatic, postwar alliance of interest between architects and the humanities. Consequently, architects could profess a devotion to humanism – critical to garner a foothold in liberal cultural institutions – and historians/humanities scholars gained validation in that their narratives were seen as in the interest of forward-looking change. As modernization became more and more pervasive, entangled within the implacable tentacles of so-called economic destiny, we see an accompanying decline of the modern, and with it the institutional sanctions for the humanities.

It is in this double sense that I am questioning the focus on the modern and the avant-garde as a red herring: the first in that it seems unable to capture the much more powerful infrastructures of modernization – law, economics, hygiene (now biomedical engineering), security – wherein modernism played only a bit part, and in the second sense in that the very sanction through which we could pose or critique such overdetermination is itself today, in institutional terms, eroding. We were asked today to present a 'position paper.' My question is simply: what position? Is not a position as much a place that is provided – such as being invited to this panel – as one which is taken? Foucault tells us that architecture doesn't matter, and in architecture schools today we more and more get the sense that historians don't matter. Conferences such as this one, where historians invite themselves to listen to each other, shouldn't fool us, and particularly not the choice of location, Brussels, a fantasmatic center if there was one. Why then, most of all today, should we be burdened with centering architects in stories of architecture? How deluded are those who still think today that by writing this or that they can move architecture this way or that, and through it power itself. In this endgame of the humanism and the humanities, are we not finally free, unburdened by the responsibility of delivering 'lessons' for applicability to the practitioner's craft, to seriously think about the intricacies or agonistics of our own? A red herring is a

non-existent species; it is entirely a narrative device, a ploy to divert attention. What would it be, in the sunset of the modern, to write histories and narratives finally relieved of the modern, to stake oneself boldly as if a red herring in the play of destiny since we are no longer burdened with designing one?

Endnotes

1. Michel Foucault, in interview with Paul Rabinow, "Space, Knowledge, and Power," in *Power*, ed. James D. Faubion, Essential Works of Michel Foucault, Vol. 3 (New York: The New Press, 2000), 354-355.

2. Alan Colquhoun, "Displacement of Concepts in Le Corbusier," first published in *Architectural Design*, Vol. 43, April 1971, 220-243; republished in *Essays in Architectural Criticism: Modern Architecture and Historical Change* (Cambridge, MA: The MIT Press,1981), 51.

3. Colquhoun, "Displacement of Concepts in Le Corbusier," 63.

BEYOND THE AVANT-GARDE: ADDRESSING VERNACULAR MODERNISM

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Peter Bürger's distinction between "modern" and "avant-garde" is effective in separating two generations of European and American architectural practice, that of Henry Russell's Hitchcock's New Traditionalists from his New Pioneers.[1] While the first, like many of their counterparts in disciplines as diverse as psychology and literature, typically rejected industrialization, the second embraced it. The use for nearly a century of the term "modern" to describe the second, while not particular to architecture, has meant that architects, architectural critics, and architectural historians have often conflated the two groups Bürger was so anxious to separate.

On the opening page of one of the most thoughtful surveys of the subject ever written, for instance, Alan Colquhoun defined modern architecture as primarily the avant-garde and thus the designs of "masters":

> Already in the early nineteenth century, there was wide dissatisfaction with eclecticism among architects, historians, and critics. This well-documented attitude justifies a history of modern architecture concerned primarily with reformist, 'avant-garde' tendencies, rather than one that attempts to deal with the whole of architectural production as if it operated within a non-ideological, neutral field. . . . If [this book] is still largely a history of the masters, that is because that was the nature of modernism itself, despite its many claims to anonymity.[2]

Colquhoun not only conflates modern and avant-garde but presumes that both are the province of a small set of architects self-consciously trying to forge new stylistic responses to modern conditions. The acceptance of modernization within architecture also encompassed, however, a large body of uncritical practice. Architects and builders around the world, but particularly on the eastern edge of Europe, and in Asia, Latin American and Africa, have since the 1930s employed new construction technologies, especially reinforced concrete, in tandem with abstraction to communicate at relatively little cost an excitement about the new. Because so few important names and so little architectural theory, can be attached to this body of work, it has been largely ignored by architectural historians, with the important exception of Sibel Bozdogan, Adrian Forty, Miles Glendinning, and Fernando Luiz Lara, even as it has for decades comprised the daily environments of perhaps the majority of the world's urban middle class.[3]

How can we develop methods to address this ordinary or vernacular modernism? First we need to define modernity more broadly than mass production and new forms of transportation, the examples that inspired the avant-garde of the 1920s. Since the eighteenth-century the economy of colonial Bengal had been as dramatically upended by the mechanization of cloth production as had that of cities of the British Midlands where the new technologies were developed.[4] There were no model T Fords produced on assembly lines in India in the 1920s, but that did not prevent Rabindranath Tagore, who celebrated his sixtieth birthday in Weimar in 1921, from appreciating the implications of the early Bauhaus for both fine arts and craft production in India. At his instigation the first Bauhaus exhibition anywhere was mounted in Calcutta in 1922, where it helped set the tone of the instruction at what became the Visva-Bharati University in Santiniketan.[5] The geographic range of modernization and of the modernisms it spawned needs to be more fully acknowledged.

Second, we need to look more closely at construction, especially the vernacular use of modern materials, particularly reinforced concrete, as well as the labor force that employs them. Concrete apartment blocks, for instance, have attracted the attention of historians like Colquhoun only when they were accompanied by avant-garde aesthetics or theoretical positions, yet this has become one of the most ubiquitous building types of the second half of the twentieth century. Few of these buildings descend from the work of Le Corbusier, although the frame of the Maison Domino's frame can be spotted on construction sites around the world. Even fewer of those built for middle class tenants share the problems associated with the notorious examples used to warehouse the poor.[6] How do we face the fact that a building type that represents the failure of the avant-garde's utopian socialism proved a stunning success with middle class consumers in Latin America and Asia? At the same time the way in which innovations in construction percolate down to the level of the ordinary building site and to those who work there, many of them still relatively unskilled, also deserves our attention.

This example suggests that we need to focus as much on the client as on the architect.[7] We are far more comfortable today with participating in networking efforts like this conference or repeating the self-promotion of self-described "critical" architects than with attributing agency to the consumers of speculatively designed housing. Why do we assume that developers and their

advertising have corrupted the taste of consumers, rather than acknowledging that men and women of all classes often have very different agendas than architects? These agendas balance economy with the expression of identity; modernism has proven more useful in striking this balance outside Western Europe and the English-speaking world, where it is more likely to communicate cultural capital than the social reforms with which it was originally and often mistakenly associated, than within it. How do we account for the way in which a supposedly objective architecture is in fact most successful when it also communicate desires, most of which involve status rather than sex?[8]

Finally, what do we lose by not acknowledging the agency of the non-western and often non-white urban middle class who as early as the 1930s and with relatively little interruption up to the present have been more consistent supporters of modern architecture than their suburban counterparts in Europe and the English-speaking world? We miss the impetus for the central monuments in our own canon, such as the work of Kenzo Tange in postwar Japan, of Le Corbusier and Kahn in post-colonial South Asia, of Niemeyer and his contemporaries in Brazil, of Norman Foster and Associates in Hong Kong, and of Jean Novel in Paris.[9] All of this architecture embodies the aspirations of clients as much as the genius of great men and their many assistants, male and female, in the office and on the building site. Although modern architecture was indisputably a western creation, it came back from the brink after World War II and again in the mid1980s above all on the strength of support for it in other parts of the world. Seeing this architecture holistically rather focusing on supporting the privileged position of our own discipline and of that of the architects we study represents the first step in a new, more inclusive history of modern architecture that acknowledges the broad scope of changes to the built environment generated by the multiple modernisms of the last century and of our own.[10]

Endnotes

1. Peter Bürger, *Theory of the Avant-Garde* (Minneapolis: University of Minnnesota Press, 1984) and Henry-Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration* (New York: Payson and Clark, 1929).

2. Alan Colquhoun, *Modern Architecture* (Oxford: Oxford University Press, 2002), 9.

3. Sibel Bozdogan, *Modernism and Nation Building: Turkish Architectural Culture in the Easrly Republic* (Seattle: University of Washington Press, 2001); Adrian Forty, *Concrete and Culture: A Material History* (London: Reaktion Books: 2012); Miles Glendinning's ongoing research on highrise housing, and Fernando Luiz Lara, *The Rise of Popular Modernist Architecture in Brazil* (Gainesville: University Press of Florida, 2008).

4. Barbara D. and Thomas R. Metcalf*, A Concise History of India* (Cambridge: Cambridge University Press, 2001), 76

5. Partha Mitter, "Bauhaus in Kalkutta," *bauhaus global: Gesammelte Beiträge der Konferenz bauhaus global vom 21. Bis 26. September 2009* (Berlin: Gebr. Mann Verlag, 2010), 149-58.

6. Katherine G. Bristol, "The Pruit-Igoe Myth," *Journal of Architectural Education* 44 (1991): 163-171; and Stefan Muthesius and Miles Glendinning, *Tower Block: Modern Public Housing in England, Scotland, and Northern Ireland* (New Haven: Yale University Press, 1993).

7. This is a reoccurring theme in the few collections on Third World modern architecture and urbanism published to date. See Duanfang Lu, ed., *Third World Modernism: Architecture, Development and Identity* (New York: Routledge, 2011); William S. W. Lin and Jiat-Hwee Chang, eds., *Non West Modernist Past: On Architecture and Modernities* (Singapore: World Scientific Publishing Company, 2011), and Joe Nasr and Mercedes Volait. eds., *Urbanism: Imported or Exported* (London: Academy Press, 2003).

8. For an exploration of this theme see Alice T. Friedman, *American Glamour and the Evolution of Modern Architecture* (New Haven: Yale University Press, 2010).

9. See, for instance, Vikramaditya Prakash, *Le Corbusier's Chandigarh: The Struggle for Modeernity in Postcolonial India* (Seattle: University of Washington Press, 2002); Zilah Quezado Deckker, *Brazil Built: The Architecture of the Modern Movement in Brazil* (London: Taylor and Francis, 2001), and Kathleen James-Chakraborty, "Architecture of the Cold War. Louis Kahn and Edward Durrell Stone in South Asia," in Anke Köth, Kai Krauskopf, and Andreas Schwarting, eds., *Building America: Eine große Erzähluung*, vol. 3 (Dresden: Thelem, 2008), 169-82.

10. I borrow the term 'multiple modernisms' from Ananya Roy. See her "Traditions of the Modern: A Corrupt View," *Traditional Dwellings and Settlements Review* 7.2 (2001): 7-19.

BETWEEN AVANT-GARDE AND POST-MODERNISM:
THE HISTORICAL SIGNIFICANCE OF SERT'S CONCEPT OF URBAN DESIGN

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Sert's launching of urban design at a Harvard conference in 1956[1] took place in the context of Cold War America, where massive government expenditures expanded the research capacities of its universities, created the interstate highway system, and sponsored the clearance and "urban renewal" of American central cities. In this rapidly changing context, Sert recognized that despite these extensive government activities, privately developed American auto-based suburbia was becoming a new norm. From a European perspective, he offered the alternative concept of urban design, which involved the architectural design of pedestrian urban environments ranging from modest local community centres up to large cultural complexes. (Fig. 1) Although focused on design solutions to architectural problems, urban design at its inception was not only about urban form per se, but was instead intended to provide new surroundings for democratic public and cultural life in the changed conditions of the postwar years.

In his opening talk at the Eighth CIAM conference in 1951, Sert had invoked the ideas of the Spanish philosopher José Ortega y Gasset on the importance of the public square as the site of the *polis*, or democratic community. [2] For Ortega this urban space was not primarily a collection of habitable dwellings, but was rather a meeting place for citizens. Ortega had previously suggested that culture was in fact "only a biological instrument, nothing more,"[3] and his concept of the public square as a place deliberately separated from the necessary agricultural life that surrounded it was an effort to continue Western democratic ideals under threat from Fascism. For Sert also, politics and civic culture required in person, face to face communication, in public settings like those of traditional Mediterranean towns or Latin American urban centres such as that of Cuzco.[4] Sert recognized early that the emerging auto-based metropolitan pattern, reliant on new media such as radio and television, was producing a less coherent and more easily manipulated public realm.[5]

By focusing CIAM's postwar efforts on the "heart of the city," Sert sought to augment the organization's prewar solutions to problems of housing, work, recreation, and transportation with new places of pedestrian public gathering, which he thought could be enhanced by the use of trees, planting, water, sun and shade, as well as with art works. Modern architects could expand their efforts to transform everyday life within these new urban environments, which he referred to as "cores," a close correlate to the French word for "heart." These would nonetheless still retain many of the characteristics of ancient, medieval and Renaissance European urban centres, a direction further developed with specific historical examples by the historian Sigfried Giedion.[6]

Despite much postwar Western elite support for this CIAM direction in Western Europe, Japan, and some American cities, of the sort that Ortega had suggested was necessary to combat Fascism as well as Communism, its outcomes were soon controversial. On one hand it did not obviously fit into the American suburban laissez-faire model of loosely regulated private development that was then occurring within the post-New Deal framework of Federally-funded highways and national mortgage lending practices. On the other hand, in urban centres, the focus on the heart of the city was soon criticized as at first elitist[7] and then ineffectual, resulting in only limited successes in America, such as Sert's campus design work or Edmund Bacon's transformations of Centre City Philadelphia.[8] At the same time, to a younger generation of CIAM modernists, Sert's ideas appeared too similar to prewar elite efforts to direct modernization from above, leading to the emergence of Team 10 and other culturally more radical urbanisms by various parallel and successor groups such as that of Archigram, the Metabolists, and Superstudio.[9]

These new architectural movements concerned with urbanism were intended to offer more radical visions than Sert's, but they emerged as now familiar sprawling metropolitan regions such as Los Angeles were instead becoming the postwar popular ideal. By the mid-1960s Sert's urban design approach began to be modified and questioned from a

Figure 1. Town Planning Associates (Paul Lester Wiener and José Luis Sert), Quinta Palatino Neighborhood Unit, Havana, 1953.

more pragmatic direction by the emergence of Kevin Lynch's work at MIT, which soon became a mainstream direction in urban design. Like Sert's ideas about urban design, Lynch's grew out of CIAM-type strategies of master planning, which assumed that the architect-urban designer would be working for some effectual central authority and could diagram and guide the three-dimensional development of cities. Lynch's work with Gyorgy Kepes, a former associate of Laszlo Moholy Nagy, on their "Perceptual Form of the City" research in the mid-1950s, began with the idea of generating field data useful for masterplanning, but soon moved away from the architect-driven aspects of Sert's GSD model of urban design. Instead, Kepes and Lynch used field interviews and cognitive mapping to generate simple concepts intended to be useful for urban designers in re-organizing new and existing metropolitan environments. A "coherent and connected" metropolitan environment was Lynch's goal, and his trans-cultural categories of paths, districts, nodes, edges, and visual landmarks that were derived from this research were intended as the means of producing it.[10] Lynch's approach became widely influential in the urban design programs that were established in the wake of the Harvard GSD program, founded in 1960. Lynch's protégés included Donald Appleyard, a major figure in the urban design program at the University of California Berkeley and a designer of the San Diego waterfront, and many others.

In that context, these post-CIAM efforts to refine strategies of master planning into the new field of urban design to produce a better urbanizing world began to appear to many to be only other forms of top-down modernist masterplanning, neither satisfying of popular demands nor questioning of architects' authority. Instead, various directions now loosely called post-modernism, began to take over the terrain of urbanism in architecture. Stemming from the ideas of Colin Rowe, Venturi & Scott Brown, and Aldo Rossi, these offered mostly formal re-readings of both modernist and classical urbanism, and emphasized the importance of the critical fragment over larger utopian visions. They countered Archigram and other 1960s utopias with new visions using elements of the urbanism of the past. Combined, as they often were, with the critical rereading of modernism's utopian aspirations by Manfredo Tafuri and others, these sometimes antithetical directions opened up a kind of new space in thinking about urbanism, one in which supposedly new approaches to pedestrian based urbanism of one sort or another were continually being put forward as critical alternatives to a no-longer-operative modernist urbanism.[11] Yet only a few such visions have been successfully realized, in places such as Battery Park City in New York (1978) or in the suburban new towns of Duany and Plater-Zyberk, raising questions as to whether these directions were ultimately any more effective in reshaping larger metropolitan patterns than the prior approaches that they replaced.

By the 1980s, both Sert's architectural, CIAM-derived approach (Fig. 2) and Lynch's cognitive mappings were overshadowed not so much by Venturi & Scott Brown's embrace of Pop culture and the Las Vegas Strip as by the popularity of Colin Rowe's "Collage City,"[12] which posited a productive tension between the ideal modernist type-forms of Le Corbusier and the contingent urban textures of the premodern city. Though it now appears that in some ways Collage City also continued earlier architect-driven masterplanning, in the constrained circumstances of the 1970s it was necessarily transposed first into the realm of avant-garde visions, which remained largely unrealized, and only then into New Urbanism and related directions.

Today, after the only limited successes of these various postmodern directions in urbanism to offer a convincing new basis for urban design, the debates around the role of the designer in shaping urban form continue. Sert's emphasis on the concept of the pedestrian-based neighborhood unit sector, bounded by new highways and pedestrian greenways, with its various scale levels of enclosed common spaces may now seem more flexible and widely applicable that the rigid formalism of set-piece postmodern urbanism, but key questions about who has the power to carry out such plans on a metropolitan or national scale remain unresolved.[13]

The massive urbanization of East Asia, much of it guided by the continuing use of early CIAM-like highrise masterplanning principles first applied during the era of Soviet influence in the 1950s, has now entirely changed the terrain of urbanism. One result is that there is now much more interest in the history of the field, not only in Sert's contributions urban design and those of his sometime opponents in Team 10, such as Alison and Peter Smithson, Georges Candilis, Shadrach Woods or Aldo van Eyck, but also in the various pedagogical correlates

Figure 2. Sert, Jackson & Associates, Roosevelt Island mixed use housing, New York, 1970-74.

of these and related directions, some of which have already been studied in their English, Dutch and French contexts.[14] Such research on urban design pedagogy and its built outcomes could also be extended to the history of urban design education into other contexts in the 1960s and beyond.

Reflecting on Sert's significance in developing the discipline of urban design since 1945, and situating it between avant-garde and post modernism, offers a way of rethinking the now somewhat stale avant-gardist/New Urbanist divide that still characterizes much contemporary urbanistic discourse. Surveying this historical territory in a way informed by an assessment of it design pedagogy and by its built and projected outcomes suggests how many of these contending past directions are still active forces in contemporary debates about urbanism, and require more detailed historical understanding.

Endnotes

1. "Urban Design," *Progressive Architecture* 37 (August 1956), 97-111. For a detailed discussion of this event and its historical context, which also included the urban design ideas and projects of Eliel Saarinen, Edmund Bacon, and Louis Kahn, see my *Defining Urban Design: CIAM Architects and the formation of a discipline, 1937-69* (New Haven and London: Yale University Press, 2009), 122-5.

2. José Ortega y Gasset, *The revolt of the masses* (New York: W.W. Norton, 1932), 164-5, cited in J.L. Sert, "Centres of Community Life," in J. Tyrwhitt, J.L. Sert, E.N. Rogers, *The Heart of the City: towards the humanisation of urban life* (New York: Pellegrini and Cudahy, 1952), 3.

3. José Ortega y Gasset, *La revue européenne* (January 1931), quoted in the French syndicalist review *Plans* 3 (March 1931), 119; cited in Mary McLeod, *Urbanism and Utopia: Le Corbusier from Regional Syndicalism to Vichy* (Princeton University dissertation, 1985), 127.

4. Sert, "Centres of Community Life," in J. Tyrwhitt, et al., *The Heart of the City,* 2-16.

5. J.L Sert, "The theme of the Congress, the Core," unpublished text, 1951, forthcoming in Eric Mumford, ed. *Sert Writings* (New Haven and London: Yale University Press, 2013).

6. Sigfried Giedion, "Historical Background of the Core," in J. Tyrwhitt, et al., ed. *The Heart of the City,* 17-25. Historical examples of the core mentioned by Giedion included Bern, Switzerland; Aldo van Eyck's Amsterdam playgrounds; the agoras of Athens and Priene, the forum of Pompeii, the Roman forum, and Michelangelo's Campidoglio in Rome.

7. This line of criticism was already present in Team 10's critique of CIAM in the 1950s (see Alison Smithson, ed., *Team 10 Primer* (Cambridge, MA: MIT Press, 1968); Max Risselada and Dirk van den Heuvel, (eds.), *Team 10: in search of a Utopia of the present, 1953-81* (Rotterdam: NAi Publishers, 2006), and it blossomed in the 1960s with the rise of advocacy planning and various protest movements. See for example, C. Richard Hatch, "Trouble on the Acropolis: notes on advocacy," *Architectural Forum* 128 (May 1968). Hatch had previously offered similar ideas at Sert's Ninth Harvard Urban Design conference in 1965.

8. See Mumford, *Defining Urban Design*, 64-79; 130-178.

9. There is now a large literature on some of these movements; in addition to the accounts of members still active in the field, among the most accessible recent overviews are Simon Sadler, *Archigram: architecture without architecture* (Cambridge, MA: MIT Press, 2005) and Rem Koolhaas and Hans Ulrich Obrist, *Project Japan: Metabolism talks* (Cologne: Taschen, 2011).

10. Kevin Lynch, *The Image of the City* (Cambridge, MA: MIT Press, 1960).

11. On the importance of both Colin Rowe and Manfredo Tafuri in the 1970s, see Anthony Vidler, *Histories of the immediate present* (Cambridge, MA: MIT Press, 2008), 97-98; 157-189; for a brief account of how these directions led into architectural "theory," see Joan Ockman, "Venice and New York," *Casabella* 619-620 (Jan.-Feb. 1995), 57-71.

12. Colin Rowe and Fred Koetter, *Collage City* (Cambridge, MA: MIT Press, 1978).

13. Paul Lester Wiener and José Luis Sert, "Can patios make cities?," *Architectural Forum* 99 (August 1953), 124-130.

14. Alison Smithson, *The charged void-urbanism* (New York: Monacelli, 2005); Frances Strauven, *Aldo van Eyck: the shape of relativity* (Amsterdam: Architectura & Natura, 1998); Tom Avermaete, *Another Modern: the post-war architecture of Candilis-Josic-Woods* (Rotterdam: Netherlands Architecture Publishers, 2005); Jean-Louis Violeau, *Les architectes et Mai 68* (Paris: Recherches, 2005).

Postmodernism – Theory and History

SESSION CHAIR:

Meredith Clausen (University of Washington, U.S.)

Postmodernism has been extensively theorized, minimally historicized. The architectural trend, or more broadly, the cultural phenomenon, has been around now for some thirty years, and now has enough historical distance to warrant a retrospective analysis, especially one international in scope.

We invite papers on either or both the theory and practice of postmodernism in architecture, their interaction or the lack thereof, and the long-term impact of each on architectural discourse. Was postmodernism as it emerged in architecture but a brief historical interlude, titillating at the time, but without much lasting import? To what extent was practice, in the hands of Hans Hollein, Charles Moore, Robert Stern, James Stirling and others supported by or engaged in theory? What role did literary critics and cultural theorists – Martin Heidegger, Walter Benjamin, Henri Lefebvre, Noam Chomsky, Colin Rowe, Jacques Derrida, Fredric Jameson – play in practice and more broadly in architectural discourse, collectively or individually? Was the pursuit of postmodern theory largely an academic endeavour independent of design practice, as Otero-Pailos has suggested? As a formal trend, postmodernism appears passé; as a body of thought, less so. What is the legacy, both of the theory and of postmodernist practice, did either exert a substantial, sustained influence on architectural thinking?

We are looking for papers addressing either or both, or (as Otero-Pailos might put it), a more theorized history or historicized theory, but in any case, a better understanding of the two and their relationship. Proposals focusing on national differences would be welcomed – Postmodernism as it emerged in Italy, for example, which was decidedly different from that of the United States. Or regional differences: why were some areas more interested in the theoretical discourse, others in the architecture? Papers might address the work either theoretical or built, of a single individual (e.g. Aldo Rossi, Philip Johnson, James Stirling, Charles Moore); a particular building or project (Hollein's Austrian Travel Bureau; Piazza d'Italia); a particular theorist, essayist, or critic (Bachelard, Baudrillard, Tafuri and the Venice School, K. Michael Hays), a body of thought (phenomenology); a specific aspect (critical regionalism) or a specific historian (Frampton, Jencks).

INTRODUCTORY REMARKS: POSTMODERNISM – THEORY AND HISTORY

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The five papers in this session on postmodernism underscore as much as anything the common characteristics of the phenomenon despite the difficulty of defining it, and prove its global, multifaceted reach. It took on a different configuration or was interpreted differently each place it emerged. What these papers make clear is its recognizability as well as reinterpretation in radically different countries, continents, and contexts. From its emergence in the United States in the early '60s to its international spread as far east as Asia, each time it took on a new guise, acquired new meanings, and was put to new uses.

Each of these papers address postmodernism from a different angle as well as place – Stockholm, Poland, London, Zurich, Italy. Ruth Hanisch examines the presence of history in the curriculum at the founding in 1967 of the gta institute (Institut für Geschichte und theorie der Architektur) at the ETH in Zürich, and the galvanizing influence of Aldo Rossi, who taught at the institute in 1972, introducing a new understanding of history and its relationship to contemporary practice; Helena Mattsson addresses its ambivalent reception in Sweden, and the resistance to Postmodernism on the part of the architectural profession, yet despite this theoretical distancing, its impact on large-scale architectural projects such as the Stockholm Globe Arena, which thrived in the expanding globalized economy of the 1980s; Piotr Marciniak in Poznan tells of its emergence in Poland in the early 1980s, and its impact on the design not just of detached houses but of churches and other sacred spaces, as well as on Polish urban planning; Steve Parnell addresses the pivotal role of the press – a critically important factor in the emergence and direction of the whole postmodern trend -- focusing specifically on AD, Architecture Design, Charles Jencks, and his symbiotic relationship with editor Andreas Papadakis, without which (and whom) the movement would have taken on a wholly different configuration, if it had emerged at all. The fifth paper, which is represented here only in abstract form, examines Aldo Rossi and the evolution of his thought and work in the 1960s and '70s, the influence of French literary theory, Deleuze, the context of Italian theoretical discourse in the late '50s and American developments of the 1970s, all of which contributed to a rethinking of history vis à vis the design process.

As a whole, the session broadens considerably our understanding of postmodernism, opening doors to new ways of approaching and conceptualizing it – the respective importance of Jencks versus Frampton, for example, the one popular and populist, the other theoretical and deeply intellectual, in places such as Poland, or the role of Christopher Alexander in the context of postmodernism as it emerged and evolved in different countries, each time taking on a different guise and underscoring marked differences in its reception, interpretation, and use.

ANOTHER POSTMODERNISM?
THE "INSTITUT FÜR GESCHICHTE UND THEORIE DER ARCHITEKTUR" (GTA) AT THE ETH ZÜRICH, 1967-1987

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The Swiss art historian Adolf Max Vogt, who had taught art history at the ETH (Science and Technology university) Zürich since 1961 and acted as the first head of the Institute gta (Institut für Geschichte und Theorie der Architektur) declared the purpose and intention of the institute in his inauguration speech in 1967: "In common usage the opposite of history is the present and the opposite of theory is practice. Imagine these four concepts as the corners of a square — for then the title of our institute describes the diagonal. We want to participate in both; the work of the institute should relate to both: to the contrast between history and the present and that between theory and practice. The quadrilateral between history, the present, theory and practice is not only the field of the humanities. It is as well the St. Andrew's cross of the architect. It concerns him as well. He cannot sidestep it, whether he builds or whether he assigns the first semester its first task." [1] Due to a special constellation of personalities and interests the institute developed intense collaborations with those teaching design in the Faculty of architecture and fostered a new interest in history as a basis for the architectural design in the following two decades. The major personalities of the founding generation of the gta were unquestionably Adolf Max Vogt, who was the head of the Institute from 1967 to 1987, the urban historian Paul Hofer and the architect Bernard Hoesli. Katharina Medici-Mall, another member of the gta, described the key aspects of research in the Vogt era at the gta as "Fünf Punkte in der Architekturgeschichte" ("Five points in architectural history"): Palladio, Revolutionary Classicism, Gottfried Semper, Le Corbusier and Swiss Modernism.[2]
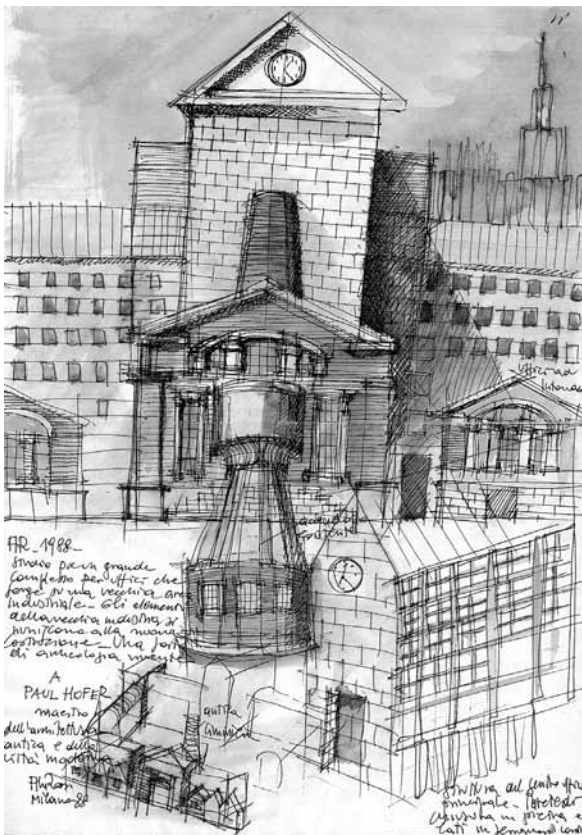
Figure 1. Aldo Rossi, Study drawing for an office complex dedicated to Paul Hofer, 1988. (source: Perche amo Paul Hofer in Andre Corboz (ed.), *Die Stadt mit Eigenschaften. Eine Hommage an Paul Hofer*, Zurich: gta Verlag, 1991, 13)

What could not have been foreseen at the time of the institute's founding in 1967 was that another very charismatic person would enter the Faculty who would serve as a catalyst in making history's role within the design process pre-eminent. In 1972 Aldo Rossi was invited to be visiting professor (Gastdozent) on the Faculty of Architecture at the ETH. The impact that his teaching, but also his sheer presence, had on his students can hardly be overstated, as a new publication by Akos Morvánszky makes clear. [3] Rossi achieved more than the open-minded founders of the gta ever fathomed: He made history more than a "St. Andrew's cross" for young architects; he made it "sexy". He was instrumental in shifting the understanding of architecture as an almost wholly technical, social and political investigation ("organigram" was then an important catchword) back to architecture as a discipline in its own right ("the autonomy of architecture"). But he was also the model for the architect as a charismatic and often enigmatic creator. For Rossi history and tradition were crucial aspects for the conception of architecture as an autonomous discipline, which developed its own logic (Fig. 1). He presented himself to his future audience the first time at the occasion of an exhibition of his work in the "Globusprovisorium", a provisional structure on the river Limmat that was rented by the ETH as additional workshop space. There he declared: "Hannes Meyer asked himself if we are in a position to hand over the pyramids to a future society as the French architects of the Enlightenment had for the French middle class. Tradition shall here mean to see the problems of the history of architecture within the idea of the present."[4] For Rossi history was neither a canon of historical

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buildings serving as a catalogue to choose from, as in the 19th century, nor a succession of styles that had to be surpassed, as in the early 20th century, but a contemporary, dynamic, inescapable force. The development of architecture follows its own rational logic, he argued, which can be understood by thorough examination. Such careful examination did not content itself with the reading of academic material, although Rossi himself was highly educated, but the analysis of architecture itself by various but especially visual means, through drawings, plans and photos. Crucially, it was not the classical canon of architectural masterpieces that interested him, but the architettura minore--the vernacular, industrial architecture, as well as a cocktail of rationalist architectures. The place where the inherent logic of architecture was immediately perceiveable was the imaginary museum of architecture Rossi conceived in his text, "Architecture for Museums" in 1966: "On the other hand, he who looks for poetic elements of rationalist architecture cannot detach himself from what Lessing said: Increase in clarity has always been, for me, an increased beauty, and still one could take the famous statement of Cezanne as a manifesto, I paint only for museums. In this statement Cezanne clearly declared the need for a painting style, following a logical and rigorous development, and placing itself inside the logic of painting verified in museums".[5]

A crucial role in establishing an intellectual basis between Rossi and the gta was played by his assistant Bruno Reichlin[6] and Martin Steinmann. Both had studied architecture at the ETH and had been assistants to Vogt at the gta. The role they played within the gta differed significantly from all the other researchers engaged in the work at the institute in that they intensively and consciously reflected on how history could influence and support the design process. After graduating as an architect from the ETH 1967, Reichlin went to Florence to study with Giovanni Claus König and later became his assistant. He was one of the first graduates from the ETH to have studied Rossi´s *L'architettura della cittá* (1966) and its references carefully. König intensified Reichlin's interest in semiotics, especially through French and Italian authors. Back in Zurich in 1972, Reichlin became Rossi's (1972-1974) and Vogt's (1972-1981) assistant and started a doctoral dissertation.[7] With his office partner and friend Fabio Reinhart, who was also an assistant to Rossi, they wrote the text "Die Historie als Teil der Architekturtheorie. Anmerkungen zu neuen Projekten für Zürich, Bellinzona, Modena und Muggiò" ("History as part of architectural theory: Remarks on new projects for Zurich, Bellinzona, Modena and Muggiò"), which appeared in 1974 in an issue on new problems and theories for conservation in the radical Swiss magazine *Archithese* (Fig. 2).[8] The opening statement was no doubt meant to provoke and is a clear statement of the integral nature of history and design: "the fundamental principles of renovation and of building in an historic context are the same as in architecture as a whole."[9] What is then needed is "an 'operational critique' that seeks to unite thinking and acting by underlying historical analysis, architectural critique and designing with the same criteria".[10] But they stress that this claim does not mean an amalgamation of historical and architectural genres. Reichlin and Reinhart's stated aim, rather, is to understand architecture as "significant" of social circumstances. They even speak of an architectural language (Reichlin especially was interested in Semiology) to integrate this with the idea of architectural autonomy they emphasise the auto-reflexivity of the architectural sign system. To understand the intrinsic logic of architectural communication, one needs to know and understand architectural history or more precisely - as demonstrated by examples in the text - the history of the site and of typology. To clarify what they mean, Reichlin and Reinhart cite a text, "Tradition und Traditionslosigkeit", by the German Marxist philosopher Hans Heinz Holz, who argues that "we cognise only insofar as we integrate the not-yet-experienced into given ways of thinking."[11]

Figure 2. *Archithese* nr 13, 1975, Title page.

Martin Steinmann had completed his diploma project in 1967 with one of the Swiss modernist leaders, Alfred Roth. After working in the atelier of Ernst Gisel, a prominent Swiss architect, for a year, he joined the gta as assistant to Vogt, a position he held from 1968 to 1970, afterwards he headed the CIAM Archives at the gta until 1978.[12] In 1975 Steinmann organized, together with Thomas Boga, the influential exhibition "Tendenzen" in the "Globus Provisorium". It was the first time that the regional if not indigenous contemporary architecture of the Ticino was shown in Zurich. It proved to be one of the most influential exhibitions for the generation of architects born around 1950 and lent the name La Tendenza to a group of
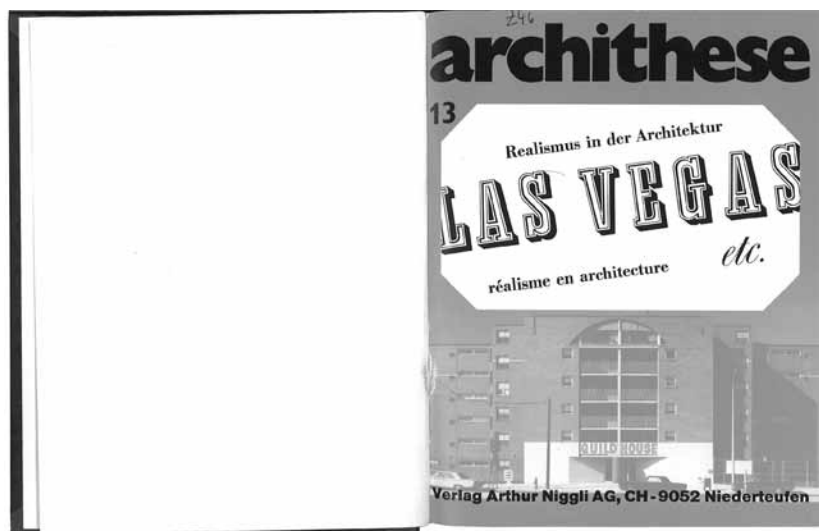
Ticinese architects.[13] The introduction in the accompanying catalogue addressing realism in architecture[14], was subsequently reprinted numerous times and became a crucial inspiration for the reception of the architecture of the Ticino. In this essay, Steinmann defined the specific relationship between autonomy, tradition and meaning in architecture. He referred to the earlier essay, "Die Historie als Teil der Architekturtheorie", and to Rossi´s much quoted phrase "l'architettura sono le architetture", to emphasise, "that meaning of architecture defines itself in relation to its own tradition, where by tradition we understand the works as our comprehension of them."[15] The integration of a single building within the logic of architectural tradition was the true rationalism, not the failed mathematical, social or methodological rationalism of modernist architecture. "History is the place," Steinmann continued, "where one's own age forms a constellation together with a defined earlier one, in a manner that can be defined as tradition."[16] History was no repository of pre-existing models but merely a framework within which to situate contemporary design decisions. Steinmann called existing architecture "prima materia" and used the concept of "répétition différente" to characterize the way one should adapt this material. His interest in semiotics was influenced by Reichlin's Florentine studies, as Steinmann describes in his inaugural lecture in Lausanne in 1989: "The science of signs is semiology. Bruno Reichlin introduced me to that science when he returned to Zurich around 1970. Semiology developed from objects and 'myths' of everyday life. In long discussions — which belong to the formative moments of my life — we tried to apply its methods to architecture."[17]

Reichlin's and Steinmann's discussions led to a co-authored article, "Das Problem der innerarchitektonischen Wirklichkeit" ("The Problem of Inner-Architectural Reality") in a special guest-edited issue of *archithese* in 1976, "Realismus in der Architektur / réalisme dans l'architecture". In it the editors emphasized again the role of history in contemporary architecture: "To understand the meaning of a work means to identify its position within a dense net of relations. The denser this net is, the larger the number of examples and the more tangible the knowledge, the more structured the field of architecture presents itself to the observer, regardless of his preferences."[18] Nevertheless, Reichlin and Steinmann always insisted that they were architects interested in history as a tool ("operante storia") for the design of contemporary architecture, and not historians interested in history as an autonomous discipline. Consequently both developed their careers outside the gta and the ETH. Reichlin pursued his architectural practice with Fabio Reinhart in Lugano, and after leaving the ETH started teaching at the University of Geneva 1984. Steinmann succeeded Stanislaus von Moos in 1980 as editor of *archithese* and in 1987 took a professorship at the EPF in Lausanne.

Although Vogt had addressed the task of defining the Swiss contribution to modern architecture explicitly in his inaugural speech, it was mainly taken up by a younger generation of architects/researchers at the gta who shifted the emphasis from Le Corbusier and Karl Moser (as named by Vogt) to "undiscovered" or underrated Swiss modernist architects like Otto Rudolf Salvisberg, Haefeli-Moser-Steiger, Alberto Sartoris and Jacques Schader. It was in a way the consequence of Rossi's teaching to shift his italianitá to the modernist context of Switzerland. The publication series from the gta had begun with a clear academic direction but was taken over by young architects as a means to investigate their own, immediate tradition and was soon given an "operational" character. "The architects of German-speaking Switzerland had to write their history before they could start to refer to it," wrote Martin Steinmann in 1991. "This point has now been reached. For a few years now an architecture exists in German-speaking Switzerland that is able to realise the teachings of the architettura razionale from within its own cultural context, its own typologies and images."[19] Of the many research projects on Swiss Modernism executed at the gta, the exploration of two architectural practises active between the wars became especially influential for contemporary practices; namely, Otto Salvisberg and the office Haefeli, Moser, Steiger. Both papers were part of the gta Archive. The rediscovery of Salvisberg especially, who was never actually forgotten but merely considered an aberration from the modernist norm, was from the beginning closely and consciously connected with contemporary architectural concerns. The journal *werk-archithese* had already in 1977 published a special issue on him.[20] The Swiss art historian Sanislaus von Moos, founder and editor of the journal and important link to the American movement around Robert Venturi wrote in the preface: "It is no accident that Venturi rates the machine laboratory [an extension of the ETH main building]. What an era, in which architecture could without visible effort be monumental to the fullest and at the same time common. Salvisberg could teach us how an architecture could be interesting without being interesting." And even more resolutely: "Today Salvisberg *has* [his italics] to interest those who are fed up with the trivial pomposity of established bourgeois modernism".[21] In 1985 an exhibition was organised and a book published from the gta on the architect based on the research of Claude Lichtenstein. The catchphrases to characterize Salvisberg's works was soft modernism ("Sanfte Sachlichkeit", Julius Posener, 1977) and the other modernism ("Die andere Moderne", Martin Steinmann und Claude Lichtenstein, 1985). Martin Steinmann und Claude Lichtenstein defined the otherness of Salvisberg's position in the preface of the exhibition catalogue as the search for balanced solutions that avoid the unambiguous proclamations of the International Style or of CIAM. Furthermore, they praised Salvisberg for always keeping construction and form independent of each other.[22] The multitude of perspectives on Salvisberg's work from different researchers contributing to the gta monograph is striking. Even the cover layout reflects a break, presenting none of the master buildings and drawings of the architect but instead

the hoarding of the construction site of the Scherk Shop in Berlin, thus emphasising the building process over the result. Ernst Strebel und Christian Sumi in their article documented and interpreted construction details in a way that was not at all common to architectural histories. Their close investigation of selected interfaces from several of Salvisberg's buildings affirmed the thesis that Salvisberg was more interested in a unified form than in exposing construction details. But that did not mean that he was hiding the construction. Rather, "the parts of the building are changed and reduced in their form and therefore gain almost the character of signs; the arrangement at the interface still refers to conventional models. In this sense, one could speak of Salvisberg's work through the previous examples as having a traditional iconography at the interface. They feature still enough 'reading support' (Lesehilfe) to be recognizable."[23] This approach, of reducing the constructional details to the absolute minimum but still retaining their readability and distinctiveness, would later be a major focus for offices such as Burkhalter & Sumi, Diener & Diener, Marcel Meili and in the early work of Herzog & de Meuron. It is still present in works of younger architectural practices as Miller & Maranta or Bearth & Deplazes. Whereas Miroslav Sik, researching Haefeli, Moser, Steiger and Meili at the gta, chose a way of blending old and new, which he called "Analoge Architektur".[24]

CONCLUSION

Within the wider frame of the Institute for History and Theory of Architecture developed a new interest in architectural history as operational tool for contemporary design; or as the urban historian and gta member Paul Hofer had already put it in 1963: "I don't mean banal actualisation. Where we enter the centre of productive energy we permeate the dead bark of the past and uncover the living. *In this sense history is not the past but another mightier presence*" [his italics]."[25] But does the new significance that was granted to history with the founding of the gta in 1967 and its impact on a younger generation of architects justify calling it Postmodernism? Yes and no. There are important similarities: The influence of Aldo Rossi has been discussed, and with Robert Venturi a second eminent protagonist was well known in Zurich. The historian Stanislaus von Moos, editor of the open minded intellectual new Swiss architectural journal *archithese*, founded in 1971, published an interview with Robert Venturi and Denise Scott Brown in 1975 under the title "Laugh to keep from crying". This was the moment when the American and the Swiss critique of a utopian modernist concept that has lost contact with the "real" world meat. In this issue of *archithese* with the title "Realism in architecture. Las Vegas etc." the concept of realism was established as a connection between the American and the Swiss discussions in stressing the importance of the "rich stock of traditional and popular images and forms, that history left to us – that was rather early considered as 'overcome'."[26] But there are significant differences between the American – Charles Jencks' as well as Venturi's – and the Swiss concept. What the Swiss perspective lacks is the polemical critical approach towards classical modernism, Le Corbusier remained an important starting point but his positions were now seen as one of many possible modernisms. Rather than being declared dead, Jencks had done in 1977, Modernism in Swiss circles was widened, now to include "soft modernisms" and other modernist variants. What is lacking as well in the Swiss version of Postmodernism, if that is what it is, is the concept of mannerism and, even more importantly, eclecticism so crucial to Robert Venturi's "complex and contradictory" architecture. Martin Steinmann in his inaugural lecture 1989 in Lausanne questioned a body of permanent historical citations: "Not everything has been said! And not everything that has been said is useful."[27]

It comes down to one's definition of Postmodernism. One response comes from an unexpected source, the Swiss sociologist Lucius Burckhardt, who was teaching at the ETH at the time and was one of Aldo Rossi's fiercest critics: "I use the word Postmodernism neutrally here" he wrote in 1984 "It is used negatively today. Postmodernist architects all deny being postmodernist, while claiming that others are. I don't use the word negatively, as we need a word for the changes that take place in architecture at the moment. One of the laws of Postmodernism may be, I think, that it considers every case as unique. That is the exact opposite of modernism, which treats very different cases as the same. This then represents a countermovement."[28] In its rejection of utopian laws and systems and its attempt to situate buildings in their specific historical contexts and spatial settings, in this sense the history-based and "realistic" thinking about contemporary architecture as embraced by the members of the gta might indeed be called "postmodern."

Endnotes

1. Adolf Max Vogt, "Das Institut, seine Aufgabe, seine Verpflichtung", in *Reden und Vortrag zur Eroeffnung, Schriftenreihe des Institutes fuer Geschichte und Theorie der Architektur 1*, eds. Jakob Burckhardt, Adolf Max Vogt, Paul Hofer (Basel / Stuttgart: Birkhaeuser, 1968), 13-29: 13.

2. Katharina Medici-Mall (ed.), "Institut für Geschichte und Theorie der Architektur. Fünf Punkte in der Architekturgeschichte", *Festschrift für Adolf Max Vogt, Schriftenreihe des Instituts für Geschichte und Theorie der Architektur an der Eidgenössischen Technischen Hochschule Zürich, gta 28*, (Basel, Boston, Stuttgart: Birkhäuser, 1985).

3. Akos Moravanszky, Judith Hopfengärtner (eds.), *Aldo Rossi und die Schweiz. Architektonische Wechselwirkungen* (Zürich: gta Verlag, 2010).

4. Aldo Rossi, "Introduction", in: *Ausstellung der Werke Aldo Rossis* (Zurich, Eidgenossische Technische Hochschule, Abteilung Architektur, Globusprovisiorium, 1972) without number.

5. Aldo Rossi, "Architecture for museums" ("Architettura per i musei", lecture 1966), English translation in *Selected writings and projects* (London/Dublin: Gandon Editions 1983), 24.

6. See: Peter Lack, *Bruno Reichlin's gebaute Architekturkritik. Moderne Architektur und Historizität,* (Weimar: Verlag und Datenbank fuer Geisteswissenschaften, 1995), 17.

7. Bruno Reichlin, *La solution élégante*, Diss. ETH, Zurich, never published as book but in several articles.

8. Bruno Reichlin/Fabio Reinhart, "Die Historie als Teil der Architekturtheorie. Anmerkungen zu neuen Projekten für Zürich, Bellinzona, Modena und Muggiò", in *Archithese* No 11, 1974. 20-29.

9. "Bruno Reichlin/Fabio Reinhart, "Die Historie als Teil der Architekturtheorie. Anmerkungen zu neuen Projekten für Zürich, Bellinzona, Modena und Muggiò", in *Archithese*, No 11, 1974. 20.

10. Bruno Reichlin/Fabio Reinhart, "Die Historie als Teil der Architekturtheorie. Anmerkungen zu neuen Projekten für Zürich, Bellinzona, Modena und Muggiò", in *Archithese*, No 11, 1974. 20.

11. Hans Heinz Holz cited in Bruno Reichlin/Fabio Reinhart, "Die Historie als Teil der Architekturtheorie. Anmerkungen zu neuen Projekten für Zürich, Bellinzona, Modena und Muggiò", in *Archithese*, No 11, 1974. 20. Hans Heinz Holz, *Vom Kunstwerk zur Ware. Studien zur Funktion des ästhetischen Gegenstands im Spätkapitalismus* (Neuwied / Berlin: Luchterhand, 1972), 84-85.

12. In 1978 he finished his dissertation on CIAM, which was published in 1979. CIAM. Internationale Kongresse fuer Neues Bauen. Dokumente 1928-1939, ed. Martin Steinmann, Institut fuer Geschichte und Theorie der Architektur 11 (Basel / Stuttgart: Birkhaeuser, 1979). In 1987 he became professor for architecture at the Ecole Polytechnique Fédérale Lausanne (EPFL). From 1980-86 Martin Steinmann was editor of the journal *Archithese* (1980/81 together with Sanislaus von Moos and 1981-1986 with Irma Noseda).

13. In the exhibition catalogue (see below) are named: Roberto Bianconi, Mario Botta, Peppo Brivio, Colletivo 2 (Tita Carloni, Lorenzo Denti, Foso R. Moretti), Mario Campi, Franco Pessina, Niki Piazzoli, Franco Pessina, Niki Piazzoli, Giancarlo Durisch, Aurelio Galfetti, Flora Ruchat-Roncati, Ivo Truempy, Ivano Gianola, Marco Kraehenbuehl, Tino Bomio, Bruno Reichlin, Fabio Reinhart, Dolf Schnebli, Luigi Snozzi and Livio Vacchini.

14. Martin Steinmann / Thomas Boga, Tendenzen: Neuere Architektur im Tessin: Dokumentation zur Ausstellung an der ETH Zürich vom 20. Nov. - 13. Dez.1975, zusammengest. von Martin Steinmann und Thomas Boga, Zurich: ETHZ Organisationsstelle für Ausstellungen des Institutes GTA, 1975, 1977. Introduction reprinted as "Wirklichkeit als Geschichte. Stichworte zu einem Gespräch über Realismus in der Architektur" in *Forme forte. Ecrits/Schriften 1972-2002*, ed. Jacques Lucan, Bruno Marchand, (Basel et. al.: Birkhaeuser, 2003) 143-152. The English translation is "Reality as History: Notes for a Discussion of Realism in Architecture", in *A+U*, September 1976, reprinted in *Architecture - Theory since 1968*, ed. Michael Hays (Cambridge MA-London, GB, The MIT Press, 1998), 246-253.

15. Martin Steinmann, "Wirklichkeit als Geschichte", op. cit.. English Translation quoted after M. Hays, op. cit., 249.

16. Martin Steinmann, Wirklichkeit als Geschichte, 10.

17. Martin Steinmann, "La leçon des choses/Die Lehre der Dinge", Antrittsvorlesung an der EPFL, Lausanne 10. Mai 1989, printed in Martin Steinmann, *Forme forte. Ecrits/Schriften 1972-2000*, 173-187: 179.

18. Bruno Reichlin / Martin Steinmann, „Zum Problem der innerarchitektonischen Wirklichkeit", in: *Archithese*, No 19, 1976, 3-11: 8.

19. Martin Steinmann, "Neuere Architektur in der Deutschen Schweiz / Architecture récente en Suisse alémanique", first published in Peter Disch, *Architektur in der Deutschen Schweiz 1980-1990* (Lugano: 1991). Reprinted in Martin Steinmann, *Forme forte. Ecrits/Schriften 1972-2000*, 93-109, quote 95. One of the first to react to this call was Martin Steinmann himself. He very early discovered the almost forgotten Swiss architect Hans Schmidt and published an essay on his work.

20. "Otto R. Salvisberg 1882-1940" *Archithese*, 10, October 1977, special issue.

21. Stanislaus von Moos, "Architektur auf den zweiten Blick, oder: Salvisberg Heute" in Otto R. Salvisberg 1882-1940" *Archithese*, 10, October 1977, special issue, 3-6: 6.

22. Martin Steinmann, Claude Lichtenstein, "Eine andere Moderne?", in *Otto Rudolf Salvisberg (1882-1940). Die andere Moderne*, Werkkatalog und Biographie von Claude Lichtenstein, thematische Beiträge von Bernhard Furrer et. al., Dokumente zur modernen Schweizer Architektur, Zurich: gta Verlag, 1985, 6-11. (second edition, Zurich: gta Verlag, 1995).

23. Ernst Strebel and Christian Sumi, "Detailzeichnungen", in: *Otto Rudolf Salvisberg (1882-1940). Die andere Moderne*, op. cit., 206-219: 218.

24. Miroslav Sik (Ed.), *Analoge Architektur*, Zurich: Boga, 1987.

25. Paul Hofer, "Die Dimension der Geschichte im Unterricht an Technischen Hochschulen. Gedanken zu den Faechern Geschichte und Theorie des Staedtebaus, Denkmalschutz und Denkmalpflege" (22.8.1963), *In der historischen Stadt das produktiv Lebendige, in der gegenwaertigen das Fortwirken des Vorausgegangenen. Paul Hofer an der Architekturschule*, Exhibition catalogue (Zurich, Institut fuer Geschichte und Theorie der Architektur, 1980), 53.

26. "'Realismus' in der Architektur", Editorial, in: *Archithese*, 13, 1974, 3.

27. Martin Steinmann, "La leçon des choses/Die Lehre der Dinge", Antrittsvorlesung an der EPFL, Lausanne 10. Mai 1989, printed in: Martin Steinmann, *Forme forte. Ecrits/Schriften 1972-2000*, 173-187: 183.

28. Lucius Burckhardt,"Regionalismus wiederverwendet" in: "Liegt die Zukunft der Stadt in der Agglomeration?, GDI-Institut, Rüschlikon/Zürich 1984, wiederabgedruckt in: Lucius Burckhardt, *Die Kinder fressen ihre Revolution. Wohnen-Planen-Bauen-Grünen*, Bazon Brock (ed.), Cologne: Du Mont, 1985, 327-331: 329.

THE SEARCH FOR NEW CONCEPTS OF SPACE AND THE CITY POSTMODERNISM IN POLAND: THEORY AND PRACTICE IN THE 1980s

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In the early 1980s Poland was experiencing an unprecedented economic crisis, which the authorities tried to cover up with intensified propaganda. The great depression in the construction industry coincided with attempts to find a new design philosophy. The greater openness of public life, related to the establishment of the Solidarity movement, enabled greater freedom of expression which led to a critique of, among other things, the projects of the past decade and to discussions on issues pertaining to communication with the public which architects had, until then, overlooked. New ideas emerging in American and European architecture led to the rejection of principles of modernism and urban planning that stemmed from the Athens Charter.[1]

Debate about the condition of architecture in Poland was accompanied by renewed awareness among architects and by specific initiatives aimed at changing the status quo.[2] The architects' determination to conform to new expectations relating to tradition was as powerful as the determination to provide modern urban solutions had been only two decades earlier.

Concurrently, the designers' market also changed. The hitherto prevailing large, state-owned studios, relying heavily on industrial technology, stagnated whilst architects began working individually or in small cooperative studios, turning to forms that were more local in character. Given the socioeconomic situation of the times, it was, however, only possible to advance individual construction projects or sacred and residential developments. The few public utility buildings designed at the time were an exception and were not actually erected until after the fall of communism in 1989.

In Poland, the greater openness of public life in the early 1980s made it possible to organise the 14th Congress of the International Union of Architects in Warsaw (15 June 1981). This was an indisputably important event for Polish architecture since it was finally possible to situate its achievements, attitudes and expectations within the larger international milieux. This coincided with the emergence of regional and new historicist architectural trends and references, as well as an intellectual revival that intensified theoretical debates to an extent that had not been seen for years. Such debates were also largely inspired by the architectural competitions announced at the time.[3] The explorations and the transformed approaches to the urban planning of residential complexes promised some major projects that were to be completed in the 1990s.

EXPLORATION AND THEORETICAL DISCUSSION

An important role in the formation of an open approach to new concepts was played by *Architektura*, a monthly magazine and a major Polish publication dedicated to spatial issues. It featured a considerable amount of articles and theoretical texts regarding the new spatial trends and explorations. Theoretical works presented therein were contributed by a whole generation of brilliant architects including: Czesław Bielecki[4], Konrad Chmielewski[5], Romuald Loegler[6], Wojciech Kosiński[7] and Jakub Wujek[8]. Most of their writing disapproved of the Athens Charter and the then prevalent prefabricated technologies. It also restored the focus on issues such as space, form, detail and site.[9] Not only did the texts emphasise a change in aesthetics, but also the ancillary responsibility to society of architects. Another article (in an issue focused on the subject of "Architecture at a turning point") concluded: "The things that are happening in international architecture cannot go unnoticed in Poland. The commotion which has emerged in architect circles is certainly not a conflict by nature. It is, indeed, the recipient, i.e. the society, that approves or rejects our work."[10]

Translated into Polish, the books of Charles Jencks and the works of Kenneth Frampton provided a basis for the appearance of a 'difference' in many projects and designs from the 1980s. This was soon dubbed by critics with the 'ambiguous but efficacious' term, 'postmodernism'. Especially the translation of Jencks' *The Language of Postmodern Architecture* stirred major ferment in Polish architecture schools and introduced these concepts to the wider public.[11]

There was, of course, also a considerable amount of criticism of the new trend stating, for instance, that

> …a separate issue are the voices emerging recently by the score, the designs and projects – popular especially among young architects – maintained in a 'local Polish postmodern' convention that is the effect of both the general mood of decadence and the fairly typical for our circles superficial reception of architectural novelty following a somewhat cursory reading of foreign magazines. Not understanding

the sociocultural context of the various schools of postmodernism, its maladjustment to the Polish social and technological reality (since it is founded on perfect workmanship and materials that are unavailable in our construction market) is the reason why a wave of barbarised historic quotations and other pseudo-postmodern shapes and forms is appearing delayed by nearly fifteen years.[12]

Notwithstanding such voices, the great enthusiasm of Polish architects, despite their limited economic and technical resources, produced not only some excellent individual projects, for instance churches and detached houses, but also a number of new urban complexes and plans.

NEW URBAN PLANNING, NEW PROPOSALS FOR CITIES

The massive expansion of gigantic block housing estates surrounding downtown areas in Polish towns demonstrated the weakness of concepts stemming from the Athens Charter. Residential design developed in the early 1980s displayed, to lesser or greater extent, an inclination towards new urban planning concepts that defied the modernist experience of the previous era.[13] Competition proposals and theoretical works, as well as several completed projects, bore an explicit reference to the postmodernist and regionalist wave that was spreading across Europe. Some of the projects were still rooted in the late 1970s, but even these displayed a completely new philosophical and aesthetical approach to urban planning.

After a series of Polish town centres were rebuilt in the wake of World War II adhering to modernist principles, the rebuilding of the Old City in Elbląg in the 1980s (Szczepan Baum and Ryszard Semka) took a creative approach to these new revivalist ideas. The project departed from the hitherto doctrine propagated by Jan Zachwatowicz, which made it mandatory to rebuild towns in strictly historical forms, as was the case in Warsaw, Gdańsk and Poznań shortly after the war. The buildings in Elbląg's Old City were erected from scratch on Gothic foundations maintaining the volume and module of the historical developments; however, the façades were an unconstrained pastiche of the old forms. Similar in character was the Podzamcze Estate in Szczecin (Stanisław Latour and Zbigniew Paszkowski) which also adhered to the historical divisions whilst producing new forms.

Probably one of the best examples of the new urban planning model was the small town of Zielone Wzgórza near Poznań completed in 1982 (Jerzy Buszkiewicz, Tomasz Durniewicz, Stanisław Sipiński and Eugeniusz Skrzypczak, in collaboration with Augustyn Bańka, an architectural psychology expert). The various solutions used in the particular buildings comprised one of the rare attempts to individualise the character of architecture created using the still dominant of prefabricated panel technology. Its spatial form anticipated a functional city solution and was founded on the premise that "…there are radical differences between erecting concentrated structures upwards in repeatable form and strict order, and historical forms in which the sacred spirit of the small town or city was present."[14] The period urban planning returned to the concept of districts supported by commercial premises and additional functions, with a central square consistent with historical standards. "Good urban planning is not created today just by laws and regulations. It also stems from cultural experience and from using architecture that is 'indicative', historical," wrote W. Kosiński at the beginning of the decade.[15] In Zielone Wzgórza the designers revisited the use of quarters and this was, indeed, the revisiting of historical roots.

These new ideas were probably the most apparent in competition projects. The town *Ogród Utrata* which was a proposal for a new town on the outskirts of Warsaw (Krzysztof Domaradzki and Olgierd R. Dziekoński) and the proposal for creating a stretch of suburban developments in Warsaw drawing on Ebenezer Howard's garden city idea, or the residential complex in Krakow at Kazimierza Wielkiego Street by R. Loegler, exemplified architects' fascination with the new shape of space, urban morphology and hierarchal geometry. A widely renowned project was the design of Poznań's Strzeszyn district (Jerzy Buszkiewicz, Tomasz Durniewicz, Stanisław Sipiński and Eugeniusz Skrzypczak). Its authors based it on the assumption that the centre and major public spaces would be composed as the counterpart to the existing city layout. The starting point was the centre modelled on the Old Market Square in Poznań, perceived as a historically evolved urban structure. The ensuing discussion expressed a consistent message from architects who now embraced historical affiliations and rejected modernist totalising residential solutions.

Most of these projects were consistent with Rob Krier's proposals presented in *Urban Space in Theory and Practice*[16] in which he modelled the morphological layout of towns based on traditional squares, streets and boulevards (as an antidote to the CIAM versions of the functionalistic city). They were also consistent with the ideas described in *A Pattern Language* by Christopher Alexander[17] and the American concepts of New Urbanism presented in the works of Andres Duany and Elisabeth Plater-Zyberk.

NEW LANGUAGE OF RESIDENTIAL ARCHITECTURE

The deteriorating economic situation in the 1980s led to, among other things, a crisis in residential construction. The architectural environment advocated equal chances for developers by limiting state involvement and permitting equal access to design and construction, regardless their organisational form.[18] This coincided with the emergence of the new trends that drew designers' attention to the role of traditional towns, architecture and details. Influential here were the ideas of Robert Venturi, accepting and

acknowledging contradiction and complexity in architecture.[19] References to historical styles regarded as paraphrases, pastiches or features of a new eclecticism made their way into the mainstream to become an avant-garde aesthetic undertaken by the most brilliant architects who created designs in the new spirit. Among new buildings that were especially noteworthy were those realised by small housing cooperatives in the downtown and adjacent areas in most of the larger towns in Poland, mainly in the major urban and academic centres. Most of them constituted complementary architecture which filled gaps in the existing street frontages. The few projects that were realised in the 1980s paved the way for the new approach to the city and to architecture (whilst many of them were not constructed until the early 1990s). Among them it is necessary to mention several that introduced a completely new (despite their references to the past) quality in the aesthetics of Polish towns. One of them was the building at Grochowska Street in Warsaw (Tadeusz Szumielewicz, Marek Martens and Lech Kordowicz, 1988) featuring commercial and residential premises on the ground floor inscribed into a street façade of the Praga-Południe district. Another was a multifamily residential in Poznań at 18 Dąbrowskiego Street (Eryk Sieiński and Mariusz Wrzeszcz) containing two-level flats of a very high quality, in correspondence to the downtown location. Its scale related to the neighbouring *kamienica* buildings (apartment blocks) and retained the structure of the early 20th-century developments.[20]

Another major influence on Polish architectural exploration in the 1980s was the IBA (Internazionale Bauaufstellung) of Berlin, in which a number of Polish architects were invited to participate, among them Wojciech Obtułowicz. Many new and unique buildings were erected in Wrocław bearing this influence: the six-storey archway-house at Hallera Street and the buildings at Saperów Street where the residents could freely shape the forms of the interiors (Tadeusz Sawa-Borysławski), as well as a whole series of projects by Wojciech Jarząbek including a building with a cylinder-shaped corner or the building at Wyspiańskiego Waterfront featuring balconies displaying a shockingly bright colour scheme.[21]

Meanwhile, architects in the south of Poland developed some distinct traits by referring to the Upper Silesian regional construction context and tradition. The use of relatively simple materials and technology as well as respect for the historically created residential forms produced some excellent results: the H-7 housing estate in Tychy (Stanisław Niemczyk) located near rural developments, a gallery-access building in Leszczyny-Czerwionka (Janusz Waligóra) which availed of regional detail or a complex of buildings in Będzin (Krzysztof Barysz) that was faithful to the principle of local identity. Peter G. Fauset thus described his impressions of this architecture in the aforementioned *Architektura* magazine:

> The new Silesian architecture is marked, similar to that in the West, in its rejection of the worst aspects of international style, as well as in its enhanced awareness of the value of local architecture; noteworthy too is its use of traditional building materials and regional construction solutions, as well as the reinstatement of architecture preceding the development of modernism.[22]

Much larger in scale was the Różany Potok estate (Marian Fikus) intended for the academic staff of Poznań's universities and colleges (Fig. 1).[23] Initiated in the mid 1980s the design conformed to the urban structure of Adam Mickiewicz University with which it was connected via a compositional axis running through a central square.[24] It was an autonomous spatial structure featuring its own market square, intersecting streets and a quarter-like structure of the developments.[25] The varied forms were in line with the changing and increasingly diversified needs of the residents. The applied language and architectural narration drew on classical principles of architectural composition emphasising corners and entrances, in addition to availing of historicising gable forms and extensive details. The final result was a remarkably coherent urban development open to further expansion.
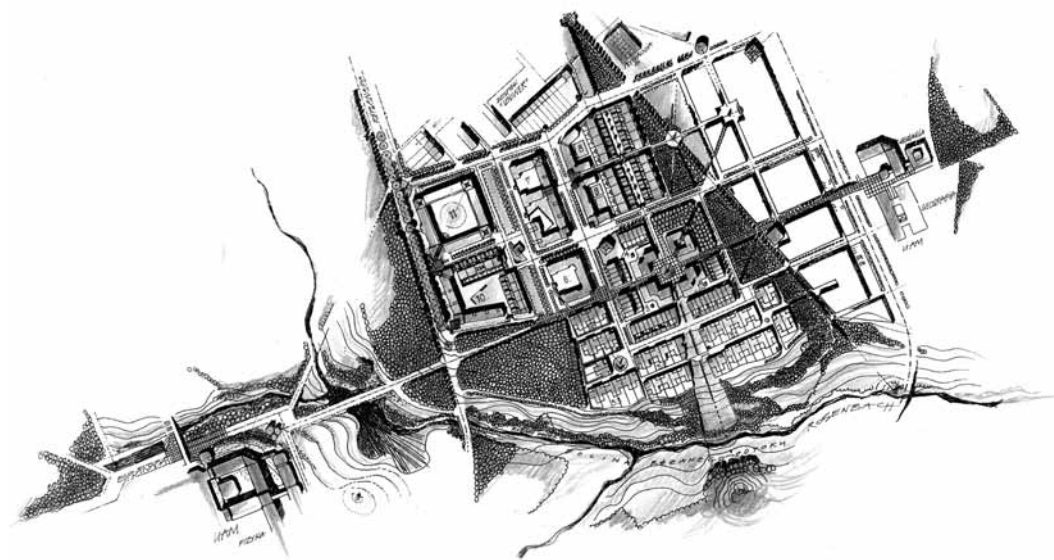
Figure 1. The Rozany Potok estate intended for the academic staff of Poznan's universities and colleges by Marian Fikus and team. (source: drawing by the author)

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One of the most desired commodities of the time, the single-family home, also constituted an area which provided for much greater freedom in design than hitherto possible. The rationed multifamily dwellings built by the state were highly sought after by the average Pole, but the single-family house was something which only the very wealthy could afford. In the latter case, working with a private developer made it possible to depart from the imposed typical standardized design which, at the time, was a prerequisite for obtaining the mandatory building permits. Marking this new freedom in design was the work of the architect Romuald Loegler from Krakow. His guiding motif of 'geometry and poetics,' based on the concept of 'liberated form,' provided a framework for what he called 'geometrical romanticism,' entailing the manipulation of an aesthetical module, such as the cube, to determine the order of an architecturally created space.[26] An example of such a 'liberated form' was the house which was built for Loegler's daughter in 1987 in Krakow.

The architectural profession was, by the 1980s, familiar with the work of Western theorists. However, as predicted by critics, the lack of an understanding of the underlying sociocultural context of postmodernism led to a "wave of barbarised historical quotations" in Polish architecture. Especially notorious were the pseudo-postmodern forms that referenced the traditional Polish home. Furthermore, this new trend greatly affected the spatial reality in Poland by reinforcing the so-called 'manor house style', the favourite style of the emerging middle class.

THE AESTHETIC EXPERIENCE OF SACRED ARCHITECTURE

To some members of the architecture profession, postmodernism became a stance explicitly in polemical opposition to official trends imposed by the authorities. This was a natural phenomenon since utopian modernism (associated with the politics of modernisation and industrialisation) had practically become the approved state style. The new trend was one of the few areas of relative freedom, especially in the field of religious buildings. As the country succumbed to economic and political chaos new, bold discussions emerged concerning the position and form of sacred architecture. After decades of blocking the construction of new churches by the communist government, a virtual explosion of new developments occurred. The turning point was 1978 when Krakow's Cardinal Karol Wojtyła was elected the new pope. Previously suspended projects gained new momentum whilst architects began to see sacred architecture as a venue for formal experiments and a fertile ground for historical references in an area of architecture steeped in tradition.

The numerous new churches determined the aesthetical standards of the new trend. One of the most distinguishable works of the period was the Lord's Ascension Church in Ursynów, Warsaw (Marek Budzyński and Zbigniew Badowski) (Fig. 2). This manifestation of postmodernism was rich in interesting formal solutions and surprising stone details on a massive brick wall that openly referenced medieval prototypes but nonetheless had contemporary appeal. Completed in the mid 1980s the project had a major impact on the forms of subsequent churches.[27] Also in this field the city of Wrocław, with its cosmopolitan atmosphere and residents hailing from various parts of Poland, was the site of many other postmodernist artistic and spatial experiments. Among them one should list the Church of Our Lady the Queen of Peace (Wacław

Figure 2. The Lord's Ascension Church in Ursynów, Warsaw by Marek Budzyński and Zbigniew Badowski. (source: Przemek Wiech)

Jarząbek and Władysław Hryniewicz) displaying a complicated interaction of solid forms in addition to disturbing, monumental stone façades. In Nowe Tychy Stanisław Niemczyk, known for his distinctive style and dubbed the 'Polish Gaudi', designed the Church of the Holy Ghost which referred to both regionalism and biblical symbolism. Furthermore, the Church of St. Hedwig the Queen in Krakow (Romulad Legler and Jacek Czekaj) was designed in the spirit of the 'aesthetics of order' featuring a clear complication of form in which "the calm spatial geometry [evolved] into sacred beauty".[28]

One of the best examples of Polish postmodernism is the Resurrectionist Seminary in Krakow (Dariusz Kozłowski, Maria Misiągiewicz and Wacław Stefański).[29] The construction of the complex (1985-1993) was a major artistic event. Its spatial layout was composed to the principle of harmony between unrestricted geometrical solids, whilst its concept was based on four symbolic gates: Initiation, Hope, Knowledge and Faith. The architecture of the buildings displayed many metaphorical references and surprised with formal solutions filled with concealed meanings, undulating forms, cracks and fractural walls.

THE NEW LIFE OF POSTMODERNISM

In 1989 Poland celebrated the fall of communism. Following this, the postmodern language of architectural narration continued to thrive in a wide number of spectacular projects. The continued critique of monotonous, place-less postwar suburbia became an opportunity to discover or create new spaces of identity. This offered a means to revisit the traditional social and communal values embodied in pre-modernist architecture and urban planning.

Postmodernism continued into the 1990s, by this time making use of advanced technology and materials. The return to the human scale of traditional architecture and cities was also welcomed by those who had missed its humanizing sensibility. Today, new buildings display a rich diversity of formal solutions made possible by the postmodernism of the past several decades.

Endnotes

1. A breakthrough year was, nonetheless, 1980 when the Venice Biennale featured the Architecture Exhibition for the first time as a separate entity. One of its organisers, Paolo Portoghesi wrote: "The turn of architecture to the womb of history and its recycling in new syntactic contexts of traditional forms is one the systems that has produced a profound 'difference' in a series of works and projects in the past few years understood by some critics in the ambiguous but efficacious category of Postmodern." Compare B.Gadomska, B.Gliński, „Obecność przeszłości, czyli retrospekcja o Biennale Weneckim 1980", *Architektura*, no.2 (1982), 25.

2. The late 1970s were marked by criticism of how the spatial environment had evolved in Poland and by intensified discussions about the problems of housing construction. One of the main objectives of *Program działań Stowarzyszenia Architektów Polskich w dziedzinie mieszkalnictwa w latach 1982-1984* [Polish Architects Association Action Programme for Residential Construction, 1982-1984], presented in 1982, was to rebuild architects' skills, to secure residents' involvement in programming, designing and constructing and to provide design (especially urban design) that would take into account the pluralism of developers and contractors. See "Program działań Stowarzyszenia Architektów Polskich w dziedzinie mieszkalnictwa w latach 1982-1984", *Architektura*, no.2 (1982) .27-28.

3. H.Adamczewska-Wejchert, „Uwarunkowania rozwoju architektury polskiej ostatniego czterdziestolecia (1945–1985)", *Architektura*, no.6 (1986) These trends were further consolidated during the subsequent Paris Biennale (1982) and Venice Biennale (1985), as well as the Architecture Biennale in Krakow which emerged in the mid 1980s.

4. One of the major Polish works was the erudite essay, Cz.Bielecki, "Ciągłość w architekturze" (Continuity in Architecture), *Architektura* No. 3-4/1978. Here Bielecki referred to, among others, Ch.Alexander (*A City Is Not a Tree*), J.Barnett, R.Venturi, L.Martin and L.March.

5. K.Chmielewski, "Didaskalia architektury", *Architektura*, no.3 (1986), 78-80 (and more numbers).

6. R.Loegler, "Froma uwolniona a nie poszukiwana", *Architektura*, no. 3(1987), 36-38.

7. W.Kosiński, "Detal-artyzm, symbol, skala", *Architektura*, no. 4-5(1986), 28-33 and W.Kosiński, "Nowa urbanistyka – miejskość, ciągłość, wielość", *Architektura*, no. 4(1984), 35-39.

8. A series of articles in the magazine published later as a book; compare J.Wujek, *Mity i utopie architektury XX wieku*, Warszawa 1986.

9. A very important synthesis of urban planning in the 1980s was presented also by E.P. Porębska who acknowledged an inclination towards the future and the will to amend past mistakes. Compare E.P. Porębska, "Nowa Utopia? Polska myśl urbanistyczna lat osiemdziesiątych na tle tendencji powojennych", *Architektura*, no. 3(1987), 12-21.

10. The fashionable attempts made at the time to conduct new studies that referenced historicism flourished among architects who searched for new theories that would justify architectural explorations. "Architektura na rozdrożu", *Architektura*, no. 2/1987, 17.

11. Ch.Jencks, *Architektura postmodernistyczna*, Warszawa 1987 (orig. Ch.Jencks, *The Language of Postmodern Architecture, London 1984).*

12. A.Gliński, Z.Kusztra, S.Müller, „Architektura polska 1944–1984", *Architektura,* no. 1-6(1984), 91.

13. The years in question did not produce any creations whose forms would clearly surpass earlier projects; nonetheless, design concepts began emerging evidently inspired by the most recent ideas.

14. W.J.Molicki, *Miasteczko Zielone Wzgórza według idei Jerzego Buszkiewicza*, Wrocław 2002, 24.

15. W.Kosiński, "Nowa urbanistyka – miejskość, ciągłość, wielość", *Architektura*, no. 4(1984), 38.

16. R.Krier, *Stadtraum in Theorie und Praxis*, Stuttgart 1975.

17. Ch.Alexander, S.Ishikawa et al., *A Pattern Language: Towns, Buildings, Construction*, Oxford University Press 1977

18. 2nd National Meeting of Architects… [*Architektura*, no.2(1984), 19].

19. Venturi presented these ideas in one of the most important architectural books of the 20th century: R. Venturi, *Complexity and Contradiction in Architecture*,

New York 1966.

20. However, its shape and façade featuring a dispersed window arrangement, wooden balconies and the overhang of the last storey was a reference to the spirit of postmodernism which proposed a new aesthetics for the downtown block of flats. Also in Poznań, Marian Fikus, the designer of a small multifamily dwelling unit at Wierzbięcice Street, went even further with these concepts by providing a façade based on classical proportions and the golden ratio. The symmetrical projection layout and a semicircular window crowning the gable suggested a postmodern language of meaning and narration modelled on the Guild House in Philadelphia by Robert Venturi two decades earlier.

21. Compare J.Harasimowicz (ed.), *Atlas architektury Wrocławia*, Vol. II, Wrocław 1998, 97-99.

22. P. G. Fauset, "Nowa architektura na Śląsku – moje wrażenia", *Architektura,* no. 1(1989), 21.

23. Design work: 1985-2006; realisation: 1989-2008 [compare M.Fikus, *Przestrzeń w zapisach architekta*, Poznań–Kraków 1999, M.Fikus, *Marian Fikus. Twórczość*, Poznań 2008, 56] Architects: M.Fikus, E.Kosińska-Fikus, R.Lisiak, P.Słuchocki and P.Bartosik.

24. The compositional axis connects Różany Potok with the Faculty of Physics and the Faculty of Geographical and Geological Sciences.

25. M.Fikus, *Przestrzeń w zapisach architekta*, Poznań–Kraków 1999, 77.

26. R.Loegler, "Nowy klasycyzm czy geometryczny romantyzm?", *Architektura,* no. 4-5 (1986), 65-66.

27. Among them was the Church of Our Lady in Głogów (Marian Fikus and Jerzy Gurawski) which, in 1988, was honoured as 'project of the year' by the Association of Polish Architects; patrz: K.Kucza-Kuczyński, *Nowe kościoły w Polsce*, Warszawa 1991.

28. R.Legler, *Z porządku uwolniona forma*, Kraków 2001, 86.

29. W.Kosiński, "Architektura współczesna", in J.Marcinek (eds.), *Dzieje architektury w Polsce*, Kraków, 2003, 356.

THE FEAR OF POSTMODERNISM: THE STOCKHOLM GLOBE ARENA, 1982-1989

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In 1980, when the first architectural biennial in Venice choose to present postmodernist architecture without mentioning the concept in the title, a similar avoidance could be spotted in the Swedish architectural discourse. Instead, history was lifted up as the central theme, both in Venice and Stockholm. Consequently, the title for the Biennial was *La Presenza del Passato* (The Presence of the Past), and in the preface of the exhibition publication *1930/80 Architecture Form Art* it was stated that 'we carry the history with us into the future.' The year 1980 was significant also in Swedish architecture. There was a wide range of exhibitions criticizing modernism and functionalism, but still there was no formation of an explicit postmodern discourse. However, 1980 was the 50-year anniversary of the Stockholm Exhibition, with a number of different events: *1930/80 Architecture Form Art* at Kulturhuset, *The Break-Through and Crises of Functionalism – Swedish Housing 1930-80* at the Museum of Architecture, and *The Uncompleted Functionalism* at the Rudolf Steiner Seminar in Järna. All these events could be seen as extensions of a long and much discussed critique of Swedish functionalism during the 1970's, which opened the way for the development of new routes within the functionalistic program. But there were also other occurrences that were more distinctly related to the growing international postmodernist movement, such as *Mannerism* at the Art Academy and *The Eighty-Room Apartment* at Kulturhuset. Significantly, however, there was no mention of postmodernism per se in any of these events.

In this paper I discuss the meanings of this avoidance of a postmodern discourse, both in the Swedish architectural context and in the society at large. I argue that the intellectual and theoretical lack of engagement in the postmodern discourse in fact encouraged – through large-scale architectural projects – an expanding global economy and the organization of what has been called Sweden's 'Third Way Society.'[1] This paper focuses on the processes in the 1980s leading up to the construction of the Globe Arena, then the world's largest spherical building begun in 1982 and completed in 1989, and the concomitant building complex Globe City, in the context of postmodernism.

POSTMODERNISM, HISTORY AND THE NEW ECONOMY

The wide range of ideas collected under the umbrella of postmodernism might best be characterized as critical perspectives of modernism – in this respect it is easier to say what postmodernism is *not* than to state what it affirm as a united discursive movement.[2] However, two trajectories can be distinguished. The first stresses and affirms the expressions of the commercial world in relation to architecture (e.g. Robert Venturi, Charles Moore and Charles Jencks), while the second rejects the same world of consumption and spectacles (e.g. Aldo Rossi, Christian Norberg-Schultz, and Leon Krier).[3] By choosing the title he did for the 1980 Venice Biennial, the director Paolo Portoghesi downplayed the impact of the commercial world of late capitalism, and instead focused on the role of history. In the Swedish context, one can not speak of both these trajectories, as the commercial aspect, the logic of consumption and late capitalism Fredric Jameson talks of, never played a significant role in post-war discussions. The only interpretation of the postmodern movement in the Swedish context was the historical.

Revealing in this context was the article 'Postmodernism' published in 1980 in the first issue of the newly begun Swedish *Magasin Tessin*.[4] The author and chief editor of the magazine was Thomas Hellqvist. This little magazine, devoted to architecture, as written in the preface to the first issue, 'in a time when building as art is impossible.'[5] Instead of trying to find solutions in the offices of the engineers and social scientist 'the journey will go into the soul of man, back in history and forward into utopia'.[6] This became a forum for Swedish architects interested in postmodernism until it ended in 1987. Its focus, revealingly, was on history and aesthetics, not consumption. The discussions on postmodernism had in fact been introduced earlier by the architectural critic Eva Eriksson in the magazine *Arkitektur,* in 1976. She was commenting the English debate that, as she expressed it, 'aims at finally ending the Modern Movement.'[7] She referred to the thematic issue of *aaq* (*Architectural Association Quarterly*) from 1975, 'The meno pause – Beyond post modern architecture,' and especially Charles Jenck's article 'The Rise of Post Modern Architecture.'[8] Eriksson, the chief editor of *Arkitektur*, had a clear social and political outlook and took an activist position; but during the 1980's she was replaced by Olof Hultin, and the discussion of postmodernism in *Arkitetur*, especially in its societal and political context, ceased.

In 1982-83 the public debate on postmodernism erupted in *Dagens Nyheter*, one of the major Swedish morning papers, under the headline 'Modernism-outdated?'[9] In the editor Arne Ruth's introductory comment 'Something new is happening – but what?' in November 1982, it is discussed whether modernism is overplayed, and if so, what comes after. He mentions that the concept postmodernism was coined in the architectural debate but has spread to other cultural fields and 'in a series of articles postmodernism as a concept will be analysed and the tendencies will be valued in relation to the modern tradition.'[10] The response to the notion of a Swedish postmodern was largely negative. As Eva Eriksson expressed it, the discourse on postmodernism lacked Swedish roots. For many authors the future was instead to be found in functionalistic architecture, even if it had to be re-thought in contemporary terms. In Leif Nylén's article January 1983, 'Punk aesthetics and postmodernism,' he pointed out that the resurgence of modernism around 1980 – what he calls neo-modernism –was only a revival of its decorative, not ideological aspects. In this sense, 'neo-modernism' could be likened to postmodernism, simply a 'look' or style, 'something you borrow and drape yourself in without taking the original theoretical claims for real.'

Meanwhile, paralleling the 1982-83 public debate on postmodernism, one of the largest architectural projects in Sweden in many years was begun in Stockholm – the building of a new multi-purpose sports and concert arena in conjunction with one of the largest shopping malls and office complexes in the country. This huge project resulted in the Stockholm Globe City, which is portrayed as modernistic, or sometimes neo-modernistic, even though many of its central features might better be understood within a postmodern context. My aim here is to show how the Stockholm Globe project in fact fits neatly within developments typically connected to postmodernism, and the late capitalism and the politics of the Swedish 'Third Way' of the 1990s characterized by deregulations and privatization of the public sector.

THE STOCKHOLM GLOBE ARENA

The first plans for developing the area around the existing arenas in Johanneshov in the southern part of Stockholm were formulated in 1982 by the social democrat and City Commissioner Ingemar Josefsson.[11] Together the different actors – sports organizations such as ice hockey and other sports clubs, the city of Stockholm, the building industry – garnered interest from politicians as well as citizens in general. There were several motivations for the project: to regenerate economically the southern part of the city through the combination of a multiplex sports arena and business complex; to attract tourists and money; to get the World Games in ice hockey; and to market Stockholm itself by means of a spectacular new building that would enliven the city's silhouette.

The City Council announced a competition in 1985 for a new sports, cultural, and commercial centre in Johanneshov, specifying in the program a building that would act as an 'advertising pillar in the city landscape, a sign for competition, party, entertainment and meetings between people.'[12] According to the program the Globe area should incorporate 75.000 square meters of offices and shops, which should finance the development of the area.[13] Although many complaints came from all the political parties, except the conservatives and the social democrats, 130 000 square meters were realized in the end of the project. Though the competition was open, the City Council invited five major building corporations to participate: Skandia and JCC, Skandia Consult AB, Diös, SIAB, and Skanska. Skandia Consult AB asked Berg Arkitektkontor to collaborate, but when Skandia withdrew, Berg Arkitektkontor, came up with an idea that they hoped would attract new financiers they needed to compete: a huge globe that would operate like a theatre, creating a theatrical ambiance within the arena, but with accessible daylight and the ability to project images inside, as in a planetarium (Fig. 1).[14]
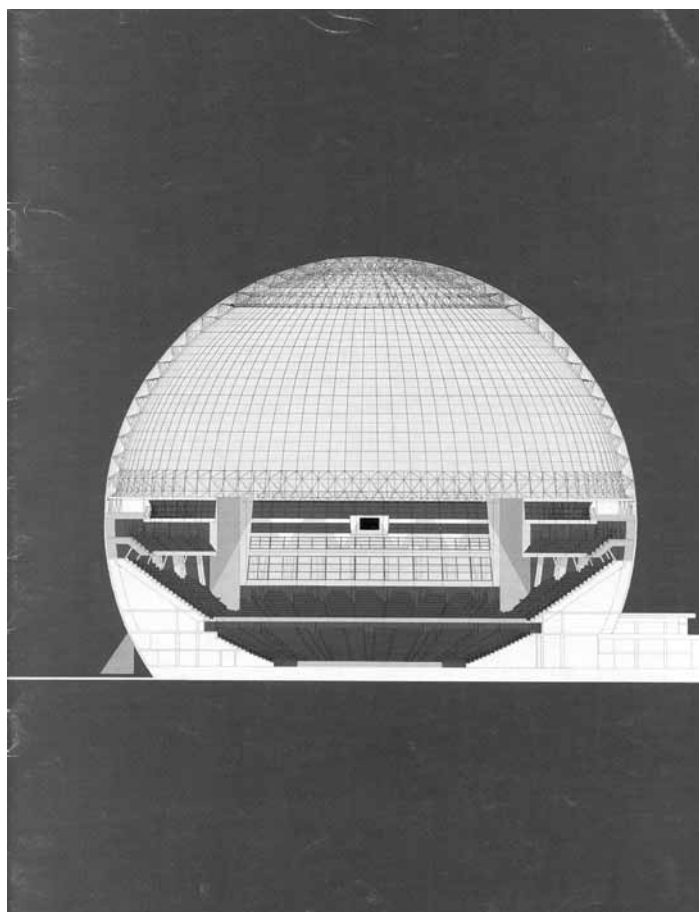

Figure 1. The Globe, drawing. (source: Berg Arkitektkontor AB)

With the new 'globe' concept, the architects managed to link with major corporations with whom they formed consortium. Called the Hovet, literally 'the court' after the nickname of Johannes*hov,* it consisted of a group of construction firms, insurance companies, and other financial institutions. The project was unique as the architectural proposal was the starting point for the collaboration between differing interests all united around a compelling architectural idea. Rem Koolhaas has described how different actors and interests in large and complex processes – what he called 'the dynamics of hell' – could be melded together by means of a strong, simple but spectacular architectural form.

The architect responsible for the Globen project, Svante Berg, describes it today as a unique window of opportunity in an otherwise quite closed situation that gave the architects the leading role. According to Berg the project would not have come about had the Skandia Consult AB not decided to pull out. In April 1986, Hovet was declared the winner of the competition, and a period of intense designing begun, involving all the different actors at the same time as construction on the arena was begun. In fact, the design was not settled upon by the start of the project, but negotiated all the way through to the completion of the buildings. The time schedule was very tight because Stockholm would get the World Games in ice hockey only if the arena was completed by 1989. In the end, the Stockholm Globe Arena was inaugurated in 1989 as the world's largest spherical building with the world's largest moving images projected on it, and Stockholm gained a brand name on the global city market.

I would argue that the Globe project encouraged new commercial markets and the political turn described as the Swedish Third Way, with certain aspects of the project, such as planning by negotiation, a stage for mass-advertisement, city branding, and aesthetics. At the start of the project it was decided that the private companies would get site-leasehold rights from the city to build commercial buildings, such as offices and shops, in exchange for covering the construction costs of the arena. Detailing of the financing could be negotiated later on, but a preliminary plan was to be included in the competition proposal. The Hovet consortium proposed an economic deal that both the social democrats and conservatives could agree upon: each participating company not only got

Figure 2. The Globe City. (source: photograph by Martin Nauclèr)

leasehold rights, but ownership of the land; in return, the city would be freed of all construction costs. The city of Stockholm provided the consortium a large loan to cover costs, which would be paid back when the office spaces were leased out.[15] During the process the city added extra facilities it needed – such as a large restaurant kitchen and a large billboard, which added to the cost. When it became obvious that the city was unable to cover its costs, there were further negotiations, with a shuffling of landownership and degrees of exploitation. The Globe project pioneered this new way of 'planning by negotiation,' intertwining economy and capital with the distribution of land, which was characteristic of the emerging new economy of the 1980's. What started as an arena ended up with a large complex of offices and shops, and eventually Stockholm Globe City (Fig. 2&3).

Another characteristic of the newly emerging economic climate of the 1980s was the development of an 'event economy,' with the big multipurpose arena itself providing large-scale commercial messages that would serve as eye-catchers for the public. Other revenues generated by major events would come from advertisement, packages providing food, dinners, luxury seats, and so on. Then too, special luxury boxes, like those of opera houses, were incorporated on the top level of the Globe, just below the ceiling, where private parties could enjoy dinner and drinks while watching the event out of public view. This was a departure from the usual democratic system used in sports entertainment, a core component in the popular orientation of the welfare state. Egon Håkansson, one of the key promoters in the commercialization of sport, through his work with the basketball team Alvik was responsible for much of this in the Globe project. This commercialization, or privatization of public sports entertainment, included the branding of the building as a symbol of Stockholm, and by extension Sweden, to the rest of the world.

In the jury evaluation of the Globe competition proposal, it was asked, 'Is Stockholm capable of building possibly the largest spherical building in the world? [On the other hand], can we choose to build something more conventional and not the most exciting proposal?' The promise of an extraordinary architectural achievement and the spectacle it would provide became a strong driving force in this project, propelling it through the 'dynamics of hell,' and without the building, it is it is doubtful the project would have had the broad social impact it had. 'The form of arena makes it unique in the world,' the jury concluded. 'The arena has the possibility of marketing itself and the city of Stockholm to organizers of conferences, sports, and culture events worldwide.'[16]

Figure 2. The Globe City. (source: photograph by Carl Henrik Tillberg)

The architect of the building, Svante Berg, as well as the preeminent Swedish architectural historian Claes Caldenby, saw it as modernistic, with 'robust and simple detailing' bearing the influence of the Russian constructivists.[17] I would describe it instead as an example of what Leif Nylén calls 'neo-modernism,' and part of the the 1980's revival of modernism as a style, a 'look' -- 'something you borrow and drape yourself in,' and in this respect more postmodern than modern. This is something in which Alan Pred, the noted urban geographer and social scientist, concurred. In the competition brief, the Stockholm City Council stated its aim to unite the largest arena in Sweden with large shopping malls and office structures into one complex. Berg Arkitekter met this demand, according to Pred, 'by falling back upon the full register of postmodern architectural devices – pastiche, irony, eclecticism, the appropriation of 'local history' and collective memory.'[18]

In light of Pred's remarks, how can one make sense of the apparent absence of postmodernism in the Swedish architectural discourse of the 1980's? I contend that with its disengagement from the postmodernist discourse, the architectural profession was able to sidestep public discussion of the connections between architecture and the commercial world, the new changing economic climate of the '80s, and the logic of consumption. Elsewhere I have argued that Swedish modernism has in fact been deeply involved with the private market and the logic of consumption; that is one of its most apparent characteristics and what makes functionalistic architecture and its social ideals a pragmatic strategy developed by [or useful to] the Swedish welfare state. It is also symptomatic that the few Swedish discussions of postmodernity, such as those in *Magasin Tessin*, focused on its connections with history, not on popular culture, mass society, media and consumption. Under the surface of modernist (and its offspring, neo-modernist) architecture, another story can be found, where architecture has a postmodernist-like double coding and in fact paves the way for a new ideology and economy that deviates from the ideas of the welfare state, so closely connected to the Swedish modern architecture. This is the Swedish 'Third Way' architecture – the new politics formulated by the social democrats in the era of globalization in the 1980s. This is when the state lost its hegemony, and the conditions for the economy, as well as for the architecture, were no longer under its control. The Stockholm Globe Arena is a stunning example of the architecture in this new era.

Endnotes

1. My understanding of the Third Way politics, its meanings and development in a Swedish context, follows to a large extent Jenny Andersson in *The Library and the Workshop: Social Democracy and Capitalism in the Knowledge Age* (Stanford, Cal.: Stanford Press, 2010).

2. It is telling how Charles Jencks opens his article from 1975 'The Rise of Post Modern Architecture': 'The title is evasive of course. If I knew what to call it, I wouldn't use the negative prefix 'post'. It is rather like defining women as 'non-men' – not a useful or complimentary definition.' *Architectural Association Quarterly*, No. 4 (1975), 3.

3. This has also bin pointed out by Tahl Kaminer in *Architecture, Crises and Resuscitation* (London: Routledge, 2011), 60.

4. Thomas Hellqvist, 'Postmodernismen', *Magasin Tessin: Tidskrift för arkitektur, estetik, miljökritik,* No.1 (1980), 37-42.

5. *Magasin Tessin: Tidskrift för arkitektur, estetik, miljökritik,* No.1 (1980), 3.

6. Ibid., 3-4.

7. Eva Eriksson, 'Modern movement – avliden eller bara tillfälligt ut form?', *Arkitektur*, No. 8 (1976), 2.

8. Charles Jencks, 'The Rise of Post Modern Architecture', *Architectural Association Quarterly,* No. 4 (1975), 3-14.

9. For more on this debate see Christina Pech, *Arkitektur & Motstånd* (Stockholm: Makadam, 2011), 203-205.

10. Arne Ruth, 'Modernismen – omodern?', *Dagens Nyheter*, November 28, 1982, 4.

11. See Sverker Ottander, 'Besluten kring Globen-projektet', Seminar paper, Dept. of Human Geography, Stockholm University, 1988, 2.

12. The competition program for 'Johanneshovs Sport och Kulturcentrum', 7.

13. 'Nya 'Hovet': Sport och kulturcentrum', 6.

14. Interview with the architect in charge, Svante Berg, 6 March 2012.

15. The negotiations is documented in 'the general agreements and sub agreements for the development of Johanneshov's sport and culture center and the commercial buildings' from 1986. Arkivet för trafikkontoret och exploateringskontoret, Arkiv Stockholms fatighetskontor, Box: F4f: 14. The final founding principles are stated in the protocol from a meeting at SIAB with the consortium Hovet and representatives from Stockholm City, 13 February, 1986. Traffic Administration Office Archive, Box: F4f:14.

16. 'Beskrivning av utvärderingen av projekttävling för Johanneshovs sport- och kulturcentrum', Stockholms Stadsbyggnadskontor, January 1, 1986.

17. Claes Caldenby, 'Vid medelvägens slut? 1975-98' in C. Caldenby, J. Lindvall, W.Wang (eds.), *Att bygga ett land* (Stockholm: Arkitekturmuseet, 1998), 181.

18. Alan Pred, *Recognizing European Modernities: A Montage of the Present* (London. Routledge, 1995), 194.

AD MAGAZINE AND POST-MODERN ARCHITECTURE

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Architectural Design (AD) was well-known and well-loved for promoting the architectural neo-avant-garde from the 1950s to the early 1970s. But in the mid-1970s the world was changing socially, politically, and economically and after the certitudes of modern architecture, AD was struggling to find a direction and readership under its new regime. Papadakis appropriated AD along with its two editors Martin Spring and Haig Beck[1] in 1975 and was looking to assert a direction in order to turn around its financial fortunes. This direction was discovered in Melbourne, where Beck heard Anglo-American architectural critic Jencks talk on Post-Modernism and subsequently set up a meeting between him and Papadakis.

Jencks held an unequivocal and definitive position: Modernism was dead and its replacement, Post-Modernism, was to take its place. Jencks had been concocting these ideas since the early 1970s and they were tested in a 1975 article entitled 'The Rise of Post-Modern Architecture'.[2] His other strand of thinking, popular in architectural theory at the time, was semiotics which formed the basis of his first book.[3] These two strands merged into The Language of Post-Modern Architecture, which eventually sold over 160,000 copies over seven editions in ten languages. This architectural best-seller marked the beginning of the Papadakis / Jencks publishing partnership. Over the next 15 years, five distinct phases of development of Post-Modernism can be identified through the pages of AD, the magazine that this successful collaboration centred on.

RADICAL ECLECTICISM

The first phase, which I will call 'Radical Eclecticism', borrowing one of Jencks' early Post-Modern classifications, begins with the publication of the first AD Profile in January 1977. This new format was a turning point in AD's history. Although still exclusively black and white inside, the cover was now heavier paper and all the pages were printed on glossy rather than the previous matt, recycled paper. The profile format, which featured Arata Isozaki on this occasion, was the first to promote style and formalism over Spring's previous more socially and politically conscious editorial line and was, according to Spring, a direct result of Beck switching allegiance from Spring to Papadakis.[4] The critic is already labelling the eclectic nature of the Japanese architect's work in opposition to 'the tyranny of centralised culture',[5] or Modernist Purism. He went on to claim that unless a theory for this Radical Eclecticism was developed, it too would fail, like its nineteenth century Weak Eclectic counterpart which he partially blamed for the instigation of the Modern Movement. Jencks briefly outlined a version of this theory, describing Radical Eclecticism as a meaningful language able to communicate[6] to both architects and the public. Jencks' article contrasts with the others in this first Profile, demonstrating a bold, new interpretation and introduction of Post-Modern thinking. Jencks' message is as much, if not more, about his own thinking than Isozaki's.

April 1977 saw the Post-Modernism issue published to coincide with the launch of Jencks' The Language of Post-Modern Architecture and corresponding exhibition[7] and symposium[8] at Peter Cook's Art Net gallery. This effectively signalled the launch of Post-Modern architecture in the Anglo-Saxon world with favourable articles, reviews and expositions on Jencks' book. As the introduction auspiciously states, 'Several leading architects and architectural critics are of the opinion that the modern movement is at an end and that it is now being superseded by new work which they have taken to calling "post-modern".'[9]

Within a year Jencks was already revising his book and the full new final chapter formed the basis of January 1978's issue, 'Post-Modern History'. Five American Post-Modern architects, were also included[10]. This constant process of revising history continued throughout the life of Academy Editions. The year ended with a long Jencksian essay concluding that Post-Modernism 'is a social art which communicates in a conventional code' and therefore that 'future architecture will evolve out of Post-Modernism'.[11]

AD's Radical Eclecticism phase endured until the March-April issue of 1980 and is characterised by a wide range of Profiles, most of which are historically orientated with an overall tendency to look backwards. The magazines also gradually became bi-monthly rather than monthly, increasingly colourful, and featured fewer pages of the 'magazine' section that comprised letters, reviews and news snippets. The end of this phase is signalled by the third edition of The Language of Post-Modern Architecture, revised and enlarged with a chapter called 'Postscript: Towards a Radical Eclecticism', and published in early 1981.

POST-MODERN CLASSICISM

The second phase of AD's Post-Modern period, which I will call 'Post-Modern Classicism', after the Post-Modern category that Jencks introduced during this period, starts with a Profile of that name in May-June 1980 (Fig. 1) which, its editors boasted, 'is the most ambitious AD profile to date. The casual reader will notice the bulk and extent of the texts, illustrations and colour'.[12] Missing the magazine's 'Round Up' section, AD is now almost completely equivalent to its Profile. A rare editorial by Papadakis notes that 'Investigating the recent work of numerous architects in America, Europe and Japan, Jencks identifies a trend towards Classicism within Post-Modern architecture, a tendency further demonstrated at Venice Biennale.'[13] Jencks is hopeful for this new fashion: 'In the past year there has been a convergence of styles within Post-Modernism, a convergence towards a manner which could be called classical.' He continues, 'the largest movement is Post-Modern Classicism, a free style which, we may hope, will continue to be lively and will not become still-born.'[14] The style, or its classification at least, has clearly been influenced by the first architectural Venice Biennale, held in 1980 on the theme of 'The Presence of the Past'. Jencks then provided 123 pages of example buildings that subscribe to his classification of Post-Modern Classicism. Architects include the usual American suspects of Moore, Venturi & Rauch, Stern, and Graves, as well as newer, more international canon fodder such as Ricardo Bofill, Morphosis, Jeremy Dixon and even Jencks with his own London flat.

In November 1980, having ousted the news pages from the magazine, Papadakis produced a simple folded black and white 'News Supplement' newspaper, 'devoted to topical developments in architecture, sent free of charge exclusively to AD subscribers.'[15] This supplement basically champions the successes of his Post-Modern cronies. The second News Supplement, of January 1981, reflects on the Venice Biennale and identifies the emergence of two main tendencies, Classicism and Eclecticism, noting that 'the relevance of history and, more specifically, Classicism, to current architecture is not in doubt.'[16] These two tendencies formed the basis of two Profiles in 1982. January-February's edition, guest-edited by Jencks and called 'Free Style Classicism', followed the wider, Eclectic line, 'with the epithet "free style" demanding a more generous interpretation of the Classical tenets and a flexibility in cultural concepts as vital as that witnessed daily in linguistic and semantic intention.'[17] This was a hybrid, Post-Modern Classicism whose architects, mainly from America and Japan, had tried Modernism and rejected it. May-June's edition, guest-edited by Demetri Porphyrios and called 'Classicism is not a Style', aimed to 'look at classicism only for the lessons it has to teach us about the nature of tectonic and architecture discourse and about the distance that separates them.'[18] This was a traditional, pure, Neo-Classicism whose architects, mainly from Europe, had rejected Modernism before trying it. The one thing that united the two positions, however, was an agreement that Modernism had failed.

The magazine during this period still maintained a pluralistic outlook of themes mainly concerning Post-Modernism and historical subjects. But by this stage, it is becoming apparent that this modification of Post-Modernism, which cites many of the same architects and even some of the same buildings, is

Figure 1. *AD Profile* 28, 'Post-Modern Classicism', May-June 1980. Architectural Design (AD) is published by John Wiley & Sons. Ltd.

more a result of Jencks' imaginative 'genius for categorisation'[19] than a true representation of any new architectural movement. During this second phase of AD's Papadakis era, a gallery was installed at Academy's editorial offices in Leinster Gardens in order to encourage exhibitions and lectures on architecture which were practically non-existent in London after Peter Cook's
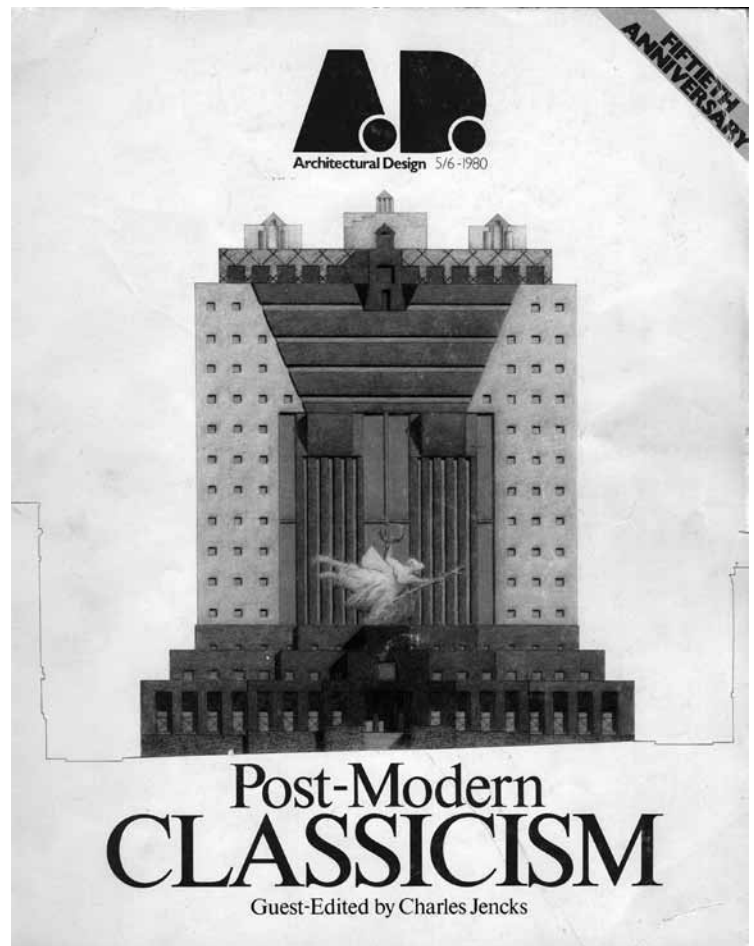
Art Net closed in 1979. The first exhibition was dedicated to Quinlan Terry's drawings, followed by simultaneous exhibitions of Robert Stern and '6 British Architects'.[20] Such initiatives of architectural culture were often used as the basis of future publications.

NEO-VERNACULAR

I will call AD's third phase of Post-Modernism 'Neo-Vernacular', once more after a Jencks Post-Modern category. It starts with the publication of the fourth edition of The Language of Post-Modern Architecture in early 1984. AD marks the occasion by publishing a conversation between Jencks and Papadakis which ends with a clear affirmation that 'The first stage of Post-Modernism is complete.'[21] Although this phase also includes the publication of the fifth edition of Jencks' book in 1987, it witnesses the cooling of the relationship between author and publisher. Jencks continues to contribute to AD, but only guest-edits a single Profile, and that is jointly with Terry Farrell on the design of his own house.[22] AD's format changes from January 1984 to consistently be a white cover with the outline AD motif at the top centre over the Profile's title in red. The last recognisable 'magazine' appears in May-June 1984 and from then on, to all intents and purposes, AD becomes a bi-monthly book.

In the late 1980s, AD continued to promote Post-Modernism but with more of an emphasis on the ideas of Demetri Porphyrios, and the Krier brothers. This period, however, is dominated by the controversy over the design of the extension to the National Gallery on Trafalgar Square. Ahrends Burton Koralek won the original competition with a High-Tech proposal but the public's and critics' reception of this design was hostile. Academy organised a discussion at its offices and invited a number of high profile architects and critics, mainly but not exclusively of a Post-Modern persuasion, to voice their opinions. The overall sentiment, as published in November-December 1983's AD,[23] was that the gallery should reconsider.

The controversy soon blew into a storm. The Prince of Wales, who essentially represents the 'R' in 'RIBA', gave a speech at its 150th anniversary and Gold Medal presentation. This speech famously denounced the National Gallery extension as a 'monstrous carbuncle on the face of a much-loved and elegant friend' and was the beginning of Prince Charles' outspoken views on architecture. He found much support from the general public as well as the traditionalists within the architectural establishment and his views were broadly aligned with the editorial stance of Papadakis' AD. It is no coincidence that the Prince's favourite architect, Leon Krier, was much published in AD during this period and it was he who the Prince chose to design the new town of Poundbury in Dorchester. ABK were duly dropped from the National Gallery Extension and in February 1986, Venturi, Rauch and Scott Brown were instead commissioned to design it. AD dedicated January-February 1986's AD to The National Gallery and published the five unsuccessful schemes of the follow-up competition. In contrast to other magazine such as the Architectural Review, AD continued to support the Prince's interventions and views on architecture, culminating in 'Prince Charles and the Architectural Debate' in May-June 1989.

The first Academy Symposium at the Tate Gallery was held in October 1987 on the subject of Post-Modernism. The proceedings were published as a Jencks book and written up briefly in the following AD with the conclusion that 'through a number of approaches and with heated debate, a viable new aesthetic is taking hold.'[24] This new tactic of holding high profile symposia and publishing the results proved popular and the following symposium introduced the next Post-Modern fashion to architecture: one that completely disproved the previous symposium's conclusion.

DECONSTRUCTION

The fourth phase of Academy AD is that of 'Deconstruction'. 1988 witnessed a race between Academy in London and the Museum of Modern Art in New York to be the first to deliver Deconstructivist architecture to the world. Jencks brought news from America of the inception of this new architectural movement and Papadakis responded quickly by setting up a symposium at the Tate Gallery on Saturday 26 March. Its proceedings formed the basis of the next AD.[25] The MoMA show did not start until 23 June, by which time the AD Deconstruction Profile was already available, showing almost exactly the same group of architects.[26] AD had already published a number of high quality Profiles on Russian Constructivism, guest-edited by Catherine Cooke[27] and highly influential on Deconstructivist architects. This aesthetic was combined with the thinking of Jacques Derrida, recently been introduced to architectural discourse.[28] The Deconstruction Profile became an instant best-seller and two sequels[29] duly appeared in the same format of dense theoretical articles on Deconstructivist philosophy followed by seductive drawings and photographs of models (and sometimes even buildings). Cooke also followed up with two further issues on Russian Constructivism.[30]

Meanwhile, the Prince's interventions in the architectural debate continued, cheered on from the Academy sidelines. His television programme, 'Visions of Britain' was transmitted on 2 October 1988 to 6.2 million viewers and was cited at length in an AD Profile called 'New Directions in Current Architecture',[31] along with a report from the Academy Architecture Forum at the Tate,[32] held to discuss the issues that the Prince had raised. A Profile was dedicated to him in 1989[33] to coincide with the publication of

his book, A Vision of Britain, and corresponding exhibition at the V&A. It quotes at length from a number of his speeches and champions the architecture of Leon Krier, in particular that of Seaside, Florida and his masterplan for Poundbury. The extremes of Deconstruction and traditional architecture reflect AD's quite bipolar personality during this period.

The fourth phase of the Jencks/Papadakis AD era ends in early 1991 with the publication of Jencks' sixth edition of The Language of Post-Modern Architecture and two Profiles hailing both the death of Post-Modernism, and by implication, its success as a style. Post-Modernism on Trial[34] is written in a retrospective mood following the usual formula of several dense theoretical, polemical articles followed by a number of exemplar buildings featured in high gloss and full colour. Introducing the Profile, Jencks wrote, 'Now that Post-Modern architecture has triumphed around the world, many people have declared it dead. This, the fate of all successful movements, is something to be celebrated.'[35] Its death is blamed on commercial complicity, especially with Disney. Post-Modern Triumphs in London,[36] Jencks' AD swansong, consciously builds a canon of Post-Modern architecture in London. In a more reflective than usual piece, Jencks considers the last decade of architectural design in terms of a war, quoting Michel Foucault, 'One's point of reference should not be to the great model of language (langue) and signs, but to that of war and battle. The history which bears and determines us has the form of war rather than that of a language: relations of power, not relations of meaning.'[37] This quote contrasts with the language games that Jencks played in his construction of the Post-Modern movement and his insatiable desire to classify, rename, and label buildings, styles and architects.

DELEUZIAN COMPUTATION

In early 1991, Papadakis sold Academy to the German publisher VCH and so a fifth and final Papadakis phase might be that where he remains editor until his abrupt sacking in December 1992 for breach of contract. The new, larger, black format of AD was introduced in January 1992 to mark the new owner. This phase might be described as 'Deleuzian Computation' as the last issue for which Papadakis was responsible was once more a ground-breaking issue, guest-edited by yet another of Jencks' introductions, Greg Lynn. The Profile, 'Folding in Architecture',[38] introduced Deleuzian theory and computation into architectural design and once again rapidly became a best-seller and epoch marker.

SUMMARY

This potted history of AD and the Anglo-American construct of Post-Modern architecture highlights several characteristics of each, not least of which is how closely aligned the two were in the uniqueness of that particular moment. Jencks was the only architectural critic who at that time was regularly travelling the Western world, 'taking the temperature' of architecture, with an overview of its stylistic evolution. The ability to quickly publish his work under his own control and direction was the main reason he approached and stayed with Papadakis. Through this Jencks / Papadakis symbiotic partnership, the architectural culture machine of Academy and AD was not merely reflecting architecture, but positively directing it. Jencks' architectural project, then, was his operative criticism – his relentless labelling, classification, categorisation, and constant updating of architectural history as it happened.

Above all, Post-Modernism was a movement of mediation. The emphasis of architecture, at least that represented by the magazines, shifted from buildings and products to publications, exhibitions, and symposia. Fully conscious of their responsibility to communicate, Post-Modern buildings played to the camera. This responsibility to communicate existed in the late twentieth century not only in the streets of the city, but on the pages of publications. The media controlled this communication – a fact highlighted most appositely by the interventions of Prince Charles' and the resulting increase in the media's and the public's attention on architecture. But architecture proved to be unprepared for and uncomfortable with this public attention and retreated into an autonomous bubble from which it is yet to return.

Endnotes

1. Spring left in March 1977, Beck in June 1979.

2. Charles Jencks, 'The Rise of Post-Modern Architecture', *Architectural Association Quarterly* 7, no. 4 (Winter 1975): 3–14 Originally delivered as a talk in Eindhoven in April 1975.

3. Charles Jencks and George Baird, eds., *Meaning in Architecture* (London: Barrie & Rockliff, 1969).

4. Martin Spring, interview by Steve Parnell, March 30, 2011.

5. Charles Jencks, 'Isozaki and Radical Eclecticism', *Architectural Design*, January 1977, 48.

6. Ibid., 46.

7. 23 May – 3 June 1977.

8. 27 May 1977.

9. Haig Beck, 'Contents: AD Profiles 4: Post-Modernism', *Architectural Design*, April 1977, 239.

10. Peter Eisenman, Robert Stern, Charles Moore, Venturi and Rauch, and Michael Graves.

11. Charles Jencks, 'Late Modernism and Post-Modernsm', *Architectural Design*, December 1978, 609.

12. Andreas Papadakis, 'Post-Modern Classicism: The New Synthesis', *Architectural Design*, June 1980, 67.

13. Andreas Papadakis, 'Editorial', *Architectural Design*, June 1980, 68.

14. Charles Jencks, 'Introduction', *Architectural Design*, June 1980, 5.

15. Andreas Papadakis, 'AD News Supplement', *Architectural Design Supplement*, November 1980.

16. JG, 'Classicism or Eclecticism?', *Architectural Design Supplement*, January 1981.

17. Andreas Papadakis, 'Editorial: Classicism or Eclecticism?', *Architectural Design*, February 1982, 4.

18. Demetri Porphyrios, 'Introduction', *Architectural Design*, June 1982, 5.

19. Andreas Papadakis, 'Abstract Representation', *Architectural Design*, August 1983, 49.

20. Featuring Post-Modernists Piers Gough, Terry Farrell, Jeremy Dixon, Ed Jones, James Gowan and John Outram. The Terry exhibition ran from 25 March to 2 May 1981 and the Stern and "6 British Architects" exhibitions ran from 2 June to 31 July 1981.

