

# The Land of Nineveh Archaeological Project: The Ceramic Repertoire from the Early Pottery Neolithic to the Sasanian Period

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*This article presents a preliminary study of the pottery collected during the 2012 and 2013 campaigns of the Land of Nineveh Archaeological Project in Iraqi Kurdistan. The report examines the morphology, distribution, and relative implications of a wide spectrum of ceramic types, spanning from the Early Pottery Neolithic to the Sasanian period. In particular, it focuses on the local aspects of the material culture, as well as on regional and transregional connections, and thus aims at placing the pottery assemblages in the broader perspective of upper Mesopotamia's diverse ceramic traditions. Despite its preliminary nature, this report embodies a substantial overview of the ceramics surveyed, which will serve as a departure point for future inquiries and more detailed analyses of the ceramic traditions of the upper Tigris region between the seventh millennium B.C. and the seventh century A.D.*

**Keywords:** pottery; Tigris; upper Mesopotamia; survey

The present work is a preliminary account of the pottery found during the 2012 and 2013 survey campaigns of the Land of Nineveh Archaeological Project (LoNAP), conducted by the University of Udine, Italy, in Iraqi Kurdistan. Herein we outline the ceramic evidence for the results discussed by Daniele Morandi Bonacossi and Marco Iamoni (2015), providing an overview of the most frequently occurring pottery collected by LoNAP and contextualizing each ceramic assemblage in the wider chrono-typological and regional framework of upper Mesopotamia. In light of the quality of data (pottery from survey investigations), as well as of the preliminary character of this work, we focus on pre-

senting the main diagnostic traits of the LoNAP materials and their relationship with the ceramic traditions of upper Mesopotamia. The pottery is thus discussed with particular attention to the presence or absence of specific diagnostic types in the LoNAP survey area; comparisons with types from relevant nearby sites and regions, as well as from more distant areas, are provided in order to indicate preliminary regional trends and local frameworks.<sup>1</sup>

## Methods

In the first two LoNAP seasons, 493 sites were surveyed; potsherds were collected at 287 of them (**Fig. 1**). Each of these sites was divided into collection areas in order to give a more precise idea of the spatial occurrence and relative distribution of ceramics by time period. From the entire intensive walking survey, the LoNAP team collected 18,918 sherds. Only the diagnostic pieces (rims, bases, decorated body sherds, and significant handles) were collected. From a ceramic perspective, the most well-represented periods are the Islamic/Late Islamic, with 2,533 sherds, followed by the Middle Bronze Age (2,157 sherds), the Neo-Assyrian period (2,092

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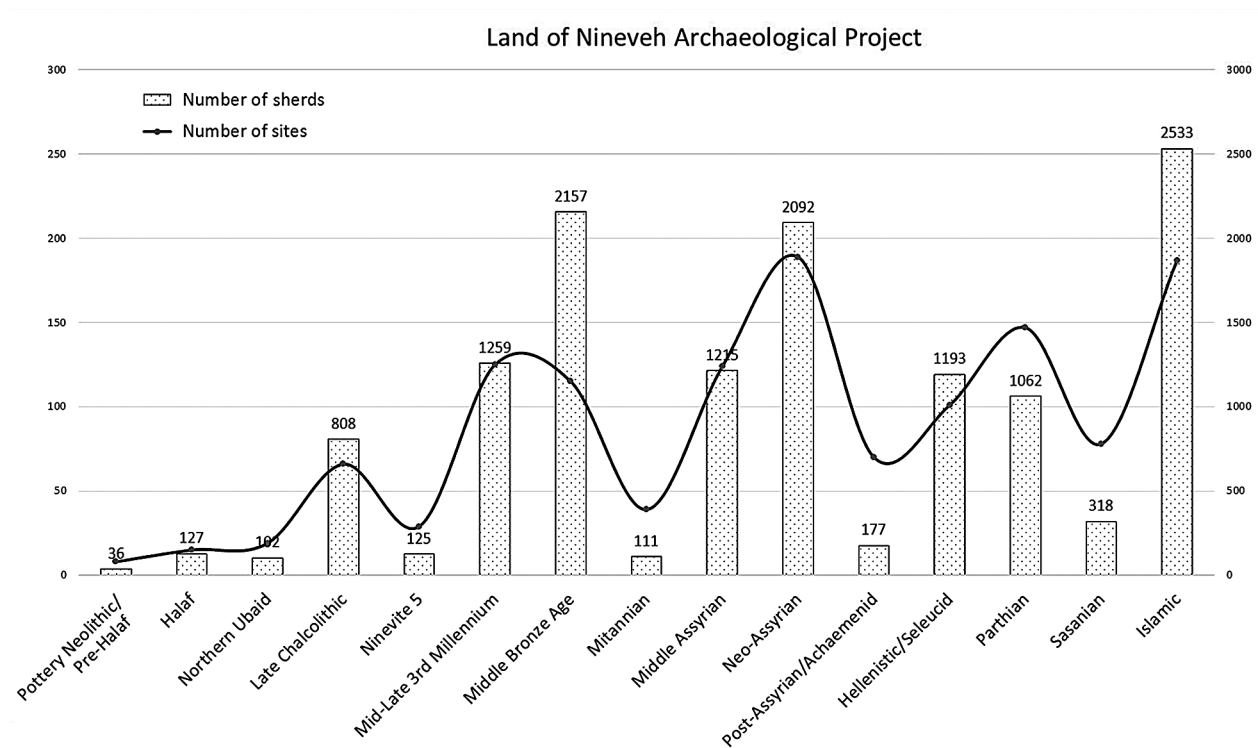
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**Fig. 2.** Chart showing the number of sherds collected in the LoNAP area by period. The line represents the number of surveyed sites per period (reference scale on the right; data taken from Morandi Bonacossi and Iamoni 2015). Although not discussed in the present article, the Islamic period is shown, since it is referenced by the authors.

sherds), the mid-late third millennium (1,259 sherds), the Middle Assyrian period (1,215 sherds), the Hellenistic period (1,193 sherds), and the Late Chalcolithic (808 sherds).

**Figure 2** shows the distribution of the pottery collected and sites surveyed by time period. In general, the ceramic data faithfully mirror the number of surveyed sites, suggesting a substantial (and, as such, unbiased) correlation between the pottery and surveyed settlement trends (i.e., large quantities of potsherds correspond to peaks in the number of settlements). This further underlines the relevance of the present work as a necessary companion for a full understanding of the survey report by Morandi Bonacossi and Iamoni (2015).

