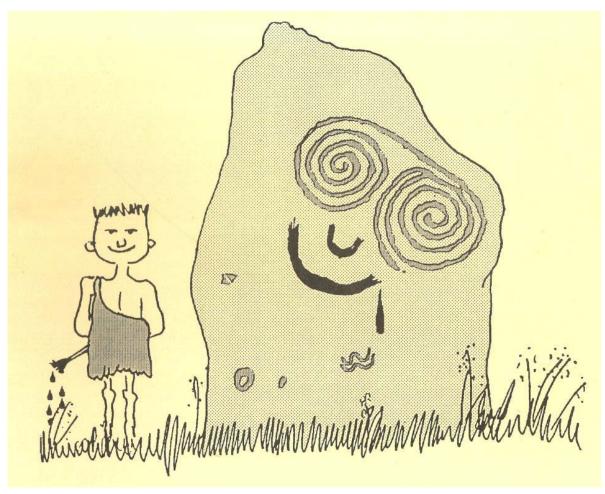
## TROWEL

Volume VI, 1995

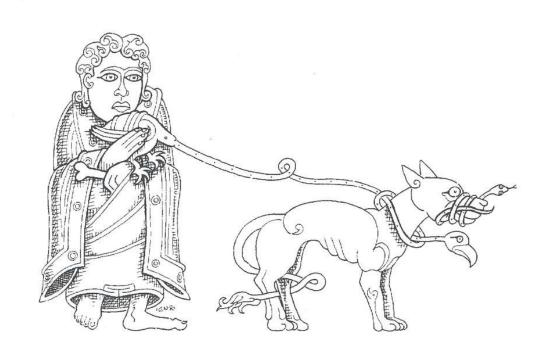


The Journal of the

# **Archchæological Society University College Dublin**

### TROWEL

VOLUME VI



#### Edited by

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#### **Editors' Foreword**

We have great pleasure in presenting this, the sixth, volume of *Trowel*. We hope that this publication is now well established and taken for what it is, an annual journal produced by students but with a standard of content that places it alongside the more established archaeological journals.

This standard is only maintained through the work that the editors and contributors put into it. Therefore, we note with concern the proposal to introduce semesterisation of the university year in U.C.D. This can only have a negative effect on the time that students, undergraduates in particular, will have to get involved in worthwhile activities, such as editing and contributing to *Trowel*. Not to mention participating in the wider, and wilder, activities of the Archaeological Society.

This year we have included updates of the complete theses lists published in *Trowel*, V. It should be noted that the University College Galway theses list published last year was incomplete and so is superseded by this year's. We are sincerely grateful to those individuals and institutions that contributed the various theses lists.

This year *Trowel* enters the weird and wonderful world of Cyberspace. Since Volume III this journal has been produced on the computer facilities here in U.C.D. and making *Trowel* available on the World Wide Web is a natural development of that process. You can find us at HTTP: 441 WWW.UCD.IE. We hope that this will stimulate further interest in and debate about Irish archaeology. The technology is now available to have access, via the Internet, to a wide variety of archaeological data around the world. This has implications for the dissemination of information in Irish archaeology which have not been addressed in any form yet.

We would like to thank the following whose help ensured that *Trowel* VI appeared. The Director and staff of the Irish Archaeological Wetland Unit, the Department of Archaeology and the Archaeological Society, University College Dublin have shown a continued interest in and support of *Trowel*. Also, special thanks to Stephen Johnston for his help and advice during some of the more fraught moments of editing.

The editors wish to acknowledge the major contributions of Conor McDermott and Bernard Guinan as editors of previous volumes of *Trowel*. In particular, the re-establishment of Trowel, since 1992, owes much to the consistent dedication of Conor McDermott, which has clearly resulted in premature greyness. While Bernard has been driven to deepest darkest Africa to escape the rigours of editing!!

*Trowel* has been a vehicle for publication by U.C.D. students. However, the editors have decided that it would be a positive move to accept papers from students outside of U.C.D. For instance, it is hoped that contributors to this year's conference of the Association of Young Irish Archaeologists might consider submitting their papers to next volume of *Trowel*. We hope that this might lead to greater communication and collaboration between the different universities in this small island.

#### DUNBOYNE CORN MILL

#### A little local industrial archaeology

#### Emmet Byrnes\*

The purpose of this article is to give a detailed description of the extant remains of Dunboyne corn mill, a small water mill, situated approximately half way between the villages of Dunboyne and Clonee, in the townland of Dunboyne Co. Meath, O.S. 6" sheet no. 50 (Fig-1).

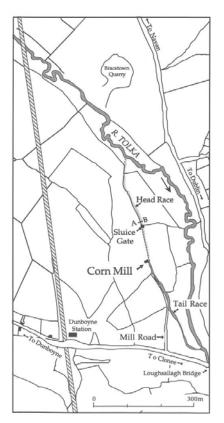


Fig. 1: Map showing location of Dunboyne Corn Mill

Today this small building is in a ruinous state, covered by a heavy mantle of ivy forgotten by or completely unknown to the greater number of the local inhabitants. However, in the not too distant past this building played an important role in the everyday lives of this small agricultural community.

Rather than examining the full history of the mill here, the focus is on the evidence which can be gleaned from the ruin today with the tools of simple archaeological survey and close observation.

However, a cursory glance through some local literature and the Ordnance Survey maps for the area has produced a few interesting notes. The Ordnance Survey Field Name Book for the Parish of Dunboyne 1836 refers to Dunboyne corn mill and the river which powered it, the River Tolka. With reference to Dunboyne corn mill it says "... in the north east part of Dunboyne Townland. An undershot wheel which is supplied by the Tolka" and of the River Tolka it says:

Tolka or Tullaghanoge River - Tulach na nÓg [the hill of the youths]. This river runs in the barony of Ratoath. One branch enters the north west part in the barony of Dunboyne Parish and flows in an east-south, east direction for 21/2 miles when it joins another branch near Flathouse. From here the Tolka flows south east to Clonee Bridge where it joins Dunboyne water. Soon after, it leaves the parish. Formerly it supplied a mill in Piercetown townland which is now in ruins. Today it supplies Dunboyne Mill and a corn mill at Clonee. The supply of water is sufficient for 8 months of the year and the fall is generally high.

(Kenny 1993, 15)

From this we may conclude that in 1836 the mill would appear to have been in regular use but by 1912 it was no longer in use, as a mill at least. This is shown by the fact that the Ordnance Survey revision map for that year shows that a portion of the mill race to the north of the mill was either silted up or deliberately filled in to the extent that it no longer counted

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as a field boundary and was omitted from the map. Some locals remember that the building was used as a corn or meal store during the 1940/50s and thereafter it seems to have fallen into complete disuse.

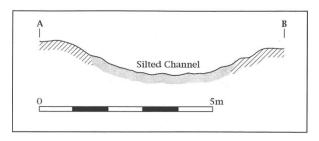


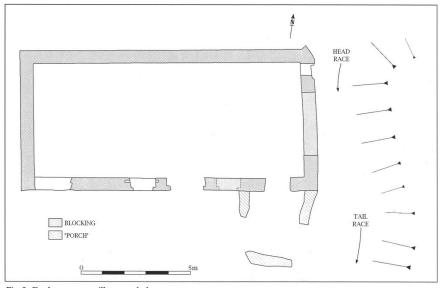
Fig. 2: Dunboyne corn mill: cross section of head race.

The remains of the mill and its associated earth-works are as follows. Access to the mill is along a narrow roadway, just wide enough for a single cart, which joins the Dunboyne to Clonee road approximately 270

metres to the south of the mill (Fig. 1). It was constructed by digging two parallel ditches, about 2 to 2.5 metres apart, and throwing the spoil from each to the outside to form two banks. This left the central area slightly lower than ground at either side of the ditches. In common with the practice of the time numerous hawthorn trees were planted along these banks to mark the roadway and keep out livestock. Today it is covered by briars and nettles but formerly it would appear to have been well maintained.

The water which powered the mill is diverted from the River Tolka approximately 300 metres to the north of the mill and flows through a broad channel to the mill (Fig. 1). The head race (the channel along which water is conveyed to the water wheel) measures 6 metres in width and between 0.5 and 1 metre in depth. However, judging from measurements taken from where the silt is still soft enough to probe, it is estimated that it was originally 1.6 metres or more in depth. (Fig.2)

An interesting feature associated with the head race is to be found about 100 metres to the north of the mill. At a point where a deep field drain intersects the head race there appears to be the remains of a sluice gate. Two clay bound 'piers' jut out from either side of the field drain. Presumably, the gap between contained some form of wooden gate which could be raised or lowered as needed to divert water from the head race into the field drain. Perhaps this was used during a period of flooding where there was a threat of the head race overflowing or the mill itself being flooded. The field drain flows downhill to the River Tolka a short distance away (Fig. 1).



Eig 2. Dumbarma aam mill. amarınd mlar

Fig. 3: Dunboyne corn mill; ground plan

At about a distance of 5 metres north of the mill the level of the head race begins to drop sharply. Presumably this was intended to increase the force with which the waters hit the paddles or buckets on the underside of the waterwheel, which was mounted on the east wall. From here the water flows into the tail race (the channel through which the water used in the mill returns to the river from which it had been diverted).

The tail race is, for the most part, dug to the same proportions as that of the head race, with the exception of the most southerly portion which narrows considerably towards the river. It runs along the access roadway for approximately 140 metres and then turns south-east to rejoin the river close to Loughsallagh Bridge (Fig. 1).

The mill itself is a rectangular building measuring 13.7 x 6.8 metres (Fig. 3). It was built from limestone (possibly quarried locally at Bracetown Quarry, only 0.5 Km away), old red sandstone and red brick for the doors, windows, and archways. A lime based mortar with a pinkish hue was used. The north and the west walls were originally featureless although in more recent times they have had several holes knocked through them. The entrance into the building is on the ground floor through the south wall. In this wall there are two doorways, one in the centre and one to the east, as well as an opening to the west, 1.8 metres wide. The central doorway has a window at either side. Outside the eastern doorway is a low walled feature, this could have served as a porch or possibly the support for a first floor maintenance balcony giving access to the upper part of the waterwheel on the east wall. It is difficult to say for certain as much of the first floor is obscured by a dense growth of ivy. Both doorways and windows were well constructed but unfortunately many of the red bricks have subsequently been robbed. On the other hand the western opening appears quite crude with red brick only being used in part. It also, unlike the central and eastern doorways, appears to have had a sill, made from flagstones and red brick. What its exact function was is difficult to say. One possibility is that it was an access for carts into the interior of the building, so that flour or meal could be thrown down into the carts from the first floor. Alternatively it could have served as a hole through which some part of the internal machinery projected.

The window on the east side of the central doorway is now blocked up as is a feature in the east wall. This feature appears to have been the archway through which the wheel shaft passed to drive the pit or trundle wheel and in turn the grindstones, which were usually on the first floor of such buildings. Further along the east wall, near the north-east corner, there is a small square window.