21. Andreas Papadakis and Charles Jencks, 'Post-Modern Classicism - the Synthesis: An Interview with Charles Jencks', *Architectural Design*, April 1984.

22. *AD Profile* 61, 'Designing a House', September-October 1985.

23. Colin Amery et al., 'National Gallery Extension', *Architectural Design*, December 1983, 130–139.

24. 'Post-Modernism at the Tate: New Trends in Art & Architecture', *Architectural Design*, December 1987, II.

25. *AD Profile* 72, 'Deconstruction in Architecture', March-April 1988.

26. Coop Himmelblau, Frank Gehry, Zaha Hadid, Peter Eisenman, OMA, and Bernard Tschumi.

27. *AD Profile* 47, 'Russian Avant-Garde Art and Architecture', May-June 1983; AD Profile 55, 'Chernikov Fantasy and Construction', September-October 1984; and AD Profile 68, 'Uses of Tradition in Russian and Soviet Architecture', July-August 1987.

28. Christopher Norris' specially recorded interview of Derrida was shown at the beginning of the symposium.

29. *AD Profile* 77, 'Deconstruction II', January-February 1989; and AD Profile 87, 'Deconstruction III', September-October 1990.

30. *AD Profile* 81, 'Russian Constructivism and Iakov Chernikov', July-August 1989; and AD Profile 93, 'Avant-Garde Russian Architecture in the 20's', September-October 1991.

31. *AD Profile* 76, 'New Directions in Current Architecture', November-December 1988.

32. 29 November 1988.

33. *AD Profile* 79, 'Prince Charles and the Architectural Debate', May-June 1989.

34. *AD Profile* 88, 'Post-Modernism on Trial', November-December 1990.

35. Charles Jencks, 'Death for Rebirth', *Architectural Design*, December 1990, 6.

36. *AD Profile* 91, 'Post-Modern Triumphs in London', May-June 1991.

37. Charles Jencks, 'Post-Modern Triumphs in London', *Architectural Design*, June 1991, 9.

38. *AD Profile* 102, 'Folding in Architecture', March-April 1993.

20ᵗʰ Century

Postwar Instrumentalization of the Baroque in Europe and North America

SESSION CHAIR:

Andrew Leach (Griffith University, Australia)

Since the end of the nineteenth century the baroque has undergone a series of critical and historical re-evaluations in view of its chronology, actors, and characteristics. Each successive moment of appraisal has clarified not only the content indicated by the term baroque but also the tools and objectives of the historians who address the problems it poses in any given moment. Papers in this session will address the study of baroque architecture from the 1940s to the 1970s with a view towards understanding its instrumentalization within the context of postwar modernism and postmodernism.

Scholarship on the history of architectural historiography has demonstrated that history assumed a new importance to the work and thinking of architects in these decades. Art historians able to distil architectural history into lessons, overt and subtle, found a willing readership among practicing architects. The figure of the architect-historian also emerged as a force at this time: committed to the academic study of architectural history but with an audience of practicing architects and students very clearly in mind. The "operative histories" famously attacked by Manfredo Tafuri had allowed for the reinstatement of history as part of the mainstream concerns of modernism. The instrumental historian returned to the architectural discourse of these decades a sense of historical debt, but shaping history as he or she did so. Among the vehicles for working through the complexities of such themes as space, form, context, type, materiality, historicity, perception, significance, and (urban) scale, the architectural baroque proved useful.

Consider Norberg-Schulz's studies of urban scale and type in Baroque Architecture; Wittkower's and Zevi's influential portrayals of Borromini as the model (modern) architect; the importance of the baroque for Giedion's conception of the history of architecture as the history of space (extending Wölfflin's and Schmarsow's premises); or Dorfles's or Scharoun's comparative readings of the baroque against modern expressionism. How does Portoghesi's Roma barocca (1966) contribute to modern (indeed, postmodern) architecture as it adds to the library on baroque architecture? Papers will explore instances in which the mechanisms, premises and consequences of postwar historiography of the baroque have sustained a translation from historiography to architecture that has proven productive for the thinking and practice of architects.

BAROQUE IN TRANSLATION:
GIEDION'S DIGESTIBLE HISTORY FOR MODERN ARCHITECTS

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> What is more pointless than a curling Baroque façade, half of which backs empty air? … If you want columns, why not real ones? and they had better hold up the roof.[1]

So believed the American architects in Rome interviewed by journalist Sylvia Wright in 1956. While she ascribed their rejection of the Baroque's 'violent extravagance' to innate American pragmatism, it was also entirely consistent with contemporary architectural ideology. In the US, the irrelevance of history to practice had been propagated by Harvard's Graduate School of Design (GSD) for two decades, ever since the GSD's new Dean Joseph Hudnut theatrically expelled all pre-1932 books from the architecture library in 1936.[2] After Walter Gropius was appointed Chair of its Department of Architecture in 1937, history was drastically demoted in the GSD curriculum, becoming a strictly elective subject from 1946–53.[3] Gropius actively discouraged students from taking any history courses, but expressed particular disapproval of 'façade' and 'symmetrical' styles, including the Baroque.[4]

While Harvard's transformation appeared radical in the 1930s, by the mid-1950s America's architectural establishment had largely followed its lead, formally embracing modernism and its emphases on abstract aesthetics, industrial technology and contemporary sociology.[5] This shift made Rome a seemingly irrelevant destination for postwar American architects. Yet Wright's interviewees were spending an entire year there, as Fellows at the American Academy. This interdisciplinary bastion of the Beaux-Arts had just been transformed into a less doctrinaire, more artistically open institution.[6] However, while Rome's continuing relevance to budding classicists and art historians was indisputable, the Academy's benefit to fields like architecture was questionable. As Wright noted, apart from the city's just-completed Stazione Termini, Rome offered few recent buildings 'to inspire young architects directly'.

Creative inspiration from other eras, such as the Baroque, could be professionally dangerous during these years. In 1952, when the *Architectural Forum* described the United Nations General Assembly as 'something like a popular baroque,' this only intensified most readers' disapproval of the design.[7] A response from George Howe, Chair of Yale's Department of Architecture, noted this label's polarizing effects among his colleagues:

> So [the UN] has been called the Baroque phase of modern architecture? What does Baroque mean? Grotesque, gigantesque, involved, as some might use the word, or, as others might use it, comparable to the works of that brief moment in the history of architecture when 'measure yielded to melody, the static to the dynamic'? . . . I should prefer a more analytical and less emotional adjective.[8]

Whatever Howe's own (diplomatically unstated) position on Baroque design values, it was no doubt influenced by his own recent stay at the American Academy for most of 1948 and 1949.[9] The appointment of a renowned International Style practitioner as Architect in Residence demonstrated the Academy's public embrace of modernism, as did its choice of Rome Prize winners in architecture. From 1947–66, nearly all came from top modernist programs. Nearly one-third were Harvard graduates, and two-thirds came from the GSD, Yale and MIT.[10]

But why would they want a Rome Prize? The Academy sidestepped the question of what modern architects should *do* there by asking applicants to submit project proposals. Thirty-eight surviving statements document how these young architects expected to profit from a year in Rome.[11] A frequent theme is one of supposedly little interest: architectural history. Over half (twenty-two) mention Italy's pre-modern architectural patrimony. Far more unexpected is that eight Fellows specifically mention the Baroque.[12] Some list it among several historic eras of interest, but a 1951 statement by Yale graduate Thomas Dawson is notably emphatic:

> . . . what is perhaps most particularly absent in the 'modern movement' is an understanding, (or worse, the absence of even the desire for an understanding), of the rich and meaningful forms developed during the Baroque period in Italy. I should like . . . to incorporate their essence into my own design in such a manner as to contribute toward the recognition of their virtues by the contemporary architectural design world.[13]

Dawson proposed the Baroque as a corrective to modernist practice a full year before Skidmore, Owings and Merrill's Lever

House was complete. His enthusiasm would make far more sense after 1966, when books by Paolo Portoghesi and Robert Venturi would inspire more widespread appreciation of the Baroque among architects.[14] But what cultivated this interest 15 years earlier, when its epicenter was an art history subfield dominated by Germanic scholars? In the 1950s two major studies of Baroque architecture were published in English: one in 1955 by Emil Kaufmann, and Rudolf Wittkower's 1958 contribution to the Pelican History of Art, which cemented the Baroque in the Anglophone canon.[15] However, five Fellows mention the Baroque before 1955, raising the matter of what Panayotis Tournikiotis calls the 'reading context'.[16] Which presentations of the Baroque were actually being read by America's modern architects at that time?

The lyric phrase cited by Howe in 1952 offers one clue. It is a passage from Oswald Spengler's 1918 book *Decline of the West* (1926 translation), where Michelangelo is hailed as the 'creator' of the Roman Baroque.[17] This popular, interdisciplinary history was widely read by Yale architecture students like Dawson through the mid-1950s, during Howe's tenure.[18] But Spengler's discussion of the Baroque is a fleeting episode in a two-volume, entirely un-illustrated cultural study of vast scope that suggests no connection to contemporary design. Furthermore, the earliest Fellow to mention the Baroque was a Harvard graduate employed by Skidmore Owings and Merrill in Chicago. In 1947, Charles Wiley wanted to go to Rome 'to experience the space concepts of the Classic, Renaissance and Baroque planners'.[19] While not a direct citation, his inspiration must be Swiss architectural historian Sigfried Giedion (1888-1968).[20]

Giedion was appointed Harvard's Charles Eliot Norton Professor of Poetry for 1938–9.[21] Wiley came to the GSD in 1940, so he likely absorbed Giedion's Norton lectures after they were published in 1941 as the magisterial *Space, Time, and Architecture: The Growth of a New Tradition*.[22] As Kenneth Frampton wrote in 1981, '*Space, Time and Architecture* has been continuously read by almost every architecture student for the past 40 years and, reviled or revered, it has exercised an important influence on every account of the Modern movement which has appeared since.'[23] The extent of its readership among postwar architects is only comparable to that of Le Corbusier's indispensible gospel, *Vers une architecture* (1923).

Space, Time and Architecture famously presents the nineteenth century as a period of crisis, whose schism between intellectual and physical culture, aesthetics and material technology was heroically resolved by modern architecture.[24] Wiley's phrase 'space concepts' echoes Giedion's use of 'space conceptions', 'the enveloping force of all architecture'.[25] An authentic space conception distills the essence of a moment into spatial terms. The architect's highest aspiration is to discern and express this through design, to literally build the *Zeitgeist*.

Giedion's influence best explains the overt Hegelianism in many Rome Prize proposals. In 1950, David Leavitt aspired to understand 'the relation between man's philosophical growth and his growing artistic and architectural concept of space', asserting that 'this growth progresses and retrogresses, but in general follows a sweeping spiral'.[26] His Rome project was to be a book entitled *The Concept of Space*, analyzing architecture, fine art, landscape design, music and literature from prehistory through Cézanne, integrating 'social, political, scientific, religious and philosophic references'.[27] The nearly infinite scope of Leavitt's (unsurprisingly) unrealized project reflects *Space, Time and Architecture*'s thesis of broad cultural integration, but not Giedion's authorial approach. He finds 'it is more helpful to examine rather carefully cross sections of decisive stages in the history of architecture. We prefer to deal with fewer events more penetratingly, in close-up view'.[28]

Giedion demonstrates this selective approach to history in 'Our Architectural Inheritance', which presents only two periods: the Renaissance and the Baroque. Of these, the Baroque predominates; in the first edition, 11 pages discuss the Renaissance, while the Baroque occupies 54. Giedion's additions for the third edition of 1954 resulted in 85 pages on the Baroque and 45 on the Renaissance, remaining unchanged thereafter. Even the expanded chapter occupies only a slender portion of an increasingly lengthy tome, although Baroque references recur throughout.[29] Before launching into his discussion of Cubism and relativity, Giedion reminds the reader that

> a thoroughly integrated culture produces a marked unity of feeling among its representatives. For example, a recognizable common spirit runs through the whole baroque period. It makes itself felt in activities as distinct from each other as painting and philosophy or architecture and mathematics.[30]

Giedion treats the Baroque as a uniquely instructive success story of intellectual, cultural, and artistic synthesis, a demonstration of how architecture can transcend the limits of style to express the 'unity of feeling' of its age. He makes it the historic period *par excellence*, one any modern architect *must* understand to create meaningful work now.

Giedion's ekphrases of baroque works filters established historical interpretations through modernist aesthetics and priorities. His description of how Borromini's 'abstract spirals' and 'animation and movement' 'gave flexibility to stone, changed the stone wall to an elastic material' suggests concrete by Maillart or Nervi. Borromini also prefigures the boldly original modern artist who does not 'imitate the shapes of bygone epochs' but makes them 'part of his own creations. Much as we try to do today, he found in his relations with history a source of power for further development'.[31] Similarly, Guarini's multifaceted persona—Theatine

abbot, philosophy professor, mathematician, engineer and architect—exemplifies the cosmopolitanism, broad education, and intellectual currency necessary to channel an entire culture architectonically.

Giedion also gives the Baroque unique historiographic prominence for a modernist text. Hitchcock and Kaufmann's histories of modern architecture (of 1929 and 1933, respectively) reach back to the eighteenth century, but their Baroque is emphatically 'pre-modern', the last gasp of an era about to be supplanted.[32] Nikolaus Pevsner's discussion on the period in his 1942 *Outline of European Architecture* comprises simply another episode between late antiquity and World War One, of no greater relevance than the Gothic or Romantic eras.[33] In contrast, Giedion extracted the Baroque from the historic continuum and planted it in the foreground, giving it new, vastly amplified importance. His unforgettable pairings of Borromini's domes with works by Picasso and Tatlin make it modernism's spiritual ancestor, mentor, and twin.

Powerful imagery is crucial to *Space, Time and Architecture*'s argument for the Baroque's contemporary validity. The book's most dynamic illustrations are Giedion's own photographs, products of an eye fully attuned to modernist appreciations of form and space. Carefully formatted shots and anachronistic juxtapositions are complemented by a layout designed to facilitate graphic reading—all techniques learned from Le Corbusier.[34] Abundant, heavily-captioned images approach parity with a text divided into bite-size portions by topical headings and marginal indices to key points. The result is an eminently user-friendly reference for architectural readers who want to locate a subject, skim a few paragraphs, and return to the drawing board.[35]

However, designing a book for architects rather than scholars does not guarantee acceptance of its ideas. Giedion's doctoral research on the eighteenth century under Wölfflin made it natural for him to consider modern architecture through a baroque lens, and vice-versa. But this approach seems unlikely to appeal to the neo-Bauhaus GSD, where he first presented this argument. However, while Gropius's aversion to history is well documented, Harvard's anti-historicism has seen some exaggeration.[36] Officially, architectural history courses were only 'elective' if already taken before enrollment, and many GSD students ignored Gropius's discouragement.[37] Moreover, Gropius helped orchestrate Giedion's Harvard appointment; they had been close allies for a decade, working together since 1928 in the *Congrès Internationaux d'Architecture Moderne (CIAM)*.[38] As its Secretary General, Giedion was himself a leading author of the modernist agenda. His position, activism and professional education—he studied engineering before art history—all conferred unique architectural legitimacy upon *Space, Time and Architecture* and its presentation of the Baroque, making his advocacy of an improbable era far more likely to be absorbed.

Gropius' support went beyond mere courtesy towards a supportive colleague and fellow traveller.[39] While he never shared Giedion's enthusiasm for the Renaissance and Baroque, most of *Space, Time and Architecture* reflects a consonance of thinking (an ideological confluence) evident in their use of common terminology like 'space conceptions', 'tradition' (which, unlike 'history', Gropius supported), and 'planners'. When Giedion christened Pope Sixtus V 'the first of the modern town planners', because 'it was in Rome that the lines of the traffic web of a modern city were first formulated, and were carried out with absolute assurance', he tied the Baroque to another pressing modernist concern: urbanism.[40] The CIAM congresses consistently treated architecture and urbanism as fully integrated disciplines.[41] Giedion's account of Sistine Rome, including his now-ubiquitous diagram, was among the 1954 additions that increased the emphasis *Space, Time and Architecture* placed on the Italian city. But all editions discuss the urban and landscape design of the French Baroque along with Rome's famous squares, Piazza San Pietro and Piazza del Popolo.[42]

Mid-century Rome Prize applications echo this disciplinary interest; urbanism is mentioned in nearly half the postwar proposals.[43] In 1964, GSD graduate Theodore Liebman asserted that visiting one iconic baroque piazza was the *sine qua non* for his own practice:

> I have been a designer for the new Government Center in Boston, and I have had to make design decisions affecting urban public spaces, building relationships, and architectural scale and character. Without having even seen the square of St. Peter's, can I fully discharge this responsibility? No, I must see it and more before I can produce my own work with conviction.[44]

Of course, the Piazza San Pietro was found in dozens of readily available sources, from Banister Fletcher to Lewis Mumford's extensive discussion in *The City in History* of 1961.[45] But Liebman's certainty that it was practically reckless to design modern Boston without experiencing Rome's most paradigmatic baroque piazza undoubtedly reflects the gospel of Giedion.

Ten years earlier, in 1954, Robert Venturi also described baroque *piazze* and architecture as central to his interest in Rome. Venturi has directly credited *Space, Time and Architecture* with shaping his view of the city's meaning.[46] His letters from Rome document this Philadelphia Quaker's fascination with the Baroque, like his account of sequential Easter Vigil liturgies at the basilica of San Pietro, Santa Maria Maggiore, San Giovanni in Laterano, Santa Maria in Aracoeli, and Il Gesù, finally ending back at the Piazza San Pietro. At San Giovanni, in Borromini's nave:

> . . . you enter and find almost complete darkness. Then a long procession appears with the cardinal at the end in complete silence without music. They walk to the western front of the church where there is a brazure [sic] with a fire burning. The cardinal blesses the

fire and from that fire every one receives light for his candle (you have in the meantime been handed a candle) so that the bottom of the church is ablaze with all of these twinkling lights. The procession then moves to the alter [sic] front of the church where water is blessed and gradually all the lights of the church are lit (Broadway lighting experts could not do it more theatrically) and then music is added to the chanting. All this time you are being overcome by incense also.[47]

The marathon ended at midnight with an explosion of bells and music in Bernini's piazza, crowning an unforgettable evening spent seeing, hearing, smelling, and feeling the baroque firsthand.

Sylvia Wright must have just missed Venturi at the Academy; otherwise her article would have been infected by his still-undiminished enthusiasm for Rome. Venturi's invocation of the multimedia extravaganzas of Broadway are prophetic of his cross-readings of high and popular culture with Denise Scott Brown, but his appetite for baroque Rome's Greatest Show on Earth was whetted by Giedion. Through the pervasive influence of *Space, Time and Architecture*, Venturi's generation absorbed the counter-intuitive idea that the Baroque was not just relevant, but *necessary* to postwar modernism. When Manfredo Tafuri rightly holds up Giedion as a paradigm of operative criticism, he both censures his ideological 'actualization' of baroque urbanism, and credits his pioneering role in 're-linking modern architecture to the past'.[48] Of course, the former explains the latter, as when Le Corbusier redefined the Acropolis through machine-age abstraction. So, too, had Giedion's book made the Baroque appear modern to 'eyes that can see'.

Endnotes

1. Sylvia Wright, "America's Most Favored Tourists," *Reporter*, July 12, 1956, 42.

2. Jill Pearlman, "Joseph Hudnut's Other Modernism at the 'Harvard Bauhaus'," *Journal of the Society of Architectural Historians* 56 (December 1997), 452–77 and *Inventing American Modernism: Joseph Hudnut, Walter Gropius, and the Bauhaus Legacy at Harvard* (Charlottesville: University of Virginia Press, 2007), 56–7, 120–1; see also Anthony Alofsin, *The Struggle for Modernism: Architecture, Landscape Architecture and City Planning at Harvard* (New York: W.W. Norton, 2002), 252–3.

3. Eduard Sekler, "Sigfried Giedion at Harvard University," in Elizabeth Blair MacDougall (ed.), *The Architectural Historian in America*, Studies in the History of Art 35 (Washington, D.C.: The National Gallery of Art, 1990), 270.

4. According to Harvard art historian John Coolidge, Gropius's attitude was 'you mind your business, and we'll mind ours'; Alofsin, *Struggle for Modernism*, 242, 246. On the distance between postwar professional education and art history departments, see Tod Marder, "Renaissance and Baroque Architectural History in the United States," in MacDougall, *Architectural Historian in America*, 165.

5. For an overview, see Joan Ockman (ed.), *Architecture School: Three Centuries of Educating Architects in North America* (Cambridge, Mass.: MIT Press, 2012).

6. Denise R. Costanzo, "The Lessons of Rome: Architects at the American Academy, 1947–1966" (PhD diss: Pennsylvania State University, 2009).

7. "UN General Assembly: Does it mean a turning point of modern architecture? Or is it the 'bankruptcy of the International Style?'," *Architectural Forum* 97 (1952), 140–9.

8. George Howe to *Forum* editor Douglas Haskell, cited by Robert A. M. Stern, *George Howe: Toward a Modern American Architecture* (New Haven: Yale University Press, 1975), 207–8. Excerpts were reprinted in "UN Assembly: How Do Architects Like It?" *Architectural Forum* 97 (1952), 114–5.

9. Costanzo, "Lessons of Rome," passim, and "Architectural Amnesia: George Howe, Mario De Renzi, and the US Consulate in Naples," *Memoirs of the American Academy in Rome* 55–6 (2011–12), 353-89.

10. Of thirty-nine new fellowships from 1947–66, GSD graduates won twelve, Yale eight, and MIT six. MIT formalized its modernism with William Wurster's 1945 appointment as dean, Yale by hiring Howe as department chair in 1950. See Costanzo, "The Lessons of Rome," 62–81.

11. Statements held in the Fellows Files, American Academy in Rome Archives, New York, New York (hereafter "AAR Archives").

12. See statements by Wiley (1947), Leavitt (1950), Dawson (1951), Venturi (1954), Dirsmith (1958), Larson (1962) and Liebman (1964). Despite a professed interest in Italian modernism, James Lamantia (1948) has stated his real desire was 'to see the Baroque'.

13. Fellows Files, AAR Archives. Wiley, Leavitt, Dirsmith and Larson mention the Baroque in passing.

14. Paolo Portoghesi, *Roma Barocca. Storia di una civiltà architettonica* (Rome: C. Bestietti Edizioni d'Arte, 1966); Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1966).

15. Emil Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, and France* (Cambridge, Mass.: Harvard University Press, 1955); Rudolf Wittkower, *Art and Architecture in Italy, 1600-1750* (Harmondsworth: Penguin Books, 1958). Bruno Zevi's Baroque examples in *Saper vedere l'architettura* (1948) had little US impact until translated into *Architecture as Space: How to Look at Architecture*, trans. Milton Gendel (New York: Horizon Press, 1957).

16. Panayotis Tournikiotis, *The Historiography of Modern Architecture* (Cambridge, Mass.: MIT Press, 1999), 6.

17. Oswald Spengler, *Decline of the West: Form and Actuality*, vol. 1, trans. Charles Francis Atkins (New York: Knopf, 1926), 277.

18. According to 1955 Yale graduate James Polshek, Spengler was assigned by the first year director. Carter Wiseman, *Louis I. Kahn—Beyond Time and Style: A Life in Architecture* (New York: W.W. Norton, 2007), 61. Howe was at Yale from 1950–54.

19. Fellows Files, AAR Archives.

20. Both Giedion and Spengler were assigned at Yale; Wiseman, *Louis I. Kahn*, 61. See also Reto Geiser, "Giedion in Between: A Study of Cultural Transfer and Transatlantic Exchange, 1938-1968" (PhD diss: ETH Zurich, 2010).

21. The Norton Professorship defines 'poetry' to include art and music. Giedion was the first scholar of architecture so honored.

22. Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition* (Cambridge, Mass.: Harvard University Press, 1941). Unless stated otherwise, all page numbers are from the 1942 reprint edition.

23. Kenneth Frampton, "Giedion in America: Reflections in a Mirror," *Architectural Design* 51, 6–7 (1981), 45. Harvard University Press's best-selling book, 65,000 copies were sold between 1941–62. Sokratis Georgiadis, *Sigfried Giedion: An Intellectual Biography*, trans. Colin Hall (Edinburgh: Edinburgh University Press, 1993), 97; Sekler, "Giedion at Harvard," 270.

24. Georgiadis, *Sigfried Giedion*, 97–150; Frampton, "Giedion in America," 45–8; Tournikiotis, *Historiography of Modern Architecture*, 21–49; and Anthony Vidler, *Histories of the Immediate Present: Inventing Architectural Modernism* (Cambridge, Mass.: MIT Press, 2008), 1–15.

25. Giedion, *Space, Time and Architecture*, 23. This is theme recurs throughout the text.

26. Fellows Files, AAR Archives.

27. Fellows Files, AAR Archives.

28. Giedion, *Space, Time and Architecture*, 27.

29. The book grew from 588 to 881 pages from 1941 to 1967. Frampton notes that Giedion often reads modern works 'in Neo-Baroque terms'; "Giedion in America," 47.

30. Giedion, *Space, Time and Architecture*, 350.

31. Giedion, *Space, Time and Architecture*, 55.

32. Henry-Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration* (New York: Payson & Clarke Ltd., 1929); Emil Kaufmann, *Von Ledoux bis Le Corbusier: Ursprung und Entwicklung der Autonomen Architektur* (Vienna: Passer, 1933). The latter has never been translated into English.

33. Nikolaus Pevsner, *An Outline of European Architecture* (Harmondsworth: Penguin, 1942). A chapter on architecture since 1914 was added for the fifth edition of 1957.

34. For Giedion's appropriation of modernist visual techniques, see Harry Mallgrave and David Goodman, *Modern Architectural Theory: A Historical Survey, 1673–1968* (Cambridge: Cambridge University Press, 2005), 260.

35. Mallgrave and Goodman observe that Giedion's 1928 work addresses the "hurried reader"; *Introduction to Architectural Theory: 1968 to Present* (Chichester: Wiley-Blackwell, 2011), 55, 241n.

36. When Giedion joined the GSD faculty in 1953 to teach history under Dean Jose Luis Sert (1953–69), four history courses were required. Sekler, "Giedion at Harvard," 269–71.

37. See page 14 of the 1946–7 GSD Bulletin, reprinted in Klaus Herdeg, *The Decorated Diagram: Harvard Architecture and the Failure of the Bauhaus Legacy* (Cambridge, Mass.: MIT Press, 1983), 108–21; see also Alofsin, *The Struggle for Modernism*, 158–9. When Gropius arrived at Harvard, history was taught by Hudnut and medievalist Kenneth J. Conant, known for appreciating modern architecture and quality instruction; Francke Bosworth and Roy Childs Jones, *A Study of Architecture Schools* (New York: Charles Scribner's Sons, 1932), 35.

38. They met in 1923 at the first Bauhaus exhibition in Weimar. Sekler, "Giedion at Harvard," 265.

39. Sigfried Giedion, *Walter Gropius* (Paris: Editions Crès, 1931); *Walter Gropius: Work and Teamwork* (New York: Reinhold, 1954); and Sekler, "Giedion at Harvard."

40. Giedion, *Space, Time and Architecture*, 5th ed., 100, 76.

41. Manfredo Tafuri and Francesco Dal Co, *Modern Architecture*, trans. Robert Erich Wolf (New York: Harry N. Abrams, 1979), 246. See also Eric Mumford, *The CIAM Discourse on Urbanism, 1929-1960* (Cambridge, Mass.: MIT Press, 2000).

42. For the third edition Giedion added material from two 1952 articles; "Space and the Elements of the Renaissance City," *Magazine of Art* 45 (January 1952), 3–10, and "Sixtus V and the Planning of Baroque Rome," *Architectural Review* 3 (April 1952), 217–26.

43. Urbanism is mentioned in 16 out of 38 statements; Costanzo, "Lessons of Rome," 115–30.

44. Fellows Files, AAR Archives. Fellow Thomas N. Larson, another GSD graduate, also names the Piazza San Pietro in 1962.

45. Mumford describes *Space, Time and Architecture* as 'Brilliant: but often cavalier in presenting facts and judgments'; *The City in History: Its Origins, Its Transformations, and Its Prospects* (New York: Harcourt, Brace & World, 1961), 597.

46. Robert Venturi, "Notes for a Lecture Celebrating the Centennial of the American Academy in Rome Delivered in Chicago," in *Iconography and Electronics upon a Generic Architecture: A View from the Drafting Room* (Cambridge, Mass.: MIT Press, 1996), 50, and Martino Stierli, "In the Academy's Garden: Robert Venturi, the Grand Tour and the Revision of Modern Architecture," *AA Files* 56 (2007), 45.

47. R. Venturi to R. and V. Venturi, 3 April 1956, Venturi Scott Brown Collection, Architectural Archives, University of Pennsylvania.

48. Manfredo Tafuri, *History and Theories of Architecture*, trans. Giorgio Verrecchia (New York: Harper and Row, 1980), 151–53 and Fredric Jameson, "Architecture and the Critique of Ideology" in Joan Ockman (ed.), *Architecture, Criticism, Ideology* (New York: Princeton Architectural Press, 1985), 65.

READING AALTO THROUGH THE BAROQUE:
SIGFRIED GIEDION AND GILLO DORFLES

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Alvar Aalto's international reputation is cemented with his inclusion in the second edition of Sigfried Giedion's *Space, Time and Architecture: Towards a New Tradition*, which was published in 1949. Significantly, not only does Giedion have Aalto join the company of Gropius, Le Corbusier, Frank Lloyd Wright and Mies van der Rohe as one of the Modern Masters, but makes the chapter devoted to him the longest of them all. To Aalto is given 39 pages, compared to Gropius's 35, Le Corbusier's 31, Frank Lloyd Wright's 27, and Mies van der Rohe's meager 23 pages.

In a letter to Aalto dating from January 1949, Giedion addresses the reason behind the outcome as he writes:

> In dieser Zeit habe ich an dem Kapitel fuer 'Sp.T.A.' ueber Dich gearbeitet, wenn ich gerade einen klaren Augenblick hatte. Es ist im Vergleich zu den andern Kapiteln, Gropius, etc. etwas zu lang geworden und ich fuerchte, dass dies bei manchem meiner Freunde viel Unwillen erregen wird. Anderssseits ist mir das Buch dadurch voellig klar geworden.[1]

The statement that 'Andersseits is mir das Buch dadurch voellig klar geworden' implies Aalto's importance for Giedion's intellectual construct: Aalto culminated the book's thesis.

We are all familiar with the basic contents of the book: retelling the history of modern architecture since the Renaissance as an alternation between disintegration and integration, between reason and feeling, tending towards a synthesis. The title of the chapter devoted to Aalto, 'Irrationality and Standard,' suggests that the protagonist represented for Giedion the ultimate culmination in this regard. As he writes: 'By 1930 the new means of expression had been attained. Now it was possible to strive for further development and to dare to leap from the rational-functional to the irrational-organic.'[2] He suggests that the 'irrational-organic' was the ultimate realm of the synthesis. His historical role: 'to re-establish a union between life and architecture.'[3]

One could well ask why had Aalto been included in the first edition of *Space, Time and Architecture*; Giedion had written his first article on Aalto in 1931 and his interest had intensified in 1933 after Aalto completed the Paimio Sanatorium and launched his Paimio Chair at the Milan Triennale in 1933. It is at this point that Giedion writes him a postcard stating that 'Sie werden zu noch zum "Magus des Nordens!"'[4] By the time Giedion began his lectures at Harvard that formed the basis of the book not only had his signature formal motif which gains a central stage in Giedion's reading of Aalto—the curvilinear form—been established, but Aalto status as a leading European modernist had already been cemented with a retrospective exhibition staged in 1938 at the Museum of Modern Art.

I would therefore suggest that Giedion's reading of Aalto and his historical role was greatly affected by the events surrounding World War Two. In fact, Giedion writes the first version of his chapter on Aalto for the Swiss magazine *Cicerone* shortly after Aalto had delivered a lecture in Zurich on Finnish reconstruction after the Winter War. Aalto becomes at this point the great humanizing force of the Modern Movement. More specifically, it is at this point that Giedion first links between Aalto's persona, the curvilinear form, his geographic, historical and cultural milieu meld into a single narrative. In what follows, I will show how the Baroque, or rather, Giedion's particular reading of the Baroque, provided the ultimate historical model and the key formal trope associated with the Baroque, namely the undulating wall, becoming the key operative tools that allowed this ultimate synthesis to happen.

The undulating, curvilinear form dominates Giedion's reading of Aalto. Giedion traces the motive to the Baroque period, more specifically to Francesco Borromini and his Church of San Carlo alle Quattro Fontane, which undulating exterior wall is credited for its ability to merge inside and outside, as well as different building elements into one synthetic element. 'Baroque manifests itself as a new power to mold space, and to produce an astonishing and unified whole from the most various parts,' writes Giedion.[5]

To be sure, Giedion is not interested in reviving the Baroque as a historical style, but rather as a kind of synthetic mindset that manifests itself at different times and places, and in the work of different authors, Aalto being one. Here he follows the legacy of such twentieth-century historians as Henri Focillon who was among the first to argue that the baroque ethos manifested itself in various places and times, writing in *La vie des formes* (1934) that 'the Baroque State reveals identical traits existing as constants within the most diverse environments and period of time.'[6] Paraphrasing Focillon, Giedion agrees that architecture is not bound by time, not simply a response to historical conditions but 'has a life of its own, it grows or dwindles, finds new

potentialities and forgets them again.'[7] Giedion's break from preconceived ideas about historical time can be traced also to another Baroque scholar, Spanish critic and author Eugenio d'Ors, whose book *Lo Barroco* (ca. 1936), where baroque spans into infinite modalities throughout a whole eon of time. D'Ors's idea of what could be called a baroque sense of time, time that is no longer linear but marked by infinite number of folding of different temporalities and speeds is echoed in the George Braque quote used by Giedion: 'L'avenir est la projection du passé, conditionee part le par le present.'[8]

Giedion's reading of Aalto's curvilinear forms were also informed by its resemblance to biomorphic abstraction, which was championed by Giedion and his wife, the famous art historian Carola Giedion-Welcker. It is worth noting that Aalto probably saw the work of Jean Arp for the first time during a 1931 visit to visit the Giedions in Zurich.[9] Importantly, the Giedions did not see biomorphic abstraction simply a formal counter pole to geometric abstraction—a reading promoted by Herbert Barr in the 1936 exhibition Cubism and Abstract Art at the Museum of Modern Art—but rather as the outcome of a particular mindset. Giedion-Welcker saw Arp's work as 'pure poetry, which allows everything anecdotal and specific, as well as psychological and individual, to flow into one large reservoir.'[10] In other words, biomorphic abstraction represented for her a shift from abstract knowledge to human experience and response to the world around—Spinoza idea of *homo cogitat* ('man thinks') over Descartes' notion of *cogito ergo sum* ('I think therefore I am'). Here all thinking and being is directed to the world, there is no foundational prior self.[11] Giedion, on the other hand, gave Arp's forms a geopolitical reading in 1930, making a case that most promising new art came from small countries like Alsace, which 'due to its location between German and French culture, is able to take a relatively free approach.'[12] Here also the focus is not on an *a priori* essence but rather on a process and directedness towards an open-ended future.

These two readings of biomorphic abstraction put forward by the Giedions—one phenomenological and the other geopolitical—as well as the notion of the baroque 'folding' of time and place all find their way into the Aalto chapter. Firstly, more than in any other part of *Space, Time and Architecture*, his chapter on Aalto discusses the personality of the man. 'One cannot speak about Aalto the architect without speaking about Aalto the man,'[13] exclaims Giedion and continues to emphasize his social (note: not individual) personality: 'people are at least as important to him as architecture.' He also talks about Aalto's restlessness, his ability to connect with people, and his networks of friends. Giedion also makes a note about Aalto's ability to absorb and appropriate ideas and formal motifs from his contemporaries into his own work in a fluid and organic manner. True to the baroque legacy, his imagination, like Arp's, is synthetic, merging and synthesizing ideas and elements into one synthetic whole. Giedion suggests that Aalto's architecture draws from this large reservoir, and that as in the case of Arp his curvilinear form is a synthetic outcome—a notation of sorts—of his actions and experiences unfolding in real space and time.

He interprets Aalto's Finnish origins in the same manner. Importantly, the lead sentence 'Finland is wherever Aalto goes'[14] implies that Aalto is constantly on the move, yet without loosing touch with his origins and his country's troubles. Importantly, Giedion does not claim that Aalto's architecture embodies the essence of Finland or some kind of mystical genius loci of the country. Rather, also here the emphasis is on a more open-ended process of making sense, of helping out. Echoing Jean Arp's native Alsass, Giedion considers Finland a RandSpace, Time and Architecturet, a borderstate, which is in a constant state of becoming, both culturally and geographically. The aerial view of the Finnish lake landscape—an image Aalto himself began to use both in his buildings as well as in his articles around 1937—captures the argument; Finland is portrayed as a pure geographical imagination, half water and half land, shaped by geological process.

The idea of becoming dominates Giedion's reading of Aalto's use of the curvilinear form as well: its meaning is never fixed, it too has an ability to migrate to new uses and new meanings. The aerial view of the Finnish lake landscape juxtaposed with the Savoy Vase, the plan of the Finnish pavilion at the New York World's Fair, and an aerial view of the Baker House summarize the argument. The form migrates from landscape to architecture and designs and into different functions and materials. It gets translated into a vase, a ceiling, a projection wall, and even shaped into complete buildings. Importantly, the curvilinear form governs function and produces innovative structural solutions, not vice versa, thus challenging the idea of dogma of programmatic, material and structural determination of form. According to him Aalto does not simply apply the form to different uses, the form becomes productive form, a generator of architectural imagination. Writing on Aalto's use of the curvilinear form in the ceiling of the Viipuri Library Giedion notes on 'freedom of opportunity to excite the plastic imagination of an artist,'[15] suggesting that the undulating wall is a productive force, which triggers imagination and creativity and allows unpredictable new solutions to perennial architectural problems to emerge.

A parallel drawn between an aerial view of the Baker House and a similar image of Landsdowne Crescent in Bath suggests that the curvilinear form had an ability to migrate into different historical contexts and locations. Giedion calls the undulating wall that marks both buildings a 'constituent fact,' as one of 'those tendencies which, when they are suppressed, inevitably reappear.' Giedion elaborates that 'Constituent facts in architecture, for example, are the undulation of the wall, the juxtaposition of nature and the

human dwelling, the open ground-plan.'[16] Importantly, Aalto's use of the undulating wall is not simply understood an individual gesture or an embodiment of some mystical national essence, but a generative trope, which transcends both time and place.

All in all, Giedion's treatment the curvilinear form becomes an ideogram that folds different strata—formal, personal, geographical, and historical—into one topological continuum, where it is difficult to separate life from architecture, a person from his or her country, form from its creator, and one historical moment from another. Aalto's character, as well as his signature form, the undulating form, are both celebrated for their ability to make interrelationships between ideas, events, imagery, people, and places through time. (As discussed earlier, form is here understood as a living entity in a manner that echoes Focillon.) Both embody kind of universal pantheistic impulse that Giedion invests with a geopolitical subtext. In his words, present-day art 'is [that] part of its essence that barriers between space and time, barriers between countries, and barriers between future and past are torn down, and with a bold seep our own period, the whole world, and the whole of history are embraced.'[17]

A key concept in Giedion's understanding of the Baroque's role in architectural consciousness was latency, the idea that the most important things are not always visible and that some ideas remain hidden albeit ready to percolate to the surface. He uses the term, for example, to imply how interpenetration of space and volume, were latent before the right technology—glass and steel—made it possible.[18] At times the notion implies also a sense of nostalgia and longing. Giedion writes, for example, how 'out of forgotten strata of consciousness the elements of primitive man which are dormant in us are again brought to light, and at the same time unity is sought with the present day.'[19]

Importantly, latency is a key notion in the phenomenological epistemology. It is based on the notion that our daily experience is surrounding by things we cannot quite think or see, that is, things that are unconscious. Marleau Marleu-Ponty writes: 'Perception is unconscious.'[20] In psychoanalysis it refers to a preconscious state; that which surrounds us in conscious life. Giedion uses several psychoanalytical terms, like 'subconscious' and 'unconscious', throughout his book. Freud's notion of *Latenzzeit* is also relevant in this context: the idea that human life is dominated by *Latenzzeit*, a period after blockades have been built to block certain natural drives, like the free sexual life that characterizes early childhood. Yet, as we have learned from Freud, rather than remaining buried and hidden, latencies becomes virulent figures, guiding out the deepest thoughts and impulses.[21] Giedion's reference to the 'irrational' in the Aalto chapter can be linked to these psychoanalytical ideas, signifying that the best, most synthetic architecture is not just a product of the conscious, rational mind, but also an outcome of deeper, irrational levels of human psyche.

The fact that Giedion's chapter on Aalto makes for a rather puzzling piece of architectural history writing, with its minute recordings of Aalto's actions, can be credited to this psychologizing take on the Baroque. To discuss the Baroque meant for Giedion and for many of his contemporaries going beyond standard historical writing and transcending the mere descriptive empirical and historical analysis. His ambitious goal was to tackle the question that had already preoccupied Focillon, namely: does a style convey a way of thinking or a sensibility? He, too, saw the Baroque as a quasi-mysterious, sensuous life force insistently resurfacing from time to time. Focillon's *Vie des formes* was a standard bearer in this regard. He writes how baroque 'forms live with passionate intensity a life that is entirely their own [. . .] they break apart even as they grow; they tend to invade space in every direction, to perforate it, to become as one with all its possibilities.'[22]

Giedion's idea that the best of modern architecture follows this baroque sensibility was followed by the Italian critic Gillo Dorfles, a professor of aesthetics at Milan University as well as an active member of both the Italian Movimento Arte Concreta and the France-based Groupe Espace, both founded in the late 1940s, the latter by the architect André Bloc. As with Giedion, Dorfles's book *Barocco nell'architettura moderna* (1951) places Aalto within this legacy. In the modestly illustrated book, Aalto is represented by the Savoy vase and an interior perspective of the Finnish Pavilion at the New York World's Fair: examples that once follow Giedion for demonstrating curvilinear form as a leitmotif in Aalto's oeuvre.

Dorfles based his book on the review of D'Ors's book for *Domus* published in 1946 called 'Attualità del barrocco' or 'The Contemporaneity of the Baroque'. Building upon Giedion, Dorfles maintained that the Baroque had remained a constant since the beginning of art and was coterminous with modernity. Baroque is read as the new *Kunstwollen*, as it were, in which the dynamic overcame the static, the tactile the optical, the organic or plastic the teometric, whether in architecture, painting, or music. Dorfles illuminates the Baroque *Raumwollen* and its ability to synthesize different elements with a quotation by A. E. Brinkmann: 'Die Selbständigkeit der Raumteile wird zur rhythmisch gebundene Folge. Dieser Rhythmus bestimmt auch die Anordnung der einzelnen Teile des Plastik körpers. Die Plastik verbindet sich mit dem architektonischen Raum, diesen modellierend.'[23]

Giedion and Dorfles instrumentalized both Aalto and the Baroque towards their larger vision for the future of post-war architecture, architecture that would enter the social realm by becoming more concrete, real and palpable. For both of them the Baroque offers a gold standard for architectural engagement. Similarly, for both of them Aalto's architecture represented a kind of saturated reality effect, much needed to revive postwar aporia. Baroque space is modified towards that goal in a manifesto of the Groupe

Espace Dorfles helped to craft in 1951: 'art qui s'inscrit dans l'espace réel, ronde aux nécessités fonctionnelles et e tous le besoins de l'homme—des plus simplex aux plus élevés. Un art dont la conception et exécution s'appuient sur la simultanéité des aspects dans les trois dimensions non suggérées, mais tangibles.'[24]

All in all, Aalto was much beloved in war-torn Italy and his work gains a more palpable impact there than perhaps anywhere else. A special issue of the journal *Zodiac* devoted to Aalto in 1958 bears witness to the intensity of the sensations architects, artists and critics felt like when they experienced one of Aalto's sculpted, baroque-like spaces—such as the interior of Vuoksenniska Church, which had actually entered his architectural vocabulary in the 1950s. The painter and critic Pier Carlo Santini writes, as if in a trance: 'With what does it rhyme this strange architecture that escapes any classification in its ultimate greatness? With what indeed, if not with beauty nowadays so oft wronged, so oft denied in man's life?'[25] Aalto, like the best of the Baroque architects, had perfected his craft to the point that one could simply sit back in awe.

The opening image of *Zodiac* captures, perhaps better than any words, the basic principle of Aalto's post-war reception and its baroque subtext: multiple images show Aalto at the table drawing. The image captures the central tenet of both by Giedion and Dolfles: the best of architecture cannot be separated from real life.

Endnotes

1. Corr. Sigfried Giedion to Alvar Aalto, January 10, 1949, Alvar Aalto Museum, Helsinki.

2. Sigfried Giedion, *Space, Time and Architecture: The Birth of a New Tradition*, 2nd ed. (Cambridge, Mass.: Harvard University Press, 1949), 566.

3. Giedion, *Space, Time and Architecture*, 565.

4. Postcard Sigfried Giedion to Alvar Aalto, July 7, 1933, Alvar Aalto Museum, Helsinki.

5. Giedion, *Space, Time and Architecture*, 109.

6. Henri Focillon, *The Life of Forms in Art*, trans. C. B. Hogan and G. Kubler (New Haven: Yale University Press, 1942), 15. Orig. *Vie des forms* (Paris: Quadrige & Presses Universitaires de France, 1934). Quoted in Helen Hills, "The Baroque: The Grit in the Oyster of Art History," in Hills (ed.), *Rethinking the Baroque* (Farnham: Ashgate, 2011), 22.

7. Focillon, *Life of Forms*, 23.

8. Giedion, *Space, Time and Architecture*, 567.

9. For more information about Aalto's relationship with the Giedions see Teppo Jokinen and Bruno Maurer, *'Magus des Nordens': Alvar Aalto und der Schweiz* (Zurich: gta-Verlag, 1998) and Eeva-Liisa Pelkonen, *Alvar Aalto: Architecture, Modernity, and Geopolitics* (New Haven, Conn.: Yale University Press, 2009).

10. Carola Giedion-Welcker, "Hans Arp: Dichter und Maler," in *Carola Giedion –Welcker' Schriften, 1926-1971* (Cologne: M. Dumont Schenbert, 1973), 246.

11. Charles T. Wolfe, "From Spinoza to the Socialist Cortex: Steps Toward the Social Brain," in Deborah Hauptmann and Warren Niedich (eds.), *Cognitive Architecture. From Biopolitics to Noopolitics. Architecture & Mind in the Age of Communication and Information* (Rotterdam: 010 Publishers, 2010), 190.

12. Sigfried Giedion, "Produktion Paris, 1930: Malerei und Plastik," in *Produktion Paris, 1930: Werke der Malerei und Plastik* (Zurich: Kiunstsalon Wolfsberg, 1939).

13. Giedion, *Space, Time and Architecture*, 603.

14. Giedion, *Space, Time and Architecture*, 567.

15. Giedion, *Space, Time and Architecture*, 579.

16. Giedion, *Space, Time and Architecture*, 18.

17. Giedion, *Space, Time and Architecture*, 620.

18. Giedion, *Space, Time and Architecture*, 529.

19. Giedion, *Space, Time and Architecture*, 621.

20. Maurice Merleau-Ponty, *Visible and Invisible*, trans. Alphonso Lingis (Evanston: Northwestern University Press, 1968), 189. Orig. *Visible et l'invisible* (Paris: Gallimard, 1964).

21. See Stefanie Diekmanna and Thomas Khurana (eds.), *Latenz: 40 Annaherungen an einen Begriff* (Berlin: Kulturverlag Kadmos, 2007) for further discussion on the topic.

22. Focillon, *Life of Forms*, 15.

23. Gillo Dorfles, *Barocco nell'architettura moderna* (Milan: Libreria Editrice Politecnica Tamburini, 1951), 10-11.

24. Gruppe Espace Manifesto, October 1951, reprinted in Luciano Berni Canani and Giorgio Di Genova, eds., *MAC/ESPACE: Arte concreta in Italia e in Francia, 1948-1958* (Bologna: Edizioni Bora, 1999), 27.

25. Pier Carlo Santini, "Alvar Aalto from Sunila to Imatra: Ideas, Projects and Buildings," *Zodiac* 3 (1958): 27-28.

ENDING THE HEGEMONY OF 'SPACE':
STEEN EILER RASMUSSEN AND THE RELATIVIZATION OF BAROQUE AESTHETICS

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In the fall of 1953 a 55-year-old professor of architecture, named Steen Eiler Rasmussen, arrived as a guest professor at MIT's school of architecture, where he gave a series of public lectures, under the title 'Experiencing Architecture'.[1] These lectures, which Rasmussen would soon repeat at Yale, and later at the University of Pennsylvania and the University of California, Berkeley, drew large crowds of architecture students, intrigued by his vividly sensory, especially tactile, accounts of historical and modern architecture.[2] These lectures would become the basis for his well-known book of 1959 *Experiencing Architecture*, first published in Danish in 1957 as *Om at Opleve Arkitektur*. The book would firmly establish his international reputation in architectural education, particularly for the ways in which it assimilated architectural history to modernist design practices. *Experiencing Architecture* was, in fact, the culmination Rasmussen's long career of teaching history to students at the Royal Academy of Architecture in Copenhagen, beginning the 1920s, as he had struggled to make history courses meaningful to generations of architectural students who were increasingly finding history irrelevant. Architectural history, in an age of abstraction and specialization, would now re-assert its relevance by invoking the sensory fullness of architecture and the craft of building. While *Experiencing Architecture* has become an international classic in architectural pedagogy, few have considered its role in reorienting the architectural historiography of baroque 'space'. Rasmussen's account of the Baroque, in fact, shifted architectural discourse in the direction that would later come to be identified as 'phenomenological': the description of embodied encounters; the privileging of immediate sensation over mediated knowledge; and the conception of the architecture as a subjectively intuited, material environment.

Symptomatic of this new orientation to the baroque was a passage from the introduction to *Experiencing Architecture* in which Rasmussen describes Carlo Rainaldi's seventeenth-century façade and piazza for Santa Maria Maggiore in Rome. In a passage that seems outrageously naïve and ahistorical, Rasmussen explains the aesthetic experience of the piazza through the medium of children's games. Recalling an observation while on a 1952 study trip to that city, he described a group of school children playing a ball game against the massive curving wall of the stone-clad apse, perched over a set of semicircular travertine steps, leading down to the piazza below with its obelisk. The ball became a tactile prosthesis for discovering not only the shape but also the stoniness of the travertine mass. Through the instrument of the ball and sensations of their own bodies, they extended themselves into the very material of the space, sensing the hardness of the wall, and 'quite unconsciously they experienced certain basic elements of architecture: the horizontal planes and the vertical walls above the slopes. And they learned to play on these elements.'[3] Merely watching the game, Rasmussen claimed, caused him to experience the entire urban space in a new way. This account was also a new way of describing the experience of Rome, not from the centres of its monumental piazzas, but from the intimate point-of-view of exploring some of its texture on the back side of one of its churches. Experiencing this piece of Rome meant grasping its thing-like quality through a synthesis of the different senses: visual, tactile, acoustic, and also kinaesthetic, without reducing any of these elements to space.

The wilful naïveté and ahistoricsim of Rasmussen's account emerged, in fact, out of a deliberate re-reading and re-appropriation of German art historical accounts of Baroque space that had continued to dominate into the middle of the twentieth century. *Experiencing Architecture* drew on much of the same baroque pedigree as Sigfried Giedion's *Space, Time and Architecture*, including Heinrich Wölfflin's historical hermeneutics and August Schmarsow's identification of the Baroque with spatial feeling, or *Raumgefühl*.[4] However, it invoked these categories, not to construct a teleology from an imagined Baroque synthesis to a modernist 'space-time', but rather to relativize and de-centre these categories, both within seventeenth-century European architecture and within an open-ended set of modernist 'experiences'. To put this relativization in context it is important to recall that, in his *Space, Time and Architecture* of 1941, Giedion placed the Baroque city at the centre of his narrative of modernist space, which becomes a continuation of the Baroque:

> The distinguishing mark of the baroque age is the method of thinking and of feeling that prevails in it; its outstanding feature is the development of a specific kind of universality. In our field, this manifests itself as a new power to mould space, and to produce an astonishing and unified form from the most various parts.[5]

With this passage, Giedion explained one of his major historical theses: that modern architecture and city planning was approaching a new universal synthesis parallel to that of the European baroque. It was a synthesis, not only between art and science, but also among different parts of the city into a unified 'space conception', which Giedion compared with that of modern artists. Given this image of modernism, Giedion's claim that the Baroque anticipated a certain kind of modern spatial experience depended to a large extent on the imprecision of what the term 'space' actually signified in this context. Juxtaposing Giuseppe Valadier's late baroque design of the Piazza del Popolo in Rome with a neo-plasticist drawing of 1920 by the Dutch artist Theo Van Doesburg, Giedion described the spatial effects of the piazza in modernist terms: 'In the Piazza del Popolo, Valadier embodies a hovering sensation in the total effect produced by his design by bringing into relation with each other two horizontal areas of different levels: the terrace on the Pincino and the *piazza* proper.'[6] With this particular comparison, Giedion intended to demonstrate 'the relation between horizontal and vertical surfaces as a basis for aesthetic responses of a special sort.'[7] This formalizing abstraction, equating the aesthetic response within an urban space to that of viewing an axonometric line drawing of non-representational planes, was a further attempt to demonstrate how 'spatial feeling' might traverse different modes of representation. However, its believability also depended on a certain vagueness of analogy, which was meant to prefigure an even more vague and yet more abstract analogy with the Einsteinian physics of space-time.

For Rasmussen, by contrast, the baroque sense of spatial feeling was a specific material and artistic technique that could be uncovered and reproduced through observation. Baroque Rome would be assimilated to the needs of modern architecture, neither in terms of the grandiose totalization of Giedion's space-time, nor in terms of the spectacle of monumentality, but rather as elements in a palette for the everyday dwelling places, offices and stores of the post-war welfare state, whose social and symbolic formation seemed to Rasmussen to be completely opposed to the ceremonial and hierarchical formations of baroque Italy. The children's ballgame against the apse of Santa Maria Maggiore, thus, was a kind of parable for the modernist appropriation of architectural history.

Even while still student at the Royal Danish Academy during World War One, Rasmussen had come under the influence of the German art historian Albert Erich Brinckmann, known for his teachings on baroque urban space and public monuments. Brinckmann's writings, especially *Platz und Monument*, became one of the prime models for understanding the aesthetic experience of such urbanistic ensembles, particularly in terms of series of heightened spatial sensations and sculptural effects. However, Rasmussen never interpreted Brinckmann in purely spatial terms; spatial aesthetics was always for the Dane connected to the methods and materials of building. Recounting decades later the impression made by this reading of *Platz und Monument*, Rasmussen remembered having been impressed by one of Brinckmann's last sentences: 'City building means: shaping space with the materials of housing!'[8] Brinckmann had written that city building could not arise from abstract thinking, but only from 'sensual thinking, thinking in the material' ('sinnliches Denken, Denken im Material').[9] This phrase connected deeply with Rasmussen's own intimate link to the Danish craft tradition, which he now extended to the scale of the city.

The most explicit reference to Brinckmann's historiography of the Baroque occurs in the third chapter of *Experiencing Architecture*, titled 'Contrasting Effects of Solids and Cavities'. This chapter title itself paraphrases Brinckmann's 1922 book, *Plastik und Raum*, the usual English translation of which would have been *Plasticity and Space*. In a passage which deploys all of the major motifs of the empathy theory that had infused these earlier baroque discourses, Rasmussen describes Pietro da Cortona's seventeenth-century Piazza of Santa Maria della Pace in Rome (Fig. 1):

> The interior seems to be pressing against the wall, pushing it out in a tremendous bulge. You can almost see how it bursts apart, forming an opening which is held together by segmented pediment which fills the shadow of the large gable. And this whole huge tense body emerges from the deep niche of the concave façade, just as the loggia below juts out into the court.

This dramatic reading of Roman baroque theatricality is, at the same time, accompanied by a deflation of its aesthetic content and a relativization of its historical and geographical significance. Rasmussen deliberately grounded this empathetic experience in the materiality of Roman construction methods by substituting in English the word 'cavity' for the more commonly used word 'space', which by this time had taken on increasingly vague but also highly abstract and polemical significations. As Rasmussen explained, 'cavity' came closer than 'space' to the

Figure 1. Piazza of Santa Maria della Pace, Rome. (source: S. E. Rasmussen, *Experiencing Architecture*, 69)

original German sense of *Raumgefühl*, or feeling of spatial enclosure. Thus, the stony niches, piazzas and interiors of the Italian Baroque were, in no sense, to be conflated with the transparent, floating planes of the Dessau Bauhaus, even less with a drawing by Theo van Doesburg. No longer would a vague idea of baroque space be able to stand in for an almost infinite variety of visual and intellectual phenomena. It would be brought down to concrete techniques of architectural material, form and illusionism. Furthermore, Rasmussen relativized and deflated the significance of Roman Baroque spaces such as the Piazza of Santa Maria della Pace by claiming that its theatricality constituted, in fact, a marginal and somewhat extreme form of architectural expression, perhaps more appropriate to the seventeenth-century Counter-Reformation than to contemporary architecture: 'The employment of masses and cavities together in effective contrasts leads to works which lie in one of the peripheries of architecture, close to the art of theatre and at times to that of sculpture.'[10] Contemporary architects who resorted to such techniques, Rasmussen implied, were those who often sought the most theatrical and sculptural results. He thus compared the Roman Fontana di Trevi with what he called Frank Lloyd Wright's 'fantasy over cavity, rock, architecture, and sculpture' at Fallingwater or the interpenetration of concave and convex forms at the Johnson Wax Headquarters in Racine, Wisconsin. In fact, Rasmussen's curious fascination with baroque Rome which continued all through the 1950s seemed part of a determined effort to reveal the techniques of its design methods in order, both to demystify its aesthetic effects and to demonstrate its extreme artifice and distance from contemporary modes of life.

After having his students make painstaking, measured drawings of the Spanish Steps in the summer of 1953, Rasmussen incorporated the following conclusion in *Experiencing Architecture*, alluding to the restrictive clothing, mannered gestures and elaborate courtly rituals of the early eighteenth century: 'Thus in the Spanish Steps we can see the petrification of the dancing rhythm of a period of gallantry; it gives us an inkling of something that was, something our generation will never know.'[11] At work in Rasmussen's assessment of Baroque Rome was a strand of Scandinavian functionalist thinking, closely tied to the empirical observations of everyday life and completely opposed to what seemed, from a functionalist point of view, various forms of mysticism and idealism surrounding baroque spatiality.

A highly publicized debate between the functionalist and idealist wings of the modern movement had, in fact, been playing out in the controversies over the so-called 'New Monumentality,' then being promoted by Sigfried Giedion, Jose Luis Sert and others. In his 1944 essay 'The Need for a New Monumentality', Giedion advocated shaping the emotional life of the masses by creating public spectacles from the forms of the modernist artist, 'who created these symbols out of the anonymous forces of our period.'[12] In the subsequent debates over the New Monumentality it was, above all, the Swedish art historian Gregor Poulsson who attacked its idealist assumptions, as well as the idea of a monumentality that would symbolically transcend everyday functions and patterns. Poulsson replied to Giedion by returning to the functionalist doctrines of democratic design: 'The modern architect has derived all his creative force, all his revolutionary ability through the very fact of his *denial* of this aesthetic difference in categories and his most decided defence of the thesis that artistic value is principally the same—naturally not actually so—in the design of cutlery, a worker's home, an underground station, a town hall.'[13] Rasmussen's understanding of functionalist design was quite similar. In 1932, he had curated an exhibition entitled *Britisk Brugskunst* (British Applied Art), which explained these same functionalist virtues. The English things not only had achieved a 'classic' form in their unornamented functionalism, they also fit the sensations and movements of the body.

Rasmussen's admiration of English functional design in the 1930s had extended to the scale of the city of London and also contributed to his relativistic understanding of Baroque architecture and its lessons for the present. This had, in fact, been a theme of Rasmussen's first major English-language book, a 1937 translation from Danish, entitled *London: The Unique City*. Rasmussen readily admitted that London was less spectacular in its spatial and monumental effects than were many continental cities, but it would be a mistake, he clarified, to judge it in those terms. The strength of its form lay, not in any complex interplay of sculpture and public square, but rather in its adaptation to daily life, especially domestic life.[14] In describing the London squares of the eighteenth century, Rasmussen emphasized their lack of monumental hierarchy. Where others saw megalopolitan sprawl and lack of planning, Rasmussen saw the *ad hoc* growth of London as a type of bourgeois, populist functionalism that had produced an urban form, as valid formally as the baroque cities of the continent, and superior to them in socio-political terms.

By the 1950s Rasmussen had added a third pole to this European geography, now focusing on the seventeenth-century Dutch cities of Delft and Amsterdam. Whereas his London project had begun with functionalism and housing reform, dealing with aesthetics only intermittently, this Dutch project consistently bore the lens of art history through Dutch painting, especially of Johannes Vermeer. Dutch art historian P. T. A. Swillens, whom Rasmussen read carefully in the 1950s, was of the opinion that there was no dramatic or allegorical content whatsoever in Vermeer's art. Vermeer, according to Swillens, was almost completely lacking in fantasy or imagination. His skill, rather, lay in his ability to experience, precisely and empathetically the objects and spaces of his world as a play of light and colour: 'In feeling and viewing, he experiences in a special way the "whole", that

is to say a mutual, indivisible connection of things.'[15] Whereas Swillens was interested in the way that Vermeer's aesthetic consciousness organized everyday things and spaces into an experience of the whole, Rasmussen was mainly interested in how the material construction of the city itself made Vermeer's aesthetic experience possible in the first place. Rasmussen's writings on Amsterdam and Delft thus began, not with the paintings, but with the material construction of the cities. Showing a view of Delft from 1732, Rasmussen noted the way in which this method of building produced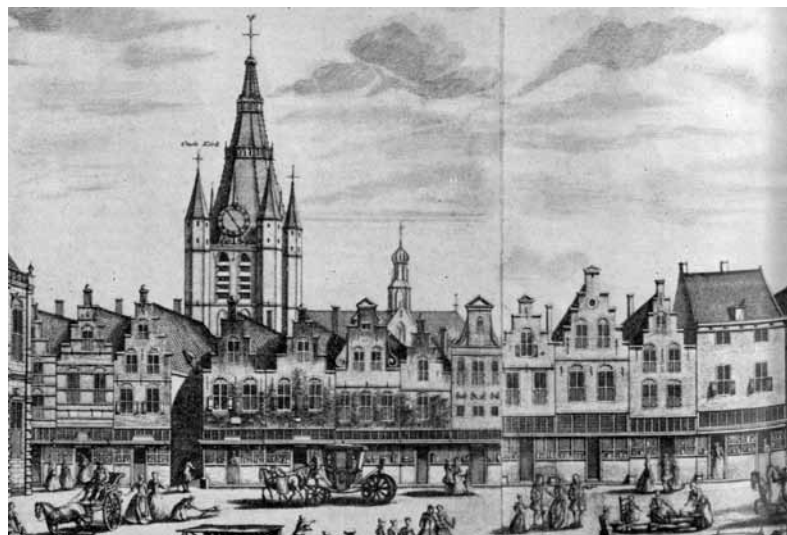 certain characteristic patterns of street frontage (Fig. 2). Because the houses were long and narrow, with bearing walls only along the shared sides of the buildings, the fronts could be opened up by a relatively light, timber frame, filled on the ground floor by great expanses of windows, by which to light the deep interior rooms of the first floor.

Figure 2. Portion of 1732 engraving of Delft, by Leon Schenk. (source: S. E. Rasmussen, "The Dutch Contribution," *Town Planning Review* 24 (1953), pl. 35)

The entire pattern of building produced a spatial and visual experience entirely different from that of the typical baroque city. The consequence of the Dutch manner of building was not just a characteristic pattern of house and street, but a characteristic way of thinking about form. In his journal notes from August 1950, Rasmussen observed that, 'While the Italians must have thought of their houses as massive blocks, through which one bored windows, for the Dutch it was a complete contrast, and windows were not holes in a mass; they themselves formed wall planes.'[16]

Dutch cities flouted all of the compositional rules of the Italian Baroque, producing houses that appeared heavy above and light below, composed not of sculpted masses forming deep shadows, but series of flat wall planes, alternately transparent and opaque. Describing Vermeer's painting 'A Street in Delft', which depicted a small house and two adjacent doorways leading to rear gardens, Rasmussen wrote:

> In the little street picture with a gabled house in Delft, one sees a day-clear representation of a building entirely without mysticism … One guesses that the entire city is built up of houses in the same crystalline character without any ornament, sheer, simple volumes and regular spaces and clear planes.[17]

There were those architects, Rasmussen claimed, who found modernist functionalism too empty and sterile, who sought to introduce symbols and ornament. Vermeer's painting proved that functionalism did not have to imply sterility, that the bare things, in their very simplicity could produce an aesthetic experience. The things were already the aesthetic content. Delft became for Rasmussen a city of bourgeois functionalism, in which theatricality was replaced by the subtle tones of light falling through windows and doorways, illuminating the objects of everyday life. Thus, Delft, alongside seventeenth-century London and Amsterdam, became for Rasmussen an inversion of baroque Rome, not a place of dramatic spatial sequences but a city of bourgeois functionalism, in which theatricality was replaced by the subtle tones of light falling through windows and doorways, illuminating the objects of everyday life.

Endnotes

1. Steen Eiler Rasmussen, *Om at Opleve Arkitektur* (Copenhagen: Gads Forlag, 1957), Engl. ed. *Experiencing Architecture* (Cambridge, Mass.: MIT Press, 1959).

2. The lectures were not part of the regular course instruction in architecture but were designed as a series of public talks, intended to address not only architecture students, but also a general audience interested in architecture. Scheduled twice a week over the course of five weeks in October and November 1953, they were publicized in MIT's 'Calendar of Events' and they apparently began to draw ever-larger crowds of students, both from inside and outside the school of architecture.

3. Rasmussen, *Experiencing Architecture*, 17.

4. Since A. E. Brinckmann had applied the spatial theories of August Schmarsow and others to urban design around World War One, Baroque Rome had assumed a privileged place in German art history, especially for its synthesis of spatial and plastic sensations. See, for example, Paul Zucker, "The Aesthetics of Space in Architecture, Sculpture, and City Planning," *Journal of Aesthetics and Art Criticism* 4 (September 1945): 12-19.

5. Sigfried Giedion, *Space, Time and Architecture* (Cambridge, Mass.: Harvard University Press, 1941), 43.

6. Giedion, *Space, Time and Architecture*, 89. The periodization of this early nineteenth-century square was debatable. In *Town and Square* (New York: Columbia University Press, 1959), 162-63, Zucker categorized it as neoclassical.

7. Giedion, *Space, Time and Architecture*, 89.

8. 'Städte bauen heißt: mit dem Hausmateial Raum gestalten!'—A. E. Brinckmann, *Platz und Monument* (Berlin: Ernst Wasmuth, 1912), 170. Rasmussen recalls having read of spatial effects through the work of Danish Art historian Vilhelm Wanscher and that he and his fellow students at the Academy had then deepened their understanding of this theme through Brinckmann's *Platz und Monument*: 'Wanscher havde talt og skrevet om "rumelige" virkninger og gennem A.E. Brinckmanns lille bog *Platz und Monument* (1912) havde vi faaet uddybet emnet. Dens motto staar paa den sidste side: "Städte bauen heisst mit dem Hausmaterial Raum gestalten ".'—Rasmussen, "Nogle pesonlige noter" in *Om at Opleve Arkitektur*, 240.

9. Brinckmann, *Platz und Monument*, 169.

10. Rasmussen, *Experiencing Architecture*, 82.

11. Rasmussen, *Experiencing Architecture*, 136. To put this statement in context, it is important to remember that Rasmussen, in fact, advocated and designed himself an informal, somewhat anonymous and understated architecture that was completely opposite to the theatrical monumentality of the Roman Baroque.

12. Sigfried Giedion, "The Need for a New Monumentality," in Paul Zucker (ed.), *Modern Architecture and City Planning* (New York: Philosophical Library, 1944), 564.

13. Gregor Poulsson, "In Search of a New Monumentality," *Architectural Review* (September 1948), 123.

14. Steen Eiler Rasmussen, *London: The Unique City* (New York: MacMillan, 1937), 202.

15. P. T. A. Swillens, *Johannes Vermeer, Painter of Delft 1632-1675* (Utrecht: Spectrum, 1950), 146.

16. 'Mens Italienerne maate betragte huset som en stor massiv blok, man brød vinduer igennem, var det for hollænderne en hel konstrastning, og vinduerne var ikke huller i en masse, de dannede selve mur flader.'—handwritten page on graph paper, dated 29 August 1950, #1991/41 Tillæg Ks. 104 III. Manuskripter og Arbejdsnoter, Folder 36, Steen Eiler Rasmussen papers, Royal Danish Library, Copenhagen.

17. 'I det lille gadebillede med et gavlhus i Delft ser man en dagklar fremstilling af en bygning ganske uden mystik...Man aner, at byen er opbygget af huse, der alle er samme kristallinske karakter uden noget ornament, lutter simple legemer og regelmæssige rum og klare flader.'—Rasmussen, "Om at Opleve Arkitektur," *Prisma* 3 (1950), 30.

EXPLORING THE EDGE OF ORTHODOXY:
THE BAROQUE AS READ BY PAOLO PORTOGHESI

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Paolo Portoghesi (born Rome 1931) is one of the most respected architectural historians of twentieth-century Italy. His studies address topics that range from the Renaissance, including investigations on Leonardo's technical drawings and on Leon Battista Alberti's *De Re Aedificatoria*, through to Michelangelo's architecture and studies on nineteenth-century Art Nouveau. Nevertheless, Portoghesi's attention has predominantly been devoted to the architecture of the Italian Baroque. When he enrolled at the Faculty of Architecture in Rome, Portoghesi was aware of two arguments that could guide his training: on the one hand, that baroque architecture anticipated the theme of freedom from tradition; while on the other, that modern architecture had its roots in classicism. Portoghesi, who was formed in the wake of Bruno Zevi's anticlassicism, opted for the recovery of the inheritance of the Baroque.

In the 1950s a disciplinary discussion devoted to the critical revision of the architectural heritage of seventeenth-century was initiated by the 'third generation of historians'.[1] The second edition of Sigfried Giedion's *Space, Time and Architecture* (1949), Rudolf Wittkower's *Art and Architecture in Italy 1600-1750* (1958), and Giulio Carlo Argan's *Borromini* (1952), *L'architettura barocca in Italia* (1957) and *L'Europa delle capitali 1600-1700* (1964) were all influential books to which Portoghesi had access. He recalls the particular importance to him of Argan's essay on Santa Maria in Campitelli, which argued the conscious abandonment of the desire to represent absolute values through architecture.

From this debate Portoghesi was able to confirm his own intuitions, producing, himself, a mature line of research that commenced in 1957, when he published his first book, entitled *Guarino Guarini 1624-1683*.[2] His analysis of Guarini's buildings was proceeded by analogies and contrasts with the work of Francesco Borromini, on whom Portoghesi was also writing significant articles. Although Portoghesi is recognized among the most pre-eminent scholars of Borromini—claimed to be his 'favourite issue'[3]—the importance of his studies on Guarini cannot be underestimated. His book on Guarini, along with his 1972 essay on Vittone and the baroque tradition in the eighteenth century, were greatly appreciated by both Wittkower and Argan, who considered Portoghesi one of the leading experts on the Baroque writing in the Italian post-war context.[4]

In 1964 Portoghesi published *Borromini nella cultura europea,* followed shortly thereafter by *Roma Barocca* (1966), the combined result of twelve years of research on the tradition of baroque architecture.[5] Significantly, in the Foreword to the first of these books Portoghesi presents himself as an 'architect'— and not as an 'historian', as one might expect.[6]

As an architect, then, Portoghesi was soon to became one of the principal heirs of the architectural tradition of the Baroque in the twentieth century. 'Heir' and not 'custodian', for the one who guards aspires to maintain without change the object which has come into his possession, whereas Portoghesi instrumentally returned it to contemporary architecture as a 'live matter'. Unique among his generation of historians, Portoghesi showed that the foundations of baroque architecture, subject to a process of critical review, had a surprising utility in the ambit of contemporary architecture. His research activity thus plays on two fronts: as history, and as architecture. The theoretical assumptions derived from historical study are methodically poured into the architectural project. Yet if the project becomes a place for checking the validity of theoretical assumptions recovered as part of the legacy of tradition and the moment in which it is overtaken by the present, it is necessary to consider it a tool of analysis and criticism of architecture *and* of history. Argan has observed that 'Portoghesi, as an architect, puts into his critical vision an operative interest that gives to his prose a unique character in our criticism of architecture, unique because Portoghesi has the architect's sensibility for architectural form.'[7] In respect to a method that crosses historical epochs, as this does, Portoghesi insists that his greater ambition is 'to create a bridge between writing history indirectly, designing, and writing history directly, investigating the legacy of the past and in its structures.'[8]

The duality of 'Portoghesi as scholar' becomes clearer if seen in the broader context of Italian architectural culture of the 1950s and 1960s when an entire generation of architects sought a critical review of the themes of the Modern Movement, the values of which were considered germane for a renewal of design. At that time the problem of defining the role of architectural history was pressing. 'History' and 'project' were considered synergic factors and architects, within their training, accordingly undertook rigorous historical studies.[9]

Disappointed by academic teaching Portoghesi pursued an autonomous path based on the concept of contamination, convinced that each architecture is generated by others, 'by a not-so-fortuitous convergence of precedents combined together by the imagination'.[10] Baroque culture fomented a new approach to architectural design that broadened the formal historical repertoire. In order to recover that lesson for his present, Portoghesi turned to Francesco Borromini as his 'ideal master', particularly prizing Borromini's relationship with the classic legacy mediated by the Renaissance tradition. Portoghesi observes 'while claiming responsibility for the right to invent new things',[11] Borromini always sought out a dialectic between the new and the ancient. Borromini's follower Guarini, too, pursued this goal pursued with the same determination, demonstrating his consciousness of the need to adhere to the spirit of the age.[12] Paraphrasing Argan: Portoghesi's goal is to find those reasons that reveal ancient architecture to the modern consciousness as a problem of the contemporary moment.

Borromini and Guarini's combined interest in the dialogue between 'revolution and tradition, rule and freedom'[13] suggested a way to avoid a contemplative or revivalist approach to history, neither of which were considered desirable at that time.[14] Portoghesi is fascinated by the critical attitude—never burlesque, nor subversive—that the *maestro* reveals in using the classic tradition in a new way. He recognises the innovative spirit of Borromini's work in Sant'Agnese, Piazza Navona, whose facade reproduces the structure of the circus in a minor scale; and in the façade of Propaganda Fide, where the relationship between the internal and external space is mediated by a little Doric temple.

As his treatment of Borromini's work demonstrates, Portoghesi is keen to use the history of architecture as a 'repertoire' of solutions, neither direct 'quotations' nor formal 'mechanical transpositions'.[15] Hence Portoghesi's buildings do not suffer from *borrominismo*, but instead offer insightful revisions of baroque issues through which the modern language of architecture might be renewed. The control of 'space', the drawing of the 'curve', the definition of the 'corner', and the problem of the 'opening', questions often darkened by modernist orthodoxy, are liberated by Portoghesi as he recasts these as design instruments that enhance his buildings. As Argan observed, for Portoghesi history is not soaked in politics, as it was for Zevi; rather it belongs to the sustained investigation of form and its meanings.[16]

The design of the Casa Baldi (Rome 1959-61) was his first opportunity to rebel against modernist orthodoxy. Portoghesi recalls the neoplastic origins of the building's design process, which comes from 'the transformation of the joint experimented with by Rietveldt in the Schröder house [...] But while Rietveld's space is geometric, the goal of my research is to create an organic, pulsating space.'[17] The rigidity of Rietveld's orthogonal scheme is surpassed by recourse to Borromini's example, his boldness in breaking the rules while at the same time being aware of the limits of action: 'his rebellion, his protest is "put into verse" in a controlled and subtle form.'[18] The space of the Baldi House is defined by the combination of inflected walls that absorb light. Their dialectic relationship of concave-convex forms renders the space continuous but not monotonous. The iconographic analogy between the lantern of Sant'Ivo alla Sapienza and the soffit edge of the Baldi House suggests that the cornice obtained by the alternation of Sant'Ivo's concave and convex lines have been elaborated as elements that join the inflected walls and exalt their expressive power.[19] Through recourse to the curve, Portoghesi reconsidered the lesson of De Stijl in order to broad its thematic horizon.

The section "Dissolvenze incrociate"—published in a volume edited by Francesco Moschini—presents the neoplastic models that serve as precedents for the Baldi House through photographic combinations showing (precisely) Portoghesi's desire for 'contamination': the Schröder House is aligned with Le Corbusier's Ronchamp Chapel and, in turn, the house for the 1931 Berlin Exhibition by Ludwig Mies van der Rohe.[20] As Portoghesi emphasised: 'From then until today the game has turned into a ritual.'[21] If Borromini's example helped Portoghesi to destabilize the dogmatic rules imposed by the Modern Movement, Portoghesi conversely recognizes how the achievements of this latter historical phase could lead to the correct interpretation of Borromini's work. This recognition prompted Argan to state that Portoghesi's historical method 'does not consist of the rather easy operation of finding Palladio in Aalto or Borromini in Wright, but acts in the opposite and more difficult direction, finding Aalto in Palladio and Wright in Borromini; that is, to demonstrate that given Palladio and Borromini, cannot not also exist Aalto and Wright."

In 1967, the Accademia nazionale di San Luca commemorated the tercentenary of Borromini's death with an international congress and exhibition programme in Rome. A newly minted academician and a member of the organising committee, Portoghesi was invited to moderate the third roundtable, entitled 'L'eredità di Borromini in Italia', but the clearest expression of his ideas on Borromini's work emerges during a polemic debate with Bruno Zevi at the end of the elder historian's speech, 'Attualità del Borromini'.[22] Distancing himself from the assumptions of Zevi, 'who [he asserted] needs to hide some emerging parts of Borromini's work in order to expose him as subversive,'[23] Portoghesi recovers some aspects of Borromini's design as instruments to make his lessons 'useful' for the present. His aim is to formulate an historical interpretation of Borromini's architecture based

on objective values. Avoiding 'reading Borromini as Bernini-like' ('berninizzare il Borromini'), as Zevi would intend to do, Portoghesi regards philological analysis and critical observations as insufficient. It is rather necessary to enact the 'verification of the drafting table' in order to continue that interrupted research so full of premises. The 'critical drawing' is the means of this verification, the middle passage between word and project.[24]

This conviction permeates the exhibition *Disegni di Francesco Borromini*, which Portoghesi curated at the Accadamia di San Luca in the same *anno borrominiano*. In his preface to the catalogue, Portoghesi confesses his fascination with the analytical technique of representation that unites the displayed drawings, but also with the obsessive geometrical construction of the forms. The documents reveal not only an exceptional 'drawing ability' but also 'a rigorous design logic'.[25] In order to understand what Portoghesi means by 'drawing ability' it is useful to look at the analytical boards he includes in the catalogue. The drawing of board number 50 (Albertina 510), which represents the section and the front of the lantern of Sant'Ivo, is evaluated 'as one of the most fascinating accounts of the art of construction we so far have to hand'; it demonstrates Borromini's boldness in relying on the simultaneous representation of structural development and form.[26]

Beyond Borromini's surprising ability to synthesize within the drawing the idea of space, structure and the technologies of building, Portoghesi also observes the 'rigorous design logic', understood as the ultimate instrument to face problems posed by historical tradition[27]. The design phase occurs in two different moments: the 'design genesis' and its 'geometric verification'.[28] The design genesis precedes the geometric verification and is based on a revolutionary method of typological and linguistic synthesis. In order to demonstrate this thesis Portoghesi turns to San Carlo alle Quattro Fontane. Its crooked curve is the result of the contamination of the classical language by Gothic infiltrations, a tradition inherited by Carlo Maderno in Lombardia in the first stage of Borromini's work. The design genesis (ideative phase) is followed by the geometric verification (control phase), based on the scientific construction of plans and façades.[29] Portoghesi notices how verified and verifiable Borromini's projects are, because his architecture embraces geometry, understood as 'a means of extending to wider and wider fields the process of rationalizing visual knowledge'.[30] That practice allows the removal of every approximation of the form and whim of invention, tracing each structure back to a universally readable scheme. Upon establishing the scheme of San Carlino, Portoghesi observes, Borromini faced 'the problem of carrying the scheme out through a rigorous method able to reduce the empirical choices.'[31]

Portoghesi had already, in *Borromini nella cultura europea*, attended to the theme of the geometrical principle as a moment for the project's verification. Indeed, the book begins with the section *La geometria borrominiana. Saggio di analisi sintattica*, clearly indicating the importance it holds among Portoghesi's views.[32] In a series of analytical boards Portoghesi indicates the possible origins of the architectural ideas underpinning San Carlo alle Quattro Fontane, Sant'Ivo alla Sapienza, Sant'Andrea alle Fratte and the Collegio di Propaganda Fide. Portoghesi schematically redraws plans or details step-by-step, following geometrical traces. These interpretative schemes are finalized to demonstrate scientifically Borromini's design principles, which emerge from the combination of regular forms. He generates a series of complex schemes dominated by a curved line specifically *not* generated by arbitrary choices. Argan and Wittkower were also engaged in discovering the genesis of Borromini's work, but Portoghesi's studies reveal an originality of method that distinguishes his observations from theirs.

In the case of San Carlo allo Quattro Fontane, Portoghesi reconstructs the development of the scheme of the church, starting with the original drawing kept at the Albertina Museum and published in the very first pages of *Borromini nella cultura europea*. In distinction from Argan, who indicates as a precedent the Greek cross hall of the Piazza d'Oro in Villa di Adriano at Tivoli, Portoghesi suggests that Borromini's church pays tribute to Michelangelo's San Pietro.[33] On the geometric analysis Portoghesi agrees with Wittkower, who states that the geometrical concept of the final project is a scheme of two equilateral triangles with a common base. But Portoghesi's explanation goes deeper:

> The first phase of the layout concerns the design of the oval of the dome, constructed with the rule of equilateral triangles; the vertices of two pulled up triangles define the centers of the four segments of the circle forming the oval, while the bisectors of the angles mark the horizontal axis and the stitches between curves of different radii. Thus, the equilateral triangle, a symbol of the Trinity, is placed as a latent form at the origin of the compositional process.[34]

The same analytical furore distinguishes the verification of Sant'Ivo alla Sapienza. Portoghesi focuses his attention on the scheme of the church, determined by an equilateral triangle in which a hexagon is contained. In reconstructing Borromini's schemes, Portoghesi is humbly executing a job of self-discipline geared toward learning a logical and rational design method able to guarantee him the 'freedom' for which, as an architect, he searches. There is no coincidence that Zevi recognized in his totalizing research a 'relationship of affinity and almost of identification' with Borromini.[35]

Considering that the studies conducted for writing *Borromini nella cultura europea* spanned a period of more than twelve years, it is plausible that some of the issues were already under observation when Portoghesi began his design activity. Again, the Casa Baldi is an experimental occasion for exercising the method borrowed from Borromini. In this sense the sketches of the house

are revealing. One such sketch[36] shows the building's geometrical construction through generative dots of curve segments—'force fields', as defined by Christian Norberg-Schulz. They are fixed within the perimeter of a hexagon. Although the pentagon momentarily offered a geometrical basis for the project, this been quickly abandoned[37]. The 'force fields' generate 'grammatical chords', obtained by the juxtaposition of inflected walls that determine, in turn, the various openings.[38]

The drawings for Casa Andreis (Scandriglia, Rieti, 1964-9) are likewise exemplary for understanding the geometrical construction of the 'regulating layout' and for its volumetric development. An initial sketch demonstrates Portoghesi's working on a grid of modular squares, the vertices of which generate concentric circles. The drawing evolves into a second layout where three adjacent scalene triangles lead to the fixture of 'centres of curvature'.[39] Only the geometrical organization of the plan can create a rhythm of surfaces whose disposition is ruled by a principle of 'order in the movement'. But the geometrical order characterising the houses of Portoghesi's exordium is emphatically stressed in his Papanice House (Rome, 1966-70). The geometry of its layout is more complicated; the spatial rhythm is almost psychedelic; and the overall volume of the building, obtained by the exhausting repetition of cylinders, definitely assumes a playful, even ironic character.[40] A final example: the Arts Academy in L'Aquila (1978-82) is the synthesis of three models of star-shape plan: the Santuary of Saar by Johann Santini Aichel, the Haus des Himmels by Bruno Taut, and Lina House by Mario Ridolfi.[41] The centrality of the layout, celebrated by the glass roof, is controlled by the form of a regular pentagon, the sides of which, with respect to the five prismatic bodies, compose the building and are rotated by one degree to soften the rigidity of the geometric pattern.

If, in Portoghesi's poetic, the contamination of historical forms becomes 'ritualized', then the geometric verification of drawings becomes systematic. The historical-design method so obtained is not the result of a personal invention: its 'fatherhood' has never been claimed.

Endnotes

1. See Liliana Barroero, "Wittkower vent'anni dopo," in Rudolf Wittkower, *Arte e architettura in Italia 1600-1750* (1958, Turin: Einaudi, 2002), xxx.

2. Paolo Portoghesi, *Guarino Guarini 1624-1683* (Milan: Electa, 1956).

3. Paolo Portoghesi, *Le inibizioni dell'architettura moderna* (Rome & Bari: Laterza, 1974), 85.

4. Paolo Portoghesi, "Vittone nella cultura europea," *Controspazio* 10 (1972): 38-52.

5. Paolo Portoghesi, *Borromini nella cultura europea* (Città di Castello: Officina, 1964); and *Roma Barocca. Storia di una civiltà architettonica* (Rome: Bestetti, 1966).

6. 'The book written by an architect has been [...] an instrument of methodological research, of clarification of the problems, not only in relation to the operation of critical history but also as an operative action in the field of modern architectural culture.' Portoghesi, *Borromini nella cultura europea*, vii.

7. Giulio Carlo Argan on the rear cover of Portoghesi, *Roma Barocca*.

8. Portoghesi, *Le inibizioni dell'architettura moderna,* 74-5.

9. To prove the originality of Portoghesi's intellectual position in this cultural context, the words of Argan, written for the 1995 opening of the Islamic Centre in Rome, are significant: 'Until a few days ago I admired you more as an historian of architecture than as an architect. Maybe I was not entirely wrong, then: now, yes. But only a great historian could have made such a great building as you have.' Letter published in Giulio Carlo Argan, "Nella crisi del mondo moderno," in M. Pisani [et at.], *Paolo Portoghesi* (Rome: Gangemi, 1993), 18.

10. Francesco Moschini (ed.), *Paolo Portoghesi. Progetti e disegni 1949-1979* (Florence: Centro Di, 1979), 15.

11. Cf "Intervento di P. Portoghesi sulla relazione di B. Zevi," in *Studi sul Borromini. Atti del Convegno promosso dall'Accademia nazionale di San Luca*, vol. 1 (Rome: De Luca Editore, 1967), 534.

12. Portoghesi, *Borromini nella cultura europea*, 13.

13. Portoghesi, *Borromini nella cultura europea*, 13.

14. The interpretation of historical revaluation given by Borromini's method is explained in the very first pages of *Borromini nella cultura europea*: 'Before being an occasion of historical and philological analysis, knowledge of the work of Borromini is a tool for self-critique in modern culture. Against its own intentions for the expansion of classical orthodoxy, Borromini's controversy ends up undermining the very foundations of those linguistic conventions restored by the Renaissance, overwhelming, in its strongest moments, impediments and inhibitions that still weigh, like mortgages, on modern architecture.' Portoghesi, *Borromini nella cultura europea*, introductory note to the book.

15. Bruno Zevi, "Attualità del Borromini," in *Studi sul Borromini*, 509.

16. Argan, "Nella crisi del mondo moderno," 13.

17. Paolo Portoghesi, "Casa Baldi sull'ansa della Flaminia, a Roma," *L'Architettura, cronache e storia* 86 (1962): 510-21, 512.

18. "Intervento di P. Portoghesi sulla relazione di B. Zevi," in *Studi sul Borromini*, 532-3.

19. Portoghesi, *Le inibizioni dell'architettura moderna*, 41.

20. Moschini (ed.), *Paolo Portoghesi*, 79-152.

21. Moschini (ed.), *Paolo Portoghesi*, 16.

22. See the discussion between Zevi and Portoghesi in *Studi sul Borromini*, 507-42; see also Giovanna Massobrio, Maria Ercadi and Stefania Tuzi, *Paolo Portoghesi architetto* (Milan: Skira, 2001), 37-9.

23. "Intervento di P. Portoghesi sulla relazione di B. Zevi," 531.

24. Portoghesi, *Le inibizioni dell'architettura moderna*, 76-80, 85.

25. Paolo Portoghesi (ed.), *Disegni di Francesco Borromini*, exh. cat. (Rome: De Luca, 1967), 3.

26. Portoghesi (ed.), *Disegni di Francesco Borromini*, 19, fig. lv. As Portoghesi continues: 'The drawing with its transparencies, its veilings, is a true x-ray that shows, where it is needed, the internal structure, qualifying itself sometimes as a section as it otherwise describes the surfaces like an elevation, or does both together . . .', 19.

27. "Intervento di Manfredo Tafuri," in *Studi sul Borromini*, 16.

28. "Intervento di P. Portoghesi sulla relazione di B. Zevi," 533-4.

29. This moment of the project had already been suggested by Wittkower in 1958: *Arte e architettura in Italia*, 170-1.

30. Portoghesi, *Borromini nella cultura europea*, 15.

31. Portoghesi, *Borromini nella cultura europea*, xi.

32. Portoghesi, *Borromini nella cultura europea*, ix-xxiv.

33. Cf Giulio Carlo Argan, *Borromini* (Milan, Mondadori, 1955), 71-2.

34. Portoghesi, *Borromini nella cultura europea*, xi.

35. Bruno Zevi, "Attualità di Borromini," in *L'Architettura* 519 (1999), 50.

36. AM 2009-2-856, Drawings Archive, Centre Pompidou, Paris. The drawing has been only partially published in Maria Ercadi (ed.), *Paolo Portoghesi. Disegni 1949-2003* (Milan: Federico Motta, 2003), 44.

37. AM 2009-2-858, Drawings Archive, Centre Pompidou.

38. Portoghesi, "Casa Baldi sull'ansa della Flaminia, a Roma," 512.

39. Paolo Portoghesi, "Casa Andreis a Scandriglia, Rieti," *L'Architettura, cronache e storia* 137 (1967): 706-19, 713.

40. Giancarlo Priori, *Paolo Portoghesi* (Bologna: Zanichelli, 1985), 54.

41. Moschini (ed.), *Paolo Portoghesi*, 140-1.

THE 'RECURRENCE' OF THE BAROQUE IN ARCHITECTURE: GIEDION AND NORBERG-SCHULZ'S DIFFERENT APPROACHES TO CONSTANCY AND CHANGE

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In *Space, Time and Architecture* (1941), one of the central texts of the modern movement in architecture, Sigfried Giedion (1888–1968) dealt with what he called 'constituent facts': a kind of basic architectural language. 'Constituent facts', he wrote, 'are those tendencies which, when they are suppressed, inevitably reappear. Their recurrence makes us aware that these are elements which, all together, are producing a *new tradition*.'[1] Although he acknowledged this as a period with different social and political conditions, Giedion was interested in how the modernist understanding of architectural space was rooted in the Baroque by architects like Francesco Borromini, Guarino Guarini and Balthasar Neumann. Later on, in his First Gropius Lecture at Harvard University in 1961, Giedion anchored his understanding by using the concepts of 'constancy and change' related to time and place through his discussion of 'monumentality' and 'regionalism'.[2] Besides sharing Giedion's interest in a German-language art historical tradition, the description of modern art and architecture offered by the architectural theoretician Christian Norberg-Schulz (1926–2000) can be understood in light of Giedion's influence as the Norwegian's tutor at the Eidgenössische Technische Hochschule (ETH) in Zurich.[3]

One sees for the first time a significant turn in the grounding of Norberg-Schulz's academic approach in *Genius Loci: Towards a Phenomenology of Architecture* (1980).[4] While his approach to architecture was rooted in the human sciences of the 1950s and 1960s—in art history, language theories related to structuralism, and also gestalt therapy—his work of the 1970s shifts from a theory-oriented approach to an experience-based understanding of the architectural work. It is an understanding of architecture grounded in philosophical phenomenology. Through this turn in Norberg-Schulz's approach to a phenomenological understanding of architecture—deeply influenced by Edmund Husserl, Martin Heidegger, and also by Maurice Merleau-Ponty—Norberg-Schulz sheds light on Giedion's discussion of 'constancy and change'. The concepts are given a new epistemological basis grounded on a different critique of Modernity, and also on another understanding of Man as historical being. This is made explicit in Norberg-Schulz's *Stedskunst* (The Art of Place), published in Norwegian in 1996. *Stedskunst* is the summation of nearly twenty years work on the phenomenology of place—an approach to the understanding of the work of architecture that should be regarded as a comprehensive place theory.

In what follows, I explore Norberg-Schulz's architectural thinking in light of Giedion's theoretical-descriptive approach, and I explore the question of how, and to what extent, Norberg-Schulz's study of the Baroque informed his phenomenological understanding of architecture.[5]

THE MANIFESTATION OF AN ENVIRONMENTAL CRISIS

During the 1960s Norberg-Schulz worked on two extensive volumes on the Baroque period, both of them first published in Italian in 1971. In the English version from 1974, *Late Baroque and Rococo Architecture*, he makes a point regarding the philosophy of science, when he emphasises that we today 'begin to understand that the Enlightenment and the scientific development that followed it did not account for the whole relationship between man and his environment [. . .]. Still, the Age of Reason pointed out the dangers of *a priori* thinking, a lesson that should never be forgotten.'[6] And yet he continues: 'The world, in fact, is still dominated by those who put the conclusion at the beginning.'[7]

The architecture of the Baroque can in a sense be seen, according to Norberg-Schulz, as a manifestation of the combination of style and tradition where the understanding of place gives building a particular presence.[8] As he reads it, this synthesis of 'the common and the local' was lost during the eighteenth century. Through the Enlightenment, experience was replaced by 'reason and taste', and the split between thinking and feeling became a reality for the field of the arts. If, as an architectural historian Norberg-Schulz, as Giedion, may be accused of mixing descriptive and normative approaches, his empirical studies of the manifestations of the Baroque period must to some extent be seen in relation to his attempt to understand, criticise and define a new academic ground for the contemporary work of architecture. This attempt was first described in his work *Intentions in Architecture* (1963), and it followed him throughout his career.[9]

Through the reading of Norberg-Schulz and, as we will see, Giedion, it becomes obvious that the two share an awareness of an environmental crisis, connected to the influence of the scientific world both on the society and on our consciousness of ourselves. This was a point of view that had been present in the phenomenological project since its very inception. Husserl, the founder of the modern phenomenology, sought to study the different phenomenon to which we relate, the way they appear for our human consciousness; he sought to study phenomena in their *givenness*. The basis for this viewpoint was a critique of the rationality of the modern sciences. Husserl, like his successors within the philosophical field, studied the conditions for perceiving that which is intuitable in the concrete world.

In *Stedskunst* (1996) Norberg-Schulz writes that Merleau-Ponty developed a new understanding of perception based both on Husserl's approach and on Gestalt therapy, where 'the split between thinking and feeling'—the split that the early Functionalism in architecture intended to heal—was solved.[10] Then, according to Norberg-Schulz, Heidegger took a step forward when he defined Men as *Dasein*, or 'Being-in-the-World'. Here, Norberg-Schulz continues, Heidegger presented a radical—in the true sense of the word—understanding of the totality, an understanding 'that destroyed the traditional relationship between the subject and the object that had been important for our understanding of the world, and that had been the reason for the split between thinking and feeling since Descartes':[11]

> When the subject is seen as *cogito*, the object turns out to be something that one stands *opposite,* perceived in a visual-perspective way. In other words, Man becomes a *viewer*, rather than a *participator*, and the community dissolves into a 'sum' of singular individuals. For Heidegger, on the contrary, Man is not standing 'opposite' any longer, but *understands* [*verstehen*] in the sense that he stands *among* the others. Thus, the existence becomes a manifold of relations, and life becomes an open 'mirroring' of *manners of being*.[12]

Here, Norberg-Schulz argues, Man is transformed from being a viewer to being a participator, and the world becomes a totality, 'the totality that modern art tried to express, but was only partly able to realize'.[13]

THE RE-DEFINITION OF ARCHITECTURE AS AN ART FORM

Norberg-Schulz's work on the place theory continuously seeks to legitimize the meaning of architecture as an art form. On the basis of Heidegger's writings, and especially 'Bauen Wohnen Denken', Norberg-Schulz connects a modern sense of homelessness to the lack of understanding of the relationship between living and building.[14] Heidegger revealed, by investigating the etymology of the world 'living' (*wohnen*), the relation between being and living. He also showed us the old German world *buan*, is intimately related to the German world *bin*, or 'ís'. To be and to live is the same, at the same time as it means that we build both houses and landscapes. The deeper meaning of this, according to Norberg-Schulz, is that we are to look after, and to care for our environment. This implies an attentive approach to what is given us.

Heidegger does not deal with architecture as an academic field or discipline. His conceptualisation of building and living is not architectural, but philosophical. He is not looking for solutions to a specific problem as much as he is trying to search for a position where things are 'floating'. For him the *questions* are at the core of his investigations. As an architectural theoretician Norberg-Schulz in another way tries to *solve a problem* connected to the experience of an environmental crisis in the modern world, and to what he considers to be the manifestation of this crisis: 'the loss of place'.

Norberg-Schulz agrees to the consequences of the environmental crisis promoted by technical-scientific rationality and the influence it has on the modern society—on our lives and on our self-consciousness. The consequences are manifest in our own production and in the buildings of our time. In his place theory, Norberg-Schulz searches for a new academic ground and a qualitative understanding of what he regards as the purpose of the modern movement in architecture: the re-definition of architecture as an art form.

According to Norberg-Schulz, the intention behind *Stedskunst* is to 'open out onto the qualitative modernism that was the true motive of the pioneers—a motive that in the 1930s and in the post-war period was lost under the pressure of totalitarian ideologies, commercial interest and a conservative "taste".'[15] In the Foreword Norberg-Schulz refers to Gideon's lecture title, 'Constancy and Change', as a key to the problem, while at the same time making clear that there is something that remains despite all manner of changes: 'The new place includes many historical traces; it expresses a continuous interaction between qualitatively different phenomenon that appear and hide again, that are maintained and changed.'[16] Norberg-Schulz continues: 'The present work intends to account for this dynamic process, with the purpose of preparing meaningful relations in a world that, in a new way, seem to dissolve into incompatible fragments.'[17] Thus, Norberg-Schulz's theory of place is meant to make visible *an architectural formal language, conditioned by place and time, which can at the same time manifest a universal architectural language*. The theory is an attempt to bring forward a systematic presentation of 'the concrete qualities of place', which includes what Norberg-Schulz calls a phenomenological method for the understanding of place. In addition to an accentuation of the significance of architecture as an art form, it opens up the unification of different academic fields and their different approaches to place and architecture.[18]

It also includes a normative determination of the work of architecture, based on and developed from Norberg-Schulz's interpretation of Heidegger's understanding of the inherited natural conditions for the production of architecture as an art form (the art of place), a determination that can be seen as a continuation of the Aristotelian idea that 'art follows and prolongs nature'.[19]

NORBERG-SCHULZ'S PHENOMENOLOGICAL APPROACH TO CONSTANCY AND CHANGE

Although Norberg-Schulz's understanding of the inherited natural conditions for the production of architecture arises out of his reading of Heidegger, it should nevertheless be seen as a response to the problem connected to the production of architecture understood as an art form in an industrialized world—the problem Giedion raised by focusing on the connection between constancy and change. The modern movement pioneers were searching for an architecture that corresponded to a world in flux.[20] Before 1945 Giedion, alongside Nikolaus Pevsner (1902–1983) and Emil Kaufmann (1891–1953), fashioned themselves as spokesmen for the idea that the spirit of the age (*Die Zeitgeist*) can be recognized in certain expressions of form. This way of thinking formed the basis for the development of different genealogies that functioned as a precursor for a 'new', modern architecture.[21]

Giedion claimed that the aim of the modern architecture was to 'recapture the most obvious things, as if nothing had taken place before'—to recapture, not to start from zero, and this in spite of his description in *Space, Time and Architecture* (1941) of a new architecture to contrast the 'alienating' historicism of the nineteenth century. In line with his philosophical phenomenology, Norberg-Schulz argues that the focus of early modernism is on the new home 'for the daily life of everyone', on the need for a qualitative understanding of our environments, and on what he refers to as a search for *the origin*, to be brought forward.[22] He emphasizes that the early modernist interest in the origin included an initial unity of the practical and the expressive. In *Stedskunst* he argues that the founding principles of Modernism actually did consist of this unity, as Le Corbusier, for instance, expressed it in 'Les 5 points d'une architecture nouvelle'.

Norberg-Schulz argues that Giedion was expanding the pioneer's interest in origins to include 'constituent facts'. These eternal 'truths' are what Giedion describes as 'those tendencies which, when they are suppressed, inevitably reappear.'[23] In contrast to eternal facts Giedion places facts of another kind, and these are regarded as 'phenomena of transition', which last for a just short period of time because they lack the inherent ability to endure.

THE PERCEPTION OF SPACE WAS PREPARED IN THE BAROQUE PERIOD

In Norberg-Schulz's reading of *Space, Time and Architecture*, Giedion demonstrates that the perception of space (*Raum*) was formed in the Baroque period. Giedion had already in the 1940s and 1950s defined the relation between constancy and change as 'monumentality' and 'regionalism' at the same time as he made it clear that the Modernism had neglected both of them:

> By 'monumentality' he did not mean something that was magnificent and resplendent, but the memories and symbols that gives Man foothold in *time*. And 'regionalism' does not mean provincialism and nationalism, but the need for foothold in *space*; which implies that space is understood as 'place'. Together monumentality and regionalism opens up to the humanization that, according to Giedion, is the goal of Modernism's second phase, after its initial focus on the practical aspects of dwelling. However, when I undertake the word 'constancy', it does not mean that I see monumentality and regionalism as consisting of eternal, ideal *forms*. It rather has to do with constant *relations* between man and our surroundings—relations that need to be interpreted again and again. This is why 'constancy and change' should not be regarded as contradictions.[24]

Giedion's approach to the relation between constituent and transitory facts is made valid for the relation between 'gestalt' and 'figure' within Norberg-Schulz's theory of place. In the single work of architecture the durable basic form is interpreted in its local and historical relation, and becomes a 'figure'.

This is central in Norberg-Schulz's theory of place. He transfers Heidegger's ontological distinction between 'what there is' (*Sein*) and the 'being of what there is' (*Seiendes*) on the notions 'gestalt' and 'figure', stating that together gestalt and figures defines the typical. And then he asks: 'So, what *is* the typical that remains in time and space? The typical is simply what comes through, when we regard "something as something".'[25] Norberg-Schulz emphasises that we perceive differences and therefore we also perceive similarities. This ability is *given to us*; it is also the basis for our pre-understanding.

Giedion, like Norberg-Schulz, focused on how the baroque masters transmuted the forms developed in the Renaissance. The interiors they produced are marked by a 'union of two kinds of interests usually encountered separately: they are at once the products of purely mathematical speculations of a high order of complexity, and completely visionary or mystical imaginative creations'. The outstanding feature of the Baroque is the development of a specific kind of universality, and 'this manifest itself as a new power to mold space, and to produce an astonishing and unified whole from the most various parts'.[26] And Giedion also argues that 'baroque methods and ways of feeling survive until the disintegration produced by the industrial age sets in

and brings with it a temporary destruction of the universal point of view'.[27] Although on different terms than Giedion, Norberg-Schulz makes this understanding of the relation between 'thinking and feeling' in the Baroque relevant for modern architecture and for the architecture of today.

CONSTANCY, CHANGE AND THE CRISIS OF MODERNITY

Both Giedion and Norberg-Schulz argue, therefore, for the importance of a *qualitative understanding* as a basis for the development of cities and our built environments, but in contrast to Giedion, Norberg-Schulz emphasizes the relation between language and reality, and between form and form of life. Giedion's study of the Baroque obviously contributed to Norberg-Schulz's view, because he argues: 'In fact, there is hardly any historical epoch which more evidently manifests a correspondence between the form of life and the architectural environment.'[28]

With his theory of place Norberg-Schulz gives 'the qualitative dimension' of the modern movement a new theoretical foundation. The qualitative, he claims, is what we all have in common, and architecture, seen as the *art of place*, is the means that makes the qualitative present. The art of place is the result of a qualitative understanding that is both general and particular, and although place theory first of all relates to a general understanding of place he argues that every single place also needs to be analyzed according to its own qualities. Norberg-Schulz stresses the importance of developing attentiveness towards the nature of a given place, writing that the analysis should be open to the qualities that could be found in the place itself. The analysis also includes the history of the place, and together with a general understanding, the analysis should contribute to an identity of the place through all the different changes, so that the place 'in other words *remains the same, although it never is the way it was*'.[29]

Thus, not only can the whole place theory be regarded as an effort to delve deeper into and solve the problems that Giedion merely identified through his focus on the relationship between 'constancy and change'. In addition, one of the most central notions in the later theory, 'the identity of place', must be interpreted in the light of this effort to go deeper into the relation between constancy and change. When Norberg-Schulz tries to develop a phenomenological method for understanding architecture, the intention is to see the field of architecture as part of the life-world. He tries to re-establish the connection between architecture and the everyday-life, not as a singular and functional built response, but as a comprehensive frame that makes life take place 'in its complexity, full of contradictions'.[30]

Norberg-Schulz finds confirmation for his phenomenological understanding of the work of architecture in his earlier studies of the Baroque. He had described the Baroque as the historical period when the single building in the City 'loses its plastic individuality and becomes part of a superior system'. Giedion, in *Space, Time and Architecture*, had written on the nineteenth-century schism 'between science and its techniques on the one hand and the art on the other, and hence between architecture and construction'.[31] Norberg-Schulz extends this observation to argue that modern architecture was 'intended as *art*, and that the aim was to heal the split between thinking and feeling that was rooted in the cogito of Descartes'.[32]

Although Giedion to a great extent defined the modern movement, for Norberg-Schulz he did not adequately address the importance of meaning. The modern movement terminated around the 1960s and it never really started again, because it was suffering under internal shortcomings—a lack that followed as a result of the fact that '*the contradiction between constancy and change was never solved*'.[33] This provoked the crisis in architectural modernism: that the problems should be solved from below was an illusion echoed by the later approach of both new rationalists and the de-constructivists.[34] The pioneers of the modern movement, either consciously or not, embraced European idealism as they understood origin as an idea or *Ding an Sich* ('the Thing itself'). They understood the problem of constancy as a repetition of certain absolute forms, and combined this with the dream of a total harmony. Giedion's constituent fact has also to be seen as a kind of ideal entity that always returns, and the same can be said, as Norberg-Schulz writes in 'Den nye tradisjon'(1997), for the 'figural elements' of Michael Graves.[35]

In his work on place theory after the 1980s, Norberg-Schulz marks a distance from Giedion's sociological approach from the understanding of the outside world that characterized the modern movement. When man is seen as 'being-in-place', the 'functional' enjoys a new depth. Functions are no longer related to measurable 'needs' that can be satisfied, but rather consist of a use, where every single action has to be seen as part of a context. As 'being-in-place' this context implies a changing interaction between qualitative different parts. The totality is at the same time characterized by stability—a stability that has to do with the place itself, a stability Norberg-Schulz refers to as *stabilitas loci*. In *Stedskunst* he writes: 'This is the apparent paradox Giedion referred to as "constancy and change". Husserl solved the paradox through a phenomenology that revealed the inter-subjective basis for all changes.'[36] But Heidegger revealed how it was possible to express a qualitative presence, according to Norberg-Schulz. This happens in the work of art or, more precisely, in the *image*. The image represents something new and exceptional. It does not mean something that could be found anywhere else, but it refers to what *gathers a world*, and therefore it includes more than the components of which it consists.

THE ACADEMIC GROUND FOR ARCHITECTURE, SEEN AS ART OF PLACE

In order to describe and to legitimize the meaning of architecture as art, Norberg-Schulz stretches the place theory as a construction—a bridge—between two central themes: The first theme, based on experience and reading, deals with the historicity of architecture, changes in architectural praxis over time. The second is based on philosophical phenomenology, and has to do with what characterizes our presence as human beings; what is constant in the relation between man and the environment. It has to do with conditions for our earthly lives, and with the relation between what is given us through nature and our own production, the human being seen both as part of nature, and as a carrier of a *common* world. The two themes emerge into an experience of crises and loss, an experience Norberg-Schulz shares with Giedion, but in his place theory the experience of crisis and loss is presented both as a critique of Modernity and as an architectural critique of what Norberg-Schulz describes the formal changes after the Baroque period, based on the influence the scientific rationality has had on the society in general, and on the relation to ourselves. This experience of crisis and loss constitutes the horizon of the place theory as a theoretical construction and is the premise for place theory as a theoretical construction.

By making the horizon clear, one can discuss relations between the substantial entity and the epistemological basis of place theory. In this way the *use value* of the theory, as a basis for a new understanding of place and as a basis for architectural practice can be discussed, criticized and also, by bringing in a broader understanding of our human conditions, developed further. Norberg-Schulz makes it evident that a phenomenological approach can open out on to a new understanding of place and architecture in which what is changing and what is constant are combined on a basis of architectural attentiveness that includes the experiences of living and building. In doing so, Norberg-Schulz makes visible a connection between practice and the academic and philosophical understanding of architecture.

Author's Note: I am grateful to Andrew Leach and Edward Robbins for comments on this text.

Endnotes

1. See Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 5th rev. ed. (Cambridge, Mass.: Harvard University Press, 1967), 18. Constituent facts are opposite to the transitory facts, facts that do not have the same durability. See 18-19.

2. See Christian Norberg-Schulz, *Stedskunst* (Oslo: Gyldendal, 1996), 5.

3. There is a direct connection from Jacob Burckhardt (1818–1897), the teacher of Heinrich Wölfflin (1864–1945), who again was the teacher of Giedion, through to Norberg-Schulz.

4. Christian, Norberg-Schulz, *Genius loci: Towards a Phenomenology of Architecture* (London: Academy Editions, 1980).

5. This theoretical issue also has relevance for practice, as I see it.

6. Christian, Norberg-Schulz, *Late Baroque and Rococo Architecture*, History of World Architecture (New York: Harry N. Abrams, 1974), 13. This book was first published in Italian (Milan: Electa, 1971).

7. Norberg-Schulz, *Late Baroque and Rococo Architecture*, 13.

8. See Christian Norberg-Schulz, *Baroque Architecture*, History of World Architecture (New York: Harry N. Abrams, 1974. This book was first published in Italian (Milan: Electa, 1971).

9. In the *Intentions in Architecture* he wanted to 'establish a comprehensive theory of architecture'. The method implied 'concentrated attention on the analysis of spatial structures, understanding space as one of mans basic existential dimensions' in his studies of the Baroque. See the preface to *Baroque Architecture*, 6.

10. Norberg-Schulz, *Stedskunst*, 7.

11. Norberg-Schulz, *Stedskunst*, 7.

12. Norberg-Schulz, *Stedskunst*, 7-8. All translations from this book are mine.

13. Norberg-Schulz, *Stedskunst*, 8.

14. See Martin Heidegger, *Vorträge und Aufsätze*, vol. 2 (Pfullingen: Neske, 1967).

15. Norberg-Schulz, *Stedskunst*, 10. The quotation from the Foreword dates to 1 September 1996. The Foreword in *Genius Loci* is dated June 1976.

16. Norberg-Schulz, *Stedskunst*, 10.

17. 'Constancy and Change' was the title of the lecture given by Giedion in the Gropius lecture series at Harvard University in 1961. As already mentioned, it is also a theme in *Space, Time and Architecture* (1961). See 859-69.

18. In other words, here architecture is seen as an art form, in contrast to a plain erection of buildings.

19. Gro Lauvland, *Verk og vilkår:* Works and Conditions. Christian Norberg-Schulz's Place Theory Seen from the Perspective of a Philosophy of Architecture (PhD diss., Oslo School of Architecture and Design, 2007), 67-68.

20. Here, modern architecture and the modern movement are indications for the new architecture that shot up in Europe during the 1920s and 1930s, and also for

the determination of this phenomenon both as physical form and ideology over the next three decades.

21. Panayotis Tournikiotis makes a differentiation between 'genealogies' and 'stories' in his book *The Historiography of Modern Architecture* (Cambridge, Mass.: MIT Press, 1999). By genealogies he means explanation of origins, a narrow developmental logic, often technological and normative, while stories implies a broader descriptive presentation, a field of possibilities.

22. Cf Martin Heidegger, *Der Ursprung des Kunstwerkes* (Stuttgart: Reclam 1960).

23. Giedion, *Space, Time and Architecture* (1967), 18.

24. Lauvland, *Verk og vilkår*, 70.

25. Lauvland, *Verk og vilkår*, 71.

26. Giedion, *Space, Time and Architecture*, 109.

27. Giedion, *Space, Time and Architecture*, 109.

28. Norberg-Schulz, *Baroque Architecture*, 10.

29. Norberg-Schulz, *Stedskunst*, 182.

30. Norberg-Schulz, *Stedskunst*, 18; Lauvland, "Verk og vilkår," 72.

31. Norberg-Schulz, *Baroque Architecture*, 12; Giedion, *Space, Time and Architecture*, 211.

32. Norberg-Schulz, *Stedskunst*, 6.

33. Christian Norberg-Schulz, *Øye og hånd: Essays og artikler: ny rekke* ([Oslo]: Gyldendal, 1997), 143. The essay 'Den nye tradisjon' (The New Tradition) was fist published in *Kunst og kultur* in 1991.

34. Neither Peter Eisenmann nor Bernard Tschumi on the one hand, nor Aldo Rossi and his disciples on the other, were able to make a synthesis of constancy and change—a synthesis that could overcome the 'split between thought and feelings'.

35. Norberg-Schulz, *Øye og hand*, 143.

36. Norberg-Schulz, *Stedskunst*, 8.

"Development" from the Periphery. Architectural Knowledge Exchange Beyond U.S./ Soviet Bipolarity, 1950s-1980s

SESSION CHAIRS:

Rachel Kallus (Technion, Israel)

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This session aims to put into question the concept of "development" by focusing on the post-WWII exchanges of architectural knowledge between the "peripheries" struggling for alternative scenarios of modernization rather than subscribing to one model promoted by the centres: the United States or the Soviet Union. Even if this period cannot be understood without accounting for the Cold War polarities, this session challenges the reduction of postwar architecture and planning practices to the US or Soviet political domination and postulates a more differentiated view on alliances among professionals from modernizing countries away from central hubs.

Focused on post-colonial modernization and nation-building processes, this session will review global knowledge exchange from the 1950s to the 1980s in order to unpack and expand the concept of "development." With possible case studies including Yugoslav architects working in Nigeria, Israeli architects delivering projects in Iran and Tanzania, or Polish planners designing cities in Iraq, this session will address networks of professional knowledge transfer in order to offer a differentiated view on the agency of experts serving their countries as much as their own professional and personal goals.

How and on what institutional bases have professional networks been set? How did they mediate local nuances of geopolitical contexts within the postwar global division of architectural labour and the flows of "development aid"? What were the interactions between such networks and governmental organizations, educational systems, and local communities? How did competition and cooperation between professionals affect the production of new architectural knowledge? In what ways did global knowledge transfer influence and challenge architecture practices and discourses of post-WWII modernisms?