A few marginal discrepancies concern the Middle Bronze Age (where a higher number of sherds is not matched by a significant settlement increase), and the post-Assyrian and Sasanian periods (for which an opposite effect has been encountered). The reason for the discrepancy in the Middle Bronze Age may lie in the higher “visibility” of the Khabur pottery, which seems to be particularly widespread in the area under investigation. By contrast, the lower number of identified post-Assyrian and Sasanian sherds may be due to a scarce knowledge of the regional ceramic horizon (in particular, of the com-

mon ware [see below]), accompanied by the occurrence of some specific types (e.g., Sasanian Stamped Ware) that, albeit occurring in limited quantities, permit us to reliably identify precise periods, thus resulting in their disproportionate contribution to the settlement numbers for those phases.

In agreement with the other missions working in neighboring regions—namely, the Erbil Plain Archaeological Survey (directed by Jason Ur), the Upper Greater Zab Reconnaissance Project (directed by Rafał Koliński), and the Eastern Khabur Archaeological Survey (directed by Peter Pfälzner)—the classification of pottery was conducted using the working ceramic typology originally developed for the Tell al-Hawa survey (Ball, Tucker, and Wilkinson 1989), later updated by Tony Wilkinson and D. J. Tucker (1995) and by Ur (2010; for a review of the different development stages of the working ceramic typology, see, in particular, pp. 214–15). This standardization of the results obtained by each project will facilitate their comparison with results from the above-mentioned neighboring projects (in particular, the site chronology and the identification of common traits in the ceramic traditions of each area). At the same time, one of LoNAP’s goals is to continue the process of updating the working ceramic typology,

through the detection of new “survey types” that will be selected by means of cross-referencing parallels from relevant stratified contexts in upper Mesopotamia. This will allow the inclusion of types that are potentially significant (but as yet not part of working ceramic typology), thus increasing the working ceramic typology’s usefulness for the region under examination. Results from new excavations (which are planned by LoNAP at selected key sites in future seasons) will also be used as further important sources of data.

### The Pottery Neolithic and the Pre-Halaf Period (ca. 7000–5900 B.C.)<sup>2</sup>

As in the discussion of the settled sites (see Morandi Bonacossi and Iamoni 2015), we preferred to combine the Pottery Neolithic and the Hassuna/Samarra phases into a single period: the Pottery Neolithic/Pre-Halaf. The absence of archaeological investigations in the region<sup>3</sup> limits our knowledge of the distinctive traits of the most common Neolithic ceramic traditions (e.g., Hassuna, Samarra) and the extent to which they overlap, as well as the possible occurrence of additional, as yet unknown, local ceramic traditions existing in the area under investigation. Currently, these factors pose obstacles to a more precise identification of the surveyed assemblages; it is to be expected, however, that the projects recently started in Iraqi Kurdistan will fill this gap and help us to understand in more detail the nature of the region’s Neolithic ceramic traditions.

The very low number of collected sherds is due in part to the reasons discussed above (in particular, limited knowledge of the ceramic Neolithic tradition in the region) but also to the first two years’ survey targets. Survey investigations during the 2012 and 2013 seasons focused on tell sequences, an emphasis that hinders the retrieval of evidence from lower, more ancient levels concealed by sedimentation and by later, superimposed occupation deposits.<sup>4</sup> Future campaigns focusing on off-site surveys may yield a greater number of diagnostic artifacts.

At present, the Pottery Neolithic in the LoNAP area seems to be characterized by simple coarse ware, with mineral and vegetal inclusions of medium and large dimensions and an outer surface that is sometimes bur-

nished. Production technology shows a still-limited control of firing procedures, with sherds exhibiting dark cores and lighter-colored surfaces. Form types found are medium-sized jars with a slightly flaring rim, and hole-mouth jars (**Fig. 3:2, 3**): both are common in the Pottery Neolithic of upper Mesopotamia (Lloyd, Safar, and Braidwood 1945: figs. 6, 41; Merpert and Munchaev 1987: fig. 5:A2; Nieuwenhuys, Akkermans, and van der Plicht 2010: fig. 2, top left corner; Bader and Le Mièrè 2013: fig. 46.2:2; Akkermans et al. 2006: 139, fig. 12:e, f, g, and k). Among these must be included a likely fragment of a husking tray (**Fig. 3:7**), typical of the Hassuna period (Lloyd, Safar, and Braidwood 1945: figs. 3, 10).

Open forms are represented by simple types as well, such as plates with flaring rims or deep bowls with rather squared rims (**Fig. 3:1**; Lloyd, Safar, and Braidwood 1945: figs. 6, 32, 35; Nieuwenhuys, Akkermans, and van der Plicht 2010: fig. 2, center image). Painted forms are in dark or red colors and occur with simple geometric designs, such as bands and hatched motifs, mostly on open forms; cups too occur with banded decorations alternating with arrow-like motifs (**Fig. 3:6, 9**). Both types resemble forms and/or decorations typical of the Samarran tradition (Gut 1995: pls. 30:476, 42:632; Nieuwenhuys, Jacobs, and van As 2002: figs. 4.8, 5). Similarly, painted closed forms show types and motifs that resemble Samarran vessels (**Fig. 3:4, 5**) (Gut 1995: figs. 25:427; 37:575; 38:579; 41:601; 42:621, 628). Clearly Hassuna decorated (painted or incised) types have—somewhat surprisingly—not yet been detected in the studied assemblages. The still-limited number of pieces studied, as well as our poor knowledge of the region’s late Neolithic ceramic traditions, oblige us to adopt a suitably cautious approach to drawing even preliminary conclusions. The situation might also depend on the occurrence of a local ceramic tradition with traits that differ somewhat from those known from other pertinent pottery sequences and require a more ample body of data in order to be fully understood.