There were two windows on the first floor, both in the south wall. One directly over the western opening/doorway, and the other over the central doorway. There does not appear to have been a third over the eastern doorway.

Internally, at a height of about 2.5 metres, there is a narrow lip along the length of the north and south walls on which the beams which supported the first floor were rested. The building was A-roofed, although whether with slates or tiles is uncertain. However the presence of an orange tile incorporated into matrix of what appears to be a repair in the south wall supports the latter.

Sadly nothing now remains of the mill machinery and the waterwheel has also long since disappeared and it may not be long before the building itself succumbs to a similar fate.

Dunboyne Mill is only one of a number of similar sites around the country and it is important that these buildings are at least in some part accurately recorded before such a fate befalls them. To that end the author hopes to have encouraged others to take a more active interest in the study of their local heritage. Although historical research is an important element of that study, with simple surveying skills, paper and close observation they also can make a significant contribution.

#### Acknowledgements

I would like to thank Ms Ciaran Trace and Mr Aidan Fleming for their encouragement and assistance, and Dr G. Cooney and the editors for their advice. Any mistakes or omissions are my own.

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#### THE PASSAGE TOMBS OF COUNTY DUBLIN

A note on previous accounts David McGuinness\*

#### Introduction

In this article I intend to give a brief history of the recording and study of the passage tombs of County Dublin. In addition to summarising previous work on the Dublin passage tombs, I will be presenting two monuments mentioned in antiquarian accounts as possible new passage tombs.

#### **Antiquarian Accounts**

The earliest description of a passage tomb in County Dublin is the late eighteenth century account of the travelling antiquarian Austin Cooper who visited and described the ruined tomb at Montpelier. It had been plundered earlier in the century to facilitate the building of Speaker Conolly's hunting lodge, now the "Hellfire Club." Cooper termed the monument "Druidical Remains" (Price 1942, 43) and gave a detailed description, including measurements, which clearly identify this site as a passage tomb. An unpublished sketch of the tomb done by Sir William Betham in 1841 is held in the National Library (Herity 1974, 257).

Numerous references to the Dublin passage tombs occur in the Ordnance Survey Letters for County Dublin written in the 1830s (O Flanagan 1930). A great many tombs, some now completely destroyed, are mentioned in this source. Descriptions are given of three of the four Seahan tombs, a "cairn...and...two ancient low sepulchral mounds very near it, one the east side, distant about 14 yards, the other on the west, distant about 20 yards." Large numbers of cairns and stone circles are described as being situated on Tallaght and Saggart Hills and a rough map showing these sites is given. However, no all of them can be recognised today. These are 'Cnocán a bhinididhe' and 'Cam andara ccloch' on Tallaght Hill, and 'Cnocán an Iolair', a cairn to the north-east of this site, and a site at 'Sliabh Toghail', all on Saggart Hill. 'Cnocán an Iolair' (Knockananiller) is described as a "monstrous large cairn" and is said to be "opened on the north-west side, apparently for the purpose of getting gravel." There is indeed a hollow in this part of the mound today which might be mistaken for a collapsed chamber. Two cairns, both open, are described as being on Sliabh Toghail (Slievethoul), though only one can be identified today. The larger of the two "contained a large grave, covered by a very large flag stone, which was broken and carried away, but the supporters remain, though not in their proper places". In the centre of remaining cairn today are some orthostats which may be the supporters that are referred to.

In 1837 W R Newenham published a report of his excavations of the now destroyed passage tomb of Knocklea in north county Dublin, in which he describes the tomb and his finds from it (Newenham 1836-7). In W D Handcock's History and Antiquities of Tallaght, first published in 1876, descriptions of three of the four Seahan tombs are given, and the main cairn on Seahan and that on Montpelier are compared with the Seefin and Seefingan cairns in Co Wicklow (also passage tombs), although he states that there was no chamber under the Montpelier cairn. Handcock also mentions a number of cairns and stone circles on Tallaght

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and Saggart Hills, his source for some of these obviously being the OS Letters (Handcock 1876, passim). In 1878 Alexander Macalister, in a paper on the history and antiquities of County Dublin, written for the meeting of the British Association in Dublin, refers to a number of the Dublin tombs. He divides up the antiquities of Dublin into several classes including "Cairns, or Giants' Graves" and "Stone Circles". In the former category he includes one of the Seahan tombs, two sites at Knockananiller, one at 'Cnoc an drinagh' and several other sites now destroyed or unidentifiable. In his category "Stone Circles" he includes one on Sliabhthoul, one beyond 'Cnoc an aniller', and several others, perhaps also passage tombs (Macalister 1878, 98-9). In Borlase's, monumental work *The dolmens of Ireland*, (1897) only one of the Dublin passage tombs, a "dolmen cairn encircled" in Ballynascorney Townland is mentioned. It appears to be the passage tomb of Knockanavea, on Tallaght Hill, though he confuses it with one of the Slievethoul cairns {*ibid.*, 382).

Early in the present century F E Ball refers to a number of the tombs in his History of the County Dublin, viz Fairy castle (on Two Rock Mountain), Montpelier, Slievethoul, Crockaundreenagh, Knockanavea, Knockanvinidee, and three sites on Seahan Mountain. In addition, he refers to the famous site on Tibradden Mountain, which he views as an early Christian beehive hut which later had a cairn built around it (Ball 1905, 49). In 1912 Weston St John Joyce mentions several of the tombs including Fairy Castle, Montpelier and Seahan. He too refers to Tibradden, as "an ancient cairn and beehive burial place" (Joyce 1912, 135).

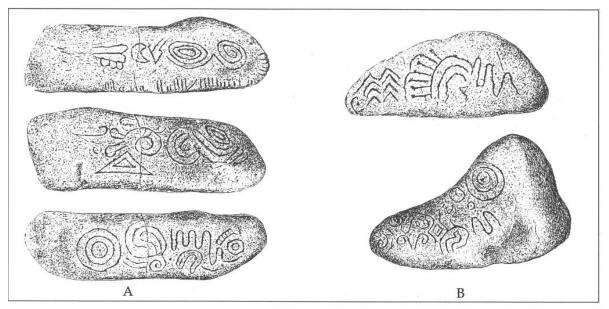


Fig. 1A & IB: Stones found at Dun Laoghaire with alleged passage tomb art and ogham inscription

In 1925 Dix published an article in the *Journal of the Royal Society of Antiquaries of Ireland* relating to several antiquities on Tallaght Hill in which he describes and gives measurements and photographs of the tombs of Knockanavea, Knockanvinidee and Seahan. He also summarises earlier references to the three Seahan tombs (Dix 1925). Two notes were published in the *Journal of the Royal Society of Antiquaries of Ireland* for 1932 describing a pair of curious stones found in the vicinity of the Old Harbour at Dun Laoghaire (Ronan 1932; Gogan 1932). Both stones are decorated with geometric forms similar to passage tomb art and one of the stones has an ogham inscription (Figs 1A & IB). Gogan, the author of the second note, compares some of the art to that of the passage tombs of Knockmany and Clover Hill. Shee-Twohig mentions the Dun Laoghaire stones in 1981 in her catalogue of the mega-

lithic art of Western Europe. She suspects that the stones are modern forgeries as the supposed megalithic art and the ogham inscription on both stones are executed in the same manner and thus may be contemporary, and the circumstances of the finding of the stones are suspicious (Shee-Twohig 1981, 236). In 1933 Farrington published parts of the original excavation report of the Tibradden monument, by Marcus Harty, along with a plan and section of the site based on Harty's sketches (Farrington 1933). In 1937 Adolf Mahr described Tibradden as a "degenerate corbelled tomb" (Mahr 1937, 350).

#### **Modern Accounts**

In the late 1930s Terence Powell published a very important article in the *Proceedings of the* Prehistoric Society on "The Passage Graves of Ireland" in which, for the first time, a distribution map and listings of the then known tombs were given. He divided the Irish passage tombs into several groups based on location, two of the groups including passage tombs in County Dublin. His "Dublin Group" included Fairy Castle, Tibradden, Seahan, Knockanvinidee, Saggart Hill (two sites), Crockaundreenagh, Knocklea and Bremore, a total of nine tombs for County Dublin (Powell 1938, 247-8). He significantly included the north Wicklow tombs (as well as those of south Wicklow) in this group, recognising their obvious spatial relationship with the south Dublin sites. He states that the Tibradden tomb, of which he gives a plan, is the most important tomb in the group. Believing that the roof was originally corbelled, he describes the tomb as being of the "early and simple tholos type" which "can be paralleled in tombs in several areas of primary settlement in Atlantic Europe as well as in Almeria" (ibid., 246). He describes the other visible chambers of the Dublin group as being polygonal in plan, some having cells or recesses opening off the main chamber. Of the methods of construction, he states that orthostats were most commonly used, though dry stone walling was known, The roofs, he says, were either corbelled or built of large slabs, or a mixture of both methods. The tumuli, built of loose stones, were circular and kerbed. He refers to the north Dublin passage tombs of Bremore and Knocklea as "isolated east coast tombs" (ibid., 239) thus seeing them as separate from the south Dublin and north Wicklow tombs.

In 1939 Liam Price, in a paper on the antiquities and place names of south county Dublin, refers to a number of the Dublin tombs. He gives measurements of two of the four Seahan tombs and is the first to note the remains of a passage in site B. He also mentions the sites of Slievethoul, Knockanavea, Knockanvinidee,

Montpelier, Fairy Castle and Tibradden. He is the first to describe the Slievethoul mound as being "of the passage grave type" (1939, 123). Of the Tibradden monument he says that "it belongs to a type which is found in Spain and other Mediterranean countries" (*ibid.*, 124) He suggests that the cist at the site might have been inserted into the tomb some time after its original construction by different people (*ibid.*, 124).

In a paper on the megalithic colonisation of Europe Daniel sees Tibradden as a tomb of the "Pavian type" (1941, 16) one among several probably marking out the primary colonisation of Ireland by the passage tomb builders. In the same paper, he makes the striking and unsupported statement that "the development of the V-shaped Passage Grave occurs and is best seen in the Dublin group" (*ibid.*, 16). In a later paper Daniel and Powell, include Tibradden as a corbelled dry-walled tomb among the primary west European passage tombs (1949, 173). This view is reiterated in Daniel's well-known work The Megalith Builders of Western Europe (1958). In 1957 doubt was first cast on the authenticity of the Tibradden monument when it was cleared out by Marcus Ó h-Eochaidhe. It had long been known that a

cist with Food Vessel had been found in the centre of the monument. Ó h-Eochaidhe felt that the chamber and passage were built in the mid-nineteenth century in order to allow easy access to the cist (Ó h-Eochaidhe 1957, 221).