The focus on global knowledge exchange draws attention to the role of architecture and architects in world affairs: while this session challenges the historically entrenched vision of architecture knowledge flow from "developed" to "developing" countries, it also affirms a very contemporary call for contextual cosmopolitism and rooted universalism.

THE INTRIGUING AND FORGOTTEN INTERNATIONAL EXCHANGES IN THE MASTER PLAN FOR THE RECONSTRUCTION OF SKOPJE

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INTRODUCTION

At 5:17AM on Friday 26 July 1963, Skopje was struck by an earthquake, which in 17 seconds destroyed approximately 75% of the urban fabric, and changed the course of its history from an unknown town to a city of international focus. Immediate actions and a formidable level of local organisation; an unprecedented pouring in of aid from the other Yugoslav republics and from individual nations and organisations; and a monumental role for the United Nations in the co-ordination of international architectural and urban planning expertise for the city's large-scale and long-term reconstruction, laid the foundation for what has been called 'a precise Marxist revolutionary situation'.[1] The detail of the paper concerns Stage 4, Replanning 1963 to 1966 of the planning strategy that was organised into five stages, and has a major interest in the invited United Nations (UN) international competition to redesign approximately two square kilometres of the city centre.[2] Action is associated with activity as productivity, but in Skopje added to this were symbolic human acts and heroic action such that its inhabitants regained their city and importantly a new position as city in the world.

These two points, political and architectural, are intriguing, firstly for their positive combination, and secondly for the resulting lack of architectural discourse on the Skopje project since. Extensive detail of the project is available in a UN publication of four hundred pages, *Skopje Resurgent* (1970), and yet searching for architectural discussion about Skopje has revealed publications that note briefly Tange's winning scheme and the competition, and very few that discuss the project.[3] The Skopje project gives rise to a paradox in architectural history, and how a project perceived as significant at the time becomes marginalised or forgotten due to factors not related to whether the project was innovative and vital in the recovery of the city. Of more importance to such a historiography are the ways key architectural players are aligned, and the less objective agenda of publicity in relation to history, memory and interest.[4]

Writing history can take on several approaches including two different if not opposing approaches suggested by psychoanalytic theorist Slavoj Žižek: one is retrospective and provides an order to events 'as a meaningful succession of stages;' and the other, 'insofar as we are history's agents, embedded, caught in the process, the situation appears - . . . open, undecidable, far from the exposition of an underlying necessity'.[5] Recently, Skopje has attracted attention as a part of a Eurocentric interest in Balkanology (a dubious title), and interestingly from architectural writers of the other ex-Yugoslav republics, alarmed by the present ideological destruction of the post-earthquake reconstruction.[6] The reconstruction of Skopje after the 1963 earthquake is a big yet untold story. The second approach requires effort to understand history in the making, at the time when players and events are not always clear, and has directed the paper towards the process, and the complexities of teams of the people and organisations involved.

The paper is structured in two parts: firstly a focus on the UN international competition for the city centre, presenting the idea of a multi-polar dynamic as a collaboration of diverse consultants and disciplines. Secondly, a discussion on the project as symbol for a unified internationalism under the UN banner, and yet caught in an international modernist debate in architecture brought about by the end of the CIAM (Congrès Internationaux d'Architecture Moderne), an organisation that had previously worked closely with the UN.[7]

INTERNATIONAL EXCHANGE /LOCAL PRODUCTION

In early 1965 the United Nations held an international competition for the reconstruction of the central city of Skopje, inviting four foreign firms - Van den Broek and Bakema (Netherlands), Luigi Piccinato (with Studio Scimemi, Italy), Maurice Rotival (USA), and Kenzo Tange (Japan); and four Yugoslav firms linked to town planning institutes - Slavko Brezovski (with Makedonija Proekt, Macedonia) Aleksandar Dordjevic (Serbia), Eduard Ravnikar (Slovenia), Radovan Misčevic and Fedor Wenzler (Croatia).[8] The jury was chaired by the UN Head of Social Affairs Ernest Weissmann, and comprised members representing the UN, Union of International Architects (UIA), Yugoslav Architects Association and Town Planning Federation.[9] On 12 July 1965 the jury announced no clear winner and divided the first prize between Kenzo Tange (60%) and Misčevic and Wenzler (40%). The jury

found Tange's proposal visionary and exciting but difficult to realize, and were positive about Misčevic and Wenzler's proposal which was easy to implement in stages. In one of the few articles that has presented all competition entries, a discussion by Boschini has argued that it has been a misunderstanding that Tange is the winner of the competition, and that Misčevic and Wenzler's proposal would be implemented, in contrast to Mitrovic who has argued Tange's proposal is far superior to the other entries with qualities that exceed those outlined by the jury.[10] Twenty years later, Popovski, an important architect in Macedonia and a team member of the Van der Broek and Bakema entry, has emphasised the visionary power of Tange's proposal, arguing that Tange understood the singularity and uniqueness of Skopje, and that his proposal as manifested in the dual concept of City Wall and City Gate captured a trans-historical foundation of architecture as an idea of place.[11]

While the responsibility to devise a new plan remained with the Skopje Institute of Town Planning Authority (ITPA), a new international team was established and was instructed to draw on the good ideas of all the entries and the recommendations of the jury to develop a definitive city-centre plan. This team was led by Mackic and included members of Skopje ITPA, Tange Architects, the Croatian team, Polservice (Polish planning consultants), and several (foreign and local) consultants.[12] The team worked on this second stage of the city-centre plan from November 1965 to January 1966, and lived in the *'baraki'* (army barracks) in Skopje. The collaborations avoided endless bureaucratic procedures and Skopje became a vital point of visionary experimentation in urban design, regional planning and architecture. Tange has noted this was assisted by the combination of the *tabula rasa* left in the wake of destruction, and a central socialist government that enabled the resources for realisation of ideological projects.[13] Photographs of meetings give a visual representation of the intricate combinations of people, exchanges of expertise and the dynamism and excitement of the process.

Tange's recollections of the workings of the team dispel the romanticism of collaborative work and yet indicate the potential creativity. The diversity of 'members with differing languages, experiences, customs, and attitudes towards architecture, but with, according to the UN system, equal rights for each member', proved challenging to design working processes. Tange has noted that discussion started with 'individual attitudes toward architecture and planning and to define what we meant by various elements of cities so that we could reach a common language'.[14] During this phase the foreign architects and planners had become more acquainted with the local conditions and daily patterns of the inhabitants. Renewed emphasis was placed on development of the program, preservation of the historical character of the Kale Hill and the *Turska Čarišija* (Turkish Bazaar), the critical airflow, and the traffic organisation.[15] The developed conceptual layout of the master plan came to be called the 'Ninth Project'.

The City Wall and City Gate are 'things' within Tange's design philosophy - strong architectural elements that give form and shape to urban space. Tange's interest in spatial structure and spatial image emerged from work on war-devastated cities in Japan as a response to a 'mass-human' scale of tragedy and suffering which presented Tange with the greatest challenge of an architect.[16] In his Tokyo Bay project (1960), the circular form of the bay and the linear city-growth introduces a hypothesis of spatial image and urban structure, and can be seen to pre-empt the City Wall and City Gate in Skopje, where it is manifested as urban framework through which the new city is created. Tange's approach to destruction has identified that people do not want weakness in buildings, they yearn for a more eternal, durable and yet dynamic feeling.[17] The people of Skopje know the City Wall as 'Gradski Zid' and it is a part of local conversation five decades after the destruction, revealing the power of the visual structure it first offered the inhabitants in 1965.[18] The scale of the City Wall and City Gate may be described as super-strong, excessive of the concrete massing in modernist projects, and yet, even in their diminished size, these elements have enabled a monumental presence to endure and structure the urban space of the city of Skopje. Only a fragment of the City Gate complex was implemented but the crucial inscription of the east-west axis has transformed Skopje into a linear rather than centralised city. Analysis of Tange's key elements, the City Wall and the City Gate is not the focus of this paper; suffice to state that the combination of programmatic and symbolic force has made them exemplary pieces of architecture/urbanism (Fig. 1).[19]

The familiar official approach for architecture contracts in which final drawings are handed over to the authorities was not satisfactory in this situation. The nature of the project meant that new information appeared constantly and it was difficult to co-ordinate the different ways of working. This made face-to-face communication compulsory as telephone calls and letters proved to not be effective. Tange worked directly with Brezovski, the Macedonian competition entrant, in order to 'communicate nuance and feeling' related to realization of the plan as three-dimensional space, significant to his design philosophy.[20]

The third phase in the city-centre plan from January to July 1966 included major work towards ensuring a standard of construction that would meet the design intention of the Ninth Project. Members who would be on the ground in Skopje during construction, namely, Pota (Director of Town Planning, Skopje) and Galic (Skopje ITPA), participated in the work in Tange's office in Tokyo for one month in order to communicate 'the much more complicated and delicate image in which content and technical means are closely interlocked'; a Macedonian-Japanese exchange.[21] One major aspect of the multi-polar exchange was that of education and training. The influx of international expertise in Skopje gave rise to the local professional standard, such that new departments

were established to co-ordinate the complexity of disciplines in addition to planning and architecture - traffic engineering, social surveying, economic analysis, construction management. These were complimented by a Training Centre for Building Construction Workers vital for the implementation of the plans appropriate to a very large-scale project.[22] After 20 months of planning operation, a total plan consisting of 150 sheets of charts, were handed by the Tange office to the city council in Skopje.[23] The creative power of Tange's approach and expressions has inspired many prominent buildings in Skopje, and with the Fellowships proposed by Weissmann and funded by the UN for Yugoslav graduates to partake advanced studies abroad, has influenced generations of architects in Macedonia.[24] The international exchange and local context paved the way for an innovative model for large-scale collaborative design.

Figure 1. [top] Spatial Plan after development of city-centre conceptual plan. Design headed by Tange, Miscevic and Wenzler, and Brezovski. Team developing the plan: Mackic as leader, Tomovski of Skopje ITPA, Isozaki, Taniguchi and Watanabe of Tange architects, Misčevic and Wenzler of the Croatian entry, Furman (traffic engineer of Polservice), fourteen members of the ITPA staff, and several (foreign) consultants on earthquake engineering and (local) on historic monuments. (source: Derek Senior, *Skopje Resurgent: The Story of a United Nations Special Fund Town Planning Project* (New York: United Nations, 1970), Plate 31)

Figure 2 [bottom] Photographs of meetings give a visual representation of the intricate combinations of people, exchanges of expertise and the dynamism and excitement of the process. Members of the UN planning consultant, the Greek firm of Constantine Doxiadis, also central member of CIAM, working on the planning of the built-up area with the Skopje Institute for Town Planning and Architecture (ITPA), 1964. (source: Derek Senior, *Skopje Resurgent: The Story of a United Nations Special Fund Town Planning Project* (New York: United Nations, 1970), 96)

STAGING POLITICS AND ARCHITECTURE IN THE 1960S

Two different types of internationalism are at play in the Skopje project. A strong and politically unified (if illusionary) world which needs to consider a combination of three factors: the effectiveness of the Yugoslav foreign policy and its non-aligned government under the charismatic leader, Josip Bros Tito; a world keen to contribute to the reconstruction of Skopje as an optimistic symbol; and the United Nations seeing an opportunity to manifest a leading role in the co-operation of international humanitarian aid. Architecturally, the project is situated within the fragmented architectural community left in the wake of the collapse of CIAM (Congrès Internationaux d'Architecture Moderne), an organisation that was established in 1928 and had a complicated but close relationship with the United Nations.[25] In the economic slowing down after the boom of the 1950s, optimism and progressive ideas of architecture and utopia gave way to a culture of criticism. The rise of the architecture journal, argues Joan Ockman, gave a forum to new voices, renegotiated the cultural and geopolitical boundaries, and gave publicity to 'places outside the usual centres of ferment, where crucial architectural developments were occurring – Scandinavia, Japan, South America, Eastern Europe, India'.[26] This is not evident in the story about Skopje. Tange's projection that, 'our first-hand knowledge, gained in Skopje, of both the difficulties and the fascination of international cooperation should be of value in future urban design projects',[27] was not assisted by the lack of publicity of the Skopje project.

Yugoslavia's political position in the non-aligned movement and its open cultural policies enabled exchange with western and eastern Europe, and with many nations in the Middle East, South America, Africa and elsewhere. Immediate responses to Tito's plea for international aid included a specialist team from France for the detection of people trapped in rubble; a 120-bed field hospital delivered from Berlin within a day (by the USA);[28] a complete factory for the prefabrication of building components from the USSR (Karpoš) that proved invaluable during construction; and a whole planning team from Poland. Nissan and Dexion dwellings added to the Yugoslav republics' contribution to the production and delivery of 70,000 prefabricated dwellings erected in nine fringe settlements, many still in use today.[29] Individual buildings were also gifted such as Romania's health centre and Sweden's children's hospital. This internationalism proceeded as examples of multi-polar support offered to Skopje. On the 14

October 1963 the UN general assembly unanimously resolved to comply with the Yugoslav government's request for assistance, heralding a planned and co-ordinated strategy that was unrivalled in UN history.[30]

To address more long-term recovery, the International Board of Consultants (IBC), formed by the Yugoslav government and the UN, made two recommendations at their first meeting in March 1964: firstly to develop a regional plan, and secondly to establish an international competition for the city centre.[31] The larger-scale master plan evolved out of several parallel trajectories. Working in tents, the staff of the Skopje ITPA had produced the first draft of a town plan for reconstruction based on the reports made by town planners Rotival (France) and Rimsha (USSR), and Rotival's sketches for alternative developments. By October 1964 Adolf Ciborowski, a central figure in the Skopje project with expertise from his role in the reconstruction of Warsaw, was appointed as Project Manager.[32] The planning teams of Constantinos Doxiadis from Athens and Polservice (the official Polish Agency), were contracted to work on the built up area (former) and to prepare the master plan and work as consultants for the regional plan (latter).[33] Weekly meetings of the international consultants and local authorities together with the professional Working Committee helped to keep everyone informed and enabled effective decision-making and problem-solving operations (Fig. 2).[34]

CIAM's central role in the urban and architectural operations of the UN had been re-established with the appointment of Le Corbusier on the UN Board of Design in 1947.[35] Ernest Weissman was chair of the international operations in Skopje and headed the Jury for the Skopje competition. Weissmann, a Yugoslavian, had founded the Zagreb Group as a national group of CIAM in 1932, had worked with Le Corbusier, and was appointed Director of Housing, Building and Planning to the UN Bureau of Social Affairs in 1948. He had sent UN survey groups to Japan to observe the reconstruction of Japanese cities. Tange states that he personally knew Weissman, and that Weissman valued his design approach, and thus suspected these were the reasons he was invited by the UN to participate in the Skopje competition. [36]

The selection of international consultants and organizations are linked through Weissmann as central figure, and his connections with the CIAM before its collapse in 1959. Distinction in the nature of internationalism is made between the UIA, a much broader organisation with official consultation status to the UN, and CIAM, whose members (namely Sert and Giedion) have claimed the UIA lacked an agenda.[37] CIAM's post-war reconstruction optimism was internally criticised in the 1950s by a younger generation who argued that its ideas of the city core and frame were static and outdated. The Japanese architects, Tange and Maekawa, who had enthusiastically joined the CIAM in 1951, had agreed it was time to renew the approach in CIAM but criticised Team 10 and especially 'the young English architects [who] are mad to kill of CIAM when we need it so badly'.[38] They were referring to the Smithsons in particular, and the group of Dutch and other northern European architects including, Van Eyck, Erskine, Van der Broek and Bakema. A culturally divisive undertone enters the discourse surrounding the fate of CIAM evident in an offhand comment by Alison Smithson 'All of Team 10 had a certain moral attitude – that we used to half-jokingly term ,the northern European-protestant ethic'.[39]

A very different international architectural scene evolved.[40] It included the international rise of Japanese modernism partly through the dissemination of *Japan Architect*, as well as the status of *Arhitekura and Urbanizam*, the pre-eminent Yugoslavian (Croatian) journal. Did Team 10 produce a divided interest between the journals according to this less spoken alliance? For example there is hardly any publication on Skopje in the 1960s (that I have found) in *Architectural Design* or *Architecture Review*, two of the prominent English language journals, and yet there is on Team 10. This is intriguing in relation to Bakema who was the last president of the CIAM prior to dissolution, a key member of Team 10, and (with Van der Broek) one of the entrants in the UN competition for Skopje. The Skopje project – a symbol of international optimism promoted by the UN but abandoned by the architectural community – was caught in a moment of architecture history between a diminished UIA (Union of International Architects) and the publicity of a culture of criticism that dominated Europe after the collapse of CIAM.

CONCLUSION

Retrospectively, similarities can be found between the architecture that emerged from the Japanese Metabolist approach, the brutalism of some Team 10 and ex-CIAM members, and the innovative architecture in Yugoslavia.[41] The architectural qualities of the Skopje project have not been properly studied due to a political-architectural situation that at the time brought it almost surreal attention and afterwards caused its demise.

The Skopje project created a new methodology of planning, and produced an innovative model for large-scale collaboration and a complex and rich approach to architectural design. It offers a perspective of the history of the times that is unusual and nuanced with a profound and curious humanity.

Endnotes

1. Derek Senior, *Skopje Resurgent: The Story of a United Nations Special Fund Town Planning Project* (New York: United Nations, 1970), 101.

2. Jack Fisher, "The Reconstruction of Skopje,' *American Institute of Planners Journal*, February, Volume XXX (1964), 46 – 48 (46). Writing at the time of reconstruction has proposed five overlapping stages: stage 1 – the relief operation, July to October 1963; stage 2 - Evacuation of women and children and provision of tent shelter; stage 3 - housing provision, August 1963 – May 1964; stage 4 - replanning 1963 to 1966; and stage 5 - reconstruction, ongoing to 1971 (first phase), and 1981 (second phase). By October 1963 the first three stages were either completed or well under way. See Ian Davis, "Skopje Rebuilt: Reconstruction following the 1963 Earthquake," *Architectural Design*, 45, Nov (1975), 660-663 (660).

3. Senior 1970.

4. It is important to acknowledge my colleagues who assisted in translation: Dr. Flavia Marcello (Italian), Dr. Astrid Roetzel (German), Dr. Robert Mihajlovski (Croatian); and in sourcing documents: Josephine Le Clerk, Domenika Boskova, Professor Dr. Minas Bakalcev, Josipa Crnic.

5. Slavoj Žižek, *Tarrying With the Negative: Kant, Hegel, and the Critique of Ideology* (Durham: Duke University Press, 1993), 155.

6. The term Balkanology preserves a structural divide between Europe and the Balkans; see Maria Todorova, *Imagining the Balkans* (Oxford, Oxford University Press, 1997). The ex-Yugoslav interest often perceives the destruction as an influx of nationalism exploiting a bizarre kitsch aesthetic. Discussion of hierarchies within Yugoslavia would illustrate the marginalisation of Macedonia (including Skopje) in publications on Yugoslav modernist architecture: see Federal Union of Associations of Yugoslav Architects, Contemporary Yugoslav Architecture, for the Exhibition of the Contemporary Yugoslav Architecture, 1959; Modern Arts Museum, Skopje, Macedonian Architecture, 1974. For present discussions see Srdjan Jovanovic Weiss, "Skopje scomparirà = Skopje will disappear," *Abitare*, (2010) July-August, n.504, p.82-95; Vladimir Kulic, "'East? West? Or Both? Foreign Perceptions of architecture in Socialist Yugoslavia," *The Journal of Architecture*, Vol. 14, Number 1, (2009), 129-147; Maximillian Hartmouth and Ines Tolic, "Turkish Coffee and Beton Brut: An Architectural Portrait of Skopje," *EAHN Newsletter*, no. 4 (2010), p. 22 – 36; See also Swiss Architecture Museum (SA M Balkanology – series of conferences & exhibitions): http://www.sam-basel.org/home.html.

7. Sarah Deyong, 'Planetary Habitat: the origins of a phantom movement', *The Journal of Architecture*, 6, 2 (2001), 113-128.

8. See Kenzo Tange, 'Recollections: Architect Kenzo Tange', *Japan Architect*, 6, Sept (1985), 6-15. Senior, 364.

9. Senior, 365. Representing the UN (Canaux, Ciborowski and others), Union of International Architects (Ling), Yugoslav Architects Association (Martinovic) and Town Planning Federation (Midic), local authorities (Sedlar, Pota). Consultants included Boris Čipan for the Protection of the historical monuments, and S. Furman of Polservice for Traffic and Transportation.

10. L.M.Boschini, "Il concorso per il centro di Skopje," *Casabella* July, v. 30, n. 307, (1966), 24-26 (25); M. Mitrovic, "La eliopolis di Tange," *Casabella*, July, v. 30, n. 307 (1966), 26-27. See also "The replanning of Skopje, Yugoslavia," in Arhitektura Urbanizam v. 7, n. 39, (1966) 7-28, for a discussion and representation of all the competition entries.

11. Živko Popovski, "Die Stadt, die in Spiel war... oder ein Fall der Kontinuität," *Architekt,* Nov., no.11 (1986) 478-481 (11); Mirjana Lozanovska, "Tange's Masterplan for the Reconstruction of Skopje: An exception to familiar exchanges," paper presented at the Cultural Crossroads, 26th Annual Conference for Society of Architectural Historians Australia and New Zealand, Auckland, New Zealand, July 2009); Tihomir Arsovski, Скопје Урбанизам и Архитектура 1945-1985 [Skopje: Urbanism and Architecture 1945-1985] (Skopje: Kniga III, Union of City of Skopje, 1989)

12. Mackic as leader, Tomovski of Skopje ITPA, Isozaki, Taniguchi and Watanabe of Tange architects, Miščevic and Wenzler of the Croatian entry, Furman (traffic engineer of Polservice), fourteen members of the ITPA staff, and several (foreign) consultants on earthquake engineering and (local) on historic monuments. Polservice detailed later in the paper.

13. Zhongjie Lin, "City as Process: Tange Kenzo and the Japanese Urban Utopias 1959-1970," (PhD Dissertation, University of Pennsylvania, 2006), 273. Mirjana Lozanovska, "For or Against Tabula Rasa: How to Perceive the Contemporary City," IASTE Working Paper Series, 'The Utopics of Place and Space,' volume 225 (2010), 13-28

14. Kenzo Tange, 'From Architecture to Urban Design', *The Japan Architect*, n. 130, May (1967), 23-27; (Tange JA 1967: 44, 45) Entire issue of Japan Architect (JA) on Tange in which more than 30 pages are on the Skopje project. On divergent opinions and different languages, see Senior, 109-112.

15. Senior 299. Members of the Professional Working Committee responsible for planning – Ciborowski (Project Manager), Galic (Director of ITPA), and the chief representative of the Polservice team, Jankowski (up to 1965). Senior, 311.

16. Robin Boyd, *Kenzo Tange* (New York: Braziller, 1962), 10.

17. Udo Kultermann, *New architecture in Japan* (London, Thames & Hudson, 1967), 9; Kenzo Tange, 'Lineage of Urban Design', *The Japan Architect*, 46, Sept (1971) 18; For a discussion on Tange's engagement with the Japanese debate between Yayoi and Jomon aesthetic approach see Arata Isozaki, *Japan-ness in Architecture*, trans. S. Kohso, ed. D. Stewart (Cambridge, Massachusetts, MIT Press, 2006), Chapter 3, (23-33).

18. For an outline of Tange's reception in Skopje evident in the papers of the times, see L. Grcheva, "Reshaping the Skopje City Centre as a National Agenda: Skopje 1965 vs. Skopje 2014" (Master in Human Settlements, Katholieke Universiteit Leuven 2011), 34-47.

19. The City Wall and City Gate are discussed in Lozanovska, 2009. Udo Kultermann, *Kenzo Tange, 1946-1969* (Zürich, Verlag für Architektur Artemis, 1970); Lin, 267-275; Deyong, 113-128; Tihomir Arsovski, Скопје Урбанизам и Архитекура 1945-1985 [Skopje: Urbanism and Architecture 1945-1985] (Kniga III, Union of City of Skopje, 1989).

20. Tange calls Slavko Brezovski the project manager. Tange (1967) 26, 47.

21. Tange, (1967), 47.

22. The Training Centre was one of the UN Special Fund projects. From it 1500 personnel graduated in two years, important for the formulation of building codes. A conflict and ongoing debate not discussed in this paper is that the centralisation of effort in Skopje was devastating for the other towns in Macedonia and resulted in an exodus of their populations. This is alluded to in Fisher, 48.

23. Tange, (1967), 47. Construction guidance and technical reports proved important. Janusz Cierpinski was appointed to lead the day-to-day realization team. In addition to organising staffing structure of the new Town Planning Department, and drafting a set of town-planning by-laws, members were responsible for minor design work. Senior, 345. Tange received an honorary citizenship and in 1968 an Order of the Yugoslavian Star for his work in Skopje. Kultermann, 1970, 8.

24. Senior, 122. Examples include: Telecommunications Building by Janko Konstantinov, a gigantic structure that gives massive presence to one vehicular entry to the city, the other side flanked by the City Wall; the new campus of the SS. Kiril and Methodius University (1974) by Marko Mušič; the National Hydraulic Institute (1972) by Krsto Todorovski; and the Bank complex (1970) by R. Lalovik and O. Papeš. Georgi Konstantinovski completed a Master of Architecture at Yale under the tutorship of Serge Chermeyeff and Paul Rudolph, and later became Dean of the Faculty of Architecture in Skopje. His Archive building (1966) and the Goce Delčev Student Dormitory (1969) are of exceptional creative and construction standard. Along with several other exceptionally designed structures, the Contemporary Art Gallery designed by the Polish firm SARP (1966) sits prominently on top of the Kale Hill overlooking the city.

25. Deyong, 113-128. Eric Mumford, *The CIAM Discourse on Urbanism, 1928-1960* (Cambridge: MIT Press, 2000).

26. Joan Ockman (ed.) *Architecture Culture: 1943-1968* (New York: Columbia Books of Architecture, Rizzoli, 1993), 21.

27. Tange (1967) 27.

28. Robert Home, 'Reconstructing Skopje' *Papers in Land Management*, 7 (2007); For description of the demolition phase see Kiro Škartov & Trajko Stojkov, "Reconstruction and construction of Skopje after the Catastrophe July 26, 1963 Earthquake," in Ettore Raffuzzi (ed) "Skopje: reconstruction and development 1963/1985," Special Issue of *Edlizia Popolare*, (English and Italian text; journal of the ANIACAP Associazione Naxionale fra gli Istitute Autonomi e Consorzi Case Popolarie palazzo della Città del Lavoro) 187, November-December (1985) iii.

29. Davis, 662: Czechoslovakia, Finland, Italy, Mexico, Norway, Poland, and apartment blocks from Romania; See also Senior, 93.

30. Senior, 32 and 152.

31. The task of the IBC was to 1. evaluate alternatives and proposals from the international effort; 2, solve multidisciplinary problems; 3, advise local authorities.

32. Ciborowski was providing expertise on the new low-density settlements of prefabricated dwellings

33. Seven members from Doxiadis were involved. Doxiadis was also known for the publication of the journal *Ekistiks*, a journal with focus on the science of human settlements. Polservice was the official Polish Agency for the supply of professional services in the field of land use and construction. Škartov & Stojkov, iv. Rotival was a town planner from France and whom coincidentally we meet later as an entrant in the UN competition and representing US.

34. This team comprised Ciborowski (Project Manager), Galic (ITPA), (Town Planning), Polservice (Jankowski) and Doxiadis Associates (Pappamattheou).

35. Deyong, 116. Deyong notes the early connection between CIAM and the United League of Nations.

36. See Kenzo Tange, 'Recollections: Architect Kenzo Tange', *Japan Architect*, 6, Sept (1985), 6-15. The 1956 CIAM meeting in Dubrovnik may be associated with Weissmann.

37. Deyong, 117

38. In 1928 after graduating Kunio Maekawa travelled to France to be an apprentice with Le Corbusier and later influenced others. (Tange 1985: 4; Maekawa cited in Mumford, 263) Tange believed that the CIAM should be preserved but not centred in Europe. Tange cited in Mumford, 263. Udo Kultermann, Kenzo Tange, 1946-1969, (Zürich: Verlag für Architektur Artemis, 1970).

39. Alison Smithson (ed), *Team 10 Meetings 1953-1984* (New York: Rizzoli, 1991) 9. Many members of CIAM who were European did not side and were not included in the Team 10 group. Neither Team 10 nor the UIA regained the international power and impact of CIAM. See Mumford, 306.

40. Mumford notes the continuation of CIAM linked activities including Doxiadis's efforts to organise symposia and journal publication of Ekistiks, Weissmann's UN career including as advisor to the UN 'Habitat' conference held in Vancouver in 1975, and events like the July 1963 cruise organised by Doxiadis, interesting because it is simultaneous to the Skopje earthquake, and precedes the UN efforts. Mumford, 257.

41. Arata Isozaki, *Japan-ness in Architecture*, trans. S. Kohso, ed. D. Stewart (Cambridge, Massachusetts: MIT Press, 2006), 45.

PERIPHERAL HUBS AND ALTERNATIVE MODERNISATIONS: DESIGNING FOR PEACE AND TOURISM IN POSTCOLONIAL CYPRUS

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CYPRUS'S GEOPOLITICAL AMBIVALENCE

On July 7 1966, a visionary project with the title, 'World Man Centre,' was presented in local press in Cyprus. The project was to house an international 'art and science center' dedicated to 'world peace' (Fig. 1).[1] The proposal was championed by three high-profile figures: The President of the Cyprus Republic, Makarios; the world-renowned American architect-inventor Buckminster Fuller; and the American millionaire and patron of the project, Caresse Crosby. Crosby had initially attempted to establish the Centre of Delphi in Greece in the early 1950s.[2] Drawing on the mythical and symbolic charge of the area's significance in the classical Greek world, the project aimed to promote world citizenship; an idea also advanced by other organizations Crosby founded, such as 'Citizens of the World' and 'Women of the World against the War'. In the end, however, the project did not materialize because the official government of Greece, which had recently joined NATO (in 1949), was unwilling to align itself with a supra-political declaration of this kind.[3]

Crosby saw Cyprus as an alternative place for the Centre a decade later. At first glance this choice seemed curious. The island had an ideal strategic geography (in-between Europe, Asia, and Africa, lying right at the east-west divide) but it was witnessing intense nationalist antagonisms between the Greek and Turkish communities that were very far from a vision of world peace. Yet Cyprus was a good fit for Crosby's vision. Let us examine the political realities of Cyprus more closely to see why unlike

Figure 1. The main actors behind "World Man Centre": The President of Cyprus, Archbishop Makarios, Buckminster Fuller and Caresse Crosby. (source: "Peace Centre Planned for Bellapais", *Cyprus Mail*, July 8, 1966 (Nicosia, Press and Information Office, PIO))

Greece (and unlike Turkey and Britain which were also acting as guarantor powers for the young state) Cyprus had not joined NATO; it was, instead, one of the founding members of the Non-Aligned movement and its ties with Afro-Asian countries went back to the island's efforts for self-determination in the 1950s.[4]

Even as Cyprus was self-consciously aligned with the Non-Aligned movement, it was continually in the midst of Cold War tensions: There was Britain's extensive colonial influence, which left Cyprus with two military bases and many influences in the domains of law, education, economics etc. There were also internal tensions between the two main communities on the island, which threatened to shake the delicate balances between two NATO allies, Greece and Turkey. For this reason, Cyprus found itself at the receiving end of United States influences in an attempt to guarantee the fragile balances on the island.[5] Simultaneously, the United Nations was already actively advancing development.[6] From 1963 onward, when the first conflicts surfaced, the UN tied its development assistance to its peace mission to eliminate inter-communal fights in Cyprus.[7] The territorial and social division that followed the conflicts of 1963, when Turkish Cypriots withdrew into enclaves, kept a fragile balance until 1967 when a second violence outbreak took place in Cyprus, causing a military response by Turkey. After this incident, the Turkish Cypriot leadership announced the creation of a separate administration. In 1968, inter-communal talks were initiated in search of a settlement of what came to be known as 'the Cyprus Problem'.

Proposed in 1966, Crosby's idiosyncratic vision of a World Center came in the midst of these local conflicts, which also had obvious global repercussions. Her idea was firmly supported by known figures such as United Nations Secretary General, U Thant, Indira Gandhi and artists Isamu Noguchi, Salvador Dali among others.[8] The local President Makarios met Fuller's suggestions to donate a 200-acre property owned by the local church for the construction of the project (The land was in the vicinity of the medieval Abbey of Peace, known as Bellapais).[9] Also following Fuller's suggestion, the World Center would be operated by the 'World Academy of Arts and Sciences,' an international organization Fuller had just been elected member.[10] The envisioned Center was going to house 'world congresses of scientists, artists and scholars, and all those dedicated to world peace and to accomplishing a practically sustainable one world accord.'[11] The geodesic dome with its planetary iconography, proposed by Buckminster Fuller and Shoji Sadao for the World Man Center, symbolized the idea of 'one world'.[12] Makarios, declared that the Center could become the 'start towards the accommodation of the inexorable social trend towards world oneness.'[13] Fuller added that owing to Cyprus's 'unique geographical position,' this project could turn the entire island into a 'center for the development of ideas of peace'.[14]

If the earlier proposal for Delphi, was to be built on the foundations of western civilization, the new World Centre designed for Cyprus was seen to occupy a land that had just come out from a long history of western colonialism. The Centre in Cyprus promised to become a modern symbol of many ideas: For Crosby it was declaring a commitment to peace, at a time when fears of global disasters from US/Soviet nuclear war were also very strong. For Fuller, the project was reinforcing a technocratic commitment to global rational planning. For Makarios and the local government it was much more: It did not only feed into nation-building and anti-colonial efforts. The Centre also strengthened their position that the government was 'determined to follow a policy of equal friendship with all nations.'[15] Of course, this was not simply a strategy consistent with non-alignment thinking; Makarios' support on the Centre could also be understood as an attempt to counter the international and local pressures Cyprus was experiencing in the mid 1960s.[16] In other words, the 'friendship with all nations' was a means to avoid the Cold War polarities, internal social pressures and conflicts, and the complexities of regional politics. By turning Cyprus into a hub of international networks of ideas, people and capital, the Government aimed to sidestep complex sociopolitical conditions from within, and dominant geopolitical influences from without.

GOVERNMENT'S LEISURE POLITICS

The ambition to make Cyprus a hub of post-political global visions extended well beyond experimental conceptual schemes such as that for the World Centre (which itself remained unrealized). The very modernization policies that were widely implemented by the young state government of Cyprus put an increased emphasis on tourist development with a similar goal: To make Cyprus a key player in the global market. Almost since the inception of the Cyprus Republic, the country followed the lead of many Mediterranean countries, which tied their economic growth to tourist development and promoted measures for making the island an international tourist destination.

The most ambitious project for the Government's plans for tourist development was the construction of a tourist Centre on Golden Sands coast, in Famagusta. This Government project was unveiled in 1969, just three years after the announcement of the World Centre discussed above. And just like the World Centre, the Golden Sands was also deeply connected to the new realities as they unfolded towards the end of that turbulent decade of the 1960s: In 1968 inter-communal talks between the Greek and Turkish communities on the island began. And even though this generated a brief optimism for smoother social and economic development, a

Figure 2. Golden Sands Hotel. Source: Patrick B. Garnett, 'A view of the sea', *Interior Design* (1977 Aug.), 436)

coup d'état a year earlier (1967) in Greece made things more complicated as it increased the threat of Turkey's military intervention in Cyprus. The young Cyprus Republic was threatened even more, both by external powers and by internal turmoil.

Even though tourism was vulnerable to conflict, the Government placed a great deal of hope on its economic benefits. The project of Golden Sands (supported by British Airways and Cyprus Airways) was to combine hotel and recreation facilities on a large portion of state-owned land. The Government commissioned the design to the British architectural firm of Garnett, Cloughley and Blakemore, collaborating with a local firm.[17] The goal was to have an international hotel brand combined with a signature design so as to insert Cyprus 'on the tourist map of the Mediterranean'.[18] As evidenced by the active involvement of President Makarios in the entire process, this project was a high priority on the government's modernisation agenda.[19]

The project architect for Golden Sands, Patrick Garnett, was quite mindful of creating 'a sense of atmosphere' that he believed was lacking in many modern hotels.[20] The key to creating this atmosphere, according to Garnett, was to avoid standardization and to relate the building's form and scale to sea-views and existing topography. Much like many modernist practices of the post-war era, Garnett attempted to insert local character into the rationalized design process. This was in tune with a widespread market strategy in the hotel industry that shifted towards reinventing the exotic in hotels, so as to offer an 'escape from reality' (Fig. 2).[21]

There is another part to the story relating to the specific realities of Cyprus: Garnett was trying to interpret 'the local' in order to shape an alternative identity not only for the corporate world of the hotel industry but also for Cyprus. Having searched for clues in the local culture, Garnett concluded that: 'There was no established architectural vernacular in Cyprus. The influences of the many conquering nations had resulted in a neutralization of building form'.[22] Cyprus's history was too contested and its contemporary situation too volatile for the architect to venture direct references to specific cultural preferences. Attached as he was to modernist aesthetics, Garnett's search for local character ultimately boiled down to 'evolving some simple new shapes in concrete which would solve practical problems such as corrosion and, at the same time, could result in giving the complex an individual architectural identification'.[23] Thus his choice for what he called 'neutral' forms was trying to make regionalist allusions while steering clear of politics.

CYPRUS'S ALTERNATIVE MODERNIZATIONs

Much of the development and modernization processes in Cyprus were tied to the government's complex and ambivalent geopolitical positioning. Both the World Man Centre and Golden Sands Hotel tried to sidestep external Cold War polarities by envisioning Cyprus as a hub for the international flow of capital, ideas and people. Whether designing for 'peace' or for 'tourism', both projects shared a critical geopolitical thinking: The World Centre advocated a supranational and post-political future; and the Golden Sands complex shifted the focus on economic growth and the architects' claims to neutrality. Even if the second project materialized while the first did not, both projects were anxiously imagining ways to transcend local conflicts and to sidestep pervasive geopolitical influences.

The complexity of Cyprus's positioning *vis-à-vis* Cold War politics – its oscillation between the Non-Aligned movement and the American sphere of influence— produced modernisation strategies that contemplated ways of sidestepping internal politics and dominant Cold War polarities. There was an irony of course behind the emphasis on the World Centre's transnational and non-ideological goals, given that Fuller's dome had many Cold War associations. Fuller's work in general was linked, as we now know with United States national interests.[24] One thus wonders if the dome's 'transfer' to Cyprus, might also have played into the politics of Fuller's one-world vision. Similarly, there was also an inescapable irony behind the government's emphasis on advancing prosperity through the economics of tourism. After 1968, it was becoming clearer that the official government's plans could only reach part of the population, as the Turkish Cypriot community formed their own separate administration. Furthermore: as the Golden Sands was claiming an aesthetics of neutrality, it was also reaffirming the spreading of corporate networks of a globalized tourist culture; and that too, was *not* beyond politics.

Endnotes

1. "The Archbishop Receives World Known Scientist" (Nicosia, Press and Information Office, PIO, July 7, 1966).

2. Linda Hamalian, *The Cramoisy queen: a life of Caresse Crosby* (Carbondale: Southern Illinois University Press, 2005), 169.

3. *Ibid.*

4. For the young state's and President Makarios's connections to Non-Aligned Movement, see for example, Yiannis Papadakis, "Locating the Cyprus problem: Ethnic conflict and the politics of space," *Macalester International* 15(11) (2005), 81–98, and James Ker-Lindsay, "Europe's Eastern Outpost: The Republic of Cyprus and the Middle East," *The Round Table* 97 (2008), 537.

5. Because even if the United States regarded the island and its development small it recognized it as important segment of the global antagonism between

Capitalism and Communism. See C. Nicolet, "The Development of US Plans for the Resolution of the Cyprus Conflict in 1964: 'The Limits of American Power,'" *Cold War History* 3:1 (2002), 96.

6. With technical assistance of UN experts and financial support, the young Cypriot state advanced three five-year 'Development Plans', between 1962 and 1976, with the goal to advance economic growth and develop the country's infrastructure. See Oliver P. Richmond and James Ker-Lindsay, *The Work of the UN in Cyprus: Promoting Peace and Development* (Houndmills, Basingstoke, Hampshire: Palgrave, 2001).

7. In 1963 Turkish Cypriots reacted against the Greek Cypriot President Makarios's proposal for constitutional amendments. Even though Makarios proposed these amendments as necessary for improving the functioning of the state apparatus, the Turkish Cypriot Vice President Dr. Fazıl Küçük rejected them as a tactical move by the Greek Cypriot community to achieve unification with Greece. See Stavros Panteli, *The Making of Modern Cyprus: From Obscurity to Statehood* (New Barnet: Interworld, 1990).

8. See Florence Hetzler, "Art, Science, and Peace: the Proposed 'World Man Center' Project on Cyprus." *Leonardo* 17.2 (1984), 100-103. and Linda Hamalian, (Carbondale: Southern Illinois University Press, 2005), 188.

9. "World Academy of Arts and Sciences" (Nicosia: PIO, July 7, 1966).

10. The World Academy of Arts and Sciences is a nongovernmental international association, which was founded in 1960 by scientists and scholars. See World Academy of Arts and Sciences, "Manifesto In the Name of Science and the Future of Mankind," http://www.worldacademy.org/content/history.

11. "The Archbishop Receives World Known Scientist" (Nicosia, PIO, July 7, 1966).

12. See more on Fuller's domes: Felicity Dale Elliston, Scott. *Architecture or Techno-Utopia: Politics After Modernism* (Cambridge, MA: MIT Press, 2007): 202.

13. "World Academy of Arts and Sciences" (Nicosia: PIO, July 7, 1966).

14. "World Academy of Arts and Sciences, near Bellapais," *Phileleftheros*, July 8, 1966.

15. In his address to the House of Representatives for the announcement of the first Five-Year Programme of Economic Development in 1961, Makarios stated: "...our Government is determined to follow a policy of equal friendship with all nations: we are convinced that only through sincere friendship and co-operation is it possible to secure international peace and to rid humanity of the threat of total extinction." "Address of the President of the Republic Archbishop Makarios to the House of Representatives on the 21st August, 1961." (Nicosia: PIO, August 21, 1961).

16. For a short account of Makarios' views on Non-Aligned movement, see "Interview by his Beatitude the President the Republic Archbishop Makarios to Mrs Samiha Taher of the "Akhbar El Yom" Newspaper of UAR (Nicosia: PIO, February 26, 1967).

17. The local firm was the architectural office of Philippou Brothers, which had extensive practice in Cyprus at the time.

18. "Agreement on the lease of 'Golden Sands' Signed" (Nicosia: PIO, September 10, 1969).

19. Patrick Garnett, project architect, explained that Makarios 'considered this new project as very significant to Cyprus's new image.' P. Garnett's unpublished writings, Courtesy of Derry Garnett (London).

20. For Garnett this lack of atmosphere is connected to the repetition of the "same international block [that] seems to reappear in different countries throughout the world" Patrick B. Garnett, "A view of the sea," *Interior Design* (1977 Aug.), 437.

21. *Ibid*.

22. *Ibid*.

23. Patrick B. Garnett, "Shape and form in Cyprus: the Golden Sands holiday hotel complex in Famagusta; Architects: Garnett Cloughley Blakemore & Associates," *Concrete,* Vol. 9, no. 2, (1975 Feb.), 26.

24. For an analysis of the ideological implications of Fuller's geodesic domes, see for example, Felicity Dale Elliston, Scott, *Architecture or Techno-Utopia: Politics After Modernism* (Cambridge, MA: MIT Press, 2007), 204, and Reinhold Martin, *Utopia's Ghost: Architecture and Postmodernism, Again* (Minneapolis: University of Minnesota Press, 2010), 33.

Open Session:
Transformations of Sources and Models in Design and Communicative Practice

SESSION CHAIR:

David Vanderburgh (UCLouvain, Belgium)

PICTURING REGIONALISM: LE CORBUSIER'S GRAPHIC WORK, 1925-1935

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In the words of Reyner Banham, circa 1930 Le Corbusier 'Took to the woods,' and began turning to regional and vernacular sources as a mainspring of his inspiration. Although this was not an altogether new practice for him (his interest in traditional types dates back to his youthful travels to the east), at this time his frequent forays in designing projects for a vast range of territories has led to both sharp criticism and high praise for his (mis)understanding of regional architecture. Yet the discussion would benefit from a re-evaluation of the conceptual changes in his artistic processes that led to an embrace of regional sources in his architecture and urbanism through a consideration of his graphic works, both drawings and paintings, which provided the site wherein many of the forms of his architectural designs are developed. By focusing on a series of sketches, drawings and paintings, this paper proposes to extend the notion of regionalism to Le Corbusier's pictorial output of the mid -1920s to mid-1930s in order to examine his search for organic analogies which established an ongoing feedback loop between two and three dimensional forms. The changes in his visual language reveal the condensation and displacement of motifs which form the alphabet of his artistic vocabulary, as well as patterns of observation and opposition, opening up broader means of viewing his overall production.

When discussing regionalism in relation to Le Corbusier's work, it is essential to consider his conception of territories and landscape as revealed through his drawings and sketches. From his earliest artistic forays, the young Jeanneret aimed to capture the world around him with pencil, pen, and paintbrush, offering a particularized way of viewing people, buildings, and, in particular, landscapes. To a large extent, his conception of a region was informed by his upbringing in the Swiss Jura, where he delighted in depicting both the vast expanses of Alpine vistas and the minute details of plants, flowers and trees.[1] This macro/micro method of observation was further developed during his foundational *Voyage d'Orient* of 1911, wherein he recorded his visual impressions along a route which traversed the Balkans, Turkey, Greece and Italy. On this trip he discovered both the monumental cities of Istanbul and Athens, as well as a variety of architectural typologies encountered in inaccessible regions generally not included in tourist travel itineraries of the period, such as Kazanlak and Mount Athos. Two key impressions can be formed by examining his drawings from these early years: an intense desire to formulate a universalizing system of viewing the world which privileged horizons, and an equally

Figure 1. Le Corbusier. Book, Houses, Stack of Plates and Bottles, c. 1920. Black ink on tracing paper. (source: Fondation Le Corbusier)

powerful urge to examine and study the details of vernacular resources. The shifts in scale witnessed between these two modes of viewing would prove fundamental to his methods of investigating and interpreting new regions on his subsequent travels. His interest was focused on defining places based on both topography and monument as well as natural or vernacular detail.[2]

The import of his encounter with the Acropolis to his subsequent Purist paintings of the late teens and early 1920s has been discussed at length,[3] but it can be noted here that the attention to horizon lines and the iconographic selection of simple, but ubiquitous *objets types* (bottles, plates, glasses, pipes, etc) relates to a search for universals founded on standards which
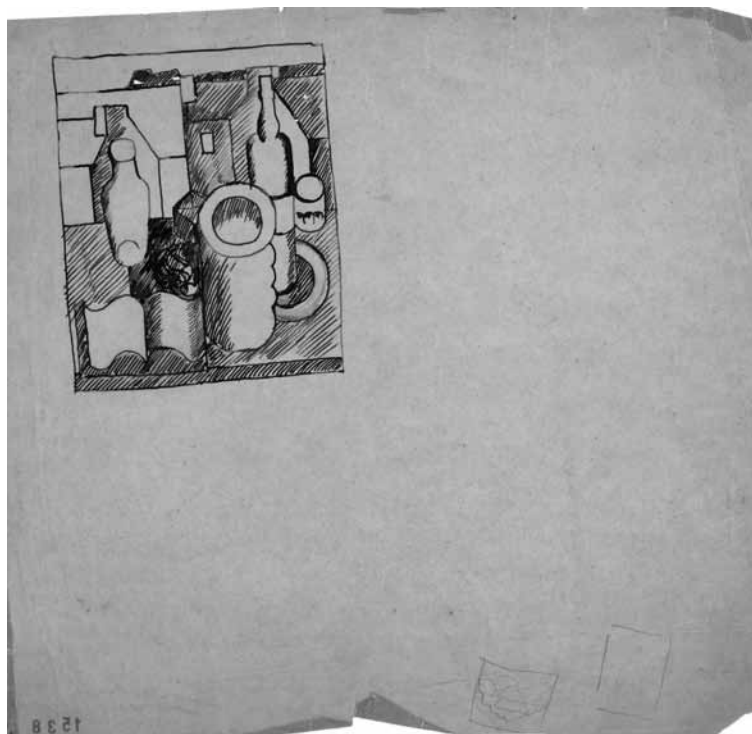
characterized this stage of his production. During a trip to Brittany in the early 1920s he recorded his impressions of the distinct profiles of the Breton houses, which impressed him through their standardized appearance and adherence to uniform building principles. In *L'Almanach d'architecture moderne* of 1925 he would write:

> The house makes the landscape. It is there like an eternal truth….One perceives that the pediment and its crowning horizontal dominates the Breton countryside. Without this horizontal crowning of the pediment there would be nothing for the eyes in the Breton countryside. It is as clear as a rallying cry. It is a sign, the sign of the Breton countryside.[4]

The honest house-type that distinguishes the area is a natural element of the countryside itself and generates the landscape, giving it structure and meaning. An intriguing preparatory study for a Purist painting of the same period (Fig. 1) reveals a perceived similarity between these traditional structures and *objets types*, offering a glimpse into Le Corbusier's reconceptualization of vernacular resources in his artistic practices. In the foreground one sees a typical Purist still-life of stacked plates, a book, bottles and carafes, but in the background he has included the defining "crowning horizontal" of the Breton houses. The gables correspond to the silhouettes of the bottles placed in the foreground of the scene, functioning as quasi-frames. In line with his Purist experiments with depth and viewpoint, he has also presented several competing perspectives at once: the upturned book and pile of plates in the foreground, and the slightly raised and projected bottles set against the horizon line of the table, behind which the buildings have become typologies, anchoring the composition. Rather than structuring the countryside, the houses now structure the still-life, turning it into a kind of landscape of its own.

Although these studies did not result in an executed painting (Le Corbusier very rarely included explicit architectural elements in his paintings themselves) they speak to the shift that would subsequently occur in his work as a painter, a change he would later explain by stating:

> From 1918 to 1927 my paintings only took their forms from bottles, carafes, and glasses seen on the tables of bistros or restaurants; in a severe discipline, they had to be searched out and found. Around 1928, I wanted to enlarge the circle of my vocabulary and I dedicated myself to what I called the "objects of poetic reaction," one thousand modest things which contained and expressed the laws of nature, events at the level of signs…also, I began to include the human figure.[5]

Motifs from the Purist period are taken up and modified time and again, but the use of line, color and texture evolves, and eventually even their pictorial frame of reference begins to change; they become juxtaposed with references to the surrounding world and with objects of an entirely different order of magnitude. Moreover, the inclusion of spiral-shaped seashells, bits of driftwood, roughened coils of rope, windswept bones and water-worn stones, which were viewed as particularly evocative and valued for their intrinsic artistic power, signaled a renewed interest in objects from the natural world.

The turn away from the limited vocabulary of Purism toward a more inclusive, biomorphic and colorful pictorial language coincided with a series of voyages to Spain, Brazil, Argentina, Morocco and Algeria between 1928 and 1936.[6] The breadth and depth of these adventures, as Le Corbusier zigzagged across the Atlantic by boat and dirigible, and soared over South America and Northern Africa by plane, invigorated his artistic production as he strove to capture the essence of each place on both macro and micro scales. On a macro level, the sweeping vistas of cities and territories viewed from the sea and air enabled him to grasp the totality of these new environments and picture the potentials of their development in fresh ways. Discussing his arrival in Rio de Janeiro by boat in 1929 he wrote:

> Off the coast of Rio, I took my pocket sketchbook: I drew the mountains, and in between the mountains the future highway and the great architectural belt which would carry it….the entire site began to speak, the water, the earth and the air: it spoke of architecture. This discourse was a poem of human geometry and of the immense natural fantasy.[7]

Here the landscape articulates ideas of architecture, the site resonating with the innate forms lodged therein. One of the pocket sketches that he executed from the ship outlines the shoreline, including the monumental statue of Christ crowning the Corcovado mountain, and is annotated 'here there are immense spaces surrounded by the circle of mountains.' A highway is seen nestled in between the peaks, following the curve of the coastline in an effortless manner, seeming already to be a natural element of the shore itself. A more finished ink drawing privileges the horizon, capturing the lateral expanse of the city itself, picturing it as an organic table upon which Le Corbusier's architectural objects will be placed

During his subsequent aerial adventures over Brazil he became a *oiseau planeur*, (soaring bird), gaining an unexpected new macro understanding of the territory, and he would declare:

> "When one is flying in an observation plane and one has become a *oiseau planeur* over all the bays, one has skirted all the peaks, one has entered into the intimacy of the city, and one has extracted with the simple glance of the *oiseau* planeur all the secrets that are so easily hidden to the poor earth dweller underneath his own feet, [then] one has seen everything, understood everything."[8]

It is noteworthy that it is only from the vantage point of the sky that one enters into 'intimacy' with the city, as if closeness can only be achieved through distance. It is the penetrative eye of the outside observer who is able to discern the secrets, mysteries

and underlying patterns of development. Concurrently, while flying over the countryside, his observation of the twists and turns of the Uruguay, Parana and Amazon rivers inspired his 'law of the meander,' as:

> From the plane I witnessed sights which one could call cosmic. What an invitation to meditation, which recalls the true fundamentals of our earth! […] The route of these rivers, in the limitless and flat land, peacefully develops the implacable consequences of the physical; it is the law of the line of greatest slope and also, if everything has become flat, it is the moving theorem of the meander.[9]

Such a revelation regarding physical laws inspired his subsequent projects for Rio, wherein the prominence of curving forms reveals a continuation of this line of thought. In a sketch produced for his 1929 conference in that city he mobilized the idea of an inhabitable viaduct whose undulating shape following the coastline enacted in physical form the natural laws he had witnessed from the air. Disregarding for the most part the existing fabric of the city, one can see Le Corbusier interpreting the regional as territorial, and related to landscape more than to local custom and/or building traditions. The architecture which is most fitting is that which follows nature.

Such a fascination with curvilinear coastal forms follows from earlier landscape studies, and a comparison with a 1928 sketch of the shore of Arcachon, a small fishing village on the French Atlantic coast whose unspoiled setting and rustic population thrilled Le Corbusier, speaks to a distinct interest in these types of natural figures and formations. Here, the outlines of the billowing summer clouds, reflected in the waters below and complementing the patterns of the windswept sand, bear a striking visual resemblance to the curve of the Rio viaduct. Oscillating between linear and aerial perspective, his patterns of observation uncover similarities between the view from a beach and the view from above.

Moreover, his pointed interest in the "objects of poetic reaction," many of which he collected on the Arcachon beaches, complements this interest in form on a micro level as he sought to uncover their underlying physical principles. A contemporary sketch of a butcher's bone reveals a surprising formal similarity between the shape and structure of the bone and the shape and structure of his imagined viaduct. Such metamorphosis and reinterpretation is one of the most important methodological keys to his world of form, and he would later assert, 'Pebbles, crystals, plants and all their parts extend their meaning even to the clouds…to the fabulous sights airplanes have revealed to us.'[10] Zooming in and out between high and low, great and small, he advocates a synthesis of naturalness and functionality.

Additionally, architectural objects in the Arcachon landscape did not pass by unobserved, in particular the lighthouse of Cap-Ferret which would appear in certain paintings of the late 20s. In *Luncheon with Lighthouse* (1928) he incorporates a coastal landscape at the bottom of the canvas underneath a table set for a midday meal. The multiple horizons here (the top edge of the table which doubles as a horizon separating the still-life from the sun hovering above, and the horizon seen under the table indicated by ocean, jetty and lighthouse) creates a sense of ambiguous space – is this an interior? An exterior? Both? The enjambment of spaces and the abandonment of perspectival laws denies a fixed reading of the table top as a stable object as it shifts through planes depending on one's reading of the horizon line. Le Corbusier also plays with his new syntax through the conflation of conch shell and glove within the still-life arrangement itself, as the integration of an organic object among the standardized elements alludes to the reality of nature in the quasi-surrealism of this composition.

Figure 2. Le Corbusier, *The Fisherwoman of Arcachon*, 1932. Oil on canvas. (source: Private Collection)

The inhabitants of Arcachon inspired him as well, particularly the peasant women who trolled the coastal waters in search of fish. In dozens of sketches, based both on postcards as well as on firsthand observation on the beach, he reveals his fascination with such robust women, and he subsequently executed several paintings based on this theme. In the 1928 painting *Fisherwoman,* a sturdy female, with swelling muscles and prominent breasts, addresses the viewer in front of a simple landscape of sand and sky. In her monumentality she calls to mind contemporary works by Picasso, as she appears hard and substantial, like an outgrowth of the sea itself emerging from the rocky reefs. This rustic Nereid reappears four years later in *Fisherwoman of Arcachon*, a canvas divided in half down the vertical axis, where she emerges as a solitary seated figure dominating the right-hand portion of the painting, basket and fishing net in hand. In conjunction with the colorful landscape and still-life occupying the left-hand side, here Le Corbusier literally demonstrates his combined interest in objects, landscape and women at this time (Fig. 2). Moreover, the rough texturing of her figure, in particular the rope-like coiling of her dress around her arms and legs, calls to mind Le Corbusier's subsequent use
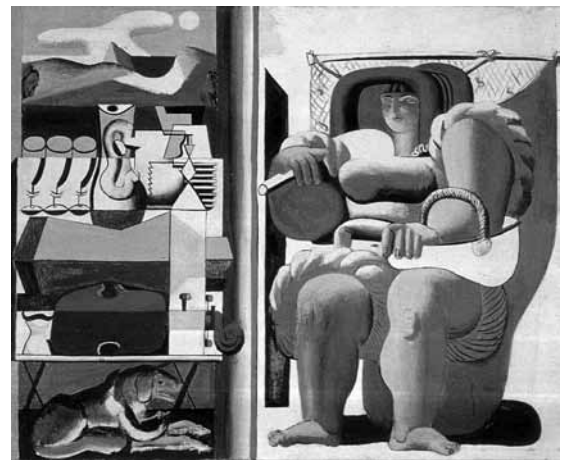
of local, unfinished materials in houses such as the Villa Mandrot (1929-32) sited near the Mediterranean coast at La Pradet, or the villa known as 'Le Sextant' (1934-5) built of rough stone and timber in a pine forest by the sea.

His renewed fascination with the female form was also inspired by his multiple trips to Algiers in order to promote his Obus plans, and Stanislaus von Moos has examined the project in relation to subsequent drawings and paintings, in particular his constant reworking and retracing of drawings and post cards of women, and their role in shaping his urban plans.[11] What is more, in the ongoing dialogue between his painting and architecture, forms from the Obus plan of 1932 would re-emerge in the 1933 canvas *Veiled Woman,* where an African woman, naked under her floor-length green veil, gazes boldly at the viewer, the curves and forms of her body recalling the shape of the Algiers viaduct, the indentations along the left-hand side recalling the redents. Le Corbusier's conflation of the North African city with the female form had been established from his first experiences there, and the transformation and ruptures witnessed as he moves from the scale of the female body, to the scale of a city, and returns to the space of the canvas, points to a triple process of condensation, displacement, and re-formed condensation as forms and shapes traverse across media.

Such transformations, translations and transferrals of perspective, size and shape speak as much to Le Corbusier's search for systems of relating to the world as they do to the negotiations, interchanges, assimilations, and hybridizations linking Modernism and Regionalism. In the quest for organic analogies between landscape, site and structure, new scales of organization arise, and as he negotiates between media, Le Corbusier stresses the interaction between natural and manmade forms, two and three dimensions, and interior and exterior spaces. The patterns of observation established during his early development as an artist reappear, and are redefined, as regional elements are reinterpreted and become universal.

Endnotes

1. On his early development as an artist see Geoffrey H. Baker *Le Corbusier – The Creative Search. The Formative Years of Charles Edouard Jeanneret* (London: Chapman & Hall 1996); H. Allen, Brooks *Le Corbusier's Formative Years* (Chicago: The University of Chicago Press, 1997); and Stanislaus von Moos and Arthur Rüegg, *Le Corbusier before Le Corbusier, 1907-1922,* (New Haven: Yale University Press, 2002).

2. For further discussion of Le Corbusier's concept of territories see Jean-Louis Cohen, "Le Corbusier, la ville, le territoire", in *Centenaire Le Corbusier, bilan et perspectives* (Paris, Fondation Le Corbusier, 1991, actes de la rencontre des 16-17 juin 1989), 29-34; and Jean-Piere Giordani, "Territoire" in *Le Corbusier (1887-1965) une encyclopédie* (Paris, CCI/Centre Georges Pompidou, 1987) 402-406.

3. See, for example, Carol S. Eliel, "Purism in Paris" in Carol Eliel, ed, *L'Esprit Nouveau: Purism in Paris 1918-1925* (Los Angeles: Los Angeles Country Museum of Art, 2001)11-70; and Bruno Reichlin, "Jeanneret-Le Corbusier, Painter-Architect" in *Architecture and Cubism*. Eve Blau and Nancy Troy, eds. (Montreal: Canadian Center for Architecture, 1997) 195-218.

4. Le Corbusier, "Un Standart Meurt, Un Standart Nait" *Almanach d'architecture moderne* (Paris, G. Crès & Cie, 1925), 85-87

5. *Le Monologue du peintre*, interview with Georges Charbonnier, Julliard, Paris, 1960.

6. His itinreraries included: Spain 1928; Brazil, Argentina, 1929; Spain 1930; Spain, Morocco, Algeria 1931; Spain and Algeria 1932; Greece and Algeria 1933; Spain and Algeria 1934; and Brazil, 1936.

7. Le Corbusier, "Corollaire brésilien" *Précisions sur un état present de l'architecture et de l'urbanisme*, (Paris: G. Crès & Cie, 1930) 244-45.

8. Ibid, 235-6.

9. Le Corbusier, "Prologue américain" in *Précisions sur un état present de l'architecture et de l'urbanisme*, (Paris: G. Crès & Cie, 1930) 4-5.

10. Le Corbusier, *Le Corbusier Talks with Students from the School of Architecture (*New York: Princeton Architectural Press, 1961) 71-2.

11. Stanislaus von Moos, "Le Corbusier as Painter," *Oppositions* 19/20 (Winter/Spring 1980) 89-109. For a full discussion of the genesis and evolution of the Obus plans see Mary McLeod "Le Corbusier and Algiers," *Oppositions* 19/20 (Winter/Spring 1980) 54-85; and Jean-Louis Cohen, "Le Corbusier, Perret et les figures d'un Alger moderne", in Jean-Louis Cohen, Nabila Oulebsir et Youcef Kanoun, eds.**,** *Alger, paysage urbain et architecture 1800-2000* (Paris : Éditions de l'Imprimeur, 2003) 160-185.

MEDIUM OR MESSAGE?
USES OF DESIGN AND PRESENTATION MODELS BY DENYS LASDUN AND PARTNERS

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Denys Lasdun's studies at the Architectural Association in the early 1930s make an encouraging example to architecture students. Whilst he by no means struggled, his projects were not spectacularly original, and his drawing lacked that inspiring quality characteristic of many admired architects. His first built work is a strange little house, impressive mostly in that he designed it during his second year as a student.[1] Yet Lasdun was later to gain some of most exciting commissions of the 1960s in Britain.

His second built work, another house, is more interesting, and it is this, built for a friend of his mother's in 1937-8, whilst Lasdun was working for Wells Coates, which introduces us to the theme of this paper – the relationship between the medium in which his designs were developed and presented, and the resulting architecture. In particular I will explore the association between Lasdun's increasing dependence on balsa models for the design and presentation of his 1960s schemes, and the resultant designs.

Lasdun's career makes a particularly good case study for various reasons: it is well-documented in his archive at the Royal Institute of British Architects; his methods of both presentation and design changed during his career from drawings to models; and his architectural practice was unusually personal – in the 1960s he turned down more work than he accepted, and structured the contractual positions of his collaborators entirely in order to retain personal control over his design process. As such, differences in his design output are fairly reliably linkable to his own changing design methodologies, rather than to different lead designers as in many firms.

This early house, then, the first project of Lasdun's to receive multiple publications, was designed and illustrated primarily as an exercise in elevational composition.[2] The façade is of different material to the brick sides of the block, and a game of rectangular geometries is played with dark windows and a panel of dark tile in the centre. The structure and section of the house are straightforward, and its plans pleasant but not unconventional – it is clearly the work of an architect whose creativity is thus-far somewhat paper-bound. The presentation drawings reflect this in their heavily-shaded two-dimensionality.

In the 1950s Lasdun began to emerge as an independent architect after the practice in which he had been a partner, Tecton, broke up. In his work he can be seen beginning to individuate himself from the memory of Tecton's architecture, and a letter to the great engineer Ove Arup, with whose firm Lasdun collaborated on all his work until the later 1960s, shows his irritated desire to be seen as something other than a continuation of Tecton.[3] The accusation levelled at Tecton's post-war work (largely housing) by critics was that it was returning to pre-modernist facadism – pretty patterns on a flat front, made by a variegated material palette. Lasdun's effortful dissociation of himself from this tendency is clear in his first post-Tecton job, the school on Tecton's Hallfield Estate in London – an estate for which he himself was the executive architect.

Where the housing is patterned with different coloured bricks, tiles and cladding panels, the school has as sculptural a plan as Lasdun can concoct – friendly for pupils in its avoidance of intimidating corridors, but also an architectural expression of anti-facadist organicism. But an investigation of the design documentation reveals that its three-dimensionality is more than merely a curvaceous plan.[4] The curve of the classroom block, in particular, seems to have caused considerable, if ultimately productive, difficulty. The block uses cross-walls as the main structure for roof and first floor slabs, but to save steel reinforcement at a time when post-war rationing required every ounce of steel to be applied for and justified in writing, he wanted to include mullions which would bear some of the load, reducing the steel required in the floor slabs. On the straight sections this posed no major challenges, but where the wall curves it threatened significant construction complications, and proportionate increases in cost.

The design drawings in which the office develops these solutions are not exclusively construction detail drawings, but include perspectives (indeed the surviving drawings are predominantly perspectives) allowing Lasdun to choose a design which would look good when built and viewed from eye level, as well as solving the practical problem. This drawing reveals the moment of revelation when he decided to separate the mullions from the cladding system, and notes in Lasdun's hand record the pleasure he took in this solution. Next, a sequence of drawings demonstrates Lasdun's exploration of the three-dimensional qualities produced by these fins or columns. He had his assistants draw a series of alternative fin-profiles, in line-drawing perspective, often schematically shaded, and sometimes exploring alternative claddings to the parapet above, through which Lasdun would judge which would make the most aesthetically satisfactory solution. This was a three-dimensional variant of Tecton's standard practice of pinning up multiple alternatives.[5]

Thus Lasdun used the two-dimensional medium of pencil on tracing paper to investigate the three-dimensional effect of his architectural proposals. But this was labour-intensive, and a slow way to test alternatives. In 1963 the most full-blooded of these three-dimensional design explorations was under way – designs for an unexecuted project for the Royal Institution of Chartered Surveyors' headquarters building in Westminster. Shaded perspectives explore small and large variations in the elevations.[6] In the planning process, Lasdun met Philip Wood, at the time a model maker for the London County Council.[7] Wood (an apt if sometimes confusing name for a model maker) was so good that Lasdun poached him as full-time model maker to Lasdun's practice – a most unusual facility for a practice which never strayed much above twenty employees in total (by contrast the LCC had around 12 model makers to 2000 architects).[8]

Wood's presence changed the design methodology. What had been done by laboursome drawing sequences was increasingly accomplished by Lasdun playing with balsa, asking Philip Wood to shave a chamfer off a corner, or cut a different slab plan. From a historian's point of view the transition is devastating to the evidence trail: these models were destroyed even in the process of their creation and none survives, so from around 1964 most of Lasdun's schemes appear only when they were presented to clients or drawn up for internal office use.

Design-wise, however, this change of process enabled Lasdun to explore functional disposition and elevational treatment as the same process. Above all, it enabled him to monitor the aesthetic effects of each decision at the moment that it was made. Philip Wood recalls Lasdun taking models into a park near the office with black cloth draped over the model and his head, in order to see how light would fall in an interior.

This move to design through working models initially represented nothing more than a more efficient design method. However, its impact followed an earlier shift to the use of models as a main presentation technique to clients and in publications.

Tecton's publications had typically relied heavily on drawings for the demonstration of design ideas, and are indeed exemplary in demonstrating the power of the line-drawing to communicate varied and complex practical and aesthetic decisions.[9] And this technique remained the predominant one in Lasdun's early publications after Tecton broke up. Whilst the design of Hallfield School was self-consciously three-dimensional, for example, the publication images were less so. By the early 1960s, in his little-discussed and not particularly outstanding project for Fitzwilliam Hall, a Cambridge college, Lasdun refused to provide presentation drawings for the fundraising literature, insisting that they use instead photographs of the presentation model.[10] And from this point onwards Lasdun used model photos as the main publication images of almost all his schemes, until the completed building could be photographed.

Various reasons can be suggested for Lasdun's preference for presentation models over drawings. In relations with clients and funding bodies, the love which most people seem to have for the miniaturised world of a model – a childhood memory of toys? – may have made it a particularly effective propaganda tool. Perhaps there is also a conscious avoidance of the 'dishonesty' of the highly rhetorical Beaux-Arts perspectives of the previous generation. Basil Spence, a slightly older contemporary of Lasdun's, continued to use these powerfully with clients, but they look spectacularly old-fashioned next to James Stirling's black-line axonometrics, or Lasdun's model photos. Coloured perspectives were for safe, establishment architects like Spence or (even worse, from Lasdun's point of view) the talented but unapologetically commercial Richard Seifert, whose glitzy, colourful perspectives crowded with helicopters and strolling, stylish stick-people sold his office blocks to developers and planners.

Figure 1. Denys Lasdun & Partners, New Court Student Residence, Christ's College, Cambridge, built 1969-72. (source: photograph by Barnabas Calder)

By contrast, Lasdun's presentation models perhaps aim to appear more objective: the three-dimensionality of a model gives the impression of telling the complete story, hiding no side of the project (although in fact they are generally mediated through the photographs of skilled professionals). And where Stirling's wonderful axonometrics allow no ground-level views of the buildings as they will actually be experienced when built, by crouching, or by photographing them through a model-scope, more accurate

previews can be gained of Lasdun's buildings as they will appear to eventual users. Where Stirling often omits context, Lasdun's models include ever more of the surroundings of his buildings, in ever-greater detail. Thus the main presentation model for the 1965 National Theatre and Opera House scheme (nicknamed by the office 'the Great Model', after Wren's St Paul's model) includes the river – slightly reflective to mimic moving water – and renders the context in immaculate balsa detail from Westminster Bridge to Queen Elizabeth hall. This model took three months to make, and was vital, as the project's funding had not been secured, and the proposal had, after a coup by directors including Laurence Olivier, Peter Hall, Kenneth Tynan and Peter Brook, bolted in the previous years from two auditoria to five, and proposed to build several storeys high over a strip of land on which development was forbidden.[11] Accordingly the model had to seduce the general public, and above all central and local government.

The National Theatre as built reflects the growing influence of models like this, and working models. If at first Lasdun's move to design through models was a simple efficiency, during the 1960s it acquired a growing influence over Lasdun's architectural aesthetic. This is particularly striking in two schemes – the National Theatre and a student residence in Cambridge – which both went on site in 1969, after years of working and reworking of models. In the case of the residence for Christ's College, Cambridge (Fig. 1), the prefabrication system is strikingly more expressive of its component parts than the intellectually and technically similar system finalised four years earlier for the University of East Anglia (UEA). Each was designed to some extent with models, but the aesthetic of UEA shows greater expressiveness of overall form than of individual prefabricated components. Each of the projects has sculptural gutters as a key moment in its façade, but the UEA one is an awkward piece for building in Balsa, and not entirely straightforward in concrete prefabrication either, whereas the gutters at Christ's have a simple and consistent U-section easily made in balsa, like most other components there.

At the National Theatre (Fig. 2) the relationship to balsa is not modular but planar. A photo which Lasdun submitted successfully for his Royal Academy membership shows a heap of models involved in the design process of the National Theatre. It shows his method of designing with sheets of balsa cut to profiles whose edge parapets would form the external expression of the building, and whose internal penetrations would make the foyer spaces and vertical circulation. Lasdun talked then and later of his preoccupation with Le Corbusier's Domino structural principal, in fact another architect-designed model whose engineering would have needed to be by no means as simple as its aesthetic implies.

In the case of the National Theatre the balsa models were worked on for five years, before the actual concrete designs were produced in a matter of months from the final balsa models. Even at the working-drawings stage important details were tested in balsa, sometimes up to 1:1 scale.[12] I would suggest that the composition of the building as slabs and faceted towers arose from the nature of balsa wood as much as from the nature of concrete, for which balsa had become Lasdun's design proxy.

This design through balsa shows its limitations in the engineering of the project. It was never going to be an easy building to construct, given the very large voids required by theatres for up to 1064, with their flying equipment suspended above, without columns interrupting the stage opening. It is tempting to indulge in counterfactual speculation about what an engineering-driven designer like Nervi might have made of the job. Lasdun, however,

Figure 2. Denys Lasdun & Partners, National Theatre, London, built 1969-76. (source: photograph by Barnabas Calder)

regarded his engineers (Flint and Neil) as being essentially the technicians who would scale the balsa up as concrete. Slabs which are easily cut and hand-glued at 1:200 become altogether more challenging at 1:1 in concrete, and the contractors, McAlpine, ended up constructing a column from foundations to the base of the fly-tower in the larger theatre to support the shuttering for the tower, before demolishing it once the tower was complete. The tower itself, meanwhile, is a spectacularly complex exercise in pre-stressing, with the weight of the front half being suspended from the rear by large amounts of steel.[13] The offices are similarly simple as balsa slabs, but again much trickier when built, since the continuity of slab normally required for such substantial cantilevers is impossible due to single-volume theatre and rehearsal spaces behind them which cannot be interrupted by transverse slabs.[14] It is a considerable tribute to the engineers (who took on the challenge in just this spirit) that they managed to retain the apparent solidity and structural simplicity of the balsa model in what was in fact one of the trickier architectural engineering projects of the 1960s in Britain.

I would like to push this argument further: not only is the structure conceived in balsa, not concrete, but the building's aesthetic, too, by the later 1960s begins closely to resemble the presentation models. At Christ's College the prefabrication system aesthetically individuates its elements much more clearly than its close relative the University of East Anglia, rounding off corners and emphasising joins rather than keeping them flush. It looks more like a kit of model parts.

At the National Theatre the most visible manifestation of the aesthetic influence of the model is the choice of finish – board-marked, exposed *in-situ* concrete. By offsetting the boards by fractions of an inch the texture of wood exists not only close up but also from greater distances, making the entire building read with the grain of wood. Where the key model for the architectural use of board-marked concrete, Le Corbusier's Unité d'Habitation, checker-boards the shuttering in alternating vertical and horizontal panels, Lasdun's shuttering is entirely horizontal except for the curved parapet of one staircase, where horizontal shuttering would have required bending every board. The late Jan Kaplicky of Future Systems worked on the National Theatre briefly during a spell in Lasdun's office, and when I asked him about it, he said only that he found the shuttering on the raking struts ridiculously irrational – indeed it would certainly have been easier as a construction detail to run the boards parallel with the struts, but Lasdun clearly wanted the continuous horizontal grain to run everywhere.[15] And the grain is exhaustively emphasised by rough-sawing the wood for the shuttering and using each board only twice to avoid the grain becoming dulled by residual cement.

The concrete itself, then, is obsessively perfect in its imitation of balsa. And its importance is stressed by the mute subservience of every other detail to the concrete surfaces. Plain, tubular handrails in inconspicuous brushed steel are set straight into the wall rather than scooped, so that the hand slams into their supports inconveniently, but their visual profile is simplified and minimised. Lighting, wherever possible, was recessed into the waffle-grid ceiling coffers or sunk beneath the floors. The original signage was beautiful and again understated. Signs were in reflective steel letters mounted directly on the wall. These accordingly covered a minimum possible of the concrete, and also reflected the colours and textures of the concrete. When they happened to reflect an area lit like the area on which they were mounted they largely disappeared, which is why they were replaced in the 1990s with large surfaces of colourful plastic, to Lasdun's unutterable distress.

Materiality underfoot was similarly understated, incorporating only three materials, dark brick, ordinary concrete paving, and a carpet designed by the architect's wife working with a specialist from the carpet manufacturers. Their explicit aim was to find a colour combination and texture which would complement and emphasise the concrete of walls and ceilings.[16] Furniture is kept to a minimum (or was; there is now plenty, and very varied), and even glazing – an important and seriously-considered component of the material palette, is in every way subordinated to the concrete. In particular Lasdun stressed the importance of keeping the glazing line well back from the parapet fronts so that it would never catch sky reflections and replace the building's furry-wooden grain with a crystalline surface.[17]

This session emphasises productive tensions in sources and media in twentieth-century design. The example of Denys Lasdun in a sense runs contrary to this – it was when he resolved the tension between the three-dimensionality of his design thinking and the two-dimensionality of conventional design methodologies that he produced his best work. Once he made the jump to designing with models the models themselves became his design source: the prime influence on the architecture of Lasdun's most exciting phase, the late 1960s, was no longer Le Corbusier, Hawksmoor, or any of the other architects he admired, but his own design models. The medium itself becomes the ideal form of the building, and the key creative tension is that between miniaturised balsa perfection and well-crafted concrete reality.

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UNDERSTANDING POSTMODERNISM *IN PRACTICE*:
OR WHAT WE CAN LEARN FROM BRUSSELS, A *FACTORY OF COUNTER-PROJECTS*

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In this paper I analyse the critical tool called 'counter-project' as it was defined and used by the traditionalist post-modern branch in 1970s Brussels. I argue that the 'counter-project' forms an instructive methodological device for understanding some of architectural theory's struggles to engage critically with the real.

Firstly, the counter-project, as a methodological device, has a complex and ambiguous relationship with the real. It is neither utopian nor realistic but attempts to address and transform concrete, real situations, however without proposing innovative, progressive alternatives. As a drawing-manifesto, it holds the middle between a critical statement and a concrete vision for the future.

Secondly, counter-projects did not just serve critical debates *within* the discipline of architecture but they also served public debates about architecture and the city. Counter-projects were, thus, used as a communicative tool within processes of citizen participation and policy negotiations. At the same time they formed an important component of 1970s architectural education. Students and teachers developed, within an educational context, counter-projects for 'real world' problems.

Thirdly, the communicative sensitivity of counter-projects (and their exhibition and presentation in conferences) allowed for ideas to travel swiftly also *within* the architectural discipline. This contributed to the dissemination of a traditionalist ideology (Reconstruction of the European City) in Brussels, across Europe, and beyond.[1]

These three elements - ambiguous relationship with the real, engagement with the public, and broad dissemination of ideology - distinguish the counter-project from other architectural or urban activist schemes such as, amongst others, paper architecture or utopias, where critique often remained within the disciplinary boundaries or never came to fruition. Counter-projects are therefore instructive as to how critiques transform (and get used and abused) when travelling across theoretical debates and realisations in practice.

THE COUNTER-PROJECT

The emergence of the counter-project as a device for architectural criticism is to be understood within the vast transformation of inner-city Brussels during the 1950s and 1960s. Within but also beyond the context of hosting World Expo 1958 and the settlement of the NATO and EU in Brussels, the city would radically modernise through the creation of urban highways (including tunnels and a flyover) and large-scale office development. Such radical urban renewal was often based on the demolition of the existing urban fabric, with its fine-grained residential function.[2] This period saw the emergence of a series of celebrated works of modern architecture, but it was as much associated with 'icons of destruction'. One can think of the *Manhattan Plan*, a CIAM-inspired Central Business District that required the destruction of vast parts of the existing, residential fabric and the expulsion of thousands of inhabitants. Once it had become clear that the project would never be realised in its entirety, the demolition works had nevertheless been executed, resulting in a heavily scarred urban tissue.[3] One can also think of the demolition of Victor Horta's *Maison du Peuple* in 1965, despite international protest, and its replacement by an office tower.

As a result, the Brussels population experienced this era as one of 'urban traumas'. The term *Bruxellisation* (in English: Brusselisation) was invented to depict the destruction of a city in the hands of architects and developers. Together with much older popular urban personae such as the word *architek* (used as a popular insult)*,* the term *Bruxellisation* would remain, for several decades, an important agent in keeping the memory of 'urban traumas' alive in the Brussels architectural and urban debates.[4]

This climate of 'urban traumas' formed a fertile breeding ground for the '68 movement and would, in architecture, crystallise in the development of the Reconstruction of the European City movement, which defended the repair of the urban fabric. In a context of *luttes urbaines* (urban revolts), counter-projects were developed as a critical tool. Crucial in this development was the foundation of the *Archives d'Architecture Moderne* (1968) and the *Atelier de Recherche et d'Action Urbaines* (1969).

The *Archives d'Architecture Moderne* (AAM) were dedicated to the creation of architectural archives, exhibitions and publications and were founded by a group of architects and historians, most notably Maurice Culot and Robert Delevoy.

The *Atelier de Recherche et d'Action Urbaines* (ARAU) was founded by René Schoonbrodt (a sociologist), AAM's Maurice Culot, and Jacques Van der Biest (a theologian who was also Priest in the popular inner-city neighbourhood *Les Marolles*, which

had suffered from demolition). Already by its founding partners only, ARAU explicitly combined political activism, urban research and citizen participation.

Counter-projects – or *contreprojets*[5] - formed a key device in ARAU and AAM's architectural and urban critique. They revolted against an entire tradition of thinking the city. Instead of 'architecture for architecture's sake' and 'pedestal-architecture' ARAU and AAM called for a more socially concerned and politicised architecture and urbanism.[6] The architectural act was to be 'demystified' and the societal duty of the architect and urbanist was to 'change life' and to 'engage and be militant'.[7] Progress and innovation were redefined as a 'return to the past and recovery of lost values': namely, by 'repairing' the traditional pre-industrial urban fabric (its organisation in *quartiers,* its public spaces and human scale).[8] As such, ARAU and AAM's formulation of counter-projects went hand in hand with a reassessment of the architecture of the past and the aim to discover Belgian architecture's authentic 'roots'.

The emergence of the counter-project as a critical tool is, thus, closely related to the Brussels 'urban trauma'. However, the counter-project also *contributed* to keeping the 'urban trauma' alive. The favouring of a 'return to the past' over progress and innovation nourished a 'fear of the new'. The 'fear of the new' characterises the Brussels architectural climate of the 1970s through the mid-1990s, largely dominated by an aversion vis-à-vis innovative architecture and by a conservative view on the city.

THE COUNTER-PROJECT'S COMPLEX ENGAGEMENT WITH THE REAL

Counter-projects functioned as a critical-theoretical tool. They were not intended to 'prefigure reality' (to be built). Instead, so Culot argued, they offered a 'reflection of the consensus of opinion on the global project and the legitimate aspirations of the inhabitants, as a trenchant weapon in the anti-industrial resistance movement'.[9] Counter-projects, thus, formed a work of resistance that was not taking place 'in the trenches' of the battlefield, but that was theoretical and strategic in nature. In the counter-project, drawing and writing interacted: the project *was* a manifesto.[10] Because, by building, architects were believed to unavoidably collaborate with society's process of self-destruction, theoretical counter-projects were posed as the only instrument available to architectural resistance. Culot left no doubt: 'a responsible architect cannot possibly build'.[11]

One of the most exemplary project-manifestoes is the *Déclaration de Bruxelles,* published in 1980 and based on the 1978 colloquium *La Reconstruction de la Ville Européenne.* The *Déclaration de Bruxelles* presents counter-projects accompanied by expressive, critical chapter titles such as 'modernity and inhibition', 'the myth of creativity', and 'urban traditions and struggles'.[12] Likewise, the publication *Les espaces publics Bruxellois: analyse et projets* combines an analysis of 'good' and 'bad' existing situations with the formulation of public space proposals for Brussels.[13]

ARCHITECTURAL EDUCATION AT *LA CAMBRE*

The French-speaking Brussels architecture school, the *Institut Supérieur des Arts Décoratifs de la Cambre* (in short: *La Cambre*) played a key role in the development of counter-projects. Already in 1968, *La Cambre* had organised the *Etats Généraux de l'Architecture et de l'Urbanisme* as a response to the student revolts of May '68.[14] Students and young architecture teachers called for a more political urbanism (*repolitiser l'urbanisme),* a critical teaching (*enseignement critique),* and for the banning of the 'individual project' celebrating the architect as genius.[15]

Robert Delevoy, co-founder of AAM and its president until 1982, was director of *La Cambre* between 1965 and 1979. Under his directorship, and under architecture and urbanism teachers such as Maurice Culot and Marcel Pesleux, *La Cambre* would increasingly support the traditionalist movement. Through colloquia, exhibitions and student reviews, *La Cambre* maintained international contacts with the architecture scenes of Paris and London, and in particular the ones around Léon Krier and the French scene around Bernard Huet.[16] Apart from the presence of Delevoy and Culot, *La Cambre's* traditionalist turn was additionally supported by ARAU/AAM 'allies' within government positions.[17] As a consequence of this 'double support', Culot's students could develop, within the educational curriculum of the school, proposals that served ARAU's political negotiations. In addition, *La Cambre* reinforced ties with ARAU by placing its infrastructure at their disposal for organising Saturday meetings.[18]

Culot established a strong group of *architectes-militants* at *La Cambre,* turning the school into 'a factory for the production of counter-projects' (*une usine à fabriquer des contre-projets*).[19] Even though counter-projects had been developed since 1968, outside *La Cambre,* namely within *ateliers publics* (involving ARAU, young architects, students and citizen groups), their status and role would further consolidate as soon as *La Cambre* started to work 'at the service' of the Brussels *luttes urbaines* (Violeau, 2005, p. 284). Especially in the period between 1972 and 1979, counter-projects would become a central element in the design teaching of Maurice Culot, Marcel Pesleux (the Culot-Pesleux unit), and André Jacqmain (the Culot-Jacqmain unit).[20] The unit taught students how to 'formulate coherent political analyses' and how to resist the hegemonic forces of industry in architectural production'.[21] A prototypical example of such 1970s education based on 'an articulation of the link between education and

research on the one hand and *luttes urbaines* and the contestation of the discipline on the other hand' would be *La Cambre*'s *Bateau d'Élie*.[22] The *Bateau d'Élie* was a group of students and teachers around Maurice Culot, dedicated to collective work on counter-projects. The counter-projects produced by students became an important vehicle for critique, within the discipline of architecture as much as within the local Brussels debate. For example, no less than eighty counter-projects developed by students between 1972 and 1975, were exhibited in 1975, first at *La Cambre*, then at the Architectural Association in London. Culot dedicated an article to these projects in the inaugural issue of the *Bulletin des Archives d'Architecture Moderne*.[23]

For Brussels, the role of *La Cambre* proved important for two reasons.

Firstly, counter-projects contributed to the 'activation' of AAM's historical research. Students developed projects for concrete Brussels sites, in some cases commissioned by public authorities.[24] In particular three counter-projects were widely published and proved influential for the later development of these sites. Namely, the *Marolles* project by Philippe Lefèbvre; a proposal for the *Quartier des Arts,* by Brigitte D'Helft and Michel Verliefden; and a proposal for the *Reconstruction du centre de Bruxelles* (including a proposal for *Carrefour de l'Europe*) by Sefik Birkiye, Gilbert Busiau and Patrice Neirinck.[25]

Secondly, the Culot unit shaped a generation of architects, many of whom are today still influential in Brussels architectural production: as principals of major architecture firms, as curators, writers or as public administrators. Most notably, Sefik Birkye and Dominique Delbrouck would found the architecture office *Atelier d'Art Urbain* in 1979, which was to become one of the most powerful Brussels architecture firms. Brigitte D'Helft and Michel Verliefden initially developed careers within different bodies of the Reconstruction of the European City movement; they subsequently co-founded, in 1983, the architecture office A.2R.C *Architecture et Construction entre Reve et Réalité*.[26] Culot's studio assistant Anne Van Loo has worked for AAM since 1980 (since 1992 as conservator of its collection), and is, since 1993, also secretary of the Royal Commission of Monuments and Landscapes. Another studio assistant, Caroline Mierop, became, in 1986 (until 1992)*,* the first director of the *Fondation pour l'Architecture.* As a major architectural foundation in Brussels, it was strongly in line with the legacy of AAM. It was co-founded by Culot, and, from 1999, it was integrated, together with AAM, into the CIVA (*Centre International pour la Ville, l'Architecture et le Paysage).* Also the influential *Tracé Royale* Project (mid-1990s) was influenced by former students of Culot (coordinated by Patrice Neirinck). This project was, moreover, initiated by the *Fondation Roi Baudouin/Koning Boudewijn Stichting,* a 'foundation for the people' that had been founded by the Belgian King in 1976, and that was close to the AAM/ARAU ideology. Because it had gradually developed into a well-financed and powerful think tank for social themes - historic conservation, public space, poverty, culture, education, and urbanism - it played an important role in Brussels debates on urban renewal and in particular the design of public space.

In other words, many of Culot's former students, erstwhile 'activists', were eventually to become associates in some of the most prominent Brussels architecture firms. Alternatively, some would pursue what might be called 'bourgeois activism' through activities linked to AAM and ARAU. Still others exercised another type of influence by taking up administrative positions within the various departments of the newborn Brussels Capital Region (1989). The impact of Culot's pedagogy can therefore not be attributed only to the fact that his students were more engaged with 'the world out there' than others, but also to the fact that they saw to the diffusion of ideas associated with the Reconstruction of the European City.

COUNTER-PROJECTS AND CITIZEN PARTICIPATION

Counter-projects were an important part of citizen participation, organised by ARAU in the form of *Comités de Quartier* or neighbourhood committees. Even though project design was in the hands of architects, citizens were involved in the development of a program for a neighbourhood. As such, counter-projects fulfilled a double aim.

On the one hand they facilitated citizen participation as a way to process architectural critique. Rather than addressing their critiques to architects or other experts, ARAU and AAM addressed their critiques to the public at large. The aim was to formulate an architectural critique that was not formulated within the boundaries of the discipline and profession but, instead, to process this critique *via* the general public. As such, ARAU and the AAM aimed to expose the ignorance of professionals to all.[27] The use of a graphic style '*à la Tintin*', within counter-projects, did not just reinforce the manifesto character of the drawings ('*la fameuse ligne claire*'). The reference to a comic strip (Tintin) also popularised its effect, and made it accessible to the general public - '*à tous les publics*'.[28]

On the other hand, counter-projects were enhanced to convince the Brussels public authorities about alternative choices to the profit-based proposals of developers. The participatory component of counter-projects supported such argument, for it allowed politicians to seize the opportunity to please their electorate.[29] In addition to counter-projects, citizen participation was encouraged through the organisation of *Boutiques Urbaines,* a local neighbourhood agency connecting inhabitants with architects and authorities.[30]

COUNTER-PROJECTS AND THE DISSEMINATION OF THE RECONSTRUCTION OF THE EUROPEAN CITY IDEOLOGY

In Brussels, the Reconstruction of the European City mindset could thrive on a golden combination of local victory and support on the one hand and their entanglement with an emerging European Urban Renaissance movement on the other. For example, the participatory initiatives as discussed earlier, served the concrete actions at the neighbourhood scale but also the sensitising for and dissemination of the Reconstruction of the European City mindset.[31] The polemical writing of Schoonbrodt and Culot can be seen in similar light. They handily used expressive terminology to criticise existing urban design strategies. For example they described the relationship between new constructions and the existing urban fabric in terms of *éventrer* (literally, "to tear out the stomach or internal parts"). In turn, they defended their own urban renovation proposals in picturesque-heroic terms: 'a beautiful city that ensures the pride of its inhabitants'.[32]

Counter-projects in particular proved to be ideal vehicles for transporting the Reconstruction of the European City ideology: both locally (in Brussels) and in a wider international context. Thanks to their format and to their involvement in architectural education and neighbourhood development, counter-projects travelled swiftly within the architectural discipline as much as amongst citizens and policy makers. Particularly important was the fact that ARAU and AAM's ideas were included in the negotiations for the Brussels *Gewestplan/Plan Secteur* of 1979.[33] This was partly thanks to the formulation of counter-projects, for this contributed to the fact that ARAU (and AAM) had gradually been taken seriously as stakeholders in Brussels urban policy making. In particular the legal recognition of citizen consultation was considered a major local triumph.[34]

But Brussels - and the counter-projects it produced - also played a key role in the consolidation of a European Urban Renaissance movement. In the Rational Architecture exhibition (London 1975), counter-projects offered this emerging, still fragmented movement an important influx of concrete cases, which allowed it to enrich and refine its research on the city. Likewise, the *La Reconstruction de la Ville Européenne* conference (Brussels 1978), and the resulting seminal manifesto *Déclaration de Bruxelles*, combined the discussion of Brussels (as a major case for 'exemplary disaster') with the discussion of citizen initiatives and counter-projects. This combination was considered instructive for a new democratic urban project.[35] The *Déclaration de Bruxelles* as such established a new 'international family of contemporary traditionalism'.[36] Also in more recent transformations within the movement, Brussels continued to play a key role.[37]

In addition, Culot offered the movement a platform for discussion within the body of AAM. Apart from exhibition catalogues and conference proceedings, the *Bulletin des AAM* (AAM's journal, published since 1975) formed a crucial, largely unchallenged discussion platform for this emerging European movement.[38]

CONCLUSION: THE COUNTER-PROJECT IN PRACTICE

Despite Brussels' central role in the formation of a European traditionalist movement, only one project can be literally labelled as a Reconstruction project: namely, the *Lakensestraat/Rue de Laeken* project (1995), the result of the 'Call for European Architects' competition organised in 1989 by the *Fondation pour l'Architecture.*[39] However, the Reconstruction of the European City ideology became established as a strong mindset in Brussels. This mindset was reinforced through counter-projects and their often-delayed influence on the projects realised on the sites for which they had been developed (e.g. *Carrefour de l'Europe/ Europakruispunt* and *Musée des Arts Modernes/Museum van Moderne Kunst, Quartier des Arts)*. In addition, this mindset was consolidated by the publication of 'manuals' that would influence significantly urban thought in Brussels.[40] Therefore, analysing the nature and effect of counter-projects helps to understand how ideologies travel through practice and how they are transformed in the course of such travels. Because inner-city neighbourhoods developed along Reconstruction lines would often prove to be fertile terrain for gentrification, counter-projects, as a methodological device of the Reconstruction of the European City movement, are instructive for understanding the challenge for architectural theory of safeguarding its *critical* project.[41] It is, thus, a methodological call for studying not the *meaning* of architecture but how architectural ideas, critiques, and ideologies are *practised*.[42] This in turn resonates with contemporary debates on the locus of architectural critique (in theory or practice).[43] I believe that, in this debate, the counter-project constitutes an instructive example.

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Albert Martens and Myriam Vanden Eede, *De Noordwijk: slopen en wonen* (Berchem: EPO, 1994).

Roland Matthu, "Tussen modernisme en traditie" in Marc lacour (ed.), *50 jaar architectuur Brussel* (Brussels: CERAA, 1989), 57-93.

Caroline Mierop and Françoise Deville (eds.), *Oproep aan de jonge Europese architecten* (Brussels: Fondation pour l'Architecture, 1995).

René Schoonbrodt, « Traditions en Architecture et en Urbanisme : leurs sens dans les luttes urbaines », in: Archives d'Architecture Moderne (eds.), *La Reconstruction de Bruxelles* (Brussels: AAM, 1982), 21-24.

René Schoonbrodt, *Vouloir et dire la ville* (Brussels: Éditions AAM, 2007).

Isabelle Stengers, "Introductory notes on an ecology of practices", *Cultural Studies Review*, 11, 1, March 2005, pp. 183-196

Mathieu Van Criekingen, "Moving in/out of Brussels' Historic Core in the Early 2000s: Migration and the Effects of Gentrification", *Urban Studies*, 46(4), April 2009, 825–48.

Anne Van Loo, *Repertorium van de architectuur in België van 1830 tot heden* (Antwerpen: Mercatorfonds, 2003).

Jean-Louis Violeau, *Les Architectes et Mai 68* (Paris: Éditions Recherches, 2005).

Endnotes

1. In Berlin, Critical Reconstruction and *Stadtreparatur* within the context of IBA 1987 (*Internationale Bauausstellung* Berlin) under Josef Paul Kleihues; in the UK, Prince Charles Foundation; connected with the US *New Urbanism* and the European *Council of European Urbanism*.

2. For example, the 1962 *Plan Tekhné* for the Brussels Pentagon suggested the demolition of 75% of the existing slum houses (Cécile Feron, "Het Nieuwe Brussel (1955-1975)", in Marc Lacour (ed.), *50 jaar architectuur Brussel* (Brussels: CERAA, 1989), 23-38: 23).

3. Mil De Kooning and Iwan Strauven, "Brussel 1945-1970: Verwachtingen en illusies", in Yves Jacqmin (ed.), *Een eeuw architectuur en stedebouw: Brussels Hoofdstedelijk Gewest* (Sprimont: Mardaga, 2000), 119-35. The Manhattan Plan was developed by *Groupe Structures* and was considered an icon of 'progressive urbanism'. After approval in 1967, it would lead to the expropriation of approximately 11,000 inhabitants (Anne Van Loo, *Repertorium van de architectuur in*

België van 1830 tot heden (Antwerpen: Mercatorfonds, 2003)*, 82*). Due to, amongst others, the economic crisis of the 1970s, the plan was realised only in part. See Nicole Brasseur, Jozef Lievens and Albert Martens, *De grote stad: een geplande chaos? De noordwijk van krot tot Manhattan* (Leuven: Davidsfonds, 1975) and Albert Martens and Myriam Vanden Eede, *De Noordwijk: slopen en wonen* (Berchem: EPO, 1994).

4. Isabelle Doucet, "Making a city with words: Understanding Brussels through its urban heroes and villains", *City, Culture and Society* (2012)(in print). *Architek* is a fierce insult in the Brussels dialect, and dates back to the 1880s. It was invented to mock Joseph Poelaert, the architect of the megalomaniac Court of Justice, for which large parts of the popular neighbourhood *Marolles* had to be demolished.

5. Called as such by the movement itself: Léon Krier and Maurice Culot, *Contreprojets – Controprogetti – Counterprojects* (Brussels: AAM, 1981), catalogue of the Belgian contribution to the Architecture Biennale in Venice.

6. Robert Delevoy, Giovanni Wieser, Maurice Culot, *Bruxelles 1900, capital de l'Art Nouveau* (Brussels: ENSAAV, 1972); Roland Matthu, "Tussen modernisme en traditie" in Marc Iacour (ed.), *50 jaar architectuur Brussel* (Brussels: CERAA, 1989), 57-93: 61.

7. Maurice Culot, "Bruxelles, la longue marche", *L'Architecture d'Aujourd'hui,* nr. 180, July-August 1975, 18-29: 19; Robert Delevoy, Maurice Culot, and Anne van Loo, *La Cambre 1928-1978* (Brussels: Éditions AAM, 1979), 426 [transl. from French].

8. Ibid., 426 (quote). Main criticism applied to the 1880s urban sanitation works and the expulsion of hundreds of *Marolliens* for the construction of Poelaert's *Palais de Justice* (Archives d'Architecture Moderne, ed., *La Reconstruction de Bruxelles* (Brussels: AAM, 1982), 8.

9. E.g. Krier's proposal for a craftsmen quarter in Brussels: Maurice Culot "The counter-projects", in: Léon Krier, Maurice Culot, *Contreprojets – Controprogetti – Counterprojects* (Brussels: AAM, 1981), no page nr.

10. Léon Krier "The reconstruction of the European city or anti-industrial resistance as a global project", in Léon Krier and Maurice Culot, *Contreprojets – Controprogetti – Counterprojects* (Brussels: AAM, 1981), no page nr.

11. Culot quoted in Krier, "The reconstruction of the European city", no page nr.

12. Drawings include craftsmen construction workers, alternative production processes such as the moulding and bringing to site of natural stone, and proposals for popular quarters. André Barey (ed.), *Déclaration de Bruxelles: propos sur la reconstruction de la ville Européenne* (Brussels: Éditions des Archives d'Architecture Moderne, 1980), 87.

13. Archives d'Architecture Moderne and Inter Environnement Bruxelles (IEB) (eds.), *Les Espaces Publics Bruxellois: analyse et projets* (Brussels: Fondation Roi Baudouin, 1981).

14. Students requested, amongst other things, a more pronounced link with the urban reality 'out there' including a more social engagement of the architect and the right to bring political actions in the school. Jean-Louis Violeau, *Les Architectes et Mai 68* (Paris: Éditions Recherches, 2005), 282-5; Jacques Aron, *La Cambre et l'architecture. Un regard sur le Bauhaus Belge* (Liège: Mardaga, 1982), 151-2.

15. Aron, *La Cambre et l'architecture*, 154.

16. The favouring of the traditionalist branch was more strongly at *La Cambre* than, for example, at the AA, where different post-modern branches were deliberately played out against one another under the directorship of Alvin Boyarski (Igor Marjanovic, "Alvin Boyarsky's Delicatessen", in Jane Rendell, Jonathan Hill, Murray Fraser and Mark Dorrian (eds.), *Critical Architecture* (Abingdon, Oxon: Routledge, 2007), 190-9.).

17. Through ministerial support, ARAU could play a decisive role in the development of the *Plan Secteur* for Brussels (Aron, *La Cambre et l'architecture*, 167).

18. Ibid., 168.

19. Culot, "L'Invité"; Maurice Culot, "L'ARAU et les architectes", in: ARAU (ed.), *Bruxelles vu par ses habitants, Quinze années d'action urbaine* (Brussels: Commission Française de la Culture et de l'Agglomération de Bruxelles and ARAU, 1984), 27-35.

20. Culot became professor of urbanism in 1974, and adjunct-director of architecture in 1977.

21. '[T]he vertical window is not only classic, but democratic' (Culot, "The counter-projects", no page nr).

22. Violeau, *Les Architectes et Mai 68*, 365 (transl. from French). The Bateau included Élie Levy, Caroline Mierop, Philippe Lefèbvre, and Anne Van Loo, and the students M. Louis, J-P. Hoa and D. Staelens.

23. Maurice Culot, "La Bateau d'Elie", *Bulletin des AAM,* nr. 1, October 1975.

24. In Brussels, some student projects were commissioned directly by Minister Guy Cudell (Delevoy, et al., *La Cambre 1928-1978*, 390-5).

25. Philippe Lefèbvre's project was published in the 1975 *L'Architecture d'Aujourd'hui* issue on 'Centres Historiques' (*L'Architecture d'Aujourd'hui,* nr. 180, July-August 1975). More details see Isabelle Doucet, *From Penser la Ville to Faire la Ville: Brussels' and Architecture's Engagement with the Real* (TU Delft, 2010), PhD Thesis.

26. D'Helft and Verliefden worked for the AAM (1978-1980) and for ARAU (1980-1985). D'Helft would work for *Inter-Environnement Bruxelles*, first as author of counter-projects (1980-82), then as *administrateur* (1982-1983). Verliefden was active at the urbanism section of the *Fondation Roi Baudouin* (1980-1983), and as *administrateur* of *Inter-Environnement Bruxelles* (1982-1985).

27. '*[D]émontrer aux yeux de tous l'ignorance des professionels'*, Maurice Culot, "L'Invité: Maurice Culot*, interview by Thierry Paquot*", 3 June 2008, *Revue Urbanisme,* nr. 361, July-August 2008, 77-86.

28. Ibid.

29. Culot, "Bruxelles, la longue marche", 19.

30. A *Boutique Urbaine* provided information, organised animated meetings and information sessions. It produced a newspaper, and organised public surveys (AAM and IEB, *Les Espaces Publics Bruxellois,* 97).

31. Most AAM/ARAU initiatives, such as the 'Urban Promenades' and 'Urban Schools' aimed to educate the public at large on an alternative urban vision.

32. *Une belle ville qui assure la fierté de ses habitants* (René Schoonbrodt, « Traditions en Architecture et en Urbanisme : leurs sens dans les luttes urbaines »*,* in: Archives d'Architecture Moderne (eds.), *La Reconstruction de Bruxelles* (Brussels: AAM, 1982), 21-24: 21.

33. The *Gewestplan/Plan Secteur* (a regional plan) would include goals related to functional mixture and the protection of the residential function. It would put several office projects and road infrastructure plans on hold and it would be more 'democratic': more transparency in decision making and citizen consultation.

34. Since 1976, each urbanism permission is subject to an obligatory public survey (*Enquête Publique/Openbaar Onderzoek*) and consultation commission (*Commission de Concertation*/*Overlegcommissie*). Support also thanks to ARAU's press attention and events such as *les écoles urbaines de Mars*, *les midis de l'urbanisme*, trips and voyages.

35. Barey, *Déclaration de Bruxelles,* 31-8. Signed by, amongst others, Culot and Delevoy, Schoonbrodt and Van der Biest, Nicolin, Grumbach, Léon Krier, Bernard Huet, Jean Castex, and Philippe Panerai.

36. Hans Ibelings, Unmodern Architecture. Contemporary traditionalism in the Netherlands (Rotterdam: Nai Publishers, 2004), 73.

37. The Declaration of Bruges was signed during a 2003 congress in Brussels and Bruges (http://www.ceunet.org/bruges.html)*,* at the occasion of the foundation of the *Council for European Urbanism,* the European variant of the American New Urbanism.

38. Especially after Huet was removed as chief editor of *L'Architecture d'Aujourd'hui*. In contrast to Huet, Culot had total freedom at the AAM, which he had himself co-founded and carefully constructed with like-minded thinkers (Conversation with Marc Dubois 26 August 2009).

39. Caroline Mierop and Françoise Deville (eds.), *Oproep aan de jonge Europese architecten* (Brussels: Fondation pour l'Architecture, 1995).

40. Three books in particular: Marie Demanet, Jean-Pierre Majot (eds.), *Handboek van de Brusselse Openbare Ruimten / Manuel des espaces publics* (Brussels: Iris, 1995); Koning Boudewijnstichting, *Vernieuwing van Openbare Ruimten in Brussel* (Brussels: Koning Boudewijnstichting, 1982); and the *Tracé Royale* project (1995)*,* also initiated by the *Fondation Roi Baudouin / Koning Boudewijnstichting*.

41. In Brussels gentrification is associated with the ideas of ARAU/AAM in the sense that it emerged first in the form of a 'soft regeneration' in what was called 'comfortable neighbourhoods' - in Brussels, also called *sablonnisation* in reference to one of the first gentrified areas namely around the *Place du Sablon*. Mathieu Van Criekingen, "Moving in/out of Brussels' Historic Core in the Early 2000s: Migration and the Effects of Gentrification", *Urban Studies*, 46(4), April 2009, 825–48; Isabelle Doucet. "Brussels: The Soft Regeneration." In *Houses in Transformation, Interventions in European Gentrification*, ed. J.J. Berg, T. Kaminer, M. Schoonderbeek, J. Zonneveld (Rotterdam: Nai, 2008), 130-143.

42. Isabelle Stengers, "Introductory notes on an ecology of practices", *Cultural Studies Review*, 11, 1, March 2005, 183-196; Isabelle Doucet, "Learning from Brussels. An irreductive approach to architectural and urban problématiques?", *Belgeo*, 2011, XII(1_2), 29-40.

43. E.g. Nishat Awan, Tatjana Schneider, and Jeremy Till, *Spatial Agency. Other Ways of Doing Architecture* (2011, Routledge); Isabelle Doucet and Kenny Cupers, "Agency in architecture: Reframing criticality in theory and practice", *Footprint Delft School of Design Journal*, 2009 (4), 1-6; Jane M. Jacobs and P. Merriman, "Editorial: Practising architectures." *Social and Cultural Geography*, 12(3), 2011, 211–222.

BUILDING THE DECORATED SHED IN EUROPE

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'The ammunition has been brought out, and the Venturis are going duck hunting, with their blind being a decorated shed.'(Gary Wolf)

In the second part of their book, *Learning from Las Vegas,* published in 1972, Robert Venturi and Denise Scott Brown take a critical look at buildings in which'systems of space, structure, and program are submerged and distorted by an overall symbolic form.'[1] The'ducks'in question are a reference to a duck-shaped shop erected by a roadside on Long Island. The Venturis are not in fact criticizing this type of vernacular construction, which, on the contrary, they rather like; what they are criticizing by extension is the modernist architecture of their time, which they see as being related to expressionism, rather than a rational relationship between form and function. In their book, the Venturis show their preference for another category of building in which'systems of space and structure are directly at the service of program, and ornament is applied independently of them.'[2] They are talking about what they call the'decorated shed,'referring to the casinos on the Las Vegas Strip that they began taking an interest in in the middle of the 1960s, and that they describe as perfectly functional boxes with giant signs erected in front of the building. These boxes are emblematic of the cheap and effective'architecture of persuasion'so dominant in suburban space.

Generally speaking, the two American architects tend to use these two archetypes to oppose the'Heroic and Original'architecture favored by the modernist establishment and the'Ugly and Ordinary'architecture of American suburbia from which they take their inspiration. The Venturis denounce the'Symbolism Unadmitted'of the modern architects, and the hypocrisy that goes with their rejection of ornaments and iconography, while defending the explicit use of signs and symbols on buildings whose function it is to communicate with the public. This differentiation between duck-shaped buildings and decorated hangars is one of the Venturis'main contributions to the debate on post-modern architecture, in which - in the words of the Spanish architect Rafael Moneo -'type is reduced to image, or better, the image *is* the type, in the belief that through images communication is achieved.'[3] But beyond the favor this classification gained in the eyes of the public, the Venturis had few opportunities to put their ideas into practice, perhaps because the'decorated shed'is essentially an'architecture without architects.'[4] They did, however, build two suburban stores using this concept, one for a group called Best in 1977 and another one for a company called Basco in 1979. Sydney Lewis, the founder of Best and a patron of the arts, commissioned SITE, a firm of American artists and architects, to build a dozen more stores, which remain the most convincing examples of the Venturis'ideas on American soil. Curiously enough, in the following years the decorated shed fared better in Europe than in America, though its raison d'être, or purpose, changed enormously.

THE RISE OF FACADISM

The conquest of the Old World began with Venice and its first Biennale of Architecture in 1980. Visitors walked up the Strada Novissima in the Arsenal, a'street'lined with fake facades literally loaded with symbolism. It was a triumph for the Venturis, who featured among the exhibitors, and the decorated shed became the archetype of postmodern architecture.

Europe continued to learn from Las Vegas in subsequent years: for example, the *villes nouvelles* or new towns that sprang up in France through the 1970s were ideal places for experimenting, the idea being to break with the mutism of the high rise housing estates and project a strong identity. At Savigny-le-Temple, Alain Sarfati produced a manifesto of postmodern architecture: the Régalles gymnasium is a metal shed that is totally conventional in structure, but literally covered in ornaments, some of which are luminous. This is strictly functional architecture, but with great symbolic force. Not far away, at Combs-la-Ville, Jean Nouvel - who at the time made no secret of his interest in the ideas of the Venturis[5] - borrowed the visual language, space and ordinary materials of the surrounding commercial architecture, and built the La Coupole cultural centre as a form of mimicry. The building has two blocks of asphalt set inside a multicolored greenhouse, with a huge sign giving the calendar of events. In Italy, where the focus was more on the question of historic types and form, Massimiliano Fuksas nonetheless borrowed something of the Venturis'irony and produced a number of decorated sheds. In front of a very ordinary gymnasium in the town of Paliano, he placed a facade with a pediment at an angle of 45 degrees, and he built the Attic of the Town Hall at Cassino to look like a film set. On a much more serious note, the English architect Quinlan Terry, who wasn't particularly familiar with the Venturis, designed some totally contemporary office buildings at Richmond upon Thames onto which he literally'stuck'neo-classical elevations that

would have been perfectly in keeping in Las Vegas. And in Brussels, the same facadism gradually became the favorite solution for renovating properties.

So while modern architects in general have freed the facade from its structural obligations, leaving themselves free to invent all manner of abstract compositions, postmodern European architects have detached it more and more from the box it decorates. They see architecture less as a question of space, structure and function than a matter of signs, images and messages addressed to a building's users and to passers by. With nostalgia or irony, these signs generally make reference to European architectural tradition, and are intended to restore a form of historic continuity to public space. Far from its original commercial purpose, the Venturian archetype plays in this way an important role in the reconstruction of the European city.

SCREENS

In the 1990s, a certain number of architects took to using the decorated shed model with even greater liberty. Like certain artists, they designed abstract boxes on which they projected texts and images. The Swiss architects Herzog and de Meuron produced a number of projects in this spirit, for an office building in Basel, a theatre in Blois and a warehouse in Mulhouse. For the warehouse project they had the leaves of a plant printed onto the polycarbonate panels of the main facade; reproduced on an infinite scale, the effect was very striking, and recalled certain of Andy Warhol's serial works, as well as the Best store done by the Venturis 15 years earlier. Still in the 1990s, Nouvel put the Cartier logo all over the curtain wall of a building he did in Freiburg for the French jeweler, while Lipsky & Rollet commissioned graphic designer Ruedi Baur to decorate the glass sunscreen of a roadside construction in Valence. Even Christian de Portzamparc, for whom ducks were no real problem, put a printed screen onto the facade of the building he renovated in Paris for the French newspaper, *Le monde*. As for Rem Koolhaas and his Centre of Art and Media Technology in Karlsruhe, he used a huge electronic display panel that shows what is going on inside the building in real time. His Kunsthal in Rotterdam, which is sometimes seen as a tribute to Mies van der Rohe, also appears to have drawn a lot of inspiration from Venturi, with its orange steel beam atop the building, its enigmatic sculpture, and - as in *Learning from Las Vegas* - a sign proclaiming 'I'm a monument'.

All these buildings are kinds of decorated sheds. This envelope architecture that dominated in Europe in the 1990s may indeed sometimes be minimalist and sophisticated, but it nonetheless draws on the most trivial of American commercial architecture for its origin. This is where it gets its efficiency and pragmatism, the priority it gives to image over space, and its autonomy with respect to its surroundings. But there are also major differences. The first quality the Venturis see in the casinos and roadside stores, which is their ability to communicate their function or identity directly to a wide public, seems to be lacking in the buildings designed by Europeans. Herzog and De Meuron state quite clearly that while they see iconography functioning like any other building material, they never use it to comment on what goes on inside the building.[6] Like other architects, they use commercial architecture for its type, but they strip it of its initial purpose. They consequently replace its advertising function by an artistic message; their library at Eberswalde with its enigmatic prints on the facade is a good example. Moreover, these European decorated sheds from the 1990s don't always use ornamentation in the autonomous fashion of the commercial roadside architecture studied by the Venturis. In many cases, facades designed as signs actually impose a constraint on the functioning of the buildings they cover. So when the American model of the decorated shed arrived in Europe, it mainly reversed the purpose of the original, demonstrating a profound process of acculturation in which the most populist approach became truly elitist.

Endnotes

1. Robert Venturi, Denise Scott Brown and Steven Izenour, *Learning from Las Vegas* (Cambridge: MIT Press, 1972), p. 64.

2. *Ibid*.

3. Rafael Moneo, 'On typology', *Oppositions* 13 (1978), 39.

4. Bernard Rudofsky, *Architecture without architects*, (New York: The Museum of Modern Art, 1964).

5. See the interview with Jean Nouvel in *L'Architecture d'Aujourd'hui*, February 1984.

6. *Cf.* 'Interview with Jacques Herzog', in *Architecture of Herzog & de Meuron* (New York: Peter Blum edition, 1995), 31.

The Way Back to an Altered Homeland: Remigration and Reemployment of Architects in Europe, 1935-1970

SESSION CHAIRS:

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Andreas Zeese (Vienna University of Technology, Austria)

Twentieth-century Europe was marked by (forced) migrations, ranging from the expulsion of minorities during World War I to the ethnic cleansing during the Yugoslav Wars. The emigration of architects has become a major research area in art history in the last decades where the focus has been laid on the dictatorships of the 1930s and 1940s particularly on Germany, Austria and the USSR due to National Socialism and Stalinism.