### The Halaf Period (ca. 5900–5300 B.C.)

The Halaf culture developed from the beginning of the sixth millennium B.C. and lasted until its end, with a Proto-Halaf and a Halaf–Ubaid transition phase connecting the period with the preceding and following ones (Bernbeck and Nieuwenhuys 2013). Unlike in the Pre-Halaf phase, the upper Tigris area has significant Halaf reference sequences, thanks to the excavation of Level XX and Sounding A of Tepe Gawra, spanning the mid- and late Halaf period (Tobler 1950); Tell Arpachiyah, dating mostly to the late Halaf period (Mallowan and Cruikshank Rose 1935; Campbell 2000: 1); and Kharabeh Shattani (Watkins and Campbell 1986; Baird, Campbell, and Watkins 1995).

<sup>2</sup> For the absolute chronology of this period, we follow the periodization provided in Nieuwenhuys, Akkermans, and van der Plicht 2010: fig. 5, though this is based on evidence from the Balikh; for the relative chronology of upper Mesopotamia see Bernbeck and Nieuwenhuys 2013: fig. 1.3.

<sup>3</sup> The most significant sequences are located farther south/south-west (e.g., Umm Dabaghiya, Tell Hassuna, Yarim Tepe). See also Morandi Bonacossi and Iamoni 2015.

<sup>4</sup> See, e.g., the case of Tell Gomel as discussed in Morandi Bonacossi and Iamoni 2015.



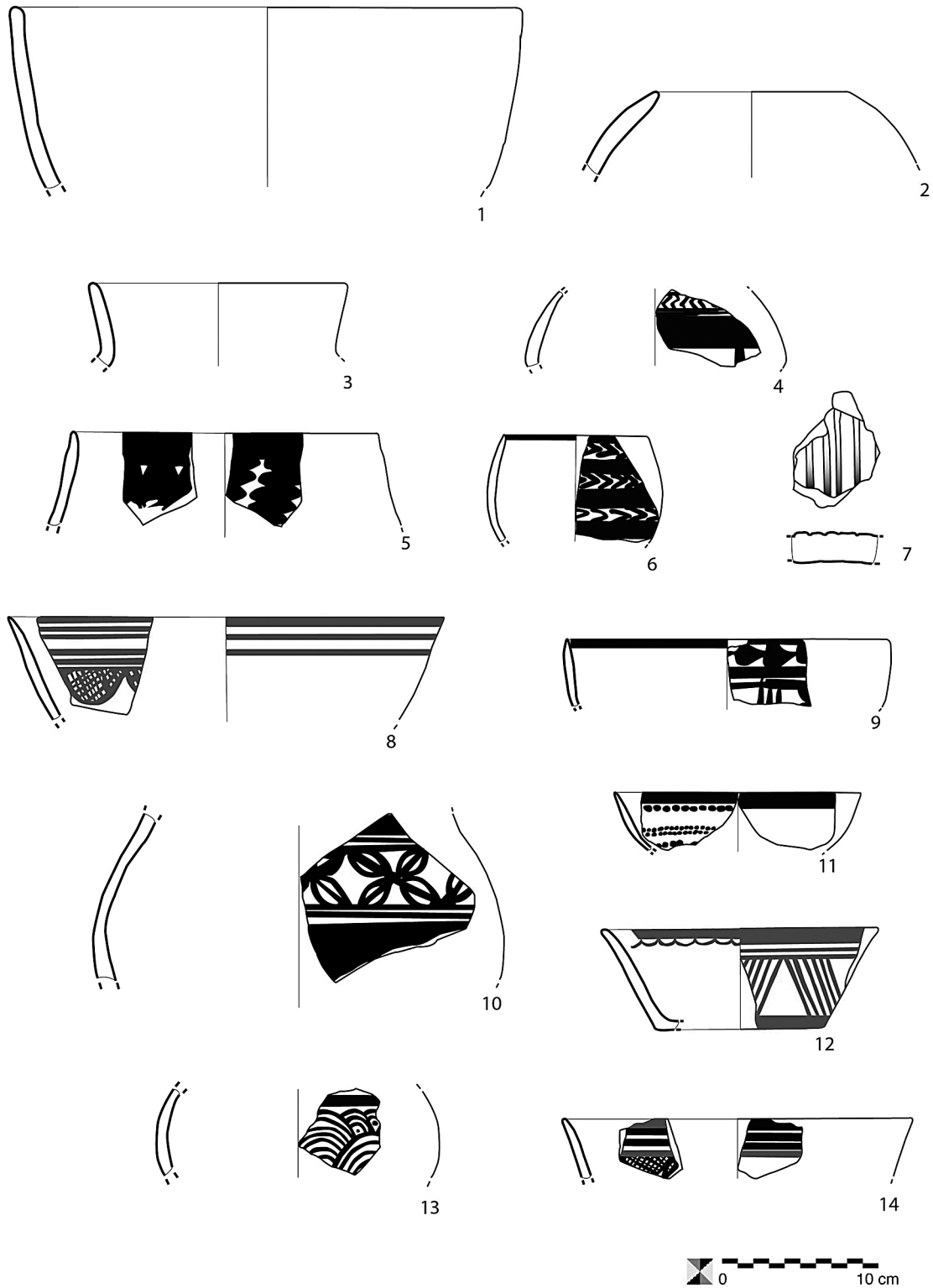


Fig. 3. Pottery Neolithic/Pre-Halaf and Halaf ceramic types from the LoNAP area. (© LoNAP Archives)



Fig. 4. Halaf small cup. (Photo by M. Gatti; © LoNAP Archives)

For the early phases, one has to move to the Balikh Valley, where excavations at Sabi Abyad have provided a solid sequence spanning the late Ceramic Neolithic to the early Halaf phase (Nieuwenhuyse 2007; Akkermans 2013). Altogether, these sites furnish numerous diagnostic materials that are useful for a more precise characterization of the survey finds.

During the 2012 and 2013 campaigns, 127 potsherds were collected and classified provisionally as Halaf ceramics. No attempt to provide a further and finer subdivision has been made to date. Future studies on selected assemblages (e.g., Tell Yahoud) that have provided a significant amount of Halaf materials will involve a more precise chronological characterization. Most of the pottery thus far attributed to the Halaf period belongs to the Painted Ware (Fig. 3:8, 10–14). The fabric is usually fine and uniform, with no visible inclusions. Colors vary from buff to orange to yellow. Painted decorations are mainly geometric, with a prevalence of chain and dotted motifs (see Fig. 3:11), which are common throughout the Syrian Jezirah and the upper Tigris (Hole 2013: 78–82). Figured patterns seem to be less frequent, though quatrefoil motifs also have been noticed on several pieces (see Fig. 3:10).