In 1950, Kilbride-Jones published a paper on the excavation of a hengiform monument situated on the north-east side of Saggart Hill. He refers to other prehistoric sites of importance on the hill, including passage tombs, and gives a map of them. He mentions the sites of Slievethoul "chambered cairn", Knockananiller "chambered cairn", Crockaundreenagh "passage grave" and Coolmine "chambered cairn". He gives descriptions and measurements of several of the sites (1950). Some of the Dublin passage tombs are mentioned in a paper read by Patrick Healy to the Old Dublin Society on the Valley of Glenasmole, including a reference to Cooper's early description of Montpelier and a comment on its contemporary condition. He suggests that some broken stones in the centre of the site are the last vestiges of the central chamber of the tomb. He describes and gives measurements of three of the four Seahan tombs and suggests that the large unopened cairn at the site is later than, and was built using stones from, the two adjacent cairns (Healy 1961).

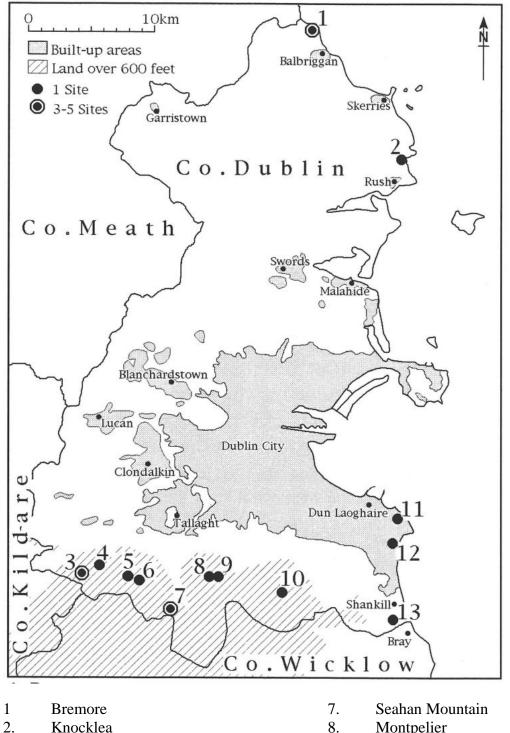
In his paper on the excavation of the Fourknocks passage tomb Hartnett describes five mounds at Bremore and raises the possibility that they may be passage tombs (1957). Powell had previously noted one of these mounds and described it as a passage tomb (1938). Hartnett too takes this site to be a passage tomb. He also mentions the Knocklea tomb (*ibid.*, 264, 268). In 1960, Etienne Rynne published a complete survey of the five Bremore sites noted by Hartnett and classified them as a passage tomb cemetery on account of their presence in a passage tomb area, their close grouping together, and their round kerbed cairns (Rynne, 1960).

The Dublin passage tombs are mentioned briefly in 1964 by Ó Ríordáin and Daniel. They group the south Dublin and north Wicklow tombs together and state that there are nine barrows on the northern edge of the Wicklow Mountains, of which five "certainly contain Passage Graves" (1964,98). Of these five sites those in County Dublin are Seahan, Knockanvinidee and Saggart Hill. They agree with Ó h-Eochaidhe that the Tibradden monument is not a passage tomb. In 1968 6 Nuallain published a paper on a previously unrecorded passage tomb cemetery in Co Donegal to which he appended a list of all the then known Irish passage tombs. He lists 13 tombs for Co Dublin: Bremore (five cairns), Saggart Hill (three tombs), Knockanvinidee Knockanavea, Seahan Mountain, Montpelier and Fairy Castle.

Nineteen seventy-four saw the publication of a work of outstanding importance in Irish megalithic tomb studies, namely Michael Herity's *Irish passage graves*. This comprehensive work provided a synthesis of all that was then known about Irish, and related, passage tombs and included a very complete inventory of the Irish tombs and drawings of a great many of the finds from them. Herity believed that the passage tomb culture was first established in Ireland on the east coast, particularly in the Boyne Valley. He suggested that the Irish tombs had their origin in southern Brittany in the area around the Golfe du Morbihan. In his discussion of the distribution of the tombs, he refers to those of Dublin. He first mentions the Bremore cemetery, having described the nearby Gormanstown tombs in County Meath. He compares the Knocklea tomb, of which he gives a plan and section, with some of the Breton sites and he suggests that the east coast tombs "may... enshrine some of the earliest elements of the Irish passage grave tradition" (1974, 72). He notes the hilltop extended cemetery arrangement of the south Dublin and north Wicklow passage tombs which he lists along with their heights above sea level. He compares the Crockaundreenagh tomb with the so-called B-dolmens common in the Carrowmore cemetery, on account of its simple style and use of

rough granite boulders (*ibid.*, 72). In the inventory of sites he lists 16 tombs for Co Dublin, based on a review of previous accounts. These are Bremore (five sites), Knocklea, Slievethoul, Knockananiller, Crockaundreenagh, Coolmine, Seahan, Knockanavea, Knockanvinidee, Montpelier (two sites, both shown in an aerial photograph) and Fairy Castle. Strangely, though, he lists only one site for Seahan, despite having read Dix's account of the site. He gives measurements and brief descriptions of the sites where possible.

In 1986 Eggan mentions several of the Dublin tombs in conjunction with those of north Wicklow in his work on Knowth and the Irish passage tombs. He mentions the "enigmatic site" of Old Connaught in south Dublin and, in the light of some of its finds, he suggests that it could have been a passage tomb (1986, 144). In 1988 Charles Mount published a plan and description of the Crockaundreenagh tomb. He suggests that this small tomb may have been oriented towards the larger cairn of Knockananiller nearby. Having considered that the tomb appears to have no differentiation between passage and chamber, Mount compares it with the other Irish undifferentiated tombs such as Townley Hall and Magheracar. In the fifth volume of the Survey of the Megalithic Tombs of Ireland classified lists of the Irish megaliths are given. In the section on passage tombs ten sites are listed under County Dublin: Ballynascorney Upper (two sites), Bremore, Coolmine, Crockaundreenagh, Montpelier, Knocklea, Slievethoul (two sites) and Fairy Castle (1989, 128). Reference to several of the Dublin passage tombs is made in an article on the archaeology of Dublin based on a preliminary sites & monuments record for the county (Stout & Stout, 1992). They compare the distributions of the various types of megalithic tombs in County Dublin and suggest that these may indicate "the existence of territorial boundaries between different tomb building communities" (ibid., 7). The passage tombs "appear as a coherent group in the south-west in a prominent position on the peaks at Tallaght and Saggart with an outlier at Fairy Castle on Two Rock Mountain." Contrasting with this is the location of the portal tombs and wedge tombs further to the east and at lower altitudes. They suggest that this apparent mutual exclusivity in the location of different megalith types implies that they were coeval and that the passage tomb builders were still present when the wedge tombs were being built in southeast Dublin (*ibid.*, 7). The passage tombs that are listed are Bremore (five sites), Knocklea, Crockaundreenagh/Slievethoul (tombs), Ballynascorney Upper (Seahan and Knockanavea tombs), Montpelier (two sites), Coolmine and Fairy Castle (ibid., 1992, 27-8), a minimum total of 12 tombs.



Knocklea 8. Montpelier 3. SaggartHiU 9. Montpelier 4. Coolmine 10 Fairy Castle Knockaunvinidee (Two Rock Mountain) 5. (i.e. Slievethoul, Knockananiller 11. **Dalkey Commons** & Crockaundreenagh) 12. Killiney Knockanavea 6. 13. Old Connaught

Fig. 2: Location map of passage tombs in Co. Dublin.

In recent years the author and Markus Redmond have published plans and descriptions of the Knockanavea tomb (Redmond & McGuinness 1992) and the Seahan tombs (Redmond &

Mac Aonghusa 1994). In the latter article we included a fourth previously unrecorded tomb on Seahan Mountain, Site A. We suggested that the four tombs represent a small passage tomb cemetery and that they also form part of a larger extended cemetery along with the other south Dublin/ north Wicklow tombs. We identified Site B as one of the few possible Irish examples of a French-type angled passage tomb (Redmond & Mac Aonghusa 1994, 38-9).

#### **Two Possible Passage Tombs**

I wish to draw attention to two further sites, now destroyed, which may have been passage tombs. These are the sites of Dalkey Commons and the Druid's Judgement Seat (Killiney). In 1837 Samuel Lewis wrote that "about the commencement of the present century, a circle of granite blocks enclosing a cromlech was standing on the common (Dalkey); but the cromlech and the stones surrounding it were blasted with gunpowder and carried away to furnish materials for the erection of a Martello tower on the coast" (1837). The site is later referred to by Macalister (1878, 100), Ball (1902, 72) and Price (1939, 125). St John Joyce informs us that the monument stood on Dalkey Commons "up to the close of the eighteenth century" (1912, 64). The description of this monument would suggest a ring of kerbstones surrounding the denuded remains of a central chamber as, for example, is found at many of the Carrowmore sites in County Sligo.

The second site, the Druid's Judgement Seat, is the well-known eighteenth century folly situated in a grove of oak trees off the top of Killiney Avenue. There was once a megalithic chamber within a stone circle at this site. This was later altered when the folly was being constructed (Wakeman 1896, 411; Ball 1902, 85; Anon 1908, 246; Price 1939, 125; Turner 1983, 15). This appears to describe a denuded, kerbed, passage tomb and its situation on a commanding height near the coast would not be out of place in the passage tomb series. There is a large stone decorated with two large circles at the site. One account describes this as the "Sun and Moon Stone," the name dating from "the days when ophite worship and druidism dominated Irish archaeology" (Anon. 1908, 246). The same commentator suggests that the carvings on the stone are the result of an attempt by someone to cut two millstones from the stone.

#### **Discussion**

From the foregoing we see that up to the present twenty-two passage tombs, or possible passage tombs, have been identified in County Dublin. These are Seahan (four sites), Knockanavea, Knockanvinidee, Montpelier (two sites), Slievethoul, Crockaundreenagh, Knockananiller, Coolmine, Fairy Castle, Knocklea, Bremore (five sites) and the doubtful site of Old Connaught. In addition there are the possible passage tombs at Dalkey Commons and Killiney.

The material available is for the most part fragmentary and incomplete and does not allow a full and proper history of the individual sites to be written. Of the twenty-two sites plans of eleven have been published, viz the Bremore sites, three of the Seahan sites, Knocklea and Crockaundreenagh, and these only in relatively recent times. It might be said that the passage tombs of County Dublin (and those of north Wicklow) have been virtually ignored from an academic point of view.

Archaeologists such as Powell and Ó Nualláin have listed them and placed than in one group or another but in many cases appear not to have visited the sites in person. This is quite

strange considering their proximity to Dublin city. The County Dublin portal tombs have long been known about and discussed and both they and the County Dublin wedge tombs have all been planned. Indeed two of the portal tombs and two of the wedge tombs have even been scientifically excavated. Yet the most numerous single megalith type in the county, the passage tomb, is the least well studied.