In contrast, the topic of remigration and reemployment of expelled or emigrated architects has rarely been examined for the period 1935-1970. Even though only a small number of the emigrated architects had managed to build up successful new careers in their exiles, the number of re-emigrants was few. While some, regarded as foreign planners, had been forced to return from the Stalinist USSR in the mid-1930s (e.g. Gustav Hassenpflug, Hannes Meyer, Mart Stam) others returned willingly to their native countries like the German-speaking architects after 1945 to the FRG (e.g. Ernst May), the GDR (e.g. Richard Paulick) or Austria (e.g. Clemens Holzmeister).

The session aims to investigate this phenomenon on a European scale; papers are invited covering remigrations during the period 1935-1970. In addition to the examples given, papers may also refer to the situation in (post-) fascist Italy and Spain, in the countries liberated from Nazi-occupation, in the socialist states of Eastern Europe after 1945 or in France and Italy after losing their colonies in the 1950s and 60s. Furthermore papers investigating the reemployment of architects who stayed in their new homelands but were again entrusted with projects in their native countries (e.g. Walter Gropius, Ludwig Mies van der Rohe) are also welcome.

Topics may include, but are not limited to the following questions: Which circumstances and premises bring/force/prevent an émigré/expatriate architect to return to or build in his native country? Which former contacts are reestablished, which strategies are pursued to build up a new career? How does the architectural work alter after remigration? Which preconditions exist in different countries for the reintegration or reemployment of architects? Do cultural policies take re-emigrants into consideration? How do their colleagues react to their return?

HETEROTOPIC HOMELANDS:
JEWISH ARCHITECTS' ATTITUDES TOWARDS PALESTINE/ISRAEL AND GERMANY

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Only a very small minority of architects, particularly Jewish architects, who fled from the totalitarian German Nazi-regime in the late-1930s and 1940s, returned to post-war Germany.[1] The break with the former homeland was too sharp; the horror about the murderous Nazi-German politics was too overwhelming. Professional circumstances were complicated too. Some architects had managed to establish a prospering architectural office in the country of exile, while former colleagues in Germany – confronted by their own racial attitude of isolating Jewish architects during the Nazi-regime – in general were hardly supportive for returning from exile. Still, some architects struggled with their traditional perceptions of homeland, their emotional nostalgia of belonging, the frustrations about their situation in exile, and their (illusionary) expectations of reconnecting to old, pre-exile times. To those, the Jewish homeland Israel turned into a hybrid place as much as Germany already was.

PALESTINE: OLD-NEW HOMELAND?

In Zionist ideology Palestine was considered the ancient homeland of the Jewish people. Therefore, migrating to Palestine was officially not perceived as a status of exile, but as a return to biblical roots and the decision to participate in (re)building the old-new homeland. In contrast to Jewish immigrants before 1933, who migrated to Palestine for Zionist or religious reasons, immigrants after Adolf Hitler's assumption of power 1933, felt exiled in Palestine. Many preferred other countries, but like England and the US they had restricted their immigration quotas.[2] Following Germany's military invasions into neighbouring countries, Jews, who had hoped to find refuge in Austria, France, and the Netherlands, continued reluctantly their migration to Palestine. Additionally, architects who accompanied their Jewish partners to Palestine could not automatically accept the country as a desired old-new homeland.

The Jewish architect and architectural historian Julius Posener left Berlin in 1933 for Paris and migrated to Palestine in 1935. In the same year he wrote his mother about his ambivalent feelings:

> Palästina ist für mich eine unausweichliche Notwendigkeit, vom egoistischen Standpunkt aus, weil ich nicht ewig der leise tretende kleine Mann sein will, der sich wegen seines Daseins entschuldigen muß und auch noch etwas mehr: Ich empfinde, außer diesem egoistischen Standpunkt, doch für alle Juden und mit allen Juden und wünsche, daß sie sich alle zusammen täten und "ja" sagten zu ihrem Volk und "nein" zu ihrem Schicksal, das immer wieder versucht, Geduckte und Geduldete aus diesem Volk zu machen. […] Das ist der ganze Umfang meiner Gefühle für Palästina. Nicht mehr. Nichts, in der Tat, von Heimatland; und noch nicht sehr viel von Heimatvolk. Keine Sehnsucht nach dortigen Traditionen meiner Urväter; eher sogar eine leichte gêne, wie vor einem Kostüm, das man mir beim Betreten dieses Landes anbieten wird, und das ich abzulehnen haben werde, nicht anders als ein französisches Kostüm.[3]

Posener described Palestine as a heterotopic place, a counter experience to the Zionist idealised homeland. His decision for Palestine was a mere necessity of survival and no feelings of biblical affiliations to the land arouse. In the contrary, Jews were confronted with ambivalent experiences in Palestine: Arab resistance against Jewish immigration increased; constructed images of the Orient as well as imagined ideals of the Jewish homeland clashed with reality while exploring new cultures and landscapes. Especially architects, who had hoped to participate in building the new Zionist nation and future Jewish state, were rapidly disappointed: Major projects were given to British mandate architects like Austin Harrison and Clifford Holliday until with the outbreak of World War II the building industry completely collapsed. An exception was the internationally renowned Jewish

Figure 1. Erich Mendelsohn, Hadassah-Hospital on Mount Scopus, Jerusalem, 1934–39. (source: Regina Stephan (ed.), *Erich Mendelsohn. Gebaute Welten* (Ostfildern-Ruit: Hatje Cantz, 1999), 269)

architect Erich Mendelsohn. He opened an office in Jerusalem in 1934. Through his influential contacts he received important commissions like the Villa for the president of the World Zionist Organisation Chaim Weizmann in Rehovot (1934–36), the villa and library of Salman Schocken in Jerusalem (1934–36), as well as the Hadassah-Medical-Centre (1934–40), plans for the Hebrew University (1934–40), the Anglo-Palestine-Bank (1936–39) all in Jerusalem, and the Government-Hospital in Haifa (1937–38).[4] Nevertheless, even Mendelsohn was disappointed: He dreamt of a Semitic union in Palestine, where man and nature, matter and spirit could amalgamate into an organic unity as he wrote in his pamphlet 'Palestine and the World of Tomorrow' in 1940: 'a Semitic commonwealth of nations […] Both Arabs and Jews unite in support of the powers of organic evolution against the powers of destructive revolution. '

His architectural perceptions (Fig. 1) of such a synthesis of Orient and Occident, of tradition and modernity stood in sharp contrast to radical modernist architects like Arieh Sharon, Josef Neufeld, Zeev Rechter, Shmuel Barkai, Shmuel Mestechkin and others.[5] They had either studied at the Bauhaus or worked in offices of leading modern architects like Le Corbusier, Hannes Meyer, and Ernst May. In Palestine they founded the architectural union "Chug" to implement radical claims of Modernism (Fig. 2). Mendelsohn accused them for ignoring regional conditions and exercising a Zionist nationalism which resembled colonialism. Mendelsohn felt isolated as he wrote his American friend and architectural historian Lewis Mumford: 'Der Maßstab des Landes ist sehr klein, und seine Bevölkerung ist in zwei Lager gespalten – politisch und geistig. Es gibt keine Möglichkeit für mich als Architekt für die idealen Werte meiner Arbeit einzutreten […]'.[6]

Figure 2. Zeev Recher, *Beith Engel*, Appartment Building, Rothschild-Boulevard, Tel Aviv, 1933. (source: Rechter private family archives, Tel Aviv)

In 1941 Mendelsohn left Palestine for the US. He knew that this was condemned as treason against the Jewish people and Zionist ideals. In a letter to Julius Posener, former assistant in his Jerusalem office, he complained about the confined mentality in Palestine 'wo ich geächtet bin wie ein Soldat, der seinen Posten verlassen hat. […] ich fürchte mich zu Tode vor den beengten Verhältnissen [in Palästina], beengt in jeder Hinsicht'.[7] Posener explained Mendelsohn's isolation in Palestine as a result of his self-assumption of being the only competent architect to develop an adequate architecture for the Zionist community, hereby ignoring design perceptions by others.[8] Even though Mendelsohn had enormous problems to establish himself in America, he never considered a remigration to Germany: 'Lieber verhungern als nach Deutschland zurück', he had already decided in 1936.[9]

GERMANY: STILL A HOMELAND?

Basically all architects were affected by the stagnation of the Palestinian building industry. Mendelsohn in 1939 advised architects not to come to Palestine: 'Business for architects in this country is very bad for the time being […] Politics makes the future of this country very insecure and I cannot advise anybody therefore to immigrate who is not forced to leave his native country'.[10] Like Mendelsohn, others tried to migrate to more promising countries: Harry Rosenthal migrated to England in 1938, Oskar Kaufmann left Palestine in 1939, received no visa for England and returned to his former hometown Budapest.[11] Non-Jewish architects like Adolf Rading, Kurt Reinsch and Josef Rings, who had followed their Jewish wives into exile in Palestine, suffered even more: Nationalistic Zionist doctrines prevented their integration into the regional architectural community.[12] In a letter to Walter Gropius, who by then lived in America, Rading characterized his situation as 'work and fight in loneliness'.[13] Like the author Arnold Zweig he criticised the growing nationalistic and anti-Arabic Jewish attitude and therefore was expelled from Jewish circles.[14] Rading rejected Zionist chauvinism. Disillusioned, he moved to London in 1950. To his architectural colleague Heinrich Lauterbach he explained that he had left Palestine like he before had fled from Germany: Leave and let go, he accused Israel of being a fascist state in which he was not able and willing to live.[15] Rading had hoped to return to Germany: 'Gott, es könnte schön sein!'.[16] But Rading failed to reconnect to his old architectural acquaintances. The competition for projects in rebuilding post-war Germany as well as the reluctance of German architects to be confronted with their formerly exiled colleagues for not having supported them shattered the hopes of reviving the international community of modern architects. Rading wrote to Walter Gropius and Ludwig Mies von der Rohe. He asked these in America very successful architects to impart contacts, but

they did not even answer his letters.[17] Only architect Richard Döcker invited Rading to return to Germany but without being able to offer him a job. Rading's answer revealed his deep frustration of not being welcome or needed in Germany: 'Ja […] Aber bis jetzt hat mich niemand gefragt. Sie sind der erste und Sie haben mir damit eine grosse Freude gemacht'.'[18]

One of the few successful remigrants was Josef Rings. He was offered a chair for town planning at the University of Mainz, and he left Palestine in1948.[19] The architect couple Judith Stolzer-Segal and Eugen Stolzer, the graphic artist Lea Grundig, the painter Beatrice Zweig and her husband Arnold Zweig left Israel for Germany. The Stolzers stayed in Munich, while the others chose to live in East-Germany – partly able to continue a career and finding a new home, others being appalled by the ruined situation of people and cities, dreaming of a return to Israel.[20]

Even Julius Posener, although Jewish and convinced of the necessity of a Jewish national state, struggled with his feelings for his two homelands – Eretz-Israel and Germany: 'Nicht das *heilige* Land, das *eigene* Land ist wichtig'.'[21] In May 1941 he joined the British Army to fight against Nazi-Germany. In April 1945 he reached Germany where he stayed until the end of 1946. As General Staff Intelligence he supervised the democratic rebuilding of West-Germany. In his letters he enthusiastically reported about his reconnection with familiar sites, habits, and cultural traditions. He felt compassions for the war-ravaged Germany, but he was terrified by the dimensions of Nazi terror, and appalled by the Germans' ignorance of guilt and their naïve understanding of compensation.[22] Neither his brothers Ludwig in Israel and Karl in Australia, nor the Israeli society accepted Posener's engagement in Germany and accused him of too easily forgetting and forgiving Nazi-crimes. Posener explained: 'Von Vergeben und Vergessen kann auch die Rede nicht sein; wohl aber von Mitleid, das mit Vergebung nichts zu tun hat. Wer mir sagt, ich möge mein Mitleid für die Meinigen aufsparen, der hat unrecht. Man kann gar nicht mehr unrecht haben'.'[23] Posener tried to defend his position and acknowledged – 'with shudders' – the roots in his former homeland Germany, of which he had no choice.[24] At that time, he described himself as 'stateless, without a native country': he considered himself as a alienated foreign soldier in his homeland: 'nicht Heimat im vollen Sinne, die mich nach all dem aufnehmen wird' '.[25] Speaking about a heterotopic homeland, he left it open whether he only meant his broken relationship to his former homeland Germany or if he was also hinting at his rising doubts about Israel being a new homeland. The increasing doctrinaire and nationalistic Zionism considered Posener's attitude towards Germany as 'treason' against his new-old homeland.[26] He was offered a job in Germany, but reluctantly refused – 'mit schwerem Herzen': In 1949 it was not considered appropriate for a former German Jew to return to Germany after the Nazi terror regime.[27] Thomas Mann explained similar ambivalent feeling in his talk in the Paulskirche in Frankfurt in 1949:

> Man zögert, die Grenzen eines Landes wieder zu überschreiten, das einem durch lange Jahre ein Alpdruck war; von dessen Fahne, wo sie sich im Auslande zeigte, man mit Grauen den Blick wandte und wo, wäre man dorthin verschleppt worden, ein elender Tod einem sicher gewesen wäre. Dergleichen wirkt nach, es ist nicht so leicht aus dem Blut zu bringen.[28]

At the end of 1947 Posener moved to London. In May 1948 Israel declared independence which was followed by the war against the neighbouring Arabic countries. His brother requested Julius Posener to return to Israel, to join the army and support his homeland's struggle for existence. But he rejected.[29]

Similarly, architect Lotte Cohn felt ambivalent about the situation in the new Israeli state:

> Ich bin keine so ganz wahre Patriotin, noch weniger ein echter Soldat. Dies unter uns – man darf es hier nicht so laut sagen. […] Ich glaube, *Sie* gerade werden mich ganz gut verstehen, wenn ich Ihnen sage, daß ich nicht zu denen gehöre, die glückselig und berauscht sich zu «Ysrael» bekennen. D.h. ich bekenne mich schon – ganz selbstverständlich bekenne ich mich – aber mit schwerem Herzen. Ich hätte es mir anders gedacht, eine Gemeinschaft oder doch Eintracht mit den Arabern und *kein* Krieg und auch *kein* Rausch für einen eigenen Staat.[30]

Despite her concerns about the Israeli development, it was 'completely inconceivable' for Lotte Cohn to return to Germany.[31] Posener, in the contrary, struggled about his feelings for a homeland. In 1961, after his time in England and Malaysia, he again had to choose between Germany and Israel, which both offered him teaching positions. After long considerations he decided for Haifa: 'Blood is thicker than water,' he explained to his architectural colleague Klaus Müller-Rehm. And, he continued, he feared of being constantly confronted by Germany's Nazi-past, when living in Berlin: ‹Es ist, scheint mir, unvermeidlich, daß das, was war, an einen herangetragen wird, daß man sich und seine Wiederanwesenheit zu erklären hat, kurz, daß man sich in einer etwas schiefen Lage befinden wird‹.[32] But being confronted with the strict immigration policiesand the Israeli prescription to teach and live prevailing Zionist doctrines, he abruptly decided to accept the chair for architectural history in Berlin. He was successful in taking up a leading position in architectural history and thereby to regain his pre-war influential position.

ISRAEL: A NEW HOMELAND

Most of the Jewish architects however remained in Israel. After the war of independence, the economic situation prospered. The building of the State of Israel offered many jobs to Israeli architects and helped integrating the Israeli society and forming

the Israeli-Jewish Nation.[33] For most of the exiled architects – not only those in Israel – the countries of exile became new homelands and memories of the old homeland faded. Thomas Mann has predicted this tendency already in 1941 while living his exile in California: 'Das Exil ist etwas ganz anderes geworden [...] Es ist kein Wartezustand, den man auf Heimkehr abstellt, sondern spielt schon auf eine Auflösung der Nation an und auf die Vereinheitlichung der Welt '.[34] Mann erroneously expected the dissolution of national affiliations, hereby ignoring the strong and patriotic feelings towards old and new homelands.

Endnotes

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16. Rading to Aenne Scharoun, 18.04.1950, cited in Göckede 2005 (see fn. 12), 422.

17. Rading to Hans Scharoun, n. d. [early in 1947], cited in Göckede 2005 (see fn. 12), 409. Gropius wrote to Lily Hildebrandt in 10.07.1946 about many letters from friends and colleagues asking for help: "mein schreibtisch ist angefüllt mit briefen meiner deutschen freunde. überall berichte von verlusten von angehörigen und besitztümer, über die müdigkeit vom kampf um das notwendigste.", cited in Reginald R. Issac, Walter *Gropius. Der Mensch und sein Werk* (Berlin: Mann, 1984), vol. 2, 931.

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22. Julius Posener, *In Deutschland 1945–1946* (Jerusalem: Edition Dr. Peter Freund, 1947).

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27. Letter of Julius Posener to the architect Klaus Müller-Rehm, 17.08.1949, in Schirren and Claus 2002 (see fn. 3), 180.

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A NEW COLLABORATION BETWEEN JOSEP LUIS SERT AND JOAN MIRÓ ON THEIR RETURN TO SPAIN: FROM THE REPUBLIC PAVILION TO JOAN MIRÓ'S STUDIO

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This paper defends the following thesis: Although Josep Lluís Sert has been recognized as the undisputed leader of the first Modern Movement in Spain, he reached his culmination as an architect whereas he got rid of the commitment made with the avant-garde architecture. The Republican connotations of his first projects, used regularly as a political manifesto in Catalonia, lead him to exile. Sert offered his best works when he returned to build in Spain in the mid-1950s. These years his architecture turned up full-grown, exempt from political engagements, and emancipated from all the formal requirements of the orthodox Modern Movement. That was the time when he developed a personal Mediterranean architecture whose principles he had never ceased to be faithful to. Furthermore, he worked with domestic programs that allowed him to focus on his most beloved topic: the integration of the major arts. Indeed, Sert found the most motivating stimulus to design in the innermost alliance that brings together architecture and art. The study for his friend, the painter Joan Miró, was a built desire.

THE MID-1930s: ARCHITECTURE AND POLITICAL PROPAGANDA

In the years before the outbreak of the Spanish Civil War, the Government of the Second Spanish Republic had been identified with a new architecture in Catalonia, which sought to represent close ideals to European models of avant-garde. In this context, Sert began his professional life. Despite his aristocratic origins, he was always a convinced progressive who defended his ideas in favour of an advanced architecture, though he never got to take radical positions.

Relying on his proximity to Le Corbusier,[1] Sert persuaded the Catalonian political leaders that Barcelona needed an urban planning that made it a pioneered as an urban laboratory: the first functional city in the world. His work was so effective that in April 1932 a significant representation of European Modern architects – Le Corbusier, Giedion, Gropius, Cornelis van Eesteren – went to Barcelona in order to prepare the IVth CIAM-Congress. Sert had won a strong respect as the founder of the Group of Catalonian Technicians for a Progressive Contemporary Architecture (GATCPAC) .[2] The association had an active space –the galleries Dalmau, which opened a day before the Republic was proclaimed –where exhibitions and conferences took place. Moreover, the Group published its own propaganda magazine: Contemporary Activity (AC) .[3] All these achievements were an insignia for a committed Government which used both Modern architecture aesthetics and Modern urbanism concepts to demonstrate its willingness to join the latest European trend. This was a way to win elections through artistic propaganda.[4] Those facts contribute on Sert's credibility to convene the CIRPAC meeting in his city. Macià as President of the Republic, Aiguader as Mayor, and Domingo as Minister of Education were the most outstanding figures on the administrative organization in the adventure for creating a new social city which, at the end of 1931, began to take shape in the hands of the architects. Sert's and Torres Clavé's political affiliation to the Catalan Socialist Union (USC) and their connections to Esquerra Republican of Catalonia (ESC) were crucial for the activity of the GATCPAC.[5]

However, Sert never assumed the ideas and the attitude of the Modern Movement in an automatic way, not even in those years of intense and close relationship with Le Corbusier in Paris. At the GATCPAC's first manifesto he pointed out the necessity of 'adapting modernity to our climatic conditions'. In fact, and probably because of Sert's influence, the magazine AC changed from a radical defense of the orthodox functional language present in the first numbers, to vindicate an architecture which paid attention to human necessities in the new society.

Sert wanted to get further away from the orthodox functionalism by publishing a lecture given at the School of Architecture of Barcelona at AC. It said: '(...) theories of Modern architecture led architects from some countries to create a "functional" architecture which, regardless of the spiritual needs of the individual, had as a result works that may not fulfill our aspirations which always go beyond material needs. (…) It does exist a "functional academicism" as dead, academic and dangerous as the academicism of this School. We have an example in the German *Siedlung*. These spiritually miserable constructions are an example, repeated often in history, of the danger of wrong interpretation theories'.[6] Sert's frontal attack on the German *Siedlungen* – an exceptional sample of the heroic period of the Central European Modern Movement architecture – seems surprising. His harsh words can only be interpreted as a vindication of the intrinsic values of Mediterranean popular architecture, a topic already

published in the AC review since the first numbers. It is true that the reference to the Mediterranean anonymous architecture had been the starting point for the renewal of the language suggested by the avant-garde. And Sert always felt nearer to this approach than to the undeniable creed of prefabrication, modulation, mass-production and mechanized industrialization – those concepts were often misunderstood by the wish to represent European ideals. Even at the 'Casa Bloc' ('Bloc House') of the GATCPAC, possibly its most Corbusian project because of its architectural and urban design, the functional models were exquisitely qualified and enriched through the treatment of the scale, the open courtyards, and the materiality of the details.[7]

The Pavilion built for the exhibition of Paris in 1937 (Fig. 1) was a real manifesto which connoted clear anti-fascist resonances. At the beginning of the war, in 1936 and after a time in Brussels, Sert went to Paris after being proposed by James Miratvilles Director of the *Commissariat of the Catalonian Generalitat Propaganda* abroad: a recognition given by the Catalan Government because of his personal effort at the development of a State Architecture, backed by the GATCPAC. The scant means and limited financial resources were not an obstacle for an excellent work, where art and architecture merge as a result of the collaboration of architects (Sert and Lacasa)[8] and artists (Pablo Picasso, Joan Miró, Alexander Calder, Julio González and Alberto Sánchez).

Despite the rationality of the model, the iron laminated structure, the glass enclosure, the ramp to the first floor, or the orthodox rationalist language, some decisions such as the open and versatile courtyard covered by a folding awning, the scale treatment, the permeability of the ground floor or the natural participation of works of art in the definition of the building spaces, allow to identify how Sert might not resign himself assuming the established modern syntax in a mechanical way. The Republic Pavilion was the last work carried out with the label of the GATCPAC. Due to this project his license to build in Spain was revoked and he went into exile to the United States: a forced abandonment from his motherland where he would never return.[9]

Figure 1. Josep Lluís Sert, Spanish Republic Pavilion (Paris, 1937). (source: VV.AA., *Josep Lluís Sert. Cicle de conferències* - Ibiza: Collegi Oficial dÀrqluitectes de les Illes Balears. Demarcació d'Eivissa i Formentera, 2007)

THE MID-1950S: ARCHITECTURE AND THE SYNTHESIS OF MAJOR ARTS

The painter Joan Miró, who had participated in the Republic Pavilion with the mural '*El payés catalán en revolución',* also exiled in 1939 for political reasons to France, where he remained ten years. When 1949 Miró decided to return to his native country, Mallorca was his choice to settle down, an island he had loved from his childhood. Five years later, he decided to build a new studio and he asked for a design from his old friend, Josep Lluís Sert. Miró Studio's proposal (Fig. 2) gave Sert the opportunity to build again in Spain after more than a decade in the United States.[10] Mallorca was the perfect place to satisfy his unrelenting desire to design Modern Mediterranean architecture and to explore some old thoughts about anonymous and vernacular models through the special use of material and light. An idea he had in his mind, as stated above, since he began to work as an architect. It does not seem casual that when Sert was commissioned with the project for Miró's new studio, he had been working for several years on a book about Antoni Gaudí, which showed him his own work from a new perspective[11]. Through Gaudí, Sert returned to recognize the values of Mediterranean architecture, something really valuable for him: Architecture, more than based on rational or technical criteria, should be built with textures, colors, light and landscape.

At the same time, to work closely with a painter introduced, as it was mentioned at the beginning of this text, a new potential in his work: Architecture, painting and sculpture could work together for an indissoluble relationship. Sert's extension of Miró's Studio became a real manifesto, but this time the trinity of politics-art-architecture was converted into a tandem because of the disappearing of the propaganda connotations. Miró's Studio at Son Abrines (Mallorca, 1954) represented a deep rift between the Republican projects from the thirties built in Barcelona and Paris, and offered a new experimental approach which anticipated the concepts he would later freely develop at the Maeght Foundation at Saint-Paul de Vence (1964, France), his greatest masterpiece.

Josep Lluís Sert had shown a special sensitivity for the Visual Arts, a passion acquired through the figure of his uncle, the painter Josep Maria Sert i Badia. He used to claim to be 'so interested in painting and sculpture such as in architecture. Architecture is the work I have dedicated my life to, but for me the Visual Arts belong to the same family'.[12] In the 1930s, he had co-founded the *Amics de l'Art Nou-Amigos del Arte Nuevo* (ADLAN, 1932-36), a group with the aim of promoting avant-garde art. That was the time

when he had begun to gestate the ideal that was shared by the most progressive Spanish intellectuals, in a search of a real synthesis between the new art and modern architecture[13]: an interest he had already had the opportunity to develop in the Republic Pavilion.

Figure 2. Josep Lluís Sert, Joan Miró's Studio (Mallorca, 1956). (source: Rafael Moneo: Apuntes sobre 21 obras - Barcelona: Gustavo Gili, 2010)

In addition, Sert had taken part on several episodes where he recorded his concern about this issue. In the manifesto "Nine points on Monumentality", drafted in 1943 together with Sigfried Giedion and Fernand Léger, they claimed the need to recover the monumental character of architecture through a lyrical encounter among city, building, mural elements, sculpture, and paintings[14]. Sert thought that art could bring the expressiveness absent in the sober language of orthodox functionalism. And the interdisciplinary work between architects and artists was the right way to achieve it. The topic was led, but tangentially, to the sixth CIAM of Bridgwater (1947), organized by himself together with Cornelis van Eesteren.[15] Even though two years later, the topic was assumed as the main one at the next Congress held in Bergamo. Speeches and questionnaires began to realize that the collaboration between architects and artists could change the mode of producing creative work itself[16]. In fact, the projects with that shared ideal with his customers – their own homes in Long Island and Cambridge and spaces for the arts designed in collaboration with artists –, were the ones when he came to be the artist he never was and his architecture grew into a masterful level. Joan Miró's Studio offered the most suitable conditions for Sert's understanding of the integration of arts. The abundant correspondence between Sert and Miró gives a close idea of the collaboration between architect and painter, now his client[17]. Both participated in the project from the beginning to the end. They formed a seamless team.

Sert and Miró knew each other since the 1930s. They had travelled together, shared conversations and interests, which settled a long and solid friendship. Sert knew Miró's work really deeply. He was able to understand how the artist wanted to observe his paintings and sculptures, what kind of light was needed to vitalize the reds, yellows or blues, what was the distance appropriated to observe correctly his murals, or what were the suitable atmosphere, textures and colors to not interfere with his creative process. In Sert's words: 'Joan Miró's world is a world of search and discovery of constants. (…) His acute eye places, as no one else can do it, different objects (of the most varied nature) in appropriate relationships, at the correct position and at the right distance one from the other. (…) This eases to relate objects constitutes an architectural quality in Miró, which makes him specially gifted to move naturally through large spaces with a special sense of scale'.[18]

Sert's initial idea was to build a large space, controlled from a longitudinal elevated corridor, that perfectly fitted Miró's needs for creation. At that moment, Miró was painting a mural for Cincinnati. Its size, 12 x 3 m, was a clue point for the studio's dimensions. A decision that amazed the painter: 'Being able to see the entire studio space and the canvases from the balcony strikes me as an excellent idea'.[19] Miró was constantly worried about the climate and how it could affect his works and his own mood[20]. Even the decisions for the interior finishes were chosen to comfort Miró's desires[21]. Miró's suggestions gave rise to a perfect rapport between one and the other. The clear spatial differentiation between the creation area and the storage space gives response to his gentle request to 'not see' another thing done while he was working[22]. The process of the Studio's design was conducted entirely by correspondence. The architect Enric Juncosa, settled in Mallorca, was in charge of the construction management.

The building fits the steep topography carved in terraces with two levels. One of them is extended to generate a *patio* for Miró's sculptures, which generously resolves the encounter of the building with the ground: the *patio* of the *masías*, convents, monasteries, palaces, present also in the anonymous architecture, is understood as a malleable element able to accommodate different scales and functions.[23] Sert uses the traditional Catalonian vaults to build the roof. This solution allows him to create a system of skylights that also resolves the ventilation of the interior space. The articulation of the different vaults defines the building volume, the façades gain plasticity and depth. They vibrate under the Mediterranean light. Sert had just made a turning point from the projects of the 1930s. The Corbusian 'wise, correct and magnificent *game* of the *volumes under* the *light*' has now become a plastic exploration: he brings closer concrete, stone, ceramic or wood, developing an expressive and meticulous studio from these materials. The skylights textured with special treatments, the slabs formed by nerves united by ceiling blocks that turn into gaps for light and ventilation, or the lattice windows that keep out direct sunlight are some of the mechanisms that allow Sert to develop such a masterful approach.[24]

Sert did not cling blindly to tradition. His references to vernacular typologies and models were neither mimetic nor proposed

a simple plastic or visual game. They were educated, plastic, sensitive, artistic.[25] He put into practice his reflections on how architecture could bring Mediterranean qualities to buildings, which should go beyond the mere commitment with rationalism language or functional demands. Thus, he developed at Miró's Studio the same solution for a ventilated ceiling as the one he built for the Republic Pavilion. However, functionality acquires new form and free expression through the essential elements of architecture – textures, materials, light or color – in Mallorca. Even the *patio*, which was already present at the Pavilion from 1937, changes in Son Abrines: it doubles (the interior work space can be considered as a second covered *patio*) and enriches. It exploits freely the relations between interior and exterior, a feature already hinted in Paris.

The Spanish architect Jaume Freixa remembers how 'Sert seems to generate the diffuse opinion that he builds museums like houses and houses like museums'.[26] Certainly, the domestic dimensions of his museums, such as the two ones built after Miro's Studio – the Maeght Foundation at Saint-Paul de Vence (1964, France) or the Miró Foundation at Barcelona (1975, Spain) –shows his natural way to integrate art into life: considering art as a part of life, he turns the museum into a personal home and each home into a unique museum.

Architecture and nature, architecture and tradition, architecture and technology, architecture and art. Sert finds his more brilliant way of expression when he works with Art and Architecture in a perfect tandem. A goal achieved after having released the duties of the Modern Movement's orthodox language and from political propaganda.

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Endnotes

1. In 1928 Sert, being still a student of architecture, went for the first time to work to Paris at Le Corbusier's office.

2. GATCPAC is the abbreviation for: *Grupo de Artistas y Técnicos Catalanes para el Progreso de la Arquitectura Contemporánea.* The Group was originally called *Grupo de Artistas y Técnicos Españoles para el Progreso de la Arquitectura Contemporánea (GATEPAC),* and it was founded in Zaragoza in 1930. There were three principal divisions: the North group, the East group, and the Central group. The East one principally supported by Catalonian architects changed the letter E, for *Españoles*, to C, for *Catalanes*.

3. AC is the abbreviation for the magazine *Actividad Contemporánea.*

4. The Governor of Barcelona acquired an immediate commitment by approving the statutes of the GATCPAC. It proves the political support received by the East group.

5. Josep María Rovira, "Josep Lluís Sert: 1929-1953", in Josep María Rovira and Jaume Freixa, *Sert: de la ciutad funcional al disseny urbá* (Barcelona: UPC, Dédal Collecció, 2006), 4–27.

6. Josep Lluís Sert, AC 8, 39, in Carlos Sambricio, "GATEPAC vs GATECPAC", *El Gatepac y la revista A.C.* (Zaragoza: Colegio Oficial de Arquitectos de Aragón, 2005), 32–3. '(…) *las teorías sobre la moderna arquitectura llevaron a los arquitectos de algunos países a la creación de una arquitectura "funcional" que, prescindiendo de las necesidades espirituales del individuo ha dado por resultado obras que no pueden satisfacer nuestras aspiraciones, que van siempre más allá de las necesidades materiales. (…) existe un "academicismo funcional" tan muerto, académico y tan peligroso como el academicismo de esta Escuela. Tenemos un ejemplo en las Siedlung alemanas. Estas construcciones espiritualmente miserables son un ejemplo más, repetido con frecuencia en la historia, del peligro de las teorías mal interpretadas.*'

7. The Casa Bloc ('Bloc House') proposed the study of a minimum housing cell duplex and the possibility of adding several ones at the same block. The idea

was the architectural result of the new political orientation of the *Comisariado de la Casa Obrera* (CCO)*,* whose executive committee members were Sert, Torres Clavé and Subirana. This technical office was responsible for solving matters related to construction.

8. Josep M. Rovira explains how Sert was the unique author of the project. Recalling the words of Lacasa: 'I was a builder of brick, Sert was an industrial builder; the pavilion should be done in four months, so it was obvious who had to create the final design'. In Rovira 2006 (see footnote 5), 17. '*Yo era un constructor de ladrillo, Sert era un constructor industrial; el pabellón tenía que montarse en cuatro meses, por tanto era obvio quién tenía que hacer el pabellón final*'.

9. Shortly after the Fascist victory at the Spanish Civil War, those responsible for the Republic Pavillion, Sert and Lacasa, were judged by civil responsibilities. They received a judgment that forbade them to return to Spain. Lacasa ended in Moscow and Sert settled in North America.

10. In 1953 Sert had been appointed Dean of the Graduate School of Design and Chairman of the Faculty of Architecture at Harvard University.

11. Josep Luis Sert and James Jonson Sweeney: *Antoni Gaudí* (Stuttgart: Gerd Hatje Verlag, 1960).

12. Josep Lluís Sert, "Josep Lluís Sert. Conversaciones entre artistas y arquitectos", in Patricia Juncosa (ed.), *Josep Lluís Sert. Conversaciones y escritos. Lugares de encuentro para las artes* (Barcelona: GG, 2011), 7. '*Estoy tan interesado en la pintura y la escultura como en la arquitectura. La arquitectura es la labor a la que he dedicado mi vida, pero para mí las artes visuales pertenecen a la misma familia*'.

13. Among the members of the ADLAN group, there were the most advanced artists of Catalonian area of the time, such as Angel Ferrant, Eudald Serra or Ramón Marinello, who regularly organized meetings, exhibitions and conferences among painters, sculptors and art critics such as Picasso, Julio González, Joan Miró and Salvador Dalí, among others.

14. 'A monument being the integration of the work of the planner, architect, painter, sculptor, and landscapist demands close collaboration between all of them'. Josep Lluís Sert, Fernand Leger, Sigfried Giedion, "Nine pontis on monumentality", in Sigfried Giedion, *Architecture you and me* (Cambridge: Harvard University Press, 1958), 49.

15. 'Do you believe that cooperation between architect, sculptor and painter is real possible, in the present stage of development? And if so what new results might be achieved from this? How in your opinion could this practical cooperation be achieved? Should the architect, painter and sculptor cooperate from the very beginning, so as to strengthen the emotional and symbolic content of architecture'. Sigfried Giedion, *A Decade of new architecture* (Nendeln, Liechtenstein : Kraus Reprint, 1979), 32.

16. "*Si une communauté créatrice entre architecte, peintre et sculpteur est possible, de quelle manière pourrait être réglé le travail commun? [...] Un travail en communauté pourra-t-il se faire avant que la mentalité prépondérante de l'individu se transforme profondément [...]*".Giedion 1958 (see footnote 15), 38.

17. Patricia Juncosa (ed.), *Miró Sert in their own words. Correspondecia 1937-1980* (Murcia: Cendeac, 2008).

18. Josep Lluís Sert, "Joan Miró. Pintura para grandes espacios (1961)", in Patricia Juncosa (ed.), *Josep Lluís Sert. Conversaciones y escritos. Lugares de encuentro para las artes* (Barcelona: GG, 2011), 35. '*El mundo de Joan Miró es un mundo de búsqueda y descubrimiento de constantes. (...) Su aguda mirada coloca, como nadie más puede hacerlo, diferentes objetos (de la más variada naturaliza) en sus relaciones adecuadas, en la posición y a la distancia correctas uno del otro. (...) Esta facilidad para relacionar constituye una cualidad, o aproximación, arquitectónica que hace que Miró esté especialmente hecho para moverse con facilidad por espacios amplios con una conciencia de su escala.*'

19. Joan Miró, "Letter to Josep Lluís Sert, 5 November 1954", in Juncosa 2008 (see footnote 17), 173.

20. 'I would suggest you to take into account the climate in Mallorca. It's hot in the summer, and the Studio has a large surface area, which is difficult to heat, particularly bearing in mind that I start working very early in the morning'. Joan Miró, "Letter to Josep Lluís Sert, 18 January 1954", in Juncosa 2008 (see footnote 17), 161.

21. 'Because of the large size of this surface, as well as the way I work, moving back and forth all the time, even on smaller-scale pieces, we probably should consider that if we cover the surface with tiles from *La Bisbla*, which are magnificent, we ought to install very efficient insulation underneath, or we would risk having cold feet, which is very unpleasant'. Joan Miró, "Letter to Josep Lluís Sert, 3 February 1955", in Juncosa 2008 (see footnote 17), 179.

22. 'Looking at the drawings, it wasn't entirely clear to me whether you can see inside the storeroom when you walk by. If so, and considering there will be paintings that I've set aside and would rather not look at for some time, and that there will also be unassembled stretchers and other materials in there, don't you think it would be better to place this space in such a way that I don't see the inside when I walk down to work, and focus my vision more on the large studio space?'. Joan Miró, "Letter to Josep Lluís Sert, 5 November 1954", in Juncosa 2008 (see footnote 17), 173.

23. Sert's ideas about the *patio*, can be found in: Xavier Costa, and Guido Hartray (eds.), "The Rebirth of the Patio", in Kund Bastlund *José Luis Sert* (Zurich: Artemis, 1967), 134-35.

24. Sert's turning point took place in parallel to Le Corbusier, but he demonstrated more interest to explore the possibilities of the technique and the standardized elements than the Swiss master.

25. About Sert's way of working see Mario Correa: "Josep Luís Sert en América"; in VV.AA., *Josep Lluís Sert. Cicle de conferències* (Ibiza: Collegi Oficial dÀrqluitectes de les Illes Balears. Demarcació d'Eivissa i Formentera, 2007), 38–57.

26. Jaume Freixa, "El museo habitable"; in VV.AA. 2007 (see footnote 25), 11.

Holidays after the Fall: History and Transformation of Socialist Holiday Resorts

SESSION CHAIRS:

Michael Zinganel (Bauhaus Foundation Dessau, Germany)

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The focus of this panel is the planning history of holiday resorts in Socialist countries and their physical and economic transformations after the fall of the Iron Curtain. After World War II, mass tourism started to be perceived as a driving force for the economic development of landscapes that had been marginalized before not only in Western but also in Eastern Europe. Segregation of urban space into zones for production and reproduction was expanded to a much larger scale: in Socialist countries too, spaces of leisure were planned and built at the peripheries of cities, on the mountains and at seashores, e.g. at the shores of the Bulgarian, Rumanian and then-USSR Black Sea or at the shores of the Mediterranean Sea of the then-non-aligned Yugoslavia. Socialist countries, however, needed more serious ideological argumentation than their Western counterparts before starting their effort: therefore they first introduced a so-called "social tourism", subsidized holidays in cheap and therefore simple accommodations, built and run by workers' unions, youth organisations, the army, and big companies for their own employees. Although first facilities were already developed in the 1930s in fascist Italy (Dopolavoro) and Germany (Kraft durch Freude), during the Popular Front government in France, in Great Britain (Billy Butlin's Holiday Camps), in Sweden and in communist USSR, their success was limited due to the overall economic crisis and the beginning war. The most important preconditions for mass tourism, growth of economy and paid holidays for workers were only realized after World War II. The liberation after Stalin's death enabled several Socialist countries to heavily invest in the design and construction of tourist resorts – and many of those were opened to foreign tourists as well.

Papers therefore should emphasize the planning history of Socialist holiday resorts on all scales, from traffic infrastructure (hubs, harbours, stations, airports), to spatial, urban and landscape design, to building typologies and interiors. Papers might also deal with the ideological arguments and the shift from collective experience to individual hedonistic encounters. Papers may also emphasize the process of post-Socialist transformation of their physical status (abandonment, restoration, refurbishment, or rebuilding) and their economic status (private, semi-private, public) including problems such as restitution of land expropriated during communist revolutions, unclear building regulations and corruption, as well as their adaption to the demands of a much more differentiated tourism and a very powerful real estate market.

HUNGARIAN SEA PROMISES A RICH SUMMER COLLECTIVE GOOD AND ECONOMIC INTEREST IN SOCIALIST LEISURE ARCHITECTURE

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COLLECTIVE GOOD

The workers' right to leisure and recreation was one of the principles of socialist ideology; however during the years of communist dictatorship (1949-1954) when even free time was supervised, its determining form was an organized holiday. A radical change started after the failed revolution of 1956, when the old-new socialist government had to stabilize its power, aim to raise living standards, give people more privacy and at the same time open up towards the West.[1] The formerly forgotten word 'tourism' was re-introduced into the official vocabulary.[2]

The main target of tourism development was Lake Balaton, which was already popular with the wider public during the first part of the twentieth century. After World War II a period of decay started: the private hotels and villas were socialised, and the area was soon characterised by a lack of maintenance and occasional unregulated developments. In March 1957 the Managing Committee of Lake Balaton (BIB) – abandoned in 1949 – was re-established under the supervision of the National Tourism Board, which provided a direct access to central funding.[3] The BIB's responsibility covered everything concerning the development around the lake: from managing infrastructural, building and landscaping plans and their financial background, through legislation and up to surveying the attendance data of resort places. The BIB involved professionals and professional associations from all the attached fields, among them the Association of Hungarian Architects. To manage the project a chief architect was appointed for the Balaton Construction Management, the office of which belonged to the Ministry of Building Affairs.[4] Finance, organisation and professional knowledge was concentrated in one place and the government and the Socialist Workers Party therefore expected quick results.

The work began on the largest regional scale plan and was based on several surveys, though all were made rather quickly and realised from a limited budget. By the end of 1957 the regional plan of Lake Balaton was completed. It grouped the settlements by their intended character, which had to define their development. The first group intended to serve mass tourism such as weekend visitors; the second was intended to serve excursionists, while the third was devoted to international tourism. 'In case of these settlements the primary concern is not to supply the demands of masses, but to make them attractive for international tourism' – defined the planners.[5] However from the 20 investigated settlements only four were listed into the third group (*Balatonföldvár, Balatonfüred, Hévíz* and *Keszthely*) all well-known resorts from the pre-war period. The architects focused on mass tourism as the main task for the upcoming years.

> We intend to concentrate the available financial forces on certain points, primarily on the supply of weekend visitors, providing them with large and well-equipped beaches, catering facilities, shelters and with camping places. We intend to solve mass accommodation for the increasing number of tourists by different quality campsites and motels. In the centres of the main resorts we intend to meet functional and aesthetic demands. We plan to design our buildings with contemporary lightweight constructions in accordance with their temporary and leisure nature.[6]

The realised architectural developments followed the objectives set out above: investments concentrated on beach facilities serving weekend tourism. Architects developed a construction system – simple shelters – adaptable to many different uses, such as buffet, dressing room, store, camp central building etc. The supporting structure consisted of reinforced concrete pillars and beams, which were pre-fabricated in a workshop during the winter. The basic elements of the structure were one type of simple pillar and one type of beam, which could be duplicated in various ways. The outer walls were made of ashlars, and for the partitions, brick or wooden panels were used. The majority of buildings were left open under the roof to allow for free movement of air. The combination of prefabrication and on-site manual work made completion of the facilities possible with only the need of a truck-crane and therefore did not require specialists, but local masters. The effectiveness of the system is highlighted by the fact that the designer reported on 28 such buildings, all of which had been completed by 1959.[7] (Fig. 1)

The same construction system was also used for restaurants, most of which were settled near to the new resort centres. In the core of these centres there were four motels purchased from the Motel Expo blocks which were in used during the 1958 Brussels World Fair.[8] The motels were made of dismountable wooden elements but without running water inside: one lavatory block

served the 168 double rooms unit. Campsites were also added to the centres which – in some cases – were equipped only with outdoor fireplace.[9] The first two-storey motel, which offered 20 rooms with bathrooms, was completed in 1960, while the next three-storey building with 60 rooms was opened in 1961.[10] Both were designed for seasonal use only and neither of them had their own restaurant as they were located near to the resort centres.

To sum up, facilities built within the three-year program of the Balaton Construction Management, served mainly for home tourism: excursionists, weekend visitors and some holiday makers. The architectural idea of domestic tourism was backed with many voluntary workers. The involvement of the Association of Hungarian Architects in the Balaton project was not formal. The Association formed its own Balaton Team, and announced for its members to be patrons of a settlement.[11] The architects worked as free advisers in the building permission process, they helped local builders improving the designs and prepared plans for the settlements.[12] University students were also involved: they worked out plans and building designs as course tasks.[13]

The new development plans were received with celebration by daily newspapers, which submitted a monthly report on the latest events. During 1957 and 1958 the articles reported mostly on preparations, but with few facts, although the texts expressed optimism. 'Hungarian Sea promises a rich summer' – was the headline of an article

Figure 1. Lavatory block at *Balatonföldvár* camp site. (source: *Magyar Építőipar*, 9 (1959) 450)

reporting the plans of the BIB.[14] A journalist even dreamed about an emerging Hungarian Riviera.

> What may Lake Balaton develop into? It can become the resort and healing place for the whole Hungarian workers society, it can become – as it was earlier called – 'the playground of the nation'. It can be the Hungarian Riviera; it can be a world beach, as it is large and attractive enough to accommodate Hungarians having their rest here and the army of foreigners as well. In consequence it can be a gold mine, even a 'hard currency factory' for the national economy.[15]

International tourism, as an aspect of the Balaton development, occurred in most of the reports, but always in parallel to domestic tourism. At the end of the season of 1957, when tourism has not lived up the expectations, a journalist reported on the initiatives launched by the BIB on how to raise interest. Among other ideas they proposed quiz and fishing games, but all the listed programs fit typically for home tourists.[16] In these years even tourism professionals included both home and international tourism when concerned with accommodation and services. The periodical, *Vendéglátás* (Catering) reported regularly on the development around Balaton, with the recurrent theme of motels. Tourism professionals were satisfied with the four existing motels so that they planned to build more of them, although on a raised standard.[17] An article in the summer of 1960 reported about the happy workers. '*Balatonföldvár* used to be the most exclusive resort settlement, favourite place for the Hungarian magnates families. Today workers' happy and satisfied voices and laughter is pushing up the silence of the sycamore avenue along the beach.'[18]

New and renovated buildings, increasing number of facilities and entertaining opportunities for both international and home tourists – the picture perfectly expressed the intentions concerning the lake, fixed on the three yearly national economic development plan for 1958-1960.

> In order for the further development of recreation the state of buildings and equipment of holiday resorts as well as the general supply should be improved. The recreation facilities of Balaton – as far as possible – should be developed for the better supply of workers, and for the expected international tourism demand.[19]

ECONOMIC INTEREST

Although economic considerations were an integral part of tourism politics from the beginning, they became relevant only by the turn of the decade. The changes in preferences are apparent when comparing the differences between the 1958th annual Act with the next Act on the five years national economic development plan for 1961-1965.

> In order to better meet the needs of international tourism and home demands, hotel capacity should be increased with 1450 rooms, primarily by the extension and improvement of the already existing hotels, especially in Budapest and along Balaton.[20]

As we see it the text focuses on hotels, mentions international tourism before home demands and there is not a word about recreation. Two recent trends explain this shift in policy. The first reason is that the slow rise in tourism was followed by an exponential growth. According to the border statistics the number of foreign visitors between 1957 and 1960 more than tripled, within which the rate of western visitors also increased.[21] Numbers of foreigners markedly increased at Balaton.[22] As a consequence a radical rise in accommodation capacity became urgent. While the equipment offered by the campsites, motels and private rooms for rent were acceptable for home tourists and guests from the socialist countries, most visitors from the western world expected international-class hotel service. The other main reason for shift in tourism policy was that the government needed all kinds of income but mostly that of hard currency, because the hard currency trade balance had deteriorated.[23] Raising the number of western visitors seemed to be an attractive solution for regaining the financial balance.

Political will had an impact on building activity at Balaton too, though – as usual – in architecture the effects appeared in a delayed manner. New shopping bazaars, harbour stations, confectionaries and restaurants were built, most of them on high architectural level, as the commissions went to selected designers chosen by the Balaton Construction Management, but as the amount of buildings increased more and more architects and offices were involved and comprehensive monitoring was lost. One of the chief engineers left the job in 1960,[24] and the architect who was responsible for the Balaton project in the Ministry of Building Affairs retired in 1962.[25]

For home tourism and for foreign guests with low budgets new campsites were opened[26], but for visitors with high demands and (with hard currency) high quality hotels were planned. In 1962 the first six storey hotel building was inaugurated at the beach – ironically after the demolition of a pre-fabricated shelter three years after its construction. Copies soon followed, and by 1964 another four were built – functionally and in form rather schematic – reinforced concrete blocks completed in *Siófok* and in *Tihany*. The chief architect of the lake kept his position but his 1963 report on the development already reflected changes in the general concept. He still referred to the three main types of settlements as before (mass tourism, international tourism, excursionists) but also set out the new password for the development.

> Until the last year we prepared mainly the sites for structural engineering, and the majority of our work was done on the field of civil engineering. During this period the password of development was "build up the base facilities". In 1962 we added a new password "demand for hotels and large recreation buildings" in form of concentrated developments.[27]

It can be seen that the two functions – hotels and recreation buildings – are both mentioned but in the next paragraph the author recognises that in the field of large recreation projects nothing had happened. In addition, the next part the report gives a detailed description of scale, function and construction of large hotels. The Balaton Construction Management did not oppose high or even tall buildings around the lake; it only warned that the touristic capacity of the lake was limited. The concept of high hotels was not against the profession either: international tourism was a favourite theme for architectural diploma designs, too.[28] (Fig. 2)

The shift in tourism policy needed some explanation – even if the most public forums still talked about tourism in general. The first comprehensive book on tourism came out in Hungary in 1961. The aim of the book was to give a professional overview, but the authors addressed also political, cultural and economic importance of tourism in a chapter under the title 'Social importance of tourism'. Though the authors addressed international and home tourism throughout the book, when they addressed the political aspect, the preferences of international tourism became evident.

Figure 2. Hotels along the *Siófok* beach. (source: Szendrői Jenő et al., *Magyar Építészet 1945-1975* (Budapest: Corvina Kiadó, 1972), 132)

> We believe that for the socialist countries in respect of international tourism the primary aim is the development of peaceful coexistence and friendly approach, while for home tourism the primary aim is the all-round support of the workers holiday by the state social politics as much as possible. Development of international tourism and the realisation of the essential investments would be necessary

even if they would not be profitable for the socialist government, even if they would not be able to offer an advantageous form for gaining hard currency.[29]

The tourism sector adapted quickly to the new trend and expressed a preference of hotels to motels[30], based on economic rather than political considerations. 'Anyway, from the economic point of view we develop international tourism to gain the greater revenue, hard currency. We have to keep in mind this when increasing the number and quality of entertaining facilities.' – came the conclusion of a specialist in 1963.[31]

Newspapers continued to report on the new developments around the lake with pride, but some dissatisfying comments also occurred. Though they more or less had the opportunity to spend their holiday in state or corporate resorts, home residents preferred private summer cottages. The silent deal between the population and the government (the state offered more and more building plots for private builders in return that the cottage owners did not require other kinds of accommodation) soon led to the need for general facilities around the lake. The reason for such emerging problems was partly that the infrastructure and service development lagged behind the growing demand. Pride appeared parallel to the complaints. For example in July 1962 the newly opened six storey hotel in *Siófok* was presented as 'remarkable and wonderful', while a few pages later in the same issue a journalist reported on the bad condition of the shore, on deteriorating water quality and he wrote extensively about the tasteless summer cottages. [32] During the next few years, the low architectural quality of weekend houses and the plan-less extension of built-in areas became a recurrent theme in newspapers.

The insufficient infrastructure and service became a common problem for holiday-makers, but neither the incorporation of more and more natural areas, nor the aesthetics of summer cottages really touched them. The latter two remained for architects, some journalists and other intellectuals to complain about. The original regional plan for Balaton didn't exclude private cottages, but the architects intended to keep an eye on them, to limit their number and restrict their location. Although the first publication on summer cottage designs recommended for the Balaton area came out in 1962, and was followed by more publications, architects never gave up on their ideas about group-settled building.[33] And really: where else if not in a socialist country based on central planning should the development of a region follow a central idea – serving the common good?

CODA

Recalling the story of the Balaton project, the chief architect divided the development into three phases and named the first between 1957 and 1967 as 'the period of flourishing'.[34] He was cheated in memory: as proved by a shift in the political concept in 1960, and was soon followed in architectural practice. The BIB never had an adequate budget to realise the development plan in its complexity. With the growing political preferences for international tourism, the majority of investments went to the international segment. Journals and newspapers also reflected this change: the initial dreams about Balaton as the Hungarian Riviera – parallel with the permanent reports on planned and finished developments all expressing the strength of the regime – slowly turning to the listing of the infrastructural weaknesses and aesthetic mess.

The architects' enthusiasm for the project, which they thought to keep under professional supervision also decayed. The volunteer architectural patronage couldn't work forever. When in March 1960 the Association of Hungarian Architects discussed the report of the BIB on recent work, they suggested by issue of a decree that only those architects, who officially had a high design qualification, had the right to design around Balaton.[35] In 1964 the architectural journal *Baumeister* devoted an issue to Hungarian architecture and published several projects from the first phase of Balaton development. The reviewer warned: the architecture around the lake is going to lose its local character.[36] The Balaton regional plan won The Sir Patrick Abercrombie Prize of the International Union of Architects (UIA) in 1965 – while the ideals of socialist holiday and tourism proposed by architects were fading year by year.

Endnotes

1. The first steps towards detente were already done earlier, but were activated only after the revolution. The National Tourism Board [*Országos Idegenforgalmi Tanács*] was founded in 1955. On Hungarian tourism policies of this period see: Rehák Géza, "Magyarország idegenforgalmi politikája," *Századok* 143 (2009), 201-230.

2. Tourism is the official translation of the Hungarian word *idegenforgalom*, which – though sometimes used as including both home and international tourism – literally refers to international tourism, just like in everyday interpretation.

3. "Megkezdi munkáját a balatoni intéző bizottság: Az Országos Idegenforgalmi Tanács Ülése," [The Managing Committee of the Balaton commences its work. Session of the National Tourism Board] *Népszabadság*, March 5. 1957, 9.

4. The chief architect was Farkas Tibor. He got this job after he had led the task force for the reconstruction of the flood damage in southern Hungary in 1956 with success. He shared the job with two chief-engineers both were selected from his former staff. Polónyi Károly was responsible for the south shore, Bérczes István for the north.

5. Bérczes I. Farkas T. et al., "Beszámoló a Balatonfejlesztés egyéves munkájáról. Regionális tervvázlat," [Report on the first year development on Balaton.

Regional plan draft] *Magyar Építőművészet* 4-5 (1958), 145.

6. Bérczes I. Farkas T. et al., "Beszámoló a Balatonfejlesztés egyéves munkájáról: Regionális tervvázlat," [Report on the first year development on Balaton: Regional plan draft] *Magyar Építőművészet* 4-5 (1958), 140.

7. Charles Polonyi, "Seasonal Buildings, Lake Balaton," in Osklar Newman (ed.), *CIAM'59 in Otterlo: Arbeitsgruppe für die Geastaltung soziologischer und visueller Zusammenhänge* (Stuttgart: Karl Krämer Verlag, 1961), 42-47.

8. Réder György, "Motelek a Balatonon," [Motels at Balaton] *Vendéglátás* 1 (1959), 21. The new motels were settled at Balatonföldvár, Keszthely, Siófok and Tihany.

9. Szauer Richárd, *Camping Magyarországon* [Camp Sites in Hungary] (Budapest: Sport, 1964), 17.

10. "Nyári szálloda Tihany-révnél," [Seasonal Hotel at the Tihany Ferry] *Magyar Építőművészet* 1 (1961) 42-43. Architect: Polónyi Károly. „60 szobás szálloda, Siófok," [60 Rooms Hotel in Siófok] *Magyar Építőművészet* 2 (1962) 9-11. and "Siófoki motel szálló," [Motel at Siófok] *Magyar Építőipar* 1 (1962), 24. Architect: Földesi Lajos.

11. Presidency minutes of the Association of Hungarian Architects, April 16, 1957.

12. A newspaper article mentions the architects 6 months voluntary work. "Termékeny vita a Balaton jövőjéről," [Fruitful Discussion on the Future of Balaton] *Magyar Nemzet*, December 10 (1957), 5.

13. Bérczes I. Farkas T et al., "Beszámoló a Balatonfejlesztés egyéves munkájáról. Regionális tervvázlat," [Report on the first year development on Balaton. Regional plan draft] *Magyar Építőművészet* 4-5 (1958), 164.

14. "Gazdag nyarat ígér a magyar tenger," [Hungarian Sea Promises a Rich Summer] *Magyar Nemzet*, March 12 (1958), 3.

15. Sebestyén Tibor, "Lesz-e világfürdő, magyar Riviéra, valutagyár, aranybánya a Balatonból?" [Will Balaton Become a World Spa, a Hungarian Riviera, a Currency Factory, a Gold Mine?] *Népszabadság,* March 23, (1957), 5.

16. "Álhalászat, rejtvénytúra a Balaton jövő évi programjában," [Pseudo-fishing, quiz-hiking: programs for the next season at Balaton] *Esti Hírlap* 24 (1957) 3.

17. "Szállodáink helyzetéről," [On our Hotels] *Vendéglátás* 1 (1960), 4-5.

18. "Vendéglátás Balatonföldváron," [Catering at Balatonföldvár] *Vendéglátás* 7 (1960), 12-13.

19. 1958th annual II. Act on the 1958-1960 three years national economic development plan' policy, 32. §.

20. 1961th annual II. Act on the Hungarian Workers Republic's second five years national economic development plan for the period between 1. January 1961 and 31. December 1965. 79. §.

21. The number of foreign visitors – based on border statistics – had an 3,2 fold increase between 1957 and 1960, within which the rate of western visitors raised from 17,5% to 21,7%. Markos Béla and Kolacsek András, *Idegenforgalom* [Tourism] (Budapest: Közgazdasági és Jogi Könyvkiadó, 1961), 277.

22. According to the tourism statistics while 50% of the hotel and motel guests came from abroad in 1960, their rate was 65% in 1961. "Közgazdasági visszaemlékezés a balatoni szezonra," [Economic Flashback on the Season at Balaton] *Vendéglátás* 11 (1961), 5.

23. In 1961 import was 26 percent higher than the export in hard currency. Pető Iván and Szakács Sándor, *A hazai gazdaság négy évtizedének története 1945-1985* [History of four decades of Hungarian Economy 1945-1985] (Budapest: Közgazdasági és Jogi Könyvkiadó, 1985), 656.

24. Charles K. Polonyi, *An Architect-Planner on the Peripheries* (s.l.: P&C, 1992), 30.

25. Simon Mariann, "Kisléghi Nagy István," *Magyar Építőművészet* 4-5 (1987), 70.

26. In 1964 there were already 26 camp sites around the lake. Szauer Richárd, *Camping Magyarországon* [Camp Sites in Hungary] (Budapest: Sport, 1964), 18.

27. Farkas Tibor, "Beszámoló a Balaton-fejlesztés hatéves munkájáról," [Report on the six years of Balaton-development] *Magyar Építőművészet* 5 (1963), 17.

28. Gárdonyi Jenő, "Toronyszálloda, új üdülőtelep, sportpálya," [High-rise hotel, new resort place, sports field] Magyar *Nemzet*, July 18, 1962, 3. and TE, "Milyen legyen a korszerű szálloda? Diplomatervek az Építési és Közlekedési Műszaki Egyetemen," [How should look like contemporary hotel? Diploma designs at the Technical University of Construction and Transportation] *Magyar Nemzet*, January 25, 1963, 5.

29. Markos Béla and Kolacsek András, *Idegenforgalom* [Tourism] (Budapest: Közgazdasági és Jogi Könyvkiadó, 1961), 314.

30. Last year *Siófok*, now *Tihany* made a big step forward with new hotels, and *Siófok* gets in the line next year again. All this changes our concepts and way of thinking, too. The phrase motel-town for example becomes thing of past, it mutates.' "A vendég egy napja Tihanyban és Siófokon," [A day of the guest in *Siófok* and in *Tihany*] *Vendéglátás* 9 (1963), 3.

31. "A vendég egy napja Tihanyban és Siófokon," [A day of the guest in *Siófok* and in *Tihany*] *Vendéglátás* 9 (1963), 4.

32. Antalffy Gyula, "Balatoni árnyképek," [Shadows at Balaton]. *Magyar Nemzet,* July 1, 1962, 7.

33. Hofer Miklós, "Tájvédelem az építész szemével," [Landscape protection from architect's point] in Tóth Kálmán (ed.), Balaton monográfia [Balaton monograph] (Budapest: Panoráma, 1974), 331-336.

34. Farkas Tibor, "Ahogy én látom a Balaton-ügy harminc évét," [As I see Balaton project's thirty years] *Magyar Építőművészet* 2 (1988), 44-47.

35. Presidency minutes of the Association of Hungarian Architects, March 15, 1960

36. 'Heute ist auch am Plattensee der mitteleuropäische Hoteltyp vorherrschend: 6 bis 8 Geschosse in klarer Rasteraufteilung, nüchtern, wirtschaftlich, bequem. Manchmal bedauert man die Anonymität solcher Bauten. Da sie aber so auswechselbar und keinen Ort gebunden sind, hat man den gleichen Typ bereits mehrmals, wenn auch an verschiedenen Plätzen, gebaut.' Paulhans Peters, "Über Architektur und Architekten in Ungarn," *Baumeister* February (1964), 104.

NORDIC SOCHI AT THE BALTIC SEA
COMPANY HOLIDAY HOMES CREATING DIFFERENCES IN SOVIET ESTONIA

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It has become common knowledge among historians studying modern society, that leisure and spending one's free time was as equally important and a highly regulated sphere of life in the Soviet Union and Eastern bloc countries as were working hours. Likewise, leisure, or the personal time spent after professional duties, has offered a rich variety of material for researchers engaged with exploring the peculiarities and controversies of the communist regimes, [1]especially in the period that has come to be known as late socialism.[2] It was then, that complex institutional and regulative apparatus took shape. The Bloc underwent consumerism, the ruling elite secured its position, tactics and patterns, and further complex administrative structures were devised and appropriating the regime in cultural practices(including personal and sub-cultural behaviour), were developed. This model is clearly visible in the field of leisure. A detailed typology of holiday and leisure institutions and natural territories and architectural spaces corresponding to that typology (some reserved for limited and privileged use only) existed. Simultaneously, holidays as a theme, had taken root in the contemporary mythology of the period, being associated with stepping outside of the ordinary and the routine, or being able to experience something extraordinary, such as imagining Estonia and other Baltic republics as 'inner abroad', or 'Soviet West' being one of the popular myths.[3]

The article studies how company holiday homes built in Estonia during the 1970s, representing institutionalized and partly-privileged leisure practices, functioned at same time as sites for architectural avant-garde realising their programme of society and space organized according to principles of democracy and diversity. I would like to consider 'difference', instead of equality, normality and uniformity, as one of the key terms for analyzing Soviet holiday culture and spatial practices, coincidently incorporating ideology critique and explaining cultural production. 'Difference' is not to be understood here solely as a quality that was characteristic to, or in the reach of the ruling *nomenklatura*, realized on the expense of the rest of the society, but as a phenomenon that marks a diverse range of practices, including those not executed from the position of authorities. As Györgi Peteri has shown, a general drive for Sovietized difference or 'exceptionalism' existed on an authoritative or systemic level, and that at some point was permitted as the new consumerist Socialism was involved in reworking the Western traits of life and into a kind of modernity suitable for socialist ideology.[4] In general, this strive for 'exceptionalist' ideology contributes to the general understanding that the cultural and social practices of former Eastern Bloc are 'ingrained with diverse, changing, and sometimes conflicting meanings.'[5] Although the limits of the article permit just a brief analysis of the case, I believe, the concept of 'difference' provides the potential for taking a step forward from seeing the late socialist architectural practices, not merely as a supplement to the investigation of the peculiarities of the Soviet society, but towards contextualizing them in the wider field of Western late-modernist cultural production.

The following analysis is based on three examples - a *nomenklatura* holiday complex for Estonian Council of Ministers*,* a rest-home for employees of a local enterprise producing rubber and plastic toys, and a holiday home of state importance built for cosmonauts and the employees of spacecraft technology research institute near Moscow. All are located on the south-western coast of Estonia, with has a high concentration of rest homes, sanatoriums, hotels and various other types of leisure areas, the majority of which were built during the Soviet period in Estonia.

COLLECTIVE LEISURE BY THE SEASIDE

In 1920, Herbert George Wells visited Soviet Russia for the second time where he met and interviewed Lenin. Following a visit to the 'Home of Rest for Workmen' a Neo-Classicist mansion designed by Ivan Fomin, a few years before the Revolution and built for Count Polovtsov on the Kamenni Ostrof, the former Russian upper-class area, he wrote an article for the readers of *Sunday Express:*

> To this place workers are sent to live a life of refined ease for two or three weeks. It is a very beautiful country house with fine gardens, an orangery, and subordinate buildings. The meals are served on white cloths with flowers upon the table and so forth. And the worker has to live up to these elegant surroundings. It is part of his education. If in a forgetful moment he clears his throat in the good old resonant peasant manner and spits upon the floor, an attendant, I was told, chalks a circle about his defilement and obliges him to clean

the offended parquetry. /.../ I find it difficult to hold the scales of justice upon many of these efforts of Bolshevism. Here are these creative and educational things going on, varying between the admirable and the ridiculous, islands at least of cleanly work and, I think, of hope, amidst the vast spectacle of grisly want and wide decay. Who can weigh the power and the possibility of their thrust against the huge gravitation of this sinking system?[6]

Wells' dual impressions that oscillate between admiration and estranging experience of the sight, are rather illustrative of the situation that was brought along with proletarianism. Here former upper-class villas and residences were adjusted for the use of first worker's rest homes in Soviet Union, while the users themselves did not yet possess the skills of a cultural and soothing rest despite it being everybody's legal right, as propagated widely in different media. Similarly, the first trade union holiday homes and sanatoriums opened in Estonia in late 1940s, following the annexation by Soviet Union during World War II. They took over former sanatoriums, villas and summer houses built in the 1920s and 1930s.

Leisure or 'rest', as used in official rhetoric, stood for therapeutic activity,[7] the purpose of which was to gain full recovery from burdensome work and to restore one's productive strength. Thus, holidays in a sanatorium were the most widely desired form of leisure and therefore in constant deficit. Pärnu, a south-western coastal town became the most popular resort destination in Estonia and was known almost as well as the Black Sea resorts among Soviet citizens from Russia, Ukraine and other republics. It was especially favoured by the intellectuals from Moscow and Leningrad (university staff, scientists, doctors, teachers, artists) and in early 1960s, a large proportion of sanatorium vouchers for a holiday in Pärnu were distributed outside Estonia.[8] The high concentration and over-abundance of holidaymakers soon proved that, the resting needs of the citizens could not be met solely by the Trade Union Confederation. Building companies were established and institutional holiday homes were initiated, and were accompanied by a general trend of leisure growing into vastly discussed theme in public discourse.[9] One of the reasons for this was the introduction of the five-day working week in the Soviet Union in the 1960s, instead of six days. The 'shift towards leisure' can be detected even in the urban context and residential architecture, for example, many cooperative modernist apartment houses in central Tallinn, that were built according to individual design, had rooms in the basement for different hobbies like a darkroom for developing pictures and rooms for playing table-tennis, sauna etc.

As the whole coastline of Pärnu county was labelled of state importance, several zoning and detailed plans, and their corrections, were made during the 1960s and 1970s. These laid out the course for further developments – not only was the detailed list of building typology created (from fishing and hunting cabins to pioneer camps and company holiday homes with up to 400-500 places), but also propositions for architectural and volumetric planning.[10] In parallel, leisure and architecture, and its social, economic and spatial factors became a topical question in scientific research.[11] During the 1970s and 1980s numerous holiday homes for collective farm construction and design offices, industries and cultural institutions, ministries and local councils and governments were built along western and northern coastlines of Estonia, as well as inland spots by the beautiful lakes and forests. In 1984, there were 380 company holiday homes in Estonia with an average size of 27 places, amounting to 6,8 places per 1000 Estonians. The plan was to raise this average to 11‰ in the following years.[12]

SPACES FOR HIDDEN PLEASURES

The 1970s has been considered a period marking the consolidation of the party elite in Soviet Union, when the *nomenklatura* had finally a chance to devote itself to enjoying privileges and 'stability of cadres'. The complex system of privileges included exclusive consumerism, privileged living conditions and leisure possibilities. From late 1960s onwards in the course of almost two decades, not only were several new residential buildings built in Tallinn for elitist use, but also holiday complexes in different seaside areas. Valgeranna holiday home, that was commissioned by local Council of Ministers and built in a pine tree forest on a beautiful sandy beach close to Pärnu, was the most outstanding one, entertaining members of party central committee, ministers, and other high rank officials and their guests.

 The complex was started in late 1960s when the first simple wooden Modernist summer houses and the canteen where erected on the site. In 1974, the new sauna building was commissioned and designed by the newly-graduated architect Meeli Truu. The initial idea of a simple Finnish sauna was soon developed into something more extraordinary – a brick building (later covered with wooden boarding) with a big central octagonal pool with natural light falling down from the huge window cupola, restrooms, a bar and seaside terracing surrounding it. A year later, the cinema and games building was designed by the same architect: luxurious private cinema hall (also used as a billiard room and dance floor) with 24 seats, coffee tables and red plush interiors, surrounded by complex labyrinth-like system of crooked hallways and stairs. Both buildings – the sauna and the cinema - were exceptional in their curvilinear futurist forms, emphatically closed from the outside, as was the client's demand.[13] Natural light enabled from different roof windows together with continuous plains and surfaces of windowless walls creating a mysterious but playful experience of space. Truu was chosen to design the new main building, but she was declined the job after an absurd

incident in a television show.[14] A building that included two luxury suites was completed in 1982 according to the designs of Raine Karp, the most established architect at that time as he had designed the majority of new public buildings for 1980 Moscow Olympics Yachting Regatta held in Tallinn. Karp's solemn monumentality introduced the new phase in the architectural concept of the complex, but it was never fully carried out, as the personnel building and sports' facilities were never completed.

The second example is somewhat exceptional in Estonia, as it was one of the few holiday homes commissioned by the Soviet state institution, rather than a local enterprise or administrative body. The Vzmorye holiday home (Fig. 1), as it was called in Russian, was built for the research institute in Moscow developing spacecrafts and respective technology.[15] The place was

Figure 1. *Vzmorye* holiday complex. Axonometry. 1976. Architect Harry Šein.

surrounded by secrecy and remained rather unknown until recently, as images of the buildings, or the project, were never published, neither in professional architectural magazines or propagandistic books (where the progressive architecture of *kolkhoz* centres and holiday homes were often reproduced). The most interesting part of the holiday home was the extension of the area initially housed with rather modest wooden summerhouses, planned and designed by Harry Šein in 1976.[16] The plan for the general area and the buildings was set up on the idea of continuous space, organized according to varying functions and modes of interaction that were marked by contiguous or changing architectural elements. The new living quarters formed a dense and rhythmic semi-enclosed structure around the courtyard marking the boundaries of micro-environment-like space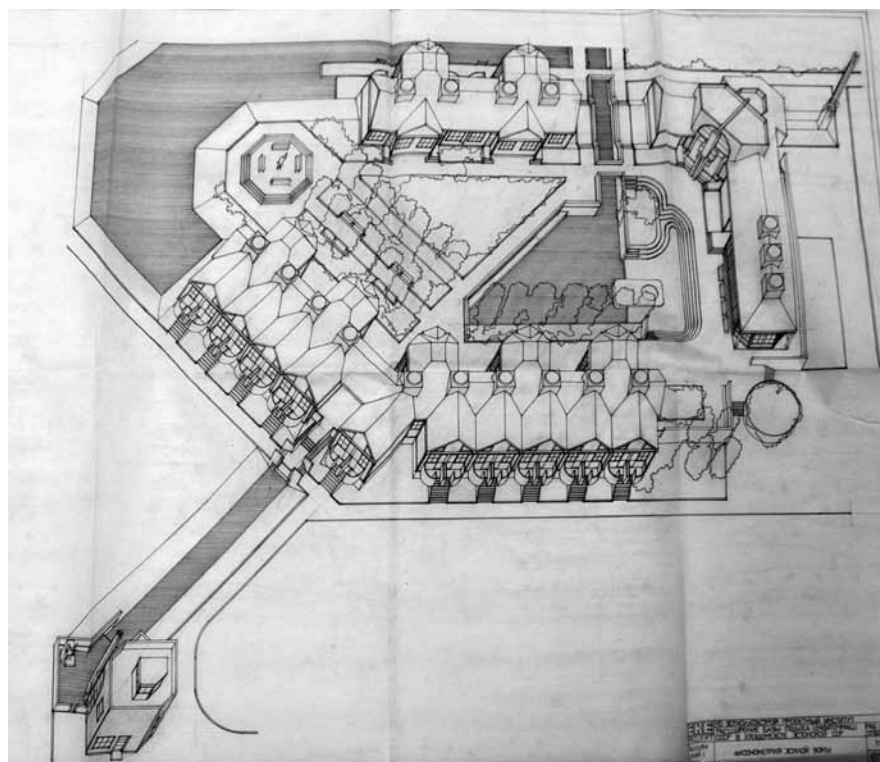. The architectural solution was praised, by an expert assessing the project, as bold and creatively interpreting whilst incorporating the qualities of individuality and locality.[17] However, the living quarters were just a fragment of this rather ostentatious plan. The rest, including the sports facilities, amphitheatre and a small harbour, remained on the paper.

A small holiday home for the employees of Polümeer, a producer of rubber and plastic toys and souvenirs located in Tallinn, shows how privacy and carefree leisure in the picturesque setting combining coastal landscape and contemporary architecture, was available not exclusively for the ruling class and *intelligentsia* but also to wider span of social hierarchy (Fig. 2). The wooden building designed by Toomas Rein in 1976 and completed in 1979 (interior design by Juta Lember) had a self-service kitchen, large sitting room with the bar and fireplace and sauna with a pool, an obligatory element in Estonian holiday homes. The guests were provided with possibilities of fishing, waterskiing, windsurfing and other water entertainment.[18] The effect of the closed form, resembling a ship, was enhanced by the wooden membrane, built as a windscreen for a terrace. Despite the general closed-nature, the lively architectural play of different volumes and shapes, (the bright red colour of the building combined with white elements like chimneys, window frames and super graphics 'Polümeer' on the wooden membrane and 'paat' ('the boat') on the boathouse), made the building appear rather expressive and communicative in its appeal for the building traditions of local fishermen's villages, whilst flirting with the ideas of corporate identity and branded architecture/space at the same time.

IMAGINED AND PERMITTED DIFFERENCE

Significantly enough, all three holiday homes were designed by architects working for EKE Projekt, a design office for collective farm (*kolkhoz*) construction companies. The role of EKE Projekt has been in many ways central to the Estonian post-war architectural history that features radical *kolkhoz* architecture as a unique phenomenon in the whole Eastern Bloc. As Estonian

kolkhozes were to some degree independent in their decisions from the state authorities, there was a considerable degree of flexibility and freedom for architects, especially when compared to state run and highly controlled design offices. EKE Projekt, designed various building types for rural areas, also company holiday homes, and became a kind of refuge or institutionally-secured seedbed for the group of young architects known as the Tallinn School (Rein and Šein among the 10 members) that transformed the paradigm of static, silent and aesthetic post-war modernism into an articulated programme manifesting the social role and creative potential of architecture.[19] Andres Kurg, discussing Šein's work, has referred to the ideas of multiplicity of choice, diverse spatial practices and the vision of democratic space, i.e. a different kind of society, shared by the group, prevailing not just in the mega-structural forms proposed by them for different architectural competitions, but also in their general belief in architecture based on humanized organization of cities and architecture.[20]

Figure 2. Holiday home of *Polümeer* factory. Architect Toomas Rein. Designed in 1976, completed in 1979. (source: Museum of Estonian Architecture - Photograph by Jüri Varus)

All three examples cannot certainly be directly associated with the critical activities and thoughts of the Tallinn School. Rein, who was somewhat older, had developed a rather peculiar expressive approach on his own, which was shaped during his formative years by Finnish Modernism, formally by the work of Alvar Aalto. Similarly, Meeli Truu developed her equally expressive form and intensified spatial experience of the Valgeranna cinema and sauna buildings independently from Tallinn School (Fig. 3). Yet the engagement with the closed form in all cases was surely not necessitated exclusively by the commissioners wish for maximum privacy, but resonated deeply with the ideas of dense, spatial cognition, and in Šein's design for Vzmorye, with the idea of conveying human interaction with the environment in architectural form and space. Clearly, this hints at, something being in the air, in the mid-1970s that led to distancing themselves from the universal and totalizing effects of Modernism and what developed into Post-modernist search for a humanist alternative to the prevailing system by the early 1980s.

If 'difference' is to be considered here as the key to understanding the spaces of leisure and the architectural ideas that all the presented examples convey, the change of meaning of such a concept should be taken into account. It does not predicate the convergence of those two cultural practices both striving for an exceptional situation. The idealised and appropriated forms of leisure, are a means for reproducing power and status, and the architecturally imagined alternative. Their coexistence was up to some point arbitrary, as the only convergence point was the actual material reality in a certain moment of time and the factors had made their relationship somewhat mutually beneficial. It is illustrative of the performance shift that occurred in public discourse, during late socialism, that brought along formal replication of authoritative discourse (e.g. critical avant-garde, participating in reproduction of the authoritative discourse and power by fulfilling the architectural commission), but the meanings of those replications were free-flowing and often unanticipated.[21] This displacement or de-territorialisation's dominant discourse was different from the dissident-kind of opposition as it unanchored the connotative meanings and injected the systems with elements of 'new, unpredictable, imaginative, creative, normal lives.[22] Andres Kurg has discussed the issue at stake in more detail in the context

Figure 3. Cinema building in the holiday complex of the Estonian Council of Ministers. Architect Meeli Truu. Designed in 1975, completed in 1979. (source: Photograph by Ingrid Ruudi)

of Estonian alternative art and design practices at that time, claiming that the 1970s were important in a sense that, rather than retreating into the private sphere (opposing to the regime through silent resistance) the developing informational systems and technology prompted questions for designers about prevailing social and spatial needs, and led to imagining new alternatives to the bureaucratic society, while participating sometimes in the activities marked by authoritative or public discourse.[23]

This de-territorialisation's nature of social and cultural production enabled the *nomenklatura*, on one hand, to create social privileges in space that were clearly producing and representing social inequality in the 'classless' society, and on the other hand, institutional 'cracks' in the late socialist system enabled the manifestation of ideas of different and democratic spatial practices in that same architectural space. As a conclusion, company holiday homes could also be considered both the product as well as the constituting part of the peculiarities of late socialism, including the view of the West and democratic space as its constitutive other.

Endnotes

1. To name few recent ones: Anne E. Gorsuch, *All This is Your World. Soviet Tourism at Home and Abroad after Stalin* (New York: Oxford University Press, 2011); David Crowley and Susan E. Reid (eds.) *Pleasures in Socialism: Leisure and Luxury in the Eastern Bloc* (Evanston: Northwestern University Press, 2010); Anne E. Gorsuch and Diane P. Koenker (eds.),*Turizm. The Russian and East European Tourist under Capitalism and Socialism* (Ithaca: Cornell University Press, 2006).

2. A slight differences might occur in understanding the term 'late socialism' in different national contexts or academic traditions. According to Alexei Yurchak, the term designates a period in Soviet Russia spanning over approximately 30 years between the mid-1950s and the mid-1980s. See Alexei Yurchak, *Everything Was Forever Until It Was No More. The Last Soviet Generation* (Oxford: Princeton University Press, 2006), 4. In Estonia, with the background of shorter history of the Soviet period starting in the 1940s, it is generally agreed in art and architectural research that it comprises largely the period of the 1970s to the mid-1980s. At the same time ethnologists prefer to use 'mature socialism' instead but understanding it within the limits proposed by Yurchak. See Kirsti Jõesalu, "Küpse sotsialismi argielu," in Tiiu Jaago (ed.), *Argikultuuri uurimise terminoloogia e-sõnastik.* (Tartu: Tartu Ülikool, eesti ja võrdleva rahvaluule osakond, 2008), http://argikultuur.e-uni.ee. Yet, it is generally agreed that the period is about the transformation of cultural and economic practices marked by the advent of consumer society in the Bloc that, in very broad terms, and the focus on the merging, overlapping and hybrid qualities of the public and private spheres. The term is derived from Fredric Jameson's 'late capitalism' that conveys the meaning of similar transformative phase in Western capitalism and is considered to be more flexible and open to diverse meanings than the known periods as "stagnation" or "normalisation" used formerly.

3. Anne E. Gorsuch, *All This is Your World*, 49-78; Tiit Kask, Aldur Vunk (eds.), *Reis [nõukogude] läände : kuurortlinn Pärnu 1940-88 = Journey to the [Soviet] West : Resort Town of Pärnu during 1940-88* (Pärnu : Pärnu Linnavalitsus, 2009).

4. Györgi Peteri, „Introduction. The Oblique Coordinate Systems of Modern Identity," in Györgi Peteri (ed.), *Imagining the West in Eastern Europe and the Soviet Union* (Pittsburgh: University of Pittsburgh Press, 2010), 4-6. Anne E. Gorsuch, „From Iron Curtain to Silver Screen," in *Imagining the West in Eastern Europe and the Soviet Union*, 170-171.

5. David Crowley, Susan E. Reid, "Introduction: Pleasures in Socialism?" in David Crowley and Susan E. Reid (eds.) *Pleasures in Socialism*, 38.

6. Herbert George Wells, *Russia in the Shadows* (New York: George H. Doran Company, 1921), 128. A fragment of Well's text was quoted by trade union high official responsible for managing resorts and sanatoriums in Estonia in a propagandist newspaper article, where only the first part of the quote describing cultural and pleasing interiors, was used to illustrate the superb quality of Soviet rest-homes that had surprised even the famous writer from capitalist England. See Eduart Tark, „Puhkekodud rahva teenistuses," *Õhtuleht,* 11 July 1981, 2.

7. Anu Järs, „Suvituselu ja rannakultuur nõukogude ajal [Summer Life and Beach Culture during the Soviet Time]," in *Reis [nõukogude] läände*, 109.

8. Ibid.

9. The subject was discussed in daily newspapers, instructive brochures were published. See for example. M. Raig, *Kuidas õigesti puhata? [How to Rest Properly?]* (Tallinn: ENSV Tervishoiuministeerium, Vabariiklik Sanitaarhariduse Maja, 1966).

10. Eesti Riigiarhiiv (Estonian National Archive, hereafter ERA) T-14.4-6.34397, 40; ERA.T-14.4-6.791.

11. M. Remmel-Orn, „K Voprosu Planirovanya Primorskyh Kompleksov Otdyha. Na Primere Parnuskogo Vzmorya," in *Geograafia-alaseid töid, Trudy po Geografii. VII.* (Tartu: Tartu Riikliku Ülikooli Toimetised. Uchenye Zapiski Tartuskogo Gossudarstvennogo Universiteta, 1967), 147-162; Yuri N. Lobanov, *Otdyh i Arhitektura. Buduschee i Nastoyaschee.* (Leningrad: Stroizdat, 1982).

12. ERA.V-12.1.3453, 5.

13. Reet Varblane, "Kolhoosiehituse fenomen", *Sirp, 22 August 2008,* http://www.sirp.ee/index.php?option=com_content&view=article&id=199:eesti-kolhoosiehituse-fenomen&catid=6:kunst&Itemid=10&issue=3194.

14. A TV show on New Year's Eve presented a sketch depicting the gates of Hell, Truu's model of the Valgeranna cinema building used among studio decorations. Ibid.

15. Local people knew the place as cosmonauts' summer houses, as „urban legends' concerning the first cosmonaut ever being in space. Alexei Leonov and the first female cosmonaut Valentina Tereshkova spent their holidays there.

16. ERA.T-32.4-1.4503.

17. ERA.R-1992.2.1825, 16-17.

18. Toomas Rein, „Paatsalu Puhkebaas," in *Ehituskunst* 1 (1981), 32-33.

19. The legacy of the group includes happenings, environments, exhibitions, seminars, performances, manifests, articles and studies on the history of 20th century avant-garde, the actual buildings forming just fragment in the whole. See an excellent discussion on the critical practices and activities of group Andres Kurg and Mari Laanemets (eds.), *Keskkonnad, projektid, kontseptsioonid. Tallinna kooli arhitektid 1972-1985 = Environment, projects, concepts. Architects of the Tallinn school 1972-1985* (Tallinn: Eesti Arhitektuurimuuseum, 2008).

20. Kurg links Šein's ideas on spatial organisation of the society with the critique of post-war universal Modernism by Team X, developed further by Structuralists and Metabolists. See Andres Kurg, "Modernism's Endgame, Tallinn 1978," in *Keskkonnad, projektid, kontseptsioonid*, 62-63.

21. Yurchak, *Everything Was Forerever, Until It Was No More,* 24-26.

22. Ibid, 114-116.

23. Andres Kurg, „Feedback Environment: Rethinking Art and Design Practices in Tallinn During the Early 1970s," *Kunstiteaduslikke Uurimusi* 20, 1-2 (2011), 42.

Welfare State
& Architecture

Open Session:
Housing, the State and Society
since World War II

SESSION CHAIR:

Adrian Forty (The Bartlett, University College London, U.K.)

POLYKATOIKIA: THE POPULARIZATION OF A STATUS SYMBOL

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GENERAL SITUATION

As its etymology reveals, a *polykatoikia* is a multi-storey building containing independent apartments that often occupy an entire floor. In the inter-war era and during the first years of reconstruction in the 1950s, the *polykatoikia* was an élite object designed by sophisticated architects and owned by the bourgeois, but emerged as a popular housing type *par excellence* during the subsequent construction boom. Two parameters define the *polykatoikia*; firstly, condominium ownership is an essential element of Greek collective housing and closely connected to the high home ownership rates of Southern Europe. Secondly, constructions are predominantly financed through a cashless deal between the entrepreneur and the owner: In lieu of a conventional purchase, the so-called system of *antiparochi* consists in a cashless deal between the owner of a plot or old house and the entrepreneur. According to this system, the owner offered his property to the constructor, who would erect a *polykatoikia* building on his land, and got in return a percentage of the erected living space. The constructor could then keep the rest of the apartments either for his own use or in order to sell them, thus operating as an entrepreneur. (In later years, entrepreneurs often rented the apartments.)

The state's contributions to reconstruction were limited to few public housing projects, generally lacking in any long-term vision. Fiscal policy encouraged the delegation of homebuilding to individuals through taxation reliefs and the distribution of power and privileges to a variety of actors. Consequently, as housing construction took off firstly in Athens, within the framework of an aggressive entrepreneurship, a series of professions unrelated to architecture, such as foremen and engineers, claimed their share in *polykatoikia*'s production. Private construction business reached its zenith during the military Junta (1967-74), reinforced by an indiscriminate distribution of construction permits and inept urban planning. Through this intense construction frenzy, Athens became an overgrown and overdeveloped capital city marked by avarice, so that when construction finally slowed down in the late seventies, Athens and to some degree other big cities were left with problematic and fragmented urban tissues.

After 1974, incessant migratory waves kept other Greek cities under pressure long after post-war rural exodus had ceased elsewhere, thus fuelling their own, belated urbanization. This pattern followed the example of Athens in many respects and was so stark, that it overshadowed Athens' own problems. In urban centres that had not experienced the same degree of growth, *polykatoikias* did not start to be erected until the 1970s. As there is no systematic study on the post-war diffusion of the Athenian *polykatoikia* typology outside of the capital city, a comparison with the provinces will be made, and particularly with the city of Rethymno on the island of Crete, whose first *polykatoikia* was erected in 1971.

In all, pressures exercised by the migratory influx into the cities encouraged the development of self-housing activities and the state demonstrated an inability to create a long-term, methodical planning. Land use, land development, city expansion, housing provision, was delegated to the individuals, who were free to find ways to access housing. In a nutshell, 'compared with other western European countries, a disproportionately large part of public resources for housing is allocated to direct or indirect money transfer to support families' access to homes'[1].

POLYKATOIKIA AND ITS ACTORS

During the boom period from 1957 to 1967, the urban working class saw its standards of living improve. At the same time, architects welcomed reconstruction as an opportunity to demonstrate their modernist creed, and to promote standardized projects for the renewal of the housing stock. Once construction entrepreneurs gained more authority in the field of housing construction, architects were side-lined. However they were not reluctant to do so, since they could focus on a more bourgeois clientele that still shared their perception of home-building as a work of art; also, the emergence of tourism and the public sector's growth allowed them to expand their activities beyond housing. Entrepreneurs had not always worked in speculative housing but once self-built housing production on the urban periphery peaked in the 1960s, and the wave of migration into the cities increased, they moved into this branch of business. In the course of time, not only did construction prove to be very lucrative, but also as their clientele climbed up the social scale, private enterprise came to be seen as the most effective and cheapest way to provide housing, enabling entrepreneurs to take over the supply of inner-urban housing.

In Greece and all of southern Europe the home is a family issue. Home ownership is an institutionally protected principle, thus the condominium ownership system went hand in glove with the family, whose members needed to live in proximity or, in this case, in the same building. In earlier years, some families had operated within often unauthorized self-build housing practices and adding a floor to the initial house was common, but the practice of superposition survived the compressed fabric of contemporary cities thanks to the *polykatoikia* type. Already deeply rooted in housing construction, the family continued to play a major role in entrepreneurial housing and transformed from a client into an agent. During the affluence of the late 1960s', constructing additional living spaces not only for relatives but also in order to exploit their economic potential allowed families to grow into small enterprises. In the 1970s, entrepreneurs were no longer individuals but became families who speculated in homebuilding, turning a need into an asset.

THE EMERGENCE OF A STATUS SYMBOL

More than a housing type, the *polykatoikia* is a reflection of post-war Greek society, subject as it was to the needs of specific actors and to its role as a popular symbol. Depicted in advertisements, the *polykatoikia* represented a new era and a re-defined modernity; seen in films, it typified fully equipped households and a carefree lifestyle, where owning an apartment extinguished the agony of rent; it also stood for a new bourgeoisie, who as owners of real estate enjoyed a constant revenue from its exploitation. The *polykatoikia* has also been a lottery prize, a trophy better than money, a multivalent ideal. But as the quality of life in the Greek capital deteriorated after the mid-1970s due to inadequate planning, the *polykatoikia*'s long term survival was called into question. In the later post-war period, the aftertaste of unplanned, frenetic construction in the hands of speculators or so-called "plot-eaters" has diminished the reputation of the *polykatoikia*.

The result is that contemporary standing of the *polykatoikia* oscillates between low-level self-housing practices and official, sophisticated architecture; it attracts alternatively hatred, and respect, as part of the country's modern mythology; it is depicted by some as the ultimate expression of modernity and by others as a hedonistic avatar of kitsch. In fact, the *polykatoikia* is a term so varied, that its different expressions certainly could fit any of the above descriptions. In order to place the *polykatoikia* under close scrutiny, it will be observed how the dynamics of its production underwent a transformation between the immediate post-war period and the mid-1970s.

FROM ATHENS INTO THE PROVINCE

'A city is a matrix of stimuli'[2].

The construction of the *polykatoikia* designed by Professor Dimitris Fatouros in the centre of Athens was completed in 1957[3]. The building belonged to the period of the resumption of architectural activity after the Civil War (1946-9) and the first stages of the construction boom. This *polykatoikia* was financed through the antiparochi system, leaving the collaborating entrepreneur, a professional contractor, in charge of selling the apartments. Despite its promising modernism and its refreshing presence in an impoverished, decayed urban tissue, the building met unexpected opposition. Surprised by the imaginative treatment of its façade and unsure whether its appearance was acceptable for Athens, the construction authorities suspended its erection for two months. The playful interchange of protruding surfaces and recessed balconies on an asymmetric double façade, underlined by intense blue and red colours, 'must have been a quandary for the officers'[4].

Contrary to the modernist designs of the 1930s' that gained plasticity through bow windows and cantilevers, the more eclectic vocabulary of the 1950s became part of the formal language of the *polykatoikia* ; cornices and mouldings inspired by classical architecture represented an effort to break away from the 1930's cubic forms. Not all production followed this trend, as many buildings resumed the aesthetic of the modern movement, but until well into the 1960s, architects ranged between the resurgence of the modern and the revival of classicism. The plan of Fatouros' *polykatoikia* is a modest solution given the plot, and is based on a separation of public and private zones on the two facades of the building, giving to each both natural light and ventilation. Communally used spaces are perceived as more important and enjoy views on Patision Street, whereas the bedrooms look over two backyards. In the centre of the plot, secondary rooms and the building's staircase form another zone, selectively ventilated through light wells. Both apartments were obviously destined for the well-to do, provided as they were with a service lift, guests' lavatory and maid's room.

Compared to Dimitris Fatouros' sensitive design, a *polykatoikia* erected in 1978 in Rethymno to a design by a civil engineer displays a similar treatment of living space; little though its façade has to do with Fatouros', the plan is evidence of the popular diffusion of the professor's arrangement. Situated party wall system, it occupies a building lot of equal size but offers four

apartments on each floor instead of two (the building of Fatouros has a floor area of 276 m^2 , only 16 m^2 smaller than the *polykatoikia* in Rethymno, whose floor area is 292 m^2). The reasons for this typological difference are primarily socio-economic, since the clientele now included students and young families, less well-off than the clients for the *polykatoikia* in 1950s' Athens. The apartments are situated around a similar pattern of a centralized staircase that allows the main rooms to overlook the road and backyard, leaving service rooms to get light and ventilation from light wells, but the rooms' grouping differs for reasons to be explained.

Overall, this *polykatoikia* is representative of a simplified and quantitative design procedure, where the main parameters were the permitted lot coverage ratio, the plot ratio[5] and maximum building height. The unimaginative interpretation of these constraints, in the backwash of the dictatorship, has caused much architecture of the seventies to be looked back on as grey, over-rationalized and speculative. The Rethymno entrepreneur's *polykatoikia* borrows from an acclaimed architectural model, but with limitations that offer an insight into entrepreneurial procedures.

THE FAMILY AS AGENT

Families saw their dreams crystalized into the plans of *polykatoikias*. In the seventies, families in rural Greek provinces were still living in unmodernized conditions, and dreamt of their own belated chance to attain modernity. As rural regions developed new urban centres, inhabitants' expectations increased. An essential component of modernity was equipment; all utilities offering comfort raised people's standards of living dramatically. Rural families, soon to be middle-class, had aspirations for comfort within the home: spaciousness, more rooms specifically grouped and connected, separate bedrooms for the parents and the children. By the time Rethymno's *polykatoikia* was erected, the importance of both spaciousness and equipment had been established, though the maid's room, service elevator and guests' lavatory of the original model had been eliminated.

Privacy was another expectation not only within the core of the apartment, but also insulating the dwelling from the neighbourhood. The *polykatoikia*'s balconies had appeared timidly on the facades in the 1950s, but expanded and grew into intermediary semi-outdoor spaces later on: in Fatouros' apartments they created a double façade, whose microclimate helped isolate the interior of the apartment from the city's noise. However, commonly, as in Rethymno, the simple, cantilevered balcony prevailed, ignoring Fatouros' innovation. Balconies do not only extend living spaces, but also create a spatially fluid barrier between the interior and the exterior; depending on their use an apartment can distance itself from the surroundings, or become extrovert and part of the surroundings . As the example from Rethymno confirms, speculative building of the construction boom era saw balconies as fulfilling a popular demand and providing an exploitable space.

THE ENTREPRENEURS' RESPONSE

Always keeping an eye on sophisticated architecture, entrepreneurs did not overlook their clients' needs, but adopted a more sweeping, wholesale treatment of housing. As the comparison of the plans demonstrates, plots were exploited to the limit, and whatever typological difference occurred between highbrow and entrepreneurial architecture was largely out of a determination to maximise the economic return. For instance, it is not clear what purpose the halls in Fatouros' plan serve, so their reproduction twenty-one years later is surprising. But entrepreneurial logic eliminated unnecessary space and placing the staircase on the light well helped diminish corridors within the apartments, and absorb them into the hallway so as to give a more spacious impression. Interestingly, the halls in Rethymno are as large as the ones in Athens, namely 8 m^2, but they assume an exclusively distributing role, whereas in Athens they seem to be promoted as the comfortable ending of the corridors.

 An obstacle to achieving modernity in urban settings was the tight urban tissue. In most of the Greek provinces urban land was fragmented into small parcels which lent themselves to a more compact version of Fatouros' *polykatoikia*. The transverse plan was easily reproduced since it offers natural light and ventilation to a maximum number of rooms, despite the city's tightness. The light wells also allow the apartments' lengthy form without condemning centrally placed spaces to obscurity. Fatouros' apartment type could thus be easily adapted to almost any plot, and slid between the two long sidewalls. The separation of private and common spaces by a zone of secondary rooms was a simple way to group rooms, and was acceptable to middle class tastes that customarily seldom encourage innovative, unfamiliar layouts. The reproduction of these three layers, long after housing production had passed to entrepreneurial hands, reveal the recognition and acceptance of the spatial hierarchy. The Rethymno entrepreneur repeated this idea, but since the need was for additional, smaller apartments, he altered the structure and introduced secondary rooms. Although he kept some of Fatouros' principles, having to cut the same area into more units obliged him to locate distribution and sanitary facilities in the apartments' centres, forcing bedrooms onto the street frontage. Nevertheless, the principle of extending the building across the full width of the plot, obtaining light, air and view from the front and, secondarily, the back, became standard solutions in the polykatoikias.

CONCLUSION

In the 1950s, Dimitris Fatouros' *polykatoikia* stood for architectural renewal and its sensitive nature influenced his contemporaries. Some of this particular *polykatoikia*'s elements never crossed the border between elite and everyday construction; after all, entrepreneurs' contribution was basically to give people access to modernity through practical, focused improvements. Nevertheless, in the 1970s Fatouros' plans still appealed to entrepreneurs on account of to their modernity and simplicity, but above all they were attractive to the new provincial urban middle-class because of the lifestyle they represented. In rural and backward areas of Greece, by embracing the *polykatoikia,* the rural middle-class aspired to belong to a new era and feel closer to the metropolitan middle classes.

Without envisaging it, Fatouros created a generative model for an entire series of middle-class *polykatoikias*, with distinctive typological qualities. Examples such as Fatouros' nowadays represent an ideal, but it is important to realize that they helped form post-war Greek architecture; in the changed conditions of the 1970s, the demands of speed, standardization and economy privileged commercial considerations over architectural ones, yet nonetheless, entrepreneurs widely adopted solutions previously developed by trained metropolitan architects, and by reproducing their typologies paid tribute to their creative skill.

Endnotes

1. Judith Allen, James Barlow, Jesús Leal, Thomas Maloutas, Liliana Padovani, *Housing and welfare in Southern Europe* (Oxford : Blackwell Publishing, 2004), 160.

2. Yiorgos Simeoforidis, "Thessaloniki: Epiviosi i Megali Poli. Syzitisi tou D.A. Fatourou me to Yiorgo Simeoforidi" (Thessaloniki; Survival or Big City. A Discussion between D.A. Fatouros and Yiorgos Simeoforidis), *Tefchos* 12 (1994), 66.

3. See Lois Papadopoulos, Sofia Tsitiridou (ed.), *Fatouros* (Athens: Domes, 2009), 202-4.

4. Rushed back from his trip to Delphi with his wife, newly-wed Fatouros had to convince the officers to accept the plans. Author's discussion with Professor Dimitris Fatouros on 7 February 2012.

5. A pre-defined variable, namely the product of the lot's total surface and the building coefficient give the total of square meters one is allowed to build.

IN BETWEEN IDEALS:
THE COLLECTIVE AND THE PRIVATE IN BAKEMA'S "'T HOOL"

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Arriving by train, a visitor to the Dutch city of Eindhoven gets a good idea of the morphology of the city just by staring out the window. The elevated tracks cross a succession of ring roads and reveal, when nearing the central station, long radial parkways that extend from the centre like a spiders' legs. A mental picture is quickly drawn: concentric circles connected by straight lines springing from their centre. Getting off the train and leaving the station at its north exit, one of these radial avenues opens up. Named after Field Marshall Montgomery the avenue extends due north, crossing road after road after road until it abruptly stops at a sprawling shopping centre hemmed in by huge parking lots.

So far, all of this trip has been about tarmac, concrete, traffic and buildings. But exiting from the other end of the shopping centre, one enters a quite remarkable neighborhood. Laid out roughly symmetrically on either side of a long strip of communal grass, some sixteen cul-de-sacs of various sizes make up a low density, low rise and emphatically green living environment. The northern edge of the site is shielded from the surrounding city by a wall of six to eight-storey slabs, enhancing the intimacy that each individual cul-de-sac evokes. A quick tour reveals a delicate but unassuming architecture, unifying the entire area into one consistent whole.

It is hard to believe that this extensive neighborhood, of over one thousand dwellings, was initiated by five individuals, none of whom had any experience of building, nor any formal knowledge of architecture. Designed and built between 1962 and '72, 't Hool stands out as an example of the visionary ideas of its architect, Jaap Bakema, and as a testament to the societal and political shifts in post-war Eindhoven. Above all, it is the manifestation of the ambitions of a newly emerging middle class whose ideals embodied elements of both the past and the future. With such a strong present day emphasis in the Netherlands on collectively initiated architecture, this large-scale precursor warrants another look.

ORIGINS

The roots of 't Hool go back to 1914, the year in which two births were celebrated: that of Jaap Bakema in Groningen and that of Philips Natuurkundig Laboratorium (Physics Laboratory: Nat.Lab.) in Eindhoven.

If Eindhoven is known for anything, it is for the Philips electronics company. What started in 1895 as a light bulb manufacturer grew into a leading business in consumer electronics, kitchen appliances, audio and video equipment and an array of other technical contraptions. Philips' success can be attributed greatly to its dedication to fundamental research, much of which was done at the company's own physics laboratory, Nat.Lab.[1]

By the late 1950s and early 1960s the engineers that worked at Nat.Lab. came from all over the Netherlands. They had lived through World War II and some of them had experienced first-hand the 'hunger winter' that struck the north of the Netherlands prior to its liberation. So to a certain extent they knew about hardship and about scarcity. Their parents had had to save diligently to put them through university. They had been only modestly helped by government loans or scholarships.[2]

At Nat.Lab. they found an inspiring working environment and an atmosphere of 'openness, tolerance and the will to think about issues that concerned society'.[3] As Nat.Lab employee Drs. J. Voogd said during a symposium called Research and Ethics: "In the departments of our laboratory, we work with great trust in each other, a strong sense of responsibility and definitely not in a state of *verzuildheid*."[4] The term *verzuildheid* or *verzuiling* is intimately associated with Dutch society of the 19th and 20th centuries. The word literally means 'pillarization', conjuring up the image of a society carried by discrete load bearing elements of equal size and shape. What this implies is that every religious or political denomination was self-sufficient. As a catholic, you would attend a catholic school, would go to a catholic hospital if you fell ill, would only watch and listen to catholic broadcasts, you would join a catholic football club, read a catholic newspaper and, for sure, would marry a catholic. To younger generations this 'pillarization' felt like a straight jacket, though in the early 60's it was still very much a reality. It seems fitting that Nat.Lab. was a place where *verzuiling* was openly criticized: not only was its workforce 'multicultural', it also operated in the field of science, the very nature of which is open, egalitarian and cooperative.

In one other important way Philips facilitated the emergence of 't Hool. Employees got together through meetings organized by the Society for Employees with a Higher Education (Vereniging van Hoger Personeel). Two of those meetings, held on 22

February and 15 March 1960, were concerned with the issue of living conditions.[5] The meetings revealed a growing sense of dissatisfaction among Philips' employees with the resources made available to them by both the municipality of Eindhoven and Philips Company itself. For its non-catholic workers Philips provided some housing and schools, but there was no possibility for the recipients to have a say in what was built . As a result, several small groups of employees initiated attempts to have their houses designed according to their own wishes. Most of these initiatives were limited in scope and size. However, there were also employees with a more extensive political and social agenda, whose wishes not only concerned the individual house, but extended to the living environment at large. A number of these people (Jan Delcour, Frans Schijff, Kees van Es and Jaap 't Hart) met together in May 1960 to form a housing co-operative. Shortly after these four were joined by Gerrit Klein, completing the group that was to initiate 't Hool as we know it today, a group that at Nat.Lab. quickly was dubbed 'the red courtyard'.

At that time, public life in Eindhoven had a reputation of being dominated by Catholic institutions. These institutions were impenetrable to new comers, making it next to impossible for outsiders to exert any influence. The city was also known for weak governance. For decades Eindhoven had failed to solve its main infrastructural problem: the railroad tracks cutting off the northern districts, like Woensel, from the centre, where the industries were concentrated. A 1946 urban expansion plan by the Rotterdam office of Verhagen, Kuiper and Gouwetor, exemplifies the halfhearted attempts of Eindhoven to develop into a modern industrial city. Although elevating the railroad tracks was now firmly on the agenda, the plan focused almost solely on the area to the south of the city. The plan was rejected and set Eindhoven back a couple of years.

The 1946 plan does however, as Piet Beekman argues in "25 years 't Hool", provide an insight into the views on city life prevalent among Eindhoven's planners, architects and politicians.[6] At the root of the scheme was the supposed delineation of Eindhoven along parish lines: a church and a school amidst houses for something like 5000 parishioners. Another 1000 people of no determinate religious identity were added to the mix, leaving as the logical building block of the city areas for 6000 people with a church at the centre. By focusing on the neighborhood, the fear of the 'big city' was neutralized. The local newspaper *Eindhovens Dagblad* in 1947 dedicated five articles written by local architects to the future of city life in Eindhoven. For example, they informed readers that the locally popular combined living room and kitchen was a thing of the past, arguing that it invited 'less favourable eating habits' like dining 'with the pan on the table'.

So by 1960 when the aforementioned Nat.Lab. employees got together to discuss their options, a city organized around comfortable socio-religious divisions was only a decade behind them.[7]

There were, however, changes afoot. Social democratic ideas had started to displace catholic ones in Eindhoven's political arena. The city's social divisions came under scrutiny and social housing was firmly on the agenda. On top of that, diminishing church-going in the new neighbourhoods in Woensel had revealed a dwindling sense of community. Finding other ways to forge an identity, for instance through architecture, was therefore being seriously considered. Change was, literally, in the air as well. When Kuiper had presented a new urban scheme in 1950 including the northern districts of Eindhoven, one could still construe that as a parish-based plan. Nevertheless, Kuiper had also included new radial roads which he likened to American parkways. The parkways were to be lined with high rise residential buildings. This aspect of Kuiper's plan sparked a discussion on high rise residential developments in Eindhoven which, eventually, allowed Bakema to include this typology in his designs for 't Hool.[8]

Within these new circumstances, the municipal institutions responded favourably to the five initiators' idea to develop not just a couple of houses but an entire neighbourhood. It was made clear however, that such a development would only be possible when social housing was included. Even though none of the initiators qualified for social housing, they welcomed the inclusion of it in their neighbourhood: to build a community that encompassed all different social strata was one of their prime objectives.

Van Es, Schijff, Delcour,'t Hart and Klein founded the housing co-operative 'Huis en Wijk' (House and District[9]) in 1961. Anyone interested in buying a house in the new development could join the co-operative, paying an annual fee to earn a say in the design. In the course of the design and construction process Huis en Wijk formed a number of committees, each dealing with a particular aspect of the design of the neighbourhood. There were committees for 'acoustics', 'gardens and collective green space', 'ducts and wiring', 'housekeeping issues', 'heating', 'high rise' and 'spatial layout'. Later on, the committee of 'dwelling typology' was added. Over the next ten years, some thirty people were involved in these committees.

The first task for Huis en Wijk was to find an architect. Naturally they looked for someone who shared their ideas on neighbourhoods and communities and was inclined to look beyond what was common. Their search proved futile until one of their advisors, social democrat Joris Cammelbeeck, got them in touch with Jaap Bakema.[10]

In Bakema, Huis en Wijk found an architect who had been working on the concepts of neighbourhood units, variation and recognisability for almost twenty years. In designs for the study plan 'Woonmogelijkheden in het nieuwe Rotterdam' (living options in new Rotterdam, 1940-41), Zuidwijk Rotterdam (1945-48), Pendrecht I and II (1949 and 1951), Hengelo Klein Driene (1950-56) and Alexanderpolder I and II (1953 and 1956) Bakema explored the possibilities of repeating and combining small

clusters of residential buildings into larger, comprehensive districts or neighbourhoods.[11] The Alexanderpolder II design is the first concrete manifestation of what Bakema called 'visual groups', defined by him as 'repeatable and variable clusters [of housing units], preferably composed in one visual entity of low rise, high rise and transitional types of housing: under, over and against the trees."[12] Clearly, to Bakema a neighbourhood was not only a socio-geographical entity but also a spatial unit, to be experienced and understood visually.[13]

THE DESIGN

When the office of Van den Broek en Bakema was officially commissioned in 1964 to design the neighbourhood, Huis en Wijk stipulated its ambitions in a concise, one and a half page document. In between paragraphs expressing the desire to include all social denominations and to provide an array of dwelling types, there is a paragraph that requests a maximum of privacy to be granted to the families inhabiting the neighbourhood.[14] The design 'should not force people into meeting each other'. Precisely this demand for privacy was to result in a specific spatial solution that, ironically, depends on collective effort for its upkeep.

The first design Bakema proposed to Huis en Wijk was not custom made for 't Hool. Rather, Bakema presented the plan for a visual group in Wulfen (Germany), a design he had recently made but which was not going to be executed (Fig. 1). The Wulfen scheme consists of 375 dwellings, combined in a point block tower, a number of slab buildings and a series of three large courtyards and two smaller ones. The buildings are arranged so that there is a general decline in height, each building being a transitional element between its neighbours. The tower, meant to make the neighbourhood recognizable from outside, connects to the first of the slab buildings that together form a protective screen. Under the lee of this screen the rest of the dwellings are laid out, with the larger courtyards first and the smaller ones, only two storeys high, ending the sequence. Almost 60 per cent of the dwellings are situated in the slab and tower buildings. The total density is 37 dwelling units per hectare. Reusing and further developing old designs was common practice for the office of Van den Broek en Bakema. One of the defining characteristics of the office is its continuous research into residential architecture and urbanism, resulting in a coherent, ever evolving body of work. Bakema may also have wanted to test whether his ideas sat well with his patrons, without wasting time on an extensive design, an explanation made likely by the fact that the office was not being paid at that point. Finally, choosing the Wulfen design as a prototype also had a practical reason: it fitted on the site. In fact, it fitted twice, so after Huis en Wijk expressed its enthusiasm, Bakema proceeded to duplicate the Wulfen design by mirroring it along the central axis of the site to create two visual groups.

Comparing the image of the Wulfen scheme to 't Hool as realized, one is struck by the similarity (Fig. 1 & 2). Some volumes have shifted slightly, the small courtyards have increased in number from four to ten but apart from that the general arrangements seem essentially the same. But Huis en Wijk's stipulations in the 1964 document are at the root of two major differences that at first may escape the eye, both fundamental to showing
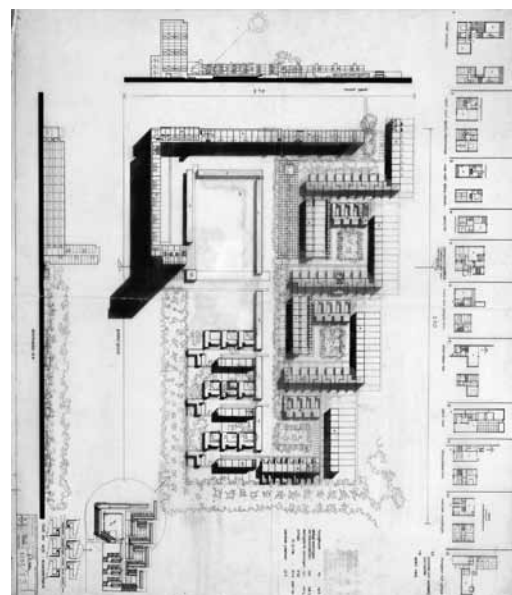

Figure 1. Plan, profiles and dwelling types of the Wulfen visual group for Huis en Wijk. (source: NAi Collections and Archive, Rotterdam)
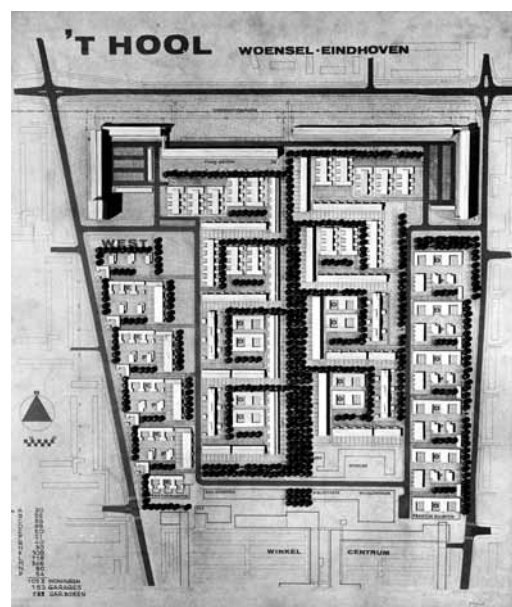
Figure 2. 't Hool as executed. (source: NAi Collections and Archive, Rotterdam)

the dualistic position of the generation of the initiators of 't Hool. First: the houses are bigger. When Bakema proposed the Wulfen scheme to his clients, the drawing had included plans of the dwelling types, which, like the visual group itself, were reiterations of previous designs, most notably of the dwellings designed for the Klein Driene project in Hengelo. Bakema's propensity for bringing together different dwelling types for different kinds of resident within one design, manifested itself in

split level apartments grouped around a central corridor in the tower, and gallery apartments and apartments grouped around a collective staircase in the slab buildings. Around the courtyards, there were two kinds of extendable dwelling and two kinds of patio dwelling, as well as a single family row house and a rather odd two storey row house called 'vertical change type'. All in all, there were eleven different types.

The dwellings Bakema proposed were universally rejected by the dwelling typology committee of Huis en Wijk. The major objection was that they were too small, and needed to be wider, deeper and higher. This objection has been attributed to the predominance in this part of the Netherlands of larger dwellings, but since many members of Huis en Wijk were not from these environs, that explanation seems unlikely. It could simply be a matter of growing wealth and growing consumer demands, that prompted the initiators to demand larger dwellings. In response, Bakema expanded the eleven dwelling types to fourteen, adding a new drive-in type and a back-to-back patio type.[15] Almost all the row houses were enlarged to a width of 6.60 m, a generous increase on the 4.80 to 5.80 m of the previous versions. The social housing units, over which Huis en Wijk had no influence, are a more modest 5.70 m. The second difference from the Wulfen design is the most intriguing. The committee of gardens and collective green ensured the required privacy of the dwellings by asking Bakema to provide a system of 2 to 5 m wide 'ribbons' of trees and shrubberies around the row houses and into the courtyards. These borders separate private space from the public and hence ensure the privacy of the inhabitants. Maintenance, through a foundation called *Stichting Gemeenschappelijke Voorzieningen 't Hool*, is covered by a mandatory contribution from every home owner in 't Hool (Fig. 3).