With reference to form, most are bowls (as is often the case with painted vessels) with slightly flaring rims. They are common in the region, occurring at Tepe Gawra, Sounding A; Tell Arpachiyah; and Nineveh (Mallowan and Cruikshank Rose 1935: fig. 60:3, 5; Tobler 1950: figs. 29, 34; Gut 1995: fig. 704). Simple-rim plates and flat-base bowls occur as well (see Fig. 3:8, 11, 12); they too have strict parallels with Halaf materials from the upper Tigris, as their presence in Halaf levels of Khirbat Hatara, Level 1, and Tell Arpachiyah, Levels TT6–10 testifies (Mallowan and Cruikshank Rose 1935: fig. 61:2; Fiorina 2001: fig. 26:1, 36). Noteworthy is a very small cup with

a globular, low-carinated body, a flaring rim, and hatched painted decoration covering the body (Fig. 4). This type occurs at Tepe Gawra, Sounding A, though with a different decorative motif, and especially at Tell Arpachiyah, where a very similar type has been found in early Halaf levels (Mallowan and Cruikshank Rose 1935: 144, fig. 71:10; Tobler 1950: fig. 44).

So-called cream bowls with flaring rims and low, flat carination are also present. The type found (see Fig. 3:14) seems to belong to a later development of this hallmark of Halafian ceramic culture, thus suggesting the presence of the mid-late Halaf tradition attested in the area (Nieuwenhuyse 2007: 149–52).

Closed forms are far less frequent, a result that may be biased by the still-limited number of pieces examined, or perhaps by the fact that decorated forms are more common among open ones. There is evidence of globular shapes (see Fig. 3:10, 13), probably with flaring necks and/or rims. These are known to occur in many different varieties and dimensions and are common in the Halaf repertoire of the upper Tigris on both painted and unpainted specimens (e.g., Tepe Gawra [Tobler 1950: figs. 53–60] and Kharabeh Shattani [Campbell 1995: fig. 28:1–6]).

Decorative patterns may be monochrome or sometimes bichrome and occur on external and/or internal vessel surfaces, usually in red-brown, black, or purple. Polychrome specimens are apparently not present, a feature that should perhaps be seen not from a chronological perspective but rather as the result of limited access to the technology necessary to produce such decoration (Campbell 1995: 74–75). The most recurrent decorations are geometric, with a predominance of chain and dotted motifs, but also common are grids, dots, herringbone patterns, bands, lozenges, and concentric circles (see Fig. 3:11–14). Some of these motifs are shared with Halaf assemblages from upper Mesopotamia (in particular, lozenges and hatched and diagonal lines [Nieuwenhuyse 2007: 189–99]) and seem to have their roots in the origins of Halaf ceramic culture.

Occasionally, decorations depict naturalistic forms, such as flowers (see Fig. 3:10) and birds (not shown); these are very stylized (especially the birds), however, and appear to be rare in the ceramic repertoire analyzed thus far. In general, the Halaf decorative patterns discussed here are mostly geometric and find their best parallels in the area situated between the upper Tigris and the Jebel Maqlub, at such sites as Tepe Gawra and Tell Arpachiyah. This may suggest some degree of regional variation (if not the actual occurrence of a local Halaf horizon), the nature of which will be a target for the next studies of the survey's ceramics. Future excavations in the area might shed further light on this aspect.

### The Northern Ubaid Period (ca. 5300–4500 B.C.)<sup>5</sup>

By retrieving a markedly higher number of sherds from the “northern Ubaid” ceramic tradition, the LoNAP survey was able to gather more consistent and definite evidence for this period. The significant sets of data known in the region from key site sequences (above all, from Tepe Gawra, but also Tell Arpachiyah and Khirbat Hatara from the Eski Mosul salvage excavation) confirm the substantial presence of the northern Ubaid ceramic tradition in the region, which in turn facilitates the identification of the Ubaid pottery recovered during the LoNAP survey. These sherds show a high degree of standardization that further underlines the occurrence of a widespread ceramic horizon featuring traits in common with Syro-Iraqi Jezirah (Stein 2012: 128). Some of the sherds seem to belong to the previously mentioned Halaf–Ubaid transition phase (Breniquet 1987; Campbell and Fletcher 2010; Karsgaard 2010), a transition best exemplified in the upper Tigris, especially by Levels XIX–XVII at Tepe Gawra (Stein 2010: 34), and thus attesting to the presence of settlements with deep processes of acculturation. The future excavation of such settlements might add crucial details for the understanding of the Halaf–Ubaid transition phenomenon.

Among the collected (and thus far studied) potsherds, noteworthy is a small jar (Fig. 5) bearing figurative motifs (likely representing a caprid) framed by geometric patterns, among which the festoons around the body are typical of traditional Ubaid decoration. The paint decorating the distinctive green-yellowish fabric is brown in color (Stein 2012: 129). Its production technique and treatment suggest a late northern Ubaid classification.<sup>6</sup>

Of the major bulk of the ceramics, to date we have identified 102 potsherds, mainly belonging to Northern Ubaid Painted Ware, which is considered, from a typological point of view, to be a late development of the classic Ubaid style that arose in southern Mesopotamia (Akkermans and Schwartz 2003: 154; Stein 2010: 33–34).

In general, the collected ceramics possess yellow-green or buff-colored mineral-tempered fabrics, although the presence of vegetal tempers has also been observed. The latter trait has been recorded in the Ubaid ceramics of Leilan Period VI (Schwartz 1988: 57) and Hammam et-Turkman Period IV (where it apparently distinguishes the later Phase IVC from Phase IVA–B [Akkermans 1988: 189]). The evidence retrieved might



Fig. 5. Late Northern Ubaid painted jar. (Photo by M. Gatti; © LoNAP Archives)

thus point to production techniques in agreement with the data from other sites; it might perhaps also indicate that the collected pottery spans the entire northern Ubaid phase, from the earliest to the latest phases. With regard to form types, these are dominated by cups with incurved, thinned, or slightly flaring rims (Fig. 6:1–4), a type well known at Khirbat Hatara Level 1, as well as from Tepe Gawra Levels XVI–XIII (Tobler 1950: figs. CXXIV:129–30, CXXVII:172, 175; Fiorina 2001: 19, fig. 9:65–67; 21, fig. 10:74, 76).