In recent times, more emphasis seems to have been placed on the famous and more spectacular passage tombs such as those in the Boyne Valley, Loughcrew and County Sligo, perhaps to the detriment of other less impressive sites around the country. This situation has not been helped by the Megalithic Survey leaving full descriptions and plans of passage tombs out of their county surveys with the intention of returning to them at a later date, though their reason for doing so is understandable (de Valera & Ó Nualláin 1972, xiii).

It is to be hoped that many of the less well known passage tombs in Ireland, including those of County Dublin, will be more thoroughly studied in the future and perhaps ultimately excavated.

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#### THE ORIGINS OF MEGALITHIC TOMBS IN ATLANTIC EUROPE

#### Chris Corlett\*

"Megalithic monuments have attracted a great deal of archaeological attention at all stages of the development of prehistoric studies. Their conspicuous size, implications of mechanical sophistication, and the intimations they give of spiritual consciousness have made them a primary target of interest from the days of Stukeley to the present. Their illustrious archaeological pedigree makes the megaliths a tempting area of study for any new approach."

(Jarman et al. 1982, 233)

In recent decades several 'new' and conflicting approaches have been argued to explain the often contradictory archaeological evidence for the origins of megaliths. It is not within the parameters of this article to discuss the cultural backgrounds of the origins of megalithic tombs, or to set about defining terms such as Neolithic, Mesolithic, gallery grave, passage grave, long mound or long house (see Hodder 1990). Also, it is not the aim of the present writer to discuss in detail the theoretical processes at the centre of the approach-es put forward by various authors. Instead, this article aims to examine briefly a selection of theoretical approaches and attempts to show that a combination of these conflicting approaches is necessary to explain the origins of a variety of similar megalith types that occur over a wide geographical area (Fig. 1).

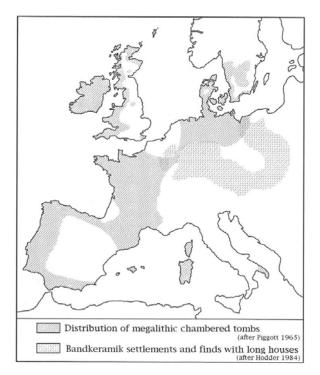


Fig.l

#### 'Old Archaeology' conventions

The scale of their construction and distribution, as well as general similarities in form, communal burial and their continued usage over many generations, have all encouraged archaeologists to study megaliths as part of a unitary phenomenon - an intrusive, coherent burial rite spreading into Europe by a combi nation of invasion and acculturation (Chapman 1981, 71).

Montelius (1899), before radio-carbon dating, sought an origin for megaliths in India, denying the possibility that they could have moved from north to south or, indeed, from some central point in both directions. Childe (1925) similarly argued for an Oriental

origin, while Piggott (1965) favoured an eastern Mediterranean origin in the form of the stone-vaulted tombs of the Aegean. The concepts of the megalith builders and the megalithic idea was celebrated by Piggott:

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Creeds and beliefs can be transmitted in many ways; conquest or evangelism, fanaticism or fashion, by saints or sailors. Some or all of these, and other possibilities, may well have operated to bring about an eventual situation in which precise details of architectural modes and ritual planning recur from one end of the western Megalithic world to the other (ibid., 60).

#### Anti-diffusionists

Renfrew (1976) directly challenged these conventions when he argued for independent origins in several areas of Atlantic Europe. Basically, Renfrew visualised megaliths as "territorial markers for segmentary societies" (*ibid.*, 204). He believed that the need for such 'territorial markers' was stimulated by population stress, caused by the introduction of farming and new peoples to an area already relatively densely populated with huntergatherer-fisher communities. In Western Europe expansion westwards by the earliest farmers in times of population pressure was inhibited by the Atlantic seaboard. Renfrew argued that, with the resulting population pressure, megaliths were used by segmentary societies to assert territorial rights and create social cohesion. Thus, it was argued that megaliths were independently inspired in a social and economic context which was common throughout Atlantic Europe.

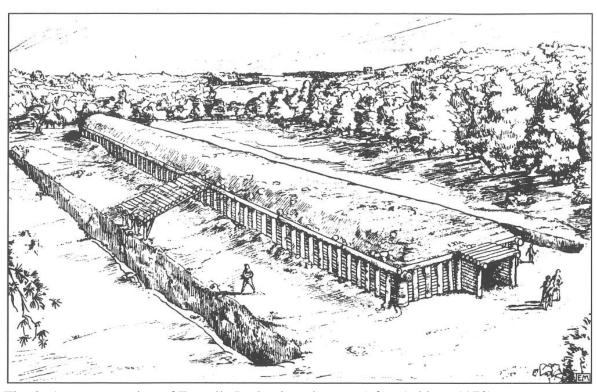


Fig. 2: A reconstruction of Fussel's Lodge long barrow (after Ashbee, 1970)

However, Chapman, also taking a broad 'anti-diffusionist' approach, found it "more profitable to relate their appearance to wider changes in subsistence, settlement and society" (1981, 78). While Chris Scarre suggested that one possible function of megaliths was to distinguish "the human- from the natural-world" (1983, 277) as part of a local transition from Mesolithic to Neolithic.

Such 'anti-diffusionist' approaches basically agreed that megaliths were inspired by a radical reorganisation by local communities of their societies and economies clue to the arrival of

Neolithic economies and social organisation, and are based very much on the spatial and chronological context of megaliths.

#### **Neo-Diffusionists**

For many years archaeologists recognised the similarities between the long houses of central Europe and the burial traditions of Atlantic Europe. For example, Reed argued that in the case of Fussell's Lodge, (Fig. 2), "such a construction would have owed a great deal to (or have been inconceivable in the absence of) knowledge of actual longhouses of a practical nature." (1974, 54). The mutually exclusive distribution (Fig. 1) and different function of megalithic tombs and Bandkeramik longhouses prevented any elaboration of such comparisons. However, Hodder went "beyond the numerous general statements of affinity" (1984, 54) when he recognised a symbolic significance to long houses that could be compared with megaliths, and suggested that megaliths had a social significance that could likewise be compared to long houses. Sherratt (1990, 149) argued that long mounds and megaliths were the 'monumental surrogates' of long houses. This association of communal monumentality with long houses allowed further comparisons with the burial traditions of Atlantic Europe. Sherratt (1990) argued that the introduction of cereal cultivation required a radical social reorganisation by the natives of Atlantic Europe which, rather than bringing about population stress, put pressure on labour resources. He suggested that a situation developed whereby intrusive farmers from central Europe "in the absence of large, stable residential units required the invention of some equivalent ritual mark of continuity and common descent" (ibid., 149). Sherratt's model considers long mounds as this invention and passage graves as the native reaction, the latter possibly representing native house types and their related symbolism and social organisation. Gallery graves are seen as a direct copy by native communities of the long mound tradition (ibid.). Essentially, these theories suggest that megaliths were constructed by the Mesolithic populations of Atlantic Europe, not due to a local necessity, but in reaction to introduced ritual, social and economic concepts represented by the long mound tradition with an ancestry in Bandkeramik central Europe.

The 'neo-diffusionist' approach is essentially based on the morphological and conceptual aspects of megaliths.

#### **Questions Unanswered**

Both the 'anti-diffusionist' and 'neo-diffusion-ist' approaches have succeeded in addressing very different issues within the broader argument about the origin of megaliths, yet neither approach has found an adequate explanation for the conflicts apparent in the archaeological record of megaliths and long mounds. For example, 'anti-diffusionists' frequently do not take sufficient account of the problems posed by morphology. Chapman argues that "the search for origins based upon formal similarities is insufficient to explain the processes which lay behind the erection of monumental tombs" (1981, 80). Yet, this ignores the fact that megalithic morphology represents a deliberate choice by their builders. While megaliths and earthen long mounds have many morphological differences, the fact that they also reflect so many significant similarities over such a wide geographical area is an important point that cannot be ignored in any approach seeking to define their origins.

The 'neo-diffusionists' have failed to take account of certain chronological issues, such as the chronological primacy of the passage tombs of Brittany and Iberia. Also, these approaches often assume morphological consistency. By "labelling a series of tomb types 'megalithic' we create a unitary class for which it is tempting to search for a single source" (*ibid.*, 78).

Therefore, both approaches have failed to answer the intriguing issues raised by the spatial distribution of these tombs. In order to address these questions raised by the chronological and conceptual, morphological and spatial context of megaliths we must combine rather than separate our approaches.

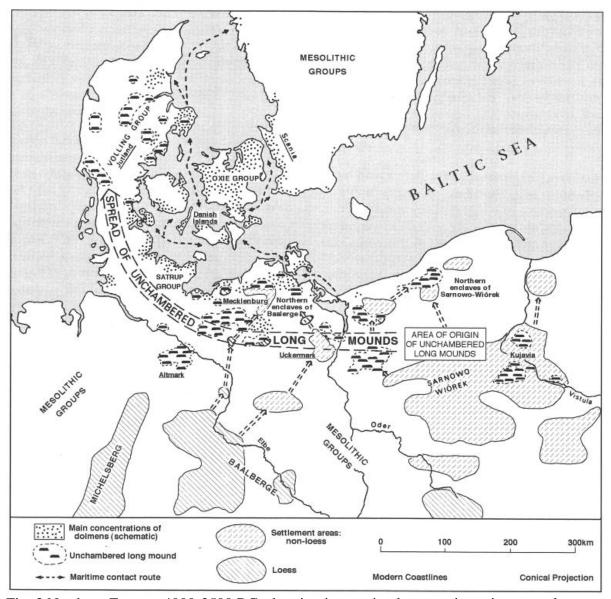


Fig. 3 Northern Europe, 4000-3500 BC, showing interaction between intrusive central European groups and indigenous populations in the North European Plain (after Sherratt 1990)

The earliest evidence for megalithic construction comes from Western France and western Iberia (Scarre 1992). The megalithic and long mound tradition of northern Europe appears to date slightly later (Midgley 1985, 221-3). It is in this area that the most convincing arguments have been put forward to explain the occurrence of these burial traditions (Sherratt 1990).

#### The North European Model

The origin of the megalithic and long mound tradition of northern Europe is extremely difficult to link directly with the slightly earlier tradition of western France. It seems probable that there was an awareness in Northern Europe of megalithic traditions developing

elsewhere, however, it is clear that the context of the megaliths in this area requires a different explanation.

The earliest burial monuments of northern Europe appear to have been the unchambered long mounds, contrasting with the earliest burial monuments of western France, the passage graves. Sherratt (1990) convincingly argues for the 'Kujavian graves' of Poland as representing earth and stone copies of contemporary timber houses and being used as 'symbols of monumentality' by pioneer farming groups attempting to establish themselves among native populations in northern Europe and Scandinavia (Fig. 3), both areas being noted for flourishing Mesolithic communities. In northern Germany and Scandinavia the distributions of unchambered long mounds and a wide variety of megaliths appear to be mutually exclusive. Thus, the northern European and Scandinavian megaliths appear to represent a native reaction to incoming traditions from central Europe. Radiocarbon dates show that megalithic structures within the 'Kujavian graves' were secondary and may reflect megalithic concepts moving from Scandinavia southwards (Jazdzewski 1973). The megaliths and longmounds of Britain may be explained by a model similar to this north European one, for instance, in southern England Ashbee (1970) suggests that the building of long mounds stimulated the construction of megalithic tombs.