CONCLUSION

The aforementioned modifications to Bakema's Wulfen design draw attention to the position of the members of Huis en Wijk. On the one hand they wanted to express being part of a community that allowed for differences but that did not exclude anyone. They shared an idealistic attitude that can be traced back to a childhood marred by economic depression and by war. On the other hand, they had experienced fifteen years of economic prosperity. They had grown wealthier than they could ever have imagined, and there seemed no limit to this continuing growth. It is no surprise that that they would want more space, inside their house as well as between them and others.

The fact that Huis en Wijk successfully opposed the trend of isolating different social classes in Eindhoven cannot, however, obscure that in an important way 't Hool's initiators were still very traditional. All the dwelling types provided are meant to be used by families. There are no dwellings specifically for (for instance) starters, childless couples, elderly people, home office workers, etc. In that sense, 't Hool is not quite as progressive as it is sometimes proclaimed.

Figure 3. Communal, collective and private green in 't Hool. (source: Robbert Guis, TU Delft)

EPILOGUE

It is now forty years since people first moved into their new homes. Some of the original inhabitants remain - living in the single storey patio dwellings – but many have moved away or died. The trees have been growing steadily. Extensive repairs have taken place, to make up for faulty detailing, and the collective green structure has been completely renovated. In 2012 't Hool is alive and popular. It is hard to find an area with so much green space and with such a profusion of different dwellings. People appreciate it. Many architects live here. Looking around, one is left to wonder what a 1000 dwelling neighbourhood built by collective initiative would look like if it were built today. Whether it could happen at all one might doubt - but if it were to, it is almost certain that the result would be neither so subdued, nor so unified.
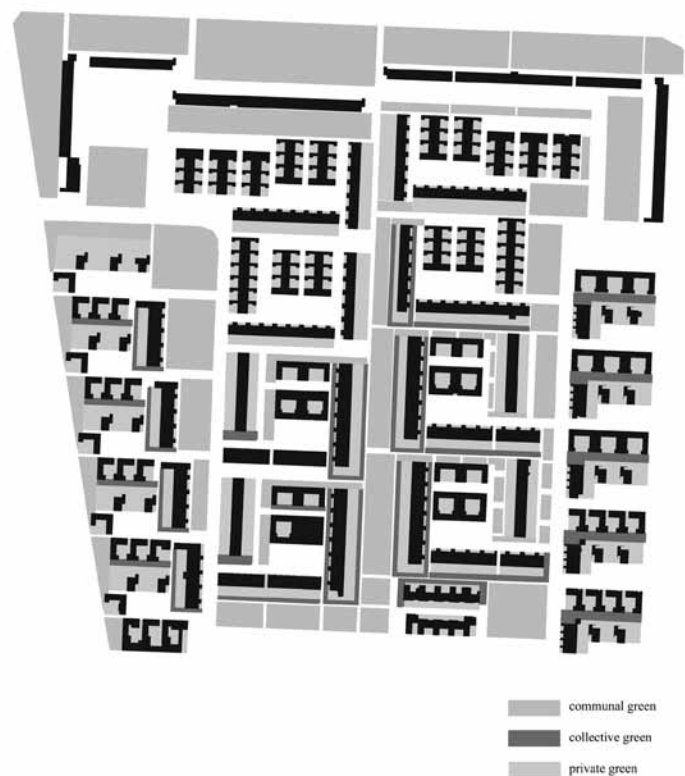
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Marc J. de Vries, *80 Years of Research at the Philips Natuurkundig Laboratorium 1914-1994* (Amsterdam: Amsterdam University Press, 2005).

Endnotes

1. For more information on the history of Nat.Lab. read: Marc J. de Vries, *80 Years of Research at the Philips Natuurkundig Laboratorium 1914-1994* (Amsterdam: Amsterdam University Press, 2005).

2. Kees van Es, "De Geschiedenis van een Woningbouwvereniging", in Hans Schippers (ed.), *25 jaar 't Hool. Een bijzondere wijk in Eindhoven*, (Eindhoven: Jubileumcommissie '25 jaar 't Hool', 1995), 20.

3. Ibid., 21.

4. Ibid., 21.

5. During the first of these meetings leftist sociologist drs. Hilda Verwey-Jonker lectured derisively on the social stratification of Eindhoven in poor and rich districts. Verwey-Jonker pushed for more diversity within each neighborhood. Source: Kees van Es, 'De Geschiedenis van een Woningbouwvereniging,' 20.

6. Piet Beekman, "'t Hool en de integratie van Woensel" in Hans Schippers (ed.), *25 jaar 't Hool. Een bijzondere wijk in Eindhoven*, (Eindhoven: Jubileumcommissie '25 jaar 't Hool', 1995), 10.

7. Ibid.

8. A 1958 report asserting the necessity for high rise residential development in Eindhoven was grudgingly accepted by the municipality. Kees van Es recounts that the high rise buildings in 't Hool were heavily contested all the way.

9. My translation of 'wijk' to 'district' is in compliance with the translation used in M. Risselada and D. van den Heuvel (eds.), *Team 10 1953-81*, (Rotterdam: NAi Publishers, 2005), 170.

10. Bakema took part in a discussion group with, amongst others, Willem Sandberg (director of the Stedelijk Museum in Amsterdam) and Cammelbeeck. The latter was an influential social democrat in the Eindhoven political arena.

11. Max Risselada describes the evolution of the 'living unit', the 'neighbourhood unit' and the introduction of the 'visual group' in the work of Bakema. Max Risselada, "Van Wooneenheid tot Buurteenheid", in Max Risselada (ed.) *Functionalisme 1927-1961*, (Delft: Publicatiebureau Bouwkunde, 1997), 170-205.

12. J.B. Bakema, *Thoughts about Architecture* (London/New York: Academy Editions, St. Martin's Press, 1981), 31.

13. Max Risselada, "Van Wooneenheid tot Buurteenheid", in Max Risselada (ed.) *Functionalisme 1927-1961*, Publicatiebureau Bouwkunde, Delft, 1997, 174.

14. Letter entitled Description of the Commission (*Formulering van de Opdracht*) signed and dated 8 February 1964 by Kees van Es on behalf of 'Huis en Wijk' in: Document of housing co-operative 'Huis en Wijk' describing project, housing statutes and available housing types (Unpublished and undated manuscript, likely from 1964), 1.

15. A complete set of drawings and descriptions of the 14 dwelling types of 't Hool can be found in: John Swagten and Sebastiaan Jongerius (eds.), 't Hool, een Kwestie van Detail (Eindhoven: Faculteit Bouwkunde, 2001).

RICARDO BOFILL AND THE OXYMORON OF POSTMODERN PUBLIC HOUSING IN FRANCE

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Two events in the 1980s have come to emblematize the development of suburban Paris. The first is the 1984 opening of Ricardo Bofill's Les Espaces d'Abraxas, a monumental housing project in Marne-la-Vallée notable for its prefab concrete façade that towers over the surroundings like a colossal city gate. The second is the 1986 demolition of the Barre Debussy, a high-rise apartment building in La Courneuve whose structural and social conditions had deteriorated considerably since its completion in the late 1950s. Underscoring the position of these events in the public imagination were their appearance in well-known films: the latter for Jean-Luc Godard's *Two or Three Things I Know About Her* (1967), a gripping social portrait about a young woman who supports her family by working part time as a prostitute, and the former for Terry Gilliam's *Brazil* (1985), a satire that likens 1980s consumer culture to the totalitarian dystopia of George Orwell's *1984*. These events, and their symbolic underpinnings expressed in film, tell the history of French public housing, of the post-war period, from its beginnings as modernist utopia to its transformation into postmodernist grotesque. At the centre of that story are the large-scale projects executed by Bofill's architectural firm Taller de Arquitectura. (Fig. 1)

In *The Language of Postmodern Architecture* (1977) Charles Jencks declared that the demolition of the Pruitt-Igoe residential complex in the U.S. city of St. Louis, Missouri symbolised the advent of postmodernist architecture.[1] Four years later, Jencks described Les Espaces d'Abraxas as a forceful alternative to the modernist housing project and the only convincing representative of French classicism. Its technology and vulgarised classical vocabulary, he argued, made the low-rent housing project suitable for the masses, both conceptually and in terms of building technology. According to Jencks, Abraxas's architecture functioned as a contemporary medium, one that, à la Marshall McLuhan, could distribute all information equally, as if it were electronic.[2] Jencks may have been alluding to the first Venice architecture biennale, the 1980 exhibition 'The Presence of the Past', in which *Abraxas* appeared as one of 22 façades lining a 'strada novissima'. The street thematized instances of preindustrial urbanity and contemporary architecture driven by the desire to reconstruct the vitality and authenticity

Figure 1. Courtyard of Abraxas, shortly after construction. (courtesy of Ricardo Bofill – Taller de l'arquitectura, Barcelona)

of historic city centres. The idea occurred to the exhibition curator, Paolo Portoghesi, during a visit to an East Berlin christmas fair, located in the midst of the modernist vacuum between Alexanderplatz and Stalinallee. He envisioned the façades as a kind of movie set, and, true to his idea, employed carpenters from Rome's Cinecittá to build the exhibition.[3]

Abraxas and the other housing projects completed by Bofill's firm Taller de Arquitectura in the 1970s and 80s went beyond Portoghesi's ambitions. Bofill did not rely on craftsmen, as called for by postmodernist representatives like Maurice Culot and Léon Krier; his historicising façades used new industrial prototypes made from concrete. The image of urbanity he devised was in keeping with that propagated at 'The Presence of the Past', but, in using modern building technology to construct entire city spaces, Bofill reversed Rossi's notion of architectural autonomy. (Fig. 2) Ultimately, he drew his inspiration not from the elite tastes of the art-viewing public but from populist sensibilities. In truth, Bofill's postmodern simulacrum of France as the *grande nation* achieved its most authentic manifestation in the music video for Stéphanie of Monaco's 'Ouragan' ('Hurricane'), which shows the princess prancing through the courtyards of Abraxas.[4]

In the 1980s the leading scholars of architectural history ridiculed Bofill's work as 'vulgar', 'narcissic' and a 'violation of history'.[5] The chorus of angry cries from historians was joined by those of local politicians and in 2006 the mayor of Noisy-le-Grand initiated an (albeit failed) campaign to tear down Abraxas.[6] The vehemence of the response suggests a subliminal effort to preserve the autonomy of the discipline—an effort likely fuelled by the fear that Nan Ellin associates with postmodern urban development in general.[7]

In any case, this broad spectrum of euphoria and criticism received by Abraxas points to the potential of architecture to provoke controversy - what Martin Warnke calls its political factor.[8] Abraxas combines seemingly contradictory elements: the technocratic welfare state that used public housing as a political instrument during the 'Trente Glorieuses' and the postmodern housing enclave more customarily created within the logic of neoliberal urban development.

The forms of Les Espaces d'Abraxas recall symbols of political power—temples, palaces, dungeons—from antiquity to the baroque. But that's not all. In retrospect, the project encountered the same dilemma as that experienced by the *villes nouvelles*. These five new towns outside Paris were conceived in the 1960s by the Gaullist welfare state but by the time construction began in the 1970s the political and economic circumstances had changed considerably. Valéry Giscard d'Estaing, who served as President between 1974 and 1981, and his Minister of the Interior, Michel Poniatowski, advocated the liberalization of state planning.[9] By contrast, the idea of the *villes nouvelles* sprang from a centralised state authority that dreamed of a plan to prevent urban sprawl, provide housing to Paris's burgeoning population, correct errors of the modernist large-scale projects and avoid the creation of monotonous cities like Sarcelles. Deeply mistrustful of local input and the free market, the technocrats in charge thought they could handle the job through good planning, executive authority and sufficiently deep coffers.[10] What they did not have was the support at local level of officials, voters, and politicians. Most important, they lacked the ability to influence regional

Figure 2. Construction site of Abraxas 1982-1983. (Courtesy of Ricardo Bofill – Taller de l'arquitectura, Barcelona)

developments outside the French economic plan. Even before the oil crisis and the election of Giscard d'Estaing, they had to scale back their forecasts. Population estimates for the villes nouvelles declined from 8 million to 1.76 million, and new unit construction in 1975 made up only 12% of housing in the larger Paris area, instead of the targeted 80%.[11]

The conflict between liberalisation and technocracy left its physical mark on Abraxas. The heart of the conflict lay in the fact that the agencies of the EPA (établissement public à caractère administrative), which were responsible for planning and designing the new towns, overrode municipal authorities, yet had to be self-supporting. This free market logic – officials financed the administrative apparatus by selling property to investors – was the reason that Abraxas ended up sandwiched between a highway and a parking garage, its residents cut off from Noisy-le-Grand's centre and shopping area.[12] The planners of Marne-la-Vallée originally envisioned a high-rise office park on the Abraxas property, but after the economic crisis of 1973, which hit the urban centre of Marne-la-vallée particularly hard, no investor could be found for the project. Under economic pressure, the planners decided to build a large housing complex instead. Bofill was an obvious choice. He was already a celebrated architect of public housing, and his architectural language promised the strong iconographic character similar to a skyscraper's imposing height.

Abraxas became the power symbol of the new town city planners in a state of crisis. And ironically, it served as the poster child for the *villes nouvelles* although it was part of a countercyclical trend in French housing policy. In 1977, one year before construction was approved, the French government passed the *loi barre*, which promoted a private ownership model, providing financial assistance to individuals for residential construction.[13] It effectively undercut the *grand ensembles* by encouraging the middle and lower-middle class to leave the housing projects, and it presaged the fate of Abraxas 20 years later. The problem was not architecture: urban isolation, unsupported community facilities, insolvency and changes in the ownership of the housing association played a role; so too did the lack of secondary schools, increased teenage violence, and the flight of the middle class.

Bofill himself actively contributed to Abraxas's ambivalent political iconography. In a 1985 essay for *Global Architecture* he describes Abraxas as a 'programme of public housing for workers (…) supported by both the Communist and Socialist parties'.[14] This description simply turns the political significance of Abraxas upside down, and not only because this building was an icon of

the *villes nouvelles* representing the power of the conservative state. Noisy-le-Grand did have a communist administration, but the mayor had no influence on the selection of the architect and besides was an open opponent of Bofill's architecture.[15] What's more, influential urban planners and architects on the left such as Thiery Paquot or Paul Chemetov believed that the proponents of the *villes nouvelles* wanted to undermine the power of communist-governed municipalities by placing conservative electors in the banlieue.[16] The purported 'embourgeoisement' of the Paris suburbs by the villes nouvelles didn't take place – at least not immediately – and the decline of France's communist party from 1973 onwards had less to do with expansion of the *villes nouvelles* than with party policy and deindustrialisation in the greater Paris area.[17] Nevertheless, the *villes nouvelles'* close identification with the power of the conservative state projected a negative image, which is why many considered it good form to position themselves against them. Bofill, by contrast, had strong ties to the *villes nouvelles* planning commission and was the foremost representative of Giscard d'Estaing's conservative architecture policies.[18] In 1974, shortly after being elected President, Giscard d'Estaing commissioned Bofill with the design of an international architectural and urban planning festival and invited him to submit a project for Les Halles, the empty space atop the RER interchange in the 1st arrondissement where Baltard's market once stood.[19] Under pressure to fill the void at the city centre with a signifcant architecural gesture, Giscard d'Estaing made an executive decision and gave Bofill the job. The following disagreements and disputes among architects and politicians eventually led to a power struggle with Jacques Chirac, who, in 1977, assumed the newly created mayorship of Paris. Relations grew so heated that an unfinished building by Bofill at Les Halles was demolished in 1978.[20] At a distance of 15 minutes by the RER from the Les Halles interchange station, Abraxas, a so-called 'palace for the people', represented less the socialist utopia of the 19th-century phalanstères than the sovereign power of modern technocrats who, by availing themselves of the architectural language used in monarchies, placed the architect on a royal throne.

That Bofill so quickly forged close ties with France's highest political office reveals his knack for winning over politicians of varying stripes. But what truly paved the way for his rapid rise in the Paris architectural world was the public housing work carried out by Taller de Arquitectura in Spain. French planners, architects and politicians saw these projects as a perfect solution to the problems of the *banlieue* and a forceful alternative to the monotony of the *grands ensembles* like Barre Debussy.[21] They were particularly taken with Bofill's Barrio Gaudì, a 500-unit blue-collar residential complex in the small Catalan town of Reus. It displayed a striking labyrinthine network of geometric forms, public street space, semi-open patios, steps, bridges, arcades, and forecourts. The hope was that its unique spatial features and individual means of access would leave a lasting impression on its inhabitants, forging deep emotional ties to their place of residence.[22]

The flexibility and individual identification promised by Barrio Gaudì—the evocation of expansiveness and the inclusion of various half-private, half-public spaces—coincided with the main motives of the *architecture proliférante* during the last boom of the large-scale housing era in France and this is exactly what French urban planners expected of Bofill when they invited him to participate in the 1971 Evry competition.[23] *Architecture proliférante* is a French building typology of the early seventies striving to combine the flexibility promised by mat buildings and the sculptural diversity of housing projects like Habitat '67 and whose proliferating construction was backed by French department officials in the late 1960s and early 70s: in the short time frame between 1967 and 1973 institutions, politicians and architects searched feverishly for a convincing 'third way' that might connect the spatial and social qualities of private residential buildings with the industrial reproducibility of large-scale modern housing. Their search was institutionalised in programs that fostered residential experiments and the early competitions for the *villes nouvelles*, mainly aiming at technical experiments, but also looking out for a significant break with postwar's monotony from a perspective of social research. It was through the surrounding circumstances of these programs that Bofill was invited to France.[24] Once he established himself in Paris after 1971, Bofill mostly pursued emotionally easy-to-grasp designs and sequences of urban exterior space, building classicistic city quarters with ionic columns and doric cornices out of exposed concrete.[25] Les Espaces d'Abraxas is the last project executed by Taller de Arquitectura that shares the generative geometry and the labyrinth-like distribution network of the Barrio Gaudì or Walden 7 – specifically within the interior gallery of the palaciò (which serve as dramatic backdrops to the chase scenes in Gilliam's *Brazil*). At the ground level, a dark, 11-storey high hallway guides residents from the elevators in the courts to the their apartments via a series of bridges and galleries. Above the 12th floor, the hallway is open air, with individual terraces and views extending from the Paris Basin to the Eiffel Tower. This conceptual cross between structuralist residential experiments and eclectic postmodern façades rarely figured in criticism of the project. Indeed, this combination is what makes Abraxas unique: a phalanstère for the masses under the conditions of 1980s production. The eclectic cement façade fed into middle-class desires for monumental representations of the *grande nation*, while the Piranesi-like stairwells in the palaciò's inner gallery evoke the modernist negative utopia.[26]

CONCLUSION

Many Anglo-American theorists have interpreted postmodernism as a cultural form of late capitalism and have pointed out the immediate link between culture and economy. For Fredric Jameson, the liberalisation of multinational capital markets after the oil crises and the collapse of the Bretton Woods system is directly related to the 'explosion of the semiautonomy of the cultural sphere' at every level.[27] In this context, Abraxas—an icon of postmodernist residential construction—embodies the political decisions and cultural developments of the 1970s: the wish to master the urban development and supply the population with housing, and the final effort of the technocracy to make large housing projects attractive for the middle class, merge into the project's grotesque consequences in the economic and political reality of its time. All these elements not only continue to have an effect in the present; they are constantly reformulated.

Over the last ten years the housing market in Paris proper has skyrocketed, pricing much of it beyond the reach of the middle class.[28] Yet on the other side of the „périphérique" – the motorway encircling Paris' inner city – far away from the landmarked prewar buildings in the city centre, one finds single-family homes without adequate access to infrastructure and cultural life, poverty-stricken housing projects and slums.[29] Today, the postmodernist version of the modernist utopia is characterised less by the current state of dilapidation and vandalisation at Abraxas than the possibility that an aspiring middle class might soon consider it a viable alternative.

Endnotes

1. Charles Jencks, *The Language of post-modern architecture* (London: Academy Editions, 1978), 9.

2. Charles Jencks, „Le classicisme „free style" à la française", in: Béret, Chantal/ Centre de création industrielle (ed.): *Architectures en France - modernité/post-modernité*, (Paris: Centre Georges Pompidou, 1981), 32-35.

3. Paolo Portoghesi, "The End of Prohibition", in: (ibid), *Postmodern. The Architecture of the Postindustrial Society* (New York, Rizzoli, 1983), 14-30, here: 29. The passage about the visit to Alexanderplatz is unclear; Portoghesi suggests that Aldo Rossi, Josef Paul Kleihues and Carlo Aymonino are in attendance.

4. "Comme un ouragan" vidoclip by Stéphanie of Monaco, 1986: http://www.youtube.com/watch?v=EGIxihIHPEk.

5. Kenneth Frampton, *Die Architektur der Moderne: eine kritische Baugeschichte* (Stuttgart: Deutsche Verlagsanstalt, 1987), 253; Hanno Walter Kruft, *Geschichte der Architekturtheorie: von der Antike bis zur Gegenwart* (München: Beck, 1985), 519.

6. The disdain for Abraxas can be clearly felt in an interview with Gilles Carrez, the chief public servant responsible for the *villes nouvelles*, in: *Deuxième campagne d'archives orales menée auprès des acteurs de la genèse des villes nouvelles françaises*, carried out by Sabine Effosse on behalf of the minisiterial evalution programm *Programme interministériel d'Histoire et d'Evaluation des villes nouvelles*, Paris, Febuary - March 2004, 16-17. The angry sentiment can also be found in the author's interview with Marie-Thérèse Goutmann, the communist mayor of Noisy-le-Grand between 1977-1984 (Sète, 2.12.2011). The demolition is mentioned on the department's tourism webpage: http://www.tourisme93.com/document.php?pagendx=969 (last accessed March 15th, 2012).

7. Nan Ellin: *Postmodern urbanism* (New York: Princeton Architectural Press, 1996), 144.

8. Martin Warnke (ed.), Politische Architektur in Europa vom Mittelalter bis heute: Repräsentation und Gesellschaft (Köln: DuMont Buchverlag), 12-14.

9. Julia Trilling, "La logique des villes nouvelles vues par une américaine", *Les Annales des la Recherche urbaine* Nr. 37, Dec 87-Feb.88, 68-77, here: 74.

10. Ibid, 72-77. For a detailed description of the structures of the planning department, see James M. Rubenstein, *The French New Towns* (Baltimore: John Hopkins Press, 1978) 36-63.

11. Trilling, p.73.

12. Interview with Gilles Carrez, p. 6 and author's interview with Hernan Jara, town planner of Marne-la-Vallée, Noisy-le-Grand, 18.10.2010.

13. For a concise description of the *Loi Barre*, see Jean-Marc Stébé, *Le logement social en France: (1789 à nos jours) (*Paris: PUF, 1998), 99-100. For figures of the production of private and public housing during the 1970s and the drastic decline of the production of public housing after 1976, see: Segaud, Marion, Catherine Bonvalet and Jacques Brun, *Logement et habitat, l'état des savoirs* (Paris: Découverte, 1998), 227.

14. Ricardo Bofill, Les Espaces d'Abraxas, Marne-la-Vallée, France, 1978-83, in Yukio Futagawa (ed.), *Ricardo Bofill: Taller de Arquitectura* (Tokyo: A.D.A. Edita, 1985), 120.

15. Author's interview with Marie-Thérèse Goutmann, communist maire of Noisy-le-Grand between 1977-1984 (Sète, 2.12.2011).

16. For a critical left-wing view of the Paris new towns, see: Elisabeth and Thiery Paquot: "Villes nouvelles: une utopie de droite", *espaces et sociétés*, Oct-Dec. 1977, 3-24, here: 4.

17. See Trilling, 75. For a detailed description of the decline of the communist party between 1973 and 1981, see Tony Judt, *Marxism and the French Left: studies on labour and politics in France, 1830-1981 (*New York: New York University Press 2011), 239-301; figures of the drastic decline in the Paris region between 1967 and 1978: 241.

18. Valérie Giscard d'Estaing resumes his intentions in his final speech at the symposium Pour une politique de l'architecture in UNESCO headquarters, October 20th, 1977, published in the conference proceedings at the *Académie de l'architecture*, Paris, 4th Trimester 1978, 59-70. Concerning the close relationship

between Giscard d'Estaing and Ricardo Bofill, see Éric Lengereau, *L'État et l'architecture, 1958-1981, une politique publique?* (Paris: Picard, 2001), 301-317.

19. The fact that Giscard d'Estaing asked Ricardo Bofill to organise an international architecture festival was stated in the Press conference of the State secretary of culture, Michel Guy, on October 1st, 1974 and partially published in *Architecture d'aujourd'hui* No. 176, november-december 1974.

20. Jacques Lucan: *Architecture en France, 1940-2000: histoire et théories* (Paris: Moniteur, 2001), 254.

21. Jean-Eudes Roullier, general secretary of the *Villes Nouvelles*, was inspired by a 1971 TV documentation featuring the Spanish housing projects by Bofill and organised the first trip with French architects and town planners to Barcelona (described in his interview with Sabine Effose, in: *Première campagne d'archives orales menée auprès des acteurs de la genèse des villes nouvelles françaises*, Paris, 10. Juli 2002, 46-48); Paul Chemetov collaborated with Ricardo Bofill on the competition for the town center of Evry in 1971 and Bernard Huet published an issue of *architecture d'aujourd'hui* on le Taller de Arquitectura *(*Nr. 182, Nov-Dez. 1975).

22. For a project description of le Barrio Gaudi, see: Le Taller de Arquitectura de Ricardo Bofill, „Réaliser l'utopie", *Techniques & Architecture* Nr. 306, October 1975, 88-97; Geoffrey Broadbent, „The Taller of Bofill", *Architectural Review* Nr. 921, november 1973, 289-297.

23. Jacques Lucan, „architecture proliférante", in *Architecture en France, 1940-2000,* 223-240; Christian Moley, *L'innovation architecturale dans la production du logement social* (Paris: Plan Construction, 1979).

24. For more on these public housing programs, see: Joseph Abram and Daniel Gross, Bilan des réalisations expérimentales en matière de technologie nouvelle. Plan Construction 1971-1975 (Paris, Plan construction, 1983); and: REX, 400 expérimentations dans l'habitat, 1971-1981 (Paris: Plan Construction, Moniteur, 1982).

25. What distinguishes the other projects in the new towns from Abraxas is their careful articulation with the urban context, either through a plaza or a vista, as in the Belvedere St. Christophe in Cergy-Pontoise, or through a lawn and water basin, as in the Les Arcades du Lac in St. Quentin-en-Yvelines. See Yukio Futagawa (ed.), *Ricardo Bofill: Taller de Arquitectura* (Tokyo: A.D.A. Edita, 1985; James A. Warren, *Ricardo Bofill, buildings and projects, 1960-1983* (New York: Rizzoli, 1988).

26. Manfredo Tafuri, *Kapitalismus und Architektur: von Corbusiers "Utopia" zur Trabantenstadt (*Hamburg: VSA, 1977), 19-20. and: "propos de table", *Architecture d'Aujourd'hui* Nr. 182, Nov-Dez. 1975, p. 59.

27. Fredric Jameson, Postmodernism or the cultural logic of late Capitalism (London: Verso, 1991), 48, 45-54; see also David Harvey, The condition of postmodernity: an enquiry into the origins of cultural change (Cambridge, MA: Blackwell, 1992), 302, 286-304.

28. For more on the precarious state of the lower middle classes, see the annual reports of the Abbé Pierre Foundation: http://www.fondation-abbe-pierre.fr/publications.php?filtre=publication_rml (consulted on March 15th, 2012).

29. Joseph Hanimann, "Die Rückkehr der Slums", *Süddeutsche Zeitung,* 26.07.2011.

ADVENTURES IN BAGHDAD:
CONSTANTINOS A. DOXIADIS, THE SCIENCE OF EKISTICS AND COLD WAR POLITICS

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This paper begins with two questions. Why was the fledgling architectural office of Doxiadis Associates (DA) invited to develop a national housing plan for Iraq in 1955 and a few years later a Master program for the entire city of Baghdad? Or more directly who recommended him, to whom and why, considering these projects entailed the largest development and housing program anywhere in the world during the 1950s, and that it offered Constantinos A. Doxiadis a blueprint to develop his 'science' of Ekistics. Secondly, why did the Ford Foundation fund Doxiadis to the grand accumulation of $5 million dollars beginning in 1960, the largest sum given to any one individual, despite evidence in the Foundation's archives that this was a waste of money?[1]

Not to give this search for answers away at the very beginning, a hint is offered: the answer has everything to do with a need for 'information' and as the world well knows 'information' about the Middle East in Washington D.C. in the 1950s and 1960s at the height of the Cold War and up to and including the 21st century opens over a gaping void.

This is a complex story of interlinking parts involving the US Cold War politics of containment, the establishment of a network of extra-area experts advising 'developing countries' on the policy of 'self-assisted' housing, and Doxiadis as a mediator for American interests in the Middle East but one that kept US's influence as unobtrusive as possible. Even though Doxiadis was sensitive that his advice was not the catalysis for the type of development change he hoped for or that there existed sufficient institutional authority to implement his schemes, nevertheless he was a dedicated collector of 'information' and his office involved with locals most prone to Communist persuasion.

This paper can only suggest there were detailed linkages between US policy of self-assisted housing and Cold War politics. In 1967 it was revealed that the US Central Intelligence Agency, the CIA, with covert funding funneled through the Ford Foundation, the Rockefeller Foundation and other private agencies, had set up the Congress for Cultural Freedom (CCF) in 1950).[2] It was an anti-communist advocacy group; a cultural arm of the US government organized around the fear that 'liberal democracy' was not as compatible with culture as communism or authoritarianism.

Although urban planning and housing were not among the Congress's main interests, Doxiadis was a lecturer at the CCF's "The Future of Freedom" conference held in Milan in September 1955, where he spoke about "economic progress in underdeveloped countries and the rivalry of democratic and communist methods".[3] In December 1960, he along with the Egyptian architect Hassan Fathy, who was working for DA at that time, were among the few attendees to another CCF event co-sponsored by the Egyptian Society of Engineers on the 'New Arab Metropolis'; the seminar was the first time social, economic, physical and administrative problems of growth and change of the Arab city were brought into focus and the symptoms of their supposed malfunctioning identified.[4] Between these two Congresses, Doxiadis was busy on plans for Iraq, in fact the first congress fell in between his six trips to Iraq in 1955.

Doxiadis arrives in Baghdad in May of 1955. He will eventually sign contracts for an Iraq Nation Housing Program (1955 -1960) and for a Baghdad Master Program (1958-1960).[5] The Iraq Development Board, a quasi-governmental body set up in 1950, as an autonomous body to oversee a program of national modernization and to prepare a national housing program, invited Doxiadis. One of the important foreign organizations of the board, The International Bank for Reconstruction and Development (IBRD), recommended Doxiadis to the Board. Doxiadis had participated in IBRD's missions in Syria and Jordan during 1954, but of course it was an American expert on self-assisted housing, Jacob Crane, who actually secured these commissions.[6] The Board was chaired by Iraq's Prime Minister Nuri al-Said who was fanatically concerned with the threat to Iraq from the Soviet Union. Endowed with a huge bankroll, the Board oversaw the construction of major infrastructure projects throughout the country from dams to irrigation systems, bridges, roads, power plants, schools, hospitals, public buildings and factories. It also sponsored the improvement of land, water and air communication and the construction of public buildings, low-income housing and community facilities, as a way to defend against Soviet influence.[7]

Housing was in a crisis situation throughout the nation, for no one had thought to develop a housing program since Iraq was formed in the 1920s.[8] The building of towns and villages had also taken place without any plans, provision of community

facilities, or public buildings. Basic needs had been allowed to accumulate for decades: in 1955 only 20% of houses across Iraq had piped water, only 17% had electricity, and at least 50% of urban housing and 90% of rural housing were in need of some form of 'amelioration' such as the addition of kitchens, showers, toilets, new roofs, solid floors, and so forth. [9]

The six trips to Iraq (May to November in 1955) that Doxiadis took were recorded in eight volumes of his 'traveler's dairy'. Arriving by plane from Beirut on his first trip, he is immediately struck by problems in and around Baghdad, which has a population of 750,000 and increasing daily. The mayor of Baghdad explains that 35,000 to 40,000 people – new migrants to the city – live in mud-houses outside of Baghdad. This is one problem, the 'sarifas', but it is not the only one that Doxiadis notes. Rents are high in the center of the city and the housing in poor condition, there is a shortage of houses for the middle class, for government officials, while land reclamation projects in the countryside, he assumes, will exacerbate the rural housing crisis and push more migrants into the cities. On top of this, Doxiadis observes Baghdad develops only in one direction along the Tigris River, causing traffic congestion with 16,000 cars trying to travel in that one direction.[10]

He visits the old part of the city to take photographs. But is not very impressed with the traditional manner of construction in brick and timber, on very narrow streets --- what the Greeks call 'oriental' houses with different parts protruding over the street. The only note-worthy buildings were the mosques of all sizes, types and ages, some on broad streets, some on bigger squares, and some even in narrow streets. He travels to the northern part of the city, to Kadhimain, a small satellite town. A national road leads across the desert towards Mosul, and he comments on elongated settlements stretching alongside this road until they thin out and stop. He travels south of the city to date plantations, and to the west of the city near the Mansur Race Course and the new railway station and airport where he finds a very exclusive new settlement. These houses are built following foreign designs and constructed in brick and concrete. They remind Doxiadis of "many middle-eastern sub-urban developments: they are exclusive but they are never adjusted to the climate." [11]

He notes that Iraq needs technical advice; it needs a long term housing program as the foundation for all of its settlements. It needs statistical surveys of its housing needs, its service needs, its agricultural needs, etc. It requires facts so the planner can develop a logical pattern by categories in relation to the size of different settlements. The main task, in Doxiadis' eye is to create better habitats for this country, and to create plans that are rich in synthesis to overcome the monotonous desert landscape.

On his second trip to Iraq, in July of 1955, the Minister of Development tells him

> "he would like us to use the experience we got in Greece,[where he had build thousands of units of self-assisted housing during reconstruction] but not to forget that we have to meet special conditions in Iraq. I answer that we have already some experience as we have worked for Pakistan, Syria and Jordan on both sides of Iraq. He agrees that such an experience is useful but, and he insists on it, he wants us to look into Iraq and meet its special problems and conditions."[12]

Housing is the urgent need, but the country also needs trained people of competence in every sector of the housing industry and from every point of view: this is Doxiadis' challenge. He is told there are three centers of importance in Iraq: Baghdad, Mosul and Basra. He asks about Kirkuk, but is told the big three are the centers of industry, communications, administrative functions and therefore the most important. Perhaps Kirkuk was off limit, as it lies adjacent to the largest oil installations and under government control. As he leaves Baghdad by plane he sees for some time the date trees, plantations, gardens, then fields. [13]

The first report on Iraq was written by August 1st (1955) and reveals his fascination with sarifas. He recounts that Baghdad's population in 1940 had reached more than a half a million and would reach one million by 1958. He begins the "Special Program of Action" (SPA) with the most urgent problem: the city was literally bursting its seams with an increasing number of reed and mud-huts -- the sarifas -- built by inhabitants themselves out of soil of the neighborhood with some straw mats, bamboo or pieces of timber used as supporting materials. The problem becomes grave on the outskirts of Baghdad, and probably the same in Mosul, Basra and Kirkuk. There are no accurate statistics, but sarifa-dwellers in and around Baghdad, he assumes, must amount to 200,000- 500,000. This Doxiadis proclaims is a danger from the economic, social, and political point of view.[14] Something more is needed to take pressure off these sarifas-dwellers, a restless population susceptible to leftist persuasion. Doxiadis' housing program was intended to 'contain' not only the housing crisis but quell the appeal of alternative models coming from the left.

He werites that statistics are needed as the base of a long-term program analyzing the flow of population from the countryside and from the center of the city to the outskirts of cities. The greatest area of sarifas in Baghdad lies northeast of the city. In that direction, an earth dam called the 'Band' built centuries ago to protect against floods of the Tigris, limits the growth of the city. Sarifas have formed a big camp of nomads along a narrow strip of land between the Band and the city's built up areas. They are considered by the government to be illegal because the land is at least 10 meters lower than the river and prone to flooding. As a consequence they have no municipal services: no electricity, sewage, roads, settlement patterns, or anything else.

SPA is based on both government-funded housing developments and self-assisted housing schemes. The latter assumes an individual either adds to a 'roofed nucleus' of a house or builds a house on a plot for which the necessary services of water,

electricity, sewerage and streets were provided. It appeals to the beneficiaries to participate in providing for their own needs. Private ownership in addition is expected to offset any radical redistribution of land, and guarantee public and private maintenance. The scheme sets up a revolving fund for the continued expansion of additional housing.

Doxiadis also develops by August 1st, a 'scheme' for communities of Baghdad. [15] This model, to be repeated in the years to come, imposes an abstract rectangular form on the land. All vehicles are limited to the main roads running along the exterior of the community, while interior communication is only by foot. Each such community contains shops, an elementary school, a mosque, a hamam, and community hall combined with coffee and tea-houses, social and health centers. The housing type contains an enclosed space, a semi-enclosed space and an open courtyard with a compound wall to protect women of the household from being seen from the outside. Since people in warm climates like to sleep on roofs, the roof must be able to carry the weight of people on it. Walls will consist of local mud, but doors and windows will be provided. A light concrete floor connects to a drain, sewage is provided, and all streets are paved. But water will be communal, allowing women to meet and gossip [in what became known as 'gossip square'] and be seen by perspective husbands. [16]

A few days later on August 6th, Doxiadis provides the first phase of The National Housing Program of Iraq (1955-1960), a five-year plan called the "Basic Foundation Program" (BFP) organizing public services to support housing, and creating a basic framework for a national housing effort.[17] He notes that the improvement of housing conditions with projects focusing on Mosul, Kirkuk, Baghdad and the Greater Mussayib agricultural area south of Baghdad was "the main subject of our contract with Iraq" and DA would eventually prepare housing, transportation and infrastructure studies for the above cities and for Basra. This housing program was supported by the creation of vocational schools for building trades in the main cities. Eventually BFD constructed tens of thousands of new houses in cities, resettled thousands of sarifa-dwellers into healthy new quarters, improved housing conditions for tens of thousands of families with water supply, sewerage, street building, community facilities. It built housing for civil servants, for the military, for industrial workers, and workshops for handicraft workers, etc. [18]

Thus Doxiadis has three schemes in hand before his third trip to Baghdad in August 11th. He links these schemes together: the action program (SPA) is just as important for the whole of Iraq as the Basic Foundation Plan (BFP): low-cost housing he insists must be connected with long-term planning.[19] Even though his initial commission in Iraq was to design and supervise the implementation of an extended program of housing covering the entire country of Iraq, Doxiadis never separates the nation's short term needs with its long-term needs. The realization of functional communities, secured with the minimum expense is needed in the short term, and DA would build these immediately. But master programs of development are needed in the long term and of course there is need of information. This became the special province of Ekistics.

Back in Baghdad we find the British firm of Minoprio, Spencely, and Macfarlane delivering its Master Plan for Baghdad at the beginning of 1956. The plan proposed new land uses and zoning, a slum clearance program, the creation of a rural green belt, and a new road system linking the old historic core with new bridges.[20]

Was it the waning influence of the British in the Middle East after their disastrous role in the Suez Crisis of 1956, was it because of increasing American pressure to utilize housing and planning as a policy of containment, or was it due to the promotional gymnastics of Doxiadis and his personal persuasion that caused the Development Board to ignore Minoprio's plan and in 1958 offer Doxiadis Associates a contract for a new master program, even though there would be coup d'etat of July 14th 1958, eliminating the Development Board's support.

Appealing to outside Western advisors was a tricky business in face of Nasser's call for pan-Arab nationalism and his suspicion of Western collaborators. Doxiadis was a convincing advocate: perhaps more palatable because he was a Greek citizen not a British or an American, or because he offered a scientific and objective program -- a propaganda smokescreen covering over evidence of more aggressive interventions. In addition his consultants were on the ground in Baghdad operating out of a branch office of DA and a Housing and Settlement Research Centre. He carried out experimental housing projects to "give a purely national character to the overall housing activity" introducing new construction methods and new materials, and training technicians. And of course, there was plenty of opportunity to gather information.

DA's master 'program' for Baghdad completed in 1960 provided a general framework for growth of the city. It was an early example of what Doxiadis would call 'Dynapolis' allowing a city to grow along a major axis in order to avert congestion. The business district, the administration sector, green zones and road systems would all expand continuously along this axis, flanked by expanding and growing residential zones. The plan for Baghdad selected for its central axis of growth the northwest-southeast Tigris river - the only outstanding natural feature in the surrounding desert - and set a growth limitation of three million inhabitants.

Upon this axis, was imposed in great clarity an elongated rectangular, gridded with rectangular sectors for various functions and absorbing the old core into its scheme. Residential sectors were subdivided into a hierarchy of community types while industrial sectors located on the edges of the city were given a similar rectangular form. Realizing the importance of water for the city, the

plan opened a canal connecting two points of the Tigris [this part of the scheme was implemented]. It went further and proposed a canal network to offer better climatic conditions for more remote parts of the city. By the time the DA left in 1959, they had constructed hundreds of units in western Baghdad and some in the northeast side of the city, "Madinat al-Thawra (City of the Revolution) now known as Sadr city. But of course the Master Plan would never be implemented.

Nevertheless, the proposals that Doxiadis Associates made and the contracts awarded for city infrastructure, model villages, housing for public servants and industrial workers, small scale manufacturing centers with housing and workshops, a system of vocational schools, plus the creation of master plans for the biggest cities, made this work the largest development and housing program in the world during the 1950s. In a country of 4 million, DA projects in Iraq improved the living conditions of well over 1 million.[21] The Iraqi commission was the first large-scale operation outside of Greece for DA and it was instrumental in different ways.

It was in Iraq, that Doxiadis drew together his methodological concepts of the science of Ekistics and developed a universal planning approach to be used as a model template in many other countries. By the time his firm's commission was canceled in May 1959, Doxiadis had gained a reputation for being a housing expert in developing countries and DA had commissions throughout the Middle East, Africa and the United States. It was said "in the Middle East the letter 'D' stands for Development and Doxiadis".[22]

Endnotes

1. Jeannie Kim, "Untitled draft Phd dissertation", Princeton University (2010): Chapter 4, 158.

2. The Congress for Cultural Freedom (CCF) was subsequently renamed International Association for Cultural Freedom (IACF) in 1967. The CCF/IACF received significant funding from the Ford Foundation. It was active in 35 countries.

3. Michelle Provoost, "New Towns on Cold War Frontier" *Crimson Architecture Historians* (May, 2007): http://www.crimsonweb.org/spip.php?article47.

4. Fuad Qubein, "Review of Morroc Berger (ed.) *The New Metropolis in the Arab World* (New Delhi and New York, Allied Publishers, 1961)" in *JAIP* 30:3 (1964), 263-264.

5. The account of The Baghdad Plan is drawn from Doxiadis Documents and also from Panayiota Pyla, "Back to the Future: Doxiadis's Plans for Baghdad" *Journal of Planning History* 7:3 (2008), 3-19; *Michelle Provoost,* "New Towns on the Cold War Frontier How modern urban planning was exported as an instrument in the battle for the developing world" (2006): http://www.eurozine.com/articles/2006-06-28-provoost-en.html; Lefteris Theodosis "'Containing' Baghdad: Constantinos Doxiadis' Program for a Developing Nation" (2008), 167-172 : http://www.google.com/search?sourceid=chrome&ie=UTF-8&q=theodosis+%22Containing'+Baghdad.

6. Lefteris Theodosis "'Containing' Baghdad: Constantinos Doxiadis' Program for a Developing Nation", 167 – 172.

7. The Board was richly endowed with an increased annual income at its disposal, the result of a 50-50 profit–sharing agreement made in 1951 between the Iraqi Government and the Iraq Petroleum Company, plus an overall increase capacity of oil flow. Nigel J. Ashton, "Hijacking of a Pact: The Formation of the Baghdad Pact and Anglo-American Tensions in the Middle East, 1955 – 1958" *International Studies* 19:2 (April 1993), 123-137.

8. Housing for the period of 1951 – 1956 amounted to 3% of the overall Development Board investment, while other buildings received 8%; but both percentages increased for the period 1957 – 1960 to 6% and 19% of the total. A.N. Raouf "Housing and Social Segregation in Iraq" *International Journal of Urban & Regional Research* 9:3 (Sept 1985), 368-382.

9. On top of this, the Iraqi government set up by the English was extremely unpopular and there was dissatisfaction among wide segments of the population; it needed to develop programs of social reform to defend against unrest and to conceal its pro-Western alliances and its unwillingness to reform the distribution of land ownership.. Ashton, "Hijacking the Pact".

10. C. A. Doxiadis "Iraq Dairy" DOX Q1- Q6 (1955) 23873.

11. Doxiadis "Iraq Diary", 14.

12. Doxiadis "Iraq Diary", 18.

13. "Thus we have a clear picture of six zones of development a/ built-up areas b/ date trees plantations c/ vegetables with some date tress, d/ vegetables irrigated e/dry farming f/ desert." Doxiadis "Iraq Diary", 90.

14. C. A. Doxiadis, "Program of Action" Iraq Reports Q.A.1 (1.8.55).

15. An interesting use of the word 'scheme' rather than 'plan' or 'proposal' alerts us to the manner in which Doxiadis' operates. "Scheme' is the word the Ford Foundation deployed to refer to a detailed plan for a new project, usually prepared with the assistance of foreign experts paid for by the Ford Foundation. A 'scheme' required justification of expenditure and methods utilized, recurring and nonrecurring expenditures, and other sources of support. Each scheme underwent a lengthy process of review and approval. The Ford Foundation was interested in helping to fund development projects such as dams and basic infrastructure plus the creation of Five year Development Plans, and they were also interesting in aiding the establishment of educational training facilities and research centers. Doxiadis had learned these lessons on his recent mission to Pakistan and he would put them to good use in the future in his many requests to

Ford Foundation for funds to set up training institutes and educational projects or 'schemes'. Applied to his operations in Athens, this caused the line to blur between the Center of Ekistics activities and Doxiadis. Georrge F. Grant ,"Ford Foundation Program in Pakistan" *The Annales of the American Academy of Politicall and Social Science* 323:1 (May, 1959), 150- 159.

16. Doxiadis, "Program of Action" (1.8.55).

17. Theodosis "'Containing' Baghdad".

18. DA, *Iraq Housing Program* 5 (September 1959).

19. C. A. Doxiadis, "Basic Foundation Program" Iraq Reports Q.A.5 (6.8.55).

20. Minoprio, Spencely and P. W. Macfarlane, Architects and Town Planning Consultants, *The Master Plan for Baghdad Report* (London, 1956): 1.Quoted by Mina Marefat at minamarefat.com/cities/.

21. A-A Kyrtsis, "Doxiadis Life and Works" in A-A Kyrtsis (ed.) C.*A. Doxiadis: Texts, Design Drawings, Settlements* (Ikaros Publication: Athens, 2006), 368.

22. Theodosis "'Containing' Baghdad".

THE DOUBLE FACE OF SOVIET ERA "POLITICS OF ARCHITECTURE"

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Few remember these days that Human Rights Watch, an organization that reports on human rights violations and abusive governments across the world, started as a private American NGO in 1978 under the name of Helsinki Watch with the self-imposed task of observing the former Soviet bloc countries' compliance with the Helsinki Accords of 1975 that sought to guarantee individual freedom. This group, along with many others, reported on and supported Eastern European dissidents. On the eastern side of the Iron Curtain formed also the Moscow Helsinki Group, Charter 77 in Czechoslovakia, and since 1979 the Helsinki Watch Group in Poland amongst others. The specter of the dissident haunted the last decade of the communist bloc and contributed to its meltdown.

While the western human rights activists could use the media for "naming and shaming", Soviet bloc dissidents had to work largely underground with painstakingly prepared samizdat publications, declarations, exhibitions, performance, gatherings, open letters and communiqués under the omnipresent risk of state persecution, physical violence, imprisonment, forced exile, social discrimination and abuse. To be a little diagrammatic, we could thus say that on the one side of the wall was the western *activist*, while on the other the eastern *dissident*. The former is the prominent model for modes of political engagements in the world, the latter now seemingly extinct, is a mode of retreat from it.

The main reason for the disappearance of "dissidentism" was obviously the collapse of the Soviet bloc states that gave it target and meaning. But mostly the dissidents of Eastern Europe wanted to reform rather than upturn their regimes. 'Dissidence' is here to mean a form of political practice that does not seek to overthrow and replace government, to take over power to govern, but one determined to radically and fundamentally contest the way in which subjects are governed. It is a fundamental questioning of professional, cultural and political conventions.

This paper aims to trace the articulation of dissidence not as a form of political action, but rather its possible manifestation in the most unlikely of practices: architecture. Could a 'dissident-architect', almost a contradiction in terms, have existed? If so – could this figure be understood as a challenge for creative and engaged design practice? And how could it inform the architect activist of today?

This research tracing the contours of the question of dissent in architecture in Eastern Europe during the Cold War was not easy. I travelled of course far and wide in search of dissident architects of the former Soviet bloc, but none of those architects I interviewed and whose story I am about to tell would even accept my basic proposition that they were dissidents. This designation is highly coded in post Soviet cultures and is usually reserved for more direct forms of political engagements. I often felt as if I needed to convince these architects that new ways of devising creative life within and in spite of repressive regimes were indeed forms of dissent. Some accepted, perhaps wanting to please their interlocutor, others refused, maybe out of modesty or respect for those that paid the higher price. An often-made claim was that neither they nor their work was even political – the Soviet state was of course political, communism was political, their critique of it wasn't… Perhaps nowadays discussion of architecture and politics has developed to a degree that no such distinction would be made, nevertheless I found those indicative and extremely informative. Yet, in all cases in the interviews, the figure of the dissident still haunted our discussions. There is undoubtedly something bewitching about this concept and about the architecture that these protagonists still produce. Could a term, for which no clear example could be found, which everybody refuses, and that needs to be shifted, skewed and even misused to make a point, help to rethink current objectives for spatial agency and design?

During the Cold War architectural dissent was mostly articulated by *refusal* – a refusal to participate in state projects that seemed stale, grey, bureaucratic, lacking spirit and beauty. By *subversion* – not physical and in the world but a conceptual subversion – of the norms and language of dominant/dominating architecture, or by a *retreat* into the private domain of paper architecture or hidden pedagogy, a space was found. I will still like to call this space and the practices that inhabited it – "dissidence."

The violent suppression of protest movements, probably first in East Germany in July 1953 and last in Prague 1968, foreclosed for many of this generation the possibility of internally-generated 'reform communism'. In those years leading up to the violent clashes with the government's military forces, a vivid, although secret, underground cultural scene had formed in many cities of the Soviet bloc. In an interview conducted in May 2008, Dalibor Vesely, an architect from Czechoslovakia who had left the

country during the Prague Spring and became later professor of architectural history at Cambridge University, described to me how groups of critical architects and artists devoted their private life to organizing secret lectures, seminars and even exhibitions that had often to appear and disappear within a few hours: "*It was against the Soviet style technocratic and de-humanised architecture that many of us aimed to escape the boundaries of architecture, as they were then defined, collaborating with, and taking on other engagements such as in stage design, painting and sculpture.*"

In order to critique or take distance from the state, this quasi movement of dissident architects, had to opt for a form of internal migration. They hoped such withdrawal would allow them to find a community of what philosopher and co-founder of the Charter 77, Jan Patočka called 'spiritual people'. Spirit was pitted against socialist historical materialism. Patočka's embrace of critique – of the 'negative experience of life' – called for a replacing of utopia with a general acceptance of life's *problematicity*. Vesely and Patočka thought that the most effective practice of critique is to *wonder*.[1] Again – this is a form of political withdrawal that is not in the world although it is intensely political. Influenced by the readings of humanist philosophy and phenomenology (partly discussed in the Chartists' "underground university"), and by the works of the surrealist movement, architects and artists engaged in collective dreaming and other exercises in enhanced subjectivity, a retreat into a private domain as the last site of freedom, where they could more easily avoid political conformity and artistic instumentalization.

"A spectre haunts Europe: the dissident.", wrote Julia Kristeva in 1977, the year of the first Helsinki monitoring conference that took place in Belgrade.[2] Impressed by the signs of new political engagement among intellectuals in Eastern Europe, Kristeva described dissidence as the politicizing work of thought[3] to which we could add also that of imagination and design. An example from East Germany (GDR) presents a rather extreme action within the possible spectrum of architectural dissidence. In the work of the architects Christian Enzmann and Bernd Ettel imagination and fantasy did not remain in the domain of the private, but rather burst the elastic boundary between private dissidence and its public expression with dramatic effects and grave personal consequences for the architects. The two architects, research fellows at the architecture school in Weimar, smuggled into the GDR competition briefs from West Berlin and smuggled out their submissions with the help of a network of Austrian monks. The format of their drawings, letter sized sheets, were chosen to deal with the constraints of their perilous travel from East to West Berlin. The unlucky moment occurred when in 1983 one of the jury members reviewing Enzmann and Ettel's submissions in West Berlin was most likely a Stasi informer and alerted the East German authorities. The competition was the first in a series of competitions for the subsequent building now known as 'Topography of Terror' in Berlin. The drawing was headed with four large-typed lines saying "Diktatur." Rather than making the reference to the dictatorship of the Third Reich, they drew a wall-strip, watchtowers and tree-lined pathways in an apparently idyllic landscape design, making an obvious, but ironic connection to the architecture of surveillance of the GDR regime. They operated by seeking to produce architectural narratives legible in built form.

While this smuggling operation was under way, the young architects participated in two more competitions in East Berlin proposing even more radical design proposals which explicitly confronted the regime. The project description for the competition for Bersarin Platz in Berlin presents a laconically overstated urban allegory drawn in ink rendered axonometrics. It proposed a cannon like machine to be placed at the centre of the square which would "shoot" citizens into freedom. Yet, a net – positioned nearby – made sure that the escape would fail and that instead citizens would be captured and imprisoned in small prison allotments. The architects chose to confront the regime seemingly oblivious of obvious risks, expressing their dissent in drawing and in full awareness of the consequences. Aiming to push the system to show the limit of its intolerance, perhaps in order to expose these political limits that were still very real during the gradual meltdown of the Eastern Bloc, or, eager to be deported into the West, they preferred to go to prison on the way out of the country. If we think of dissident practices as a rather delicate interplay between the private and the public domain, between subtle gestures of refusal, subversion and outspoken critique, the work of Enzmann and Ettel seem to have pushed this boundary. In its radicalism it marks perhaps the limit in the possible range of dissident architecture. Here the rules were broken, rather than played differently. By seeking to generate "crisis" the two self-testified enemies of communism have practiced the outmost tactic of revolutionary socialism. The two architects were captured and charged with offending the GDR and imprisoned for 20 months. After their release in 1986 they were left unemployed until they managed to exit to West Berlin, at the end of 1988, merely a year before the fall of the Wall.

Of course, dissidents do not share a single ideology. What they do share is an essential component of real politics – discontent – transformed into aesthetic practice. The 1975 Helsinki declaration had inspired women and men across the Soviet bloc to engage in a form of critical political action that must be held distinct from the revolutionary one. The challenge of dissident practice is a balancing act seeking to navigate between its limit concepts: to mobilize civic passions for conflict, confrontation, struggle and resistance for the radical reorganization of force relations without assuming a horizon of ultimate satisfaction and a moment of absolute liberation. As such, dissidence could never be a purely ideological practice, but one inserting itself as a negative political practice. The dissident would find herself at odds with any political or ideological hegemony.

Another important impulse was given in the late 1970s when the Central Glass International Architectural Design Competition in Japan and architect magazines Japan Architect and A+U started to call for overseas entries to international idea competitions which did not require an entrance fee. It was these platforms that enabled architects and students from across the communist countries to present their work internationally. The submissions were indicative of the art of imagination in many ways. Every corner of the drafting or submission papers were filled with architectural details, perspectival views, facades and spatial narratives. Most indicative was the use of traditional drawing techniques with water colours and even elaborate etchings. The project for a 'Columbarium Habitabile' which Alexander Brodsky and Ilya Utkin's submitted both to a competition of the Union of Architects of the Soviet Union in 1984 and again in the Shinkenchiku Competition of Japan Architect in 1986, proposed a colossal archive in which plans, models and other documents drawn from Moscow's historical architecture are classified. It presented a surreal setting that ironically commented on the dilapidation and neglect of the historical city. These drawings were in more than one meaning fossilized time, they depicted notions of time – both the labor time necessary their drawings – an investment entirely inefficient in the functionalist environment of socialism – and the layers of historical time of architecture. But the etchings also create a temporal illusion that they have been created in the past. Moreover, the antiquated and laboriousgesture of the needle cutting into the plate (that also allows for the reproduction and further circulation of the work) and the melancholic romanticism of their motives created a sense of despair that in its sheer "inefficiency", absurd lethargy and bizarre search for beauty made a political statement.

From none of the Soviet bloc countries was it possible to simply mail the submissions to the competition hosts in Japan. Rather, the participation was only possible through an intermediate architects association which managed, censored and decided which submission could be forwarded to western magazines. Architect and theorist Helen Stratford who hasresearched Soviet era architecture described how in Romania entries were first collected and discussed in the Romanian Union of Architects and that participating architects needed additional certification to have their works sent off.[4] The Romanian secret service, the notorious *securitate*, was well informed and even held copies of the individual architectural entries – so much for the non-political nature of the work. (One day there should be an exhibition of architectural drawings from the collection of the KGB, the securitate and the Stasi.)

But this perhaps frustrating necessity to collect works also had the effect of bringing architects together who later grouped themselves togetherin informal shows. In Romania students from architecture schools in Bucharest and Timisoara, after some exposure in the Japanese competitions, formed groups and initiated exhibitions. The group Form-Trans-Inform under Constantin Petcu also developed alternative teaching programs that involved conceptual research together with philosophers, artists and scientists, as well as performances and events.[5] In Tallinn architects, later grouped as the Tallinn School, organized in 1978 an architectural exhibition in which they showed evocative collages, photographs and conceptual drawings that effectively functioned as an unambiguous comment on the degradation of the profession that had to subsume itself to the planning economy and the simplifications of standardized constructions.[6] In 1984, a group of architects from the Moscow based MArkhI Institute collected work for an exhibition titled "paper architects". This lead to the best known of all Soviet era movements at the time. The group included architects Yuri Avvakumov, Michael Belov, Alexander Brodsky and Ilya Utkin, Iskander Galimov, Mikhail Filippov and Nadia Bronzova. They became well-known for presenting their work in various international exhibitions, mainly in the west, in the years leading to the final meltdown of the Cold War confrontation in the late 1980s. Their most visible exhibition was at the Venice Architecture Biennale of 1991. Their invitation to present at the Russian Pavilion marked the political transformation that had already happened. But the exhibition coincided with the August Coup, and the almost daily announcements of republics from the former Soviet Union breaking away. Iskander Galimov, whose drawing "City Cathedral" depicting a strange Basilica on the Red Square was used for the exhibition poster, decided not to return to Moscow and settled permanently in Austria.

Although both activist and dissident are perceived as critical, largely progressive forces, their motivation is different. Whereas the activist finds and takes action in the real world, constantly pushing the boundaries of the politics of the possible, dissident aesthetics represent rather often a retreat into the imaginary, ironic, dreamlike and the impossible. The sites of dissident architecture were the *kitchens* – private sites of social interaction and production behind a closed door and the *paper* – the ultimate site of architectural fantasy, that needed not be materialized. If for dissidents retreat and the work of fantasy and imagination was indeed a political gesture, for activists it was engagement, potential cooption collaboration and subversion of norms that was the mode of action.

And yet – particularly in the present context of architectural practice in which an ethic of political courage has been flattened either into the technical "virtuosity" of surfaces or the paper brief of the hyper pragmatist service provision - it is essential to expand on the given options of architectural action and add dissidence into the architectural/spatial field of the possible. Contemporary architectural and other aesthetic practices have indeed in recent years developed a host of new methodologies and techniques for

articulating their distance from and critique of dominant political and financial structures. Devoid of agency of action, Cold War dissidents articulated their position in drawings of fantasy-like paper architecture, while the contemporary forms of architectural practice seem to gravitate towards activism and direct-action in the world. Both positions come across problems and paradoxes and must navigate complex political force fields and possible complicities. Perhaps contemporary political action must fuse the spirit of the activist with the ghost of the dissident.

Endnotes

1. Jan Patocka, 'The Spiritual Person and the Intellectual', transcript of a lecture in 1975, in *Jan Patocka, Living in Prolematicity*, edited by Eric Manton, OIKOYMENH, Prague, 2007.

2. Julia Kristeva, 'A new Type of Intellectual: The Dissident', in *The Kristeva Reader*, Blackwell Publishers, Oxford, 1986, 99.

3. "*For true dissidence today is perhaps simply what it has always been: thought.*", Julia Kristeva, ibid.

4. Helen Stratford, 'Enclaves of Expression: Resistance by Young Architects to the Physical and Psychological Control of Expression in Romania during the 1980s*'*, in *Journal of Architectural Education*, 2001, 54: 4, 218-228: 220.

5. ibid., 221.

6. Andres Kurg, 'Architects of the Tallinn School and the critique of Soviet modernism in Estonia', *The Journal of Architecture*, 2009, 14: 1, 85-108.

Partnership and the Creation of Modern Professional Practices in Architecture and Planning

SESSION CHAIRS:

Tim Benton (The Open University, U.K.)

Maristella Casciato (Università di Bologna, Italy)

Who is the global architect? Is he or she a single, dominant designer or a multi-layered collaboration between teams and partners? Is the archistar phenomenon the effect of a new professional practice, or just a fashionable attempt to regain glamour for a design world whose boundaries are more and more blurred by the current flows of multi-media propositions that underpin building politics and that architecture is asked to reproduce? The position of the session's proponents is to challenge the claims of the "master" designer as sole creator, branding his/her own name as a precocious achievement of modernist culture. The session proposes a redefinition of the position of the designer within his/her professional environment and a better understanding of how collaborative design has worked in the past. The focus is on the web of relationships that constitute the work of architecture and planning.

How do architects work with their partners, associates and studio assistants? How do ideas pass around the studio, between the word and the pencil? In many cases, we have no way of tracking the flow of ideas between collaborators, but occasionally history has left us with clues to this process, in the form of plentiful drawings and documentary or verbal accounts. The session encourages examples from different geographical areas, based on solid evidence coming from documentation that assesses roles, gender frames, family or group exchanges on a transnational dimension. Examples may include models of equal or unequal partnership; teamwork related to specific professional occasions such as competitions; spousal teams; renewed practices after interruptions. Cases where architects' collaborators changed, and the effect this may have had on the practice would be particularly insightful. Also welcomed are papers that redefine how partnership modified professional practice with the invention of shared attitudes, new modes of expression and a different representation of roles. There is an interesting strand of master/assistant typologies in collaboration, some related to the genetic process (for example, hand/idea, rough sketch/measured drawing, plan/perspective), some determined by skills and specialization in different fields, some more in the world of construction such as client/builder/craftsman. More than to determine an inventory of practices, the session seeks to give an account of the diversity of professional practice in twentieth-century architecture and planning and to bring to light those individuals that have remained very much overshadowed by the course of their own history and the narrative of architectural historians.

ON CO-OPERATION FROM A POLITICAL CATEGORY TO A DESIGN TOOL

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As the mass was the collective subject of mass industry capitalism, the definition of collective subject that better suits the actual situation is the one of multitude. The multitude is a collective subject that gathers all different individuals and communication and co-operation are fundamental to its essence.[3] Ultimately the multitude is a class concept and a subject of production though its cooperative power is exploited by capital. Specifically co-operation is an autonomous power typical of collective subjects, and is a production mode that has to be reclaimed from capitalist exploitation. Releasing co-operation can support a collective subject to reach another order, to recover the city through political action on local and territorial scale, overcoming the capitalo-centric system.

On the premise of the multitude as a collective subject producing by means of co-operation- within modernist culture Hannes Meyer can be seen as paradigmatic in the effort to transform co-operation from a political category into a design tool for the working class within mass industry capitalism. His work can be regarded as harbinger in our profession, in particular to put into crisis the cognitive status of autonomous vision and the centred self.[4] Analysing how Meyer related himself to his contemporary mass society can provide insights into how to relate our profession to the multitude and to its relationship to the city.

When declaring in his article 'Die Neue Welt' (1926)[5] his intention to undermine and transform existing values, Hannes Meyer was reacting against the bourgeios establishment and intended to align with mass industry, and the functionalism of the *Neue Sachlichkeit*. It was the time that highly specialized workers in the German machine industry constituted a compact base for the workers' councils, and raised an unprecedented class consciousness of their potential as Rosa Luxemburg had already analysed and supported.[6] Perhaps Luxemburg's dialectic of Spontaneity and Organization[7] influenced the conceptual shift that Hannes Meyer made from his text 'Die Neue Welt' (1926) to the one of 'Bauen' (1928)[8].

In the first one Meyer defines 'building as a technical process', referring to his crusade towards 'scientied architecture'[9] by which economic, technical and productive efficiency coincide as one. Together they inform the mass aesthetic that would finally allow architects to equal more and more engineers and redefine their authorship. But in the later text –'Bauen' – Meyer made a conceptual evolution, conceiving 'building as a biological process'[10]. Here 'building is a life process' that organizes social, technical, economic and psychic aspects of the mass society. Then in 'Bauhaus and society'[11] (1929) Meyer specifies that 'the new theory of building […] as a theory of society is a strategy for balancing co-operative forces and individual forces within the community of a people.'

Meyer's co-operative thinking **-** as architect, teacher, and intellectual- started early in his formation in 1912-1913, getting in touch with the Garden City movement and the British co-operatives. Later on in the Freidorf project Meyer was involved as member and actively participated to the meetings of the co-operative life in the village. His thought was strongly influenced by the keenness in the collective aspects of producing and learning together, and the self-valorisation theory elaborated by the Swiss pedagogue J.H. Pestalozzi. Since the very beginning, though often scrutinized by severe self-criticism, co-operation became his political category to problematize collective work in the heart of the debate on the status and role of the architect in an industrial civilization. He used it to address the shortcomings of functionalism – criticising those who embraced technological modernization but not the social consequences of it[12]- and the crisis of teaching to affiliate with industrial production abandoning the artistic and authorial aspects of arts and crafts production.[13]

For Meyer co-operation is the political form of the time[14], and because of its essentiality to contemporary society, it produces an architecture that continues the building tradition: 'Architecture as "continuing the building tradition" means being carried on the tide of building history'[15]. The blossoming of German industry implied for Meyer the achieving of a conjunction of building techniques and social needs. Eventually co-operation in architecture fosters self-production, redefining authorial action by the architect. The architect himself turns into an organizer[16]. He becomes a specialist worker, abolishing the separation of the artist from other kinds of workers, and thereby articulating a sense of assimilation of art and life into architecture.[17]

Once assumed that art as the organization of the life process, the mass aesthetic reaches a different horizon beyond sole materialism. The architect organizes mechanisms that set in motion the process of assembling an object made up of use values and visual codes already consolidated by society and structured by continual self-production. Then the controlling action by the architect is hardly retraceable and mostly unrecognizable in between the collective work and the reciprocal play of action and potential

among society and the city. 'Because the doctrine of building is close to life's realities its theses are constantly changing: because it finds concrete existence in life, its forms are as rich in content as life itself.'[18]

I propose two ways to investigate how Hannes Meyer used co-operation as an architectural design tool for the mass society. The first is explicit about the production mode of professional architecture; the second is implicitly related to mass society at large. The two can be read as complementary faces of the same tool.

'I never design alone. All my designs have arisen from the very start out of collaboration with others.'[19] Inasmuch as the architect is an organizer of the life process, he consequently has also to organize his work and co-operate with many other disciplines. In this concern he applied the concept of 'brigade' in both his professional work for designs and competitions, and his new didactic programme at the Bauhaus. 'A brigade is composed of draughtsmen, technicians, economists, engineers and architects', they work in stages to develop a design and their collective work enables the various phases of a building to develop. [20]

Peter Behrens in his office had already introduced working in teams with different specific knowledge according to a strict procedure, inspired by the industrial production process. But there is a relevant difference in approach brought by Hannes Meyer's brigade. Behrens's aim as architect was to control almost every visual manifestation of the AEG Corporation from product design to architecture in terms of industrial production[21]. Regardless of his anti-positivist position – Behrens turned the professional set up of architectural practice into a corporate assembly line. Despite acceptance of the modern situation, there remained a traditional, even conservative aspect of the modern society envisioned by both Walter Rathenau and Peter Behrens. Art and science were still distinct and the role of the artist preserved as dominant in society. On his side Meyer openly embraced positivism, but extended it further than its mere technical objectivity. His endeavour already was looking for what later on M. Hardt, T. Negri and P. Virno called self-valorization[22] of the individual subjects within the collective subject. That becomes even more evident when analyzing the implicit line of co-operation as design tool in his work.

Meyer initially investigated several fields straddling from art to architecture and at the same time started thoroughly committing to propagating the ideas of the co-operative movement. In 1924 he designed the Swiss pavilion for the International Exhibition of Co-operatives in Gent.[23] The big room consisted in the co-op theatre and the co-op vitrine installation. The space was meant for co-operative propaganda through 'popular education', using folk culture. Meyer imposed 'the simplest simplicity' in the expression of abstraction to convey socially determined content about co-operation. This was his way to both promote co-operation among the individuals of the mass society, as well as co-operate with them through 'the education of new vision and perception' and thus to stir them to become more politically aware.

The theatre co-op aspired to involve human affect by displaying body-games, glimpses of light, colours, movement, noises and music from a gramophone. The plays were mute pantomimes and described the idea of the co-operative to hint at and prove its benefits. Meyer wrote the scenes touching the core elements of the cooperative ideology: work(private enterprise and wage labour, clothing a man finds happiness in the Coop dress), the dream (about different possibilities) and trade (cutting out the middleman). The play of the actors wass combined with human-size puppets, suggesting the opposition of man versus dummy, co-op versus anti-co-op. Namely, the audience was confronted with a contrast between the heart, brain, affective and natural movement of a freed man, against the shame and mindlessness of a doll.

At the other end of the exhibition space, opposite the stage, was the co-op showcase. The showcase was the counterpart to the Co-op theatre; it consisted of a large glass case like a shop window offering 36 standard items of co-operative production and co-operative trade. The collection of co-op products symbolized a production that has grown out of the alienation of the capitalist market economy and ownership, demonstrating how co-operation can emancipate from capital. The products were arranged in a clear spatial composition. Meyer associated the form of repetition with industrial mass production, stacking and ranging objects as if at the end of production assembly lines. No product was individually displayed, each was presented collectively as a group with no centre, yet individually recognizable.

Thanks to the various Co-op projects[24] of his first experimental phase of work, and to his previous experience at the *Siedlung Freidorf*, Meyer defined his basic ideological position. In this period he set up the model of co-operation as the reciprocity between modes of production and modes of perception[25] that he will develop throughout his entire career. In his most relevant designs he elaborated a new relationship between the building, its non-author – the architect and other specialists - and individuals. ' Building is no longer an individual task in which architectural ambition is realized. Building is a joint undertaking of craftsmen and inventors, (…). Building has grown (…) to a collective affair (of individuals) (…).' .[26] And since, 'being determines consciousness, building is a factor of mass psychology, (and) buildings and all the results of architecture in general are never just a building, but a part of a productive or recreational system'.[27] As much as architecture is part of a system of production, re-production and consumption that has an influence on individuals, the contingencies of the collective subject of the mass society had an influence on the scientific diagram that generated the project.

The Petersschule, the League of Nations and the Bernau School are all different designs that pledge the same collective architectural task to foster co-operation of the mass society. In the Petersschule project in Basel (1926-27) the understanding of building as a biological collective process is already retraceable. The design is a diagram of potentials for occupation. To enhance learning and playing in the full collective consciousness of each pupil, the collective spaces of the school are given most emphasi by wide corridors serving classrooms, an external staircase, and overhanging platforms for playgrounds. Meyer's brigade maximized external surface, by suspending it above ground, otherwise impossible to achieve on the very tight site in the historical centre. The building would have had a steel framework resting on only eight columns and these carry the steel structure of the platforms on four cables. The paramount display of collective aspects make the building more evident and present in the city, as well as the programme it contains. The design organizes formal elements of the city and turns visibility and enacting of education almost into an everyday collective ritual, a spectacle of co-operation.

In 1926-27 Meyer also delivered his proposal for the League of Nation in Geneva. This design entry is the ultimate manifesto for the institution of the mass society, conceived as 'a transparent machine for work and co-operation'. Explaining the project Meyer writes: 'No back corridors for backstairs diplomacy but open glazed rooms'. Consistently also the authorship of the architect tries to fade, reducing the building to a composition of standard materials, efficiency of programme and its technical apparatus for collective production.

The assembly hall is organized storeywise: for the representatives, the press and the public, and acoustic performance to allow anyone to hear is one of the major concerns of Meyer. The structure is a reinforced concrete grid, based on the garage at ground floor, expecting more cars than the competition brief required. The tower is in a steel frame composed in an H plan as slender as possible so as to be transparent, and the lifts and vertical circulation are a beacon. In both buildings the frames are just the minimum support for glazed façades all over. The outcome is a non-hierarchical field of spatial and structural coordinates available to society. However the results of the competition made this building never realized as well.

The only major project that Meyer succeeded in bringing to completion is the Federal school of the German trade unions federation in Bernau (1928-30). Finally Meyer could incorporate into this school his co-op ideology marked by the dialectics of internal material determinations and external socio-cultural ones. The client supported Meyer's co-operative intentions and the building construction was even funded by 4 ½ million members of the union with individual contribution of 50 pfennings. At the time the federation represented more than 80% of all the unions in Germany, and the school was thought of as an institute of educational excellence for labour, as the Bauhaus was for designers. The school was intended for volunteers from the unions to enjoy further education for a short period. Meyer, divided 120 students in 12 cells of 10 each, based on his proposal of a new form of socio-educational organization.

The functional diagram is a linear arrangement organizing the various uses of the complex into three distinct yet interconnected components. The first building hosted most of the public functions and was connected to a residential zone of four dormitories. It terminated in a two-story building with a wide staircase connecting a gymnasium and classrooms. A long steel-and-glass corridor served as an interior passage linking the complex's components. The steel of this passage, along the winter garden and the gymnasium staircase, was painted red, contrasting sharply with the gray concrete structure and buff brick of the exterior. The vibrant red signified the principal circulation path. It is one of the building's most prominent public spaces and exterior features, and emphasized the underlying functional diagram. Eventually in this project the collective spaces embody a significant mass psychological factor that attains the sought-after layer of collective life, shared production and self-valorization for the Federation's students.

Substantially Meyer in his works deconstructs architecture into its material determinants and the social conditions of its making. For him architecture has to merge into society. It could be argued that Meyer tries to find the link of the production of architecture to Karl Marx's concept of the production and of man and society: 'just as society itself produces man as man, so is society produced by him.'[28]

The relevant aspect to be here distilled for the architecture of the multitude is that Meyer used material diagrams to organize the potential of collective immaterial production[29] and self-valorization of the mass society. It could be said that by doing so he subverts bare positivism and capitalist exploitation, reintroducing affective and political aspects of biological life into architecture. Specifically co-op architecture organizes objects of a future mode of production, and a collective perception as mode of reception.

On the one hand in Meyer's extension of co-operation from a political category into a design tool, architecture is not produced by a mapping of material factors only, as if it were a transference of an already constituted meaning that exists outside and before architecture. His application of material factors to develop diagrams is opposed to today's use of 'diagram of everything'[30] which 'suspend judgment'[31] and are devoid of any social purpose to emancipate immaterial production from capital. And on

the other hand his work cannot be compared with advocacy planning[32] which entails a technocratic understanding of politics, and defines the architect as advocate –mediator- between the authority and the collective subject. Rather, co-op architecture is an organization of a process, a set of operations, a production of certain effects on and by the collective subject, not available without a design performance.

In Meyer's time - and even more in ours - this entails acknowledging that design is co-operative and our profession is based on appropriation/re-appropriation and signification of existing and pre-existing architecture in the city. The professional task is to organize in co-operation the use and the meaning of the city. In other words reorganizing an organized form of existence, by letting the collective subject implicitly co-operate with architecture and explicitly co-operate among its individuals. Such processes address collective subjects, stimulating their co-operation from within the collective intelligence. Architecture must transform into a positive force directed towards the formation of a collective agency. By means of this, individuals could regain on the one hand the agency to affect, and on the other the capacity to be affected by their city, recovering from its alienation.

Endnotes

1. '(…) Moreover, as one of the final forms in which the welfare of the nation is to be realized, the new housing estate is purposively organized work which engages the energies of all and in which co-operative effort and individual effort join forces in a common cause. Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

2. 'Building has grown from being an individual affair of individuals (…) to a collective affair (…)' Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

3. 'The multitude is a whole of singularities and communication and co-operation are fundamental to its essence' Toni Negri, 'Pour une définition ontologique de la multitude', *Multitudes #9* mai-juin 2002.

4. Cfr. M. Hays*, Modernism and the post humanist subject, the architecture of Hannes Meyer and Ludwig Hilberseimer* (MIT Press 1995).

5. Hannes Meyer, "Die Neue Welt" *ABC Beiträge zum Bauen* 1926.

6. Sergio Bologna, "Class composition and the theory of the party at the origin of the workers-councils movement", *Operai e Stato* (1972).

7. 'The masses are in reality their own leaders, dialectically creating their own development process. The more that social democracy develops, grows, and becomes stronger, the more the enlightened masses of workers will take their own destinies, the leadership of their movement, and the determination of its direction into their own hands.' Rosa Luxemburg*, The Political Leader of the German Working Classes*, Collected Works 2.

8. Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

9. The term 'scientified architecture' is borrowed from Cfr. M. Hays*, Modernism and the post humanist subject, the architecture of Hannes Meyer and Ludwig Hilberseimer* (MIT Press 1995).

10. Most evidently inspired also by H. Meyer's Marxist readings, it is anyway striking how such concept anticipates Bio-Politics from M. Foucault and its further developments by A. Negri and M. Hardt, as well as Human Nature as discussed by P. Virno.

11. Hannes Meyer, "Bauhaus and society", *Bauhaus n°1* (1929).

12. Crf "Die Neue Welt" and "Bauen", but also see for instance the difference in approach of a working brigade between Beherens and Meyer, later described in the paper.

13. Cfr. Hannes Meyer, "Bauhaus and society", *Bauhaus n°1* (1929).

Hannes Meyer, "Bauhaus Dessau 1927-30, My Experience of a Polytechnic Education", Mexican periodical *Edificacion n°34* (1940)

And Francesco dal Co, *Hannes Meyer, Architettura o rivoluzione*, Marsilio editore 1969.

14. 'Trade unions, co-operatives, Ltd;, Inc., cartel, trust and the Leuague of Nations are the forms in which today's social conglomerations find expression, and the radio and the rotary press are their media of communication. Co-operation rules the world. The community rules the individual. Each age demands its own form. It is our mission to give our new world a new shape with the means of today'. "Die Neue Welt" *ABC Beiträge zum Bauen* 1926.

15. 'Architecture as continuing the building tradition means being carried on the tide of the building history […] the process of building becomes biological […] history is the driving force of the system. Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

16. 'The new house is a prefabricated unit for site assembly and, as such, an industrial product and a work of specialists: economists, stasticians, hygienists, climatologist, industrial engineers, standard experts, heat engineers… and the architect? He was an artist and has to become a specialist in organization.' Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

17. 'As members of the Bauhaus we are seekers: we seek the harmonius work, the outcome of the conscious organization of intellectual and spiritual forces. Every human work is directed to an object and the world of its is apparent in it. This is is life-line. Thus our work. Collective in aim and embracing the braod masses in its scope becomes a manifestation of a philosophy of life.

Art?! All art is organization. (…) and accordingly subjective, bound to the person, and accordingly objective, determined by society.' Hannes Meyer, "Bauhaus and society", *Bauhaus no.1* 1929.

18. See Hannes Meyer, "Bauhaus and society", *Bauhaus no.1* 1929.

19. Hannes Meyer, "How I work", *Architektura CCCP nr6* 1933 Moscow. Published a few years after the Bernau School.

20. The brigade works in 4 stages: 1 diagrammatic representation of the building program 1:500/1:1000. 2 standardization of all spaces of the same kind

(individual spaces) 1:100/1:200 (DIN: German industrial standards, OCT: soviet standards). 3 diagrammatic plan of the whole building 1:500 (axonometric, aerial views+photomontage). 4 is the harvest of 1,2,3 plus a visit to building site that finally delivers the draft design. Hannes Meyer, "How I work", *Architektura CCCP nr6* 1933 Moscow. Published a few years after the Bernau School.

21. Stanford Anderson, *Peter Behrens and a New Architecture for the Twentieth Century,* MIT Press 2000.

22. 'Self-valorization refers to an alternative social structure of value that is founded not on the production of surplus value but on the collective needs and desires of the producing community. [...] (Self-valorization) describes the practices of local and community-based forms of social organization and welfare that are relatively independent of capitalist relations of production and state control' M. Hardt and P.Virno (2006).

23. K.J. Winkler, *Der Architekt Hannes Meyer, Anschauungen und Werk*, (Berlin: VEB Verlag für Bauwesen 1989).

24. Namely Theater Co-op, Vitrine Co-op, Linos Co-op, Fotos Co-op, Interieur Co-op.

25. See Hays, cit.

26. Hannes Meyer, "Bauen", *ABC Beiträge zum Bauen* (1928).

27. VOPRA Statement #10 and #11 (Russian Association). "On Marxist architecture" *Manuscript in German* 1931.

28. Karl Marx, *Economic and Philosophic Manuscripts,Third Manuscript* (1844).

29. Cfr. Branden W. Joseph, Alessia Ricciardi, Paolo Virno "Interview with Paolo Virno", *Grey Room, No. 21* (Fall, 2005) http://www.jstor.org/stable/20442701, and Maurizio Lazzarato "Immaterial labour" on http://www.generation-online.org/c/fcimmateriallabour3.htm.

30. 'Maybe, architecture doesn't have to be stupid afterall. Liberated from the obligation to construct, it can become a way of thinking about anything - a discipline that represents relationships, proportions, connections, effects, the diagram of everything.' Rem Koolhaas AMO-OMA and &&&, *Content* Taschen, (2004).

31. Rem Koolhaas *Al-Manakh 1*, Volume (2007).

32. Paul Davidoff "Advocacy and Pluralism in Planning" *Journal of the American Institute of Planners, Volume 31, Issue 4*, (1965).

OSKAR STONOROV'S IDEA OF ARCHITECTURE AS AN "ART OF TOGETHERNESS" (1920s-1940s)

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OSKAR STONOROV: A LIFELONG COMMITMENT

'In the very fact of working in collaboration with others on these projects he has given the example in practice of the kind of cooperation and sharing which is essential to real advance in planning.'[1]

Since the early years of his career the German architect Oskar Stonorov (1905-1970) showed a growing interest in the cooperation between professionals in different fields, while teamwork became a kind of "credo" in his practice[2]. Not only official professional partnerships (with W. Boesiger, A. Kastner, L. Kahn, G. Howe and F. Haws) but also a surprising number of temporary associations (according to different engagements) and public commitments marked his professional life on both sides of the Atlantic. His involvement with federal agencies, local administrations and civic organizations concerned with housing and planning, as well as his lifelong *liaison* with the labor unions, influenced his approach and the work of his partners along the years[3].

Architect, planner, civic activist, politician and sculptor, Stonorov is mostly known as the co-editor of the *Gesamtes Werk*, the co-designer of the Carl Mackley Houses, the co-inventor of the *Better Philadelphia Exhibition* and the designer of the *Frank Lloyd Wright Exhibition* held at Palazzo Strozzi in 1951[4]. In fact, his projects and an unexpected number of writings reveal a multifaceted figure whose interests, ideals and standards of work played a fundamental role in the shaping of a transnational discourse on housing and city planning. The paper addresses one of the most interesting moments of Stonorov's activity, and of the history of the American professional practice at the same time, the New Deal[5].

Born in Frankfurt, in 1905, Stonorov (the son of a Russian *emigré* engineer) studied in Karlsruhe, Italy (studying mathematics and sculpture in Florence in 1924-1925) and Switzerland (where he graduated in architecture with K. Moser at the ETH in 1928), first practicing as an architect with Lurçat in Paris in 1928-1929[6]. Even if he never worked for Le Corbusier, the influence of the Swiss architect, described by Stonorov as being as 'seductive as dictatorial, lucid while irrational', is acknowledged on several occasions, especially through his residential projects[7]. He was responsible for the volume I of the universally known *Le Corbusier und Pierre Jeanneret: Ihr gesamtes Werk von 1910-1929,* that he produced with Boesiger in 1930, inaugurating an intense collaboration with the architect during which they designed three model-houses in Switzerland (among them the "House on the Lake", 1931), a skyscraper for Zurich (never built) and participated in the competition for the National Theater of Kharkov[8]. However, the project for the theater marked the end of their two-year transatlantic collaboration and initiated Stonorov's special interest in theatrical construction. At the same time, his groundbreaking project for a hospital in Karlsruhe (1929-1930), the result of a joint effort with a surgeon (father of the friend Peter Blos), inaugurated a growing interest in the design of hospitals, health centers and structures for aged people that he would foster until the end of his life after arriving in the US in 1929 with the intent to propose to the Rockefeller Foundation a program for the design of a new hospital environment in the US[9].

The Ukrainian competition also marked the beginning of a new joint venture, with the German architect Alfred Kastner (1900-1975), another member of the first and mostly ignored generation of European *emigrés* in the US (with Lescaze, Frey, Kiesler, Clauss…)[10]. The competition for the Palace of the Soviets provided in 1931 the occasion for the two architects to work together. The fact that, when awarded the second prize in 1932, both were dismissed from their positions in the firms of R. Hood and H. W. Corbett mirrors the critical condition of European architects during the early 1930s in the US[11]. This situation was underlined on the occasion of the 1931 New York *Rejected Architects Show*, featuring nine projects (among them the work of Stonorov) neglected by the Architectural League on the occasion of its 50th Annual Exhibition[12].

THE NEW DEAL: HOUSING IS EVERYBODY'S BUSINESS

'Oskar helped cement the relationship between the Roosevelt era and housing.' (E. Bacon, 1970)[13]

On March 1, 1934, after three years of shared efforts[14], Stonorov and Kastner signed an agreement to establish a three-year partnership of "architects, theater designers and engineers"[15]. However, they were first associated in 1933 with the American architect Pope Barney for the design of the Carl Mackley Houses built under the PWA in the Juniata Park, Philadelphia (1933-1935), for the Full Fashioned Hosiery Workers. Barney was involved during the first phase when the names of Kastner and

Stonorov could not appear on official documents in part due to the work conditions of *émigrés* architects during the early years of the Depression and the initial defiance of federal institutions towards foreign professionals. The agreement highlights the responsibilities of the partners: Barney was responsible for relations with Washington and with the contractor, as well as for the accounting, Stonorov was in charge of relations with the labor union, the progress reports, the publicity and the sociological aspects of the work, while Kastner had the responsibility of the drafting room[16]. This pioneering project soon became a manifesto of New Deal modern housing, featured in publications and exhibitions in Europe and in the US over the decade. However, its interest goes beyond merely aesthetic reasons: methods and instruments (surveys) and the involvement of the workers in housing and community planning made the project radically innovative[17], mirroring the encounter between Stonorov's civic and political activism, his involvement with Roosevelt's administration and with labor unions (and their representatives) and Kastner's experience in low-cost housing design[18].

The New Deal constitutes an excellent observatory to study American architectural practice, standards of work and professional organizations: the Depression produced the driving forces for shaping alliances and associations within the public and the private sphere[19]. This was a time of changes and challenging opportunities for Stonorov: because of his background and his social engagement he acquired a central role on the public housing scene. Consultant of the Housing Division of the PWA since 1933, he was member of the local Piladelphia Housing Authority (PHA) and Citizens City Planning Council (CCPC) and contributed with Bauer to the definition of the Wagner-Steagall Act in 1937[20]. He participated in the TVA programs with Gutheim, while his major contribution was the national program of housing for workers that he shaped in collaboration with the labor unions, Edelman and Bauer, through the inauguration of the Labor Housing Conference. The experiences in government housing, his growing public engagement, his ability to negotiate with public bodies and boroughs led him to play a central role in defense housing and community planning programs during the Second World War.

During the years of the partnership he established numerous temporary associations: this is the case of the federal Camden Housing Project, NJ[21], developed for local labor unions with the "Allied Architects of Camden"- nine architects chaired by Stonorov and Hettel - under the PWA in 1935 (Kahn was a collaborator on that occasion)[22]. These collaborations mirrored different organizations of work and of the firm according to the nature of the projects. The size of the office significantly changes during these periods, from 10 to 75 employees, including engineers and landscape architects, marking the shift towards the new corporative culture that took shape during World War Two.

Stonorov's political architecture and knowledge of housing[23] convinced Howe to collaborate with him in 1937, creating the basis for their official partnership inaugurated during the Second World War[24]. Their first agreement reflects the nature of their future collaborations: 'For any architectural commissions arranged by Howe (as the patron) in his own name or in the name of Stonorov, S. pays to H. a percentage for his services in obtaining such job. The agreement is not to be interpreted as a partnership but that H. is acting as agent for and on behalf of Stonorov'.[25]

THE WAR LABORATORY

'The planner operates as an orchestra conductor who brings together, blends, synchronizes, harmonizes or reconciles the many elements and the variety of professional knowledge, skills, techniques involved in such vital designs.'[26]

The war years represent a fascinating moments for the study of professional practices, and of Stonorov's activity as well. American architects were forced to associate in order to obtain defense housing: new alliances took shape for that purpose, teamwork became the only form of work and new professional figures emerged. This is the case of the "Architect-Engineer", the profile used in contracts with the government that clearly defines the nature of the work, not too far from Stonorov's architectural education, experience and training that was largely along engineering lines.[27]

Regarded as a difficult moment by the majority of US professionals, WWII inaugurated a new and prosperous phase in Stonorov's career. [28] His technical experience, skills in the fields of planning, engineering and architecture, capability in administration and negotiation, as well as his political and civic commitments made him a perfect candidate for defense housing[29]. Moreover, his creative approach to workers' housing, his interest in community and neighborhood planning and his concern with "people" influenced the activity of his *Beaux-Arts*-trained partners during these years.

Due to the large number of engagements, Howe first asked Stonorov to join him in the association "George Howe and Associates, Architects and Engineers" in 1940 (the two would have the supervision of and responsibility for architectural design), an articulated structure with 73 employees conceived to meet the demand for complete design services and to assist members to obtain and carry out large-scale federal commissions[30]. However, at the same time each member maintained his independent private practice and every collective commission formed the subject of a special separate agreement creating the basis for the shaping of a postwar corporative organization of architectural practice. On April 27, 1941, the partnership Howe, Kahn & Stonorov was

inaugurated on the occasion of the Pennypack Project in Philadelphia[31], but on Feb 8 1942, after Howe had been named architect of the Public Building Administration, the partnership changed its name to Kahn & Stonorov. They associated as "experts of architecture, design, engineering and planning", but they also arranged to have individual partnership agreements for each job, in order to maintain individual and private jobs in association with different clients, as in the case of the co-partnerships with the US government (NHA and FPHA) for defense housing[32]. According to a simplified vision of the firm's organization, Kahn was responsible for the design and Stonorov for the administration of the office. However, a close observation of the partnership agreements reveals an articulated and multifaceted structure, mirroring the fundamental (and often under-valued) contribution of Stonorov, due to his political role and his competency in housing and community planning. According to Stonorov's account, his activity as a partner included, beyond the architectural side of the profession, supervision of design and construction, planning, land survey, investigations and negotiation with boroughs and technical departments of cities for cooperation agreements with the Federal Government[33].

The partnership developed more than 10 housing projects during these years (among them the 1942 Carvert Court at Coatesville for the CHA, featured at MoMA[34], the 1943 NCHA Lily Ponds, the 1941 Camden Development by Hettel & Stonorov…), reflecting the encounter between Kahn's experiments in low-cost housing design and Stonorov's connections and political activism required to secure government housing commissions and to get them built (according to Williamsons' chart it is no coincidence that Kahn worked for Kastner 1935-1936 when he designed the Jersey Homesteads Project for the Resettlement Administration, featured at MoMA in 1936[35]).

However, it is the ambitious joint effort of Bomber City, the progressive war-housing development designed under the FHA for the Ford's Willow Run aircraft plant in Ypsilanti (MICH20069),[36] that revealed the effective contribution of Stonorov. In fact, even if his role has rarely been acknowledged, he was the major force behind the shaping of this town and community planning experiment from the beginning when, through Reuther he proposed the idea to Washington and to the UAW[37]:. Considered as "the most workable and most human guide to the integrated community produced to date, the innovative model plan for 32,000 workers was expected to become a symbol of the New Deal and of professional cooperation for postwar planning however, despite Stonorov's efforts the project was not implemented according to the original idea[38].

While the housing projects represented the joint effort of the two architects, their theoretical work reflects the effective contribution of Stonorov, confirmed by an impressive number of lectures, articles and essays. Through this work (as well as through the participation to the CIAM and ASPA groups and to the Zucker project) the partners contributed in different ways to the debate on postwar planning and architecture[39]. This is the case of the project for a hotel submitted for the themed issue of *Architectural Forum*, "Buildings for 194x" (May 1943),[40] and of the two booklets produced by Stonorov and Kahn for the Revere Copper and Brass Inc within the series published on postwar architecture. Both *Why City Planning Is Your Responsibility*? (1943) and *You and Your Neighborhood: a Primer on Community Planning* [41] (1944) are deeply rooted in Stonorov's pre-war experiences in collective housing and reflects his interest in humanely conceived community planning and in "democratic (participative) planning", anticipating fundamental concerns of the postwar planning discourse[42]. The result of a long collaboration with the CCPC inaugurated in the prewar period, the 15,000 copies of the *Primer* became a reference-work for citizens, civic and public associations. However, the draft of another unpublished booklet (credited to Kahn by A. Shanken in his analysis of the visual aspects of Kahn's planning schemes)[43] also stresses the importance acquired by neighborhood planning during the war, as the "optimum size based on an intermediate structure between the individual and the State" that marked the shift from housing to neighborhood, to community to city planning: a recurrent discourse addressed by the MoMA exhibition *Look at Your Neighborhood* in 1944 that would constitute the core of the renowned *Better Philadelphia Exhibition* in 1947[44].

TOWARDS POSTWAR PLANNING FOR PEOPLE

> 'This exhibition is not the work of an individual or two. It represents teamwork. The vicissitudes of democratic action-the compromise-is the very merit of this show. We have attempted to blend the ideas of many Boards and Commissions and people into the presentation of a single idea.' (O. S.)[45]

The Second World War marked a shift in the Stonorov and Kahn association. While their partnership terminated in 1947, it is clear that with the end of the conflict the association, formed to address and solve housing problems, was loosing its original aims in the new economical, political, cultural and social context of postwar America. If the project for the Solar House, developed by Stonorov with Anne Tyng in 1945, officially represented the last joint effort of the firm, the 1947 *Better Philadelphia Exhibition* (dirtected by Stonorov with E. Bacon, while Kahn had a secondary role) marked the effective end, mirroring the diverse directions taken by the two partners after the end of the war. The event represented the result of a long work started by Stonorov with the CCCP before the war and mirrored his idea of city planning as a "large-scale application of an everyday process", his call for

civic action and his belief in the cooperation between citizens and professionals in the planning of the city. So, while according to Brownlee Kahn started to rethink his approach to modern architecture during the war, shaping his first considerations on "New Monumentality" (Zucker, 1944), Stonorov went ahead with his project to combine architecture and social activism and capitalized on his previous experiences in teamwork, housing and community planning in two different directions[46].

On the one hand, Stonorov became one of the leading figures in the American discourse on city planning and, in collaboration with the ASPA and the CCCP, he raised to a new level his experiences in community planning[47]. On the other hand, thanks to his role of consultant to the Marshall Plan for Italy, France and Germany, to his commitment with labor unions and to his friendship with W. Reuther, he started a joint effort to export to Europe, and in particular to Italy, the workers' housing and community planning programs developed in the US during the New Deal. He campaigned for the free labor movement as a unique opportunity to address the European housing deficit. Together the two friends and colleagues established a dialogue with several European labor unions, while the organization of the *Frank Lloyd Wright Exhibition* in Florence in 1951 provided a unique opportunity to inaugurate a stimulating exchange/collaboration with Italian architects, planners, and political and labor leaders (among them the most important for him was Adriano Olivetti) during the 1950s. His postwar activity was marked by a number of better- and lesser-known partnerships (such as the one with Haws), commitments (such as with the UAW) and temporary associations (among them with Yamasaki and Gruen for the Gratiot Redevelopment Project in Detroit in 1956) until his life was tragically ended in a plane crash while visiting the new UAW building with Reuther.

Stonorov's civic, public and political involvement, together with his professional background, made him one of the most interesting figures of the New Deal architectural *milieu*, legitimizing his position in the American Depression. Described as a "Jack-of-all-arts and a master of many, he could direct the work of others, or labor along side of them with equal skill"[48]. Because of his social and political attitudes he remained in the shadow of several colleagues and little attention was paid to his work by American or European historiography after his tragic death in 1970. While the project of Carl Mackley Houses has been partially acknowledged, his entire work has been virtually ignored, although it reveals an unexpected multifaceted figure that deserves new attentive consideration[49].

Endnotes

1. Citizens' Council on City Planning, Philadelphia, *Planning Award to Oskar Stonorov*, 5 May 1949, b. 51, Oskar Stonorov Papers (OSP), American Heritage Center University of Wyoming (AHCUW).

2. The paper is part of an ongoing research project on the work of Oskar Stonorov and on the role played by the German-American architect in the definition of an architectural discourse on modern public housing during the New Deal.

3. Stonorov was a member of numerous federal agencies and housing and planning associations (among them the National Public Housing Conference, the Citizen's Council on City Planning, the Philadelphia Housing Authority, the National Association Housing Officials) and participated to important federal projects such as the TVA. He was part of professional groups such as the AIA and the AIP, an active member of the American CIAM and the ASPA, and deeply committed with labor unions such as the American Federation of Full-Fashioned Hosiery Workers, the United Automobile Workers and the C.I.O.

4. For a first assessment of Stonorov's work see B. Zevi, "L'idea di Oskar Stonorov", *L'Architettura* XVI, 3, July 1970, pp. 142-143; F. Gutheim (ed.), *L'Architettura*, "Special issue dedicated to the Work of Oskar Stonorov", XVIII, 2, June 1972. On his work during the early 1930s see P. Santostefano, *Le Mackley Houses di Kastner e Stonorov a Philadelphia, 1931-1935* (Roma: Officina, 1982).

5. According the perspective that assumes the end of WWII and the death of Roosevelt as the conclusion of the New Deal period. See J.L. Cohen, *Architecture in Uniform: Designing and Building for the Second World War* (Yale University Press, 2011). See also J.P.J Oud, *Building and Teamwork* (1951), unpublished writing sent by Oud to Stonorov in 1952. OSP, AHCUW.

6. Stonorov spent a few years in the South of France learning from the sculptor Aristide Maillol in the early 1930s and he will work as a sculptor until the end of his life, as mirrored by his Philadelphia fountains, by the several works shaped in Tuscany after WWII and by his bust of Catherine Bauer at the headquarters for Housing and Urban Development in Washington, DC. See "Memo", *Personal Data*, 7 Jan 1931, f. 18, box 51, OSP, HACUW. Ref to J.-L. Cohen, *André Lurçat, 1894-1970 : autocritique d'un moderne* (Liège: Mardaga, 1995).

7. O. Stonorov, *Le Corbusier (seen from America)*, 1946, f. 15 b. 38, OSP. HACUW.

8. The theatre for 4000 seats constituted the joint effort of the two architects with the collaboration of Gustave Lyon, expert in acoustics in the Dept of Public Works of the French Government. During his formative period Stonorov specialized in theatrical design, f.3, b. 9, OSP, AHCUW. See also O. Stonorov, "Theatres, Movies and Places of Entertainment", in Paul Zucker (ed.), *New Architecture and City Planning. A Symposium* (New York: Philosophical Library, 1944).

9. "Memorial Service, Notes by Peter Blos" 16 May 1970, f. 17, b. 51 OSP. The friendship originated in Florence and continued throughout the years while Stonorov shared with Peter Blos's father a particular interest for modern hospital design.

10. Born in Leipzig in 1900, Kastner studied at the University of Leipzig and at the Technische Hochschule of Hamburg and emigrated to the US in 1924,

working for B. Goodhue, James Roger, Joseph Urban and Raymond Hood in New York until 1931. *Resumés*, f. 21, b. 51, OSP AHC

11. Stonorov had spent 10 months in the office of Corbett, Harrison and Murray, learning about American practice. See the correspondence between Kastner and Stonorov (3 September 1931- 6 December 1932) concerning the teamwork, their first collaborations, and the organization and management of the partnership. OSP, AHGUW.

12. *Rejected Architects, Model Project Photos. An Exhibition organized by architects whose models were not accepted for the current Architectural League Show*, April 21-May 5, 1931. The exhibition featured the projects of Clauss and Daub, Stonorov & Morgan, Hazen Sise, William Muschenheim, Walter Baermann, Elroy Webber and Richard Wood.

13. Edmund Bacon, "Article in memoriam of Oskar Stonorov", *Memorial Service Notes*, 16 May 1970, f. 11, b. 51, OSP, AHCUW.

14. Stonorov & Kastner submitted the plans for the replanning of the center of Stockholm in 1932, before the inauguration of the official partnership. During the years of the partnership they worked together on the design of prefabricated and steel frame houses for the Republic Steel Corporation and on a number of public housing projects.

15. *Partnership agreement between Alfred Kastner and Oskar Stonorov*, 1 March 1934, f. 8, b. 20, OSP, AHCUW

16. *Partnership Agreement between Barney, Kahn and Stonorov* for the purpose of the project of model apartment houses (the Carl Mackley Houses), 14 September 1933, f. 8, b. 20, OSP, AHCUW.

17. On the method based on a sociological survey see W.W.Jeanes, Kastner & Stonorov Architects, *Housing Union Hosiery Workers in Philadelphia*, *Housing of families of the American Federation of Full-Fashioned Hosiery Workers* (Philadelphia: C. Woerishoffer Grad Dept of Social Economy and Social Research, 1933). On the "Architect's discussion" see pp. 56-61.

18. Kastner, preliminary studies for Negro-Low-Wage Housing in Washington, 1933-1934 (Subsistence Homesteading Project), f. 9, b.9, OSP, HACUW. See Alfred Kastner, "Houses for ten dollars a month", *Journal of Negro Life*, December 1932, pp. 372-379.

19. Richard Pommer, "The Architecture of Urban Housing in the United States during the early 1930s", *Journal of the Society of Architectural Historians*, 37, 4, Dec 1978, pp. 235-264.

20. On the relationship and collaboration between Bauer and Stonorov see P. Hoberlander, E. Newbrun, Houser. The Life and Work of Catherine Bauer (Vancouver: UBC Press, 1999).

21. "Agreement between J. Hettel and the City and County of Camden for the low-rent housing project "NJ 10"", 13 March 1939. See also *Camden Agreement between Hettel, Stonorov, and the US Government for the architectural, site planning and professional services on 500 housing units*, Camden NJ, 9 January 1941, f. 9, box 20, OSP.

22. Their first collaborated in the design the City for Children's World for the FHA at the 1939 New York World's Fair, after Stonorov had designed the US Government Science Exhibit at the *San Francisco Golden Gate International Exposition* one year before. Stonorov proposed also co-operative pavilions for labor unions at the 1939 NYWF in collaboration with the Architects, Painters and Sculptor Collaborative of New York, b.47, OSP. AHCUW.

23. See R. Stern, *George Howe: Toward a Modern American Architecture* (Yale University Press, 1975). On this discourse see the correspondence between Howe and Stonorov ,14 February, 1938, OSP, AHCUW.

24. O. Stonorov, "And Housing…", *Shelter* 1938.

25. On the architectural and professional culture during the war years see Jean-Louis Cohen *Architecture in Uniform,* op. cit., and Donald Albrecht, *World War II and the American Dream: How Wartime Building Changed a Nation* (Cambridge: MIT Press, 1995).

26. Oskar Stonorov, *Speech* (undated), OSP, AHCUW

27. NHAFPHA Washington, "Architect-Engineer Contract" (for war housing projects), 11 August 1942, f. 6, b 20, OSP, AHCUW. See also Fritz Gutheim, "In Memoriam Oskar Stonorov" (*Memorial Service Notes*), 16 May 1970, f. 16, b. 51, OSP, AHCUW.

28. Contract-questionnaire": Stonorov also applied for the Commission Military Government (1943) but there were no possibilities to commissioning men from civil life except in the case of doctors, chaplains and particular categories.

29. *Questionnaire* to apply for defense housing, May 1943.

30. *G. Howe and Associates, Architects and Engineers, Agreement,* 20 November 1940, OSPA, AHCUW.

31. "Howe, Stonorov and Kahn, Partnership Agreement: Pennypack Wood Project, Philadelphia", 28 July 1941, f. 7 b. 20 OSP, AHCUW.

32. *Stonorov & Kahn Partnership Agreement*, 8 February, 1942, OSP. AHCUW. "Architect's Contract for defense housing under the Laham Act between the United States (NHA and FPHA) and Kahn and Stonorov for the project of Carvert Court, Coatesville (100 dwelling units)", f 6, b. 20 OSP, AHCUW

33. *Questionnaire*, 8 July 1943, f. 18, b. 51, OSP, AHCUW.

34. Exhibition, *The Lesson of War Housing*, Museum of Modern Art, New York, 1945.

35. R. K. Williamson, *American Architects and the Mechanics of Fame* (Austin: University of Texas Press, 1990). She highlighted through the chart "Career Connections of major American architects" the relationships between Kastner, Kahn, Stonorov and Howe before and after the partnership, as well as the connections between Stonorov and some of the young professionals who worked in his office (among them Robert Venturi). The project by Kastner and Kahn is featured at the MoMA on the occasion of the exhibition *The Architecture of Government Housing*, in 1936

36. *Prospectus of Detroit Defense City based on community planning*, 26 Sept 26, 1941. See also "The composite Plan Town Site –Willow Run", conceived by

Stonorov with the support of Walter Reuther, 22 June 1942, f. 14, b. 3, OSP, AHCUW.

37. "Oskar Stonorov on Detroit Defense City", *Memorandum*, 11 September 1941, f.14, b.3, OSP, AHCUW. The original project for Bomber City (Detroit Defense City Project) included in 1941 a community center designed by Saarinen and Swanson and 10 individual projects: five housing neighborhoods (of 1200 dwellings) signed by the architects selected for Defense City at Willow Run: Howe, Saarinen, Winn, Lyndt and Smith, Kastner and Hoben, Keck, Wurster, Stubbins, Stonorov, Stone, Kahn. Stonorov conceived the general plan and contributed to the selection of the site, while Howe was the chair of the executive committee, and Saarinen the urban designer. See: *Notes on Bomber City* (9 February 1943), b. 3, OSP, AHCUW.

38. W. Jordy, "Fiasco at Willow Run", *Nation* 156, 8 May 8 1943, reprinted in W. Jordy, *Symbolic Essence and other writings on Modern Architecture and American Culture* (Yale University Press, 2005) pp. 127-132. Only 500 temporary houses were finally built because of the alliance between real estate, banks, the Ford company and local administrations.

39. Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960* (Cambridge: MIT Press, 2002).

40. L. Kahn, O. Stonorov, "A Hotel for 194x", *Architectural Forum (*themed issue *New Buildings for 194X*) 78, 5, May 1943, pp. 78-79.

41. L. Kahn, O. Stonorov, *Why City Planning is your responsibility,* (New York: Revere Copper Bass Inc., 1942); Kahn & Stonorov, *You and Your Neighborhood: a Primer on Community Planning* (New York: Revere Copper Bass Inc., 1944).

42. For their Primer the two architects used in an instrumental way famous images such as the view of the Radburn community (NJ) by Clarence Stein or the José Louis Sert's charts of recreational needs of different age groups published in his *Can Our City Survive: an ABC of urban problems, their analysis, their solutions* (Cambridge: Harvard University Press, 1942) .

43. Andrew Shanken, "The uncharted Kahn the visuality of planning and promotion in 1930s and 1940s", *Art Bulletin* 88, June 2006, p. 310-325.

44. Andrew Shanken, *194X*: *Architecture, Planning, and consumer culture on the American home front* (Minnesota University Press, 2009).

45. O. Stonorov, *Speech*, "Better Philadelphia, 1947", f. 25, b. 9, OSP, AHCUW

46. On this period of Kahn's career see S. Goldhagen, *Louis Kahn's Situated Modernism* (Yale University Press, 2011); D. Brownlee, D. De Long, R. Koshalek, *Louis I. Kahn: In the Realm of Architecture*, (New York: Rizzoli, 2005); R. Mc Carter, *Louis I Kahn* (London: Phaidon, 2005). See also Louis Kahn, "Monumentality", Paul Zucker, *New Architecture and City* Planning (New York: Philosophical Library, 1944) pp. 577-588.

47. O.Stonorov, *Better Philadelphia, 1940-1947* "*Reasons for the need and basic ideas for a movie on replanning old neighborhoods"*, 7 December 1944, f. 1, b. 10, OSP, AHCUW: "The film will be based chiefly on the book '*You and Your Neighborhood- A Primer for Neighborhood Planning*': like a living organism, a city must continuously renew its cells - the neighborhood - or die…It is agreed that there exists great interest in every community for a 'down to earth' approach to neighborhood replanning and it is also believed that such ideas as are current in the USA may be of interest to other nations for them to witness how we are tackling a problem common to all city dwellers over the world. Citizens' participation is the greatest factor in successfully and democratically achieving the replanning of neighborhoods."

48. L. Crowell, "In Memoriam Oskar Stonorov" (*Memorial Service Notes),* 16 May 1970, f. 16, b.51, OSP, AHCUW.

49. The year after Stonorov's death an exhibition titled *Oskar Stonorov Architect, Sculptor, Planner, Political Philosopher and Originator of Ideas* was held in Philadelphia in 1971.

THE ROLE OF GUILDS, OVERSEERS, AND ARTISANS IN THE BUILDING OF A BRAZILIAN COLONIAL "ARCADIA"

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On some level, we realize that design and construction teams generate the large and complex built forms of our cities and landscapes. Yet the myth of the single star architect as sole designer persists. This percolates through interpretations of history where important contributors to the design of buildings and other built form are marginalized and unrecognized, while a choice few are acknowledged as geniuses. This archistar conceit is also used when referring to current architectural practices although such firms are often composed of large frenzied teams of architects known to work on charrette for months on end to realize a project, and in addition, the success of a project often hinges on the creative contribution of engineers and people in the construction trades.

Archistar branding is clear and concise. It is easier to follow a creative thread and refer to a particular building or style in this way. That said, when the various actors and influences (a team of architects, a guild or artisans' workshop, engineers, a team of overseers, a visionary client) are teased out, a richer understanding of both the creative process and the various influences that came to play in the development of a particular design or style can and do emerge. Although the case that will be discussed here is from the eighteenth century, it can contribute to a growing body of understanding about collaboration and creative expression in any period.

THE CASE OF OURO PRETO, MINAS GERAIS

The inland city of Ouro Preto (originally called Vila Rica) began around 1700 as a string of tiny hamlets of gold prospectors who settled along a river that meandered through a valley cutting through the mountains of Minas Gerais. The region's reputation as a gloriously rich source of gold grew swiftly and the population of Ouro Preto swelled. Not only miners, but artisans, builders and architects emigrated from Portugal and migrated through wilderness from the Brazilian coast to seek their fortune. In addition, many thousands of slaves were imported from Africa to work under horrific conditions panning and mining for gold.

With an increasing population, the need for buildings of various kinds became acute. Some of the architectural projects created in Brazil's mining region during the latter half of the eighteenth century were so distinctive that colonial sites in Minas Gerais, including the entire city of Ouro Preto, were later designated UNESCO World Heritage sites.

Ouro Preto's World Heritage designation reflects the city's extraordinary mountainous setting and architecture but also the gold rush, significant migrations, other artistic production and rich history. The architecture of Ouro Preto was noted first by Brazil's heritage institute in the 1930s, as they recognized the architecture and art produced here as a significant part of Brazil's patrimony.[1] Daryle Williams Durham points out that validating heritage was a way of solidifying a cultural identity for the new *estado novo* (1937-1945) of the Getúlio Vargas Regime.[2] It is this significant architecture and its authorship that will be the focus here.

ANTONIO FRANCISCO LISBOA, ARCHISTAR

The Brazil-born artist/architect Antonio Francisco Lisboa (nicknamed Aleijadinho) has been singled out as the remarkable archistar genius of the architectural developments in Ouro Preto and other areas of Colonial Minas Gerais, Brazil in the latter half of the eighteenth century. He was so identified with the particularities of this period's architecture and ornament a stylistic category was named for him, reflected in the title of an article by the architectural historian J. B. Bury.[3] In Brazil, a whole industry has developed around Lisboa. His now mythic proportions were promoted initially by the circulation of a short biography from 1858 that wove fact and legend together to create this larger-than-life figure from the previous century. Although his talent is not in any dispute, he did not create these masterworks alone. A study of the artistic community in which he lived, how the work was commissioned, and who his teachers, collaborators and apprentices were is crucial to a better understanding of the work.

THE ARCHITECTURAL MILIEU

During the gold rush, houses, churches and a few civic buildings were built in Ouro Preto. Notably, rival religious groups: brotherhoods, sodalities and lay orders – were all commissioning new churches for their congregations at the same time. Evidence

suggests that artists, artisans, builders and engineers could not escape being witnesses to each other's ideas as the new buildings emerged all over town. The clients as well as those who toiled on these projects were competing as well as collaborating, perhaps pushing ideas further than they might in isolation. In this way, this rather remote environment became a petri dish of creativity.

DESIGN SOURCES

Despite its physical isolation, Ouro Preto and the whole region were connected to images and ideas through a web of trade and migration. While some of the buildings built during the eighteenth century in Minas Gerais were unlike any other buildings in Portugal, elsewhere in Brazil or the other regions of the Americas, their basic design and details were actually new combinations, variations and interpretations of a vocabulary largely based on the knowledge of Portuguese, Bavarian and Italian architecture, with possibly knowledge and cultural elements slave artisans and builders brought from the gold coast of Africa. Although exact references are not known, wealthier Portuguese residents had impressive libraries, and the earliest account of Lisboa's life and work by Captain Joaquim José da Silva contains many European architectural references including Corinthian columns, the Pantheon in Rome, and Giacomo Vignola. This reflects what was called the cultural "Arcadia Mineira" a learned society who wrote poetry, appreciated, wrote and played music, and understood the importance of the arts.

The governors of the captaincies saw architecture as a device to create a cultured and civilized society.[4] Accommodating a growing need for architectural talent in Ouro Preto, the master carpenter/architect Manuel Francisco Lisboa (Antonio Francisco Lisboa's father) and the sculptor/designer João Batista (a designer for the mint) took on apprentices and conducted classes.[5] Antonio Francisco Lisboa apprenticed with both his father and Batista.