Bowls occur with simple rims, sometimes slightly flared (Fig. 6:5, 6). This type is also common in other northern Ubaid sites on the upper Tigris, such as Kenan Tepe and Tell Arpachiyah (Mallowan and Cruikshank Rose 1935: fig. 34:7; Parker 2010: fig. 21.10J).

Jars occur together with form types similar to those of the preceding Halaf period, thus in agreement with the above-mentioned transitional process. The jars have globular bodies and sharply flaring rims (Fig. 6:7, 8); parallels are found at Tell Arpachiyah and Tell Brak (Mallowan and Cruikshank Rose 1935: fig. 37:1; Oates 1987: 195, fig. 3:5).

Painted motifs are mostly geometric, with bands, festoons, and wavy lines in proximity to the vessel rims (Fig. 6:9, 10). The latter are mostly typical of cups and bowls, whereas closed forms tend to have simpler decorations, such as bands, covering ample portions of the surface. The paint is chocolate brown or black in color and usually occurs on both inner and outer surfaces of the sherd. A striking decorated body fragment (Fig. 7) shows a hatched/grid decoration that seems to have a close parallel from an earlier Ubaid horizon (Ubaid 2; see Oates

<sup>5</sup> In this, as well as the Late Chalcolithic dating, we follow the absolute chronology proposed in Stein 2012: 129, table 1.

<sup>6</sup> I am indebted to Dr. Tatsundo Koizumi for the classification of this vessel.



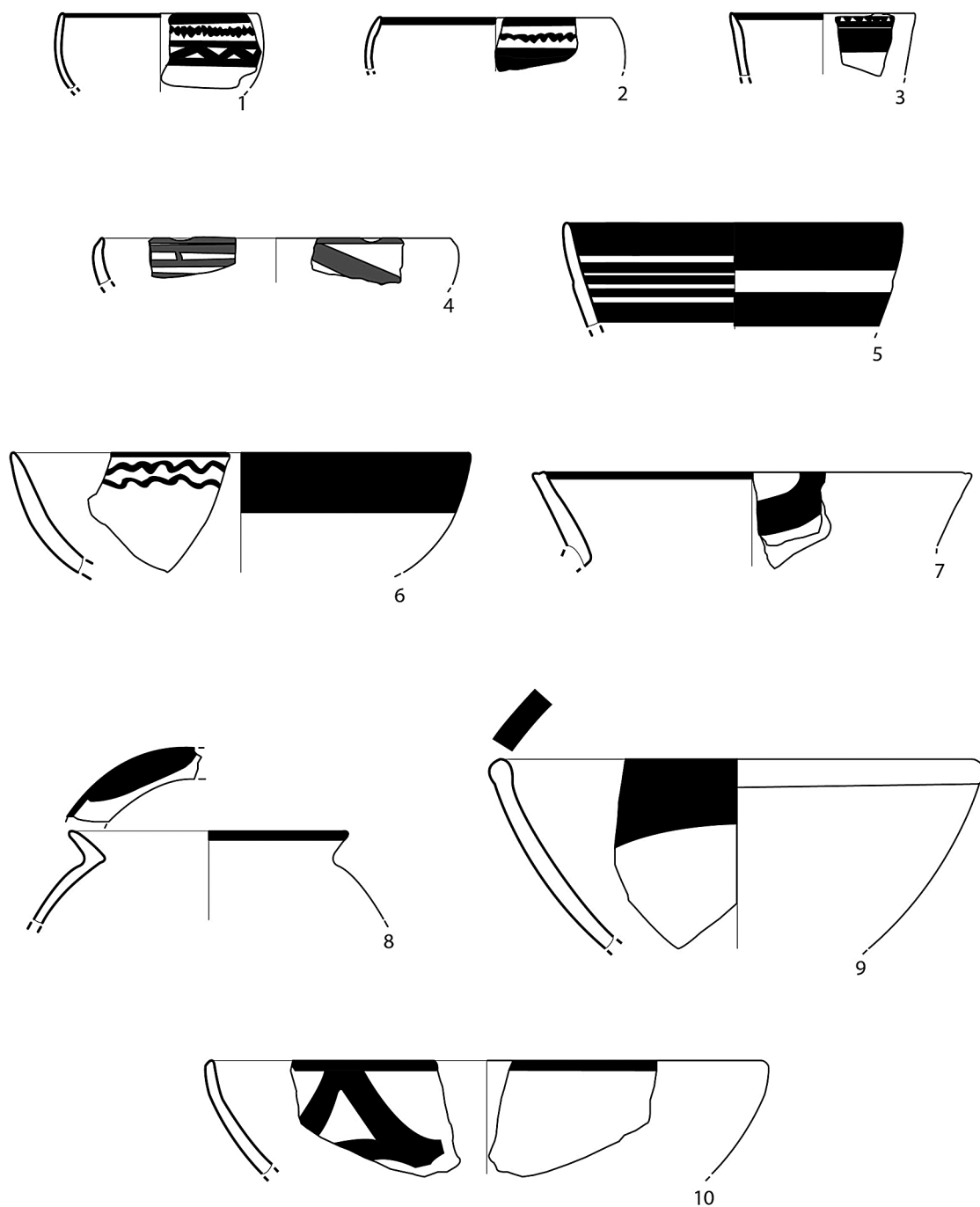


Fig. 6. Northern Ubaid pottery from the LoNAP area. (© LoNAP Archives)

1960: 35, pl. V:2), perhaps ascribable to the above-noted Halaf–Ubaid transition phenomenon that occurs in upper Mesopotamia. This might further testify to an earlier onset (perhaps from the mid/late-sixth millennium B.C.) of Ubaid “acculturation” processes (represented in this case by the adoption of Ubaid ceramic styles) in upper Mesopotamia (Carter and Philip 2010: 2).<sup>7</sup>

Apart from this interesting point, which calls for a more detailed study of the pottery, the Ubaid material so far recovered by the LoNAP mission seems to fit well with the region’s known traits and has a number of aspects in common with Ubaid assemblages from the Tigris region, as well as from the Syro-Iraqi Jezirah.