#### The West European Model

The Passy-sur-Yonne mounds, south-east of Paris, are similar, conceptually and morphologically, to the long mound tradition of northern Europe and Britain. Hodder's (1984) argument that long mounds are a Bandkeramik invention based on the principles of the long house tradition appears to hold out in the Paris Basin. However, while Sherratt's (1990) model works well in northern Europe, such a theory fails to explain the archaeological record of western European megaliths and long mounds simply due to the lack of conclusive early dates for the Passy-sur-Yonne mounds (Scarre 1992). Sherratt's (1990) argument, outlined above, that long mounds, ultimately of Neolithic Bandkeramik origin, influenced the native Mesolithic populations in northern Europe and Scandinavia to build megalithic tombs, cannot be used to explain the origins of megaliths in Western Europe. Instead, it appears that the Neolithic, in terms of economy and mobile material culture, had already arrived at a slightly earlier date in western France along existing Mesolithic exchange networks with southern France (Scarre 1992). The arrival of Bandkeramik influence from the Paris Basin appears to be roughly contemporary with the construction of the first megaliths in western France (Sherratt 1990).

In order to come to an understanding of the origins of megalithic tombs we must briefly consider the history of the early megalithic tombs. The Breton passage tombs appear to provide the earliest dates for a megalithic tradition anywhere in Europe, for example Bougon and Barnenez are radiocarbon dated to 3800 be (uncalibrated) (Scarre 1992). As one moves further east towards the heartland of the Bandkeramik the earliest date for a passage tomb comes from La Hoguette in eastern Normandy, which is radiocarbon dated to 3610 be (uncalibrated) (*ibid.*). Iberian passage tombs have provided dates comparable to the early Breton examples (Savory 1977, Scarre 1992). In Iberia there is no Bandkeramik tradition, and long mounds and gallery graves are absent. Clearly these Breton and Iberian passage tombs fall outside the argument proposing that the stimulus of megalithic tombs can be found in the central European long house tradition, supporting Renfrew's (1976) basic idea for independent origins. Furthermore, there is "no evidence that the practice of multiple inhumation originated in a Bandkeramik or Cerny context" (Scarre 1992, 143). This highlights the importance of the Mesolithic graves at Hoedic and Teviec in Brittany that

provide local antecedents for the tradition of communal burial rites associated with megaliths. Yet, how do we explain the origins of long mounds and also gallery graves if we accept that they do not have a chronological primacy?

In western France and western Iberia megaliths in the form of passage tombs appear to have originated independently. In western France it seems possible that population groups moving into this area from the Paris Basin reacted by constructing long mounds based on the long established concepts of the long house tradition of Central Europe. Gallery graves appear to retain many of the concepts present in long mounds and it is possible that they represent a native counter-reaction to the intrusive tradition. However, it may also be possible that gallery graves represent a subsequent development of long mounds by the incoming Bandkeramik-influenced groups. Due to the lack of Bandkeramik-influenced groups, with their long house traditions, in Iberia there was no reaction to passage tombs in the form of long mounds or counter-reaction in the form of gallery graves. There has often been a reluctance to explain the occurrence of passage tombs in Iberia and Brittany at very similar early dates because of the significant distance (500 km) that separates these two areas (Fig. 4). However, if we accept that the western French Neolithic had its origins in southern France (Scarre 1992) then this distance is considerably reduced.

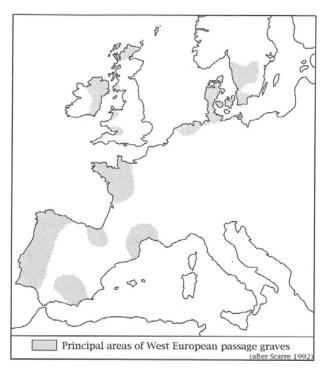


Fig. 4

#### **Conclusion**

In northern Europe megaliths appear in the context of a Mesolithic-Neolithic transition accentuated by incoming Bandkeramik communities from central Europe (Sherratt 1990). I would like to suggest that the origins of megalithic tombs in western France and western Iberia may appear in the context of a Mesolithic-Neolithic transition that has its origins in southern France rather than Bandkeramik central Europe. Furthermore, while the long mounds of northern Europe may have inspired megaliths. It would appear that the long mounds of France were inspired by the development of a megalithic tradition in western France and Iberia.

This article has attempted to show that a combination of the previously outlined 'anti-diffussionists' and the 'neo-diffussionists' approaches is necessary to explain and reconcile a wealth of conflicting archaeological evidence, chronological and conceptual, morphological and spatial, that cannot be successfully explained using a single approach.

#### Acknowledgements

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#### KNOCKEA, CO. LIMERICK

A unique Early Christian ritual monument.

James Eogan\*

In the summer of 1960 the late Prof. M.J. O'Kelly excavated two monuments of an extensive archaeological complex on the hill of Knockea six miles south east of Limerick city (Fig. 1). One of the monuments Site 1 turned out to be a very unusual cemetery while the other was a partially destroyed ringfort (O'Kelly 1967).

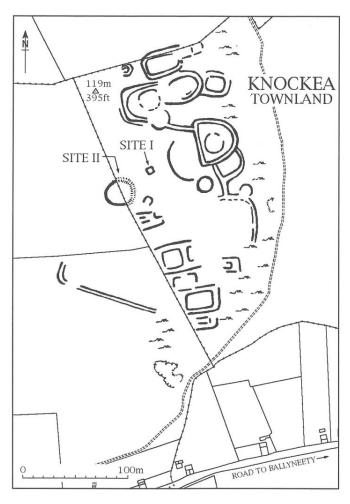


Fig. 1 - Plan of monument complex on Knockea hill (after O'Kelly, 1967)

#### Site 1, Description

On excavation it became clear that Site 1 was a unique monument (Fig. 2). It consisted of a U-profiled ditch, square in plan with rounded corners which was two metres wide at the top and 80cm deep on average. The spoil from the ditch had been thrown up on the inside to form a bank, which had an average width of about three metres and enclosed a square area c. 8.3m x 8.3m. It was internally faced with a dry stone wall which stood to 70cm in height and the bank may also have had an external stone revetment. There was no gap in the enclosing bank and the ditch was continuous, however, midway along the western section of the ditch a 1.5m wide causeway of earth and stones had been built, at the same point a gravelled pathway ran over the bank. A line of twenty-five large postholes was found on the crest of the bank. They all had

similar dimensions and were placed on average one metre apart. Two smaller posts were found either side of the path where it crossed the top of the bank, O'Kelly suggested that these may have been to hold a gate (*ibid.*, 83). Two posts-holes were also found at the outer end of the causeway.

The enclosed space seemed to have been covered by an even spread of stone (Fig. 2). The burial of an adult was found in this stony layer, however, the other burials didn't come to light until after the stones had been removed. There were sixty-six individuals buried at Knockea, the burials were simple extended inhumations in pit graves, for the most part they were oriented east-west but a number of juveniles were oriented north-south. O'Kelly

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mentions that many of the burials were cut by later interments and that a "considerable" (*ibid.*, 76) amount of disarticulated bone occurred, so clearly this is a minimum number. Even though the area within the banks was quite small no burials had taken place in the bank or the ditch and there were no burials found in the area excavated outside the ditch. The only human remains found outside the area reserved for burial was a small amount of bro-ken adult bones which had been placed in a "shallow scrape" (*ibid.*, 76) on top of the bank in its northeast angle between two of the posts mentioned earlier.

There were two pre-enclosure features uncovered in the excavation. They were both curvilinear trenches, one to the east the other to the south of the enclosure (Fig. 2), with maximum dimensions of c. Im wide and 0.4m deep. Both had been cut by the enclosure ditch, and the one to the east had been cut by a third trench similar to the others. All were filled by soft dark soil containing a few animal bones, according to O'Kelly this suggests that they stood open for a while. These features are not securely dated, except that they obviously predate the construction of the enclosure.

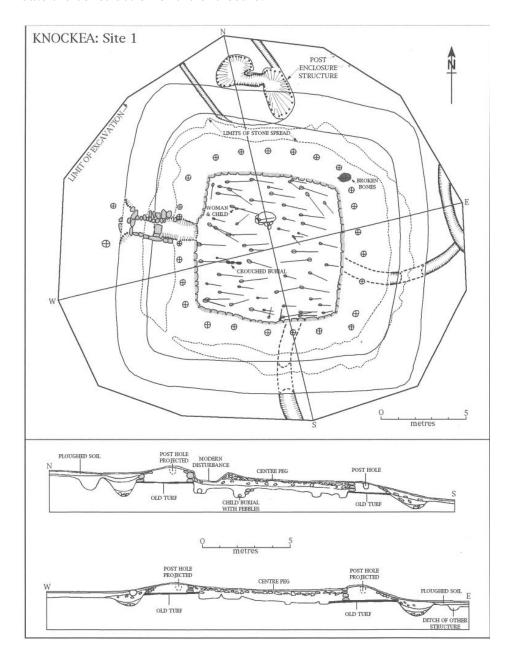


Fig. 2 - Plan and cross sections of Site 1 (after O'Kelly, 1967)

To the north of the enclosure a feature was uncovered which post dated the digging and silting up of the ditch. It consisted of two parallel trenches running roughly north-south, one of which ran right up to the outer edge of the enclosure bank (Fig. 2). The other (eastern) trench only ran for a short distance from the edge of the excavated area. Its southern end was cut/truncated by an irregular pit which extended over the silted up ditch. The filling of the trenches and the pit was a uniform dark, charcoal flecked soil. This layer produced a few animal bones and a blue glass bead with a white spiral meander. This bead is of a type that is common "from Early Christian times onwards" (*ibid.*, 82) and so provides us with some sort of a *terminus ante quern* for the construction of Site 1. There were a number of finds from within the enclosure, though none that were unequivocally associated with any of the burials, these included a portion of a bone comb, a roughout for a spindle whorl, a few 'strike-a-lights' and a carved stone pebble, any of which would not be out of place in a mid-first millennium A.D. context.

#### **Discussion**

It is clear that Knockea, Site 1 was a purpose-built funerary monument. It was clearly defined from the surrounding landscape by a continuous ditch and bank, the latter being surmounted by some sort of post built structure(?palisade, Trailing, ?flag poles, ?crosses) There may have been a gate/door where the gravel path crossed the top of the bank on the western side and the external end of the causeway was marked by two upright posts. The form of this monument is very different to the typical Bronze Age/Iron Age ring-ditched burial enclosures or the well-known later ecclesiastical cemeteries (O'Brien 1990, 37; 1992,130).