ARCHITECTURAL PRODUCTION

In addition to the construction of the few civic buildings and structures permitted by the Portuguese government, most of the creative production was church related. When religious groups petitioned the crown for permission to build, it was often granted, resulting in many churches for the various lay confraternities that represented many social classes from the wealthiest Portuguese immigrant elite lay orders to the poorest African slave brotherhoods. These groups then became the clients for the various churches within what is now Ouro Preto and beyond, more than a dozen in Ouro Preto itself. The early churches were simple ones using the Jesuit model found in other regions of South America, said to loosely correspond with sketches of Il Gesù church in Rome as well as, most likely, a general plan from a Spanish treatise by Fray Lorenzo de San Nicolas.[6]

BROTHERHOODS AND GUILDS

In colonial Minas Gerais, it was common practice for men to join a religious brotherhood or a lay order. Class and racial segregation in Brazil, particularly in the religious brotherhoods, meant that the rich joined different groups than the poor and those of mixed race joined different groups than the Portuguese or the African slaves. In addition, the São José brotherhood seems to have been not only a religious organization for mixed heritage residents but also it became the brotherhood of artisans, artists and musicians including Antonio Francisco Lisboa. There is a scarcity of information about how the brotherhood functioned and whether it acted like a guild. Perhaps by looking at brotherhoods in other cities, a better picture of the role São José played in the lives of its artistic community can be pieced together. The important thing about this brotherhood is that members like Antonio Francisco Lisboa were surrounded by people in the arts in their social and religious life as well as at work.

THE CONTRIBUTION OF ENGINEERS

In the middle of the 18th century, the Portuguese Crown sent engineers to the colony of Brazil specifically to teach at the school of fortification. Some Portuguese engineers made their way to the mining region in the interior as well. One such engineer, José Fernandes Pinto Alpoim was reassigned to work on the Governor's Palace in Ouro Preto, already under construction. There, the mining and military engineers Joseph Rodrigues de Oliveira and Pedro Gomes Chaves had already made an impact on the landscape.[7] Oliveira designed military residences in the area, and a new parish church of Nossa Senhora do Pilar (Our Lady of the Pillar). In 1741, Chaves was placed in charge of the parish church project..[8]

What these three engineers had in common was a simple, clean approach to design. The architectural historian Carlos Lemos writes: 'The Portuguese military engineers that were in Brazil in the eighteenth century ignored the Baroque, preferring in their compositions, an emulation of the Renaissance'.[9] Without a doubt, these early projects were much more restrained than later work embellished by wood and stone carvers, architects, master masons, sculptors and painters.

REVEALING INFLUENCES AND COLLABORATIONS

The intertwined construction histories of the two Third Order (lay order) churches of São Francisco de Assis (San Francisco of Assisi), considered to be Lisboa's masterpiece, and the nearby Nossa Senhora do Carmo (Our Lady of Carmel), a stately building with contributions by Lisboa, reveal how some of the same people were at work on both buildings, as well as other construction projects. Payment records reveal that Lisboa was a crucial contributor to São Francisco's skillful and dynamic resolution, and that his touch was responsible for the façade of the Carmo church.

The São Francisco church is notable for its cylindrical bell towers that are expressed in the nave and also set back from a dynamic torqued broken pediment. The Carmo church's gently curving façade and bell towers echo the new forms that break from the norm of rectilinear plans and elevations consistently found in the older churches in town. It is this curvilinear form as well as an interconnectedness, a unification of design elements that is considered to be the 'Borrominesque' and '*estilo Aleijadinho*' architecture discussed by J.B. Bury and numerous other historians. The question arises, were these *estilo Aleijadinho* elements Lisboa's doing, or was the local creative activity and the community of artisans builders and architects working together partly responsible for this breakthrough? Where did these ideas come from? Although records are scarce, some clues can be revealing.

CONSTRUCTION HISTORY

While the Third Order church projects were commencing in 1766, two other churches were under construction, one across town and another in the nearby town of Mariana. They both included oval naves and chancels as well as undulating tile roofs. The structure across town, Nossa Senhora do Rosário, included cylindrical bell towers that gently merged with the curved front façade in a clean simple manner that reflected the aesthetic brought to town by Portuguese engineers. This construction predated the São Francisco façade by as much as four years. There are few records to reveal who designed these buildings beyond the will of the first contractor for both, José Pereira dos Santos, but their presence in the landscape may have influenced the major designers of São Francisco and the Carmo.[10]

The Third Order of São Francisco was formed in 1745, after which they began to raise funds for a grand church, eventually contracting prominent builders and designers around 1766. Among them was the mason Domingos Moreira de Oliveira. He remained on this project until 1787, most likely collaborating with the mason Miguel da Costa Peixoto as well as Antonio Francisco Lisboa who contributed greatly to the building's design and execution. Lisboa was paid for two carved-stone pulpits located at the chancel arch, as well as the design and carving of the entire façade frontispiece including a medallion and the split pediment. Lisboa also was commissioned for the tribune and the retable of the chancel, and two side altars. These were executed with his apprentices, slaves from Africa, Maurício and Augustinho.[11] [12]

It is important to point out that architectural historian Beatriz Oliveira suggests that evidence of Lisboa's use of apprentices is revealed in the combination of delicate ornamentation and bold architectural form in the church's retable, implying the contribution of more than one artist. Furthermore, the retable of São Francisco's chancel was still being carved between 1790 and 1794 when Lisboa was already quite ill. Lisboa's nickname, Aleijadinho, refers to a degenerative disease that made fine carving increasingly difficult for him. Over time he must have become increasingly dependent on assistants.[13]

At the same time as Domingos Oliveira began to work on São Francisco, the construction project of the other Third Order church in town, Nossa Senhora do Carmo, (Our Lady of Carmel) was in construction only about 100 meters away. Manuel Francisco Lisboa (Antonio's father) designed the building initially, but his death necessitated a replacement by the stonemason João Alves Viana who then worked with the very same Oliveira of São Francisco and a multitalented builder/artist Francisco de Lima Cerqueira, who traveled through the challenging hilly wilderness for many weeks, from São Joao del Rei, for this work.

In 1768, Cerqueira, Oliveira and Peixoto were all overseers on the Carmo church. In that year, Cerqueira and Oliveira presented the sodality with a radical design change – the stonemason João Alves Viana's proposal involving proportional and material changes for exterior walls, vaults, and arches. While the exact nature of this proposal is unknown, the resulting structure has a gently undulating front façade and bell towers that are not rectilinear like the earlier ones in town, but softly bulge, suggesting cylindrical forms, quite different from Manuel Francisco Lisboa's earlier very rectilinear work. Also important to keep in mind is that Manuel's son Antonio Francisco Lisboa was paid for a variety of projects within the church, including the execution of two altars and ornamentation on the crossing arch. Lisboa was also an overseer during the late construction phase and he is generally considered to be the creator of all the carvings on the front façade. To make matters more confusing for historians, the São Joao del Rei architect, Cerqueira, was not just an overseer, but was paid for the execution of numerous interior elements of the Carmo.[14]

Where did Viana's proposal for the changes championed by Cerqueira and Oliveira originate? Was he looking at the São Francisco church's cylindrical towers and the integration of the towers with the sculpturally dynamic frontispiece, most likely conceived by Lisboa? Was Viana, or Lisboa for that matter, taking ideas from the sleek curves and cylindrical bell towers of the Rosário

church? We may never know the answers, but to complicate the question even further, Cerqueira's masterwork, the São Francisco church in his hometown of São Joao del Rei has undulating sidewalls and cylindrical bell towers.[15] While there is no record of formal collaboration between Lisboa and Cerqueira, Lisboa is named as the author of a sketch for the São Francisco church in Sao Joao del Rei. His sketch shows a rectilinear façade with rectilinear bell towers and delicate carvings around the central entrance. Cerqueira's design changes to the church in São Joao del Rei in 1781, where he ripped out some already built form, likely included the curved roof, sidewalls and cylindrical bell towers, not reflected in Lisboa's sketch. These curvilinear and interconnected forms echo the Carmo church as well as what was certainly Cerqueira's first-hand observation of the construction of cylindrical bell towers of the Sao Francisco and Rosário churches of Ouro Preto. Although there are many differences, the delicate carvings around the entry and the shape of the windows shown in Lisboa's initial drawings remain.

There are a number of puzzle pieces missing from the associations and influences between Lisboa and Cerqueira, not to mention their other many associations. But what we can see from just the account of the two Third Order churches is that Lisboa was a team player, not just as an overseer, but also as the leader of a small group of apprentices. We also can see that his dynamic forms, the integration of bell tower with the front façade on the São Francisco church, the dynamic broken pediment and the seamless way his carvings on the São Francisco façade melt into the oculus are all part of his genius, but the ideas might have originated from keen observation as well as interaction with his colleagues encountered as an artist/architect and overseer for many projects. Discovering Lisboa's cultural community not only reveals where his ideas may have originated, but also gives us clues about how architectural and artistic ideas are generated as well as helping to demystify and demythologize the archistar.

Endnotes

1. The organization was then called *Serviço do Patrimonio Histórico e Artístico Nacional* (SPHAN).

2. Daryle Williams Durham, *Culture wars in Brazil: the first Vargas regime, 1930-1945*, (Duke Univ. Press 2001), 15-17, 90.

3. J. B. Bury, "The 'Borrominesque' Churches of Colonial Brazil" *The Art Bulletin,* Vol. 37, No. 1 (Mar., 1955), 35, and "Estilo Aleijadinho and the Churches of Eighteenth Century Brazil," *The Architectural Review. 61,* no. 662, 92-100.

4. Roberta Marx Delson, "Planners and Reformers: Urban Architects of Late Eighteenth-Century Brazil," in *Eighteenth-Century Studies.* 10, no. 1 (Autumn 1976): 48.

5. Judith Martins, *Dicionario de Artistas e Artifices dos Seculos XVIII e XIX em Minas Gerais* (Rio de Janeiro: Publicações de IPHAN, 1974), 1: 366.

6. *Arte e uso de arquitectura* by Fray Lorenzo de San Nicolas was a practical guide to architecture, published in two volumes in Spain during the seventeenth century. See Bury, "The 'Borrominesque' Churches, 27 – 28.

7. Aurelio de Lyra Tavares, *A engenharia militar portuguesa na construção* do Brasil (São Paulo: SPEME, 1965), 183–184; 1: 23-27., Arquivo Historico Ultramarino, código 532, Caixa 3 Doc. 45. 1722.

8. Arquivo Historico Ultramarino,, MG-Caixa 3, doc. 45, 252, 12 October 1722. Arquivo Historico Ultramarino, Illus. "Quarteis" MG, Cap. 1151 and "Quarteis" MG, Cap. 1152.

9. Carlos Lemos, 'Dos engenheiros militares portugueses que atuaram no Brasil no século XVIII e que ignoram o barroco, preferindo em suas composições, a contenção renascentista'. "No brasil, a coexistência do maneirismo e do barroco até o advento do neoclassico historico'. Barroco: Revista de Ensaio e Pesquisa 15 (1990/1992): 255.

10. José Mariano Filho, "Considerações: Acerca do templo de Nossa Senhora do Rosário e São Francisco de Assis de Ouro Preto (Conferencia realizada no Instituto de Estudos Brasileiros em 15 Dec. 1939)." *Estudos Brasileiros,* 4, no. 10 (Jan.–Feb. 1940), 392–397; José Pereira dos Santos, "Testamento com que faleceu José Pereira dos Santos." In *Anuario do Museu da Inconfidencia.* Year III (Ouro Preto: DPHAN, 1954), 140.

11. Bretas, Rodrigo José Fereira. "Biographic outline relating to the Late Antônio Francisco Lisboa." In *Passos da Paixao: O Aleijadinho,* ed. and commentary by Myriam Andrade Ribeiro de Oliveira, Trans. Maria Cunha Brenner. Rio de Janeiro: Alumbramento, 1984 (first published circa 1858), 29 ; Caio C. Boschi. *O barroco mineiro: artes e trabalho* (São Paulo: Editora Brasiliense, 1988), 33.

12. Martins, *Dicionário,* 1:369-370. See also "Livro de Receita e Despesa da Ordem Terceira de São Francisco de Assis," fls. 70, 83, 120, 121, 141, 151, 165, 166, 167, 181, 207.

13. Bury, "The 'Borrominesque' Churches," 30, 45; Martins, *Dicionário,* 1: 370.

14. Germain Bazin, *A arquitetura religiosa barroca no Brasil.* São Paulo: Museu de Arte, and Paris: Librairie Plon, 1956, vol. 2:74.; Martins, *Dicionário,* 1:176, 2:84, 301–305.

15. Martins, *Dicionário,* 2:84, 2:301–302.

THE BIRTH OF AMERICAN CORPORATE ARCHITECTURE IN THE MID-TWENTIETH CENTURY

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> The atom bomb was much less a triumph of science than a triumph of organization.
> ― Peter F. Drucker, *Concept of the Corporation*

The American discourse on modern architecture changed dramatically after the Second World War with the rise of large-scale architecture firms. The label "corporate architecture" emerged soon thereafter, partially in response to these changes. The term suggests that the architectural icons of an aberrant modernism are subservient to American corporate clients and, therefore, superficial in initial design concepts and their formal resolution. It is clearly a critique of the mid-twentieth century American capitalism that seemed to dominate the cultural world at that time. Even if the term corporate architecture was widely employed, there has been little research on what it was and how it operated. This paper tackles the general transition in architectural practice, concentrating on the firm of Skidmore, Owings and Merrill from the mid-1930s to the early 1960s.

SOM'S MAIN CONTRIBUTION TO MODERN ARCHITECTURE

SOM is considered an innovative architectural firm that combined the creative forces of individual architects with the strength of a large-scale corporate organization. This was first recognized as early as 1950 when the Museum of Modern Art in New York City invited the firm to exhibit its recent projects. The bulletin for the exhibition reported it was the first architecture show that did not focus on individual designers or collaborating partners. Instead, it was a firm "composed of a group of single designers working exclusively in the modern idiom, [that] produces imaginative, serviceable and sophisticated architecture."[1] The bulletin argues that individual designers within the firm had no fear of losing individuality, rather: "They work together animated by two disciplines which they all share – the discipline of modern architecture and the discipline of American organizational methods."[2] This unity resulted from the architects' awareness of their new situation. Due to the size of projects and personnel, they could no longer work as individuals and, instead, were willing to work collectively. SOM enabled its designers to contend with seasoned, well-established individual architects in the competitive, dynamic market after World War II.

One of SOM's early partners, William Hartmann, suggested that it was necessary to create a complex organizational structure to manage large-scale architecture and engineering projects. He contended that bringing in professionals with various backgrounds and incorporating them into parts of a compound organization was what made SOM successful.[3] The partners of the firm had to cope as the business of architecture changed from the simple design of buildings to more inclusive architecture-engineering projects. As they grew, SOM organized more than a thousand employees efficiently, while continuously inviting energetic and capable young talents to even further expand the firm.

The American Institute of Architects New York Chapter recognized this ingenious combination of modern architecture and business techniques, awarding Louis Skidmore the Medal of Honor in March 1949. By then, SOM had already built the Great Lake Naval Training Center, the Sloan-Kettering Institute, the Bellevue-New York University Hospital Research Group, the Town of Oak Ridge, Tennessee and the Terrace Plaza Hotel in Cincinnati. According to the award, Skidmore proved how "to understand the practical problems of the client, to solve these problems in an economic and socially useful manner, and to produce from this distinguished architecture."[4]

In 1957, the AIA awarded its Gold Medal to Skidmore, AIA's highest honor, previously given to only 14 other American architects, including Charles F. McKim, Paul P. Cret, Louis Sullivan, Eliel Saarinen, Frank Lloyd Wright and Bernard Maybeck. With the award, Skidmore was recognized among the most prominent architects in the United States. However, his qualifications were vastly different from those of previous recipients. Skidmore's main contribution was the success of his organization, not his artistic achievement.[5] He befittingly received this honor a year after his official retirement from the firm. Despite his efforts to construct a modern corporate firm, Skidmore had been viewed as a fatherly figure. With his receipt of the medal and retirement, the last trace of an old architectural practice was finally gone in the firm.

LAWYER AS ORGANIZER OF ARCHITECTURE OFFICE

When Skidmore and Nathaniel Owings started the firm in 1936 after the Century of Progress Exhibition in Chicago, their business model was very simple; there were two collaborating partners and several employees. It changed in 1939 when architect and engineer John O. Merrill was invited to be a partner. However, Merrill remained just a limited partner for the following 10 years, despite the firm changing its name to Skidmore, Owings and Merrill. In 1949, Skidmore and Owings finally gave up their dual ownership accepting Merrill along with William S. Brown, Gordon Bunshaft, Robert W. Cutler, and J. Walter Severinghaus as full partners.[6] After that, the firm occasionally accepted full partners with unanimity.

This expansion of leadership was influenced by the founders' desire to keep the firm intact and flexible when they retired. They considered the organization's well-being much more important than themselves. *Fortune* magazine noted that the formula used to broaden the base of the original two-man partnership was a "variation of one widely used by law firms, but rare if not unique in architecture."[7] Indeed, the leadership structure was initially drafted and continuously rewritten by Marshall Grosscup Sampsell, a lawyer who worked with the firm from its beginning. He was a partner of the Chicago law firm of Isham, Lincoln & Beale. Many early partners of SOM remembered him as one of the most important figures in the development of the firm.[8] Bunshaft recalled that Sampsell was "the man who's responsible for the creation of what the firm became."[9] He developed the basic structure of partners, associate partners and participants in order to make the firm a continuously growing organization. Within this structure, young designers could progress up the ladder.[10] Sampsell based this concept on the structure of law firms he knew well.

Hartmann even argued that there were three essential people who established the firm: Skidmore, Owings and Sampsell. Hartmann emphasized the importance of Sampsell, assuring that "I'm sure it would have fallen apart if he [Sampsell] hadn't existed."[11] The lawyer was, in a way, much more important than any single partner. He played a key role in making most of the critical decisions regarding the operation of the firm. Sampsell was both an outsider and an insider. Owings described Sampsell as "something like a satellite moon to Saturn, he is essentially a part of SOM, yet detached. Shy, retiring, he has been our legal mind since 1936, serving as confidant and confessor." Additionally, for several decades, Sampsell was charged with maintaining and updating the rational bureaucratic system of partnership that he introduced to the firm. As Owings described, "The overall partnership documents under which SOM operates were originally put together by Gross [Sampsell] and are ever-changing, like the amorphous body of English law, which includes much that is not written down at all."[12]

As a large firm, SOM, under the guidance of Sampsell, developed a welfare system for its employees designed to maintain long-term stability. A medical insurance program and a profit-sharing retirement fund were among the benefits that it offered employees. SOM was one of the first firms that introduced an inclusive medical insurance program. In 1953, *SOM Newsletter* reported the introduction of "Group Insurance" as an important part of the firm's personnel policies.[13] In addition, the partners decided to begin a 'Profit-Sharing Retirement Fund' in 1956. SOM is believed to be one of the first professional organizations to establish this type of fund and, in its first year, there were two hundred and twenty-two persons eligible.[14]

THREE BUSINESS STRATEGIES

While SOM's business model, from its partnership structure to it benefits program, allowed the firm to grow and be successful, the firm would not have thrived, let alone survived, in its field without its other innovations more closely related to practicing architecture. These innovations were SOM's concerted effort to maintain the consistency and quality of their work. These efforts can be divided into three points: its focus on decentralization, the "package deal" and a lasting relationship with its clientele.[15]

Decentralization

Though common today, decentralization was an innovation SOM originated. Several months after its establishment in 1936, Skidmore and Owings split its offices. While Owings remained in Chicago running the original office, Skidmore set up a second office in New York. Before long, the San Francisco (1946) and Portland (1951) offices were established.[16] By the mid-1950s, these four offices had divided the world map and were working on projects around the world. The New York office undertook projects in the East Coast, Europe, the Middle East and South America. The San Francisco office served the West Coast, the South and the Far East. The Portland office, developed in association with Pietro Belluschi, operated in the Pacific Northwest and Alaska. The Chicago office, the administrative center of the firm, covered projects in all other sections of the country.[17]

Decentralization was a challenge because of the great distance between offices and the unique identity of each. The benefit, however, far outweighed the challenges. In January 1958, *Fortune* magazine reported that SOM's "four regional offices operate autonomously in their own areas but join forces as needed for national and international accounts, so there is considerable switching of specialists, facilities and jobs among offices."[18] Furthermore, the partners realized that the difficulty of decentralization would be lightened externally by emerging communication and transportation technology and internally by the standardization of design. SOM understood that unifying the firm's production and standardizing its organization in a manner that paralleled the

standardization of the building industry were crucial steps for a successful architecture business. For this reason, every project was organized in the same manner in all of SOM's regional offices.[19]

In order to maintain cohesiveness of taste and technique across the offices, a coordinating partner was selected annually. This person's role was to coordinate administration and production as well as design. He also held monthly meetings among the four offices and assigned partners and staff members to specific phases of each project. [20] In addition, there was a partner in charge of overseeing a standardized "SOM style" in all of the firm's designs. This role went to Bunshaft in New York. By forcing people to take on different roles in an office, the firm helped partners better understand the general process of design. The purpose of this development was to achieve greater efficiency and flexibility in the general operation of the firm.

Comprehensive Approach

Another characteristic of SOM's practice was the "package deal", which included master-planning, engineering and construction supervision as well as architectural, interior and landscape design. This comprehensive service first became possible with Merrill's joining in 1939. Merrill, an architect-engineer, made a big contribution to the young architecture firm, enabling it to provide their clients with more services. In doing so, from the early 1940s, SOM could attract large-scale projects which were previously given to engineering firms. Realizing the importance of this diverse approach, those who would be accepted as general partners in 1949 represented themselves with different specialties: Severinghaus as a housing expert, Cutler as an expert in hospitals, Brown as a prefabricated housing specialist and Bunshaft as the man chiefly responsible for the SOM style.

In terms of organizational structure, the four SOM offices were quite similar. Under a managing partner, there were five functioning groups. They were composed of: A. Project Management, B. Design (Programming, Design of Project, Interiors, Material and Methods Research), C. Production (Architectural and Civil Engineering, Mechanical Engineering), D. Construction (Contracts, Construction Supervision, Field Offices), and E. Administration (Office Procedures, Records, Accounting, Non-technical Personnel). These different groups reflect the nature of SOM's transformation from traditional architectural practice to a new one that required construction-related personnel and a large group of administrative staff. Additionally, design now required the collaboration of various specialists and the growing importance of the mechanical systems of a building required an entirely different approach to architecture.[21] The organizational structure at SOM reveals its complexity and collective nature, emphasizing the significance of rational communication among diverse people involved in the project.

Close Relationship with Clientele

SOM's third business strategy was to foster a lasting connection with its clients which significantly helped the firm expand during and after the Second World War. As *Business Week* pointed out, SOM's relationship with its clients was far different from, for instance, Frank Lloyd Wright's patron-architect relationship. SOM designers gave its clients an active role in planning. By incorporating the client throughout, SOM could prevent a lack of practical considerations and arbitrariness from the design process.[22] Clients took such a critical role in the design process that Bunshaft portrayed their every job as a "marriage of owner and architect."[23] Skidmore and Owings began to develop long-lasting connections with the leaders of large businesses and governments at the Chicago Fair of 1933.[24] These connections accelerated during the New York World's Fair of 1939. The importance of these fairs to the formative years of SOM was tremendous. Skidmore and Owings met their strongest supporters and friends there including Howard Heinz, president of the Heinz Company; John Kimberly of Kimberly-Clark; and Robert Moses, planner and administrator of building projects in New York City.

SOM's significant government and military connection began with the Oak Ridge project between 1942 and 1945. Through the project, SOM gained experience in housing, hospital, commercial, religious and municipal buildings as well as with roads and utility systems.[25] Working confidentially with regard to the project's purpose, SOM assembled an on-site practice involving 450 architects, engineers and surveyors. Architectural historian Henry-Russell Hitchcock stated that the experience in Oak Ridge "laid the organizational foundation for undertaking the extensive and varied private commissions that came their way in increasing numbers when the building curve turned upward two or three years after the War was over."[26] The strong relationships with business and governmental clients helped the firm become active not only in the United States, but also in far-flung places such as Venezuela, the Philippines, Morocco and Okinawa soon after the War.

SOM'S SELF-IDENTIFICATION AS A CORPORATE FIRM

SOM used the principles and strategies previously outlined to excel through the 1950s. In 1956, Skidmore informed the other partners of his decision to retire. His health slowed him down and he had confidence in the firm he established. Upon Skidmore's retirement, Sampsell sent a letter to the State of California to inquire if SOM could keep Skidmore's name in its title. The state answered that if Skidmore was paid as a consultant, SOM's use of the original name in California was "not in violation of Business & Professional Code §5580."[27] Similar to Skidmore, when Merrill retired in 1958, he became a consultant so there was little

concern about keeping the name. However, Skidmore's death in 1962 created confusion and concern among the partners.[28]

Upon facing the same problem in Oregon, Sampsell pursued a permanent solution. In order to prevent any future issues, he proposed "to attempt to have the statute amended" at the state legislature session "so as to permit indefinite use of the name" of the firm in Oregon.[29] He also advised the partners to consider an alternative solution in case his attempt did not work—the appointment of Louis Skidmore, Jr. as a member of the Oregon partnership.[30] All of the partners and Sampsell believed that the firm had moved beyond individual partners—the partners belonged to the firm, not the other way around.[31] However, these legal troubles showed the partners that their architectural practice was at risk of doing illegal business under a "fictitious name."[32]

This predicament originated from the growing rift between SOM's organization and the old, legal definition of architectural practice. Architectural practices were traditionally based on an individual or a group of individuals. But, SOM pursued a collective identity, or "Modern 'Gothic Builders Guild'," as Owings described.[33] It was not an architectural firm based on the creativity of a single individual. Indeed, the firm outgrew the conventional definition of architectural practice. The firm's leaders were well aware of this and identified themselves as part of a corporate entity.

In the introduction to the book, *Architecture of Skidmore, Owings & Merrill, 1950-1962*, Hitchcock expressed a worry about the "hysterical vitality" of the individual architect-designer. At the same time, he emphasized that SOM's unsurpassed achievements were made possible by the "relative looseness of the SOM organization, the importance of designers in its hierarchy, and the inclusion of engineers."[34] These organizational characteristics of SOM spread throughout the world and became useful strategies for large firms. It was around this period that the rapid expansion and dominance of corporate firms began.

Endnotes

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2. Ibid.

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4. The Louis Skidmore Papers, Library of Congress.

5. "AIA Gold Medal," 1957, The Louis Skidmore Papers.

6. "$2-Billion Worth of Design by Conference," *Business Week*, December 4, 1954: 103.

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17. William Hartmann, "S.O.M. Organization," *Bauen und Wohnen* 12 (April 1957): 116.

18. "The Architects from 'Skid's Row,'" 139.

19. Hitchcock, "Introduction," *Architecture of Skidmore, Owings & Merrill, 1950-62*, 10.

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21. Hartmann, "S.O.M. Organization," 116.

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23. Bunshaft quoted in "$2-Billion Worth of Design by Conference," *Business Week*, 104.

24. Owings, *The Spaces in Between*, 44-60.

25. Owings, "From Oak Ridge to Manhattan and Way Stations," Speeches and Writings File, Box 53, The Nathaniel Alexander Owings Papers. The speech was given on October 15, 1946.

26. Hitchcock, "Introduction," *Architecture of Skidmore, Owings & Merrill, 1950-62*, 8.

27. Philip S. Mathews of San Francisco law office, Ackerman, Johnston, Johnston & Mathews, Letter to the Chicago Law office Isham, Lincoln & Beale on October 6, 1962, "Skidmore, Owings & Merrill: Firm Name in California," Box 8, The Nathaniel Alexander Owings Papers.

28. Ibid.

29. Marshall G. Sampsell, "Memorandum: Reuse of the Name Skidmore, Owings & Merrill in the State of Oregon," February 14, 1963. Box 8, The Nathaniel Alexander Owings Papers.

30. Ibid.

31. "Articles of Partnership of Skidmore, Owings & Merrill," October 1, 1960, Box 21, The Nathaniel Alexander Owings Papers.

32. Mathews, Letter to Isham, Lincoln & Beale on October 6, 1962

33. Owings, *The Spaces in Between*, 61-70.

34. Hitchcock, "Introduction," *Architecture of Skidmore, Owings & Merrill, 1950-62*, 10.

'MORE THAN THE USUAL AMOUNT OF STUDY'

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At the corner between Greycoat Lane and Elverton Street in Westminster, London, there stands the building of the Royal Horticultural Hall. From the outside, the overall character of the building is predominately brick and stone, without suggesting anything whatsoever about the interior. Only on the rear façade, do we have a hint of what might lie inside the building. On the east façade, a series of window openings is aligned with three columns, over which an elliptical arch springs, covering the central part of the rear wall - a suggestion that a curved roof might rest on top of the building, whose main structure is probably of columns and arches springing from them. Only when we are in the interior do we actually realise that that peculiar arrangement on the rear façade is deceptive; neither columns nor arches are behind the walls. What is concealed behind the walls is a series of parabolic structures spanning the entire width of the exhibition hall.

The Royal Horticultural Hall is the outcome of one of the first twentieth-century British architectural practices to have collaborated with an independent British engineer. Little is known, however, how this new form of collaboration came about. What were the circumstances giving rise to this emergence of a particular form of practice? What did the new material of reinforced concrete do to the relationship between architects and a new emerging profession like a structural engineer? This paper aims to show, firstly, how the architects Murray Easton and Howard Robertson responded to the role of a structural engineer who turned out to be both a beneficial partner and potential rival. Secondly, the paper tries to account for the structural daring of the Royal Horticultural Hall, regarding it as an effective and necessary outcome of the collaboration. To consider these questions, we should begin by turning back to the change taking place in building industry at the end of nineteenth and early twentieth centuries in order to understand a condition giving rise to their 'collaborative' approach more clearly and to understand what the new material meant to them.

Since the 1890s, reinforced concrete had become available through patented systems controlled by a small number of specialist firms. Each firm had its own patents, and their commercial success depended largely upon the protection of their proprietary system. To use reinforced concrete for building, architects, who had had little part in the development of the material, were obliged to adopt one of those patented systems from the specialist firms. Under this system, to design the structural work architects were obliged to call upon a concrete specialist, working out of the proprietary systems. While the concrete specialist would offer structural solutions and procedures for the work to be constructed according to the architects' design, the disadvantage of using the firm's specialist was that the choice of materials, structural details and constructional method must follow the procedure of that proprietary system.[1] The choice open to the architect was between one or another proprietary system, but the choice of a particular system was not a sure route to the best design.

An alternative procedure became possible when the licensing systems for the materials began to break down around 1920s, as the original patents expired, opening the opportunity for an independent engineer to design a structure without commitment to any particular system.[2] The advantage of this was to allow architects and engineers to adopt structural solutions free from the concrete companies – a condition that the engineer Oscar Faber considered as better suited to the interests of both architects and engineers.

> Surely the true specialist who the architect and engineer will seek should not be fettered by allegiance to any "system" or bar, and should use in every contingency an arrangement of bars dictated solely by the science underlying his art.[3]

Faber's conviction is that the adoption of a concrete specialist tied to a particular firm limited the structural possibilities of architecture; the only satisfactory structural result was, for him, to be derived from those who had no commercial connection with the concrete firms.

Whether or not encouraged by Faber, it was apparent that Easton and Robertson, after winning the competition for building a new hall for the Royal Horticultural Society (RHS), decided to approach an independent structural engineer, as Faber had proposed, and it was indeed he whom they invited to be the consulting engineer for the Royal Horticultural Hall. They foresaw that using the specialist of a concrete firm would limit them to the choice of the firm's proprietary constructional method, compared to the open systems offered by an independent engineer.[4] Their justification to employ a structural engineer demonstrates well the advantage of a structural engineer over a concrete specialist in that it offered a saving in fees as well as allowing them to achieve a more slender structure. On 11 November 1925, they wrote to the Council:

[…] the L.C.C. will accept from an engineer of repute reduced structural members which it will not accept from a specialist contracting firm. […] This superiority applies to economy as well as to result for it is obvious that specialist firms do not do work for nothing and as a matter of fact this charge is generally not less than 10% on actual costs, although the fact that it is included into the contract may lead building owners to believe that they are not paying for it. […] The standard fees of engineers for such work are 5% on the actual cost of the steel work and 7½ % on the cost of reinforced concrete work. The higher charge for the latter is due to the fact of its being in the first place cheaper than steel work and in the second place involving a very great deal of additional work and supervision. [5]

While accepting the architects' recommendation to employ an independent engineer for the structural work, the Council however understood that the reinforced concrete required the expertise of the engineer and was therefore solely the engineer's responsibility. The Council negotiated with the architects that the architects' fees should be reduced from 6% to 2½ % of the total value of the work, while the engineer alone would receive the full rate of fee for the reinforced concrete work.[6]

The architects, however, objected, explaining to the Council: this is 'by no means a case of handing over rough drawings to be worked up by the engineer', for their responsibility also included constant consultation 'with the engineer in order to ensure the correct working of every detail and service'.[7] Unlike the customary practice when a specialist firm was appointed, in which case the architects would take no part in the design of the structure, Easton and Robertson claimed that their responsibility for the design of structure was extensive, involving them in travelling to study the roof forms in Europe, in preliminary study of the roof type, in construction of a model for the study of the illumination of the hall's interior, carried out at the National Physical Laboratory, and in preparation of drawing work.[8] In their letter to the council on 28 November 1925, they wrote:

Had we been asked to design the office block and to collaborate with an engineer […] the case would have been different. As it is, […] we should like to feel that our efforts in this direction are not hampered by the knowledge that [what] we believe to be more than the usual amount of study is to be paid for by less than the usual fees. [9]

By 'more than the usual amount of study', the architects emphasised that their responsibility over the structure counts for the special circumstances of the work. At the end of the letter, Easton and Robertson expressed their preference for employing the engineer under their authority:

Finally may we suggest that in making any appointment the Society should avoid the difficulty of divided control by making the engineer responsible for his part of the work through ourselves. The contrary arrangement has been known to lead to unfortunate results such as independent certification of sums claimed by contractors and the responsibilities of the architect to the client is correspondingly weakened. [10]

If the employment of an independent engineer over a concrete specialist allowed the architects to maximise the benefit to be gained from the engineer's participation in the process, their desire to put the engineer under their control showed how anxious they were about the role of the engineer – a revealing incident in the long running story of the relationship between architects and engineers.[11] While the potential consequence of collaborating with the engineer presented considerable advantages, it also presented the architects with a major risk of losing responsibility over the structural work. Rather than letting the engineer in and accepting the loss of more than half of their fees, it was absolutely crucial that Easton and Robertson reacted to the introduction of the engineer by presenting the concrete structure as a piece of collaborative work, as much the architects' responsibility as the engineer's. To understand significance of this relationship between the architects and the engineer more fully, we need to know what Faber brought to the collaboration, and to turn to look at the built work itself.

The reinforced concrete parabolic arches of the Royal Horticultural Hall have been linked to precedents in Europe, especially ones at Arvid Bjerke's Gothenburg Hall in Sweden, to which Howard Robertson himself made a study visit.[12] However, the Royal Horticultural Hall significantly differs from Bjerke's Hall. At Gothenburg, we see the sections of laminated timber arches relatively fatter at the bases than at their apex. But at the Royal Horticultural Hall, the section of each parabolic arch is around 6 feet in depth at the top, then as it curves downwards it becomes shallower and shallower and turns into rectangular columns of 3 feet by 1½ feet at floor level, contrary to a
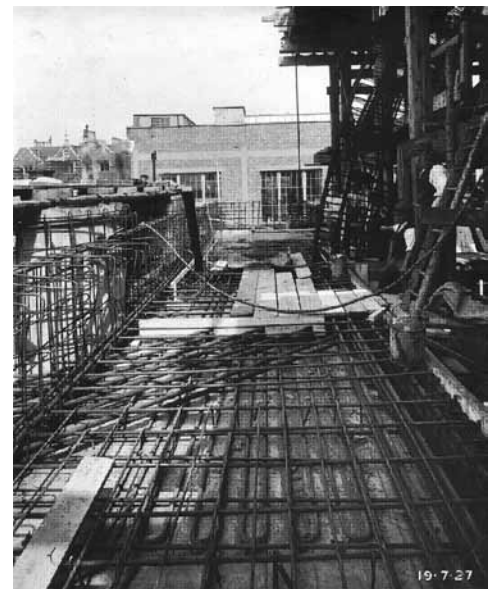

Figure 1. The North Aisle's Roof Slab under construction, photographed in July 1927. The aisles' slabs act as 'transfer beams' carrying the thrust of the arches before transferring it to the ties of the end walls. The extra reinforcing bars, laid diagonally, were cast into the aisles' roof slabs to carry the thrust of the main arches and led to the change of the skylight's shape. (source: RHS, Lindley Library)

usual expectation that the lower part of a structure should be fatter, and therefore more stable. This unusual and complicated arrangement, in which the heavy parts on the top are rested on the relatively slender piers, was surely the architect's ideas so as to fulfil the demand for optimum space of the hall with the minimum obstruction - and one that needed an ingenious engineering solution appropriate to the architects' design.

In terms of engineering, the difficulty of the Royal Horticultural Hall's parabolic structure lies in its lack of abutment, requiring resolution of the problem of lateral thrust. Although the parabolic arches of the Royal Horticultural Hall look as if they spring from the floor, creating the smooth continuation curves of the parabolic arches, structurally they spring off vertical columns at the height of 13 feet above the ground.[13] Unlike the Gothenburg Hall, where the thrust of the laminated arches presented at floor level, the thrust of reinforced concrete arches here is critical at the level of the side aisles' roofs. As *Engineering* reported:

> Had the arches been parabolic from the ground floor upwards, their thrust could, of course, have been taken by a suitable tie from side to side at ground level, but any such arrangement applied to arches on the desired line would have been inadequate to resist the bending moment at the first floor without the use of reinforced-concrete sections far too heavy for elegance, and in addition involving an extravagant cost. The rigidity of the side aisles was, moreover, much too small to allow them to sustain the thrust of the arches at the level of their flat roofs, and for architectural reasons no ties from the aisles across the arches were permissible. [14]

To solve this structural problem, while keeping the outline of the arch section as given by the architects, Faber endeavoured to construct the slab roofs of both side of the aisles as horizontal reinforced concrete beams, of 26 feet deep by 150 feet span and of 11 inches thick, to 'take the horizontal thrust of the arches and transfer it to ties in the end walls of the building at each end of the girders'.[15] What is happening inside the aisles' roof here is that the steel reinforcement for carrying the trust to the ties at the end walls starts at the middle of the girders, and as it reaches towards the end walls the amount of steel reinforcement gradually increases.[16] This caused some alteration during the construction, as it was reported that the skylights at both end of the aisles' roofs needed to be reduced and reshaped from circular into hexagon, so that there would be more space for the steel reinforcement necessary to form the ties (Fig. 1).[17] Furthermore, rather than using the normal joint detail of lapping and hooking to join the main rods - a solution that required adequate space to allow for the overlapping and so thickening the section - the limited space of the roofs prompted Faber to invent the special detail of a 'screwed joint' to bolt the rods, in order to keep the size of the slabs down as the architects provided.[18]

Since the engineering solutions required for the construction - the horizontal slabs, the ties, and the screwed joint - derived from the collaboration with the engineer, the success of the Royal Horticultural Hall lay essentially in Easton and Robertson's understanding of the nature of what was needed from an engineer's contribution. It is most unlikely that if Easton and Robertson had gone to a concrete firm to design the structure for them, they would have got these ingenious solutions specific to their design.

Figure 2. The Royal Horticultural Hall Main Hall, looking towards East Wall, where the 'chameleon' concrete tie camouflages itself according to where it is present on the building fabric. (source: RHS, Lindley Library)

If we turn to look at the Royal Horticultural Hall more closely, we can see its materials manifesting a particular view of the architects towards the 'structure.' Let us start from the main parabolic arches. While most of surfaces of reinforced concrete arches are left as bush-hammered concrete, but marks of shutter-boards are left visible, not entirely removed by bush-hammering, at the lower parts of the arches we see an attempt to give the piers a surface treatment. Originally clad in 'Manu-Marble' or artificial marble but this artificial marble proved disappointing, becoming detached from the body of the piers, the piers were then resurfaced with terrazzo finish.[19] But whether they were artificial marble claddings or terrazzo finishes, the attempt to cover the piers with another layer of materials and to make them appear as if they were valuable stones, rather than to left as bare concrete, is to offer a more agreeable treatment for the parts close to human occupation.

The partial-concealment, partial-exposure of structure material such as this continues at the horizontal girders, making us, if anything, puzzled by their structural expression. While the two flat roofs of the aisles are the main structure carrying the thrust over to the ties and uniting a series of reinforced concrete ribs all together, they do not appear as structural elements. Their sides are integrated with ventilation apertures, while their underside surfaces are covered with a thin layer of white plaster, through which the trace of rough boarding used as formwork remains visible.

Nor is the reinforced concrete tie at the eastern wall fully exposed. At the eastern end, where a series of window openings, arranged in three columns, together with the four pilasters attached to the wall with pronounced vertical forms, the reinforced concrete tie runs across the wall, going through the infill-walls, the pilasters and windows altogether. But where it lies across the infill and pilasters, it appears as a beam whose surface is cover with acoustical plaster the same as that of the wall; when it penetrates through the series of windows, however, it reveals itself as an exposed reinforced concrete beam, whose surface is of bush-hammering like that of the arches. It seems as if this reinforced concrete tie is camouflaged according to its surroundings (Fig. 2).

Rather than making visible the legibility of structure, concrete here is almost like a chameleon, changing itself according to where it is in the building. At the parabolic arches, the concrete appears as pure structure, then becomes less structural element at the aisle slabs and then when it transforms into Gothic-like windows at the end wall, the concrete becomes a completely secondary element, being disguised and covered with acoustic plaster, although actually the concrete tie here is the single most important structural element in the building.

Confronted by the fabric of the Royal Horticultural Hall, we experience a bewildering array of the structural expression. With this appearing and disappearing of structure, it seems that Easton and Robertson attempted to keep the appearance of the structure as secondary to overall effect of the architecture. What was done here anticipates what Roberson was to express in his ideas about 'structure' in architecture sixteen years after the completion of the Royal Horticultural Hall.

> The very important part played by engineering in building is apt to be exaggerated to the point where even technicians become blind to the fact that a building's structure is only a means to an end. Structure is sometimes glorified as something that comes first; it has even been said by some architects that 'structure is the first interest of the architect'. Surely that is misleading; it is building – plan, section, elevation and constructional realization in all three dimensions of an idea – that is the prime interest of the architect.
>
> This is not to denigrate engineering, which does however need to be placed in its right position as a means to an end, as the servant and not the master in the field of architecture-building. [20]

Robertson's concern here is that while the engineering aspect of the work is fundamental to the creation of architecture, he saw it necessary to subordinate the structure under 'building.'

Easton and Robertson's handling of the structural aspect of a building had been consistent. Their letter to the Council proposing to employ the engineer under their authority, their architecture of the Royal Horticultural Hall whose structure is half-concealed and half-exposed, and Robertson's remark of the secondary role of the structure in architecture, all are deliberate attempts to make the engineering aspect subordinate to the architects' presence. With the regard to the problem of the emergence of a structural engineer as a collaborative partner of architects in the early twentieth century, Easton and Robertson came up with the solution of collaborative practice. Ultimately, this made it possible for them to maintain their responsibility over the structural work, without being subordinated to the engineer.

Endnotes

1. For the early development of reinforced concrete in Britain, see Patricia Cusack, "Agents of Change: Hennebique, Mouchel and Ferro-Concrete in Britain, 1897-1908," in *Early Reinforced Concrete*, ed. Frank Newby, *Studies in the History of Civil Engineering; 11* (Aldershot: Ashgate, c2001), Patricia Cusack, "Architects and the Reinforced Concrete Specialist in Britain 1905-08," *Architectural History* 29 (1986).

2. Andrew Saint, *Architect and Engineer: A Study in Sibling Rivalry* (New Haven and London: Yale University Press, 2007), 267.

3. Oscar Faber and P.G. Bowie, *Reinforced Concrete Design Vol.I. - Theory* (London: Edward Arnold & Co., 1924), 257.

4. Ibid.

5. The RHS's Council Minutes, 11 November 1925

6. For the issue of the fees, see The RHS's Council Minutes, 11 November 1925, 28 November 1925, 1 December 1925, and 9 May 1926.

7. The RHS's Council Minutes, 28 November 1925

8. The RHS's Council Minutes, 28 July 1925.

9. The RHS's Council Minutes, 28 November 1925 (in brackets added).

10. Ibid.

11. This particular case of the collaboration between the architects, Easton and Robertson, and the engineer Oscar Faber, illustrates Andrew Saint's argument about the way architects negotiated their relationship with engineers. See Saint, *Architect and Engineer: A Study in Sibling Rivalry*.

12. It should also be noted that Howard Robertson had an excellent knowledge of European architecture, writing several books and articles on Dutch, Scandinavian, French and German architecture.

13. For engineering details of the main arch Rib, see Anon., "The New Horticultural Hall: 150-Feet Span Girders Carrying 270 Tons," *Concrete and Constructional Engineering* XXII, no. 8 (August 1927): 478.; Anon., "The Royal Horticultural Society's New Hall," *Engineering* (Dec 21, 1928): 764.

14. Anon., "The Royal Horticultural Society's New Hall," 263.

15. Ibid.: 763.

16. For details of steel reinforcement inside the aisles' roof, see Anon., "The New Horticultural Hall: 150-Feet Span Girders Carrying 270 Tons," 477, esp. 'Part Section of Thrust Girders'.

17. The RHS's Council Minutes, 18 October 1927.

18. Anon., "The New Horticultural Hall: 150-Feet Span Girders Carrying 270 Tons," 473.

19. The Manu Marble can still be seen lining the internal walls of entrance hall and the lower parts of the dais above the entrance hall. For the report of the restoration process of the Royal Horticultural Hall, see "The Royal Horticultural Society's Second Hall (1928)," in *National Building Studies. Special Report. No.33* (London: H.M.S.O., 1948-1966), 3-9.

20. Howard Robertson, *Architectural Arising* (London: Faber and Faber, 1944), 27.

The Welfare State Project. Architectural Positions, Roles and Agencies

SESSION CHAIRS:

Tom Avermaete (TU Delft, The Netherlands)

Dirk van den Heuvel (TU Delft, The Netherlands)

Mark Swenarton (University of Liverpool, U.K.)

The session builds on the one held at the first EAHN conference 2010, and aims to address the multifarious relations between architecture and the vast subject of the Western European welfare state, which by now is generally considered a historical phenomenon.

While the welfare state involved a wide array of social policies and programmes, including health care, unemployment benefits and old age pensions, at its heart were initiatives – from new towns to hospitals and from schools to housing – that required new architectural solutions. This placed the architect on the front line of the welfare state project. Initially, architects received wide-scale praise for their innovative work but, when political consensus over the welfare state came under strain or collapsed – as notably during the crisis of the 1970s – architects and the work they produced came under sustained attack. Today, as we look back to the historical phenomenon of the welfare state, we can start to re-assess both how architects positioned themselves within the politics of building production and, crucially, the nature and characteristics of the work that they produced.

To understand the production of the period roughly demarcated by the years 1945-1985, we would like to investigate the positions, roles and agencies that architects have articulated vis-à-vis the welfare state. The Western European welfare state adopted large parts of the aesthetic agendas of the pre-war avant-gardes, and acted as a generous patron to modern architects and artists alike. Yet, at the same time, the welfare state system was under consistent attack, sometimes literally through terrorism or the street riots of 1968, sometimes more playfully in the case of socalled happenings and Dutch Provo. Main criticism as also vented by architects, concerned so-called "repressive tolerance" pointing to totalitarian aspects of the welfare state systems and their bureaucracies in particular.

We would like to bring together presentations that re-investigate the specific positions of architects as envisaged and allowed for by the welfare state project and vice versa. We want to address questions such as: What positions were given to architects in the post-WWII period and what critical roles did avant-garde architects claim for themselves? What was the real span of their agency? How did architects deal with the tension between the oppressive aspects of the welfare state project on the one hand and its emancipatory ambitions on the other? And most important of all, what productive moments, roles and projects emerged from this?

TOWN PLANNING WITHIN A LIBERAL WELFARE STATE DISCOURSE AND PRACTICE OF A MODERN BELGIAN ARCHITECTS: JEAN-PIERRE BLONDEL

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INTRODUCTION

The emergence of modern urbanism can be understood in the framework of what Peter Wagner define as the rise of twenty century "organized modernity" against nineteenth century "liberal modernity" : a need to overcome social and spatial inequalities by constructing tools of large-scale regulation.[1]

In Belgium, the development of labour unions and social housing in the interwar period were first steps toward the establishment of collective discipline to overcome social inequalities and reduce the material uncertainties of the working class.[2] Simultaneously, intellectual circles such as the Société des Urbanistes Belges (SUB) and the Belgian section of the Congrès Internationaux d'Architecture Moderne (CIAM) claimed the collective science of urbanism but it failed to institutionalize as a powerful state discipline.[3]

It is recognized that planning tools and models imported from the nations pioneering welfare state development - Germany, England and France - have failed to institutionalize in Belgium. From the introduction of garden city decentralization model in the interwar period to the development of national planning and large-scale social housing policy in the postwar period, it is assumed that the liberal and conservative context of Belgium politics failed to provide a sustainable framework for modern urban planning.[4]

This paper intends to draw a different history by focusing on a modern Belgian architect underestimated by the existing literature: Jean-Pierre Blondel. Spanning from his master's thesis on Brussels in the early 1950s to his plan for Louvain-La-Neuve in the early 1970s, this in-depth analysis of Blondel's archives reveals a tradition of planning the city taking root in the Belgium urban history of Jean De Ligne and suggesting an alternative way to the postwar welfare planning paradigm.[5]

THE INTERWAR DEBATE ON MODERN URBANISM

In the interwar period, progressive western architects and engineers engaging in the emerging field of urbanism shared the belief that industrial society should recognize the need to define a new socio-spatial order. Yet the precise form of this collective order will remain a contentious object during the interwar period.

The Congrès Internationaux d'Architecture Moderne (CIAM) embody the emergence of modern and scientific urbanism as a rational agent of welfare development. CIAM's main goal was to promote modern architecture and urbanism as a scientific discipline to rationalize and regulate the spatial organization of industrial society on a collective base. For CIAM members, the welfare of the individual should be achieved through the collective discipline of urbanism. From the second to the fifth interwar congress, CIAM explored rational and scientific approaches of different scale of human settlement - "minimum dwelling", "rational allotment", "functional city" and "housing and recreation" - in order to ensure standardized welfare for the mass.[6]

However, despite the will to focus on technical expertise and not political goals, CIAM's purpose will be disturb by the politicized debate on metropolitan concentration versus urban decentralization and high-rise versus low rise. Le Corbusier's utopian proposals for new metropolitan concentration - Plan de la Ville de 3 millions d'habitants (1922), Plan Voisin de Paris (1925), La Ville Verte (1930)- will face the critics of left wing CIAM members denouncing them as reactionary projects reproducing the capitalist accumulation of the nineteenth century industrial metropolis.[7] Belgian CIAM members drawn together around Victor Bourgeois will take an ambiguous position within this debate. Although leftwing architects such as Jean-Jules Eggericx (1884-1963) and Raphael Verwilghen (1885-1963) felt sympathy for Le Corbusier ideas, they remained close to the metropolitan decentralizing paradigm of garden-cities.[8]

THE POSTWAR WELFARE PLANNING PARADIGM

Just after World War II, the debate shifted as Le Corbusier with the Assemblée de Constructeurs pour une Rénovation Architecturale (ASCORAL) adopted the linear industrial city model.[9] First developed in the 1930s by communist architects, Nikolaj Miljutin in URSS and Renaat Braem (1910-2001) in Belgium,[10] this paradigm of industrial and dwelling decentralization seems prevalent in postwar France and Belgium.[11] It embodies the goals of the postwar welfare state: providing a sustainable framework for

combining large scale industrial employment and good living conditions in a healthy green context. As a result, postwar national planning in Europe was mainly concerned with large-scale decentralization of industries and dwelling outside of existing cities, providing an ideological framework for the construction of industrial corridor and the "grand ensemble".[12]

In Belgium, the national government of the 1950s focused on the development of industrial corridors along canals and highways.[13] Satellite towns around existing urban nuclei were planned in these industrial corridors to provide attractive dwelling for the workers. However, the national state failed to apply this dwelling policy on a large scale as it remained beyond the scope of its goals.[14]

Within the network of industrial corridor, Brussels played an ambiguous role. It was seen as the centre of the highway network but the orbital motorway promoted by the road administration, aimed to bypass the capital.[15]

JEAN-PIERRE BLONDEL

It is against this project of beltway that a young Belgian architect, Jean-Pierre Blondel (1924-), reacted around 1950. Blondel was studying architecture and urbanism in the Ecole Nationale Supérieure d'Architecture et des Arts Décoratifs – La Cambre (ENSAAD La Cambre), a progressive school founded in the interwar period by Henri Van de Velde. Through the public figures of Victor Bourgeois (1897-1962), the school was the Belgian ideological front of CIAM and Le Corbusier since the 1930s.[16] In the postwar, urbanism was taught by Jean Eggericx, Gustave Herbosch and Jean Wynants, three functionalist architects focusing on the design of the rational arrangement of residential neighborhood.

Blondel was influenced by the alternative teaching of Jean De Ligne (1890-1985): a modernist architect emphasizing the empirical study of urban development in its natural and historical context. Unlike the dominant interwar discourse, De Ligne did not condemn the haphazard growth of the industrial metropolis by opposing a normative utopian model. He perceived the liberal growth of contemporary industrial cities as the continuation of the medieval trade town.[17] Relying on the urban history of Henri Pirenne, De Ligne described the medieval trade town of southern Netherland as an ideal example of civic development driven by merchants and traders at the strategic crossroad of transport infrastructures: national roads, canals, etc.[18] For Pirenne, the civic capitalism of medieval trade town is embodied in the contemporary liberal monarchy of Belgium driven by bourgeois entrepreneurism.[19] Twentieth century Brussels exemplifies this natural growth of a medieval trade town born in a river valley and transformed into a modern industrial metropolis.

AGAINST METROPOLITAN DECENTRALIZATION

In this historical context, Blondel undertook to study the Brussels road network as the modern transport infrastructure succeeding waterways and railways.[20] Blondel perceives the Senne valley, occupied by the Willebroek canal, as the main backbone of urban development. While employment is distributed along this north-south axis, residential areas occupy the East and West adjacent plateaus. Through this valley section radial arteries connect the city with its regional context. Brussels is perceived as a centralized metropolis growing according to both topography and radials transport infrastructures.

For Blondel the proposals for a motorway ring road ten kilometres in diameter rejects this centralized radial pattern and abstracts the city from its topographical context. In contrast, he suggests upgrading the radial arteries to preserve the centralized character of the metropolis. The available land in the lower part of the valley should be used to re-organize industrial activities according to a new road parallel to the canal and the railway. The East-West existing
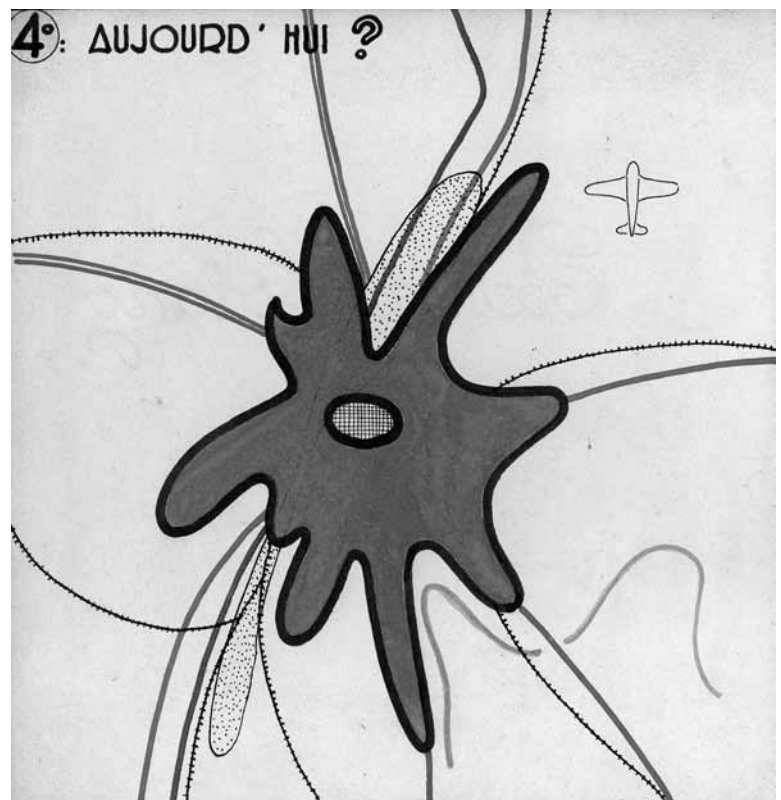

Figure 1. Etude d'un réseau de voies principales à Bruxelles, Extrait de la planche 103-3-5, "Bruxelles aujourd'hui." Graduation thesis at l'Ecole Nationale Supérieure d'Architecture et des Arts Décoratifs – La Cambre, 1950 by Jean-Pierre Blondel. (source: Fonds Jean-Pierre Blondel and Odette Filippone, Archives et bibliothèque d'Architecture, Université Libre de Bruxelles)

arteries converging to the city centre should be updated to new transport and dwelling standards.[21] While Blondel details this infrastructural re-organization, he does not focus on the question of dwelling, suggesting that it remain a private affair. As a matter of fact, Blondel breaks with the 1940s welfare development paradigm, ie decentralized dwelling units and industrial corridor in a green environment. On the contrary, Blondel emphazises the centralized pattern of the metropolis, drawing together industrial, dwelling and civic development.

This transgressive aspect of Blondel work emerged in the mapping techniques unfolded within the framework of the CIAM grid. Compared to the abstract and detailed functional maps developed by CIAM since the third congress, Blondel schemes reveal the morphological organization of the metropolis in its region. The maps tend to go beyond functional aspects to suggest a synthetic metropolitan form. They are not intended to condemn the existing organization of the city but to reveal its morphological essence. (Fig. 1)

Unlike the grids presented by the Smithsons, Ecochard, Candilis and Woods at the CIAM IX few year later,[22] they do not bring ethnographic study of housing and urban space but analyze metropolitan development on an empirical base. Although Blondel's proposals might seem naïve in terms of modern transport techniques they reveal a tradition of modern urbanism rooted in the historical and morphological evolution of the medieval city. The metropolitan analysis of Blondel and its graphic layout challenge the rational approach of welfare development supported by CIAM.

UPDATING METROPOLITAN ARTERIES

Two year after completing his thesis, Blondel found the opportunity of investigating the form of the new metropolitan arteries with two architects recently graduated from ENSAAD La Cambre: Lucien-Jacques Baucher (1929) and Odette Filippone (1927-2002). Unlike Renaat Bream or Le Groupe l'Equerre, they did not have active engagement with left wing politics as the spur to undertake large-scale housing development in suburbs. Instead Blondel, Baucher and Filippone initiated discussion with private developers in order to renew the Avenue Louise, one of the major radial arteries leading to central Brussels. They took into consideration the scale of private redevelopment project: the urban block. Their proposal suggests replacing the nineteenth century perimeter block with vertical building to open green space along the avenue. Against the Athens Charter principle of the separation of dwelling and circulation (resolution 27), this proposal reemphasizes the urban interrelation between traffic infrastructure and building.[23] The proposal suggests updating inhabited radial road instead of building large-scale suburban dwelling. During the 1960s, the architects will have various opportunities to apply this transformation of Avenue Louise: first the Vincennes Residence (1962-65) and later a project by Baucher for a tower of 20th floors (1966).[24]

REDEFINING THE CIVIC CENTRE OF THE METROPOLIS

In early 1961, Baucher, Blondel and Filippone engage in the international competition for developing Tunis as the capital of the independent state of Tunisia. In the 1940 and the 1950s, the French colonial government intended to plan the decentralization of the city in satellite towns build around new ring roads.[25]

Against this, Baucher, Blondel and Filippone proposed to reinforce the centralized pattern of the city and build the civic centre of the nation in the middle of the medina at the junction of road and port infrastructure. The architects draw together the new democratic institutions (National Assembly, Parliament, Ministries) with cultural and commercial facilities around a pedestrian platform. They use the topography to organize the junction of radial road and parking space beneath this pedestrian platform.

In the 1950s, the elder and the younger member of CIAM shared a revival of interest for the heart of the city.[26] Pedestrian platforms were developed by Jose Luis Sert and Paul Lester Wiener at that time to organize new civic centre in four projects for Latin-American cities.[27] The idea to build a pedestrian platform right above the crossing of national road seems an original idea of Baucher, Blondel and Filippone. It allows them to maintain the heart of the city as both the national traffic crossroad and a pedestrian public space. In this respect it is the opposite of the concept of pedestrian *stem* developed by Candillis-Josic-Woods in which car traffic is rejected from the urban development on a beltway.[28]

The urbanism of Baucher, Blondel and Filippone clearly embodies a resistance to the policy of decentralization of the city implicit in postwar welfare development. The determination to preserve the city centre as an accessible public space is symbolically rooted in the medieval trading centre described by De Ligne and Pirenne. As we have seen above, De Ligne described the medieval town of southern Netherlands as an ideal example of civic and economic development at the crossroad of transport infrastructures: national roads, water canal, etc.[29] The market halls, municipal belfry, cathedrals and hospices build by corporations of merchants and craftsmans at the cross road of transport infrastructures embody the civic and economic emancipation of these town from seigniorial and colonial power. This emancipating vision of capitalist medieval town contrast with the pathological description common in progressive urbanism discourses.[30] For De Ligne and Blondel, the contemporary spatial framework of welfare development is not seen as a denial of free urban growth in favour of decentralized pattern, it is embodied in the

radiocentric structure of the historical city. Therefore the main goal of modern urbanism (as agent of welfare development) is not to design separated residential and industrial areas but to provide the public infrastructure allowing for the free development of industry, trade, administration and dwelling. This is what we can call a social-liberal tradition of welfare development in which the state provides public infrastructure but not private superstructure such as housing. The metropolitan infrastructural program envisioned by Blondel is balanced by the construction of private housing in which Baucher, Blondel and Filippone emphasize a diversification of individual response.

THE SYNTHESIS OF LOUVAIN-LA-NEUVE

In the late 1960s Jean-Pierre Blondel will find an opportunity to put in practice his vision of urban planning on an ambitious scale. Due to linguistic conflict, the French speaking community of the Catholic University of Leuven had to leave the original campus for a new location in Wallonia. Jean-Pierre Blondel was appointed with the archeologist Raymond Lemaire and the economist Pierre Lacomte as planners of the new university settlement. A large agricultural site located on the national road (N4) midway between Brussels and Namur was chosen as the new location for the settlement.

As Raymond Lemaire and Pierre Lacomte had no experience in urban design, Jean-Pierre Blondel was responsible for setting-up a design team with his former students of the ISAD La Cambre. From late 1968 to 1973 this Urbanisme Architecture Group (UA Group) did extensive studies to frame the development of the new settlement. The location chosen for Louvain-La-Neuve was due to the presence of a large area of inexpensive agriculture land in a watershed located a few hundred meters from the national road. Although the new settlement was removed from an existing urban pattern and infrastructure, it was first conceived as a succession of expanding pedestrian platform connecting educational and industrials poles.[31] Road, parking and railway infrastructure were planned below the pedestrian platform in the bottom of the valley. Dwelling had to grow freely around these public platforms. (Fig. 2)

At first sight the proposal might seems inspired by Candilis-Josic-Woods stem pattern developed in the early 1960s. However, the flexible built form suggested by Blondel and his team departs from the geometric pattern of Candilis-Josic-Woods numerous "plan-masse".[32] Buildings on the platform had to be organized freely according to a structural grid and housing was deliberately not designed in the first plan.

Unfortunately, the Blondel and UA Group proposal for flexible free-standing architecture on the public platform will be rejected by Raymond Lemaire who envisioned a neo-traditional urban space define by brick walls and pitched roof. Lemaire had a powerful influence on the actual construction of Louvain-La-Neuve with the public platform changing into a network of closed streets and plazas. As a result, Louvain-La-Neuve will remain misrepresented as a postmodern urban paradigm.
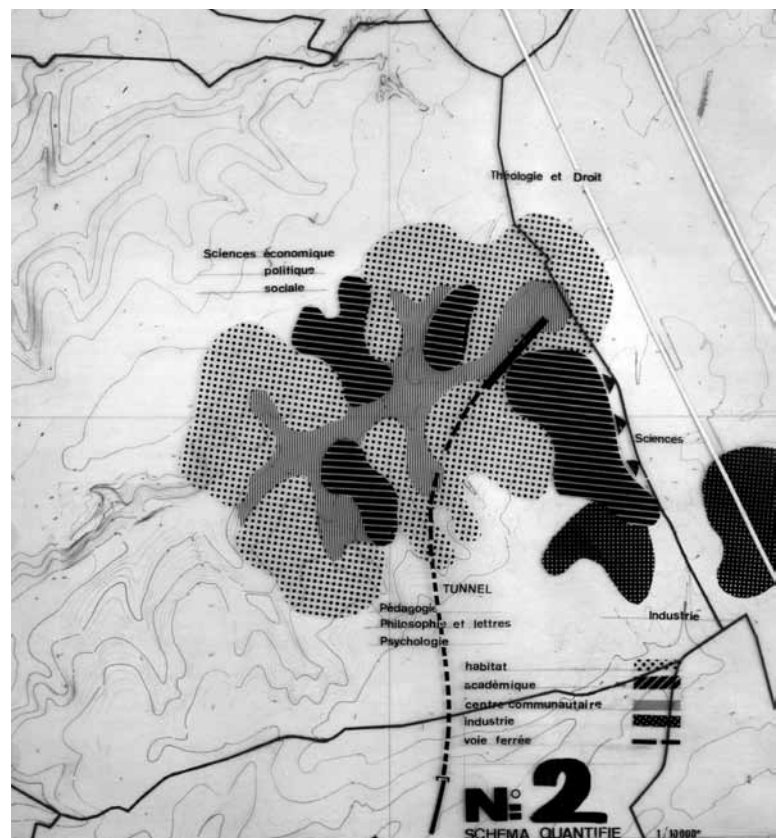

Figure 2. Master Plan of Louvain-la Neuve, preliminary project, quantification scheme, 1969 by Groupe Urbanisme-Architecture. (source: Fonds François Terlinden, Archives privées de Betrand Terlinden)

CONCLUSION

The history of modern urbanism in Belgium is generally seen as the importing of planning models developed in the nation pioneering welfare state development: England, France, USSR. Louis Van der Swaelmen, Jean-Jules Eggericx and Raphaël Verwilghen have advocated decentralized garden city development during the 1910s and early 1920s.[33] From the late 1920s, the vice-president of CIAM, Victor Bourgeois, promoted separation of function and circulation and high-rise building within existing

Belgium cities.[34] From the mid 1930s to the late 1960s Renaat Braem emphazised decentralized linear urban development.[35]

This account of Blondel urban project reveals an alternative paradigm of postwar urbanism in Belgium. It perceives the twentieth century growth of Belgian cities in the continuity of medieval trade town build at the crossroad of transport infrastructures: national roads, railways, canals, etc.

As a result, welfare development is not seen as an opposition to alienating liberal metropolitan growth, it is embodied in the radiocentric structure of the historical city. Therefore the main goal of modern urbanism - as agent of welfare development - is not to separate residential and industrial areas but to provide the public infrastructure allowing for the open development of industry, trade, administration and dwelling. This is what we can define as a social-liberal tradition of welfare planning in which the public figure of the urbanist plans the collective infrastructural backbone and the liberal architect give shape to individuality and privacy. It envisions human emancipation as a balance between collective consciousness and individual entrepreneurism.

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5. This paper is based on an early research on Blondel archives (Faculté d'Architecture de l'ULB) done together with Benoît Moritz for the chapter "Pratiques Urbanistiques" in Irene Amanti Lund & Maurizio Cohen, *L-J Baucher, J.-P. Blondel O. Filippone : 3 architectes modernistes*, (Bruxelles : Cellule Architecture de la Fédération Wallonie-Bruxelles, 2011), 225-246.

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7. Eric Mumford, *The CIAM discourse on urbanism*, 1928-1960 (Cambridge, Massachusetts : MIT Press, 2000), 44-130; Kees Somer, *The functional city: the CIAM and Cornelis van Eesteren*, 1928-1960 (Rotterdam : Nai Publishers, 2007), 9-207.

8. Geoffrey Grulois, "La construction épistémologique de l'urbanisme en Belgique" in *Belgeo n°1-2 : Urban studies in Belgium* (2011), 5-16.

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30. Françoise Choay, *L'Urbanisme utopie et réalité : Une anthologie*, (Paris: Editions du Seuil, 1965).

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A 'NATIONAL' HOSPITAL FOR THE NATIONAL HEALTH SERVICE? THE ROLE OF THE DESIGNER[1]

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The UK National Health Service (NHS) came into existence in 1948, but it was not until the mid-1950s that sufficient funding was made available by government to begin in earnest the process of improving the country's stock of hospital buildings. Initial schemes were often designed by private practitioners.[2] However, at the end of the decade, an Architect's Department was created within the Ministry of Health. This paper presents research-in-progress on that Department's interest, between c.1965 and 1975, in various approaches to standardisation as ways to achieve new and extended hospitals quickly and economically. The first, 'Best Buy', provided a complete hospital for the lowest possible cost without compromising functionality. In parallel, standard departmental layouts were developed; they could either be combined to create a complete hospital or used to extend an existing building. Leading from this work was a further approach known as 'Harness', after the central wiring loom used in motor vehicles, in which the standard departments were connected by a spine corridor that provided circulation and also accommodated the mechanical and electrical services. Both Harness and Best Buy came close to becoming 'national' hospitals. Yet neither was intended as an unchangeable model; Best Buy, in particular, was as much a philosophy of economy as a design. Thus what in practice did standardisation mean for the hospital designer?

Britain's hospitals attracted critical comment in the 1950s. Some 2700 institutions transferred in 1948 into the NHS, but many were dilapidated, with 45% pre-dating 1891.[3] Although capital allocations to the NHS were severely limited until 1955,[4] the resulting breathing space was put to good use. In 1949, the Nuffield Provincial Hospitals Trust inaugurated a major study of hospital design, considering the subject from first principles. Its report was published in 1955 to coincide with the first capital allocations; it proved influential.[5] By bringing together a small, multi-disciplinary group (including nurses, doctors and a historian) and by publishing an evidence-based discussion of good practice, the Nuffield Trust anticipated the direction in which the Ministry of Health was increasingly travelling. The Ministry's own Architect's Department was formed in 1959 with William Tatton-Brown as Chief Architect; Howard Goodman later took the role after the Ministry had become the Department of Health and Social Security (DHSS).

The incursion of the Ministry into what had hitherto been primarily a local affair reflected frustration about the protracted nature of the growing number of hospital projects under development, and particularly the time spent working out unique briefs for every project.[6] In this respect, we should note the ever-more complex nature of hospital design – the product of advances in medicine and medical technologies, increasing life expectancy, and altered patterns of disease. In response, Tatton-Brown quickly initiated a series of 'Building Notes' that codified good practice for use in briefing. Thus while design remained an essentially local activity, it now took place within a framework in which costs and service provision were guided from the centre via a system known as 'Capricode', deviations from which had to be justified. Yet despite the advent of the Building Notes, it was noted that hospital capital projects remained costly and slow.[7] This state of affairs was particularly problematic in view of the assumption that, not only were an additional 100,000 beds needed, but that nearly all hospitals would be reconstructed by 2001.[8]

The drive to speed hospital design was given added impetus by the publication in 1962 of the 'Hospital Plan for England and Wales', which proposed 99 new and 134 upgraded 'District General Hospitals'.[9] While the Hospital Plan was scaled back in 1966, it still envisaged a significant amount of building. The numbers would be hard to achieve if each project was progressed individually, and so they presented the opportunity to develop a comprehensive response that was in scale and potential impact second only to the contemporaneous school-building programme.[10] In such circumstances, it was fortuitous that Tatton-Brown came from Hertfordshire County Council, whose acclaimed post-war schools had used prefabricated techniques for quick and economical construction. In 1965, a Building Working Party was formed to examine policy under Frank Mottershead, a senior civil servant. It suggested that the Ministry should provide 'guidance on every kind of functional unit' and that it should investigate standardisation.[11] Such recommendations are not surprising in view of the important role of standardisation and prefabrication in school and house construction in this period. Industrialised building techniques were also favoured by government more generally.[12] A discussion paper was produced for the Working Party by Raymond Gedling, one of several civil

servants whose work was to prove fundamental to the standardisation drive.[13] Gedling began by noting that significant savings could be made by the use of a limited range of standard components and that perhaps such items should become mandatory. His paper continued with consideration of the potential for standard department plans, though such a development, he said, occupied 'debatable ground' because standardisation risked rigidity and might not deal with local issues as well as a bespoke solution. But standardisation was not unknown, as several Regional Boards had devised 'type' ward plans and their own prefabricated systems. Accordingly, he concluded that, while Boards might resent having to use another Board's designs or layouts imposed by the Ministry, there was diminishing opposition to the idea.[14]

Two tracks emerged. One Ministry team developed a whole hospital layout according to a philosophy described as 'Best Buy', designed for the lowest cost that could be reconciled with medical practice.[15] Initially, this project was not intended for emulation, though by summer 1968 at least some within the Ministry thought that the design might be adapted for multiple sites.[16] Two 'Best Buy' hospitals were constructed at Bury St Edmunds and Frimley, Surrey, between 1969 and 1974, both arranged with wards banded peripherally and a central highly serviced core of operating theatres and critical care areas.[17] The decision to build two hospitals to a similar plan countered the initial intention that 'Best Buy' deliver a philosophy, not an archetype, and the Secretary of State, Keith Joseph, was said in 1972 to be keen not only to build 'Best Buy' replicas but also to make the template compulsory in certain cases.[18]

The second group focused from early 1966 on 'standard departments'. This strand of work represented a fundamental shift in the relationship between hospitals, Regional Boards, and the Ministry, implicating the latter less as funder/ arbiter of an otherwise local process and more as a source of architectural plans.[19] Gedling's Working Paper had proposed various possible approaches. One was a devolved arrangement in which the Ministry would devise layouts that Boards could work up into designs and from which 'standard drawings and detailing' would emerge.[20] Alternatively, Gedling thought that policies could be set at the centre, with centralised drawings leaving little for local teams to do. In this case, the aim would be a basic configuration that would allow easy inter-relationships, i.e. structures, dimensions and layouts that would permit any department to be placed above, below or alongside any other.

By April 1967, policies outlining the way in which departments would operate had been agreed, and a series of designs planned as 'H' and 'T' shapes was emerging, linked to a 'Best Buy'-like 'racetrack' corridor (Fig. 1).[21] However, ten months later, in February 1968, the scale of ambition had increased. While work on the H and T-shaped standard acute and maternity wards continued, there now also developed a focus on finding ways to create a 'sensible whole hospital' by means of a 'modular approach'.[22] By October, the term 'Harness' had come into use as a way to describe this activity. Departments would be connected by the 'Harness zone', a serviced communication spine, described as a 'trunk, around which the departments would fit.'[23] The key breakthrough came in April 1969 with a suggestion that every Harness departmental template use a standard width and that this width be repeated in the courtyards between templates.[24] Interestingly, the idea that a standard building plan/volume be used for multiple departments had been proposed by John Weeks in 1964, who, inspired by the modular units at the Vale of Leven Hospital and believing that flexibility would be the hallmark of the 1970s, suggested that 'it would be very fortunate if identical pavilions could provide efficient envelopes for a wide range of departments.'[25] A study by the architect Paul James confirmed that a clear space 15 metres wide could accommodate most departments,[26] and by 1971 this work had been resolved into a series of linear and cruciform templates (Fig. 2). When assembled, these templates created a building of up to four storeys, punctured by a regular chequerboard grid of courtyards. There was a standard structural system, with services routed above departments and wards from the spine through deep concrete trusses of 15.3 metres span, spaced at 5.1 metre intervals.
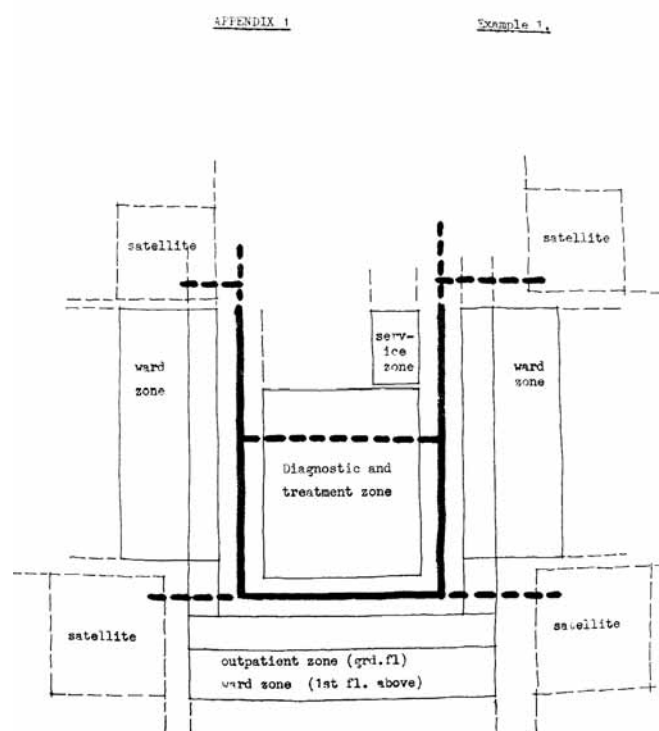

Figure 1. Early standard department plan, c. 1967, with an arrangement of the hospital not unlike 'Best Buy' in its 'racetrack' plan. (source: National Archives, MH 166/488. Crown Copyright)
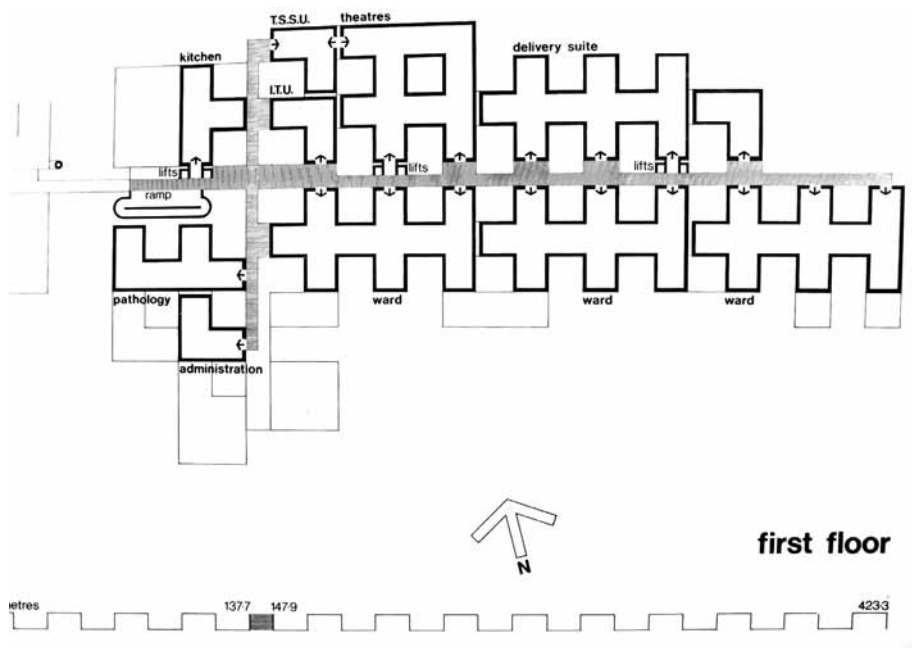
Figure 2. Layout of the Dudley Harness hospital at first-floor level. (source: National Archives, MH 166/658. Crown Copyright)

Ceri Davies, a senior architect in the DHSS, described this approach as more up-to-date than the 'Best Buy' layout with its peripheral banded wards;[27] it was also more flexible in that a layout could be composed to meet local needs and particular sites. There are broader resonances of the 'mat plan' popularised at this time by such figures as Alison and Peter Smithson, while regular courtyards figured in Paul James' Airedale Hospital of 1965-71, RMJM's Ninewells Hospital (1960-74), and Powell and Moya's Wexham Park, Slough (1957-66).[28] However, Davies later recalled that the low-rise/high-density studies of Leslie Martin and Lionel March were particularly influential; Martin and March's scheme for the reconstruction of Whitehall as a series of courtyards had been published in 1965.[29] More generally, the idea of an indeterminate, extendable building recalls Richard Llewelyn-Davies and John Weeks' design for Northwick Park Hospital, as well as, perhaps, the linear replanning of London proposed by Tatton-Brown in the 1930s, though Tatton-Brown himself appears to have favoured Best Buy over Harness.[30]

Where did Harness and Best Buy (and the non-Harness standard designs) leave the designer? The explicit aim was to reduce design time and to achieve 'a more economical and efficient design process'.[31] Inevitably, the result could be thought restrictive, and Paul James' report on the feasibility of a standard width noted that 'standardisation demands a disciplined approach based on a set of rules which necessarily limit the range of choice open to the designer'.[32] Unlike the Hertfordshire schools (where standard components were arranged in different layouts according to local circumstances), in the case of hospitals, dossiers were to include 'all the design material needed for the departments', there were to be databanks of information, and it was suggested that the designer's role would be 'the selection of the departments required and the number of modular spaces required to house them, followed by the arrangement of these departments in the best relationship to each other.'[33] Questions were raised as to whether all hospitals would end up looking alike, and whether the designer would be left with little more to do than dress up standard plans with a range of standard components.[34] That this approach might be controversial is evident from the fear that the standard designs might be rejected by regional architects, and that the RIBA might not allow architects to be involved.[35]

At the same time, the designer's position was also challenged by the multi-disciplinary nature of the Ministry and DHSS teams. Few post-war buildings can truly claim to be the product of a single hand, but hospitals perhaps demonstrate particularly close links between architecture, engineering and function, with medical and nursing practices impacting on design to a significant degree. Thus the first step in the standardisation work was to evolve 'whole hospital policies' that would govern the relationships between departments – such things as whether food would be heated centrally or not, or whether the acutely ill would be grouped together in a high-dependency unit. Medical and nursing input also informed the layout of departments; it was reported that their enthusiasm for research slowed design.[36] Quantity Surveyors and engineers were also important Ministry team members. In addition, the origins of standardisation in Westminster and the dictates of policy both suggest the role of government as a further 'co-designer' of the Welfare State. In this respect, John Weeks suggested in 1977 that the impact of central policy on design meant that there was a 'recognisably British approach' to hospital architecture.[37]

Thus various factors might suggest the marginalisation of the designer in creating the Welfare State Hospital: the rules of standardisation; the impact of civil servants as planners and funders; and the consequences of multi-disciplinary advice on the departmental templates. But, though Goodman was keen, it was never quite clear how 'total' standardisation would be: encompassing plans, structure, or both? Furthermore, the archives reveal conflict between the Best Buy and standard department

teams, and tension between those working on the Harness approach and those creating the non-Harness acute and maternity standard designs.[38] In reality, the Ministry soon found it necessary to develop variant layouts and to consider a more flexible version of Best Buy, while the Harness hospitals built at Dudley and Stafford both featured local variations.[39] There was also much potential work for designers in shaping the immediate environment experienced by patients and staff, even allowing for the use of standard components, signage and furnishings; in this respect, Philip Powell of Powell and Moya wrote in the mid-1980s of the liberating nature of template-based hospital design, feeling that it allowed architects to concentrate on features that would be valued by a building's users.[40]

The idea that design was somehow marginalised by standardisation rests on a view of the designer as the creative orchestrator of the individual project. This position has long been held up as the 'ideal'. For example, the *Architectural Review*'s special issues on hospitals in 1965 and 1970 urged architects to lead improvements.[41] Similarly, Nicholas Bullock contrasts the 'design' approach of the Smithsons' housing at Robin Hood Gardens with the contemporaneous system-built Ronan Point tower, the implication being that 'design' – which we might also see as being implicit in the Nuffield study's eschewing of the 'type form' – was superior to the 'production' focus of system-building, being at least a considered attempt to resolve a specific set of circumstances.[42] Seen in these terms, a design process based on the selection of standard layouts and components is problematic, as are buildings that are the product of numerous professional inputs (and which, perhaps, contain spaces that are made and re-made by their users).[43]

However, we should be wary of giving buildings and ideas a secondary status simply because they are not unique works of individual creation. In his study of the Hertfordshire schools, Andrew Saint notes the social convictions and collective working of the designers (who remained largely anonymous, at least to the general public) and their wish to 'share the proceeds of material, technical and cultural development amongst all.'[44] What resulted, Saint continues, were not 'masterpieces in the conventional sense'; they were 'at constant odds with issues of style, meaning and appearance'. One is also reminded of Fernand Léger's pronouncement that 'Architecture is not an art. […] It is a function of the social order.'[45] Seen thus, the Welfare State designer emerges as a figure contributing to society, rather than an iconic form-maker. Roles that may seem 'un-creative', such as detailing Harness layouts from the Ministry's basic stipulations (as Regional teams were asked to do), or assembling a hospital layout from a series of standard templates, could be of value. Indeed, Derek Stow, designer of numerous health buildings in this period, thought the task simply to create 'the best environment for patients that one could produce', rather than an architecture that 'sold itself'.[46]

A further role for the designer also emerges at one remove from the process of creating actual buildings. Ceri Davies recalled that he was initially attracted to the Ministry from a local authority office on account of the opportunity to do serious research.[47] The Ministry and the DHSS were, like the Ministry of Education, hot-beds of research. Ministry teams functioned as troubleshooters, 'flying in' to resolve local problems, while Ministry-led schemes, such as the Greenwich Hospital of 1963-8, functioned as demonstration projects. Nurses and doctors at the Ministry functioned almost as 'surrogate clients' for the architects, critiquing and contributing to plans on the basis of their own experience (and research) though, of course, without the commitment of having to use the buildings that emerged.[48] Tatton-Brown explicitly linked standard departments and the research agenda in March 1966, suggesting that the programme would not only speed the design of hospitals and the work of the Ministry in approving proposals, but that it would also allow architects to work increasingly on 'research projects'.[49] Research inputs came also from private practices, including the work by Paul James on standard widths, studies of Harness cladding by Derek Stow (one of many research projects undertaken by Stow), computerisation of the Harness process carried out with input from the Department of Architecture at Cambridge, and an evaluation of Harness by BDP.[50]

This brief examination of the UK hospital design programme in the 1960s and early 1970s suggests the need to see the role of the designer in a broad context, shaped by civil servants and parliamentarians and with limits on local creativity. Yet those working at the heart of the Ministry, as part of multi-disciplinary teams undertaking concerted research over several years, originated concepts and philosophies that, through the scale of application, could have transformed the British hospital. Intriguingly, the programme was considered an 'architect-dominated exercise' in some circles.[51] In the event, financial crisis and problems with the wide-span beams both truncated Harness before it really started, while only six Best Buy hospitals were completed. But the ideas conceived in this period underpinned the subsequent 'Nucleus' programme of more than 100 schemes. 'Nucleus' adapted the cruciform blocks of Harness to marry template-based design with greater room for individual expression in structure and elevations. The result was perhaps less ambiguous about the possible relationship between 'design' and 'production' in the creation of a 'national' hospital.

Endnotes

1. I would like to thank Ceri Davies and Derek Stow for interviews about 1960s/70s hospital design. The research was undertaken as context for the research project 'Design and Delivery of Robust Hospital Environments in a Changing Climate', funded by the UK Engineering and Physical Sciences Research Council; the project's Principal Investigator is Professor Alan Short at the University of Cambridge.

2. Kenneth Powell, *Powell and Moya* (London: RIBA Publishing, 2008), 86-90.

3. Brian Watkin, *The National Health Service: the First Phase* (London: George Allen and Unwin, 1978), 56-9.

4. Charles Webster, *The National Health Service: a Political History* (Oxford: Oxford University Press, 2002), 30.

5. Nuffield Provincial Hospitals Trust, *Studies in the Functions and Design of Hospitals* (Oxford: Oxford University Press, 1955); W. Paul James and William Tatton-Brown, *Hospitals: Design and Development* (London: Architectural Press, 1986), 70.

6. John Weeks, 'Hospitals: patronage', *RIBA Journal* 84, no. 10 (May 1977), 187-9.

7. London, National Archives [hereafter 'TNA'], MH166/486, minutes of the Mottershead Working Party, 25 October 1965, and accompanying correspondence; MH166/361, papers relating to the 'Harness' hospital at Dudley: 'Boards […] see the need to make the maximum use of standardisation to enable them to reduce the length of time it takes to plan and build hospitals and also to reduce the demand for scarce design skills'.

8. TNA, MH166/486, minute of 8 December 1965.

9. 'A Hospital Plan for England and Wales', Cmnd. 1604 (London: HMSO, 1962).

10. J.R.B. Green, 'Architectural requirements of hospital lighting', in R.G. Hopkinson (ed.), *Hospital lighting* (London: Heinemann, 1964), 82-106 (p. 82).

11. TNA, MH166/486, minutes of the Mottershead Working Party, 17 November and 8 December 1965, and accompanying paper by Raymond Gedling, 'Hospitals for the Twentieth Century'.

12. John R. Gold, *The Practice of Modernism: Modern Architects and Urban Transformation* (London: Routledge, 2007), 192-200.

13. TNA, MH166/487, 'BWP 9 – Standardising hospital building: memorandum by Mr Gedling'; Ceri Davies, interviewed by the author on 31 January 2012.

14. TNA, MH166/486, minutes of the Mottershead Working Party, 20 January 1966.

15. TNA, MH166/486, minutes of 25 January and 2 February 1966.

16. TNA, MH166/487, Note to RHB Secretaries, May 1966; MH166/663, minutes of the Steering Committee, 20 June 1968.

17. Peter Stone, *British Hospital and Health-care Buildings: Designs and Appraisals* (London: Architectural Press, 1980), 87-102. The layout was derived from the Ministry's Greenwich District Hospital.

18. TNA, MH166/510, letters from D. Somerville, 19 April and 3 May 1972; minutes of 10 October and 1 December 1972.

19. TNA, MH166/486, minutes of 20 January 1966.

20. TNA, MH166/487, 'BWP 9 - Standardising hospital building'.

21. TNA, MH166/488, 'Progress Report on Development Projects', April 1967.

22. TNA, MH166/488, 'Building Working Paper 21', February 1968.

23. TNA, MH166/664, minutes of meeting between Ministry officials and South Western RHB, 8 October 1968.

24. TNA, MH166/752, letter from C.E. Stone to Paul James, 11 April 1969; MH166/360, minutes of 22 April 1969.

25. John Weeks, 'Hospitals for the 1970s', *RIBA Journal* 71, no. 12 (December 1964), 507-516.

26. TNA, MH166/364, minutes of 20 October 1969.

27. TNA, MH166/664, minutes of meeting between Ministry officials and South Western RHB, 8 October 1968.

28. The Smithsons: Eric Mumford, 'The Emergence of Mat or Field Buildings', in Hashim Sarkis (ed.), *Le Corbusier's Venice Hospital and the Mat Building Revival* (Munich: Prestel, 2001), 48-65. For the UK examples, see James and Tatton-Brown, *Hospitals*, 54-5, and Stone, *British Hospital*, 160-74. Jonathan Hughes considers Wexham Park in 'The Brutal Hospital: Efficiency, Form and Identity in the National Health Service', (Ph.D. diss., London, 1996), 83-116. For US courtyard hospitals, see Alison Fisher, 'Humanist Structures: Bertrand Goldberg Builds for Healthcare', in Zoe Ryan (ed.), *Bertrand Goldberg: Architecture of Invention* (New Haven and London: Yale University Press, 2011), 130-143.

29. Davies, interviewed by author; Ian Rice, '"Ziggurats for Bureaucrats": Sir Leslie Martin's Whitehall Plan', *Architectural Research Quarterly* 8, no. 3-4 (2004), 313-323

30. Northwick Park: Stone, *British Hospital*, 146-59, and Hughes, 'Brutal Hospital', 127-132; John R. Gold, 'The MARS Plans for London, 1933-1942', *Town Planning Review* 66, no. 3 (1995), 243-67; for Tatton-Brown's concern, TNA, MH166/664, letter of 13 August 1968.

31. TNA, MH166/358, 'Meeting with Representatives of the Nursing Profession', 22 April 1970; also MH166/360, letter from C.E. Stone, 26 March 1971.

32. TNA, MH166/658, 'Harness Feasibility Studies', April 1970, 2.

33. TNA, MH166/830, letter from C.P. Goodale to Regional Hospital Boards, 9 August 1968; H.E. Lewis et al., 'The Harness Hospital system', *Proceedings of the Institute of Civil Engineers*, August 1976, 401-443 (see p. 402).

34. TNA, MH166/664, minutes of meeting with representatives of the Manchester Regional Hospital Board, 14 November 1968.

35. TNA, MH166/358, note of discussions with Regional Architects, 18 September 1968; MH166/487, 'BWP 9 – Standardising hospital building'.

36. TNA, MH166/664, note of meeting with Hospital Planning Doctors, 18 July 1968.

37. Weeks, 'Hospitals: patronage', 187.

38. E.g. TNA, MH166/510, letter from John Ward to Howard Goodman, 30 May 1972: 'there seems to be a very marked reluctance […] to recognise the possibility of, or the desirability for, an ongoing Best Buy programme'.

39. Davies, interviewed by author.

40. E.g. TNA, MH166/1136, draft Harness interior design guide, c. 1974-5; Powell, *Powell and Moya*, 97.

41. 'Foreword: Health and Hospitals', *Architectural Review* 137, no. 820 (June 1965), 411-12; 323-324; 'Health and Welfare', *Architectural Review* 147, no. 879 ('Manplan 6', May 1970), 323-4; more generally, Andrew Saint, *The Image of the Architect* (New Haven and London: Yale University Press, 1983), 6, 162-4.

42. Nicholas Bullock, 'Building the Socialist Dream or Housing the Socialist State? Design Versus the Production of Housing in the 1960s', in Mark Crinson and Claire Zimmerman (eds.), *Neo-Avant Garde and Postmodern: Post-War Architecture in Britain and Beyond* (New Haven and London: Yale University Press, 2010), 321-37; Nuffield, *Studies*, xx; Richard Llewelyn Davies, 'The general design problems of the hospital', *RIBA Journal* 62 (October 1954), 485-503 (p. 485).

43. See e.g. Bruno Fortier's criticism of hospital architecture, cited in Fisher, 'Humanist structures', 131.

44. Andrew Saint, *Towards a Social Architecture: the Role of School-Building in Post-War England* (New Haven and London: Yale University Press, 1986), viii-ix.

45. Quoted in Patrick Nuttgens, *Understanding Modern Architecture* (London: Unwin Hyman, 1988), p. 208

46. Derek Stow, interviewed by the author on 26 March 2012.

47. Davies, interviewed by author.

48. The term 'surrogate client' I borrow from a study by Geraint Franklin of David and Mary Medd's work as school designers, forthcoming in *Architectural History*, 55 (2012).

49. TNA, MH166/487, minutes of meeting on 16 March 1966.

50. TNA, MH166/752, letter from C.E. Stone to Paul James, 11 April 1969; MH166/360, minutes of meeting on 22 April 1969; MH166/1129, correspondence relating to Harness cladding; MH166/1132, evaluation of Harness by BDP; Davies, interviewed by author; Stow, interviewed by author; Land Use & Built Form Studies (University of Cambridge), 'DHSS Harness Concept: Automatic Design Aids – a feasibility study' (unpublished report, 1970).

51. TNA, MH166/663, memo by K.W. Blakey, 20 May 1968.

TOWN PLANNING:
GIANCARLO DE CARLO'S ALTERNATIVE TO THE WELFARE STATE PLAN

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For the Milanese architect Giancarlo De Carlo, the making of architecture was political action. On 17 March 1969, in an unusually crowded city hall in the town of Rimini, Italy, De Carlo addressed the audience and spoke to the relationship between architecture and politics. Although better known for being a popular destination for vacation, further popularized by Dino Risi's movie *L'ombrellone* ("Beach Umbrella") in 1965, in this meeting Rimini was at the centre of one of the most passionately debated topics of the late 1960s: the post-industrial city as source of social inequality. It was against this inequality that students and workers were openly expressing their discontent on the streets of Italy. Responding to this problem, De Carlo began by stating that he "did not believe that an [urban] plan could be conceived without both a political and ideological intention."[1] In his view, a self-declared "neutral plan" often concealed reactionary agendas. But if De Carlo claimed a political ground for architecture, how did politicians respond to a political architecture?

The March meeting was one of many organized by De Carlo. One year prior, the Communist administration of the city had appointed the architect for the design of a new town plan.[2] The purpose of the meetings was to ask for the citizens' participation in the design process. By stating the impossibility of separating any plan from its ideological intention, De Carlo implicitly criticized the neo-liberal management of the national territory. The ineffectiveness of urban regulations fostered by the right-wing government, the so called *Centrismo* (Centrism) of the 1950s, had already exposed its devastating effects, creating economic instability—not to mention social inequality—of which the 1962 economic crisis was a clear outcome. However, De Carlo similarly questioned the territorial policy promoted by the centre-left coalition, the *Centro-Sinistra Organica* (Organic Centre-Left), in office since 1963. Initially acclaimed by both the Christian Democrats and the Socialists, with the blessing of the Communist Party, as a necessary way out of the economic crisis, the proposal for a state-controlled development of the national territory, commonly called *programmazione* (programming), was the subject of endless—and inconclusive—parliamentary debates during the 1960s.[3] De Carlo's critique of *programmazione* became evident in the same Rimini meeting once the architect attacked the post-industrial city as materialization of a bureaucratic, centralized process. In his words, "Too often the city is the expression of its institutions instead of the community inhabiting its spaces."[4] Yet, by criticizing the economic model proposed by the Organic Centre-Left, De Carlo effectively distanced himself from the only official alternative to the neo-liberal development of the 1950s and 1960s. Therefore the following questions arise: What was De Carlo's proposal for an economically profitable yet socially sustainable development of the Italian territory? How did De Carlo's alternative respond to the official political debate? And finally: How can one situate his view within the architectural debates of the time?

The hypotheses underlying this research cast De Carlo's conception of planning both in theoretical and operative terms, as inspired by a conscious political vision, though his views were located outside of the official positions offered by the different parties, including the left-wing parties. The process leading to the design and the outcome of the town planning for Rimini was the first opportunity for De Carlo to fully express his views. What follows is an attempt to unfold De Carlo's political understanding of territorial planning through the Rimini project—how the latter constituted a precise critique of the welfare state as discussed by the Organic Centre-Left during the 1960s, and finally, how politicians responded to its formulation.

In the city-hall meetings, De Carlo explained that for him architecture's main objective was the organization of the contested *territorio* (territory). As architect Carlo Doglio declared, Italian architects and historians such as Carlo Aymonino, Giuseppe Samonà, Aldo Rossi, and Manfredo Tafuri had turned their attention toward the "architecture of the city" since the end of the 1950s, while De Carlo obstinately remained faithful to his conception that architecture should engage—and most important—on a territorial scale, resisting the temptation to leave such matters exclusively to the decision-making of economists and bureaucrats.[5] The problem for De Carlo was that "the normative instruments of town planning are in fact based on the negotiation between political and economic power"[6] to the degree that "territorial organization is always the representation of the groups of people holding decisional power."[7] Thus the architect's interest in a larger context was a direct consequence of the political and economic implications of the discipline, implications—he would argue—best managed on a large scale.

For De Carlo, the way in which Rimini had been transformed through the centuries confirmed his assumption. For instance, the late-nineteenth-century development of the city's coastline, De Carlo observed, occurred due to the alliance between the Vatican and municipal power. Shortly after the unification of Italy, the Vatican built a resort for children affected by tuberculosis between the city centre and the sea. By expropriating private land for public use, the municipality was able to realize a number of infrastructures to serve this new project, such as the train station and the promenade overlooking the Mediterranean. However, once seaside locations became popular destinations for leisure, at the beginning of the twentieth century, the sanatorium was conveniently moved elsewhere, and the expropriated land was made accessible for private investments and speculations. As De Carlo noted, this decision benefitted only a privileged few, leaving the great majority of the citizens outside of the decision-making process. In his view, the problem was that the city's land was being used as a commodity by those with economic and political power rather than being treated as a public good. This phenomenon affected not only the unequal concentration of wealth but also the distribution of different social classes in the city.

De Carlo stated that the commodification of city land had caused the working class's migratory flight toward the periphery, from both the urban centre and the rural areas, consigning them to deeper geographical and intellectual isolation. To better substantiate his claims, De Carlo alluded to the city administration's policies in the late 1950s aimed at displacing certain functions away from the city center. The fish market, for instance, was moved from the centre to the periphery for hygiene reasons. As far as De Carlo was concerned, the hygiene problems should have been solved using technological innovations, as the fish market represented a point of aggregation essential to the dynamic life of the urban centre. Instead, the displacement of the fish market resulted in keeping the working class away from the centre, and—ultimately—in the "domestication" of the city centre into a series of controllable situations.

Once more, De Carlo's words on the inevitability of ideological intention in any plan resonated in the Rimini city hall. But De Carlo's statement was not only a critique; it was also a point of departure. Because ideological views and planning were inseparable, in De Carlos's opinion, the former should be clearly defined in the early design stages—which was, in fact, the aim of the meetings with citizens, an attempt to define and outline the political intentions of the Rimini plan. But how could an ideological view be expressed through the organization of the territory?

De Carlo's ideas about organization in architecture grew out of his anarchist beliefs. Retracing the main events of his life a few years before his death, the architect recalled:

> The most debated argument [at Canossa for the second postwar national meeting of the Anarchist Movement, (Federazione Anarchica Italiana, or FIA)] was the dilemma between freedom and organization. The anarchists will continue to debate that argument in the following years, without moving—in any real way—toward a conclusion. Despite many doubts, I was sympathetic to those who feared that organization was turning into power and bureaucracy.[8]

De Carlo noted that at the FIA meeting, the discussion addressed how to organize the anarchist movement without forming a hierarchical, centralized power structure. In other words, the problem was how to define those limits, without which a "really open, free, and active organization without leaders"[9] would slide into a rigid order.[10]

De Carlo proposed addressing this problem by distinguishing between the structure and form of architecture. By structure, De Carlo meant "the organizational types through which the activities are performed in physical space,"[11] and by form, "the physical configuration that the organizational types assumed in performing the activities."[12] In a lecture given at the School of Architecture of Naples in 1967 entitled *Aspetti del rapporto fra residenza ed organizzazione urbana* ("Aspects of the relationship between housing and urban organization"), De Carlo elucidated how social interactions (which constituted his understanding of structure) had evolved through time in relationship to the changing system of labour from agricultural to industrial, and how such developments had affected the urban fabric (the architect's conception of form). In short, De Carlo offered a concise description of how the Western city had changed through history (from pre-industrial to post-industrial) due to the variations of the relationship between its form and structure.

But for De Carlo, in the same way that social relationships had been crystallized into spatial forms, those relationships also tended to resist such solidification, creating what the architect called "disorder." Central in his thinking, De Carlo defined the concept of disorder in two ways: as a reaction to an imposed order (problematic in principle because it originated from an authoritarian act) and as an inevitable and simultaneously productive action. De Carlo explained further:

> But while the pathological dregs of "order" are the result of the exasperation of an authoritarian and repressive condition that outruns its own rules, spreading in a state of amorphous violence, the "disorder" that is opposed to "order" has a complex branching structure. The latter is not institutionalized: It renews itself continually, reinventing at every moment images of a reality in transformation.[13]

Undoubtedly inspired by his readings of anarchist literature, such as Peter Kropotkin's *Mutual Aid*, De Carlo's understanding of architectural organization characterized the inclusion of "disorder" as an ever-changing yet self-regulating configuration of

living. Thus every project should be addressed "by considering all its aspects, without establishing an a priori arrangement that any one point is better than another. It allows you to think that the order of things changes constantly, and the attempt to fix them in a hierarchy is simply an assertion of power."[14] As an outcome of his conception of disorder, De Carlo identified a number of strategic points in Rimini that he called "condensers," in which the architect envisioned a "disorderly" integration of different activities. These condensers were aimed precisely at nurturing the formation of a productive disorder.

But in order to define that productive disorder, the selection of the design process, what De Carlo would call *progettazione processo,* was equally important:

> The important thing is not the result but the path you take in the effort to reach it, accepting all the positive contributions you find along the way and with an inclusive attitude toward obstacles. I think that doubt is a key that can open the various doors to the problem, that the process is the real purpose and that the built object has the value of a tentative verification. [15]

Any project should be addressed within an awareness of its ideological preconceptions, and every aspect was equally important. By privileging the means over the end, the trajectory over the realization, the process became central. De Carlo used this *progettazione processo* in the design of the plan for the central area of Rimini, composed of the historical centre and the working-class area of Borgo San Giuliano then occupied by a shantytown. In the *Piano Particolareggiato* (Detailed Plan) of this last neighborhood, De Carlo used his participatory procedure, including the citizens and, in particular, the working class in the design process.

The working class was also the supposed beneficiary of the *programmazione* discussed during the 1960s. Presented by the Socialist Party as the last opportunity to realize a socially responsible economic plan for the country—with a not-so-obscure Soviet reference—*programmazione* lived through multiple theoretical formulations, of which the 1969 *Progetto '80* (Project '80) represented the final attempt. While never concretely applied, *programmazione* was proposed in public debates as the framework for a new social equality.[16] In 1963, in an interview with the communist journal *L'Unità,* De Carlo stressed that the very objectives of *programmazione* should be both the welfare of the population and an increase in the citizens' participation in power.[17] In De Carlo's view, without the former the latter objective had no value. But which practical repercussions would such a participation have in the development of town planning? According to De Carlo, by enacting the participatory process, any local urban policy would necessarily gain autonomy from the dispositions imposed by central power. Dissent should not be expressed only through local administrations within the planning process—it should be an essential component in the realization of alternative territorial developments on a regional scale.

De Carlo's critique of the formulation of *programmazione* certainly reiterated his objections to the policies of the *Partito Comunista Italiano* (Italian Communist Party). In a passionate letter to the architectural historian Bruno Zevi, De Carlo responded to accusations that he had changed his political beliefs and showed a flirtatious attitude toward the Communist Party. De Carlo stated that the claim to objectivity with which the Communists justified their power and to which they asked the people's submission would

> oblige them to found a society held together by "morality" and therefore repressive and old. Because an objectified power is not allowed to generate relevant textures of subjectivity […], it is necessary to hold [the objectified power] up by a humanly repellent structure, which has to be kept together by impoverishment and a constant physical or psychological repressive attention.[18]

In other words, in his view, the Communist Party had betrayed the worker's needs and demands in order to save the bureaucratic structures supporting the party apparatus.

As De Carlo explained, "[in Rimini] participation is used as a political, administrative, and technical objective of the plan."[19] As such, it required the active presence of the individuals who occupied a marginal position with respect to power. To achieve participation, one would have to demystify "imposed values, to dissolve the alienation that centuries-old impositions of such systems have produced, and to stimulate a consciousness so precise and cutting as to provoke the rebound of new information and criticism."[20] On the other hand, the designer would have to accept criticism and doubt regarding his own assumptions, positions, and proposals. In order to have a real communication with the users, the architect had to be willing to constantly redirect his action in accordance with the suggestions of users. Also faithful to his early appreciation for "spontaneous architecture,"[21] De Carlo observed that "those who are excluded from the use of power—and therefore from what is officially recognized as culture, art, architecture—are not larvae waiting for a metamorphosis that will permit them to benefit from the legitimate values of the power structure. They are bearers of new values which potentially already exist and are already manifested sporadically in the margins not controlled by institutional power."[22]

While discussing the detailed plan for the city centre, De Carlo explained that due to the centrality of Borgo San Giuliano, its land value had increased enormously over the past 20 years. Its inhabitants had already been exposed to the problem of speculation and had shown an uncommon resistance to the changes to the neighborhood. After various meetings with residents, however, De Carlo sensed that the people were less attached to their houses, given their state of degradation, than to their location. In response,

the architect proposed replacing the existing urban fabric by providing new construction in the old neighborhood. De Carlo also suggested enlarging the historical centre up to the Borgo by creating a main access for commercial use and new housing along the north-south axis (Fig. 1). The new buildings were to use prefabrication and to include the possibility of being constructed by the residents themselves. The models indicated rows of two-story houses with front and back yards (Fig. 2). The owners could also choose among a variety of configurations, selecting among different materials and forms. In other words, within a defined range of possibilities, the inhabitant was responsible for the design of her own house.

While one can debate how much space De Carlo's decision-making forums truly left open to citizen contributions, the participatory process undoubtedly attracted wide press attention for its unorthodoxy. In the meantime, De Carlo recorded an astonishing result of the meetings: If participation was employed in response to an architectural problem the outcome was certainly not. In De Carlo's words:

> It was also necessary to clarify the risks involved in such action. The process did not aim to inform the people in order to obtain consensus— instead it sought to involve concretely the working class in the decision-making. And it was essential to understand that if taken to the extreme, this process would have put into question certain principles often taken for granted, such as political and administrative delegacy, while the latter [delegacy] is usually justified by the need for an order that an assembly debate would not guarantee. [23]
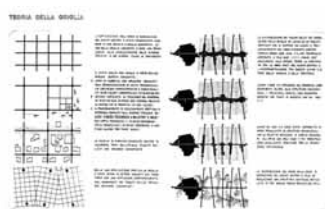
Figure 1. Giancarlo De Carlo, Detailed plan for Rimini. De Carlo planned the extension of the historical centre to the Borgo San Giuliano on the right. (source: *Parametro* 39–40 (1975), 25)
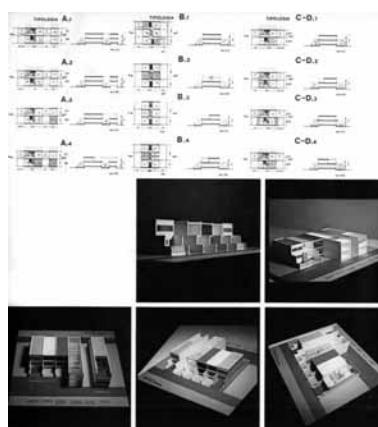
Figure 2. Giancarlo De Carlo, Project for prefabricated housing in Borgo San Giuliano. (source: *Parametro* 39–40 (1975), 35)

For De Carlo, the meetings at the city hall initiated a growth in consciousness. The people participating started to realize that if urban land was, in fact, a public good, the citizens' involvement in the decision-making was not simply a concession but an indispensable right. To be more precise, the Rimini precedence was an explicit attack to the principle of "delegation" both in an architectural process and—more important, in De Carlo's view—in political terms.

Taken seriously, such outcomes had to have repercussions beyond the local political sphere. By criticizing the concept of delegation, De Carlo's process implicitly questioned the very foundation of the Italian parliamentary republic per se: the delegation of sovereignty to representatives—the members of Parliament—rather than to the people. Following one of the fundamental conceptions of the anarchist Pierre-Joseph Proudhon in "General Idea of the Revolution in the Nineteenth Century" (1851) regarding the impossibility of equality in a representative democracy, the Rimini plan ended where it had originated: architecture as a political action had produced a political outcome. The critique did not pass unnoticed: Repeated attacks on the project were expressed by both the local press, through the right-wing journal *Il Resto del Carlino* and through the local administration, which had kept its distance from the participatory process. Those attacks delegitimized the plan and ultimately halted its development. As architecture claimed political ground with De Carlo's Rimini project, the political sphere opposed this interference and relegated the architect back to the defined boundaries of his own discipline.

Endnotes

1. *"Io credo che non si possa fare un piano se non esiste un sostegno di carattere idologico e politico. Io non credo ai piani neutrali, e in realtà non ne conosco."* [my translation] Giancarlo De Carlo, "Incontro con le associazioni culturali," *Documenti: Notizie del Comune di Rimini* 2 (1969), 11.

2. A *Piano Regolatore Generale* (General Urban Plan) for Rimini was designed in 1965 by architect Giuseppe Campus. In 1968 De Carlo started to design a *Piano Particolareggiato* (Detail Plan) for the city centre.

3. Proposed first by the economist Pasquale Saraceno in the immediate postwar period, a detailed formulation of *programmazione* was presented in 1954 by

Christian Democrats Minister of Finance Ezio Vannoni. At the heart of the problem was the unequal economic development in different parts of the peninsula, symbolized by the discrepancy between the south and the north of Italy. As the plan remained unrealized, it was reformulated in 1964 as the "Pieraccini Plan," after its promoter, the Minister of Finance, Socialist Giovanni Pieraccini. The last formulation of *programmazione* was reiterated in 1969 with the *Progetto '80* (Project '80). Vast is the literature on *programmazione*; for its application on territorial policy: Fabio Lavista, *La stagione della programmazione* (Bologna: Mulino, 2010); Silvano Scajola, "Chapter One: The miracle and the crises," in Carlo Pirovano (ed.) *Modern Italy: Images and history of a national identity* (Milano: Electa, 1985), 9-19; Paolo Jacobelli et al., *Ideologia e territorio* (Roma: Giulio Savelli editore, 1973).

4. *"Accade così troppo spesso che la città, anzichè espressione della collettività che la abita, sia invece espressione delle sue istituzioni [...]"* [my translation] Giancarlo De Carlo, "Incontro con le associazioni culturali," *Documenti: Notizie del Comune di Rimini* 2 (1969), 13.

5. Carlo Doglio, "Il piano dei piani: ovvero della urbanistica della pianificazione territoriale 1950-1960," in Giancarlo De Carlo et al. (eds.), *Le radici malate dell'urbanistica italiana* (Milano: Moizzi Editore, 1976), 63.

6. *"Gli strumenti normativi dell'urbanistica sono infatti fondati sulla contrattazione tra potere politico e potere economico [...]"* [my translation] Giancarlo De Carlo, "Incontro con le forze del lavoro," *Documenti: Notizie del Comune di Rimini* 3 (1969), 5.

7. *"l'organizzazione del territorio è sempre la rappresentazione della volontà dei gruppi che detengono il potere delle decisioni [...]"* Transcription of an interview between Giancarlo De Carlo and *Rinascita* on the condition of the city, dated 17 April 1974. Archivio Progetti, Università IUAV di Venezia, De Carlo-scritti/130. The archival research was conducted in the Archivio Progetti, Università Iuav di Venezia, and it took place in the summer of 2009 and 2010. Special thanks go to the Archivio Progetti archivists and in particular to Riccardo Domenichini, Rosa Maria Camozzo, and Francesca Sardi.

8. *"L'argomento più dibattuto era stato il dilemma tra libertà e organizzazione. Gli anarchici avrebbero continuato a misurarsi con quell'argomento negli anni successivi senza –per la verità– venirne a capo. Se pure con molti dubbi, la mia simpatia andava verso quelli che temevano che l'organizzazione si sarebbe rapidamente trasformata in potere e burocrazia."* [my translation] Giancarlo De Carlo and Franco Bunčuga, *Conversazioni con Giancarlo De Carlo: Architettura e libertà* (Milano: Elèuthera, 2000), 68–69. De Carlo had started to participate in anarchist ideas at the end of the war, while in Milan he was hosted by the architect Carlo Doglio and met with the intellectual Delfino Insolera. Through Doglio, De Carlo got to know the writings of Peter Kropotkin. As De Carlo recalled, although Doglio thought that Kropotkin's thinking was less influential than other Italian and French authors, De Carlo found the Russian thinker inspiring for his multidisciplinary interests. Later through the English anarchists around the journal *Freedom,* De Carlo met Colin Ward and John Turner, and he was introduced to Anglo-Saxon intellectuals such as Patrick Geddes, Olmsted, and Lewis Mumford.