### The Late Chalcolithic Period

Thanks to recent research carried out in key upper Mesopotamian sites (e.g., Arslantepe, Tell Brak, Hacinebi), the originality of the northern Mesopotamian Late Chalcolithic occupation and the relative local material culture has now been definitively assessed (Frangipane 1997; Stein 1999; Oates et al. 2007; Ur, Karsgaard, and Oates 2007). This has led to the identification of a proper periodization, which subdivides the Late Chalcolithic into five subphases spanning the late fifth and fourth millennia B.C. (Rothman 2001; Stein 2012). However, a complete ceramic characterization is still lacking, especially for the initial periods (Oates 2010: 45; 2011); excavations at Khirbat al-Fakhar have started to fill this gap only very recently, but further data are awaited (e.g., the final publication of the TW sequence from Tell Brak) for a more exhaustive Late Chalcolithic ceramic typology. The upper Tigris, despite several salvage excavations carried out during the 1980s, offers data sets of limited usefulness; among these, Tell Karrana, Musharifa, and Tell Mohammed ‘Arab have furnished the most interesting evidence, especially for the transition between the Late Chalcolithic and Nineveh 5/Early Jezirah 0 (Oguchi 1987; Roaf and Killick 1987; Rova 1993; 2003b).

On the basis of the available information, and given the preliminary character of the present study and the use of similar approaches in most recent studies of survey project material (Ur 2010; Algaze, Hammer, and Parker 2012; but see the Tell Leilan survey for a different and

<sup>7</sup> This hypothesis is based on the similarity between this sherd and pottery decorated with a similar reserved pattern that has been classified as Hajji Muhammad Ware (= Ubaid 2). The validity of the Hajji Muhammad Ware and related types has been severely contested, however; in particular, the chronological relevance of diagnostic types has been denied in favor of a more high-status role (e.g., formal eating/feasting [Crawford 2010]). This would ultimately lead to the elimination of the Ubaid 2 phase, with a consequent stretching of the Ubaid 1 and 3 phases.



Fig. 7. Fragment of a likely early Ubaid (Ubaid 2 or Halaf–Ubaid transition) potsherd. (Photo by M. Gatti; © LoNAP Archives)

more precise approach [Brustolon and Rova 2008]), the following discussion of the ceramic evidence involves the subdivision of the Late Chalcolithic into two main periods, an early one (embracing the Late Chalcolithic 1 and 2) and a later Late Chalcolithic that includes the Late Chalcolithic 3–5.

The reader may note that our analysis of Late Chalcolithic ceramics does not follow the description of the sites (Morandi Bonacossi and Iamoni 2015), in which there was no attempt to subdivide the available data into subphases because of the many sites whose ceramic assemblages were still in need of further study in order to obtain a finer classification. However, a few ceramic collections have already been studied in some detail: they served as a starting point for the following preliminary presentation of the most significant traits characterizing the early and late Late Chalcolithic. At present (the end of the 2013 campaign), 45% of the Late Chalcolithic material so far analyzed belongs to the Late Chalcolithic 1–2 and 35% to the Late Chalcolithic 3–5; we are not yet able to propose a more precise periodization for the remaining 20%. In future publications, we plan to maintain this macro-subdivision for more general analyses of LoNAP

settlement patterns, whereas in more detailed investigations (e.g., on those sites whose surface materials attest to extensive Late Chalcolithic occupation) a more precise chronological classification of the ceramics collected will be attempted.

The identified Late Chalcolithic pot fragments at present total 808, a much higher number than those for previous periods (more than three times larger than the Pottery Neolithic/Pre-Halaf, the Halaf, and the Ubaid periods combined). This evidence is in good agreement with the data from the settled sites, where a significant increase has been identified as well (see Morandi Bonacossi and Iamoni 2015). The pottery shows a clear local tradition, dominated by the vegetal-tempered pottery which eventually becomes the distinctive Chaff-Faced Ware, typical of most of the Taurus (e.g., Amuq F) and Zagros regions (Braidwood and Braidwood 1960: 233–39; Schwartz 2001: 238–39; Helwing 2012: 203–5; 2013: 85). As discussed in more detail below, influences from the south (e.g., imports or forms inspired by south Mesopotamian/Uruk traditions) are minimal, a noteworthy trait of the area under examination.

#### *Late Chalcolithic 1–2 (ca. 4500–3900/3850 B.C.)*

The earliest phase of the Late Chalcolithic is attested by 368 potsherds. The ceramic production is almost completely handmade and is dominated by inwardly beveled rim bowls (**Fig. 8:1–5**), which are well known in early Late Chalcolithic phases from Khirbat al-Fakhar (Al-Quntar, Khalidi, and Ur 2011: fig. 6:5–8) and Tepe Gawra Levels XI–X (Tobler 1950: fig. CXLIV:375, 382, 384; Rothman 2002: figs. 15:1816, 1819; 18:1928) and seem to be common in all of upper Mesopotamia (Rothman 2002: 58; Brustolon and Rova 2007: 12), since they occur also at Nineveh, Tell Brak Operation H6 (Level 7), Leilan Period V, and Hacinebi Phase A (Schwartz 1988: fig. 58:5–7; Gut 1995: fig. 53:800–802; Pearce 2000: fig. 2:g; Matthews 2003b: fig. 3.13:2).

Inwardly beveled rim bowls are normally undecorated but may occasionally have a painted decoration (usually red or brown) along the inner side of the rim (see **Fig. 8:2, 4**). This can feature internal short stripes or blobs, usually three in number—an intriguing motif, as precise parallels are known from Tepe Gawra Level X-A, as well as Nineveh and Musharifa (Tobler 1950: fig. CXLIV:375; Oguchi 1987: fig. 14:11; Gut 1995: fig. 53:802)—thus strengthening the idea that a very homogeneous ceramic tradition may characterize the Late Chalcolithic of the upper Tigris. The presence of this decorated type as far as the Keban area in the upper Euphrates might imply that long-distance contact took place between these regions during the early Late Chalcolithic (Lupton 1996: 15 and fig. 2.1:H–J).