The western entry to the monument and its rectangular form (Fig. 2) remind one of the layout of a Christian church. On the basis of the excavated remains the use of this site was definitely of a ritual nature. This is not to say that this monument was a church, but it appears that a monument such as this could have been among the first generation of Christian ritual monuments in Ireland. It may be simplistic to talk about this monument being a native Irish interpretation of a 5th or 6th century missionary's description of a rectangular church, but the change in ritual that undoubtedly came about with the Christianisation of Ireland must have given rise to new types of monuments. While presumably the ritual paraphernalia pertaining to Christianity could have been brought from Gaul or Britain by the early missionaries, the form of ritual buildings had to be described to and interpreted by the non- or newly-Christianised Irish. In relation to this point it is interesting that Doherty (1984) has shown that the term Basilica seems to have had a different use (being used to describe an excavated structure {ibid., 314), and/or an important tomb/shrine (ibid., 313), rather than a building) in the context of Early Christianity in Ireland than it did elsewhere. Additionally, as Betty O'Brien (1992, 134-6) has shown, Christians were being buried in a pagan fashion or in pagan cemeteries in the late 7th and early 8th centuries. Clearly the coming of Christianity and the conversion of the pagan Irish was not a cut-and-dried affair and if we are seeking to identify field monuments relating to the first couple of centuries of Irish Christianity we might look with more profit at what might be termed anomalous or unclassified sites (cf. Swift 1993).

It should also be noted that the curvilinear ditches which pre-date this cemetery bear an uncanny resemblance to Bronze Age funerary and ritual monuments (ring-ditches) excavated in Cos. Limerick and Tipperary during the construction of the gas pipelines and in the course of the Discovery Programme (Daly & Grogan 1993,47-57; Doody 1987,10-12; Gowen

1988,52-115). If these ditches are the last remnants of Bronze Age burial monuments it places the cemetery at Knockea in a similar context to early medieval cemeteries in Wales, e.g., Tandderwen and Plas Gogerddan, where Heather James has identified "...a conservatism in location of [Early Medieval] cemetery sites, together with change and innovation in burial practices" (1992, 90). The location of Christian cemeteries close to pagan burial places has been noted previously, e.g., O'Laverty (1882), Thomas (1971, 53-58). Tirechán, in the *Collectana*, alluded to this pattern when he wrote about St. Patrick building an exclusively Christian ritual monument, an "earthen church", at the site of a pagan burial in a round ditch ("fossam rotundam") at Cruachu (Bieler 1979, 144-5). It is interesting that Tirechán uses such specific wording in his description of this pagan burial site, purportedly constructed two hundred years prior to his description as it implies that he was very familiar with such monuments and their construction.

I believe that we can look at a monument such as the Knockea enclosure as being a place where a group of early Irish Christians may have met to observe the rituals of their religion and certainly where they buried their dead. It is interesting that after its use as a cemetery the site seems to have been sealed with a layer of stones, with only a single burial possibly postdating this sealing, though the report of the excavation is not equivocal on this point (O'Kelly 1967, 72). There are no local traditions associating this site, or any other on the hill, with ancient burial, so this decommissioning of the monument may have occurred in antiquity. Although I have offered a tentative interpretation of this intriguing site I am sure that much more remains to be written, particularly about the place this monument in its early historic context both in terms of socio-political groupings and the evidence for the early church in this part of North Munster. It is quite probable that other examples of this sort of Early Christian ritual site will be identified through archaeological survey and excavation.

This brings me on to the wider issues of the approaches that have been taken in the interpretation of the archaeology of Early Christian Ireland in general.

So far, studies of this subject have concentrated, in the main, on describing the material remains, the sole exception being Harold Mytum's book *The origins of Early Christian Ireland* (1992). My turn takes an explicitly processual approach (systems analysis) to the study of the processes that were operating in the socio-cultural system that constituted Early Christian Ireland from the 5th-8th centuries A.D. While strong reservations have been expressed about Mytum's approach and his interpretation of the evidence at his disposal, it has also been recognised that Irish medievalists need to examine their theoretical perspectives (6 Floinn 1993, 923ff). I concur with this view as it is only through further research in this vein, combining the rich archaeological and historical evidence, that we will come to a greater understanding of this exceptionally vibrant phase in Ireland's history. So much work has been put into the social aspects of archaeology, and what we can legitimately infer from material remains in prehistoric contexts (Bradley 1984; Renfrew & Bahn 1991; Barrett 1994) that it would be foolish to ignore the implications of this research for Early Christian Ireland.

However, this is not a one-way process, for if we, as archaeologists, cannot understand the mechanisms by which Christianity and its distinctive rituals and monumental forms were assimilated into a non-Christian society in the 5th and 6th centuries A.D. we must ask ourselves what hope do we have of understanding changes in prehistoric beliefs and rituals? Not to mention the wider aspects of social structures, trade and exchange, subsistence etc. Rigorous, self-reflective, theoretical approaches to the text-aided archaeology of Early Christian Ireland will not only benefit our understanding of that period but may well influence our approaches to and interpretations of prehistory.

#### Acknowledgements

I would like to thank Dr T O'Keeffe for stimulating my interest in Knockea, in particular, and Early Christian burial archaeology, in general, through an MA seminar in the Dept. of Archaeology, U.C.D. on the latter topic; and for reading an early draft of this article.

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#### **DEATH BE NOT PROUD?**

Two grave slabs from Athy, Co. Kildare

Edmond O'Donovan & Seamus Taaffe\*

"At the entrance to the village I was stopped by four or five persons who asked for charity - they explained that it was to be used to give decent burial to a poor wretch who had died of hunger. I replied that since he was dead he wanted nothing. This answer did not appear to satisfy them, and so I contributed to the funereal pomp, the occasion being, perhaps, the only one in which the poor fellow's friends were interested in his concerns"

De Latocnaye (1984,15)

So wrote a French traveller of a scene he encountered in the town of Athy in 1796. De Latocnayes' almost summary dismissal of this appeal to his charity was perhaps indicative of one who knew that his passing would be marked in a far more formal manner. Yet while such a scene portrays the treatment of the impoverished in death in the late eighteenth century it was most likely reflective of the treatment of the common dead in preceding centuries. Those without property and distinction could expect no elaborate commemoration in death. Christian burial was common to all, but commemoration in monumental form was the sole preserve of the wealthy.

In 1986 the Athy Museum Society in conjunction with FAS carried out a survey of the graveyard of Old St. Michael's in Athy. In the course of the work they discovered the only known medieval grave slabs from the town of Athy. There is a dearth of such slabs in Ireland and thus their survival in St. Michael's is important in that context alone. They were found to the south of the church in the older part of the graveyard just below the surface. These two previously unpublished cross slabs are discussed here.

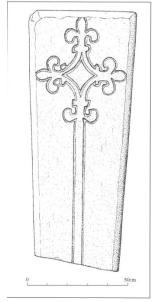


Fig. 1: Slab one

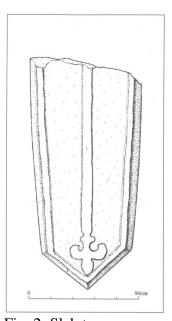


Fig. 2: Slab two

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#### **Slab One: Description**

Incomplete upper portion of a trapezoidal shaped slab with bevelled edges, decorated with a centrally placed doubly incised *fleur-de-lis* cross. There is a lozenge centrally placed within the *fleur-de-lis*. The slab was fashioned from limestone. There is no inscription present. The lower part of the slab was broken in antiquity. The slab measures 128cm in length, 57cm in width and 47cm in width at its broken base.

#### **Slab Two: Description**

Incomplete lower portion of a trapezoidal grave slab with a pointed terminal. The slab was carved in relief and decorated with a central ridge terminating in a single fleur-de-lis. The edges are raised and concavely chamfered. The slab was fashioned from limestone. There is no inscription present. The upper half of the slab was broken off in antiquity. The slab measures 106cm in length, 42cm in width at the base and 53cm in width at its broken end.

#### Discussion

The ruined church of St. Michael's is situated within the graveyard. It consists of a plain rectangular building of an uncoursed rubble construction. Internally there is no discernible division of the church into nave and chancel. Much of the structure has been badly damaged with only a few of the original features surviving most notably the parallel sided doorway of fifteenth century date which lacks its arch (Bradley, Halpin & King 1986, 64).

The dedication and origin of the church have been attributed to the de St. Michael family who were barons of Rheban and Lords of Athy in the thirteenth century (Otway-Ruthven 1961, 170). Robert de St. Michael is noted as having two knights fees in Landa de Reban in 1283 (Sweetman 1877, 467) while in 1282 Thomas de St. Michael was a juror at an inquisition at Tully, Co. Kildare (*ibid.*, 424). In the same year Sir Thomas de St. Michael was one of the jurors at the inquiry into the property of the deceased Roger Mortimer (*ibid.*, 466).

The earliest references to the church are from 1297 when 'Thomas Grennam robbed the church of St. Michael of six pecks of oats' (Mills 1905, 182) and 1297 when the self-same Thomas Grennam committed a similar theft from the church (*ibid.*, 202). A further reference to the church occurs in 1311 when John Poukoc and Alice Heyne were charged with breaking into the church and stealing a variety of goods including silver and textiles which had been contained in chests left in the building for safekeeping, though they were later acquitted of the offences (Wood, Langman & Griffith 1956,227).

The de St. Michael family are also credited with the patronage of the *Fratres Cruciferi* who established the priory of St. John at some time in the thirteenth century on the west bank of the barrow in Athy (Gwynn & Hadcock, 210)Some sources suggest a date of 1253 for the establishment of the monastery "under the invocation of St. John, by Richard de St. Michael, Baron of Reban" (Hamilton 1916, 439). The ecclesiastical tax returns for the years 1302-1306 refer to the priory of St. Thomas (From the thirteenth century this hospital of the *Fratres Cruciferi* was known as St. Thomas the Martyr's) and the vicarage at 'Riban' with no mention of St. Michael's (Sweetman & Handcock 1886, 243) while in 1559 it is noted that the rectory of St. Michael belonged to "the late hospital of St. John" (Bradley, Halpin & King 1986, 63). It would thus appear that the church was part of the property of the priory. Thereafter the church and chancel are described as being in good repair by visitations of both

1615 and 1630 (*ibid*. 1986, 63). The church later fell into disrepair in the middle of the eighteenth century with the construction of a new church in the town centre in the 1750's.

Since St. Michael's foundation is not likely to have taken place any earlier than 1250, it suggests a terminus ante quern for the slabs in the late thirteenth century. Bradley suggests a broad dating scheme within the thirteenth and fourteenth century for this type of slab "During the thirteenth and fourteenth centuries burial monuments tended to be recumbent slabs placed on the ground, characterised by a coffin-shape and decorated with a. fleur-de-lis cross" (Bradley 1985, 52). The slab of Joseph de Keteller from St. Canice's Cathedral in Kilkenny is similar in form and decoration to Slab One. The de Keteller slab is coffin shaped with bevelled edges, decorated with an incised *fleur-de-lis* cross down the centre. This closely parallels Slab One. It is inscribed and dated to 1285 (*ibid*. 1985, 55). Therefore a late thirteenth century date may be applicable to Slab One.