9. *"significa infatti ammettere concluso senza esito il tentative mio e d'altri di suscitare nelle condizioni presenti d'Italia una associazione senza capi veramente aperta e libera ed attiva."* Giancarlo De Carlo, Letter to *Volontà* , dated 6 November 1958. As reported in Francesco Samassa, *Giancarlo De Carlo: percorsi* (Venazia: Il Poligrafo, 2004), 353.

10. The position of the anarchist group was expressed through the journal *Volontà* :*"A noi non resta che ripetere ancora una volta: chi lavora al Governo lavora contro il popolo. L'avvenire si costruisce soltanto restando in basso, aiutando le resistenze all'autorità, promovendo le iniziative spontanee nelle sedi locali, che son le sole vitali. Perchè nessun Governo esprime le volontà, gli interessi del popolo, contro ogni Governo bisogna mantenersi in stato di opposizione permanente. Il solo risultato efficace di questa continua crisi, alfine risolta col potere ai preti e con l'appoggio dello Stato americano, è che abbiamo ora dinanzi un Governo chiaramente nemico. Anche i capi politici di sinistra sono forzati all'opposizione. Il popolo ricomincerà a capire qualcosa. E quindi, sul piano della opposizione non più della assurda collaborazione, la lotta in Italia riprenderà senso e valore. [...] Sono i politici professionali che hanno distrutto quella volontà, creando il mito del 'ci penserà il Governo', facendo digerire al popolo pillole sempre più grandi di Autorità, in forma di Governi dapprima esistenti solo sulla carta e via via irrobustitisi fino alla presente riconquista di un potere effettivo nelle mani delle caste reazionarie e conservatrici. E non bisogna nascondere quale grande parte hanno avuto in questo cammino negativo, che ha disperso l'impeto iniziale del popolo, anche i politici dei Partiti di sinistra."* "Messa a Punto," *Volontà:rivista mensile del movimento anarchico di lingua italiana*, July 1, 1947, 2–3.

11. *"Intendo per struttura i tipi organizzativi attraverso i quali le attività si attuano nello spazio fisico."* [my translation] *Appunti sulla conferenza "Aspetti del rapporto fra residenza ed organizzazione urbana" – 23 gennaio 1967*. Archivio Progetti, Università IUAV di Venezia, De Carlo–scritti/076, 4.

12. *"Intendo per forma le configurazioni fisiche che i tipi organizzativi assumono nell'attuare le attività." Ibid.*

13. *"Ma mentre le scorie patologiche dell'"ordine" derivano dall'espansione di una condizione autoritaria e repressiva che scavalca le sue stesse regole dilagando in uno stato di violenza amorfa, il "disordine" di opposizione all'"ordine" possiede una sua struttura ramificata e complessa che, non essendo institucionalizzata, si rinnova di continuo, reinventando ad ogni istante le immagini di una realtà che si trasforma."* Giancarlo De Carlo, *"Il Pubblico dell'architettura," Parametro* 5 (1970), 12.

14. *"sul modo di affrontare un progetto osservando i suoi temi da tutti i punti di vista possibili, senza stabilire a priori che un punto è migliore di un'altro, perchè si è persuasi che l'ordine delle cose cambia e ogni tentativo di fissarlo in una gerarchia non è altro che un'affermazione di potere."* [my translation] Giancarlo De Carlo and Franco Bunčuga, *Conversazioni con Giancarlo De Carlo: Architettura e libertà* (Milano: Elèuthera, 2000), 67–68.

15. "*che importante non è il risulototo ma il percorso che si compie per cercare di raggiungerlo accogliendo tutti gli apporti positivi che durante il viaggio si incontrano, ponendosi di fronte agli ostacoli con spirito inclusivo; che il dubbio è una chiave che può aprire le varie porte del problema; che il processo è il vero scopo e l'oggetto ha valore di verifica tentativa."* [my translation] *Ibid*.

16. Contested by the intelligentsia of the same left-wing parties that supported its realization, *programmazione* was subject of extensive debates within intellectual

forums from the Marxist *Quaderni Rossi* to *Contropiano*. It was in an article for *Contropiano* that the philosopher Antonio Negri criticized not only the conception of *programmazione* but also the very intellectual base of the welfare state by describing John M. Keynes' policies for transfiguring Capitalism into a socially responsible system as a means to deprive the working class of its revolutionary impetus. Antonio Negri, "La teoria capitalistica dello stato nel '29: John M. Keynes," *Contropiano* 1 (1968), 3–40.

17. Giancarlo De Carlo, "De Carlo: Unità della sinistra per il rinnovamento," *L'Unità*, March 26, 1963, 3.

18. *" I comunisti non possono essere corrotti perchè la loro ragione di potere è oggettiva, impersonale e perciò mitica. [...] L'oggettività della sottomissione al potere dei comunisti li costringerà a fondare una società tenuta insieme dalla "morale" e perciò repressiva e per di più vecchia. Perchè il potere oggettivo non generi tessiture rilevanti di potere soggettivo (più rivelanti di quelle marginali che sono inevitabili) è necessario [che sia] sostenuto su una impalcatura umanamente repellente, bisogna tenerla insieme impoverendola, e così con una costante attenzione repressiva, fisica o psicologica che sia."* [my translation] Giancarlo De Carlo, Letter to Bruno Zevi dated 27 July 1975, and included in a letter dated 24 October 1975. Archivio Progetti, Università IUAV di Venezia, De Carlo–atti/010.

19. *"qui invece la partecipazione è citata come obbiettivo politico , amministrativo e tecnico del piano"* [my translation] Giancarlo De Carlo, "Rimini/ Un piano tra presente e futuro," *Parametro* 39–40 (1975), 5.

20. *"E questo da un lato richiede lo spiegamento di una attività preliminare di informazione e di critica rivolta a smitizzare tutti i sistemi di valori imposti, a dissipare le alienazioni che l'imposizione secolare di questi sistemi ha prodotto, a uscire da una presa di coscienza così precisa e mordente da provocare il rimbalzo di nuove informazioni e critiche."* Giancarlo de Carlo, "Il Pubblico dell'architettura," *Parametro* 5 (1970), 11.

21. De Carlo contributed for instance to the organization of the exhibition "Architettura spontanea" (Spontaneous Architecture) in the 1951 Ninth Triennale of Milan with Enzo Cerutti and Giuseppe Samonà.

22. *"Infatti, gli esclusi dalla gestione del potere—e quindi da quanto è ufficilmente riconosciuto per cultura, arte, architettura— non sono larve in attesa di una metamorfosi che li porterà a beneficiare dei valari legittimi del potere. Sono portatori di nuovi valori, che già si manifestano nei margini non controllati dal potere istituzionale."* Giancarlo de Carlo, "Il Pubblico dell'architettura," *Parametro* 5 (1970), 12.

23. *"Si doveva anche arrivare a chiarire fino in fondo i rischi che potevano derivare da un'azione che non si proponeva di propagandare informazioni allo scopo di strappare consenso, ma di mettere in atto uno stato di concreto coinvolgimento della base popolare nel processo delle decisioni. Ed era necessario rendersi conto che questo coinvolgimento, se fosse stato portato fino alle sue estreme conseguenze, avrebbe messo in questione la legittimità di alcuni principi molto spesso considerati indiscutibili: come quello della delega amministrativa e politica, data come antitesi di ordine alla tesi che il dibattito assembleare genera inevitabilmente disordine."* [my translation] Giancarlo De Carlo, "7/ La partecipazione popolare al piano particolareggiato del nuovo centro," *Parametro* 39–40 (1975), 50.

POLICIES, SPACES AND COLONIALISM: NANTERRE'S THREE GENERATIONS OF GRANDS ENSEMBLES

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POLICIES, SPACES AND COLONIALISM: NANTERRE'S THREE GENERATIONS OF GRANDS ENSEMBLES

Nanterre, ex-industrial area and communist suburban municipality to the east of Paris, is the ideal focus to uncover the relationship between urban restructuring, housing and immigration policies of France's post-world war two welfare state for three reasons.

(1) The Mirror Effect: Nanterre/La Défense: Nanterre was named 'Zone B' in the plans drawn up by the Public Department for the Development of La Défense (Epad). It became the site for those necessary but less desirable urban functions displaced from Zone A/Paris La Defense, in particular housing the dispossessed: 9540 homes were demolished in Zone A between 1958 and 1970[1].

(2) From slabs to megastructures: The grand ensemble is a quintessential product of France's post-world war two welfare state and state-led urban development. However, is significant to note that the term itself has no real legal definition[2]. It is typically applied to large-scale industrially produced mass housing constructed between 1953 (Courant plan) and 1973 (Guichard circular) whose architecture clashed with the traditional patterns of the urban fabric. Both the French post-war welfare state and Nanterre's communist municipality placed social housing, symbolised by the grand ensemble, at the heart of their respective policies. The three generations of grands ensembles in Nanterre, designed by Beaux-Arts-trained modern architects, provide a panoramic view of post-war modernist architectural shapes and practices.

(3) From bidonvilles to grands ensembles: As Nanterre was the location of Algerian bidonvilles or shantytowns between 1953 and 1973, the allocation of immigrant welfare housing became an issue for municipal and national housing policies.

For the past 20 years, the grands ensembles have been portrayed in the media as 'ghettos' full of violence. Their identification with the so-called 'suburban crisis' has paved the way for a heavier security presence and demolitions (the Borloo Law, 2002), transforming a social issue – the degradation of working class living conditions – into an 'ethnic' question of non-assimilation by the Other (eg: ex-immigrants, the poor, Muslims, the unemployed, etc). Paradoxically, the stigmatisation of the grands ensembles –and of the people who inhabit them– is not due to any absence of policy, it is rather a product of them[3].

FROM COLONISED TO IMMIGRANT

The famous photograph featuring an ocean of shacks and makeshift homes in the shadow of the CNIT reveals a darker aspect of the growth and technological progress enjoyed during the 'Golden Age' post-war era: the exclusion of a cheap labour force, Français Musulmans Algériens workers (FMA)[4], who were considered more French than foreign – they had held the right to free movement and the right to vote since 1962 – but still more foreign than European immigrants.

Between 1953 and 1973, a certain number of Algerians lived in France's largest bidonvilles, in Nanterre, just west of Paris[5]. The term bidonville appeared in France in the 1950s[6] and replaced the terms taudis ('slum' - linked to rural exodus and industrialisation) and 'zone' (referring to the shantytowns that sprung up around Paris during the inter*war* period), thus transforming the issue of low-income public housing into a particular problem for a specific population: provisional housing for temporary immigrant – Spanish, Portuguese and mostly North African – workers. The history of the bidonvilles in Nanterre is inextricably linked to the Algerian War, and steeped in the memory of the *17 October 1961 police massacre of Algerian demonstrators'.*[7]

The Nanterre bidonville comprised three main entities scattered across wastelands and in the interstices between industrial sites. North-eastern Petit-Nanterre (outside the Epad perimeter) would become a North African neighbourhood after the war; overcrowded hotels were supplemented by shacks in order to house the rapidly increasing number of families emigrating to escape Algerian War (1954-62). The largest bidonville, La Folie, was located in the central western section of the district earmarked by the Epad as the future locale for the Hauts-de-Seine Prefecture (1968), a large cultural complex and the Parc public housing complex (zone B1). The third group of bidonvilles was located in the north west of Nanterre, near the Seine (zone B3). (Fig.1)

Despite the wretched conditions, a tightly-knit community developed around the local cafés and small shops, as well as a real estate micro-market ranging from sales of permanent structures to the exorbitantly-priced rental of converted caravans and shacks. An address in the bidonville was not considered valid to obtain official documents (residence *or* work permits, family registration) or for public services (postal services)[8].

During the Algerian war, Nanterre's bidonvilles and especially La Folie were reputedly under National Liberation Front (FLN) influence, and hence remained under the control of the police. In the early 1960s, their role was more to maintain order than to oversee inhabitants' relocation: mapping, census data and shack/inhabitant numbering contributed to effective surveillance and informed preparations for the eventual demolition[9]. For the Minister of the Interior, the *National Company* for the *Construction* of *Housing* for *Algerian Workers* (SONACOTRAL) would become a tool for supervising the FMA population[10]. Periods of indignation and calls for the demolition of the bidonvilles alternated with long periods of neglect. In reality, Nanterre's bidonvilles were maintained in part because they provided convenient housing for the cheap labour force working on prestigious Zone A construction sites; they were eradicated as and when their land was required for the redevelopment of Zone B. The gradual urbanisation of Nanterre, subdivided into three sections (B2, B3, B1), is representative of the production of the grands ensembles throughout France.

Figure 1. Bidonvilles and the planning of the B3 Zone, 16 may 1969. (source: EPAD – DEFACTO Rights Reserved)

THE CAMUS SLABS OF THE 1950S

The first generation of grand ensemble in Nanterre was a typical example of French 'heavy prefab' construction, to achieve rapid, low-cost mass construction. These housing groups were composed of slabs with five or nine floors, facing north/south and east/west.

To house those dispossessed by WWII on a national level, the state would launch several experimental building projects utilising prefabrication techniques to lower construction costs. Consequently, three housing estates were erected in Nanterre: Marcellin-Berthelot (1753 units) and des Provinces françaises (886 units, 1956-58) under the direction of Bernard Zehrfuss, Robert Camelot and Jean de Mailly; and Anatole France (799 units, 1955-60) directed by Zehrfuss[11]. These architects had been selected, in parallel, to plan La Defense and build the CNIT (1958).

Marcellin-Berthelot and des Provences françaises were part of the 4000 housing units for the Paris Region program, which promised large-scale 'heavy' prefabrication projects 'based on the Camus process'[12]. This system represented the height of French industrial concrete construction at the time, was exported across the world, and would finally become the epitome of architectural mediocrity, called 'hard French' style[13]. These grands ensembles constituted the very first urbanisation program for what would later be known as sector B2, which at the time was a wasteland of sandpits and brownfields. They had domestic modern comforts (hot water, shower, central heating, waste chutes) but were not accessible by public transport and had no amenities. (Fig. 2)

Today these three developments, landlocked by highways and train tracks, are used primarily for social housing (85%): des Provinces françaises houses the most underprivileged, while Anatole France is home to an ever-changing roster of Defence Ministry employees.

The creation of Zones for Priority Urbanisation (ZUP, 1958) led to massive suburban urbanisation and promised urban renewal, including eradication of the bidonvilles. Yet the war in Algeria had precipitated the emigration of entire families, and combined with the arrival of hundreds of thousands of repatriates from Algeria in 1962, the housing crisis was really not resolved despite a quantitative jump in construction. Priority was given to solvent French citizens and repatriates from Algeria, while segregated temporary accommodation and council estates (HLM) with lower standards, as the Social Relocation Programs (PSR)[14], were designed to accommodate other 'particular' categories of the population.

THE ZUP OF THE 1960S

The second generation of grands ensembles focused on the urbanisation of sector B3, and was intended to house the dispossessed from the bidonvilles and others being evacuated from Zone A. The master plan, drafted by André Remondet[15] for the Epad, imagined a residential area complete with public facilities and amenities (schools, sports centres, health-care, retail). The building shapes were more varied and their location evoked a 'Beaux-Arts' composition: the layout was ordered around an oval-shaped mesh of very high towers encircled by rounded paths and polygon-shaped buildings of medium height[16]. The master plan was not entirely realised, but was repeatedly modified and criticised by various divisions of the Epad for featuring 'fussy' towers that required

Figure 2. The tabula rasa of the Zone B1 and the Camus slabs of the Zone B2, June 1972. (source: EPAD – DEFACTO Rights Reserved)

simplification to remain within budgetary constraints; "Be realistic, let us build the HLM even if we must settle for rather ordinary plastic", was the order of the decision-makers[17].

The master plan for this second generation of grands ensembles had two parts:

The Chemin de l'Ile, whose construction was overseen by Nanterre's district HLM Office. Its purpose was to house tenants displaced by the La Defense building site (roughly 900 units), and was composed of the André-Doucet estate (276 units, 1962-67, architects Amédée and Jean Darras and Yves Redon, OMHLM); the Exprodef 3 building (105 units intended for the dispossessed from La Defense, architects Remondet and André Malizard) ; and the towers in the Zilina estate (676 units, 1970-71, OMHLM); and the Acacias, to be built by SONACOTRA. This housing project was linked to the bidonville eradication scheme and included cités de transit, or transitory camps (roughly 1300 units), tower blocks intended for families (808 HLM units and 280 PSR units, 1971-75, Logirep (subsidiary of SONACOTRA), architects Remondet, Dan Giuresco, Amédée and Jean Darras, and Redon), and two dormitories for single immigrant workers (512 beds in 1969, 512 beds in 1070, Edouard Menkès).

Once built, the Acacias project promised the eradication of the bidonvilles and would pave the way for the urbanisation of Zone B3, including a cultural centre and various public facilities[18]. For the sake of an ideal 'blend' of tenants, it was agreed that the total number of families displaced from the bidonvilles to be offered housing was not supposed to exceed 15%, which meant that all other housing exchanges would have to be overseen. For example, out of the 101 units in the first Acacias tower, 51 units were allocated to the eradication scheme. Of these, 16 (=15%) were set aside for families coming either from the bidonvilles or allocated preferentially to the most 'evolved' families from the transitory camps, while 35 were attributed to French families through exchanges with other current social housing programs[19]. Raymond *Barbet, the mayor* of Nanterre (from 1935 to 1973), was generally the last to hear about eradication provisions – especially in relation to the increasing number of transitory camps being built in his municipality – and bemoaned planners' lack of respect for the agreement as much for the order the bidonvilles were evacuated as for the very fact of the relocation to Nanterre itself[20].

CONSTRUCTED SEGREGATION

The bidonville population was relocated in one of three ways: to dormitories for single workers; via transitory camps considered a provisional step for the so-called 'abnormal' or insufficiently 'developed', and to lower-standard HLMs, a literal promotion in social status.

A 1949 survey on defective habitats, coordinated by architect and town-planner Robert Auzelle for the Ministry of Reconstruction and Urbanisation, included a grid to evaluate families' social standing to determine whether they were eligible for permanent housing or would need preliminary re-education[21]. Transitory camps (cites de transit) emerged as a socio-educational platform for populations judged by the authorities as insufficiently 'developed'[22], unlike the 'emergency camps' (cités d'urgence) created

after demands made in 1954 by the Abbé Pierre for the 'poorly-housed'. Five were constructed in Nanterre between 1960 and 1963: Marguerites, 206 units, 1960; Grands Prés, 101 units, 1960; Pâquerettes, 30 units, 1962; Doucet, 90 units, 1962; and Les Groues, 70 units, 1963.

The pilot project les Canibouts (1963-65) was constructed by SONACOTRAL subsidiary LOGIREP on a section of the Paquerettes bidonville that lay outside the Epad perimeter in Petit-Nanterre. This complex (691 units, designed by Marcel Roux) was intended to provide inhabitants of the bidonvilles with public facilities and living spaces replete with modern comforts in the heart of a grand ensemble. Les Canibouts, would eventually represent a first attempt at a quota system, housing ironically not the bidonville inhabitants but the repatriated French citizens (who had priority to social housing due to the urgency of their circumstances), together with only 15% Algerians, whether single workers or families selected from the transitory camps[23]. Using the 'blending' argument, and spurred by fears of ghettoisation, the portion of housing allocated to Algerians was officially limited, heralding the notion of a 'threshold of tolerance', an expression that became official after its inclusion in the 1964 Debré law to eradicate the bidonvilles.

The records of the Epad and its exchanges with the Prefecture do not hide the commonly held opinion that a significant number of large families would always remain insufficiently evolved and could never be rehoused in HLMs or even in PSRs, and would remain in the transitory camps indefinitely[24]. Thus, in 1971 the first generation of transitory camps – prefab or mobile homes or easily disassembled units – would be succeeded by permanent structures, like the Gutemberg (200 units) and the Pont de Bezons (106 units), similar to HLMs but of lower standards. In the absence of any permanent solution, they serve to house the population forced to evacuate the bidonvilles according to the development projects of the Epad[25].

THE SYMBOLIC REVALUATION OF THE BIDONVILLES

The University of Nanterre (inaugurated in 1964 on the site of a former bidonville) was the birthplace of the May 1968 peace movement that spread throughout France. Intellectuals and activists contributed to a revaluation of the bidonvilles' stigmatised locales, their inhabitants and (little-known) culture. Sociologists Monique Hervo and Marie-Ange Charras[26] studied the living conditions at La Folie, and included numerous first-hand accounts in their research. In a break with traditional perceptions of poverty, anthropologist Colette Petonnet found not fragmented individuals uprooted from their traditions but rather the primacy of interpersonal relationships, with solidarity and conviviality emerging in opposition to the established order. She redefined the concept of a bidonville as an instrument of gentle urban acculturation and decried the transitory camps as segregated and abandoned sites that marginalised the destitute[27]. As part of their architectural degree, Isabelle Harpin and Serge Santelli conducted a survey of the bidonville located on the rue des Près. The information they gathered, from the scale of the urban fabric to a detailed mapping of the internal organisation in each housing unit, would serve as the foundation for a relocation project. They found that the bidonville employed a form of vernacular architecture to express a way of life in opposition to the administrative rationale behind transitory camps.

In this climate of politicisation and activism, a turning point arrived in 1970 when the Vivien law associated bidonville eradication (considered an immigrant housing problem until that moment) with the elimination of unsanitary living conditions. Prime Minister Jacques Chaban-Delmas (1969-72) began championing general policies against inequality that resonated more uniformly with the goals of the 'new society'. In parallel, the outcry against technocratic urbanisation, and specifically against the grands ensembles, forced the government and many architects to formulate new responses. Comprehensive Development Areas (ZAC, 1967) succeeded the ZUP, and Guichard's circular put an end to towers and slabs in 1973.

THE 1970S: CURVES AND MEGASTRUCTURES

The creation of the new Hauts-de-Seine department, with its Prefecture in Nanterre (1968) prompted the Epad, in conjunction with the Prefect, to create an urban centre that would become the administrative and cultural hub for the whole area.

The urbanisation of zone B1, for the most part occupied by the la Folie bidonville, got under way as the new decade began. In 1971 the Epad decided to create a new a residential area around the 24-hectare André-Malraux public park. Only the south section of Remondet's original master plan was retained: the Fontenelles (754 units, 1977-81) and Champs-aux-Melles (1142 units, 1970-72) housing estates. The new master-plan drawn by Claude Schmidlin under the direction of Jean Miller, the new director fo the Epad (1969-77) was composed of two distinct groups of units circling the park. Five terraced mega structures with pyramid-like silhouettes designed by Jacques Kalisz[28], each with direct access to the park, were placed to the north (MH1-MH7, 2500 units, 1974-7); while in the southeast, 18 towers of various heights by Emile Aillaud, featuring undulating facades and colours by Fabio Rieti, formed the Pablo-Picasso complex (1607 units, 1974-8), managed by three separate HLM organizations (municipality, region, department).

With his significantly more plastic approach, Aillaud[29] broke with 'chemin de grue' planning, thereby attempting to renew the tower block concept, while Kalisz's brutalism replaced isolated and monolithic architectural objects with prolific, multifaceted structures. Using the principles of combinatorial architecture, Kalisz had already built the Nanterre School of Architecture (1972) in the neighbourhood of the André-Malraux Park[30].

Both Aillaud's 'cloud-towers'[31] and Kalisz's 'organic urban units' offered a variety of dwelling plans that went beyond the standardisation and homogeneity characterising the slabs and towers of the previous generation. Their designs sought to explore alternatives to postwar productivist approach, to redefine the urban landscape, and to reimagine the groundscape of common areas. For example, consider the parking areas designed for the various housing estates. In the first generation, parking spaces were dumped in between tower blocks, practically as an afterthought; in the second generation, they line the perimeter of a grassy open area; while in the third generation, the sophisticated 'Snake' element planted a garden on top of a massive undulated semi-underground parking lot.

Today, three of Kalisz's mega structures (Central Park, Vallona and Liberté) include high-end private units available for rent or purchase, while heavily subsidised social housing predominates in the other two (MH4 and MH7) as well as in the entire Pablo-Picasso complex. The social evolution of this department can be directly correlated to the way social housing has been allocated[32]. Today, all the grands ensembles erected in Zone B - the first one called now 'cités de l'Université (B2), Les Canibouts in Petit-Nanterre, Chemin-de-l'Ile and Acacias (B3) and the Parc sud area (B1) – are classified as 'Sensitive Urban Zones' (ZUS) housing 45% of Nanterre's total population (39,806 inhabitants spread across four ZUS covering 215 hectares, or 18% of total surface area)[33].

FROM ONE STIGMATIZED HABITAT TO ANOTHER

The policies enacted to eradicate the bidonvilles formalised a split between housing for French workers and housing for immigrants, the latter kept at arm's length from the HLMs that represented the top of the public housing ladder. In the context of high demand, priority for social housing was given to solvent French households and to registered voters from the municipalities concerned. The prevailing logic at the time often consisted in housing the disadvantaged in municipalities that were politically opposed to the departmental office and the sitting government. At the end of the 1960s, these (communist) municipalities, including Nanterre, denounced the inequalities between districts and clamoured for a more equitable distribution of immigrant families throughout the territory[34].

The transitory camps continued as the principal destination for displaced families. They became places of insalubrity and exclusion. In 1983, the transitory camp Gutenberg was demolished. It had been proudly inaugurated in June of 1971 by Prime Minister Chaban-Delmas, Housing Secretary Robert-André Vivien and Nanterre's mayor Raymond Barbet in the company of a flock of children whom Chaban described as 'children of happiness, whereas before they were children of squalor'. As soon as the neighbourhoods begin to decline, the discrimination that had long kept Algerian immigrants out of the HLMs suddenly compels them to regroup there[35]. The objective of achieving immigrant integration via access to modern housing, in conjunction with the intention to spread them evenly throughout the territory, had certainly failed[36].The terms cité de transit and grands ensembles successively replaced bidonville in socio-political nomenclature, perpetuating immigrant housing stigmatisation and, ultimately, adopting the very posture they had criticised them for: trying to wipe the slate clean.

Endnotes

1. The *La Defense* development scheme stipulated the demolition of 9540 homes: 5760 homes in zone A and 3780 in zone B including 3300 in Nanterre, see *Chantier de France* 36 (Nov-Dec 1970), 1084.

2. The term first appeared in the architectural vocabulary in 1935 in Marcel Rotival, "Les grands ensembles*", L'Architecture d'aujourd'hui* 6 (June 1935), 57. For a more complete definition see *Frédéric Dufaux and Annie Fourcaut* (eds.), *Le Monde des grands ensembles* (Paris: Créaphis, 2004), 45-6.

3. The 2012 campaign posters for the *Front National* featuring the slogans 'Choose Your France' by 'Youth with Marine [Le Pen]' take advantage of the 'spatialisation' of this social issue. About the urban policy of '*quartiers sensibles*', see Sylvie Tissot, *L'Etat et les quartiers. Genèse d'une catégorie de l'action publique* (Seuil: Paris, 2007).

4. About the change of the status and the identification of the Algerians see, Françoise de Barros, "Des Français Musulmans d'Algérie aux immigrés. L'importation des classifications coloniales dans les politiques du logement en France", *ARSS*, 2004, n°159, pp. 26-45

5. Jacques Barou, "*La mémoire des bidonvilles*", in Jean-Claude Béhar, *La Défense : l'avant-garde en miroirs* (Paris: Autrement, 1992), 45-4.

6. Raffaele Cattedra, "Bidonville", in Christian Topalov (ed.), *L'aventure des mots de la ville* (Paris: Robert Laffont, 2010), 125-9.

7. Monique Hervo, *Chronique du bidonville, Nanterre en Guerre d'Algérie 1959-1962* (Paris: Seuil, 2001).

8. Abdelmalek Sayad. *Un Nanterre algérien, terre de bidonvilles*, (Paris: Autrement, 1995), 20-40.

9. Heavier duties were performed by a newly created special police force called the 'Z Brigade' a.k.a. the 'demolition men', while the Technical Assistance

Section (SAT) took the census.

10. About Sonacotra see, Marc Bernardot, *Loger les immigrés. La Sonacotra 1956-2006*, (Paris : Editions du Croquant, 2008)

11. Bernard Zehrfuss (1911-1996), Robert Camelot (1903-1992) and Jean de Mailly (1911-1975) were all graduates of the *Ecole des Beaux-arts*; Zehrfuss and De Mailly were winners of the *Grand Prix de Rome*. Zehrfuss, linked to the CIAM since before world war two, also built the UNESCO Palace in Paris (1952) with Breuer and Nervi.

12. Jean-Claude Croizé, "A time when France chose to use prefabricated panel construction systems. The '4000 logements de la région parisienne' programme 1952-1958" (paper presented at the Second International Congress on Construction History, Cambridge UK, march 29-april 2, 2006), http://www.croizejc.com/Prefabrication.pdf.

Camille Bonnome, Louis Leonard, "L'industrialisation du bâtiment", in *Encyclopédie pratique de la construction et du bâtiment*, (Paris: Aristide Quillet, 1959),1401-4.

Jean Barets, "La préfabrication lourde", *Annales de l'ITBTP* 96, (Dec. 1955), 1287-1318 and in *Techniques et Architecture* 5, (Nov. 1957), 82-8.

13. Bruno Vayssière. *Reconstruction Déconstruction. Le hard french ou l'architecture française des Trente Glorieuses,* (Paris: Picard, 1988).

14. The *Programmes sociaux de relogement*, created in 1961, institutionalized the construction (financing) of transitory camps.

15. André Remonet (1908-1998) was Prix de Rome in 1936 and succeeded Auguste Perret as head of an atelier at the Ecole des Beaux-Arts.

16. "Zone B. Secteur III", *Techniques et Architecture* 1, (Feb. 1968),122-4.

17. Note written by Cumence, Head of the Land-Use department, to the Director of the Epad dated 28 July 1966 (Epad archives).

18. Letter from the Director of the EPAD to the Prefect of the Hauts-de Seine district concerning the urgency of issuing building permits, 14 February 1967 (Epad archives).

19. "Résorption des bidonvilles de Nanterre, organisation des opérations d'échange", Letter from the Director of the EPAD to the Hauts-de Seine district Prefect dated 2 June 1969 (EPAD archives) about the exchanges. The list of the 16 families that were to be relocated was established by the Chief of the Service of Liaison and Promotion for Migrants Officer Roberrini, Paris Prefect's Office, (Epad Archives).

20. *Bidonville* eradication agreement between the Epad and the Hauts-de Seine district Prefecture, 25 April 1968. Municipal Council meeting minutes dated April 17 1970 *"Résorption des bidonvilles"*.

21. Robert Auzelle, *Recherche d'une méthode d'enquête sur l'habitat défectueux*, (Paris: Vincent Fréal, 1949).

22. See Jean-Paul Tricart, "Genèse d'un dispositif d'assistance: les cités de transit", *Revue française de sociologie* 18 (1977), 601-24 and Muriel Cohen and Cédric David, "Les cités de transit : le traitement urbain de la pauvreté à l'heure de la décolonisation", *Métropolitiques* (29 février 2012), http://www.metropolitiques.eu/Les-cites-de-transit-le-traitement.html.

23. See Amelia Lyons, "Des bidonvilles aux HLM : Le logement des familles algériennes en France avant l'indépendance de l'Algérie", *Hommes et Migrations*, 1264 (November-December 2006), 47-48.

24. Epad, Land-Use Department Legal section note entitled "Résorption des bidonvilles de Nanterre, Organisation d'échanges avec les logements construits par Logirep aux Acacias", 27 Feb. 1970.

25. Zone B1 construction demanded a more rapid demolition of the *bidonvilles, in 1971,* than had been originally foreseen, in 1974/1975, necessitating the creation of the Gutemberg and the Pont de Bezons *cités de transit* at the 'discretion' of Mayor Barbet. Meeting held 21 Sept. 1970 in the offices of Minister Vivien about the subject of eradicating Nanterre's *bidonvilles* and a 5-year occupation agreement of Gutenberg *cite de transit* (from 1/1/1971 to 1/1/1976) between the Epad and the Family Transit Centre (CETRAFA).

26. See Hervo Monique Charras Marie-Ange, *Bidonvilles, l'enlisement*, (Paris: Maspéro, 1971).

27. Claude Petonnet*, Ces gens-là* (Paris: Maspéro, 1968) and *On est tous dans le brouillard. Ethnologie des banlieues* (Paris: Galilée, 1985).

28. Jacques Kalisz (1926-2002) studied at the Ecole des Beaux-Arts (atelier of Remondet) and then worked, in close collaboration with Jean Perrottet, at Atelier d'Urbanisme et d'architecture (AUA). He was the only communist architect to be selected by the Epad, ostensibly with the support of Max Querrien (director of architecture in the Ministry of Cultural Affairs). Jacques Kalisz, «Apprivoiser la démesure», *Techniques et architecture*, 307, (janvier 1976), 37-42.

29. Emile Aillaud (1902-1988) realizes from the 1960s several council estates claiming "a poetic way of living" in opposition to the principles of the Charter of Athens. Emile Aillaud, "Désordre apparent, ordre caché", *Techniques et architecture*, 307, (janvier 1976), 76-85.

30. Built using industrial metal construction set in an orthogonal frame arranged at 45 degrees. Abandoned since 2004, the building is currently under threat of demolition.

31. The 'cloud towers' of the *Pablo-Picasso* complex would be listed '*Twentieth Century Heritage*' in 2008.

32. Marco Oberti, "L'analyse localisée de la ségrégation urbaine. Ville, quartiers et cités dans une commune de la banlieue parisienne", *Sociétés contemporaines* 22-3 (1995), 127-43.

33. CCL 2008. *Conférence communale du logement, Charte des attributions*, Nanterre Town Hall, Oct. 2009.

34. Anne Steiner, "Figures de l'immigré à Nanterre: d'un habitat stigmatisé à l'autre", in Anne Gotman (ed.), *Villes et Hospitalité: les Municipalités et leurs "étrangers"* (Paris: Maison des sciences de l'homme, 2004), 331-54.

35. Olivier Masclet, « Du bastion au ghetto. Le communisme municipal en butte à l'immigration », *ARSS*, n° 159, 10-25.

36. Marie-Claude *Blanc-Chaléard, Des Bidonvilles à la ville, Migrants des trente glorieuses et résorptions en région parisienne* (HDR diss., Paris 1, 2008) 73-124, 276-98.

Shaping a Middle Class Life: Architecture, Domestic Space and Building Programmes since the Birth of Consumer Society

SESSION CHAIRS:

Filippo De Pieri (Politecnico di Torino, Italy)

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Since the 1930s, the middle class has played a central role in the expansion of mass consumption in most advanced societies. The increased access to consumer goods has affected many aspects of life and, as Pierre Bourdieu famously argued in *Distinction*, strategies of consumption have influenced the way social statuses are perceived, communicated and transmitted. These phenomena have also made an impact on how space and built form are considered and used.

Architecture can be viewed as a salient component of this process of social transformation, one based on the recognition, on the part of specific social groups, of the symbolic values assigned to material consumption. With its capacity to define the symbolic barriers that separate social classes, architecture has contributed to the shaping of many contemporary societal hierarchies: targeted by designers, contractors, real estate investors as well as by public policies, the middle class has built part of its cultural identity on precise models of life and aesthetic preferences.

This session intends to investigate how architecture, by proposing ways of living and lifestyles that came to be considered characteristically bourgeois, has contributed to a process of middle class self-identification. Papers are invited to examine the architectural models that, since the 1930s, were developed and advanced in an effort to address and shape the residential needs of the middle class. Among the questions the session wants to address are: how did designers, developers or real estate operators imagine the middle class and its internal articulation? Did specific buildings serve as reference points for the diffusion of peculiar solutions, related for example to spatial organization, technological equipment or use of materials? Did specific middle class groups develop forms of social identification with elements or practices related to architecture? And how were residential spaces transformed by the people who inhabited them?

The session's goal is to promote a debate on methodology applied to the architectural history of everyday life. We especially encourage the presentation of "stories of houses" -- namely, historical analyses that concentrate on selected buildings, images of "modern life" and the experiences of those involved in the creation of a middle class model of life.

MIDDLE CLASS EMERGING FROM THE MARGINS OF SOCIETY

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In 1895, in Lynchburg, Virginia, Amaza Meredith was born the youngest of four children, to Emma P. Kenney a woman of African American descent, and Samuel P. Meredith a white man. Her birth certificate, identifies her simply as a daughter born to a black woman, Emma P. Kenney resident of Lynchburg Virginia, the father's name remains blank. Nevertheless, despite legal restrictions against interracial marriage in Virginia, it appears that Samuel Meredith married the mother of his four children, and built them all a large wood frame Victorian home with a decoratively appointed wrap-around porch. Marriage, and a solid, comfortable home, would have given Emma and her children the appearance of respectability, and adherence to conventional norms of propriety. The home, and the patriarchal family were markers by which late nineteenth-century society measured status and class participation. For African Americans particularly, marriage promised security, and the domestic realm represented an area over which reform-minded progressive individuals had control because it operated within the private sphere.[1] The establishment of such conditions symbolized a strategy employed by educated African Americans attempting to counteract their derogative stereotypes disseminated in the popular pres and lodged in the American imagination. As sociologist E. Franklin Frazer argued in his essay "The Present Status of the Negro Family in the United States" published in 1939:

> "In the competitive life of America, the success of the Negro in achieving a new and more intelligent adaptation to American civilization will depend upon his incorporation into the economic organization at large, upon his own cultural resources, and finally upon the extent to which he is able to incorporate in his own family traditions and heritage the patterns of behavior requisite for survival."[2]

However, if a stable home and a comfortably situated, respectable family, in theory, provided a panacea to racial discrimination, it was nevertheless a dangerous method to employ in creating an appearance of normalcy and respectability by a couple in a mixed race relationship, which was, after all, against the law.

According to records Amaza's father, Samuel Meredith, was a master craftsman, a carpenter whose family had lived by the trade for generations. Meredith taught his daughter how to draw blueprints and turn a perfectly curved stair newel. Amaza's mother, Emma Kenney, was an educated, self-employed, head of household, who had purchased land alongside plots owned by her future husband, which the two eventually combined in order to construct a home. By all appearances, despite the Jim Crow laws, which prescribed a separate life for blacks and whites, and in certain states, prohibited by law interracial marriage, Amaza Meredith's parents had worked out a system within which to provide higher education to their offspring, to carve out a life together, and to establish a standard of living that suggested the achievement of a certain social position and the security that came with it. Photos of Amaza and her father taken separately at a local studio reinforce the desire to present a certain semblance of propriety and an interest in cementing a middle-class appearance even though society attempted to deny the family the possibility of living as a traditional conjugal unit. When Amaza expressed to her father a desire to become an architect however, Samuel Meredith could only discourage his daughter, knowing full well the discrimination and hardship she would suffer, attempting to negotiate the profession as a woman and an African American. So, instead, Amaza embarked on a career like many other young women of her status and studied to become a teacher. But even following this profession Amaza's journey was not without sacrifice. In order to receive the education necessary to teach at the college level she would have to join the large numbers of African Americans leaving their homes to seek opportunity in the industrialized urban North. Unlike many who migrated north to find economic opportunity, escape oppression and the violence of racism, never to return home, Amaza had a different goal in mind, to gain the qualifications needed to teach in the black institutions of higher education in the South which were eager to keep abreast of the most recent pedagogical trends.

Amaza arrived in New York just two years after Howard University philosophy professor and cultural critic Alain Locke published his anthology of essays called *The New Negro,* in which he heralded the arrival of a 'new era,' and an African American cultural blossoming, that became known as the Harlem Renaissance. Within the broad context of social, psychological and cultural change transforming the city of New York, Locke painted a picture of Harlem as a "race capital" within which a diverse population of African Americans was coalescing to determine a new sense of themselves, dispel old mythological yet emphatically derogative stereotypes, and simultaneously reinforce their centrality to American democratic life. Disillusioned with the lack of political progress and civil rights owed African Americans, Locke urged intellectuals and artists to force a "reevaluation of the Negro in

terms of his /(or her) artistic endowments and cultural contributions, both past and present." It was through the arts he declared, that African Americans could secure this re-evaluation and find entry into 'mainstream society,' a euphemism for equal rights and assimilation.[3]

Enrolling at Columbia University Teacher's College, Amaza specialized in Fine Art and Art Appreciation, fields, which would qualify her as a member of what leading black intellectual W.E.B. Dubois had defined as the Talented Tenth. The Talented Tenth were to be an elite group of individuals distinguishable from the black masses by their high level of education, moral authority, and cultural knowledge.[4] This group would lead the black community, acting as a buffer between the black underclass and white society, and, in affirming their class distinction, would overcome the relentless racism inflicted upon them. Although Dubois predominantly had men in mind when he argued for the development of a Talented Tenth, women, desperate to move beyond the limits of domestic service, trained in large numbers to be teachers. The schooling process they underwent, far exceeded the pursuit of academic courses, focusing on the reinforcement of good manners, high moral standards, a 'cultured' appearance and Christian character. Through such training, women were able to develop as individuals who also created an example and forged a way for others to follow.[5] Nevertheless, as historian Kevin Gaines has noted, this 'racial uplift' ideology was problematic. While it no doubt involved, "intensive soul-searching, ambivalence, and dissension on the objectives of black leadership and on the meaning of black progress," as black leaders deemed the promotion of bourgeois morality, patriarchal authority and a culture of self-improvement essential to enfranchisement and survival as a class, there were those who did not agree with patriarchal authority and had their own ideas about progress.[6] Amaza's mother can be seen as conforming to traditional ideals of racial uplift, and even though Amaza complied with certain aspects of the Talented Tenth ideology, she nevertheless saw alternative possibilities for progress through the example of independent, self-sufficient women. In obtaining an education from a Northern white college she not only gained the level of qualification necessary to teach at the college level but was exposed to the advanced cultural stimuli of the metropolitan milieu. As a student of art appreciation, Amaza gained the knowledge, which she would later impart to a future generation of individuals who in turn would contribute to the middle-class. Conforming to New Negro ideation, Amaza furthermore presented a vision of womanhood, which strongly denied the persistence of black female stereotypes lingering in the American imagination.

On arriving in New York, she was already the product of a generation of black women who had laid the foundation for future potential assimilation and for women to express themselves freely, act independently, and seek fulfillment outside the constraints of a patriarchal society. She presented a figure "mediated and mediatized by emerging industries, pulp fiction, advertising, and cinema," the modern woman who was "pictured as 'going places…'" at the wheel of an automobile, at the helm of a speedboat, in the cockpit of an airplane." Amaza expressed herself in the sartorial and behavioral habits of an independent woman who "wore pants, cropped her hair, smoked in public..." and was unafraid to experience the adventure of outdoor leisure pursuits, the spectacle of social engagement and political activism, and the passion of sexual attraction and desire.[7]

After completing a teaching diploma, Amaza had continued her education through summer sessions at Virginia State College, and had fallen passionately in love with her session leader, a woman, Edna Colson, only slightly older than herself. Edna's maternal grandmother had been enslaved, but her maternal grandfather Jack McCray or McCrae, was a well-respected free black merchant in Petersburg, Virginia, who was well connected to other similarly free black merchants and artisans and able, during the 1850s, to travel freely between the North and South. Such an element of freedom had enabled them to function unsuspected as conduits of information, one aspect of which was to facilitate the successful transportation of runaway slaves via the Underground Railway system, to freedom in the North and Canada. These freed families formed the foundation of the future middle class and became leaders of their communities. Edna's family was deeply invested in the first African American colleges; her father was a principle teacher during the first year of Virginia State College. Edna too, was invested in the possibilities of higher education, a political activist and teacher actively engaged in improving educational opportunities for other African Americans. She was enrolled in a PhD program in the 1930s at Columbia University.

Amaza and Edna developed a bond that was based on empathy, friendship and passion. As each spent long periods pursuing their education in the North, their relationship developed through a plethora of correspondence, which extended from 1917 until Amaza's death in 1984. The correspondence provides a pathway to understanding female same-sex relationships, which seemed to abound during the period between the wars, but also to the possibilities made available by industrialization, the increased accessibility to new products displayed in department stores, and exposure to key iconographies of consumer culture. In the 1920's and 30's architectural and aesthetic innovation exploded on the streets of New York as a building boom in which traditionalism visibly gave way to Modernism transformed the streets into a gallery of new architectural style. The promotion of this new style received careful and prominent documentation in symposia and exhibitions where the latest in foreign and national thought was displayed for both professional and popular consumption.

In 1926, the Metropolitan Museum of Art displayed furniture by Jacques-Emile Ruhlman, purchased at the *Paris Exposition des Arts Decoratifs et Industriels Modernes*, exposing to the American public for the first time the significance of the new Modernist mode in home furnishings. The Architectural League held an exhibition organized by Raymond Hood, which for the first time showed the work of architects and interior designers side by side. Gradually the exhibition scene began to shift to the more commercial site of Department stores and if the department store building signaled the growth in economy, its contents offered the possibility of distinctly coded possessions and styles. As members of an aspiring new mobile class, women, such as Amaza both produced and were produced by the experience of shopping. Clothing fashions but also home furnishings provided visible indicators of social rank as well as choices in individual identity, and new design came to symbolize efficient modern living packaged for mass consumption. The smooth, shiny, easy to clean surfaces were both innovative and exciting and thought to appeal to those who aspired to distinguish themselves as progressive, as well as interested in keeping an efficiently run home.

In June 1927 the department store Macy's was praised in the trade press for presenting Modernism to the general public: "Macy's has finally commercialized this modern art, but based upon the soundest of foundations: the demand of the consumer."[8] Later in 1927 the department store, Wannamaker's also established a permanent department devoted to Modernist furniture and decorative objects. In 1928, Lord & Taylor's followed suit at the same time that Abraham & Strauss hired Paul T. Frankl to transform its "livable house," an area dedicated to furnishings, from an American colonial cottage into a sophisticated Modernist villa. Other important exhibitions included the American Union of Decorative Artists and Craftsmen (AUDAC) held at the Brooklyn Museum in 1931. In 1932 the Museum of Modern Art held its seminal exhibition of International Architecture. A show, which highlighted European architectural experiments in modern housing, together with a small selection of American designs to the public's attention, and suggested a new internationalism in architectural style had begun to spread throughout the western world. Following this show, the Metropolitan Museum staged its second Exhibition of Contemporary American Industrial Art in 1934. While the Metropolitan's 1929 exhibition was noted for its lavishness, the later show purported to provide "affordable luxury." This focus on bringing good design to the general populous was a theme that ran through the architectural exhibitions as well as those of interior design. One highly progressive exhibit held at Park Avenue and 29th Street in an all-steel modern house designed by William van Allen and built for the purpose by the 'Modernage Company,' the "House of the Modern Age" staged imaginary rooms arranged with modern furniture and decorative items produced for display. Amaza attended this exhibit, keeping the ticket in a collection of ephemera of her personal possessions, now in the Virginia State archives. Amaza also kept a ticket providing her long-term access to the Metropolitan Museum's exhibits and correspondence reveals that both Amaza and Edna were interested in modern art and the new modern style furniture.

As a student of Fine Art and Art Appreciation Amaza took courses established in a foundation curriculum designed by proto-modernist Arthur Wesley Dow. This curriculum actively encouraged students to stroll the streets of the city, observing and absorbing to enhance their art appreciation and aesthetic judgment. Dow's curriculum was unique in its attempt to teach students the value of art through applying a formula based on structural form. A method that universalized artistic expression across national, racial and ethnic boundaries, focusing on exemplary works composed through the harmonic combination of line, tone, and color and thus eliminating stylistic hierarchies that have otherwise persisted in framing the Western art historical canon. Such a dismissal of stylistic hierarchies allowed works of the African tradition, for example, to be valued alongside those of Ancient Greece and Rome. This more democratic approach to aesthetics also provided the potential to appreciate value in expressions of popular culture.

Around 1936 it is clear from correspondence that Amaza and Edna had begun to discuss the possibility of moving on from the college dormitories they had come to depend on, and create a home they could share. They began to collect images of modern furnishings. Edna described in one letter a sofa in a modern modular style that had caught her eye in a department store. Amaza wrote to her friend Anne Spencer who was a known subscriber to magazines, to send her a copy of *American Home Magazine* in which she had seen a streamline moderne fireplace that she liked. Finally when Edna had completed all the requirements for her PhD she wrote to Amaza that now they could finally begin to seriously think about building a home.

A scrapbook kept by Amaza provides a reified glimpse into the two women's private existence, allowing us, the onlooker to gaze at its secret intricacies and practices. Photographs show the building under construction, and then inhabited, with interior features staged in a way that suggest a mode of living; a couple of armchairs nestled before a streamlined, art moderne fireplace, a large radio, framed photos, a small African statue and objects d'art on the mantle, newspapers piled on a side table. Such everyday objects provide clues to the resident's identity. It's a modest structure, which emphasizes the horizontal in a cube-like form built of concrete blocks and coated with white stucco. A flat roof terrace with curved metal coping is accessed by means of a steel ship's ladder and landscape elements including poured concrete stoops connect to a flagstone path around the building's perimeter, anchoring it to the site. The building's façade is assymetrical, incorporating rounded sides punctuated by bands of

glass bricks, and a carport extending off a built-in garage. An abundance of windows creates a dialogic relationship between interior and exterior, allowing light and sun to enter while providing views out. In its formal elements and white stucco aesthetic the design reveals a knowledge of the most advanced art currents of the period and suggests a familiarity with the principles of the International Style. A style, which was said to espouse "a complete break with architectural tradition."

In choosing to build her home in the modern idiom, Amaza Meredith I believe, signaled to those around her, the possibility for a future liberated from history and open to new concepts of race, gender and sexuality. By documenting it in a scrapbook she preserved it along with the knowledge she had gained under Arthur Wesley Dow's curriculum at Columbia. In the words of Walter Benjamin, Amaza "gave the camera lens the task of making discoveries." Through carefully composed images of luxurious sensuality, everyday things provided the harmonizing elements of line, tone, and color and through the reflective surfaces exaggerated in the soft glow of sunlight entering carefully placed glass panes. In this scrapbook Amaza rediscovered the new modern world of middle-class cultured existence she had created for herself and her companion.

Endnotes

1. The problem of the African American family became a key aspect of the new sociological studies undertaken at the turn of the twentieth century by academics such as W.E.B. Dubois and E.Franklin Frazier as the search for conditions under which African Americans might gain the respect they deserved and be admitted into mainstream American society accelerated. See for example W.E.B. Dubois, "The Negro American Family," Atlanta, 1908 and E. Franklin Frazier, "The Changing Status of the Negro Family," *Social Forces* 9, 3 (Mar., 1931), 386-393; E. Franklin Frazier, "The Present Status of the Negro Family in the United States", *Journal of Negro Education* 8, 3 (1939).

2. Frazier, "The Present Status of the Negro Family in the United States".

3. Alain Locke, *The New Negro* (New York: Touchstone, 1997, reprinted from Albert & Charles Boni, 1925). For an interpretation of Locke's *The New Negro*, see Arnold Rampersand, "The Book that Launched the Harlem Renaissance", *The Journal of Blacks in Higher Education*, 38 (2002-2003), 87-91.

4. Henry Louis Gates Jr., and Terri Hume Oliver (eds.), *W.E.B. Dubois, The Souls of Black Folk* (New York: W.W. Norton, 1997), 39-41.

5. Stephanie Shaw, *What a Woman Ought to Be and Do* (Chicago: Chicago University Press, 1996), 90.

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"THE GARDEN AS THE BIGGEST ROOM OF THE HOME": THE SEARCH FOR A TURKISH WAY OF MODERN LIFE

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The founders of the Republic of Turkey adopted state capitalism as the new country's economic policy to achieve progress and modernization. The state embarked on a development program, acquiring full control over commerce, industry, banking and agriculture. As a result of this extensive centralized control, bureaucrats and technocrats came to form the middle class of the new Turkish society and to shape that society with a modern, westernized identity.[1] The configuration of the built environment emerged as an essential element of this identity. To own a home designed according to the latest fashion, with modern facilities and a garden, became a key middle class desire. This desire was an outcome of bureaucrats' and technocrats' close relationship with European culture and the new forms of consumption.

Housing cooperatives, financially supported by government agencies, expanded as the primary construction system in order to satisfy this desire. The Republic of Turkey adopted a corporatist ideology and cooperatives functioned as a device that ensured the interconnection between different layers of society. Many scholars have treated the system of housing cooperatives as a social housing institution, because of cooperatives' collectivist nature. I take a different stand, arguing that they should be interpreted as short-term and small-scale private investments. I suggest that the government aimed at keeping the housing sector under its control by ensuring that the need for new housing was met. And the members of the middle class had their own priorities: to own fashionable houses, appropriate for their positions, identity and taste, at below-market prices. For some of them, to become a member of one of those cooperatives was just an investment.

I substantiate my argument by analyzing Merbank Housing Cooperative in Istanbul, which was founded by the employees of the Central Bank of the Republic of Turkey on 29 June 1946. The cooperative bought 60,000 square meters of land at Zincirlikuyu - an area north of the city centre that was not yet populated - for the construction of their settlement. It then hired Zeki Sayar as the principal architect who, in turn, appointed Turgut Cansever to design the site plan. The construction of 38 houses on this site was completed in 1948.[2] (Fig. 1)

Figure 1. General view of Merbank Housing Cooperative. (source: Zeki Sayar, "Merbank Mahallesi Zincirlikuyu", *Arkitekt* 253-254 (1952), 215)

Alongside his professional activities, Zeki Sayar was the publisher of *Arkitekt*, Turkey's first architectural journal.[3] He created it in 1931 with two colleagues, Abidin Mortaş and Abdullah Ziya Kozanoğlu.[4] Until the closing of the magazine in 1980, Sayar worked at every stage of the publication process and authored head articles on subjects such as urban planning, housing, architectural education, professional and construction industry rights.[5] In his dual capacity as practitioner and publicist, Sayar occupied a unique position among the Turkish architects of the time, something that makes Merbank a special case for examining the relationships between different actors of the design process.

THE BACKGROUND

The first housing cooperative of Turkey, Bahçelievler Housing Cooperative in Ankara, was founded in 1934. The key actor in organizing this cooperative was Nusret Uzgören, a bureaucrat in the Central Bank of Turkey and a strong supporter of corporatism.[6] By the time Uzgören and his colleagues from the finance sector founded Bahçelievler, agricultural, retailers' and consumers' cooperatives were already well established in the country. The government supported such cooperatives, as a part of its corporatist ideology, with such financial institutions as the Agricultural Bank and the People's Bank.[7]

Corporatist ideology rejected both liberalism and Marxism and understood society 'as an organic whole consisting of mutually interdependent and functionally complementary parts.'[8] According to this view, individualism was disruptive to social equilibrium, and a classless society was seen as the best way to organize the social system[9]. The Republican People's Party (CHP), Turkey's only party during the period 1923-1946, declared in its 1931 program that the Turkish society was a classless, holistic system. The main principle behind this program was the division of labour between occupational groups, and the expectation that these groups were to work in harmony with each other.[10] The cooperatives were the tool to create that harmony. The Commercial Code of 1926 defined cooperatives as corporations established to satisfy the needs of occupational groups with loans and mutual support.[11] As a result of government's full control over financial agencies, cooperatives were since their foundation a form of semi-private, semi-public enterprise.

The Real Estate and Credit Bank of Turkey, founded in 1926, was responsible for the financial needs of housing cooperatives. Until 14 June 1946, when the law governing the bank was renewed, it gave loans with an interest rate of 8.5 percent.[12] The new law specifically mentioned cooperatives, providing for them a reduced interest rate of 5 percent.[13]

The idea of forming a housing cooperative was a response to the insufficient numbers of houses available in Ankara. After the city was declared capital of Turkey, its population changed dramatically with the rapid increase of the number of government buildings and officials. It was no longer a small provincial town, but rather the centre of the whole nation's attention, and housing was one of the city's most urgent needs. Even though the government had made a few attempts to build housing settlements in the new city centre, the agencies in charge failed to build a sufficient number of houses.[14] Furthermore, no private company was capable of establishing large-scale settlements in order to meet the growing need for housing[15]. This left most people with two options: to build their own home with their own resources or to live as a tenant in apartment buildings realized by wealthy investors for a profit. Housing was scarce, disorganized and expensive. Bahçelievler Housing Cooperative was founded as an alternative to these two options – a way of pooling resources to build a settlement of single-family homes.[16]

THE COOPERATIVES

Although about 70 housing cooperatives were established between 1934 and 1946 —27 in Ankara, 15 in Istanbul and the rest in other cities— only 10 percent of them completed construction during this time period. These settlements, all in Ankara, varied in size. While the biggest one, Küçükevler Housing Cooperative, had 216 homes, the smallest one, Karınca Housing Cooperative, had 34 homes. The settlements consisted of single homes, each with its own garden, with an average floor area of approximately 150 square meters: due to the high land values in the centre, they were all realized in the city outskirts. In spite of the land value advantage, municipal services did not extend to these areas, so cooperatives were responsible for providing them.[17] Almost 80 percent of the cooperative members were bureaucrats and army officers.[18] Uzgören was convinced that these settlements with their cheap and healthy homes would improve the well-being, the moral character and the work performance of the officials and their families.[19] Despite the fact that the bureaucrats were presenting these cooperatives as cheap solutions for homeownership, houses were expensive and luxurious and the settlements were disconnected from the city centre.[20]

In establishing housing cooperatives, policy makers responded to a problem of housing shortage. For example, records of parliamentary debates show that members of parliament discussed the issue of housing shortage at length while debating the laws concerning housing cooperatives.[21] Nevertheless, Zeki Sayar wrote in 1941 that the overall legal and organizational framework was not well suited for such a task.[22] He indicated that there was a lack of scientific research; laws, building codes and regulations were poorly developed; the organizational system of the government agencies was fragmented; and professional associations were unable to join the decision-making processes. In the same article, Sayar calls the different actors within the field of architecture to work together for a better legal and organizational system for the construction industry.[23]

The officials of the Central Bank of Turkey founded Merbank two weeks after the Parliament accepted the new governing law of the Real Estate and Credit Bank, in 1946. Even though they were able to get loans at the newly reduced 5 percent interest rate, their estate was far from the city centre and from municipal services, just as those of previous cooperatives were. As a result, the cooperative spent 63 percent of its land value to construct the sewage, clean water and electric systems and to build the roads and the pedestrian walkways.[24]

SINGLE FAMILY HOMES WITH GARDENS

The administrative structure of the cooperatives was established by legally binding contracts. The founders of Bahçelievler underwrote the first of these contracts. Later cooperatives adapted it according to their needs, but the overall tone and the major decisions of this contract remained the same. The contract defined the cooperative as a corporation with a limited life span and the aim to provide homeownership to its members. All other housing cooperatives also defined themselves as corporations. According to its contract, Bahçelievler's duration was 20 years. Other cooperatives' duration periods varied according to the terms of their construction loans.

To become a cooperative member, one important requirement was to buy a certain amount of shares. The Administrative Council -- composed by members elected by other members -- was responsible for accepting new associates, buying the estates, deliberating on the design, bidding for the construction contract, and making choices about communal areas such as playgrounds, social clubs or sport centres.[25]

This wide range of responsibilities gave members of administrative councils an opportunity to get involved in the design process. They were able to change the site plans, the types of the homes, or the number of the rooms. This gave them a chance to realize their vision of an appropriate home for their social status.[26] Zeki Sayar indicates that, in spite of his inclination to design the Merbank settlement with row houses to reduce the costs, members insisted on single-family residences. For them, even duplex dwellings were out of question.[27] (Fig. 2)

For many Turkish middle class individuals, single-family homes with gardens were the most appropriate representation of national identity. For Merbank's members, in fact, the insistence on single-family homes was a natural position to take. Newspapers and magazines frequently published articles on the supposed virtues of this type of residential aggregation: in one of them, published in 1935 by

Figure 2. A street view from Merbank Housing Cooperative. (source: Zeki Sayar, "Merbank Mahallesi Zincirlikuyu", *Arkitekt* 253-254 (1952), 220)

the magazine *Hilal-i Ahmer*, N. Baydar claimed that apartment buildings took away any chance of freedom and well-being and that it was impossible for their residents to get a good rest after long hours of work in offices.[28] According to Baydar, the peaceful environment of a single-family home with its garden could cure all of these ills. In the author's opinion, this reason had led the government of the Republic of Turkey to choose '… this typology as the housing units for Ankara.'[29]

Several German academics and professionals, hired by the Turkish government or emigrated to Turkey as a result of the repressive politics of the Nazi regime, influenced significantly the governmental decision described by Baydar. For example, Hermann Jansen was hired by the government to work between 1928 and 1932 on a plan for Ankara as a garden city.

In 1934, Gerhard Kessler, who had moved to Turkey in 1933 and who taught at Istanbul University, published a book in Turkish on modern urban planning theories. In his book, Kessler stated that a person growing up as a tenant in an apartment block could never have a chance to learn what a family home is. According to Kessler, these persons could turn very easily into proletarians and their hatred of class distinctions might put the country in danger. To support his argument, Kessler pointed out that cities like Paris, Berlin, Vienna, and Saint Petersburg, with an excessive numbers of apartments, had experienced rebellions throughout their history, while cities like London, Brussels, and Amsterdam, mostly developed with single-family homes, had had more peaceful histories.[30] Turkish professionals and policy makers repeatedly cited Kessler's words in their writings on housing issues, referring to his ideas without, at times, even mentioning his name.[31]

Between 1943 and 1948, Gustav Oelsner, who had moved to Istanbul in 1939 and who worked at the Ministry of Public Works and at Istanbul Technical University, published 14 articles in *Arkitekt* on issues such as urban planning, planning policies, modern
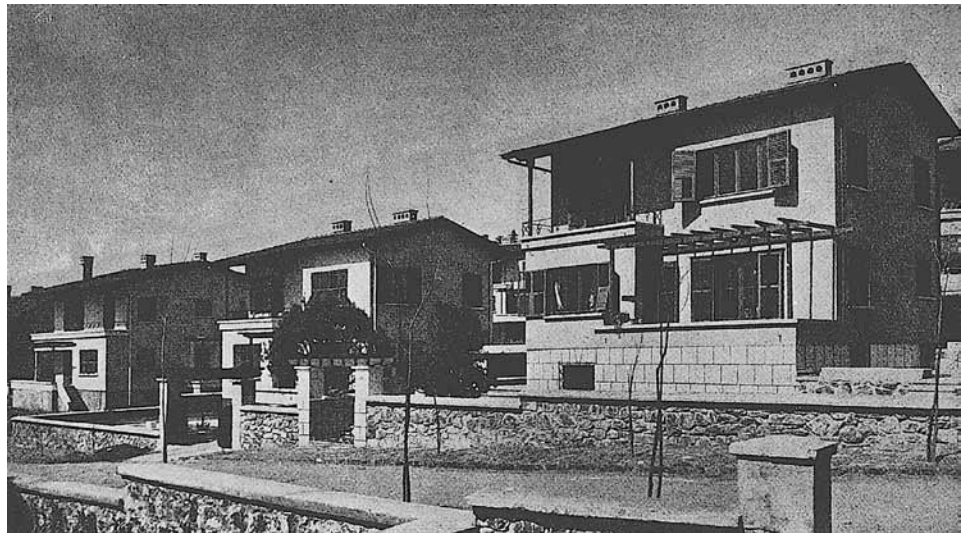
houses and housing settlements.[32] In his articles he advocated for the construction of garden cities conceived as residential areas separated from the city centres by green belts. Oelsner acknowledged that the absence of places of social gathering such as cafes, theatres and restaurants could represent a potential drawback for the model of the garden city; nevertheless, he argued in favour of the home with garden as essential to guarantee the quality of a family's daily life. According to Oelsner, families could live peacefully and freely in these settlements, children could grow up happy and untroubled, men could find tranquillity through garden work, and homes would look beautiful with the flowers from the gardens.[33] The German architect advocated for the construction of row houses in these settlements because of their affordable costs if compared to those of single houses.[34]

It is probable that this proposal had an impact on Sayar's ideas and design philosophy. Sayar expressed his dissatisfaction with the small size and densely packed nature of the lots available in Istanbul's city centre in a 1934 article. He pointed out that the only way to build family homes which were not in a row as in the city centre but standing by themselves with open facades was to buy land outside the city centre.[35] As mentioned above, row houses were his first choice in terms of typology in the design of the Merbank complex. This, perhaps, was not the only Oelsner-inspired element that Sayar implemented in his project. Compared to previous houses designed and constructed by Sayar, buildings in Merbank's settlement had smaller windows and rooms,[36] in line with Oelsner's recommendations for garden city houses.[37] According to Oelsner, adding one or two small rooms in the basement and in direct connection with the garden was necessary in order to store garden products and tools. The only house still standing in the Merbank housing neighbourhood has indeed a small room in the basement that directly connects to the garden.

Sayar designed six different house types for the settlement. The smallest type had three rooms and measured around 110 square meters. The biggest type had seven rooms, and its cost was double than that of the smallest dwelling. All types featured the same domestic organization: the primary door opened to a small entrance way that was connected to the main hall; the secondary hall connected the semi-public areas (the living and dining rooms) with the service section and the private areas (bedrooms); the service sections, finally, had a secondary entrance.[38] The domestic organization used in the Merbank houses, characterized by a gradual circulation from public areas to private ones, was a common feature of designs by Turkish architects during this period. In the professional literature from this period, there is no discussion of the question of household work and women's role in the home; instead, architects included rooms for maids in the houses they designed. The homes of Merbank had rooms next to the circulation areas that were suitable for accommodating a maid, a rather common habit for the Turkish middle class of the time. One façade of each of the Merbank houses featured a symmetrical organization that was modified by the negative and positive effects of patios and balconies. The other three façades were designed with evenly balanced windows on each side. The design of the eaves and the chimneys was reminiscent of Ottoman vernacular.[39]

CONCLUSION

The Merbank Housing Cooperative's venture ended in a way similar to other analogous endeavours of this period. When the construction loans were fully paid, after 20 years, the members dissolved the cooperative. During this period of time, starting from the mid-1950s, the type of the single-family home lost its appeal, and apartment buildings became more fashionable. In 1965, revisions to the civil code gave individuals the right to own condominiums. Gradually the members of the dissolved Merbank Housing Cooperative, holding all the rights to their homes, replaced them with four- or five-storey apartment buildings that were more profitable. Most of these apartments built during the 1960s and 1970s were then replaced in the 1990s by seven- or eight-storey buildings, mostly for commercial purposes. These days these buildings are gradually leaving their place to new structures, some of them designed by prestigious architectural firms.

During the period analyzed by this study, the government's insistence on maintaining control of the housing sector prevented the full development of private initiative. Because of the absence of private investors capable of providing suitable homes to meet middle class expectations, luxury settlements became the primary focus of government support. Low-income families were forced to find their own solutions, mostly in the form of informal settlements. After the Second World War, with the rapid spread of these settlements, policy makers began to take notice of the problem. The Turkish parliament approved new codes in 1948 and in 1953 and gave better support to cooperative initiatives with the aim to reach a wider range of potential investors and to grant access to private property to a larger number of citizens. But the approach taken by the codes remained the same; being a tenant was culturally unacceptable, and so the government continued to promote only homeownership in its housing policy. With the rise in population, the middle class continued to increase its numbers, and the vicious cycle repeated itself.

Endnotes

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12. Resmi Gazete, "Emlak ve Eytam Bankası Kanunu", 3 Haziran 1926

13. Resmi Gazete, "Türkiye Emlak Kredi Bankası Kanunu", 22 Haziran 1946

14. Gönül Tankut, *Bir Başkentin İmarı: Ankara (1929-1939)* (İstanbul: Anahtar Yayınevi, 1993); İnci Aslanoglu, *1923-1938 Erken Cumhuriyet Dönemi Mimarlığı,* (Ankara: OTDÜ Mimarlık Fakültesi Basım İşliği, 1980).

15. Eftal Şükrü Batmaz et al., *İnşaatçıların Tarihi: Türkiye'de Müteahhitlik Hizmetlerinin Gelişimi ve Türkiye Müteahhitler Birliği* (İstanbul: Tarih Vakfı Yayınları, 2006), 57.

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17. "Ankara Karınca Yapı Kooperatifi", *Belediyeler Dergisi* 26-27 (1937), 62-65; "Ankara Bahçeli Evler Yapı Kooperatifi", *Belediyeler Dergisi* 26-27 (2937), 70; "Başşehrimiz Ankara Modern Bir Mahalleye Daha Kavuşuyor: Küçük Evler Yapı Kooperatifi", *Belediyeler Dergisi* 47 (1939), 13-20.

18. Muhip Cihat Ani, "Ankara Kooperatifçilerinin Belediyeden İstekleri, Temennileri", *Karınca* 115 (1946), 16.

19. Nusret Uzgören, "Bir Rapor" in *Ankara Bahçeli Evler Yapı Kooperatifi Hakkında Derlenmiş Birkaç Yazı* (Ankara: Başvekalet Matbaası, 1935), 7.

20. In 1946, the salary of a low-rank government official was 26.70 Turkish Liras (TL); the salary of a high-rank government official was 154.66TL. In 1941 a loaf of bread was 14.50 kuruş (1TL is equal to 100 kuruş), a kg of rice 40-50 kuruş, a kg of sugar 48 kuruş, and a kg of butter 175-180 kuruş.
In Merbank, the price of the smallest house type was 15,804TL and the price of the biggest was 29,900TL. In addition, members paid a share of the cost of land, 240,000TL, and of municipal services, 151,460TL.

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23. Sayar (1941), 240.

24. Sayar (1952), 224.

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26. Akcan (2009), 162-163.

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30. Gerhard Kessler, *Büyük Şehirlerin İçtimai Çehresi ve Zamanımızda Büyük Bir Şehirden Beklenen Vazifeler* (İstanbul: Belediye Matbaası, 1934).

31. Two of these articles are: Nusret Uzgören, "Ucuz Otru Kooperatifleri ve Şehircilik", *Karınca* 163 (1950), 30; Celal Uzel, "Ucuz Halk Meskenlerinin Münferit Tip Olmasının Lüzumu", *İller ve Belediyeler* 72 (1951), 59.

32. Gustav Oelsner, "İktisadi Temel Kaideler", *Arkitekt* 141-142 (1943), 206-211; Gustav Oelsner, "Şehircilik", *Arkitekt* 159-160 (1945), 71-74; Gustav Oelsner, "Modern İskan Semti ve Şehircilik", *Arkitekt* 175-176 (1946), 168-170.

33. Oelsner (1946), 168.

34. Oelsner (1946), 169.

35. Zeki Sayar, "Doktor Rıfkı Bey Evi-Kadıköy", *Arkitekt* 63 (1934), 102.

36. Sayar (1952), 218-224.

37. Oelsner (1946), 169.

38. Sayar (1952), 218-224.

39. Sayar (1952), 218-224.

MODERATE MODERNISM FOR THE MIDDLE CLASSES
THE WEST GERMAN MODERNIST 'BUNGALOW' AND THE IDEAL OF A PROSPEROUS 'LEVELLED MIDDLE-CLASS SOCIETY' IN POSTWAR WEST GERMANY

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INTRODUCTION

In former West Germany, modernist bungalows are omnipresent as a suburban single-family home of the 1960s and 1970s. From the 1950s onwards, a great number of architect-designed bungalows – publicized equally in professional journals of architecture[1], magazines like *Die Kunst und das schöne Heim* (Art and the Beautiful Home) and coffee table books[2] – established the single-storey modern bungalow type with its distinct flat and protruding roof as the defining residential architecture in postwar West Germany. Numerous modernist bungalows in speculative developments and as part of larger housing schemes[3] rendered the simple and straightforward building type a commodity for mass consumption during the 1960s and 1970s, until in the early 1980s rising land prices made single-storey building largely unattainable and more colourful and figurative architectural developments replaced the modernist bungalow's reduced architectural language.

Hidden in remote locations and easily overlooked as designs by lesser-known architects or very early works of renowned architects, West-German bungalows have received little academic attention[4], although this suburban architectural type represents the West-German ideals of a free middle class society and modest 'Prosperity for all'[5] during the formative decades after the war and the division of Germany in an exemplary way. During the decades of *Wirtschaftswunder*, the so-called economic miracle of the 1960s, the West-German bungalow's Californian inspired architecture became the ideal light and holiday-like home for the aspiring middle class family.

> The bungalow counted as the highest happiness of the young *Wirtschaftswunder* generation, in which the architect's artistry at 'capturing the warming, healing and uplifting sunlight' could unfold its full potential. … In this home, 'full of light generosity', one felt 'almost on vacation'.[6]

As an American-German hybrid, the West German bungalow is an etymological oddity influenced by 1940s and 1950s residential modernism as much as by the middle class architecture of the traditional American Bungalow. While the German term *Bungalow* implies an American genealogy until today[7], the modern single-storey flat-roof architecture of the West German bungalow is not based on the Arts-and-Crafts-Architecture of the so called American Bungalow[8] with its overhanging eaves, rusticated base and shingle façades, which, starting from California, captured the USA from the 1880s to the 1920s.[9] This aesthetic difference is primarily due to the late arrival of the term to Germany, where it had had no reference to local building types until after the Second World War. Its early 20th-century use as a technical term, which described housing in the United States[10], English cottages[11] or colonial architecture[12], was replaced when the modern bungalow typology emerged in popular books and journals during the 1950s: by then, the German term had lost its traditional foreign allusions and its new, general 'meaning "cottage", "summerhouse"'[13] was quickly attached to the modernist single-storey architecture of contemporary flat-roofed houses in West Germany and abroad. The most formative architectural influences were the Californian residential projects of the Case Study House programme (CSH) and those built by Richard Neutra in the 1940s and 1950s. All of these were never called bungalows in the USA.[14] Nevertheless, contemporary West-German publications hailed Neutra's American houses as 'Neutra bungalows', 'dream house of modern man', and 'the most contemporary and technically most accomplished form' of the bungalow.[15] The term bungalow got attached to the modern single-storey house so quickly and firmly that until today – in the mind of West German lay and architectural audiences alike – an American 'bungalow' is still more likely to be a house by Richard Neutra than an authentic American Bungalow.[16] The semantic architectural difference between bungalow and the West-German *Bungalow*, as it is shown in the use of the term in the German title of the CSH publication *Modern California Houses*[17] and in the above-mentioned references to Neutra, raises three important questions in light of this session's interest in middle class life: how did the West German bungalow architecture relate to its twofold American genealogy, how did this relationship influence the bungalow's social use and connotations in West Germany and what conclusion may we draw from its analysis about the particularities of West-German middle class life?

THE ARCHITECTURE OF WEST GERMAN BUNGALOWS

The majority of West German bungalows are single-storey family homes for owners with evident middle class occupations like architects, doctors, scientists, lawyers and businessmen.[18] Yet the typology's scope ranges from simple prefabricated box bungalows or compact bungalows in housing estates to extensive industrialists' villas and the most renowned West German bungalow, the so-called *Kanzlerbungalow* (Chancellor's bungalow), built 1963-64 as a representative residence and reception building for the West German Federal Chancellor by architect Sep Ruf in Bonn. The West German bungalow thus includes houses suitable for middle class house-owners with widely varying personal circumstances. Floor areas range from around 25-30 sqm for holiday homes and 80 sqm for small houses to 300-600 sqm villas – with building costs from about DM 35,000 for a small inexpensive pre-fabricated unit to over DM 2m. The average middle class bungalow as a single-family home has a floor area of about 100-160 sqm.[19]

This sociological and typological breadth is hardly visible in bungalow photography[20], due to the continuous architectural idiom of bungalow architecture with large glass panes underneath a projecting flat roof or distinct roof edges. Additionally, the low architectural form of the single-storey houses does not easily indicate a sense of its horizontal dimensions. The consistent pictorial language of the photographs further supports this phenomenon. Just like Neutra houses, West-German bungalows are generally portrayed from their own garden – as a low architectural form settling in a natural setting beneath trees, its windows looking out into the scenery. This mode of representation highlights the spatial inversion of the modern bungalow, a shift away from representative façades oriented towards the street, toward the quiet seclusion of the private garden. Whether the site requires it or not, West German bungalows show an essential two-sidedness, with closed entrance façades and fully glazed façades towards the garden. In some examples, architects differentiate

Figure 1. Bungalow garden façade with typical open living room space and large glass windows towards the garden (Stuttgart 1953, architect: Klaus Gessler, demolished 2010). (source: Klara Trost, *Landhaus und Bungalow. Beispiele moderner Eigenhäuser im In- und Ausland mit einer Einführung* (Frankfurt/Main: Ullstein, 1961), 8)

these façades within a unifying compositional design in terms of materiality, proportions, colours, etc. More often, white, rendered façades with small openings facing the street seem, metaphorically, to protect the privacy of the glass façades toward the secluded private garden.[21] (Fig. 1)

Thus sheltered, the bungalow living rooms are modern open plan spaces, at ground level with the garden and intensely entangled with the outdoors via large glass panes, protruding roofs and walls, continuous surfaces and other modernist architectural features, which are employed to dissolve the façade boundary, therefore creating ambiguous spaces with almost room-like qualities between interior and exterior (Fig. 2), design solutions for which Andreas Vetter coined the term *Pseudoraum*.[22] In the formation of those *Pseudoraum* spaces, the Californian inspired West-German bungalows are themselves heir to those architectural themes of the 1920s and 1930s in Central Europe, which had informed 1930s and 1940s Californian residential modernism. Much like a picture window, which Sandy Isenstadt characterised as a 'product both of landscape and of the leisure to contemplate it through clear, flat glass […]; an alloy of Romantic outlook and industrial technology,'[23] modernist bungalow architecture unites the Arcadian view with contemporary architectural design. Instead of a flat picture window, the spatial dissolution of modern architecture extends the concept of the picture window into a three-dimensional frame, as manifest in the open-plan space of the bungalow living room. Together, the inversion of the modern house and the spatial dissolution of the house towards the garden define the essence of West German bungalow architecture. Rather than an object enclosed by four walls, the bungalow ideal is an expansive inhabitable window space, implemented primarily in the living areas with an intense connection to the privately owned garden.

MIDDLE CLASS LIFE IN THE MODERNIST BUNGALOW

In its orientation toward the garden, the West-German bungalow continues and appropriates architectural concepts of contemporary residential modernism. However, in its focus on modern family life in one shared open space it also evokes the fundamental shifts from formal upper (middle) class conventions to shared middle class family life as implicated in the American Bungalow:

> The bungalow may be seen as a symbol of America's modernization, from a nation molded by formal social and behavioral conventions to a more pragmatic and informal society. The move from the more expensive Victorian house with its need for domestics to the modest but snug bungalow embodied an egalitarian trend, as larger parts of the population were able to afford their own home. […] At the same time, the bungalow, with its large, central family space – the living room – allowed for new social conventions that moved away from the overly refined rituals of nineteenth-century life.[24]

With regard to middle class life in the West German bungalow, it will be shown how the four central points mentioned in this quote – (1) the focus on a shared family living room linked to the outdoors in a house that is (2) modest and snug, as part of (3) an egalitarian trend in housing ownership and of (4) societal modernisation – are, in their contemporary form, equally applicable to the postwar modernist bungalow in West Germany.

A view from the living room

The extent to which the living room epitomises the ideal of modern bungalow architecture has been discussed above. In this sense, the West-German bungalow's main living room space resembles the contemporary modernist single-store house as much as the traditional American Bungalow, in which "[a]ll of the life and the parts of the bungalow revolved around the living room. […] It was its concentration upon a vital, ample family center that made the bungalow great."[25] However, West German bungalows (and Californian modernism) differ from the American Bungalow – with its family living room and veranda at the front of the house facing the street[26] – in their orientation towards the views from the living room onto the individual garden or

Figure 2. Dissolution of the façade boundary between interior (left) and exterior by means of Pseudoraum spaces (Karlsruhe 1964, architect: Reinhard Gieselmann). (source: Reinhard Gieselmann, *Reinhard Gieselmann: On the Search of Style* (Cologne: Menges, 2007), 37)

the landscape beyond, the essential feature of modern bungalow architecture. Michael Bunce's study of the Anglo-American landscape ideal[27] and Sandy Isenstadt's investigation of the picture window[28] have shown how the appreciation of landscape and nature, the ability to conceive a set of trees and a hill as landscape, and the spatial connection of landscape appreciation to the residential interior are a formative part of cultural middle class identity. In different West German bungalow types, the interest in a connection to nature outside generated a variety of architectural solutions. The dominant bungalow type with an L-shaped plan is designed at level with the garden and almost seamlessly intertwined with it. More introvert types focus on atria housing flowers and plants, while the most extrovert bungalows – elevated boxes in lightweight construction – look out over the landscape like a loge. These views of the garden or over the natural landscape, seen through large glass panes, become a definitive part of the atmosphere inside; 'everywhere, the outside green looks into the house through the wall-like window panes'[29] or, as Baudrillard has observed in his analysis of the modern material glass, 'the exterior, nature, landscape invade […] the intimate, private realm and come to bear as an atmospheric residential element.'[30]

A modest home

The interest in modesty and 'snugness' that one can find in the above-mentioned citation, echoes in descriptions of West German modernist bungalows for example in the aim that 'the house may be managed without permanent assistance by the owners alone.'[31] Even though architecturally the West German bungalows may be understood as a continuation of 1920s and 1930s European residential modernism, the circumstances of their realisation are fundamentally different. Instead of a well-to-do upper

class elite who could furnish with noble and expensive materials and cutting-edge technology avant-gardist projects like Ludwig Mies van der Rohe's Tugendhat House, postwar West German bungalows were middle class family homes for clients in more modest circumstances. A decade after the Second World War these bungalows were constructed on cheap sites released from agricultural use with mostly simple, prefabricated or standardised materials. The modest luxury of these bungalows is more of a spatial quality. Often, even this spatial luxury is limited to the living room, while in the overall layout functionality dominates the arrangement of its modern kitchen, open dining/living space and the compact private quarters with modern bathrooms and often rather boxy individual rooms. In its modest and snug made-to-measure functionalism, the modernist bungalow redefined middle class family life for the postwar nuclear family in West Germany, and was closer to the American Bungalow's interest in inhabitability than to European inter-war modernism.[32]

An egalitarian trend

Anthony King's dictum about the 'significance of the bungalow' as 'usually owned by its inhabitants, with no one living above, at the side or below' and 'a "modern" form of dwelling for a "Western type" nuclear family'[33] may also be used to describe the ideal of West German postwar housing policy during the late 1950s, when liberal individualism in the tradition of the former enemies and present allies was employed to set West Germany apart from the socialising tendencies of both the National-Socialist past and the German Democratic Republic (GDR).[34] The governing conservative party considered that ownership of one's home would 'contribute positively to the development of democratic virtues:' as a consequence, the individual home with a garden was supported via a specific fiscal legislation.[35] The individual house was further acclaimed as an 'intimate and recreational refuge from work and society, where the citizen would feel as a human individual.'[36] This notion entailed not only the physical retreat into the private spheres of family life, as embodied in the inverted orientation of the modern single-family bungalow, but also a similar mental phenomenon, as described by German sociologist Helmut Schelsky in his work on the 'levelled middle class society.'[37] In his analysis, Schelsky further describes how the *déclassement* of refugees and displaced persons, the turmoil of the two World Wars, and the rise of the working class in the inter-war years (plus the profound and dramatic social changes during the Third Reich, which Schelsky omits) resulted in an enforced social mobility and in a modern society, in which the ideals of the socially upwardly mobile working class and the remainders of class distinction among the de-classed upper and upper middle class meet at a common level, which Schelsky calls 'kleinbürgerlich-mittelständisch' (lower middle class, *petit-bourgeois*).[38] As a modest and simple house, the West German bungalow answered the levelled middle class' longing for material wealth and consumer goods like radios, refrigerators, cars[39] and lend itself to embody the needed 'model for an enduring state of fulfilment.'[40] West German middle class bungalows of the 1950s and 1960s[41] were predominantly built in areas that prospered rapidly during the economic miracle, like the Rhineland around Bonn, Cologne and Düsseldorf, places of origin of the social market economy, the so-called *Rheinischer Kapitalismus* (Rhenisch capitalism);[42] near Frankfurt, West Germany's new financial centre, around Munich and in Baden-Württemberg, close to the expanding businesses of Siemens, Daimler Benz and other West German engineering companies. Built from the revenues of economic growth, the West German bungalow became a symbol of individual social advancement in rural areas, towns and suburbs near the large agglomerations. Even if West Germany was mistaken about its general status as a middle class society, as Adorno suggested,[43] for many families a bungalow symbolized their acquired status as prosperous members of a new modest middle class – especially during the decades of the economic miracle when Ludwig Erhard's promise of 'prosperity for all' seemed viable, and social decline a distant memory of the difficult past.

Societal modernisation

The denotation of architectural modernism and middle class values, as they emerged in West Germany during the 1950s and 1960s, was shaped by the particular political situation after the Second World War, the end of the Third Reich, and the division of Germany. In the fundamental shift towards a new free democratic Western society, West Germany was experiencing an enforced modernisation in Habermas' sense; traded concepts no longer supplied authoritative interpretations and norms, and the new West German society, in an act of self-foundation, was forced to establish a new normativity.[44] In postwar West Germany, modes of class distinction also shifted, as Aida Bosch has argued with regard to Pierre Bourdieu's habitus concept;[45] 'the historic breaks such as the anti-intellectual and anti-*bourgeois* Third Reich and the conscious concentration on democratic rebuilding after the war fractured and modified the historic influences of class culture.'[46] The defining significatory role of modern architecture in this process of West German national re-definition has received much academic attention.[47] In this context, the use of modern architecture for West German bungalows is more than the mere interest in new architectural trends, typical of bungalow booms.[48] Modern bungalow architecture distinguished its owners in their 'class-specific significatory structures, taste patterns and stilistic preferences'[49] as part of a cosmopolitan modernist avant-garde and a new forward-looking democratic German middle class society.

THE WEST GERMAN BUNGALOW AND THE IDEAL OF
A MIDDLE CLASS SOCIETY IN POSTWAR WEST GERMANY

This analysis indicates the importance of the West German bungalow's double system of reference, that links it both to bungalow culture and to contemporary Californian modernism. While architecturally, the kinship between this type and other examples of residential modernism is obvious and results in the luxurious spatiality of bungalow living rooms, it is the nexus to the middle class world of American bungalow culture that allows for a clearer differentiation of this postwar type from earlier modernist houses. The conjunct analysis of architectural aspects and sociological circumstances shows how the homogeneous portraits of bungalow architecture relate to egalitarian ideals of the levelled middle class society, just as the introversion of the West German bungalow away from the direct neighbourhood reflects a widespread sociological impulse. In this re-definition of middle class life in the modern postwar welfare state by means of private housing, the West German bungalow is part of a broader European development. However, the urgency of this process and its historical connotations in the process of national re-definition make the West German bungalow a particular example for this development.

Endnotes

1. The most important West-German architectural magazines of the time, such as *Bauen und Wohnen*, *Baumeister*, *Bauwelt*, *Deutsche Bauzeitschrift* and *Deutsche Bauzeitung*, all published examples of bungalow architecture.

2. Bungalows were shown in coffee-table books dedicated to single-family houses in general, and in special bungalow editions: Gerhard Schwab, *1 - 50. db Einfamilienhäuser* (Stuttgart: DVA, 1962); Siegfried Nagel, *Einfamilienhäuser, Bungalows, Ferienhäuser. Offene Wohnformen* (Gütersloh: Bertelsmann, 1968); Klara Trost, *Landhaus und Bungalow. Beispiele moderner Eigenhäuser im In- und Ausland mit einer Einführung* (Frankfurt/Main: Ullstein, 1961); Walter Betting and J.J. Vriend (eds), *Bungalows. Deutschland, England, Italien, Holland, Belgien, Dänemark* (Darmstadt: Müller-Wellborn, 1959); Martin Mittag, *Kleinsthäuser, Ferienhäuser, Bungalows 160 Beispiele kleiner Eigenheime, Wochenendhäuser, Gartenhäuser, kleiner und mittelgroßer Ferienhäuser aus dem In- und Ausland* (Gütersloh: Bertelsmann, 1959).

3. Groups of bungalows as part of large housing estates with mainly large apartment houses can be found for example in Dortmund-Kirchlinde, Bochum-Hustadt, Berlin-Gropiusstadt and in the Berlin 1957 Interbau exhibition, the so-called *Hansaviertel*.

4. In recent years, several publications have been devoted to Richard Neutra's European houses and the so-called *Kanzlerbungalow* (Chancellor's Bungalow) in Bonn, the residence and reception building designed by architect Sep Ruf for the Federal Chancellor: Klaus Leuschel and MARTa Herford, *Neutra in Europa - Bauten und Projekte 1960-1970* (Cologne: DuMont, 2010); Sep Ruf, Joaquin Medina Warmburg and Paul Swiridoff, *Sep Ruf, Kanzlerbungalow, Bonn* (Stuttgart: Menges, 2009); Stiftung Wüstenrot and Stiftung Haus der Geschichte der Bundesrepublik Deutschland, *Kanzlerbungalow* (Munich: Prestel, 2009). While these volumes partly discuss transatlantic influences on the West-German bungalow, to date no basic research on West German bungalow architecture and this typology exists. This paper draws on the author's PhD study of 65 exemplary bungalows, built in West Germany 1952-1969 and published in contemporary periodicals, magazines or picture and plan books (see notes 1 and 2).

5. Title of a book by the West-German Minister of Commerce Ludwig Erhard, who owned a bungalow designed by Sep Ruf near the Tegernsee lake and, upon his election as Federal Chancellor, commissioned the *Kanzlerbungalow*. Ludwig Erhard, *Wohlstand für alle* (Düsseldorf: Econ, 1957). Translation by the author.

6. Hermann Glaser, *Deutsche Kultur. Ein historischer Überblick von 1945 bis zur Gegenwart* (Bonn: Bundeszentrale für politische Bildung, 1997), 231, quoting contemporary popular magazines. Translation by the author.

7. Ansgar Steinhausen, "Flach mit Niveau," *Häuser* 1 (2007), 23.

8. Robert Winter, *The California Bungalow* (Los Angeles: Hennessey & Ingalls, 1980), Clay Lancaster, *The American bungalow 1880 – 1930* (New York: Abbeville, 1985).

9. Anthony D. King, *The Bungalow. The Production of a Global Culture* (London: Routledge & Paul, 1984), 127-155.

10. Otto Wislicenus, "Die einfachsten Formen des amerikanischen Wohnhauses," *Zentralblatt der Bauverwaltung* 41, 9 (1921), 53-57.

11. Friedrich Schultze, "Neuere englische Landhäuser," *Zentralblatt der Bauverwaltung* 28, 33 (1908), 229-232.

12. Baltzer, "Wohnungsbau und Wohnungsbenutzung in den Tropen," *Zentralblatt der Bauverwaltung* 30, 88 (1910), 542-544.

13. Wolfgang Pfeifer, Wilhelm Braun and Zentralinstitut für Sprachwissenschaft, *Etymologisches Wörterbuch des Deutschen*, 2. ed (Berlin: Akademie, 1993), 184.

14. However, given the exceptional role of the Austrian-born and German-speaking Richard Neutra for West German bungalow architecture, Neutra's use of the word bungalow, which he had already employed against common usage on his drawings for a flat-roofed single-storey house in the 1932 building exhibition in Vienna-Laim, Austria, may have been influential in the modernist appropriation of the term. (Neutra's drawing is published in Thomas S. Hines and Richard J. Neutra, *Richard Neutra and the Search for Modern Architecture* (New York: Oxford University, 1982), 111.) A similar modernist appropriation of the term bungalow can be found in the English architect June Park's book *Houses and Bungalows*. In the UK, however this phenomenon was only a short-lived attempt versus the 150-year old bungalow tradition. June Park, *Houses and Bungalows* (London: Batsford, 1958).

15. Walter Betting, "Vorwort," in Betting and Vriend (eds), *Bungalows,* i. Translation by the author.

16. Ironically, many bungalow architects, whilst having propagated modern bungalow architecture, have held reservations against the use of the popular term until today. Born in the 1920s and educated in the 1940s, before the rise of the West German bungalow, they still sustain the earlier terminology, in which 'a bungalow is a house in the tropics'. Rüdiger Hoge in an interview with the author, 10.06.2011.

17. Esther McCoy, *Modern California Houses; Case Study Houses 1945 - 1962* (New York: Reinhold, 1962); Esther McCoy, *Wohnbau auf neuen Wegen. Musterhäuser und Bungalows – ihre Planung, Konstruktion, Bauausführung und Wirkung* (Ravensburg: Maier, 1964).

18. Professional occupation is one of the defining aspects of middle class; cf e.g. Wilfried Dumon, *De middenstand als sociologische categorie: een explorerend onderzoek naar het middenstandsbegrip* (Leuven: Uitgeverij Nauwelaerts, 1963), 109-11.

19. This popular assumption was confirmed by the author's study of 65 exemplary West-German bungalows built and published 1952-1969.

20. For a more detailed analysis of the photographical aspects of the West-German bungalow, see Carola Ebert, "Private vistas and a shared ideal: photography, lifestyle and the West German bungalow," in Andrew Higgot and Timothy Wray (eds), *Camera Constructs. Photography, Architecture, and the Modern City* (Aldershot: Ashgate, 2012, forthcoming).

21. The West-German bungalow's two-sidedness is analysed in more detail in Carola Ebert, "Privatisierte Landschaft. Westdeutsche Architektenbungalows 1952-1959 zwischen kalifornischem Traum und (nicht-)städtischer Realität," *dérive. Zeitschrift für Stadtforschung* 47 (2012), 18-23.

22. Andreas K. Vetter, *Die Befreiung des Wohnens. Ein Architekturphänomen der 20er und 30er Jahre* (Tübingen ; Berlin: Wasmuth, 2000), 26-32.

23. Sandy Isenstadt, "The Rise and Fall of the Picture Window," in Barbara Miller Lane (ed.), *Housing and Dwelling. Perspectives on Modern Domestic Architecture* (London: Routledge, 2007), 299.

24. Alexandra Staub, *Cultural Change and the Ideal of the Single-Family House in the Federal Republic of Germany 1950-1989* (Ann Arbor: ProQuest, 2006), 33.

25. Lancaster, *The American Bungalow 1880-1930*, 220.

26. Clifford Edward Clark, jr., *The American Family Home 1800-1960* (Chapel Hill: University of North Carolina Press, 1986), 173.

27. Michael Bunce, *The Countryside Ideal. Anglo-American Images of Landscapes* (London: Routledge, 1994), 5-32.

28. Sandy Isenstadt, *The Modern American House. Spaciousness and Middle-Class Identity* (New York: Cambridge University Press, 2006), 113-146.

29. "Eigenheim des Architekten Günther Balser in Frankfurt," *Architektur und Wohnform* 66, 5 (1957/58), 184

30. Jean Baudrillard, *Das System der Dinge. Über unser Verhältnis zu den alltäglichen Gegenständen* (Frankfurt/Main: Campus, 1991), 56. Translation by the author.

31. Günther Balser, "Eigenheim eines Architekten in Frankfurt/M.," *Deutsche Bauzeitschrift DBZ*, 3 (1959), 276.

32. Clark, *The American Family Home 1800-1960*, 211.

33. King, *The Bungalow*, 3.

34. During the 1960s, after the physical separation of Germany by means of the 'Wall' and when housing issues became more pressing, this focus shifted towards large-scale housing.

35. The *Zweites Wohnungsbaugesetz* of 1956 formalised the provision of housing as a governmental duty and granted fiscal amelioration for parts of the expenses for owner-occupied houses. It also laid down maximum sizes for subsidised houses and apartments. Due to these limitations the floor areas of subsidised bungalows were similar to those of apartments in housing schemes.

36. Wolfgang Bohleber, *Mit Marshallplan und Bundeshilfe. Wohnungsbaupolitik in Berlin 1945 bis 1968* (Berlin: Duncker & Humblot, 1990), 59. Translation by the author.

37. Helmut Schelsky, *Wandlungen der deutschen Familie in der Gegenwart: Darstellung und Deutung einer empirisch-soziologischen Tatbestandsaufnahe* (Stuttgart: Enke, 1955), 218-242. Schelsky's work gives an apt description of sociological changes in West-German postwar society. For the rise of lower income groups see e.g. Hans-Jürgen Kersig, "Die nivellierte Mittelstandsgesellschaft," (PhD diss., Cologne University, 1961) 135-40. However, the applicability of Schelky's concept as a sociological model is disputed; see also Hans Braun, "Helmut Schelskys Konzept der 'nivellierten Mittelstandsgesellschaft' und die Bundesrepublik der 50er Jahre," *Archiv für Sozialgeschichte* 29 (1989), 199-223.

38. Schelsky, *Wandlungen der deutschen Familie in der Gegenwart*, 220-2. Translation by the author.

39. Schelsky, *Wandlungen der deutschen Familie in der Gegenwart*, 224. Translation by the author.

40. Schelsky, *Wandlungen der deutschen Familie in der Gegenwart*, 236. Translation by the author.

41. The geographical information refers to the author's study of 65 exemplary bungalows.

42. A term coined by the French economist Michel Albert for the West German social market economy, the so-called German Model, to differentiate this capitalist model from the capitalist market economy in the USA and the UK. Michel Albert, *Kapitalismus contra Kapitalismus* (Frankfurt/Main: Campus, 1992).

43. Theodor W. Adorno, *Jargon der Eigentlichkeit. Zur deutschen Ideologie* (Frankfurt/Main: Suhrkamp, 1964), 20.

44. Jürgen Habermas, *Der philosophische Diskurs der Moderne: zwölf Vorlesungen* (Frankfurt/Main: Suhrkamp, 1985), 16. Translation by the author. Habermas refers to modernity in a more general sense.

45. Pierre Bourdieu, *The Distinction. A Social Critique of the Judgment of Taste* (Cambridge: Harvard University Press, 1984).

46. Aida Bosch, *Konsum und Exklusion. Eine Kultursoziologie der Dinge* (Bielefeld: transcript, 2010), 59

47. See e.g. Deborah Ascher Barnstone, *The Transparent State. Architecture and Politics in Postwar Germany* (London: Routledge, 2005).

48. King, *The Bungalow*, 74.

49. Bosch, *Konsum und Exklusion*, 58

BETWEEN SOVIET MASSES AND THE ELITE:
ALTERNATIVE HOUSING DESIGNS IN LITHUANIA IN THE 1960s

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In recent years, the theme of the classes in a 'classless soviet society' and their material environment has received a lot of attention from researchers; especially the exclusivity of the elite (or the ruling class, or *nomenklatura*) is often in focus.[1] Some time ago the soviet dichotomy theory (between the elite and the masses) came under criticism in the proving that a much more varied social layering existed, especially in the late soviet times.[2] If the soviet *nomenklatura* can be easily identified through their position and privileges, it is much more difficult to identify a soviet middle class, if possible at all. The social stratification of society is usually defined by the income and profession, but, in the Soviet Union, wealth was guaranteed rather by power and privileges. The socialist 'market' as a politically regulated field of social relations is the guide, by which sociologists study the various social groups and the elite in the supposedly classless Soviet society.[3]

Still, in viewing the class structure through their consumption, a completely different picture emerges. Further on in this text we will try to define the middle class of the Soviet Union by its consumption of housing. The elite received privileges and their housing was privileged as well, the masses were provided with housing for free, but had to wait in line for it, in between these two classes a group of owners of cooperative flats emerged, who were privileged to use their own income to acquire a flat of better quality. In the paper I will argue, that they also had an aesthetic privilege of better architecture.

COOPERATIVE BLOCK OF FLATS AS A SYMBOL OF THE SOVIET MIDDLE CLASS

In 1957, when the government of Nikita Khrushchev declared the industrialized mass housing programme and construction became widely industrialised, building of private houses become proscribed in capital and larger cities (like Vilnius and Kaunas in Lithuanian SSR) and restricted in the mid-sized towns.[4] The ban to build individual houses encouraged a distinctive housing programme in the Soviet Union – the construction of the *cooperative flats*. Politically it became a solution to the difficult situation of the well known soviet apartment shortage. Socially this process started to accumulate a better provided group of urban society. At the same time it also encouraged designs of alternative and experimental dwellings which are in the focus of this paper.

The cooperatives for the construction of flats could be established within local municipalities (Executive Committees of the local management boards), and also within industrial enterprises and organisations. It means, that the members of more prosperous departments and organisations were allowed to advance and improve the construction of their housing with their own financial contributions (the way of acquiring the latter wasn't controlled). The resolution stated, that the construction work could start, when the members of the cooperative had contributed at least 40 percent of the amount for the construction, and the State bank had provided credit for the remaining part.[5]

In Vilnius the first housing cooperatives were established in 1963, and the first nine cooperative houses were built that year. In fact these buildings did not fight either industrialisation or standardisation, because they had to be built following a standard design and according to standard technology. However, the range of privileges included a selection of better building materials and a more comfortable flat layout. The houses were four stories high at the most (if without an elevator) in comparison to a standard five storey and only two flats on one level in comparison to a standard three or four. Bricks were usually used more widely for walls and partitions in comparison to the standard pre-fab concrete panels. The apartments had higher ceilings of 2.80 m in comparison to a standard 2.50 m, larger kitchen area, extra utility space, and especially bigger apartments, starting from three rooms in comparison to standard budget two-room family apartments. The design of facades was plain but distinguished by better quality finishing (e.g. terrazzo plaster) or a special detailing (e.g. a unique roof above the main entrance). The distinctive feature of cooperative multi-flat houses was that they were all ordered by a single organisation and were built on the specially allocated plot in comparison to the new suburban residential districts of pre-fab blocks. The main advantage of the houses was clearly not architecture but their *improved comfort*. Even so, one could clearly tell the house being cooperative from the better material quality.

A house in Vilnius illustrates the case in detail. An individually designed in 1974 by architect Aida Lėckienė and built in 1977, the cooperative house in Šeimyniškių Street demonstrated obvious *improved comfort* in both its exterior and interior. Combined of

four 5 to 8 storey blocks with an elevator in each it housed 52 *better planned* 3-5 room apartments (only 3 two-room apartments, 27 three-room apartments, 17 four-room apartments and 5 five-room apartments that were considered a luxury in the soviet everyday life). The house and the apartments featured all elements of *improved comfort*: the brick walls were terrazzo plastered while the numerous loggias were covered with an innovative chemical cladding. Besides bigger rooms, higher ceilings and larger kitchens and bathrooms each apartment was supplemented with a daylight utility room.[6]

CREATIVE WORKERS GOING CREATIVE

Some housing cooperatives were especially craving for a permit for 'individual design'. Needless to say that architects supported such activity as it was almost the only field to practice non-standard housing ideas. However, acquiring permit for 'individual design' was not an easy task and the stories behind those permits beautifully illustrate the complicated formation of informal ties within the soviet society and bureaucracy.

The community of artists in the Soviet Union had more privileges from this point of view. As early as 1953, painters and sculptors were allowed to have workshops (studios) with flats attached to them in the newly designed buildings in Vilnius and Kaunas.[7] Later, the members of other creative organisations were also allowed to apply for the larger living floor space (exceeding the existing norm of the square metres per person), under the need for a creative workshop or study room. The members of these organisations (being a member was obligatory for the professional existence), united in a cooperative, had the right to apply for a land plot for construction of a house or houses, and a permit for an individual design issued on the grounds of the special purpose of the buildings.[8] As socialism progressed, these organisations advantageously used the possibility to build cooperative flats with studios, which meant highly desired extra space. True to their name, creative workers, together with architects showed much more creativity than the party elite or the technical community. In their projects, the highly improbable soviet urban housing schemes like semi-detached houses of two or three floors with separate entrances, fireplaces and halls were born.

For example, the Union of Composers' block of houses in Vilnius (architect Vytautas Edmundas Čekanauskas, design 1960, construction completed 1966), was indeed a unique occurrence in housing construction in the Soviet Union. It can be considered the first outstanding architectural object, where unanimity of innovative composition, typology, and use of materials, structural construction and interiors was created. The object is exceptional by its social origin, and its individuality as a project makes it unique in the context of mass pre-fab assembled construction that had begun to gather speed in the USSR.

The construction of this complex was initiated by the group of composers who used their informal connections to receive an empty land plot and the approval from the head architect of the city.[9] The composers developed a concept of low-rise terraced houses, thus saving the historic area from the standard five floor pre-fab slab – such buildings were already planned on the adjacent land plot. Once the decision had been made, in 1959 the Town Construction Design Institute announced an internal competition to design 16 single-flat houses and a concert hall building. The competition was won by young architects Vytautas Edmundas Čekanauskas and Vytautas Brėdikis, whose project was innovative and clearly Scandinavian flavoured.[10]

Architect Vytautas Edmundas Čekanauskas has stated that although the main idea to build terraced houses had already been conceived, his 1959 study trip to Finland helped to decide on using mostly traditional, natural and locally available building materials (red brick, thick pale plasters and timber). He also adjusted the buildings to natural terrain, thus saving the pine trees. Nordic architecture, especially Finnish and Swedish, played an important role in this process because of the possibility to experience Finnish modern architecture at first hand during the study trips in 1959–1964. Also, knowledge about Nordic modern architecture was of high interest and available from international architectural magazines due to expanding connections with the West. Nordic regionalism was an acceptable solution for Lithuanian architects since it combined modernist design with regional tradition and thus expressed their aspiration for national expression. The architecture of Union of Composers has a lot of connections with a group of buildings in Tapiola (houses by Kaija and Heikki Siren, 1955). Just like in Finland, the flats in Vilnius were economical and simply furnished, yet functional. Čekanauskas imparts that he

Figure 1. Housing unit for the Union of Composers of the Lithuanian SSR, design, 1960. (source: Vilnius county archive, f. 1036, ap. 11, b. 228, p. 4)

couldn't exceed the restricted housing area norms, but 'I gained on corridor – it became a hall with stairs, and we also designed a rather big cellar' .[11] The chairman of the Union of Composers helped to gain permits for all these extra-ordinary solutions. Such individualism, innovative planning and decking outside the houses undoubtedly state a higher quality of housing (Fig. 1).

Later, the Union of Artists also organised the construction of the 'creative workshops with the flats'. Painters, sculptors and a few writers, joined into the cooperative and managed to secure a land plot near the wooded area and also a permit for an individual design in 1967. The project of 28 semi-detached houses by architect Algimantas Mačiulis had to be simplified during the construction, but each flat had a separate street entrance, a studio with a fireplace, a store room and a garage on the ground floor, and four rooms and a kitchen on the first and second floors.

In the first version of the project, the architect designed 30 semi-detached houses, arranged on the narrow land plot. All houses had three floors and came in three versions: three rooms and studio ($82 m^2$) or four rooms and studio (89.5 and $96 m^2$). This project wasn't approved because the living floor space for a flat exceeding $60 m^2$ wasn't allowed. Architect Mačiulis remembers that the project had to be revised at the Party headquarters. A group of cooperative members and an architect even visited poet Eduardas Mieželaitis at home to plead the artists case in the government to allow non-standard bigger flats[12] (he was then an important member of the Lithuanian Communist Party Central Committee, a delegate at the USSR Highest Council and the chairman of the Union of Writers of Lithuanian SSR, and thus a 'voice' of the creative workers at the important official negotiations). This didn't help, however, and orders were issued to restrict the flats to $60 m^2$ living floor space plus a studio room. The final version featured 28 blocked houses, divided into two groups. A single house was $56 m^2$ with a $30 m^2$ studio. At the back, on the southern side each house had a separate open yard, as if extending the studio outside (Fig. 2).
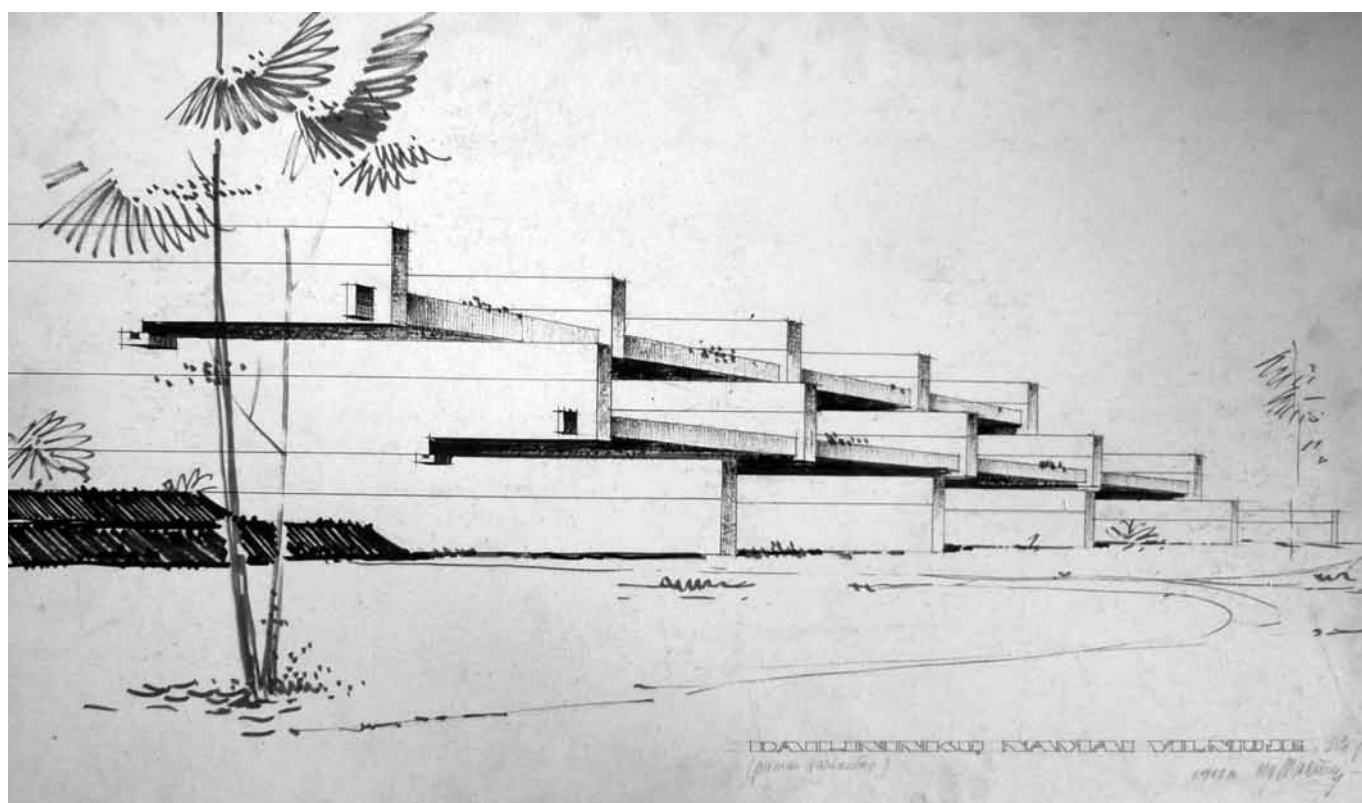
Figure 2. Housing unit for the Union of Artists of the Lithuanian SSR, design, 1968. (source: Vilnius county archive, f. ATD-1127)

CONCLUSION

The research shows that although in command, economy class was determined by the influence accompanied by position, not by income, the latter became important in the late soviet period as it was connected with the consumption. Although officially different housing models could not exist in the Soviet Union, it existed in all forms and shapes. Cooperative housing, introduced after the prohibition of construction of individual houses, in the period of industrialisation emerged as a substitute for the cessation of private (individual, family) houses in large urban areas. The group of soviet society who owned the cooperative flats might be conditionally called a middle class shaped by the extra income and a privilege to use their income to acquire a flat of better quality.

Cooperative housing served also as a field for experimentation for architects eager to express more varied planning ideas. Individually designed cooperative flats and multi-flat houses were made possible because of the rather privileged position (both by income and by privileges) of the creative organisations in soviet society, which was reflected in housing solutions as well. Both examples from Vilnius reflect western (namely Nordic architectural influence) as well as the effort of the architects to introduce novel principles of planning and architecture.

Endnotes

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KEEP IT LOOKING BEAUTIFUL!
HISTORICISED RESIDENTIAL ARCHITECTURE
AS A MEANS OF REPRODUCING THE MIDDLE CLASS SELF

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HISTORICISED RESIDENTIAL ARCHITECTURE

When the trappings of history are no longer confined to museums, the past is made visible at a variety of locations[1]. We can spend our holidays in historicised theme parks, we go shopping in new shopping centres whose architecture is a throwback to shopping arcades of the nineteenth century, or we live in neighbourhoods with historicised architecture[2]. For example, building professionals who construct suburban housing and cottages have adopted the Tudor style in order to create a sense of 'Englishness' in the United Kingdom and elsewhere[3]. References to the American small town[4] and European medieval streetscapes[5] have also been widely used in attempts to create 'authentic' communities and localities[6].

In the Netherlands, neotraditional residential architecture was widely dismissed from the start of the 1950s to the mid 1990s. However, during the past fifteen years neotraditional neighbourhoods have become increasingly common[7]. One of the most important reasons to explain this change in attitude is the increased production of owner-occupied houses[8] for the Dutch middle class[9]. Moreover, the creation of recognizable regional architectural identities has become arguably the main objective of planners. Initially, non-Dutch architects like Krier and Kohl introduced the idea of an idealized European small town into the Dutch context throughout the 1990s[10]. Afterwards, more and more Dutch offices began to refer to particular Dutch building traditions -- like the craftsmanship found in vernacular farmhouses (characterized by brick or green brushed wood) and the austere usage of (exotic) style elements -- in order to recreate unique and recognizable residential places[11].

Neotraditional neighbourhoods in general, but particularly in the Dutch context, are characterized not only by the strong rhetoric of locality and regional identities, but by a high degree of home ownership. They tend to be exclusive places where the vast majority of the residents are 'white', affluent and well-educated[12]. Whether *all* Dutch neotraditional neighbourhoods are exclusive places is a matter for further research but it is a fact that in each newly-built suburban (neotraditional) neighbourhood, a certain percentage (10 up to 30 per cent) of social housing is demanded by the government[13]. Approximately 519,000 new housing units were projected over the period 1995-2005, mainly built by consortia consisting of local authorities, housing corporations and private developers[14]. The number of neotraditional housing schemes among recently-built neighbourhoods remains unclear, but Boeijenga and Mensink argue that '[H]istoricist building styles are in fact extremely common… including the wooden Zaan houses…the miniature versions of traditional farmhouses...and the so-called Hague School, popularly known as "thirties houses".'[15]

While many studies have highlighted the motives behind the production of historicised neighbourhoods[16] or the ability of design features designed to encourage community formation[17], the empirical question that has been largely ignored is how residents themselves construct their middle class place identity via the consumption of neotraditional architecture. In this paper, I therefore aim to explore how people produce a 'classed' place-identity, first by developing attitudes towards, and social and cultural practices in, residential space and second, by the way they judge and classify these in order to draw symbolic boundaries between 'people like us' and the 'Other'[18].

The research illustrated here is based on narratives emerged during in-depth interviews involving fifteen households in the Dutch neotraditional neighbourhood of Brandevoort. The neighbourhood is a recently-built suburban neighbourhood, which is part of the municipality of Helmond (situated in the province of North-Brabant).

MIDDLE CLASS' PLACE IDENTITY

When people decide to move they (re)consider their place identity. Yet the freedom to choose a residential place and to acquire a property is dependent on peoples' assets. According to Savage et al., property is, alongside bureaucracy and culture, one of the three assets fundamental to class formation. Social groups attempt to preserve these assets for future generations and convert one type of asset into another. Typically, fractions of the middle class aspire to transform their cultural assets into property, with 'the aesthetics of the middle-class residence' playing 'a major part in the exhibition of specific cultural taste and values'[19]. Once middle class incomers have moved to their new home, they 'electively belong' to places by seeking to distinguish

themselves from the 'locals' who might have more established attachments to the place. The former group is likely to identify the beauty and architectural features of a place as belonging to them and to 'people like us', while the latter group emphasize the 'given-ness' of place[20]. Cloke et al. demonstrate that middle class fractions develop lifestyle strategies of elective belonging in rural areas[21], while others show that incomer households draw a symbolic boundary between their 'respectable' newly-built private estates and 'others' living nearby by classifying them as 'tasteless' and/or 'rough'[22]. This process of drawing symbolic boundaries reflects the spatial and social withdrawal tendencies of the upper and middle class in exclusive enclaves[23] or even in gated communities[24].