The same decoration also characterizes the pointed-rim bowls, another form type apparently frequent in the early Late Chalcolithic (**Fig. 8:6**). The best parallels come again from Gawra Level X (Tobler 1950: fig. CXLIV:383); elsewhere, the type does not seem to be particularly common, thus making it an apparent diagnostic of the upper Tigris region. The fabric is usually chaff tempered but not particularly coarse. Colors vary from buff-yellow to orange to brownish. Painted decoration occurs also with the well-known “Sprig Ware” type: it is usually taken as diagnostic of the early Late Chalcolithic (and this may be true for the Tigris area in particular [see Ball 1997]), as its presence at Tepe Gawra as early as Level XII may demonstrate (Tobler 1950: 149, fig. 275; Rothman 2002: 57). Somewhat surprising is the apparent absence of the so-called Coba bowls that are considered a hallmark of the early Late Chalcolithic: yet their absence in the studied assemblages (at least in the original version [see Rothman 2002: 55]) might imply the existence of a regional limit to the spread of this widely occurring diagnostic type (Rova 1999–2000; Oates 2011).

Among the closed forms, neckless jars with flaring rims (**Fig. 8:7, 8**) seem to be the most distinctive type; they are well known in early Late Chalcolithic contexts, such as Khirbat al-Fakhar (Al-Quntar, Khalidi, and Ur 2011: 160, fig. 8:1–3), Tell Leilan Period VI (Schwartz 1988: fig. 66:7), and Grai Resh (Kepinski 2011: fig. 9:12). Also common are the internally hollowed jars (**Fig. 8:9–11**): they feature a rounded rim or a short upright rim and occur in Late Chalcolithic 2 levels at Grai Resh (Kepinski 2011: figs. 9:15, 11:8), as well as in early Late Chalcolithic levels from Area HS6 at Tell Brak (Matthews 2003b: fig. 3.12, 23). A last distinctive type is the beaded-rim hole-mouth jar (**Fig. 8:12**), whose presence in early Late Chalcolithic levels is corroborated by recent excavations at Khirbat al-Fakhar and again at Tell Brak Area HS6 (Matthews 2003b: fig. 3.13, 19; Al-Quntar, Khalidi, and Ur 2011: fig. 7:10, 11). The type has been found with a typical gray ware (which becomes predominant in the following Late Chalcolithic phases, particularly during the Late Chalcolithic 3 [cf. Brustolon and Rova 2007: 8, 22]) and must have been common in the upper Tigris region, as its presence in Nineveh (Gut 1995: fig. 55:813), in the region of Leilan (Brustolon and Rova 2008: 377, fig. 7F:2.1), and Tepe Gawra Levels XI–IX (Tobler 1950: fig. CXLIV:402–4) suggests.

#### *Late Chalcolithic 3–5 (ca. 3900/3850–3100 B.C.)*

To date, 288 potsherds have been attributed to the Late Chalcolithic 3–5. The use of vegetal-tempered fabrics shows a definite increase as a result of the predominance of Chaff-Faced Ware (Schwartz 2001: 238–41; Stein 2012:



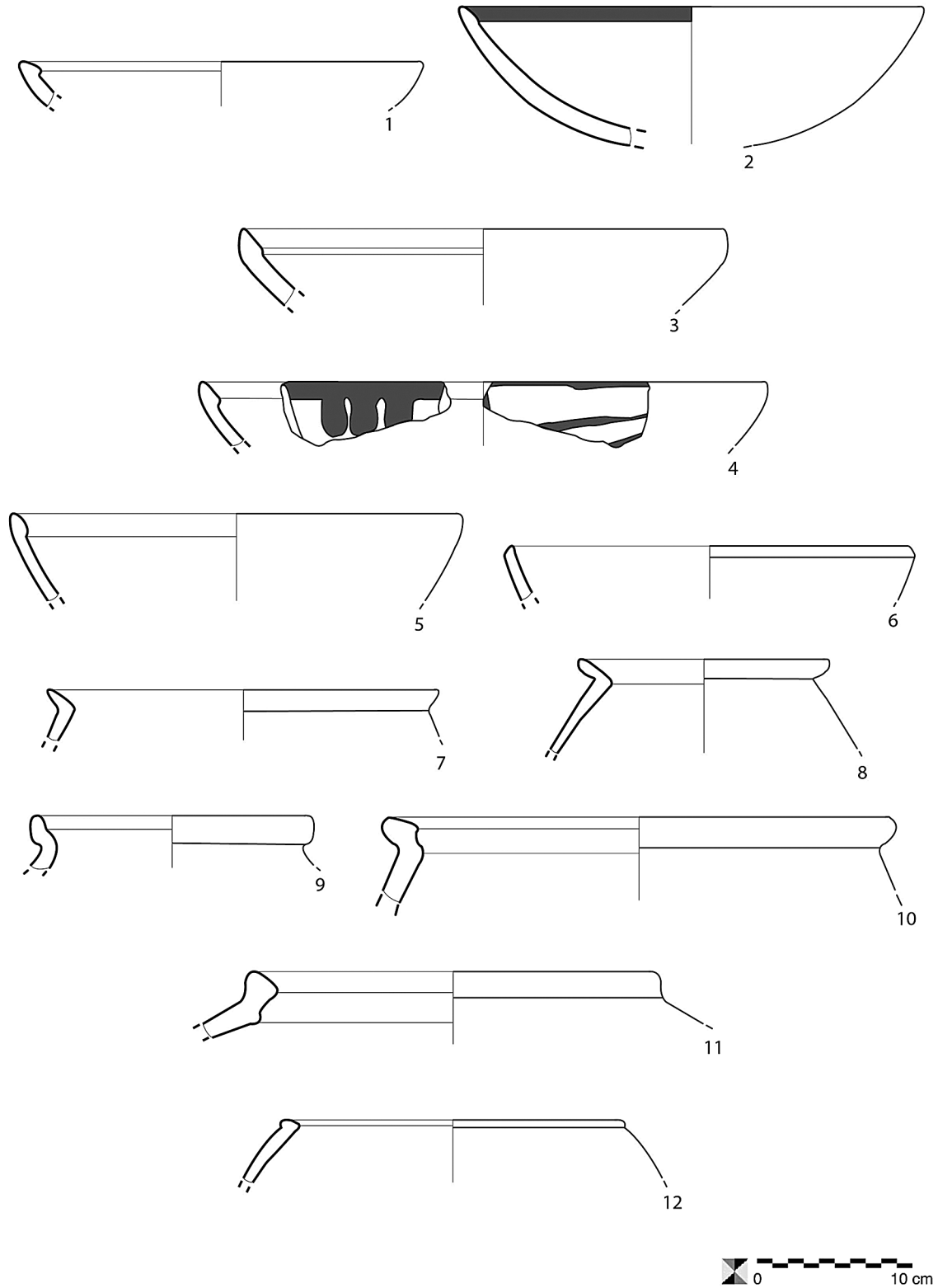


Fig. 8. Late Chalcolithic 1-2 pottery from the LoNAP area. (© LoNAP Archives)

140–41). The predominance of fabrics heavily tempered with inclusions of plant material might have been a result of a technological innovation that produced a different, more orange and/or gray color (with the above-mentioned gray ware now occurring consistently). The ceramic repertoire also undergoes a change, thanks to the introduction of a few new types.