The St. Michael's slabs have in common, trapezoidal forms, and a similar motifs, but significantly Slab One is incised and Slab Two is decorated in relief. The relief decorated slabs from St. Canice's appear to date to the early fourteenth century, such as the Anabindna Roch and Elena Fitzgerald slabs (*ibid.*, 58-60). The so called 'crusader tomb' from Galway, though it has incised decoration, resembles the surviving lower portion of Slab Two with its similarly pointed end and the presence of a central ridge terminating in a single fleur-de-lis. The Galway slab has been given a thirteenth to early fourteenth century date (Higgins & Heringklee 1993, 375). Therefore, on the basis of the evidence of the Galway and Kilkenny material, a late thirteenth to early fourteenth century date may be suggested for Slab Two.

The original location of the slabs, it is assumed, was within the medieval church of St. Michael's. Burial within a church was a privilege particular to the upper echelons of society down to the seventeenth century. This social grading was aptly reflected upon by one particular epitaph writer:

Here lie I by the chancel door, Here lie I because I'm poor, The further in, the more you'll pay, Here lie I, as warm as they.

(Rodwell 1989,158)

While the problem of dating has received some attention above, there remains the problem of the identity of those whose graves the slabs were meant to mark. One writer noted a local tradition that at the battle of Ardscull in 1315 there fell on the English side Raymond Le Gros and Sir William Prendergast and on the Scot's side Sir Fergus Andressan and Sir Walter Murray and that they were buried in St. Michael's. But the same writer also states that others such as Samuel Lewis believed the Dominican monastery to be the place of their internment (Carroll 1892,103). However, the likelihood is that the slabs marked the burial place of a member of the local community such as, perhaps, one of the de St. Michael family from whom the church, it is supposed, derives its name.

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# ENVIRONMENTAL CHANGE AND RIVER BEHAVIOUR Implications for archaeologists

Mary B. O'Connor\*

The 1994 U.C.D. Geography Society Inaugural lecture, which was given by Dr Mark Macklin of Leeds University, was devoted to demonstrating that river behaviour is a sensitive reflector of climatological and anthropogenic influences. Although factors such as the tectonic history of a river may make it more or less sensitive, results from his research suggest that climatological and anthropogenic disturbances are reflected more quickly and accurately by a drainage system than by almost any other environmental system. For example, events such as flash floods of a critical magnitude would leave a record in river sediments not necessarily reflected in the pollen record. Well dated natural events which affected particular river basins have been registered in the fluvial record of other rivers, even those located on another continent. Dr Macklin described the evidence of this in fluvial records of the Pleistocene (i.e., from about two million years ago to 10,000 BP) and the Holocene (i.e., from 10,000 BP to the present). He pointed out that fluvial sedimentation sequences can be used by archaeologists, and other researchers, as a chronostratigraphic frame work.

From the above summary of Dr Macklin's outline of the usefulness of such research to archaeologists, it may appear that a demarcation of research endeavour is implied. In fact, Dr Macklin argues strongly that an integrated approach leads to a fuller interpretation of the fluvial record, and therefore, of significant events within a river catchment area. The suggested route to this integration is put forward by Macklin (et al. 1992). In this monograph it is argued that in order to disentangle the respective roles and relative importance of human activity vis-a-vis climatic change it is necessary to assess and link a number of geomorphological, environmental and cultural elements, which together provide historical insight to the development of a river basin. Recent studies, both in Britain and in the U.S.A., have demonstrated that this is unlikely to emerge from investigations of single, discrete river reaches but requires evaluation of the entire river basin where the full range of Holocene depositional environments and fluvial stratigraphies are represented {ibid.}. It is further suggested that an optimum return from research effort cannot be achieved with the traditional approach whereby interpretation of Holocene river sequences by archaeologists and earth scientists in Britain, as elsewhere, is focused on evaluating anthropogenic as opposed to climatic factors in the control of catchment water and sediment

yields, channel and floodplain morphology, and in turn the alluvial record of a drainage basin. Instead an approach is suggested to move from reconstruction of Holocene river environments to their interpretation both in general and, in particular, to model the response of human communities to changes in river regimes, as well as their impact (deliberate and inadvertent) on the fluvial system.

In his lecture Dr Macklin outlined studies of several southern European rivers which led him and his fellow researchers to the conclusions outlined above. It was decided to apply the same methods to a fluvial system in Britain and this research has shown that alluvial valley floors are one of the most sensitive and susceptible environments in Britain to subtle shifts in hydroclimate and this was probably true throughout the Holocene. It is likely that this would

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also apply to Irish alluvial valley floors because, relative to more extreme environments, Irish drainage basins are very similar to those found in Britain.

To achieve the desired aim of an integrated approach it is argued (Macklin et al. 1992) that the first requirement is that episodes of valley floor sedimentation and erosion be mapped and dated to determine their temporal and spatial pattern. Investigation of single discrete river reaches, is as mentioned earlier, not sufficient for this purpose. For example, the research of the Tyne basin (2927 km2) in northern England involved investigation of three reaches which were representative of the system as a whole. The second requirement is that fluvial sediments should be provenanced, particularly when alluviation is believed to relate to catchment land-use change. Recognition of post-settlement alluvia associated with agriculturally accelerated soil erosion or mining activities are especially important in this context. Thirdly, independent proxy records of regional climatological and hydrological change with appropriate temporal resolution should be available. Finally, it is essential that prehistoric and historic catchment land-use histories are documented at least in general terms. All four of the components outlined above, and which are felt to be essential, have been studied, to a greater or lesser extent, during investigations into Holocene fluvial processes and depositions as seen in the basin of the Tyne.

The Tyne basin was chosen because it was considered that the catchment was suitable to evaluate longer-term environmental controls of a river system, primarily because river dynamics and post-glacial alluvial sequences typical of those found in upland, piedmont and lowland rivers elsewhere in Britain (and therefore Ireland) can be studied in a single drainage basin. It is interesting to note that the investigations of the dispersal of the nineteenth century and early twentieth century mining waste in the river system has also been useful for interpreting the fluvial redistribution of eroded soil associated with prehistoric and later catchment disturbance. This is because the fine-grained sediment from basins which received the lead and zinc waste received distinctive chemical signatures which can be recognised downstream in Holocene alluvium. The Tyne basin has an archaeological record extending from the later Mesolithic and pollen diagrams from upland sites in the region showing small-scale and temporary forest clearance associated with Bronze Age pasture and some arable cultivation. However, these are not reflected in the fluvial sediment stratigraphy which shows instead that the most dramatic phase of land-use change appears to have been extensive forest clearance during the later Iron Age and Romano-British periods.

In this study of the Tyne basin the following dating methods: radiocarbon dating of associated wood and peat, supplemented by optically-stimulated luminescence (OSL), palaeomagnetic techniques and archaeological evidence. Trace metal chemistry and lichenometry were also used on sediments deposited after 1750 AD (Macklin et al. 1992,127).

Following the research of Macklin (et al. 1992) more regional chronostratigraphic markers have also been identified in British fluvial stratigraphies, where the Tyne basin findings are confirmed by the results from other river basins. This has implications and, indeed, applications for British and Irish archaeology. Therefore, Macklin (et al. 1992) contend that recognising and dating discontinuities in Holocene alluvial stratigraphies may ultimately prove to hold the key, not only to understanding the utilisation of fluvial environments by prehistoric and historic human communities, but also for quantifying the pattern of survival and destruction of the archaeological record in river valleys. Thus, investigations of Holocene alluvial sequences demonstrate very clearly that anthropogenic activities and climate change need not be considered as competing hypotheses for explaining the timing and pattern of Holocene alluviation and river erosion. Instead, the research indicates it is more appropriate

to view river response to environmental change in terms of a continuum between these two factors which, in particular circumstances, can each control water and sediment yields and, thus the alluvial record of a drainage basin.

In Ireland an integrated archaeological and geographical approach is personified in the work of people like Estyn Evans (1942). Since then each discipline has evolved with intensified specialisation in each and within each. It requires conscious integrative decisions to counteract the possibility of biased results due to compartmentalisation. Archaeological research in conjunction with areas such as palaeobotany and geophysical techniques, among others, have proved very fruitful.

Lake sediments have been used to evaluate the nature and cause of environmental change, particularly if associated with human disturbance, however, Macklin (et al. 1992, 20) point out that while the same opportunities are available for fine grained river sediment analysis for provenancing purposes they have not been used in archaeological contexts. Analysis of charcoal concentrations, sediment grain size and morphology, heavy mineral assemblages, mineral magnetics and chemical properties of sediment can reveal the parent material from which it was derived and where in a drainage basin erosion was taking place at a particular time. Soil erosion at Fornaught Strand, south-east Ireland was associated with "agricultural activity in the Middle Neolithic" (Macklin et al. 1992, 20). It should be possible to identify, for example, the first significant influx of eroded soil onto valley floors and to establish whether it occurred as a result of clearance and/or climate change.

Legally binding structures should be put in place to protect important fluvial sedimentary deposits from disturbance through activities such as quarrying or drainage. At the very least, notice should be given of the intention to engage in such activities so that 'rescue' measures can be taken in the same way as for other sites of known or suspected significance.

This article has attempted to show that where fluvial sediments are ignored a serious break occurs in the circular and cumulative flow of information necessary to the compilation of a comprehensive record of events in a river catchment area, both anthropogenic and natural. This gap in the record is even more serious where pollen preservation is poor and unreliable. An increase in the incidence of integrated research by geographers and archaeologists in areas other than those outlined above would clearly be to the benefit of both disciplines. Allowing for the greatly increased specialisation within both disciplines, the tradition of bridging the archaeology-geography divide proposed by Estyn Evans (1942) can be brought forward into the 21st century.

# Acknowledgements

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## COSTUME AND ITS RITUAL SIGNIFICANCE

A cross-cultural comparison of the Paracas and Pueblo Indians

Meg Quinlisk\*

"tantos simbolos, cabalas, sabidurias, astrales y cdlculos se urden ensus telas". [so many symbols, spells, sayings, stars and conjectures are warped in their cloth]. Guatemalan poet Miguel Angel Asturias, 1974

Although the cultures of the Pueblo Indians in the American Southwest and the Paracas Indians in southern Peru are very distant from each other geographically and chronologically, a comparison of the two leads to more similarities than their apparent lack of affinities would imply. Making cross-cultural comparisons is a key to understanding the common threads underlying human culture at its most basic level. In studying two cultures that are far removed from each other in space and time, similarities arise that are indicative of human nature and instinct. From similarities within the subject of the ritual and religious significance of costume, a basic human tendency to impersonate supernatural forces as a part of religious ritual becomes evident.