Diverse studies accordingly underline that the construction of place-identity involves the (re)production of 'contemporary inequality, especially its cultural and symbolic aspects'[25]. This stresses that preferences for a particular locations or styles of development might act as a means of displaying *distinction*. Bourdieu claimed that taste is 'the basis of all that one has - people and things - and all that one is for others, whereby one classifies oneself and is classified by others'[26]. He related taste to inherited cultural capital (acquired by family background) and cultural capital acquired by education, arguing that the higher is someone's cultural capital, the more importance is attached to the representation of something rather than its instrumental characteristics. However, the relationship between cultural capital, taste and the formation of class is more complex than this suggests. In an unequal society, knowledge of cultural artefacts like classical music or art is used as means to represent and legitimate social boundaries. By using their *habitus* as a generative principle, individuals reproduce cultural practices and societal structures (i.e. the possibilities to acquire and employ social, cultural and economic capital).

Although much contested[27], the concept of *habitus* has laid the foundation for a number of studies that have reconsidered class formation as a structuring principle of inequality while giving more attention to the aesthetic, gendered, cultural and moral aspects of this process[28]. The 'culturalist' class approach recognizes cultural identity as 'classed' identity. This does not mean that people explicitly have to identify themselves within 'discrete class groupings for class processes to operate' as all that is required is 'for specific cultural practices to be bound up with the reproduction of hierarchy'[29]. This hierarchy is a fine-grained differentiation (re)produced by economic and cultural practices including the judgement of whether people have the 'right' taste or whether they are morally worthwhile[30]. Morally judging means classifying people (especially women) as respectable or not. In relation to residential life, one example of 'boundary work' is the invention of community-based activities by which participation and a sense of community can be generated. When carried out regularly, these activities become 'invented traditions' 'establishing or symbolizing' the social cohesion *of* 'real or artificial communities'[31]. Moreover, aesthetic judgments of style can also be seen as an example of symbolic boundary drawing. In line with Duncan and Duncan[32], I propose that aesthetic judgement (i.e. taste) is intertwined with the economic *and* visual consumption of property and residential environment including the 'gaze' exercised upon (and over) those who live in specific neighbourhoods[33].

RESEARCH LOCATION: BRANDEVOORT

The suburban neighbourhood of Brandevoort is expected to be composed by 6,000 single-family houses by 2015 of which approximately 3,000 have been built up to now[34]. Here, the developers also wanted to design an identifiable neighbourhood that was 'totally different' from the old urban neighbourhoods of Helmond. In the nineteenth century, the city had developed as an industrial city specializing in textile and metal production. However, since the 1980s industrial production has been in decline. Nowadays, the city has a negative reputation due to its relatively high rate of unemployment and delinquency. The architectural firm Krier and Kohl was asked not

Figure 1. The green zone and moat that divide De Veste from the 'new' suburbs (i.e. the other new parts of Brandevoort). (source: Photograph by author)

to include references to the industrial past but rather to fortified old villages whose remains can still be found in the province of North-Brabant. In my research I focus on the centre of Brandevoort known as De Veste. Here the urban design is based on one-family houses arranged as housing blocks. Of the approximately 900 houses built in De Veste to date, 84 per cent are owner occupied. The average income level of the residents of Brandevoort and its centre, De Veste, is higher than the average for the city of Helmond[35]. (Fig. 1)

My research sample comprised fifteen households with 22 interviewees in the De Veste neighbourhood centre. These homeowners who paid between €200,000 and €500,000 for their dwelling were for the most part/all well-educated and born and raised in the Netherlands. (Table 1)

The research participants were encouraged to reveal personal narratives face-to-face with the investigator about three basic topics: why they decided to move to their present neighbourhood, how they assessed the neohistoricized design and how they experienced everyday life in the neighbourhoods they share with others[36].

	De Veste (Helmond)
Doctor or academic researcher	2
Manager	3
Architect	1
Teacher	-
Journalist	-
Police officer	1
Office or bank employees (secretary, administrative work, accountant, IT-administration, etc.)	10
Nurse	-
Shop assistant	2
(supervision of) metalworker	2
Housewife	1
Total no. Interviewees	**22**

Table 1. Occupations of the interviewees.

Narrative One: The Aesthetic Judgement

All the respondents in De Veste appreciated the architectural aesthetic of their newly-built neighbourhood and claimed that they generated a number of different associations. The brick that appears to be hand-made, the diversity of the facades, and the natural greenery were the most frequently referred features. The interviewees classified these aspects as non-standard and related them to certain 'types' of people, indicating their elective belonging to their new neighbourhood[37]. For example, Frank, a 26 year-old metalworker asserted with enthusiasm:

'I think certain architecture is appealing to a certain type of people. The people living here would really like to live in an Amsterdam' canal-side house but can't afford it. Choosing a house here is the next best thing. They are new; there are no maintenance costs for the coming five years ... Brand spanking new houses with a touch of the nostalgia and an image of yesteryear.'

A middle-aged couple (Dave is an academic researcher and his wife Edith has a university graduate degree but works as a secretary) claimed:

Dave (38): '[*De Veste*] is in principle a suburban neighbourhood which has been built with references to the past.'

Edith (37): 'All the houses are different, in height and colour of the bricks. This makes it more than a run-of-the-mill neighbourhood.'

Dave: 'I would never claim to live in a bog-standard row of houses.'

Edith: 'Me neither, because it doesn't feel like that.'

These quotations are typical accounts of the appeal of historicised aesthetics. The diverse brick facades are regarded as being the direct opposite of other 'placeless' newly-built suburbs, as well as the monotonous row of houses of postwar neighbourhoods which are typical of social housing. In addition, the variety of brick facades reminded almost all respondents of the old Amsterdam' canal-side houses where the elite used to live. The ability to choose variety and historicised aesthetics is a way of constructing a 'respectable' self that belongs to a valued social group: the 'people like us'[38].

Besides historicised aesthetics, greenery also appears to symbolize respectability. The greenery of De Veste is basically situated in the zone surrounding the 'old-new fortress'. A male resident named Felix, a non-college graduate who worked as a manager in the computer industry where he apparently earned a large amount of money (illustrated by the large number of branded furnishings, the price of which he referred to during the interview), claimed that 'a lot of space' was a decisive factor when deciding to move just to the edge of the De Veste 'fortress'.

'We wanted to have a sense of freedom, with no neighbours nearby or on the opposite side. We feel we have a different, special house ... this open space will remain green and open for ever. Farmers and rich people live some way away but the space in front of our house will not be built in the future.'

For some, the 'gaze' upon this green zone and moat (Fig. 1) evidentially prompted the idea of living in a quasi-rural environment. This affinity for nature is something often noted in studies of the middle class[39], with Cloke et al. arguing that rurality is an object of desire across the range of (middle) class fractions[40].

Judging the historicised image of the street

The great majority of residents of De Veste were not keen on people lingering on benches along the streets, associating that behaviour with uneducated 'working-class' residents of an area in Helmond called Het Haagje, and with delinquency and poverty. This suggests that street furniture served a predominantly decorative function rather than actual usage, as discussed by Sarah and Max, the elderly couple mentioned above:

Max: 'Well, they are imitating the image of the 'good old days' by putting a bench out.'

His wife Sarah: 'But they don't use it. It's like that neighbourhood in Eindhoven, the Edison neighbourhood isn't it?'

Max: 'But you have them in Amsterdam as well.'

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Sarah: 'There they often sit out if the weather's good. But now people think it's not the done thing any more […] No. We reckon it looks bad - it's not done. It was all right in the old days […] You see it in neighbourhoods where sort of the lower classes live. They all sit outside together don't they?'

Max: 'No, only in working-class districts, real working-class districts.'

Sarah: 'Yes, and the people love to sit outside together in nice weather and to call to people over the road, to the neighbours opposite. 'Hey mate, fancy a beer?' [*laughs*] That's not our thing.'

Max: 'Let's say we're just not like that.'

The quotations capture how Sarah and Max linked aesthetic and moral concerns in the process of marking the boundary between the 'respectable' and 'unrespectable'. The two quotations illustrate that street furniture here appeared as an instrument for inhibiting social interaction in front of the houses at the same time as consolidating a particular aesthetic. It had to fit in with the perfectly historicised architectural image and to make the 'decent' street visually coherent. Betty, aged 24, a secretary, stated:

'You know what the front gardens end up looking like? We get annoyed at the sand at the front [*of the house*] opposite, and the other stuff - it's not that we're looking out for things to moan about...[*hesitation*]...Well, perhaps we do a bit. But here in the neighbourhood you're so used to everyone keeping it looking beautiful. Everyone planting nice plants and hanging up nice lamps. We once had neighbours opposite who always kept their curtains closed! [*indignant*] Then you sort of think, we pay quite a lot of money and then you have to sit and look at that all day long.'

Her ambition to retain the look of the community represents her uncompromising acceptance of, and hence identification with, 'middle class' norms. The imposed social pressure to maintain a perfect image of the past is evident in more than just this form of self-regulation given the style of fences, awnings and lamps are also subject to local government regulations, with a brochure of approved materials and colours meaning the residents have little choice in terms of how to decorate their houses and gardens. Each resident of De Veste is also required to keep the fences white in colour and low in order to create a homogenous and therefore beautiful look. Here, individuals' desire to personalise residential spaces is counteracted by the need to cultivate a collectively-controlled historicised image.

Narrative Two: Inventing Traditions

The residents of De Veste celebrate their perception of being a community in a similar way. However, they also organize a so-called Dickens Night festival which takes place in De Veste every year in December. Inspired by the literature of Charles Dickens, they have invented an imaginary nineteenth century tradition[41]. For one day, the entire public space serves as a market place for social activities and the sale of goods. Moreover, visitors and residents are encouraged to dress up as characters from the writing of Dickens. (Fig.2)

Most of the interviewees appreciate this event because it sets De Veste off from other suburban neighbourhoods. Goods are put on sale and the houses are decorated in a way that fits in with the nostalgic image of the past. One De

Figure 2. Celebration of the Dickens Night festival in De Veste. (source: photograph by author)

Veste interviewee pointed out that the residents are not expected to 'sell junk'. She was critical of door-to-door salesmen and she emphasised the fact that the Dickens Night event is intended to be a rather chic, art and crafts market. Similarly, some interviewees maintained that anyone who does not decorate the streets in a 'decent' way is not deemed to 'belong' to this neighbourhood. For instance, according to Sally (38), who works as an office employee and who is the mother of two children:

'...then you ought to go and live somewhere else if you... er ... don't want to adapt to this style.'

Here, moral with aesthetic judgements again combine to draw a symbolic boundary between the 'respectable' self and the 'Other'.

CONCLUSION

The recently-built Dutch neotraditional neighbourhoods seem to meet the desire of fractions of the middle class to live in predictable residential spaces where they hope to share daily residential life with like-minded people. As the case study illustrates, neotraditional design features, the visual consumption of community space and the inventing of community-based traditions reinforced a classed place-identity[42]. This suggests that symbolic boundary-making took several forms but the aesthetic judgement of the neotraditional environment is a significant means used by the interviewees to classify themselves as part of a social group perceived as 'respectable'[43]. In addition, taste as an aesthetic and moral concern was a means to control residential space and to impede its change. Therefore the 'innocent appreciation' of historicised architecture served as an 'effective mechanism[s] of exclusion and reaffirmation of class identity'[44].

In the light of this, it is tempting to equate the reasons of appreciation of historical revivalism by the Dutch middle class with motives elaborated in studies in which new urbanisms have been related to the erection of symbolic barriers in order to maintain class exclusivity[45] and regional identities which only make sense in the relation to the 'Other'[46]. However, in the Netherlands the tendency of the 'white', affluent and better educated to isolate themselves in historicised 'insulated spaces'[47] seems to be balanced by policy intervention and the kind of housing production and supply. First of all, class exclusivity of residential space has been undermined by the state regulation that a certain percentage of new suburban housing stock has to be social housing[48]. Secondly, the recently built suburban housing has been part of a national building programme for which the state has provided subsidies for land acquisition and/or improvement of the infrastructure[49] in order to allocate high standard housing schemes, infrastructure and employment to a great number of Dutch urban regions. The housing production itself has been realized by building consortia that share risks and benefits with local authorities generally supervising the design of the urban form and architecture[50]. All these aspects have so far prevented the creation of neighbourhoods for the (upper) middle class with clear spatial boundaries like gates or fences (except for a few exceptions)[51]. Buildings professionals prefer instead to provide a hierarchy of residential places by means of historical references that, following Till, legitimize particular 'regional identities as being normal'[52]. Here, I suggest that an actual legitimisation of territorial boundaries goes beyond what housing producers are able to achieve by themselves. Territorial boundaries only 'work' if residents routinely identify with the offered historicised neighbourhoods and, hence, draw symbolic and social boundaries in the midst of their day-to-day residential life.

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30. Stephanie Lawler, "Introduction: Class, Culture and Identity", *Sociology* 39 (2005), 797.

31. Eric Hobsbawm (1983) "Introduction: Inventing Traditions", in Eric Hobsbawm and Terence Ranger (eds.), *The Invention of Tradition* (Cambridge: Cambridge University Press, 1983), 9.

32. James Duncan and Nancy Duncan, *Landscapes of Privilege. The Politics of the Aesthetic in an American Suburb* (New York and London: Routledge, 2004).

33. John Urry, *The Tourist Gaze* (London: Sage Publications, 2002).

34. Gemeente Helmond, *Masterplan Brandevoort* (Helmond: Gemeente Helmond, 1997).

35. Gemeente Helmond, *Statistisch Jaarboek* (Helmond: Gemeente Helmond, 2007).

36. According to Anthony Giddens, *Modernity and Self-Identity. Self and Society in the Late Modern Age* (Cambridge: Polity Press, 1991), self-identity is conceived as being socially constructed via personal narrative, i.e. 'stories told by research participants (which are themselves interpretive)' as well as 'interpretive accounts developed by an investigator based on interviews and fieldwork observation (a story about stories)': Catherine C. Riessman, *Narrative Methods for the Human Sciences* (Los Angeles: Sage Publications, 2008), 6. People construct narratives to give meaning to themselves, their relationship with others and - last but not least - their relationship with their place of residence. Michael Leyshon and Jacob Bull, "The bricolage of the here: young people's narratives of identity in the countryside", *Social and Cultural Geography* 12 (2011), 159.

37. Savage, Bagnall and Longhurst, *Globalization and Belonging*.

38. Savage, "The Politics of Elective Belonging".

39. Savage et al., *Property, Bureaucracy and Culture*.

40. Cloke, Phillips and Thrift, "The new middle classes and the social constructs of rural living".

41. Non-Dutch readers probably are amazed about the popularity of Charles Dickens in the Netherlands. The authors of the website of the small-sized Charles Dickens Museum (www.dickensmuseum.nl) argue that there was always a lively interest in Dickens since his writings had been translated into the Dutch language (from 1839 onwards). However, particularly throughout the last two decades, Dickens' humorous and not very harsh descriptions of social class differences have been used to invent city festivals that take place around Christmas. Here, 'real' historic or historicised city spaces serve as stage to revitalize characters from his writings. The journalist Van Ijzendoorn claims in his article 'The new Victorians' in the Dutch magazine *De groene Amsterdammer* (2012, no.136, p. 63) that Dickens is much-loved because his stories fit to the Dutch contemporary 'unsecure and therefore nostalgic society'.

42. Watt, "Living in an Oasis"; Savage, "The Politics of Elective Belonging".

43. Bourdieu, *Distinction*; Bev Skeggs, *Formations of Class and Gender. Becoming Respectable* (London: Sage Publications, 1997).

44. Duncan and Duncan, *Landscapes of Privilege*, 4.

45. Dowling, "Neotraditionalism in the Suburban Landscape"; Falconer Al-Hindi, "The New Urbanism".

46. Till, "Neotraditional towns and urban villages".

47. Atkinson "Padding the Bunker", 820.

48. Boeijenga and Mensink, *Vinex Atlas*.

49. Ministry of VROM, *Vierde Nota Ruimtelijke Ordening Extra*.

50. Han Lörzing, "Reinventing Suburbia in The Netherlands", *Built Environment* 32 (2006), 298.

51. Sabine Meier, "'Arabian Kasbah' for sale in Rotterdam. The appeal of a themed and gated residential area for the urban middle classes" (paper presented on the RC 21 Conference Amsterdam, 7-9 July, 2011); Stijnie Lohof and Arnold Reijndorp, *Privé Terrein. Privaat beheerde woondomeinen in Nederland* (Rotterdam: NAi Publishers, 2006).

52. Till, "Neotraditional towns and urban villages", 710

Engineers and Counterculture

SESSION CHAIR:

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Nothing might seem further removed than the world of high-tech engineering and the back-to-the-land movement of the 1960s. But it can be argued that just as the military applications which stimulated the development of light-weight transportable structures provided the inspiration for the domes and the inflatable structures used for pop festivals and the alternative communities of the 1960s and 1970s, the world of engineering was also stimulated by the ecological ideals and traditions of networking of the Counterculture.

Why did the ingenious structural solutions of the engineers – geodesic domes, zomes, inflatable structures – appeal to the young generation of the counterculture? Through campus lectures, magazine articles and other publications, the engineers seemed to offer new possibilities, free from the limitations and discipline of the International Style. The mesmerizing effect of engineer-inventor Buckminster Fuller's long lectures on many campuses inspired many hand-built geodesic domes. It was the students who invited the engineer-architect David Georges Emmerich (1925-1996) to teach at the Beaux Arts School of Architecture in Paris in 1965. Students experimented with pleated surfaces, stackable units and tensegrity structures. This research led to constructive systems using cheap,

industrialised components, with wide scope for self-help housing as well as a broad range of architectural structures. Studying the structure of microorganisms seemed more stimulating than calculating reinforced concrete or steel trabeated systems, and architect and structural engineer Frei Otto demonstrated how to use these experiments in the design of tensile structures. By contrast, the countercultural obsession with ecological principles had a delayed action impact on engineers and architects, stimulated by the 1973 oil crisis. And the countercultural habits of networking and collectivisation prepared the ground for the personal computer revolution and the connectivity of the World Wide Web.

Papers will be welcomed which uncover the paradoxical interaction between sophisticated structures and what the younger generation, influenced by the counterculture, explored in student work or built projects in the 1970s. Similarly, papers which trace the influence of the counterculture on engineering or computing applications will also be welcomed. The focus should mainly be on Europe and its relations with North America.

CONSCIOUSNESS DESIGN

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This essay comprises a formal analysis of a historical object, or a small class of objects, that can only be described as virtual. These were geometrical figures that took both material and immaterial forms. But their materiality is less the issue than their density, as it were; some of these forms were light and transparent while others were compressed, and opaque. The first of these figures took architectural form as a triangulated or polyhedral system of interlocking and interchangeable units that promised economy, flexibility, and the potential for unprecedented aesthetic effects—space frames, in other words. The other class of forms was a more organic architecture that was *brut*, layered, and tactile—a style that Reyner Banham once described as an *architecture autre*.[1]During the period that concerns me here, both of these tendencies had their respective exemplars, who will also serve as my complementary protagonists: R. Buckminster Fuller and Paolo Soleri. Mainly during the early 1970s, these two individuals, and a whole host of other interdisciplinary designers and theorists, were implicated in a series of ideological and morphological reversals, in which their particular geometrical forms were quite literally internalized as figures of human consciousness and its relationship with the external environment. These reversals were, of course, underwritten by the so-called counterculture and the peculiar forms of psycho-spiritual and technological utopianism that it engendered.[2]

As a first example of these reversals, I would offer the story of Carlos Castaneda, a UCLA anthropology student who, in 1968 published a book titled *The Teachings of Don Juan: A Yaqui Way of Knowledge*. In the book, Castaneda recounted trips to Arizona, where he met the Don Juan of the title, a Sonoran Yaqui Indian who was versed in the ritualistic use of peyote, which he used to initiate Castaneda into a supposedly ancient worldview that differed radically from Western rationalism. The book, and its many sequels would become international bestsellers, and seminal texts for the emerging phenomenon of the new age movement. Subsequently, Castaneda himself became something of a guru or shaman. But in the early 70s, when the authenticity of his accounts was questioned, he withdrew from the public eye and founded a cult, complete with orgiastic debauchery, cropped hairstyles, and suicide pacts. Punctuating this bizarre and tragic story is a moment in the early 1990s when Castaneda once again began making public appearances, this time to promote a yoga or kung fu-like method of physical movements, or 'passes' that he called 'Tensegrity'. Acknowledging that the term had been borrowed from R. Buckminster Fuller's description of structures in a state of 'tensional integrity', the practice was defined as:

> … the interplay of tensing and relaxing the tendons and muscles, and their energetic counterparts, in a way that enhances the overall integrity of the body as a physical and an energetic unit, and promotes a conscious awareness of how all the parts of our being—tendon, muscle, bone, nervous systems, organs, etc. work together, integrated by a healthy flow of energy.[3]

Here is one version of the figure whose outlines—whose pattern, if you will—I want to trace more fully. Within this figure is the human subject, whose body is pressed into a series of geometric shapes. This figure, in turn, maintains a dynamic relation with the surrounding environment, from the ground beneath her feet, out into to the cosmos itself. Accordingly—and we can anticipate this having only the most casual acquaintance with mysticism of this sort—the universe, too, has its own geometrical patterns; patterns that the individual must replicate, in miniature, in order to more fully integrate with the larger whole. This integration, predictably, is capable of refining and reorganizing the very consciousness of that individual, allowing him or her to attain to higher states of awareness and wellbeing.

This structural interplay between inner and outer space amplifies the basic logic of modernist design, which has always sought to bring harmony to the relationship between humanity and the built environment. Indeed, avant-garde design historically always called for a 'new man', and has frequently appealed to various forms of mysticism in defining this subject, from Theosophy and Freemasonry, to a perennial concern with Zen Buddhism and Hindu mythology, and the constant pressure of Judeo-Christian belief systems (We have even recently been informed of Le Corbusier's involvement with the 'occult').[4] Commenting on Rudolf Steiner, one of the central figures in this earlier moment of contact between modernity and mysticism, Ernst Bloch wrote a scathing and poetic passage:

> It is not surprising that special dreamers are to be met here too. They are perforated enough to allow unstandardized states to enter into them. That which is deranged has so deranged the limits of the ordinary everyday that it can easily coat the unusual with the

everyday and vice-versa. […] At the peak of "Knowledge of Higher Worlds" the occult journalist Rudolf Steiner established himself, a mediocrity in his own right. A mediocre, indeed unbearable curiosity, yet effective, as if mistletoe were still being broken off here, as if something shoddily druidical were fermenting, soaking, murmuring and chatting on newspaper.[5]

This dreamer, this 'perforated' subject is at the heart of my analysis here, but is impossible to approach except through the material and immaterial structures that are thought to situate him or her in relation to the world around them.

If the historic avant-garde had figured this desire for spiritual and material integration via an appeal to industrial technologies and simple forms, in the decades following WWII, the right angle and the Phileban solids no longer seemed adequate to express the complex relationships between humanity and perhaps the dominant nature-culture hybrid of our era: *the environment*.[6] This job was taken up instead by cybernetics, which promised to explain natural and technical 'ecologies' based upon theories of information exchange and the laws of thermodynamics.[7] The diagrams of the man-environment relation offered by cybernetics immediately found isomorphic models in the work Fuller, among others. Indeed, these complex, topological structures, most of which were arrived at via intuitive means, entered into a mutually affirmative relationship with cybernetics and systems theory that culminated most spectacularly in Fuller's 1975 magnum opus, *Synergetics* (the subtitle of which was *Explorations in the Geometry of Thinking*—which I believe should be taken as literally as possible).[8]

Fuller himself gave a remarkable example of the integration of consciousness and environment in the Introduction to Gene Youngblood's seminal *Expanded Cinema*. Here, he imagined what he qualified as a 'science fiction' scenario, in which all of the world's foetuses inhabited 'a superb telepathic communication system […] interlinking all those young citizens of world around Wombland'. He elaborated this model of group consciousness thus: 'We intercept one of the conversations [in this communication system]: "How are things over there with you?" [asks one foetus] Answer: "my mother is planning to call me either Joe or Mary. She doesn't know that my call frequency is already 7567-00-3821"'. After this light exchange, however, the intercepted conversation takes a darker turn:

"I'm getting very apprehensive about having to 'go outside'. We have been hearing from some of the kids who just got out—They say we are going to be cut off from the main supply. We are going to have to shovel fuel and pour liquids into our systems. We are going to have to make our own blood. We are going to have to start pumping some kind of gas into our lungs to purify our own blood. We are going to have to make ourselves into giants fifteen times our present size. Worst of all, we are going to have to learn to lie about everything. It's going to be a lot of work, very dangerous, and very discouraging".[9]

The Wombland fable served two purposes: it allowed Fuller to offer a quasi-mystical metaphor of literally expanded consciousness that would resonate with the counterculture audience for Youngblood's book, and it also allowed him to deliver his perennial message that a new form of global design was the only way that humanity might save itself from naturally or artificially induced extinction. But in order for this new utopian project to take shape, the patterns connecting us to our social, global, and even cosmic systems had to be defined. While Fuller was hard at work on this task, so, too, were a host of others, who, like him, were holistic visionaries from a multitude of different backgrounds. Some of the most famous names in this regard were Norbert Wiener himself, the founder of cybernetics, anthropologist Gregory Bateson, naturalist Rachel Carson, scientist Ervin Laszlo, literature professor Marshall McLuhan, biologist René Dubos, renegade Jesuit priest Pierre Teilhard de Chardin, psychologist Abraham Maslow, and so on.[10] This discourse engendered a certain holistic approach in architecture and design circles as well, led, besides Fuller, by Gyorgy Kepes, Siegfried Giedion, John McHale, Konrad Wachsmann, and, as we will see, Paolo Soleri.[11]

The results of this research were wildly variegated, and played out in academic and clinical journals, avant-garde manifestos, and a new class of popular literature that mixed scientific, aesthetic, and spiritual speculation, which very quickly gave way to what we now know as the New Age and 'self-help' movements. At the heart of all of these initiatives was the thinking subject, and the question of just how and where this subject was situated relative to the actual patterns of society, the environment, and the universe. Accordingly, the underlying ethical question of these various enquiries was essentially the same: was humanity capable of sloughing off the trappings of individual ego to unite in a new form of community, embracing what Freud had famously described as an 'oceanic feeling',[12] or would the insights gleaned from a systemic understanding of man's place in the universe be turned toward more self-serving ends? In other words, could consciousness evolve? And, if so, how could design facilitate its evolution in the most desirable direction?

Undoubtedly, Paolo Soleri was the leading architect to attempt to answer these universal questions. He did so by adapting both cybernetics and new models of consciousness to his theories of architecture and ecology. Following Teilhard, and other holistic thinkers, Soleri insisted that systems should not simply strive for a state of equilibrium, but should actually evolve over time, and that, much like organic and mineral structures, human establishments were capable of undergoing a similar process of refinement, of complexification of form and function. Surprisingly, this did not lead Soleri to a morphology of expansion, but to one of contraction; what he called urban implosion. This is why Soleri's Arcologies seem to rise from the earth in an Heideggerian

fashion, striving upward, only to involute upon themselves, dividing and individuating into complex, symmetrical interiors. This simultaneous transcendence and introspection was a material analogue for the human spirit, which Soleri believed could either continue its cosmological journey of evolutionary progress, or melt away into a nightmarish suburban entropy.[13]These ideas took on a new sense of urgency when Soleri broke ground on an ambitious urban experiment called Arcosanti in Cordes Junction, Arizona in 1970. The ostensible reality of Arcosanti drew (and continues to draw) believers from a variety of backgrounds, from dropouts to industrious architecture students. Of course, this lent Soleri the aura of something of a mythical figure himself, a guru leading the faithful into the desert to establish a new form of civilization.

Interestingly, though, Soleri's work came to occupy an ambiguous position within the counterculture.[14] While he located himself in the American desert, and advocated for an ecological model of design, much like his countercultural contemporaries, his Arcologies lacked the spontaneity and democratic impulse of geodesics, inflatables, video cameras, and other *ad hoc* applications of contemporary technology. But they also lacked the free-wheeling spirituality of the holistic philosophies that were taking shape simultaneously. Soleri did not so much want to expand human consciousness, but to concentrate it. William Irwin Thompson, one of the best-known cybernetic spiritualists to emerge from this context, captured these ambiguities by contrasting Soleri to Carlos Castaneda: 'For Castaneda isolation in the desert is a psychedelic technique for projecting the unconscious, but for Soleri the desert is the Archimedean place to stand to move the cities of the earth. Soleri does not indulge in youth-culture fantasies about mysticism and nature […]'.[15]

Soleri acknowledged his distance from the counterculture via the trope of deprivation. In his view, the hippies, in their quest to eliminate all forms of alienation from one another had inadvertently gotten rid of all the good things about culture as well, becoming, in his words (and those of Desmond Morris) little more than 'naked apes'.[16]Soleri contrasted himself to Fullerin analogous terms: 'Even though Fuller may tell us we will never run out of resources, we must now accept frugality. What I am advocating is not squalid *survival*, but a rich life[…]'.[17](For his part, Fuller once paid Soleri the backhanded compliment of calling him 'one of the greatest of the dreaming strategists'.)[18]The formal distinction is clear here as well. If Fuller had wanted to map *a priori* 'geometries of thinking', and decenter the subject in a vast and ultimately homogenous series of immaterial structures or frames, Soleri, conversely, wanted to create 'the city in the image of man', building it up from the earth in thick, crystalline, almost gothic forms whose density reflected the richness of the human spirit.

These opposed patterns reflected a fundamental ambivalence about the nature of post-industrial society. Was human consciousness one small component of a vast Cartesian projection, or the centre of a crystalline accretion? Was the designer to be a rational, Archimedean engineer, or a spiritual dreamer? And, finally, was consciousness to be the agent or the object of design? Were people privileged centres or perforated egos? This is precisely the moment where we can identify the formal pattern of an ideological reversal; where the forms I have been describing are turned inside out, or *vice versa*. The subject, inhabiting the precise point at which inner space meets the external environment is the locus of these reversals, in which consciousness expanding mysticism in the spiritual can so easily become ideological mystification. Max Horkheimer and Theodor Adorno described these reversals as the dialectic of enlightenment, in which 'the paradoxical nature of faith ultimately degenerates into a swindle, and becomes the myth of the twentieth century; and its irrationality turns it into an instrument of rational administration by the wholly enlightened as they steer society toward barbarism'.[19] It is the insistence that the mind shares a physical or formal structure with the environment that makes this reversal possible; how Fuller's synergetic view of the universe becomes Castaneda's method for programming members of a mystical cult, or how, conversely, at the heart of Soleri's profoundly mystical conception of spiritual evolution, is the classical enlightenment subject, replete with a keen rationality and free will. Formally, it becomes difficult to identify which subject is more 'perforated' within and by these material and conceptual structures.

One alternative to the dichotomous nature of these questions came in the form of the radical materialism of philosopher Gilles Deleuze's and psychoanalyst Félix Guattari's *Mille plateaux*, wherein the authors described a hybrid kind of subject. This nomadic 'body without organs', as they famously described, was both a material singularity, but also a porous entity, penetrated by the networks and flows of both nature and culture. *Mille plateaux* is perhaps one of the last, great holistic statements of the late twentieth century, compiled and written in France beginning in the 1960s, but not published until 1980. In it, we find the seeds of contemporary critical theory, and vestiges of the formal structures of the counterculture as well. Indeed, Carlos Castaneda features quite prominently in Deleuze's and Guattari's formulations, where they often use his ideas to articulate the formal patterns that constitute the deterritorialised subject they are attempting to describe:

> In the course of Castaneda's books, [they write,] the reader may begin to doubt the existence of the Indian Don Juan, and many other things besides. But that has no importance. So much the better if the books are a syncretism rather than an ethnographical study, and the protocol of an experiment rather than an account of an initiation. […] Castaneda illustrates, for example, the existence of a molecular perception to which drugs give us access (but so many things can be drugs): we attain a visual and sonorous microperception revealing

spaces and voids, like holes in the molar structure. That is precisely what clarity is: the distinctions that appear in what used to seem full, the holes in what used to be compact; and conversely, where just before we saw end points of clear-cut segments, now there are indistinct fringes […]. Everything now appears supple, with holes in fullness, nebulas in forms, and flutter in lines.[20]

The patterns described by Deleuze and Gattari are a combination of the geometries of Fuller and the accretions of Soleri. They are both expansive and implosive; they have a temporality, but not a teleology. And, perhaps most importantly, their patterns offer us a view of a composite humanity, no longer whole and autonomous, but perforated by ethereal energies and the flows of matter. In this view, man is no longer at the centre of the natural and technical systems surrounding him, and he thereby may be freed from the impossible task of balancing their energetic and spiritual dynamics, as well as from the imperative of never ending design.

Endnotes

1. Reyner Banham, "The New Brutalism," *Architectural Review* (December, 1955), 355-361.

2. On the counterculture and its impact on art and architecture, see the recent publications: Felicity Scott, *Architecture or Techno-Utopia* (Cambridge: MIT Press, 2007); Caroline Maniaque, *French Encounters with the American Counterculture 1960 – 1980* (London: Ashgate, 2011); and Elissa Ather and Adam Lerner, eds., *West of Center: Art and the Counterculture Experiment in America, 1965 – 1977* (Minneapolis: University of Minnesota Press), 2012.

3. Unknown author, www.castaneda.com, accessed February 8, 2012. See also Carlos Castaneda, *Magical Passes* (New York: Harper Collins, 1998).

4. J.K. Birksted, *Le Corbusier and the Occult* (Cambridge: MIT Press, 2009).

5. Ernst Bloch, *The Principle of Hope,* trans. Neville Plaice, Stephen Plaice, and Paul Knight (Cambridge: MIT Press, I986), vol. 3, 1184-1186; Quoted in Benjamin Buchloh: "Beuys: The Twilight of the Idol: Preliminary Notes for a Critique," *Artforum* 18, 5 (January 1980), 35-436. On nature-culture hybrids, see Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge: Harvard UP, 1993), *passim*.

7. The architectural application of cybernetics has been well documented, most significantly by Rheinhold Martin in his study of the corporate design of the 1950s. Reinhold Martin, *The Organizational Complex* (Cambridge: MIT Press, 2003).

8. R. Buckminster Fuller in collaboration with E.J. Applewhite, *Synergetics" Explorations in the Geometry of Thinking*, 2 vols. (New York & London: Macmillan Publishing, 1975 - 1979).

9. Buckminster Fuller, "Introduction," in Gene Youngblood, *Expanded Cinema* (New York: EP Dutton, 1970), 15-16.

10. On some of these figures and their role in postwar U.S. history, see Linda Sargent Wood, *A More Perfect Union: Holistic Worldviews and the Transformation of American Culture after World War II* (Oxford & New York: Oxford UP, 2010).

11. On Giedion and Kepes, see Martin, *The Organizational Complex*; on John McHale, see Anthony Vidler, "Whatever Happened to Ecology? John McHale and the Bucky Fuller Revival," *Architectural Design* 80, no6 (November/December, 2010), 24-33; on Wachsmann, see John Harwood, "Konrad Wachsmann and the Digital Metaphysics of Architecture," forthcoming.

12. Sigmund Freud, *Civilization and its* Discontents, in James Strachey, ed. *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XXI (1927-1931): The Future of an Illusion, Civilization and its Discontents, and Other Works* (The Hogarth Press and the Institute of Psycho-analysis, 1961), 64. Freud borrowed the phrase from Romain Rolland, a famous mystic instrumental in popularizing the teachings of Swami Vivekananda, whose revival of yoga foreshadows Castaneda's Tensegrity.

13. I discuss these ideas further in Larry Busbea, "Paolo Soleri and the Non-Organic Life of Architecture," in Jamie Kruse & Elizabeth Ellsworth, eds., *Making a Geologic Turn*, forthcoming.

14. Anecdotal evidence abounds of responses to the 1970 show at the Corcoran Gallery, and of hopeful participants leaving the Arcosanti workshops disillusioned. On the former, see Henryk Skolimowski, "Paolo Soleri: The Philosophy of Urban Life," *Architectural Association Quarterly* 3 (1970), 41.

15. William Irwin Thompson, *Passages About Earth: An Exploration of the New Planetary Culture* (New York: Harper & Row, 1973), 38.

16. Paolo Soleri, *The Bridge Between Matter and Spirit is Matter Becoming Spirit* (Garden City, NY: Anchor Books, 1973), 127-128.

17. Soleri quoted in J.M.D., "Job Site for Utopia," *Progressive Architecture* 54 (Winter, 1973 -4), 79.

18. Fuller quoted in Skolimowski, "Paolo Soleri," 40.

19. Max Horkheimer and Theodor Adorno, *Dialectic of Enlightenment*, (New York: Continuum, 2002), 20.

20. Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, Brian Massumi Trans. (Minneapolis: University of Minnesota Press, 1987), 161, 227-228.

FROM DIFFERENCE WITHIN STRUCTURE TO DIFFERENCE IN ITSELF: ARCHITECTURAL MORPHOLOGY IN THE ISRAELI SCENE c. 1970

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The phrase 'architectural morphology' designates the study of form in architecture and its processes of conception, transformation and classification. It therefore implies an inquiry into the nature of spatial arrangement; that is, the order and structure of architectonic space.[1]In twentieth century architecture, such an investigation into form usually carried with it the intention of questioning received ways of structuring space, thereby favouring an operative approach that exceeded sheer analysis.

It was between the late 1950s and the early 1970s that architectural morphology reached a striking peak. While the foundations of post-modernism were seemingly being laid elsewhere, a great deal of architects, artists and engineers –many of which have remained outside of mainstream discourses–developed a number of research projects, both in Europe and the US, through which they sought to challenge what they understood to be traditional ways of envisioning the organization of architectural form. This work involving morphology at an architectural scale can be loosely grouped into two different traditions.[2] On the one hand, a strand whose protagonists were frequently associated with the term 'informal' and a more or less recurrent preoccupation with the question of *surface topology* includes Frederick Kiesler (1890-1965) as one of its earliest representatives, and other architects and artists such as André Bloc (1896-1966) and Vittorio Giorgini (1926-2010). A second set of authors, more commonly identified with the term 'morphology' per se, showed a marked interest in applying quite literally pure geometrical models when conceiving architectural design. This group comprises some well-known names like Alfred Neumann (1900-1968), Anne Tyng (1920-2011) and MosheSafdie (1938-), as well as other figures that have remained unstudied to date, such as Keith Critchlow (1933-), Michaël Burt (1937-) and Peter Pierce (1936-), to mention but a few. The core of the latter trend is constituted primarily by architects that came out of the Israeli scene in the late fifties and sixties, namely Neumann, Safdie and Burt. It will be particularly on the work and writings of these three architects that I shall focus on in this paper.

ALFRED NEUMANN AND THE BASIS OF ARCHITECTURAL MORPHOLOGY

Czech-born architect and theorist Alfred Neumann posited 'morphology' as a science through which to study and instrumentalise the formal lawfulness of three-dimensional structures –both of the natural and theman-made environments. On the one hand, he looked at the formal evolution of a number of historical archetypes, from domestic architecture and cupolas to igloos and other vernacular constructions. Though most notably, his main drive led him to establish an experimental rapport with the forms of nature. Through careful observation of certain spatial arrangements of the living world –such as those built by wasps and bees[3]– Neumann sought to extract their underlying formal laws and examine them scientifically in order to determine their spatial possibilities.[4] His goal was to define what he termed 'a grammar of space', that is, a set of formal criteria that would enable him to explore the limits of Euclidean geometry–which he considered 'far from being fully exploited'[5]– beyond rectangular prismatic patterns. This research path led Neumann to promote the validity for architectural design of a number of geometric and morphological principles thatended up setting the basis for the whole of the Israeli discourse, namely the relation between cell and aggregate, the potential of topological transformations[6] and the operativity of three-dimensional space packing. The latter, in particular, became the hallmark of Neumann's work as a designer as well as the concern that mediated between architectural morphology, more broadly, and one of its main sources of inspiration: crystallography.[7]Just as crystallography concerns itself with the regular subdivision of space, space packing –also known as 'closepacking'– deals with the study of specific polyhedra which, when placed together in space, leaves no spaces unaccounted for.[8]Moreover, by placing such an emphasis on the problem of the subdivision of space Neumann set out to recast the nature of space-packed architecture as three-dimensional ornament in and of itself. The ornamental quality of crystallographic aggregations, so he believed, was due to the high density of elements to be found within a given section of space, whether the aggregation was deployed on a plane or in space. In his seminal essay 'Architecture as Ornament' of 1969, he attempted to prove how this ornamental order may be coded in architectural terms when three-dimensional crystallography is used as a model for conceiving architectonic spatial arrangement.[9]

Now, this approach may certainly be located within the tradition of *biological structuralism*.[10] Yet when examining Neumann's theoretical and design production at large, a marked humanism emerges that further complicates the depiction of his architectural

thinking. In 1956, he published in French his only book, *L'Humanisation de l'Espace: Système M Φ*. In this volume, he discussed his idea of 'humanized space' and the need for its pursuit in contemporary society. The definition of this humanized space would be accomplished through an abstract system of proportion that Neumann developed accordingly, i.e. driven by his aspiration to rationalize, via geometry and mathematics, the kind of space that would be most suitable to be appropriated by the sensible body.[11] Thus, the breaking down of space into ever-smaller units which resulted from space packing constituted Neumann's particular effort to make architecture relate to the human scale.

DEFINING ARCHITECTURAL MORPHOLOGY'S GRADIENT: MICHAËL BURT VS. MOSHE SAFDIE

The speculative practice of Michaël Burt and the early work of Moshe Safdie, being somewhat antagonistic, define the spectrum in relation to which the various positions in architectural morphology may be construed.

More extremely so than Neumann's, professor Burt's research epitomizes the scientific approach to architectural morphology.[12] His work, up to the present, has been primarily centred around the study of systems of space subdivision, both open and closed, that achieved continuity through periodicity. These systems were based, for the most part, upon the space packing of polyhedra with double-curved surfaces –otherwise known as 'saddle polyhedra' (Fig. 1) – with incidental reference to analogous cases with planar surfaces.[13] Burt advocated for periodicity as he believed it to be a crucial economic factor to be taken into consideration when envisioning spatial configurations in architecture. Periodicity here being directly linked to standardization and industrialization, the possibility of repeating spatial units would lower costs of production as well as speed up construction processes.[14] In his search for structural efficiency, then, and inspired by soap-solution films, he aimed to explore the possibilities of so-called 'minimal surfaces' for architecture. This term designates double curved surfaces across which load transmission runs solely through tensile and compressive membrane stresses, or in other words, surfaces in which flexure has been reduced to zero.[15] Taken as a form finding

process, therefore, it can be said that a strong aesthetic determinism underlies the production of minimal surfaces.[16] Also, as Burt pointed out on a number of occasions, the unique configurational properties of these kinds of systems stem from the fact that the continuous surface divides the space into two identical halves (or sub-spaces) which never meet, for the surface itself constitutes the very partition between those.[17]

The Ukrainian architect thus distinguished his composite patterns of dispositional continuity from what he considered a "static approach" to the structuration of space based on 'isolated forms'. As opposed to the latter, Burt was convinced that his investigation was able to yield a virtually inexhaustible source of spatial arrangements to be employed for architectural purposes.[18] Indeed, despite the emphasis on theoretical experimentation, Burt insistently strove to prove the applicability of his formal speculations for *real* architecture.[19] For example, in his doctoral thesis he devoted an entire chapter to possible architectural applications of spatial patterns with doubled-curved surfaces.[20] Those turned out to be mostly roof structures –either large span, continuous periodic or single-span– of which Burt managed to build a few.[21] In addition, even if in a more marginal fashion, he also ventured into suggesting some ideas as to how to turn his geometric systems into the basis of actual buildings.[22]
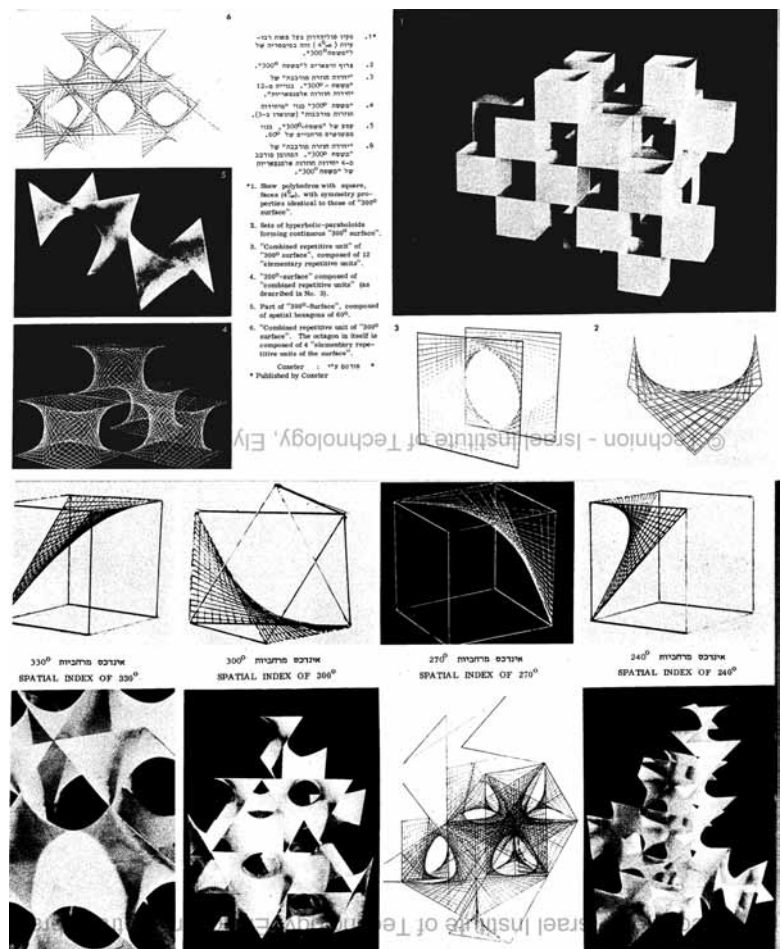
Figure 1. Michaël Burt. Space packing of polyhedra with double-curved surfaces. From Michaël Burt, *Spatial Arrangement and Polyhedra with Curved Surfaces and their Architectural Applications* - Doctoral Thesis (Haifa, Israel: Technion, Israel Institute of Technology, 1966): 23, 30. (source: Courtesy of the Technion Israel Institute of Technology, Elyachar Central Library)

At the other side of architectural morphology's gradient is the work that Israel-born architect MosheSafdie developed during the late sixties and early seventies, for unlike Burt he primarily aimed to put technology at the service of social problems. At that time, the Israeli architect was interested in the city, particularly in confronting the environmental crisis –pollution, lack of decent housing, infrastructure shortage, etc.– that had been motivated by the rapid growth of the urban metropolis. In order to face this challenge, Safdie came up with his own version of the three-dimensional city. In it, the sub-division of *land* and the building-as-entity were abandoned in favour of the sub-division of *space* and the grouping of different programs within a single megastructure. In such a dense urban settlement, he then sought to offera small open space and the sense of privacy that would mirror the original features of the rural family house, as he considered that the processes of rapid urbanization had ignored these fundamental living standards. The arrangement of the 'space cells' comprising thesemegastructures was conceived in such a way that a certain degree of diversity would be achieved through repetition (Fig. 2). Safdie claimed that, in operating thus, it would be possible to provide a specific sense of location and self-identity within a community structure that had otherwise been built on the principles of standardisation.[23] Safdie's attention to the user is thereby to be contrasted with that of Neumann; the former fostering a kind of individualism and well-being through the structuration of urban form, the latter focusing on the question of proportion as this determined the relation of the human body with architectural space.

It is plain that Safdie's conception of architectural morphology differed significantly from those of other Israeli architects. Neumann's fixation with the ornamental qualities of spatial arrangements seemed to be focused on aesthetic effects as these are meant to both be experienced by the user and fulfil the architect himself as a creative designer. Since the program of the individual units or 'space cells' characteristically comprising his buildings, so Neumann believed, could and actually would vary over time, the Czech submitted the design criteria of those units to the inherent spatial order structuring the entire building, rather than to function or use.[24] Yet if in Neumann's buildings spatial considerations were relatively independent from social facts (namely

usage), Burt's research work would represent the radicalization of such an attitude, for he would not even carry out his formal researches as architectural projects in the first place, yet would search for an application *a posteriori*. Therefore, due to the self-reliant nature of the laws regulating their formal structures, both Neumann's and, specially, Burt's contributions appear closer to the scientific approach to architectural morphology.[25] Conversely, Safdie conceived his 'space cells' –i.e. the boxes of his famous Habitat project of 1967– as programmatic units in and of themselves, in such a way that their specific shape and configuration was pitched against the use they were intended to serve.[26]Indeed, from the spatial arrangement of the space cells and their specific layout, to the question of prefabrication; for Safdie the rapport between form and social agenda played a defining role, as did the attention to environmental factors and even the creation of employment linked to processes of industrialization.[27]

Two different kinds of 'functionalisms' are thus found collapsing here: on the one hand, the functionalism of the 'form follows function' motto, in a certain way applicable to Safdie's work; on the other hand, the functionalism of the architects who understood architectural morphology as something of an autonomous science. Indeed, while the disregard for social facts characteristic of their formal experiments

Figure 2. Moshe Safdie. New York Habitat Scheme I, in New York City (1967). (source: *Zodiac*, no. 19 (1969): 184)

might lead to think that he latter authors should instead fall into the category of a marked 'formalism', this second kind of functionalism alludes to the function of an element within a larger whole as it is determined by a set of internal regulatory principles, rather than external ones.[28]

FROM DIFFERENCE WITHIN STRUCTURE TO DIFFERENCE IN ITSELF

Now, I have hitherto problematised the debate around morphology in the Israeli architectural scene by discussing some of the differences among its defining positions. By way of conclusion, I would like to illustrate the way in which the notion of *difference* per se brings all those positions together.

More precisely, it is the question of *difference within a given structure*, as I briefly touched upon earlier, that appears central to the nature of architectural morphology,[29] and in this sense it is no wonder that the authors associated with this label have often lent itself to be discussed within the context of structuralism.[30] Let us recall, however, that not only morphology has been linked up with structuralist agendas. Significantly, so too was the case of the production of a group of Dutch architects led by Aldo van Eyck and known as the 'FORUM group'.[31] This collective advocated for conceiving buildings as systems, rather than *figures*. Endeavouring to tackle the need for large-scale housing in a 'humane' way, van Eyck called for an extension of aesthetic sensibility in order to embrace the kind of architecture that resulted from the standardization of building components, the repetition of dwellings into housing units, and of units into housing groups. This new sensibility was promoted under the idea of "the Aesthetics of Number" and its correlative, that of 'configurative design'. While the grouping together through repetition and rhythm would eventually yield differentiation, the units to be repeated were designed according to the principles of functional indeterminacy so as to facilitate program changes over time.[32] Undoubtedly, the resonance of these principles with those of architectural morphology is rather evident.[33]

The relentless repetition of a spatial unit into a larger whole created the impression of a strongly pre-determined structure. However, a generic enough design for those units would allow individual expression to emerge, while their non-homogeneous three-dimensional arrangement was meant to foster identification with a specific location within a pre-established spatial system. This kind of difference, therefore, was one that was subsumed to, and dependent upon, a particular structural order, arguably a typical structuralist tenet. Nevertheless, I am going to argue that this structuralist analogy constitutes an uneasy one vis-à-vis the way architects involved in morphology expected difference to arise. Transformations involving change of use and individual expression could not but be inextricably bound to time, yet a diachronic view of the development of difference appears incompatible with the synchronic, static, ahistorical character of the structuralist notion of structure.[34] Alternatively, one might begin to think about the way in which difference generates itself over time and thus study the relationship of such a temporal process with the problem of repetition.

Now, this proposition echoes early Deleuzian ontology in a way that the discursive rapport, in my view, cannot be overlooked. Indeed, right around the time when architectural morphology was gaining momentum –the late sixties– the French philosopher set out to think the question of *difference in itself*, the kind of difference that *just* distinguishes itself, as opposed to distinguishing itself from something else.[35] *Pure difference* –as termed by Deleuze– is to be considered in its 'unilateral distinction', in its determining itself, as in the difference that is made in the expression 'to make the difference'.[36] Furthermore, for Deleuze the notion of difference in itself connects and coalesces with that of *complex repetition*. Repetition was usually posited as simple, bare repetition, a mechanical repetition of the same element which, being invariable, cannot escape sameness in its form of expression. However, simple repetition, Deleuze claimed, would find its basis 'in the more profound structures of a hidden repetition in which a "differential" is disguised and displaced'.[37] This 'hidden repetition' is referred to as 'complex', one which, in being variable, includes difference within itself, has difference as its mode of presentation. Complex repetition involves elements that multiply or in any way reflect each other, even though they may be disguising its own temporal play of differences and variability.[38]

It is, then, self-evident that the phenomenon of complex repetition may only take place in time. 'The rule of discontinuity or instantaneity in repetition tells us that one instance does not appear unless the other has disappeared. […] [R]epetition disappears even as it occurs',[39] wrote Deleuze himself: in this appearing and disappearing, repetition –and by extension its bound up play of differences– cannot be separated from the progression of time. Yet within this conceptual framework, other aspects arise that are equally relevant to the account of the nature of difference in architectural morphology. Namely, it is precisely the fact that pure difference is inextricably tied to complex repetition what enables to address the relation between the repetition of elements –whether spatial units or otherwise– and the development of difference as it was envisioned by the architects involved in morphology. Let us recall that the structuralist project, instead, concerned the distribution of differential relations within a space of coexistence called 'structure', without regard for repetition as a core tenet. Lastly, confronting the problem of difference

in itself places an emphasis back on the element –or alternatively, on the relationship element-to-element, in its reflecting the phenomenon of repetition– and away from structure. That is to say, the very isolation of the problem of difference implies its raise above structure, and in this very transcendence it allows for the characterization of the element that renders itself different over time. 'Element' would thereby no longer be construed as hierarchically inferior to 'structure'.

It is far from my intention, though, to impose a Deleuzian reading of architectural morphology. Rather, my briefly discussing his conceptual construct of *difference* ought to be seen in its illustrative purpose. It constitutes but a heuristic instance leading to my larger claim, namely a shift from structuralism (prevalence of structure) to the metaphysics of difference (prevalence of the way in which an element or *cell* makes itself different); that is, a move away from a philosophy of *order* and towards a critique of *identity,* when invoking an intellectual framework for architectural morphology. Indeed, one could speculate that the analogy between architectural morphology and structuralism may have been first triggered by an impulse to account for a certain imagery of 'structures', and not by a preoccupation to establish any ontological grounds whatsoever. Aiming for a *theory of difference* in architectural morphology may very well be the way to go, in which case, however, I would like my remarks to be considered nothing but prolegomena and notes pointing in that direction.

Endnotes

1. For a more comprehensive definition of 'architectural morphology' see Michaël Burt and Ami Korren, 'Rigid Edge, Building Attached Membrane Structures. Case Study: Amado Roof Structure, Technion - Israel'(IASS Symposia. Beijing, China, 2006).

2. It should be noted from the outset that, while related, architectural morphology is to be distinguished from 'urban morphology'. The latter, perhaps more often invoked within the field of architecture, refers to the ways in which human settlements can be studied *vis-à-vis* their processes of formation and evolution.

3. The efficiency –both material and in terms of the use/floor area ratio– with which these natural structures were erected proved an invaluable lesson for Neumann's understanding of generative processes of form. See Rafael Segal, *Unit, Pattern, Site: The Space Packed Architecture of Alfred Neumann 1949-1968* (Unpublished Dissertation, Princeton School of Architecture, 2011):102.This dissertation has presented for the first time Neumann's personal archive.

4. In relation to these kinds of findings, Neumann wrote: 'one could follow the way from cell to cell (aggregate), the transformation of shape and dimension which the element undergoes, the laws and symmetries determining the shape of the aggregations'. In Alfred Neumann, "Morphologic Architecture," *Zodiac*, no. 16 (1966): 136.

5. Ibid: 139.

6. 'Two geometric objects (each a set of points in Euclidean 3-space) are topologically equivalent if, and only if, there is a biunique, bicontinuous transformation carrying one into the other', in Bonnie Madison Stewart, *Adventures Among the Toroids; a Study of Quasi-Convex, Aplanar, Tunneled Orientable Polyhedra of Positive Genus Having Regular Faces with Disjoint Interiors*, Tall search book no. 1 (Okemos, Michigan, 1970): 26.

7. For an elaborate study of the role of space packing in Neumann's architectural thinking see chapter 2 in Segal, *Unit, Pattern, Site: The Space Packed Architecture of Alfred Neumann 1949-1968*.

8. These spatial units are usually polyhedra of various kinds whose complexity is space packing's object of research as well. For an extended discussion of the problem of space packing see Keith Critchlow, 'Closepacking',*Zodiac*, no. 22 (1972): 172-178.

9. In a statement condensing this kind of 'pattern thinking', Neumann wrote: 'If it is admissible to consider ornament as two-dimensional crystallography, it is equally justified to call crystallography and with it architecture a three-dimensional ornament. For architecture is related to crystallography from the space packing point of view'. In Alfred Neumann, 'Architecture as Ornament',*Zodiac*, no. 19 (1969): 94. In many ways, three-dimensional space packing maybe seen as a projection in space of traditional two-dimensional pattern thinking.

10. In broad terms, biological structuralism involves the establishing of structural analogies with the living world, or more precisely, the description and abstracting away of the structures behind the forms of nature such that they can be rendered differently in different material realms. One of the earliest exponents of biological structuralism was Scottish biologist and mathematician D'Arcy Wentworth Thompson (1860-1948), mainly known as the author of the 1917 book *On Growth and Form*.

11. *The Humanization of Space: the System M PHI*, my translation. See Alfred Neumann, *L'humanisation de l'espace: la système M Ph.*(Boulogne-sur-Seine: Éditions A.A., 1956).Segal has shown that the tradition of the relationship between systems of proportion and the search for a humanized unit of space can be traced back, at least, to the immediate aftermath of WWII. See Chapter 1 in Segal, *Unit, Pattern, Site: The Space Packed Architecture of Alfred Neumann 1949-1968*.

12. Despite a number of occasional teaching experiences overseas –notably at Carbondale and Yale in 1971– Professor Burt's research work has been associated with the Israel Institute of Technology since 1963, when he started teaching at the Faculty of Architecture and Planning of that institution. Later in his career he served as the dean of the Faculty during two different periods, 1977-79 and1989-93, the same position Neumann himself had held between 1953 and 1958. Burt's popularity within the School remains to be studied: it is noteworthy that Zvi Hecker, Neumann's partner during the sixties and occasional professor at Technion, claims that he does not know Professor Burt 'personally'. From Zvi Hecker, interview with José Aragüez, May 2nd, 2011.

13. Even if somewhat more rudimentary and less ambitious in scope, there is a revealing precedent to Burt's project on the aggregation of polyhedra in the work of Spaniards Miguel Oriol and Antonio Carrillo. See Miguel Oriol and Antonio Carrillo, 'Investigaciones Sobre Ordenacion del Espacio',*Revista*

Nacional de Arquitectura, no. 55 (July 1963): 28-38.The work of Oriol and Carrillo gained some international recognition as proven by the subsequent publication of his research in L'Architectured'Aujourd'hui. See Miguel Oriol and Antonio Carrillo, 'Recherches pour la Comprehension et l'Ordonnancement de l'Espace',*L'Architecture d'Aujourd'hui* 34, no. 117 (November 1964): 102-105.

14. This motivation alone might be read as implicit in Neumann's work as well. However, the aspects I discuss hereafter, central to understanding Burt's work, will clearly set him apart.

15. According to Burt, it was in minimal surfaces that the material achieved its 'moment of truth' *vis-à-vis* the structural properties of the resulting surface –soap films being the direct source of inspiration: '[a] film stretched over a closed spatial perimeter represents the 'ideal configuration' as regards the ratio of material input to resulting surface area, with minimum numbers of points of support'. In Michaël Burt, *Spatial Arrangement and Polyhedra with Curved Surfaces and their Architectural Applications - Doctoral Thesis* (Haifa, Israel: Technion, Israel Institute of Technology, 1966): I.

16. Burt would probably endorse this claim himself. In reference to the external appearance of minimal surfaces being essentially but the result of the forces acting within them, he pointed out repeatedly that creativity gained in 'objective validity' and became more 'impersonal' when following his method of producing form.

17. See Michaël Burt, *Spatial Arrangement and Polyhedra with Curved Surfaces and their Architectural Applications - Doctoral Thesis*: 128. Later on in his career Burt called attention to the fact that, even though the spaces confined by two-manifold envelopes were commonly referred to as interior and exterior, 'telling which is which is a relativistic notion'. In Michaël Burt, *The Periodic Table of The Polyhedral Universe* (Haifa, Israel: Technion, Israel Institute of Technology, 1996): 8.

18. For he lamented the designer's lack of 'formal culture': 'The number of forms which had acquired a name or a specific notation through the ages is amounting to infinity, although the number of those which comprise our day-to-day formal vocabulary is extremely (and regretfully) limited, by comparison, even amongst designers and architects, whose profession, by definition, compels them to manipulate and articulate forms and space'. In Michaël Burt, *The Periodic Table of The Polyhedral Universe*: 8.

19. In this sense, I wish to qualify Italian theorist Maria Bottero's portrayal of Burt's work as 'an exclusively geometrical study aimed at demonstrating the multiple aggregational possibilities of complex polyhedral, unknown to present-day constructive practice based on the cube and the parallelepiped'. In Maria Bottero, "Editorial," *Zodiac*, no. 22 (1972): 238.Bottero's view, however, does apply more specifically to Burt's *Infinite Polyhedra*, first published in 1974. For a more recent edition see Michaël Burt, Menachem Kleinmann, and Avraham Wachman, *Infinite Polyhedra*, 2nd ed. (Haifa, Israel: Faculty of Architecture and Town Planning of the Technion, Israel Institute of Technology, 2005).

20. See Chapter III: "Architectural Application of Solid Spatial Patterns with Double-Curved Surfaces", in Michaël Burt, *Spatial Arrangement and Polyhedra with Curved Surfaces and their Architectural Applications - Doctoral Thesis*: 97-134.

21. In collaboration with other architects, Burt has erected a number of roof structures in Israel for facilities of various kinds, such as swimming pools, malls and university buildings. His first large-scale construction, however, completed in 1969, was not a roof, yet a pavilion which he called *Hexahyp* ('HEXAgonal HYperbolic Paraboloid'). See P. K. Hoenich, 'An Op Art Picture on Contiguous Double-Curved Minimal Surfaces',*Leonardo* 4, no. 1 (Winter 1971): 23-26.

22. For example, Burt made reference to the ways in which linear utilities might be laid out within the continuity of those geometric spaces, the relationship between cells in the aggregation and program units, the systems of internal communication and how to develop different alternatives for internal partitioning. See Michael Burt, *Spatial Arrangement and Polyhedra with Curved Surfaces and their Architectural Applications - Doctoral Thesis*: 131.

23. See Moshe Safdie,'New Environmental Requirements for Urban Building',*Zodiac*, no. 19 (1969): 181. The question of *identity* and *difference* is recurrent in Safdie's language. In relation to it, Safdie promoted the use of technology in the pursuit of standardization in building processes, for he expected that such a strategy would lower costs of production and create continuous employment opportunities: 'I believe that the immediate step is to put the construction industry in the factory. Building must be subdivided into "space cells", each space cell must be capable of complete factory production, of transporting from central plants to construction sites, and of assembly with minimum labour'. In Safdie, "New Environmental Requirements for Urban Building": 182.

24. Neumann underscored the fact that the meaning that may be extracted from ornamental symbolism is bound to change depending on receptor and context, claiming that if abstract form and associated meaning are the two components of any given piece of ornament, it is the former the one that remains invariable. Equating then meaning with function or program, and abstract form with spatial organization Neumann claimed that '[t]he principle of space division is more constant than the changeable function. The morphology of an object has nothing to do with its use, what one calls its function'. In Alfred Neumann, "Architecture as Ornament.": 94.

25. Maria Bottero characterized this approach as a departure from the precepts of the Modern Movement, according to which the organization of architectonic facts were to somehow parallel that of social facts. Note the use of the term "structurists" to designate practitioners of architectural morphology: '[…] the cognitive attitude of the structurists rejects any simplified correspondence between form and content, between spatial organization and social organization […]. The social sphere, and its economic and linguistic structure, does not come under the problems tackled'. In Maria Bottero, 'Technological Research and Architecture',*Zodiac*, no. 21 (1971): 232. I am arguing that these kinds of statements made at the time were fallacious, for Safdie's architectural ideology ought to be clearly distinguished within the discourse around morphology as his approach could by no means be conflated with the scientific one of what Bottero referred to as 'the structurists'.

26. Even though Safdie acknowledged the extraordinary influence of Neumann's work: 'For me, he was the only architect with whose work I felt total affinity. This I felt even before I met him and more so when I got to know him', in a personal letter to Neumann's wife, Naomi, and postmarked November 18th, 1968. Quoted in Segal, *Unit, Pattern, Site: The Space Packed Architecture of Alfred Neumann 1949-1968*: 2.

27. Safdie's preoccupation with the industrialization of building processes, however, may be seen as just but one of the reasons that architectural morphology has often been regarded within the larger field of 'environmental design'. See, for example,Keith Critchlow, 'Toward a New Philosophy of Structure',*Zodiac*, no. 22 (1972): 185. In addition to studying the potential of geometry (and particularly of symmetry and closepacking) for standardization, architects involved in morphology often attempted to cause as little an impact as possible on the pre-existing setting. To that effect they fostered the use of environmentally friendly materials and showed a strong bias towards lightweight construction. To these considerations, Safdie –not unlike Neumann earlier in the sixties– added the importance of the reception of sunlight and views, and the provision of shade as concerns that would directly inform the arrangement of cells in his urban designs. See Safdie, "New Environmental Requirements for Urban Building": 182.

28. Architect and engineer David Georges Emmerich (1925-1996) clarified the way this type of functionalism ought to be distinguished from the one associated with the rationalism of the Modern Movement: 'Therefore, if one wishes, in spite of everything, to use the expression "function" in speaking of the relationship "form and function", it would be necessary to understand it in a broader sense, as an ensemble of permanent and possible properties –a set of determinants– which, tied together in a structure and under the effect of certain forces, produce a form. It is clear that here function signifies more than destination or utility, and moreover that a function can be satisfied by several forms and inversely several functions by the same form'.In David Georges Emmerich, *Course in Constructive Geometry; Morphology* (Seattle: Dept. of Architecture, University of Washington, 1970): 9.

29. Admittedly, *difference* is also relevant for architectural morphology in another way, namely as it concerns the problem of expression. Both actors and commentators recurrently posited architectural morphology in its potential to engender new means of spatial expression, that is, new forms and spatial patterns. Earlier, I discussed how this question constituted one of Michaël Burt's main drives; Neumann himself was equally convinced that 'the large array of space packing patterns, using the platonic and Archimedean solids and their duals, prisms and antiprisms, has not yet found any architectural application' (Neumann, 'Morphologic Architecture': 139). Along the same lines, critics such as Keith Critchlow spoke about a 'new spatial syntax' (Keith Critchlow, "New Geometrical Information," *Architectural Design* 40, no. 4 (April 1970): 164), and Maria Bottero showed her conviction about morphology's achievement thus: 'It is instead a matter of a widespread feeling of dissatisfaction with the traditional modules of architecture and an attempt to create an original approach which, all things considered, implies a new definition of the architectonic language' (Bottero, "Technological Research and Architecture": 231).This search for new architectonic expression –that is, other than the existing; that is, a *different* one– has been briefly examined elsewhere, even if not in relation to the problem of difference proper. For example, Rafi Segal commented on this pursuit of a new expression in the introduction to his dissertation. Note that the fact that these architectonic languages were being put forth in terms of their being distinct does not imply that such a possibility constituted the only motivation behind its conception, as Segal points out: 'Space-Packing was not just an operative device to aid design, but also reflected a larger socio-biological process which related to the development of the way spaces were occupied by people. Neumann believed in a general 'evolutionary'tendency towards grouping, of people and spaces, a process by which primitive individual cells gradually merged, through the development of civilization, to form larger groups, settlements and eventually whole cities', in Segal, *Unit, Pattern, Site: The Space Packed Architecture of Alfred Neumann 1949-1968:* 11.In order to rigorously discuss the possibility of this particular kind of difference, the question to ask would not only be, to be sure, whether the architectural language produced by architects involved in morphology *was different or not*, but also *what exactly can one mean when one says that it might indeed be different*.While remaining a challenging theoretical investigation to be undertaken, I will not deal with it in the context of this paper.

30. See, for example, Arnul Lüchinger, *Structuralism in Architecture and Urban Planning*(Dokumente der modernen Architekt. Stuttgart: K. Krämer, 1981). Let us recall, in broad terms, that structuralism's main goal was to define systems of order underlying particular existing realities. Structuralist authors theorized those systems of order or *structures*as ones wherein the set of relationships between their elements were privileged over the elements themselves. These elements were deemed interchangeable yet retained their meaning in their dependence on the whole, which in turn was independent of its relationship to the elements.

31. D.C. Apon, J.B. Bakema, G. Boon, A. van Eyck, J. Hardy, H. Hertzberger and J. Schrofer comprised the editorial staff of the magazine FORUM for issues 7/1959 through 3/1963, as well as for a special issue of July 1967. Hence they were referred to as the FORUM group.

32. See Aldo van Eyck, *Forum*, vol. 7 (Amsterdam: G. van Saanen, 1959): 223, and Alison Margaret Smithson and Team 10, *Team 10 Primer* (Cambridge: MIT Press, 1968): 83.

33. Aside from the discussed above*vis-à-vis* architectural morphology, it would be worth adding Safdie's interest in utilizing 'repetition and yet combine elements to achieve variety and diversity' (Safdie, "New Environmental Requirements for Urban Building": 181), and Keith Critchlow's description of architectural morphology's goal –and implicit critique of the metropolitan city of the early seventies– to achieve 'high densities without high-rise and monotonony' via geometrical orientation (Critchlow, "Toward a New Philosophy of Structure": 185).This dialectic of difference and repetition, I would argue, cannot be separated from another dialectic that appears equally relevant for architectural morphology, namely that of determinism and freedom. When asked to elaborate on this particular point, Zvi Hecker highlighted its interest yet amusingly enough responded that such a question 'needs an article not an answer'. From Zvi Hecker, interview with José Aragüez, May 2nd, 2011.

34. A similar argument has been made with regards to the problem of signification in Western philosophy and literary theory since the late sixties. See for example the 1968 interview of Jacques Derrida with Julia Kristeva titled 'Semiology and Grammatology', in Jacques Derrida, *Positions* (Chicago: University of Chicago Press, 1981): 27-28. This interview was first published in *Information sur les Sciences Sociales* 7, June 3rd 1968.

35. Deleuze wrote *Différence et Répétition*as his main dissertation for the Doctorat d'état, along with which he presented a secondary, historical thesis: *Expressionism in Philosophy: Spinoza.Différence et Répétition* was first published in 1968. It is important to note that, by the late sixties, a number of literary

critics and philosophers primarily connected with the French scene had already begun to question the structuralist project. Shortly afterwards, these authors were associated with so-called post-structuralist thinking. One could then argue that the move to relate an architectural trend that reaches its peak in the late sixties to structuralism would lenditself to be questioned on the grounds of the latter being already up for grabs at the time.

36. See Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994): 28.

37. Ibid: xx.

38. At some point, Deleuze offered a more intuitive passage so as to illustrate the way in which pure difference and complex repetition are intertwined in principle: 'Modern life is such that, confronted with the most mechanical, the most stereotypical repetitions, inside and outside ourselves, we endlessly extract from them little differences, variations and modifications. Conversely, secret, disguised and hidden repetitions, animated by the perpetual displacement of a difference, restore bare, mechanical and stereotypical repetitions, within and without us'. In Deleuze, *Difference and Repetition*: xix.

39. Ibid: 70.

'BLOW ME A HOUSE'
FELIX DRURY AND EXPERIMENTS IN FOAM CONSTRUCTION, ca. 1968-73

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INTRODUCTION

In the nineteen sixties and seventies, architect Felix Drury taught several studios at the Yale School of Architecture and organized a number of independent projects in which graduate students designed and built structures using an experimental technique of spray-on, polyurethane foam construction (Fig. 1). Although now largely forgotten, the work of Drury and his students received extensive media attention during their era and were featured in the *New York Times*, *Vogue*, *Architectural Record*, *Progressive Architecture*, and *House and Garden*.[1] The title of my essay is taken from the 1969 *Vogue* article, illustrated with photographs by Claude Picasso. Drury's foam projects participated in a culture of hands-on learning that characterized Yale's School of Architecture in the nineteen sixties, the most lasting manifestation of which was the 1967 founding of Yale's First-Year Building Project, the oldest, continuous design/build program in North America.[2]

Although Drury taught a studio in 1966 at Yale that was a direct precedent for the First-Year Building Project, he developed a personal approach to teaching notably different from that of his Yale peers. Born in 1928 in Ohio, educated at the Phillips

Figure 1. Yale students in a foam house, 1968. (source: James Righter)

Academy and Princeton, Drury went on to graduate study at Princeton's School of Architecture with a group of students who would prove important to twentieth century American design: Charles W. Moore, Donlyn Lyndon, William Turnbull, and Hugh Hardy. Moore in fact once observed, 'Felix had masterminded my own Ph.D. at Princeton,' and it was Moore who, as chairman of Yale's Department of Architecture, hired Drury to teach in 1966.[3] Yet Drury differed from Moore in a number of ways—most significantly, by exploring experimental means of construction in the foam projects he organized for his Yale students. I will examine several of these projects and relate them to significant artistic and cultural currents of their era. Delineating the contours of a an alternative design

practice, Drury and his students found in these foam structures a way to explore the limits of direct participation and on-site improvisation as architectural strategies. Their free-form, non-orthogonal geometry takes on new relevance in light of the recent embrace of architectural blobs and mutable shapes by designers such as Greg Lynn.

YALE FOAM

The first foam project took place in 1968, as a second-year studio for members of the class of 1970, who built three foam houses in the woods at Yale's golf course. The idea of using spray-on foam was actually a student's. William Grover, a member of the class of 1969 and later a partner of Centerbrook Architects, saw a television commercial for the Union Carbide Corporation, in which polyurethane foam was sprayed onto an inflatable object set on a deserted island.[4] Seeing architectural possibilities in the idea, Grover obtained funding from the School of Architecture to fly to Union Carbide's plant in West Virginia, where he convinced the company to donate both spray equipment and several fifty-five-gallon drums of polyurethane to Yale. He also

had a prior interest in curvilinear forms, as seen in sketches from 1964 (Fig. 2). Grover proposed spraying the foam onto shapes made of paper-backed burlap stitched together with a heavy-duty sewing machine. Leaf-blowers would then be used to inflate the burlap shapes. Grover secured donations from the Bemis Company, a manufacturer of burlap bags, founded in 1858 in St. Louis, Missouri. The School of Architecture gave approval to organize a project and it became Drury's spring 1968 studio, with Grover as teaching assistant.[5]

The students in the studio held a competition to design prototypical houses using the technique proposed by Grover—spraying the foam onto the inflated burlap forms. The designs of three teams were selected for construction—one by Turner Brooks and Andy Burr; another by Roc Caivano and Rod Lack; and the third by Daniel V. Scully and Anthony Zunino.[6] In a recent interview, Brooks recalled that his team's design consisted of a series of domes, the largest of which was twenty-two feet in diameter. The main entrance was through a circular hall shaped like an umbilical cord.[7] As part of the learning process, students inflated test balloons in the main exhibition space of Paul Rudolph's A+A Building, an event that turned into a school-wide happening as the blown-up forms filled the two-story volume. The burlap bags were transported to the golf course, inflated, and sprayed with foam. Class member Alberto Lau made a film of the process, with a story

Figure 2. Foam house, 1968 (source: Estate of Felix Drury)

line involving one of students being hatched out of an egg-like shape and then leaving the foam house, 'as if he were the first cave man to inhabit the earth,' according to Brooks.[8] Design historian Jeffrey Meikle accurately pinpointed the 'stone age' characteristics of the students' designs [Illus. 5, 6]. 'The polyurethane foam dome, a kind of petrified inflatable,' Meikle observed in his 1995 book *American Plastic: A Cultural History*, 'invited comparisons to prehistoric cave dwellings or, in a more timely reference, to the hobbit holes of J.R.R. Tolkein.'[9] Brooks returned to the foam houses a year or so later—only to discover a group of eight naked hippies living in one of them. The presence of squatters did not go over well with the university, or with Yale golfers who happened to encounter them when chasing down an errant shot, so the houses were sealed up.[10]

The photogenic constructions were, nevertheless, featured in an article in *The New York Times*, which led to an invitation from New York's Museum of Contemporary Crafts to design an installation for an exhibition entitled 'PLASTIC as Plastic' that opened to enthusiastic reviews in November 1968.[11] *The Harvard Crimson*, for example, reviewed the exhibition in its arts pages, calling it 'the most gleamingly contemporary and pertinent of any (exhibit) in New York.' Harvard singled out Drury's environment as worthy of note:

> The foam building belongs in the suburbs of Xanadu. Being in it is like being swallowed by Moby Dick, perhaps. There is no distinction between ceiling and walls, the texture is amorphous whiteness and there are no easy-to-understand geometric forms.[12]

Such good publicity led to the invitation from *Vogue* to create a mock-up house featured in their May, 1969 issue, which sought to align the foam environment with a 'free-choice' lifestyle. Later that year, Drury and three students came to New York to design and execute a cave-like 'foam environment' that was illustrated in the May 1970 issue of *Progressive Architecture*.[13]

Drury would go on to build several more foam projects, one of the most ambitious of which was a temporary, outdoor installation in 1970 in Pittsburgh. The project was for the Three Rivers Arts Festival, an annual, ten-day event in downtown Pittsburgh, which originated in 1959.[14] In mid-May 1970, Drury and a small group of participants, including his son, Fritz, recent Yale graduate James V. Righter, and Righter's wife, Sandy, fabricated a number of large, conical and domical foam elements in a factory in Aspinwall, a borough of Pittsburgh on the banks of the Allegheny River. They transported the component pieces—described in a local newspaper as 'the foam thing'—by barge along the Allegheny to downtown Pittsburgh, and assembled them on a large traffic island near Point State Park. Arranged in circle, the elements held vitrines for small sculptures and *objets trouvés* that were part of an exhibit called 'The Artist Looks at Industry'.[15]

Assembled as a group effort in a festive spirit, the installation evoked the Happenings of Claes Oldenburg from the early sixties. Just a year earlier, Yale art and architecture students had helped Oldenburg install his sculpture, *Lipstick (Ascending) on Caterpillar Tracks* in the Beinecke courtyard at Yale.[16] Similarly, in 1970, Yale architecture students built several inflatables at Coxe Cage, the university's cavernous hall for track and field meets, as a backdrop for a visit by the hippie commune Hog Farm and its founder, Wavy Gravy.[17] Following their participation in the Woodstock Music Festival in August, 1969, Hog Farm embarked on a cross-country tour, with New Haven as nodal point on the map of where the counter-culture met the establishment. Attended by hundreds of students, the Coxe Cage installation included music and a light show influenced by Andy Warhol's Exploding Plastic Inevitable and the psychedelic performances by the Joshua Light Show at New York's Fillmore East a few years earlier.

For Drury, foam constructions such as the structures at the Three Rivers Festival were social instigators: devices to encourage visitors to interrogate their everyday environments. 'It is meant to raise questions about what is inside and out, what is under and over, what is slow and fast. It is meant to be slightly absurd and totally useful,' Drury wrote in the brochure that accompanied the exhibit.[18]

> This structure asks a few basic architectural questions. What is a wall; What is an opening? What makes a room? What is its size? How does it feel to be around it? Most of us never ask questions like these about our surroundings and most will find this structure radically different. Is it frightening or is it friendly?[19]

Described by one commentator as a 'foam castle,' the project had a quixotic element, which Drury emphasized when he suggested that at the festival's end, the structure 'could be lifted into the river to float to the Gulf of Mexico, where it would raise new questions. Back in Pittsburgh, we should be left questioning everything around us.'[20]

In spite of this quixotic aspect, Drury was able to interest corporate clients in sponsoring a few foam projects. A year after the Three Rivers Arts Festival, the textile manufacturer West Point-Pepperell commissioned Drury to design a guest house at their corporate campus in Langdale, Alabama. The largest of Drury's foam projects, the house had a binuclear plan, with living and bedroom quarters connected by a tunnel-like central corridor. The interiors served as dramatic, monochromatic settings to display the firm's colorful fabrics. Drury completed over ten foam projects, including a house for another corporate client, Monsanto, before abruptly stopping in the mid-nineteen-seventies upon learning of the dangerous health effects of the foam once it caught fire.

FROM KIESLER TO ANT FARM

The free-form shapes of these and other foam projects by Drury and his students inevitably recall the 'Endless House' of avant-garde, Romanian-born architect Frederick Kiesler, who worked on his visionary project from 1950 to 1961, exhibiting a large cement model in 1960 at New York's Museum of Modern Art.[21] Kiesler's book, *Inside the Endless House*, was published posthumously in 1966 and widely reviewed in the architectural press.[22] A small exhibition on Kiesler was in fact held at Yale in 1967.[23] When I interviewed Drury, however, he denied Kiesler was an influence. For Drury, the fundamental significance of working with foam was to explore non-orthogonal forms and non-standard structure. Drury told a *New York Times* reporter, 'From an educational standpoint, the idea is to get away from the stick mentality—thinking exclusively in terms of the post and beam—so that students after they graduate will feel at ease with a material like this, with its curved lines.'[24] One of the main attractions of the foam projects for the students was the immediacy of the building experience—the structures could be built in a few days and altered in few hours. As Andy Burr, a member of the class of 1970, recalls, 'what attracted us to foam was we could put it up so quickly. It became almost a theatrical event.'[25] Burr's classmate Peter Rose, now a professor at Harvard's GSD, recalls foam as 'this magic material. It was pure magic the way we would arrive and with little more than a few drums of the polyurethane, a foam gun, some masks, and a fan we'd inflate a whole building.'[26]

Burr and Rose were so taken with the experience of working on the foam structures that they pursued more projects after graduation, forming a design-build practice they called 'Endless Construction.' They convinced the Canadian government to finance construction of two foam houses for the Wahta Mohawk reserve near Bala, Ontario, north of Toronto.[27] Burr and Rose also built an enormous inflatable in one of Montreal's main squares, Place Ville Marie, and published a handbook for constructing an entire Canadian village out of foam houses.

But Burr and Rose grew disenchanted with foam construction as they matured as architects. Burr recently told me, 'Foam was good in that structure and insulation were both in one. But it had its limits.'[28] He went on, 'building out of foam was not improving the technology of building. Traditional wood frame construction is actually very sophisticated, worked-out over a hundred years,' against which foam proved no match once he began to receive significant commissions as an architect. Similarly, Rose described how 'there was a lot of sameness to the foam houses. The material offered a limited formal range.'[29] And if the ease of application was one of foam's attractions, it proved problematic. As Burr's and Rose's classmate, Turner Brooks, recounts, 'It was almost too easy. Foam proved an unsatisfactory material. It was very organic but wood construction gave more of a resistance' to design with.[30]

While they lasted, the foam projects reflected other currents of the era, particularly an interest in ephemeral environments, inflatable structures, and buoyancy and mobility as alternatives to traditional construction and in opposition to cultural constraints. As Marc Dessauce noted in his 1999 book, *The Inflatable Moment: Pneumatics and Protest in '68*, the French group Utopie sought to reinvigorate society through a combination of radical social critique and inflatable environments intended to challenge the mass, weight, and permanence of the traditional cities.[31] Closer to home, the collaborative art and design group Ant Farm pursued a strategy combining temporary inflatables, bus tours of the country, and provocative, multi-media performances. Doug Michels, one of Ant Farm's founders, graduated from the Yale School of Architecture in 1967 and worked in Charles Moore's

New Haven office.[32] Michels described how the hands-on, collaborative environment at Yale was important to the founding of his group:

> In a way, the seeds of Ant Farm were sown at Yale when I was a student there. In 1965 the Art and Architecture building had just opened…all the students came together in the rooftop coffee shop in an interactive and interdisciplinary atmosphere. At the same time, team design, with no leader, was emphasized in the architecture school. And that's very much like Ant Farm—mixing disciplines and not having a leader, or having every person lead at times, follow at others.[33]

Chip Lord, Michels' fellow Ant Farm founder, did not recall Drury's foam projects as a conscious influence. Nevertheless, Ant Farm's 'House of the Century' of 1971-73 was built shortly after the height of enthusiasm at Yale for free-form foam structures and its forms evoke the foam houses by Drury and his students, even if it was built of ferro-concrete, not foam. For the most part, the foam projects by Yale students lacked the political and social critique that characterized European and avant-garde interest in inflatables, however. But they do embody what Reyner Banham once characterized as a generational shift away from abstraction in art to a 'kind of direct-participation, real-space, real-time involvement aesthetic' that occurred during the nineteen sixties.[34]

ARCHITECTURAL PLAY

Another important aspect of American culture of the second half of the nineteen sixties reflected in the foam houses was the exploration of the playful, comedic side of experience in opposition to establishment hierarchies. Cultural critic Barry Curtis has described the sixties as 'a time when being young and playful seemed like a way of life rather than simply a rite of passage. Many of the cultural manifestations of the late 1960's are hard to take "seriously." But we must remember that seriousness was one of the enemies of the counterculture of the time and that "proportion" and "balance" favored the status quo.'[35] In this light, architect Robert Godley described Drury to me as 'a merry prankster,' a phrase that refers to Ken Kesey, author of *One Flew Over the Cuckoo's Nest*, who in 1964 led a bus tour of psychedelic popularisers who called themselves the Merry Pranksters.[36]

In tune with Kesey and other prominent figures of the counterculture of the nineteen-sixties, Drury focused on ludic activity—the element of play. Yet in contrast to most avatars of the counterculture, Drury worked from within the establishment. The foam structures by Felix Drury and his students evoke a moment in American history when a Yale professor could take on seriously the role of *homo ludens* and devise both learning experiences and experiments in alternative construction.

Endnotes

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31. Marc Dessauce, *The Inflatable Moment: Pneumatics and Protest in '68* (New York: Princeton Architectural Press, 1999).

32. Constance M. Lewallen and Steve Seid, *Ant Farm 1968-1978* (Berkeley: University of California Press, 2004), 38.

33. Ibid., 41.

34. Reyner Banham, "Monumental Wind-Bags" in Dessauce, 33.

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ARARAT – ARCHITECTURE BETWEEN UTOPIA AND DYSTOPIA

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When ARARAT opened its doors at the Museum of Modern art in Stockholm in April 1976 it was the result of one of the most ambitious exhibition undertakings in Sweden during the 20th century. With artists, architects, engineers and craftsmen working side by side it was a striking manifestation of interdisciplinarity that declared far-reaching aims; the title did not only host the biblical connotations of survival but was also short for Alternative Research in Architecture, Resources, Art and Technology.

The architectural situation in Sweden around 1970 is often described in terms of a widespread sense of crisis after modernism, as it was practiced in Sweden, reached a cul-de-sac. Critical encounters involved the whole field of architecture, from the methods of the building industry and the responsibility of the architect to the intellectual production of the discipline. This transition period has also been described with the help of a series of rather quick and clear shifts from high-tech to low-tech, from futurism to retrospection, from internationalization to regionalism.

Bringing the exhibition ARARAT into the picture obscures these changes, making them less clear-cut and offers a narrative of the post-war era that is not as simple, or not even as appealing as the more dominating one according to which Sweden's position as an overall modern, rational, welfare state is well established. From the perspective of Swedish post-war architecture, this exhibition calls into question the nature as well as the historiography of Swedish modernism (or functionalism, which was the preferred term)[1] itself. Already at the time of the exhibition ARARAT was declared the most important architectural endeavour since the so-called Stockholm exhibition in 1930, commonly known as the breakthrough of modernism in Sweden. At first sight the differences seem unbridgeable between the streamlined rationalistic modernist dreams of the former and the investigative ecological solutions of the latter. But despites these ostensible contrasts, enhanced by the circumstances in support from state or commercial interests, ARARAT had more in common with the rational and utopian impetus of any modernist manifestation than its humble appearance revealed. This is especially evident in the manifest trust in technological solutions and engineering to solve the problems of contemporary architecture and society. The means were the same, only the aim had changed over time; to save the planet from annihilation through offering ecologically sound solutions that would create harmony between culture, nature and technology.

Swedish counterculture has often been described as antithetical to modernism, as distancing from matter of fact reality, as being rather introvert and promoting low-tech solutions, history and ''back-to-nature''. ARARAT challenges this view showing how the hierarchies between technology, art and nature were levelled, and makes the shift away from modernism a more intriguing and complex one.

GLIMPSES FROM THE EXHIBITION

At ARARAT ''architecture' was interpreted as the most comprehensive of concepts, embracing everything from the smallest building stones in biology to the most monumental urban constructs. This approach was also reflected in the exhibition's main hall. The central installation, a so-called 'populated sculpture', was constructed to be used and experienced by the visitors. It was organised to illustrate the flow of resources emanating from the four elements (these were placed along the walls and designed by artists, architects and stage set designers) interacting with daily life. Therefore, re-cycled used clothes woven into carpets or lactic acid fermentation of vegetables were on display side by side with state of the art technical solutions, solar cells and wave generators to name just a few.

Although the concept of architecture was central to the exhibition as the building of society at large it also featured three more straightforward full-scale architectural works. The Solar row house, the Straw bale house and the Form house on the courtyard of the museum can help to shed some light on the architectural issues at stake.

THE SOLAR ROW HOUSE

ARARAT was initiated by architect Hans Nordenström and the actual starting point for the exhibit was a research application for a single building, an experiment station for solar energy. Although the scope of the exhibition was considerably enlarged, this first idea was represented by the so-called Solar row house. The slender one-storey building with thin walls dominated by

large glass windows displayed different solar energy systems, heating and insulation methods, new as well as more traditional. Among the three buildings, the Solar house row was the one most in tune with the technological developments of the day. Solar energy was given a prominent role on Ararat and a firm belief in its future possibilities was shared by the organizers. Moreover, the building happened to combine a fashionable appearance with environmental consciousness. This would help attracting the modern visitors from the city, a journalist wrote, implying that the high standard of living would be an obstacle for the ecological and energy saving society envisioned.[2] The exhibition's emphasis on solar energy was also met by criticism of a different kind; observers lacked the political analysis and argued that the exhibition's focus on small scale private projects was too exclusive and that the really effective solutions could only be reached in multi-dwelling building and on an urban scale. The absence of explicit political analysis was however intended, since organisers felt political perspectives would veil the important alternatives put forward. Nonetheless, the group of organisers did not escape the confrontation between global humanist ideals and local elite practice, and the criticism that often followed this tension.

THE STRAW BALE HOUSE

More intriguing perhaps from an architectural viewpoint is the straw bale house, a simple building designed by architect Klas Anshelm (1914-80), one of the most renowned Swedish architects at the time. A straw bale construction clad in reinforced plaster, it was very different from commissions on a different scale occupying the architect at the same time (such as university buildings in southern Sweden). Anshelm's own tangible interaction – helping to build the hut-like building himself – created a stir of surprise in contemporary architecture society, and was especially appreciated by students.[3] Although small, the straw house has come to take a special place in the writings on the architect Anshelm. His biographers have stressed the journey towards simplification and reduction of the architectural means of expression towards 'primitive aesthetic models' that the architect embarked on late in his career.[4] Most famous of these is the small workshop for his aged architect colleague Sigurd Lewerentz. The straw house was simple and cheap, it was possible to build quickly and - above all – on ones' own. As such it represented an interest for simple, ecological techniques opposed to the often grand-scale and energy devouring architecture of the day. At the same time it represented an organic shape, a closeness to nature, an almost circular building with no right angles that marked a new engagement for architecture's past and it's partly forgotten foundations. As this anti-elitist handmade statement the hut questioned the role of the architect himself.

THE FORM HOUSE

The Form house, also called the recycled house, was the most expressive of the architectural contributions on the exhibition. Its' archaic stave church look was carefully designed and recognized by the visitors as was the wildness and rebelliousness, also intended by the architects. The verticality of the building and the elevation around a single central space was not only a visual challenge to contemporary architecture but also more explicitly a comment to existing building regulations (2.4 m ceiling height in dwellings) and their restrictive effect on architectural expression. Also central to the building's articulation was the wooden material which was treated in a more traditional way than the - albeit wooden - prefabricated element-based and industrialized construction methods common in Swedish housing production at the time. A wish to reconnect to building techniques in the past brought experienced carpenters and constructors to the project.

The form house was built by the so-called Formverkstan (Form workshop) founded a few of years earlier by a group of students from the School of architecture in Stockholm that wished to improve the curriculum with subjects of a more alternative kind. Their Form house came to embody many of the ambitions of the ARARAT exhibition, such as experimenting with anti-hierarchical working methods and combining knowledge from different times and disciplines.

At ARARAT architecture was interpreted as an all-encompassing 'system'.[5] This systems-oriented model of the natural, along with the holistic world view, the organizers of ARARAT owed to contemporary countercultural movements in the 1960s, most manifest in Great Britain and USA. Study trips, personal contacts as well as books and research results referred by the organizers are also a concrete testimony of these influences. ARARAT mirrors ideals central to countercultural currents in many respects, such as the liberation of the individual implying an active, creative human subject, the access to knowledge or the alternative nodes of social and communal organization.

ARARAT attempted to collect and display all available research and knowledge in the field and making it accessible to the public. But the exhibition did not offer a narrative thread or an authoritative voice to its visitors, just a cacophony of artefacts. In this respect a parallel to the Whole Earth Catalog (WEC) seems especially striking. Influence from architectural visionary Buckminster Fuller is of course also undeniable, among other things as an important source of inspiration for several of the key concepts of the WEC. Not only the emphasis on 'whole systems', which echoes both Fuller and the 'Understanding whole

systems' (a headline of the WEC), but also the broad definition of tools or the uneven distribution of the world's resources places ARARAT as a follower of the ambitions of the catalogue. Through its interactive exhibitions, workshops, information centre with library and reading room and an extensive seminar series ARARAT could be described as a catalogue to knowledge and tools brought to life. ARARAT embraced process oriented thinking, everything happened in a hub, much like the early cybernetic visions or the 'global village' of Marshall MacLuhan.

As a consequence of the subject the perspective of the exhibition was global but specifically Swedish concerns were also addressed since also Sweden, according to the organizers, had come to exploit natural resources in an irresponsible way during a remarkably short period of time.[6] Historian Martin Wiklund has shown how several critical 'stories' came to challenge the hegemony of the main narrative of Modern Sweden in the early 1970s. The countercultural movement was one of these, noted for its critical approach to modernity portraying Sweden as a 'rationalistic and large scaled technocracy'.[7] Interestingly enough, several architectural phenomena are regarded as constituting the arguments of the movement, such as functionalism, the so-called million programme (one million housing units produced between 1965 and 1974) or the symbolic and riot-like battle over a few elm trees in Stockholm in 1971. But the criticism against modernity should not be understood as nostalgic, hostile to modernization or progress in general. It is simply a different interpretation of development and progress, i. e. a question of values, Wiklund states.[8]

ARARAT embodied this approach as well as a belief in a responsible, conscious use of technology that could transform the whole of society into a harmonious system. From an historical perspective ARARAT's challenge unfolds as twofold; in its day ARARAT questioned the contemporary discourse on architecture, today the exhibition can help to re-read the progression and nature of Swedish modern architecture as such.

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THE SPINNER EXPERIMENT:
FREI OTTO AND THE INSTITUTE FOR LIGHTWEIGHT STRUCTURES

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It could be said that architectural culture and the so-called counterculture of the 1960s participated in a common historical moment but from very different positions. Both invested in revolutionary change, which resulted in moments of reciprocal influence and appropriation.[1] But aside from the most radical architectural practices, these exchanges were often out of synch culturally and politically. One example is the practice of the architect Frei Otto, whose relationship to the counterculture in Germany will be considered here. I will specifically focus on the shared meaning of the term 'experiment' during this time, which was key to both scientific methodology and new forms of political and social practice. The use of experimentation as an integral part of architectural design was developed at Otto's Institute for Lightweight Structures (IL), which was founded in 1964 at the Technical University of Stuttgart. Rather than focus on the influence of engineers like Otto on the counterculture I will look at the IL itself as a site where the conflicts and coincidences between technocracy and counterculture were played out.

It is important to briefly define what is meant here by counterculture. While it is generally used to describe opposition to all forms of hegemonic culture during the 1960s and 70s, I will focus on the meaning of the term established by Theodore Roszak, who is credited with coining the expression in his 1968 *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition*.[2] As the titles implies, for Roszak the counterculture was defined quite specifically by an opposition to the rule of the technocracy. Technocracy was viewed by the counterculture as not 'merely' a cultural condition but a form of power that 'elud[es] all traditional categories'. Technocracy 'renders itself ideologically invisible. Its assumptions about reality and its values become as unobtrusively pervasive as the air we breathe.'[3]

The countercultural opposition to technocracy was political in nature, but it was also expressed through 'non-objective' forms of knowledge and experience including mysticism, non-Western religions, and hallucinatory drugs. This included alternative modes of transmitting knowledge, as seen in campuses around the United States where 'free' and 'experimental' universities were established by students. This was a response to the penetration of technocratic society into the university in the form of think tanks and the so-called military-industrial-academic complex. The counterculture in Germany followed a similar trajectory to that of the United States, but its most visible cultural dimension – hippy culture – arrived later and to a lesser extent.[4] It was also defined more by its political and social radicalism than its cultural tendencies, and marked by a tense generational conflict aimed not only at the conservative morality of the previous generation, but also its implication in fascism. This, along with its later arrival, meant that the counterculture would have a less visible cultural influence on architecture in Germany.

The IL's experimental reputation attracted young students from all over the world[5], who congregated there in an informal manner. A description by Berthold Burckhardt, who was a central member of the research team, evokes a commune led by an architect-guru:

> '[Students] made the pilgrimage from the city centre to the IL tent on the Vaihingen campus not primarily to gain subject credits, but to be there a few weeks and be able to experiment, discover, discuss, and listen…It quickly became clear outside Germany that an unusual place in an unusual tent had come into being here in Stuttgart, an open experimental workshop. Work and travel students, made the journey and stayed for hours, weeks, and in some cases even years.'[6]

The Institute began with six students, but by 1971 this had increased to up to 70 at any one time.[7] Some of these young students were no doubt attracted by Otto's pneumatic and tent structures; forms that had captured the imagination of radical architects. Otto's architecture, with its direct translation of natural forms and focus on the minimal use of energy, also appealed to the nascent environmental movement. The open teaching organisation of the IL, housed in one of Otto's own experimental structures, attracted a generation looking for alternative methods of pedagogy and dissemination of knowledge.

The IL's tent-like structure was built in 1966 in a wooded area on the new campus of the TU Stuttgart in Vaihingen, 'among scientific neighbours, who view it as a curiosity, a thorn in the side of exact sciences, or perhaps as a stimulus, some form of progress.'[8] The building was designed without a definite interior layout so that groups could assemble and disperse 'as in a biological game.'[9] The interior was fitted-out with mobile heating benches that could be plugged into a pipe system as needed so that 'groups assemble and disperse according to projects, while individuals can isolate themselves.'[10] According to the IL literature, 'the same informality pervades the think-tank operations as well as the study programs.'[11]

In the words of Burkhardt, 'bureaucratic, formal, or rigidly fixed behaviour structures simply could not develop in this tent'.[12] Experimentation at the social or urban scale – using form-finding, self-organization, and optimization – was part of the agenda of the IL, even if it was secondary to experiments in structures. These experiments were also applied to the IL itself: 'experiments are not restricted to models and architectural ideas – the human beings involved here (at present the average age is just over 30) experiment with themselves….the methods of cooperation and the attendant personal and psychological effects belong…to the IL's own tent-covered structure.'[13] Self-experimentation was central to the counterculture, but here it is not clear if the students are the authors or the subjects of the experiment.

Do these descriptions indicate that there was something like a counterculture at the IL? As a former student has noted, the IL was a place for 'serious research', where something like hippy culture could not have easily thrived.[14] Furthermore, the apparent spontaneity of the organization seemed to have been more in theory than in practice ('Germans', he notes, 'are not known for being spontaneous'[15]). There is also no evidence of student initiative at the IL in the style of the experimental pedagogy and 'free universities' that shook the academic world all over Germany beginning in the mid-1960s.[16]

It might be more accurate to say that Otto's institute more closely resembled the technocratic think tanks that the counterculture opposed. Otto's development of the ideas behind the institute cannot be separated from technological culture in Germany's post-war history. His first experiments with lightweight structures were developed as a prisoner in a war camp at Chartres. There his theory of optimisation was honed from his pilot's knowledge of lightweight construction for aircraft combined with the demands of war-time material shortages. In 1958, shortly after completing his doctoral dissertation on suspension roofs, Otto founded a small research institute in Berlin, housed in a self-designed structure in his in-laws' back yard. During this time, Otto worked independently as an architect/engineer and travelling lecturer. His lightweight, formally expressive structures lent themselves well to exhibitions like the 1957 Interbau, and thus contributed to the new architectural 'face' of Germany. The scale of Otto's projects changed dramatically with Expo '67, and in 1968, when the IL received a grant from the Deutsche Forschungsgemeinschaft[17] for a special research project on long-span structures. This would be used towards designing the 1972 Olympic stadium.

Not long after receiving the grant and moving into the IL tent Otto published several texts in which he envisioned the future of the institute. In 'Ein Interbau und ein Spinnerzentrum' he described the need for internationally-coordinated research in architecture. According to Otto 1970 was a pivotal year as it 'marks the final end of the international style.'[18] In response he proposed a new 'Interbau' exhibition in which critical themes could be addressed, including: 'buildings in cold regions and deserts', 'cities on and under water', 'living in outer space', 'paradises and slums', 'old and new nomadic architecture', 'tent and trailer cities', 'chemical architecture', 'erotic architecture', and 'the revolution of architecture students in the US, Asia, and Europe 1966-1970.'[19] Here Otto covers thematic terrain that would have appealed to the counterculture and architectural avant-garde of the 1960s.

In order to address these issues, Otto proposes the creation of the *Spinnerzentrum* ('Spinner Centres'), an invented term that plays on the double meaning of 'Spinner' in German: one who is crazy and one who spins threads, creating connections and webs.[20] These centres are in essence interdisciplinary architectural think tanks where 'inventors can work and grow with their ideas.' For Otto, the figure of the inventor replaces that of the architect, and is 'advancing from an autodidactical pseudoscientist to the central figure in research.[21] In this model scientific experimentation is seen as an avant-garde practice:

> 'Methodical inventors are the real avant-gardists of today.…For the inventor in such manifold fields like architecture and environmental design one coined the lovingly disrespectful yet appreciative expression 'Spinner.' Spinners produce new threads and nets. Spinners try to find new syntheses in all fields of science, technology, and art.
>
> The spinners, and those who can and want to learn spinning, will come if we dare to experiment and establish a 'Spinnerzentrum.' In this 'Spinnerzentrum' one will experiment, one will discuss….One has to let spinners spin, to help them and analyze their spinning.'[22]

Otto's insistence on large-scale orchestrated research and experimentation as a form of architectural practice ('systematic experiments alone make up the process of spinning') was possibly unique in architectural culture.[23] The 'madness' of the architect-scientist can be read as a critique of the sobriety of modernism, and the insistence on collaboration as an alternative to the heroic individual architect.

The decentralised approach to research and experimentation also corresponds to shifts in the history of the laboratory in the sciences. In his study of the history of experimentation in microphysics Peter Galison identifies two changes relevant to a 'postmodern' practice.[24] One is the role of the author of the experiment itself. According to Galison, the individual gives way to a group of workers of various skill levels, and is eventually part of larger set of relationships through 'trading' that takes place among different scientific methods and traditions. Similarly Otto set up the Spinnerzentrum as a series of networks, not only within the IL but also between research and industry. Otto collaborated with other institutes and the individuals who led them, like the Institute for the Application of Geodesy to Construction and the Otto Graf Institute (which developed testing instruments) in Stuttgart, the Institute for Biology and Anthropology in Berlin, and engineers including Ted Happold, Peter Rice,

and Lennart Grut. He had Zeiss manufacture special lenses for photographing models, and received funding and commissions from Volkswagen and Farbwerke Hoechst. Even if Frei Otto gave the impression of a guru-like 'mad scientist' working in isolation he was in truth a 'spinner' at the centre of a web.

Peter Galison identifies a second shift in the history of experimentation that is also relevant here. He writes on two methods of producing information in modern science, one based on photographic images that mimetically reproduce phenomena, and one based on data or what he calls 'logic'. He describes the convergence of these two methods during the 1980s with the rise of the electronic image in which there is no separation between image and data. Frei Otto's models were built at the cusp of this transition, and already reveal the convergence of these two different modes of thought. I will also argue that Otto's rather unique methods of model-based experimentation reveal an affinity with countercultural approaches to experience and non-objective knowledge.

Otto used physical test models to derive structural information that allowed him to both create and test architectural forms. These experiments were relatively unique in their combination of scientific methodology and formal expression.[25] The focus of these experiments was the optimisation of building materials to achieve successful and efficient structures, a process derived by moving between physical model and mathematical calculation. In a 1971 issue of *AD* dedicated to Otto, Ted Happold and Peter Rice discussed the use of experimental models at the IL. Happold asks, 'is it possible to overestimate the part model testing plays in his work? Certainly one is highly aware of it in his Institute—in fact you might think his Institute existed only for it.' He adds, 'I do not see how these structures can ever be achieved without his cycle of model tests. They are the only protection against the heavy hand of the engineers….Engineers find it very difficult to believe that there are more things in heaven and earth than are dreamt of in their calculations.'[26] Happold's comment suggests that Otto's experiments served as an alternative form of design knowledge that resisted the calculation of engineers. Rice describes this as 'intuition backed up by physics rather than mathematics.'[27]

One method of experimentation was the use of soap film to find optimal forms. Soap film has a high and uniform tensile strength, and requires a closed structure, making it ideal for form-finding tests for pneumatic structures, tensile roofs, and sphere packing. Otto began conducting experiments at his small research institute in Berlin in the 1950s, but it took several years until he was able to accurately observe and measure these ephemeral and fragile models. Otto developed a series of devices that allowed for the creation of soap-film structures in ideal conditions, which became increasingly larger and more complex as he sought to eliminate environmental interference. These machines eventually integrated a way of capturing the images photographically, using special lights, plates, and lenses. The use of photography was key in the quest to create a perfect index of the ephemeral bubbles.

These images clearly have a formal quality. In the publication material of the IL, the results of the experiments are shown next to photographic images taken from nature, inviting comparison to the dynamic forces underlying natural structures. The images also have an aesthetic quality reminiscent of the abstract and scale-less images of New Objectivity photography. At the same time they were the basis for numerical data that Galison identifies as logic.' The publications show a transition from photographic images through tracing, abstraction, and analysis in drawings in order to finally arrive at calculation. While image and logic never completely converge they come closer in the process of translation from object to calculation.

A slightly different approach is taken in Otto's experiments using tension nets. Used for both the design of the 1967 Expo pavilion and the 1972 Olympic roofs, these were typically made of metal wires that were loaded with weights. They were also fitted with stereophotographic cameras and specially designed scales that could register movement to 1/10 of a millimetre. Here again, a physical model was combined with a method of precisely documenting it photographically and numerically. These models were quite large, and could be adjusted according to the information feedback given by the measurements. While the method of analysis was relatively simple, constructing these models was extremely difficult and labour-intensive. The technologies used by Otto were in many ways primitive, but an enormous amount of information was produced by the intricacy of the models, thanks to the 'cheap labour' of the students.[28] Trying to simulate the formal conditions of the models and the enormous amount of information that they contained was at that time still impossible by any other means.[29]

However, there was a limit to what the models could calculate, and that is where the 'heavy hand' of the engineers, and later, computers, stepped in. Too many errors could enter in the transition between scales, where a small flaw could increase 100-fold. In the cases of the 1972 Olympic roofs and the 1975 Multihalle Mannheim, computers were introduced to calculate the intricate and interrelated loads of the models.[30] Here image and logic move towards one another but without convergence.[31]

How can we interpret this form of experimentation in light of the new ideas around non-objective knowledge proposed by the counterculture? What is striking about Otto's method is its initial resistance to the calculations of engineers and the insistence on direct experience and intuition. This, perhaps more than bubbles and experiments with open floor plans, brings it in contact with the counterculture and its critique of objective forms of knowledge in favour of knowledge gained by 'experience'. The new forms of experience practiced by the counterculture were not without their scientific origins as well, as the example of Timothy Leary demonstrates.[32]

There is avant-garde playfulness in generating of soap bubble models using Pustefix (children's soap bubble formula), and inhabiting a large tent that was itself generated from a tiny soap bubble. Similarly, when these 'scientific' models are used in drawings and collages by Otto they suddenly take on a utopian aspect reminiscent of the generation of Bruno Taut. Even the colourful 1972 Olympiapark, filled with Otto's light and floating forms, was said to have had a 'Woodstock Effect' for the 'Blue-Jeans Generation.'[33] These comparisons are mostly superficial however when set against the reality of the politics surrounding Otto's buildings, which were used to represent Germany at a time when much of the counterculture was disillusioned with the government's attacks on personal liberties and its targeted assaults on the student movement.[34] Otto's structures made ideal symbols for a young republic trying to maintain an image of both technological superiority and moral righteousness. This contradiction was also pointed out by Leon Krier, who wrote that 'after the stage-sets of the Nazis, German corporations and companies prefer to hide behind trivial structures like those of Frei Otto.'[35] In this view the distance between Otto's laboratory and the spontaneous pneumatic architecture of the counterculture seems great. The unresolved dilemma of rationality and its critique is one way to understand the political contradictions in Otto's work, which engaged progressive and utopian ideas yet were so easily invested with ideological meaning to which Otto seemed oblivious. This is perhaps an example of the 'unobtrusive' nature of technocracy that Roszak had warned of.

At the IL, scientific knowledge was inflected by the non-objective forms of knowledge that were the hallmark of the counterculture. Even if the research environment at the IL was not countercultural, it was nevertheless built upon a legacy of experimentation that ultimately pushed the imagination of architecture in a radical direction, a tendency shared by the architects of the generation of 68. The example of the IL opens the question of the limits and possibilities of experimentation as an avant-garde practice.

Endnotes

1. This can be seen in the appropriation of new technologies, like the paradoxical borrowing of Buckminster Fuller's geodesic domes by the counterculture. This and other examples are discussed in Felicity Scott's *Architecture or Techno-Utopia: Politics After Modernism* (Cambridge: MIT Press, 2010).

2. Theodore Roszak, *The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition* (1968) (Berkeley: University of California Press, 1995).

3. Roszak, 20.

4. Germany's 'long 68' can be traced approximately to the period between the killing of Benno Ohnesorg at a protest against the Shah in West Berlin in 1967, and 1977, or the year of the German Autumn.

5. Prior to establishing the institute in 1964 Otto was already known outside of Germany, having taught as a visiting professor both at Berkeley and Yale. His fame grew after co-designing the West German pavilion for Expo 67, the subsequent publication of two volumes on his engineering research, which were enthusiastically reviewed in the *Whole Earth Catalog's* first issue, and a solo exhibition at the MoMA in 1971. See Frei Otto, *Tensile Structures Vol. 1: Pneumatic Structures* (Cambridge: MIT Press, 1967). Frei Otto, *Tensile Structures Vol. 2: Cables, Nets, and Membranes* (Cambridge: MIT Press, 1969).

6. Berthold Burkhardt, 'The Institute for Lightweight Structures: University Institute and Spinners' Centre' in *Frei Otto. Complete Works* (Basel: Birkhäuser, 2001), 97.

7. *Architectural Design* 3 (1971).

8. Berthold Burkhardt, 'Frei Otto at Work,' *Architectural Design* 3, 1971, 140. The tent was initially built as a full-scale test model for the Expo 67 pavilion, before it was donated by the Ministry of Finance to house the IL after 1968.

9. Ibid.

10. Ludwig Glaeser, *The Work of Frei Otto and his Teams, 1955-1976 : IL Special Issue Devoted to the Exhibition Organized in 1971 by the Museum of Modern Art, New York* (Stuttgart : Institut für Leichte Flächentragwerke, 1978), 8.

11. Ibid.

12. "Frei Otto at Work," 140.

13. Ibid.

14. Denis Hector, interview with author, February 20, 2012.

15. Ibid.

16. This was not because of its location. Stuttgart was a visible node in the student movement: the iconic poster bearing the '68 slogan "Everybody talks about the weather…we don't" was designed by Stuttgart art students, and Stammheim prison, where the RAF members were held, was just 20 minutes away from the IL.

17. This national government grant from the German Research Foundation was for a *Sonderforschungsbereich* ('Special Research Area'), a fund dedicated to collaborative research centres with a specific focus.

18. 'Ein Interbau und ein Spinnerzentrum', in *Frei Otto: Schriften und Reden 1951 – 1983*, ed. Berthold Burkhard (Braunschweig: Vieweg, 1984), 90. This text was originally published in *Allgemeine Bauzeitung* 40 (1970), 36-37. All translations from this text are mine.

19. Ibid, 91-92.

20. He also recommends the provisional title 'Institute for the Advancement of Unusual Achievements in the Field of Architecture'.

21. Ibid, 93.

22. Ibid.

23. The appropriation of scientific methods and practices was not new, and had been part of the experimental tradition of the Bauhaus and the Ulm School for Design, but never to the extent that they were at the IL. Otto also refers to the Bauhaus as a 'Spinnercenter'. 'Ein Interbau und ein Spinnerzentrum'.

24. Peter Galison, *Image and Logic: A Material Culture of Microphysics* (Chicago: University of Chicago Press, 1997).

25. According to Peter Rice 'this integrated use of models, both as an inventive design and finally an analysis tool, is very unusual and may be unique'. 'Lennart Grut, Ted Happold, and Peter Rice Discuss Frei Otto and his Work,' *AD* 3 (1971), 144-158.

26. Ibid.

27. Ibid.

28. Ibid.

29. There were far more sophisticated methods of analysis available at that time using computers, but they were only data-based and did not allow for the physical and visual experience of the model.

30. The flexibility (or what would today be called parametric logic) of the models was also built into the construction of the actual buildings – the tensions of individual connections in the built structure could still be adjusted via special clamps.

31. It was not until the 1990s that structures of this type could be convincingly simulated both visually and numerically in the computer.

32. There are many more examples, including a shared history between psychological and behavioral sciences and psychedelic images and lightshows. In addition, several of the conceptual preoccupations of the architectural avant-garde – like self-organization – were also studied by scientists.

33. Manfred Sack, "Die Überraschungen von München." Undated typescript for *Regenbogenspiele* book. Otl Aicher Archive.

34. Specific measures included the 1968 Notstandgesetze (Emergency Laws), which allowed for the suspension of constitutional rights during a state of emergency, and the 1972 Berufsverbot or Anti-Radical Decree, which disqualified citizens who were members or participants in certain political groups from working as civil servants, including as teachers.

35. Leon Krier, 'A Monument in Berlin (on Ludwig Leo's Boathouse' *Art Net* 1975, ed. Peter Cook. Reprinted in ARCH+ 57/58 (1981), 11.

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