### The Paracas Indians



Fig. 1: Map of North and South America showing the location of the Pueblo and Paracas cultures

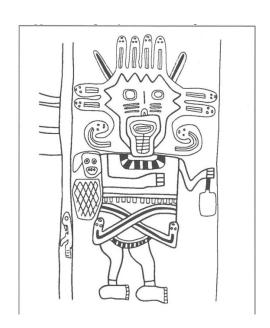


Fig. 2: Anthropomorphic creature in block color style. (from Paul 1990, 68)

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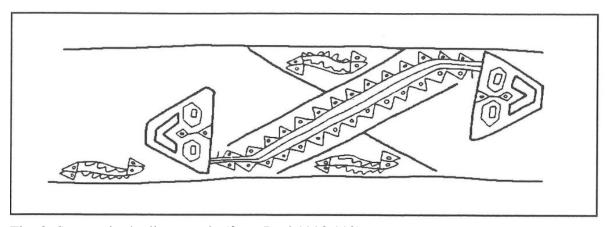


Fig. 3: Serpent in the linear style (from Paul 1990,112)

The Paracas culture is a society that can be dated to 600-175 BC. The Paracas Peninsula is located on the coast of southern Peru, and has a desert climate with no rainfall (Fig. 1). The people were fishers and agriculturists, growing beans, maize, red peppers and peanuts. Weaving was the culture's most important non-subsistence activity, and extremely advanced technology was developed to create elaborately designed textiles. While some information about the Paracas culture can be gleaned from present day cultures of the Andes, most of the information that exists comes from archaeological evidence. The Paracas disposed of their dead in mummy bundles, that is, mummified bodies wrapped in multiple layers of cloth and placed underground in baskets or ceramic vessels. The size of the bundle relates to the status of the person wrapped in it, and the designs on the textiles used to wrap the mummies function symbolically, giving detailed information on costume and informing us about the society's world view and social roles.

There are three styles of design recognised on Paracas textiles, each carrying a different meaning. The block colour style is characterised by solid blocks filled in with colour, and curving lines (Fig. 2). Anthropomorphic figures and animals are most often depicted in this style, and it has been suggested (Paul 1990) that the block colour style was used to show elements of the visible, tangible world. The figures are shown wearing personal ornaments similar to objects found in the mummy bundles, so it is probably a relatively realistic representation of everyday life and costume in Paracas.

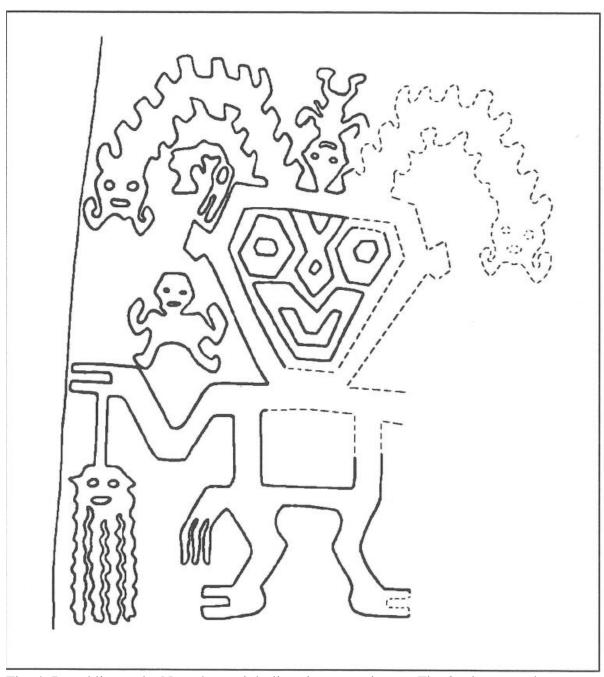
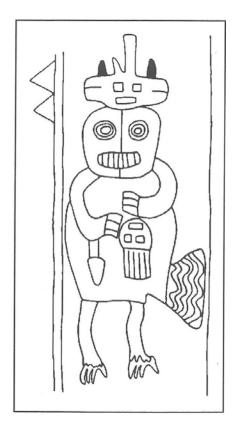


Fig. 4: Broad line style. Note the straight lines in comparison to Fig. 2; also note, the anthropomorphic figure is holding a trophy head (from Paul 1990, 73)



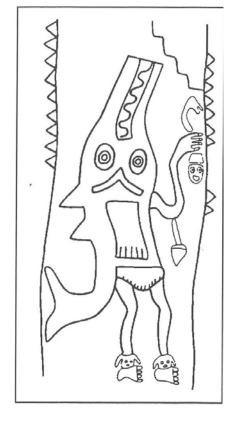


Fig. 5: A human impersonating a bird, note trophy head (from Paul 1990,104)

Fig. 6: A human impersonating a shark (from Paul 1990, 85)

The second style is of linear, one stitch wide, parallel lines, forming abstract and geometric images, derived from imaginary sources (Fig. 3). There are only about thirty motifs that appear in this style, with little variation between textiles, even those of different periods. Paul (*ibid*) argues that the images in the linear style are representations of the supernatural and mythical because they are more ideographical than pictorial. The linear designs are highly conventional, and probably signify symbols of community supernaturals or nature spirits.

A third style appears to be a combination of the previous two, called the broad line style, characterised by loosely straight lines forming images similar to the ideographs of the linear style (Fig. 4), but less geometric and abstract in nature. The broad line style could have been used to show the intermediary stages between the visible, tangible world and the supernatural - a state that would be reached in a religious ritual of impersonation.

The iconography used to decorate the borders of Paracas textiles signifies the world view of the society. Most often such images resemble pampas cats, birds, and sharks or fish. The pampas cat is a symbol of the earth in the Paracas cosmological system because of its relation to gardens (it is often shown in association with lima beans, and probably kept pests out of the gardens). Birds are related to the heavens, and sharks are symbolic of the sea. Other recurrent images are sacrificial ones, including decapitated trophy heads, trophy bodies and humans bending backward with exposed ribs. Head hunting was an important aspect of many ancient Andean cultures, and the people of Paracas were no exception. They possibly believed that a person's strength and spirit resided in his head, so trophy heads were a symbol of power and prestige. Pampas cats, birds, and fish are very often shown with human feet and

hands, carrying a knife (Figs 4, 5, 6 and 7). This appears to be a depiction of a ritual of impersonation, in which a human dresses as a supernatural spirit to gain its favour and ask for blessings. On account of the cosmological significance of the animals, it is likely that they were impersonated in such a manner.



Fig. 7: A human dressed in a pampas skin (from Paul 1990, 86)

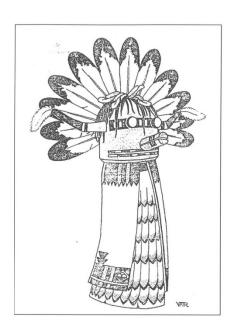


Fig. 8: The kachina doll, a representation of a supernatural force in the Pueblo cosmology. It is used to familiarize children with the supernatural world (from Roediger 1961, 15)

## The Pueblo Indians

The Pueblo Indians live in an area with an arid climate in the south-western United States, and a great part of their spiritual life is devoted to seeking rain for their crops. While their culture is still alive today, much of the information regarding the Pueblo Indians is based on ethnographic accounts of their religious practices.

The Pueblo Indians have an extremely stylised spiritual belief in impersonation, which pervades many aspects of their lives. From early childhood, Pueblo Indians are taught about the conventional symbols used in impersonating the supernatural through the use of kachina dolls, which are hung in the house and reveal different aspects of costume, such as head-dresses, clothing, and accessories that identify an impersonation (Fig. 8). The kachina dolls are representations in miniature of the actual impersonators called kachinas, similar to the images found on Paracas textiles.

Pueblo rituals require a private retreat for the kachinas, which is always followed by a large, public dance. During the retreat, the kachinas prepare their costumes for the dance, masks are remade for every dance. Once a kachina dons his body paint and mask, he is set apart from his ordinary self. He gains immortality in this ceremony and he cannot be touched by anyone while in costume.

The costumes used in impersonation are conventional, with different colours symbolising characteristics and cardinal directions, different head-dresses and props representing specific

supernatural forces. Each item of a dancer's costume, even the material used to make the cloth he is wearing, is representative of a facet of the deity he is impersonating (Figs 9 and 10).



Fig. 9: The buffalo kachina dancer- the costume relies heavily on body paint; the dancer's body is painted dark brown with white crosses that symbolize the bow (from Roediger 1961, 133)

## **Discussion**

Jean-Paul Sartre (cited in Barthes, 1983) puts forward a helpful tripartite model for the study of costume. The first conception of costume is the popular and poetic idea, that the garment

magically produces the person. Second is the empirical conception, that the person produces the garment. Third, the dialectical approach is that there is a turnstile between the person and the garment. Using Sartre's model in examining the similarities between Pueblo and Paracas costume, the act of impersonation of a supernatural force is the poetic conception of the garment, in which the clothing a person wears suddenly puts him into a sacred form. The empirical conception is the actual fabrication of the costume itself, which, to the Pueblo Indians - in remaking the ritual masks - is part of the religious ceremony itself. The third conception, that of a turnstile between the person and the garment, is exemplified by the role of the costume in denoting status or identity. The turnstile exists when changing the costume would change the role a person has in the society, and vice versa, as occurs in the impersonation rituals.



Fig. 10: The eagle impersonator wears a costume with yellow body paint. The kilt, brocaded sash, woven red belt, and fox-skin are conventions of the eagle. The mantle worn by a male dancer is indicative of his eminence in the community and the spirit's eminence in the community of supernaturals (from Roediger 1961, 149)

Both the Paracas and Pueblo impersonations show a strong sense of the separation between the worldly and the heavenly. The Paracas use different representational styles to show different aspects of the cosmos, i.e. the worldly, the otherworldly, and the gateway between the two. This is similar to the Pueblo Indian's ritual period of seclusion, required for kachinas before an impersonation ceremony - an intermediate stage between everyday activity and sacred impersonation. Both are also similar in their conventional representation of the impersonation. Each Pueblo deity is symbolised by certain colours, fabrics, and accessories, and, though the images on

Paracas textiles may seem less conventionally symbolic the representations are highly suggestive of the attributes of their deities, for example, the association of the pampas cat with the lima bean. The Pueblo kachina dolls may function differently in the culture than Paracas textiles, but both serve as vehicles for such conventional representations.

Many examples of glorifying deities through impersonation can be seen throughout history and even in contemporary religions. For example, Buddhists desire to become more like Buddha through meditation, also, the desire of Christians to emulate Jesus Christ through ritual ceremonies, such as an enactment of the Stations of the Cross. The kachina dancer wears the mask of the eagle and the Paracas, perhaps, wore the skin of the pampas cat for similar reasons.

It is very well to study a single culture in a vacuum, but the value of the knowledge gained from archaeological and anthropological study is increased by comparisons with other

cultures. From such cross-cultural comparative approaches, we enrich our understanding of both past and present societies.

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