Previous research on Late Chalcolithic 3–5 ceramics defined hammerhead bowls and casseroles as reliable indicators of the periods (Schwartz 2001; Brustolon and Rova 2007; 2008; Stein 2012). Although these forms also occur in the Late Chalcolithic 3–5 surveyed sites, they are not the predominant types.<sup>8</sup> Among open forms, gray ware bowls with externally swollen rims (Fig. 9:2–4) seem to be particularly common; these are widely present at Nineveh (Gut 1995: fig. 55:800–802) as well as at Tell Brak, Area HS1, Level 6, corresponding to the Late Chalcolithic 3 (Felli 2003: fig. 4.21:30). Lastly, plates with square rims and hemispherical bowls/cups—the latter perhaps developed from the inwardly beveled rim bowl of the early Late Chalcolithic—also occur in reasonable numbers (Fig. 9:5–6). Their presence in the Syrian Jezirah confirms the existence of strong connections with the upper Tigris region (Felli 2003: fig. 4.22:12). Closed forms, on the other hand, include jars with an internally grooved neck that—thanks to their wide diffusion in upper Mesopotamia (cf. Tell Brak TW Phase 16; Tell Leilan Period V; and Hacinebi Phase A)—constitute a reliable hallmark of the mid–late Late Chalcolithic (Schwartz 1988: fig. 60:5; Oates and Oates 1993: fig. 51:19–20; Pearce 2000: fig. 4f–g). Necked jars occur as well, with triangular, thickened, or out-turned rims (Fig. 9:7–9); these are all types well known at mid–late Late Chalcolithic levels from Tell al-Hawa, Tell Brak TW Phase 16, and Nineveh (Ball, Tucker, and Wilkinson 1989: fig. 28:6–8; Oates and Oates 1993: figs. 51:21; 53, 58; Felli 2003: fig. 4.20:7, 10).

### **Influences and Contacts: The Southern Uruk Absence? Final Considerations on the Late Chalcolithic (ca. 3600–3100 B.C.)**

One of the most remarkable traits thus far detected is the striking absence of Uruk types. At present, only three potsherds have been classified as southern Uruk pottery: a beveled rim bowl fragment (Fig. 9:10), a jar with nose lugs and cordoned decoration, and a jar with a flaring rim (Fig. 9:11). These types are common in Uruk-related contexts in upper Mesopotamia, such as at Tell Brak (Operations CH and TW, Levels 9b–11 [Fielden 1981: fig. 3:40, 41; Oates and Oates 1993: fig. 54:74]), Tell Leilan (Schwartz 1988: fig. 52:1, 2), Hacinebi Level B2 (Pearce 2000: figs.

12:a, 17; Stein 2001: figs. 8.6A–F, 8.7E–F), Nineveh (Gut 1995: pls. 61:886; 62:887; 63:896, 911–915; 66:936), and Tell Mohammed ‘Arab (Roaf 1998: figs. 1, 2). All the specimens discussed here come from the Navkur plain (thus perhaps suggesting some kind of major interest in that area on the part of Uruk communities).

The low occurrence of Uruk material is somewhat surprising, especially in light of the evidence from neighboring regions. There is a consistent occurrence of Uruk types in the area west of the Tigris (e.g., the region of Zammar and north of the Jebel Sinjar)<sup>9</sup> and in the Syrian Jezirah, not to mention the possible presence of a significant Uruk settlement at Nineveh itself (Algaze 1986; Stronach 1994).

Survey projects in adjacent eastern regions of Iraqi Kurdistan have found significant quantities of Uruk materials too;<sup>10</sup> yet to the north, the situation looks similar to the evidence at hand (Algaze, Hammer, and Parker 2012; Iamoni 2014).<sup>11</sup> There are a number of possible explanations for this phenomenon, most of which invoke settlement patterns and autonomous socioeconomic processes. These possibilities are discussed elsewhere (Morandi Bonacossi and Iamoni 2015), and there is no need to repeat them here. With reference to the ceramic tradition of the region, the very low proportion of southern Mesopotamian materials is indeed the result of limited contacts, possibly caused by the real absence of long-distance trade routes (which most likely crossed the region in the southern plain of Mosul) or by the occurrence of alternative route networks with which Uruk communities did not interact during the fourth millennium B.C. Whether, in the ultimate analysis, this was caused by a scarce interest on the part of southern Mesopotamian society for opening contacts with the region under examination or by the strong autonomy of local settlements is an issue that will be discussed only after a complete analysis of the retrieved evidence.

It has been stressed already (Morandi Bonacossi and Iamoni 2015; but see also the case of Tell al-Hilwa [Wilkinson and Tucker 1995: 45]) that prehistoric and protohistoric sites may suffer from a lower visibility than

<sup>8</sup> For the hammerhead bowls, see Fig. 9:1.

<sup>9</sup> Although, also, the number of settled sites observed with Uruk materials is lower than the number of sites with local ceramics (Wilkinson and Tucker 1995: 43–45). The Beydar survey has found a similar scarce presence of Uruk materials as well, with only two sites attested (Ur and Wilkinson 2007: 307).

<sup>10</sup> I am deeply indebted to the director of the Upper Greater Zab Reconnaissance Project, Prof. Koliński, and the director of the Erbil Plain Archaeological Survey, Prof. Ur, for this information. For a preliminary assessment of the sites characterized by southern Uruk materials of the latter project, see Ur et al. 2013: fig. 15.

<sup>11</sup> This seems also to be confirmed by the preliminary data of the Eastern Khabur Archaeological Survey (Pfälzner and Sconzo 2015: 22).

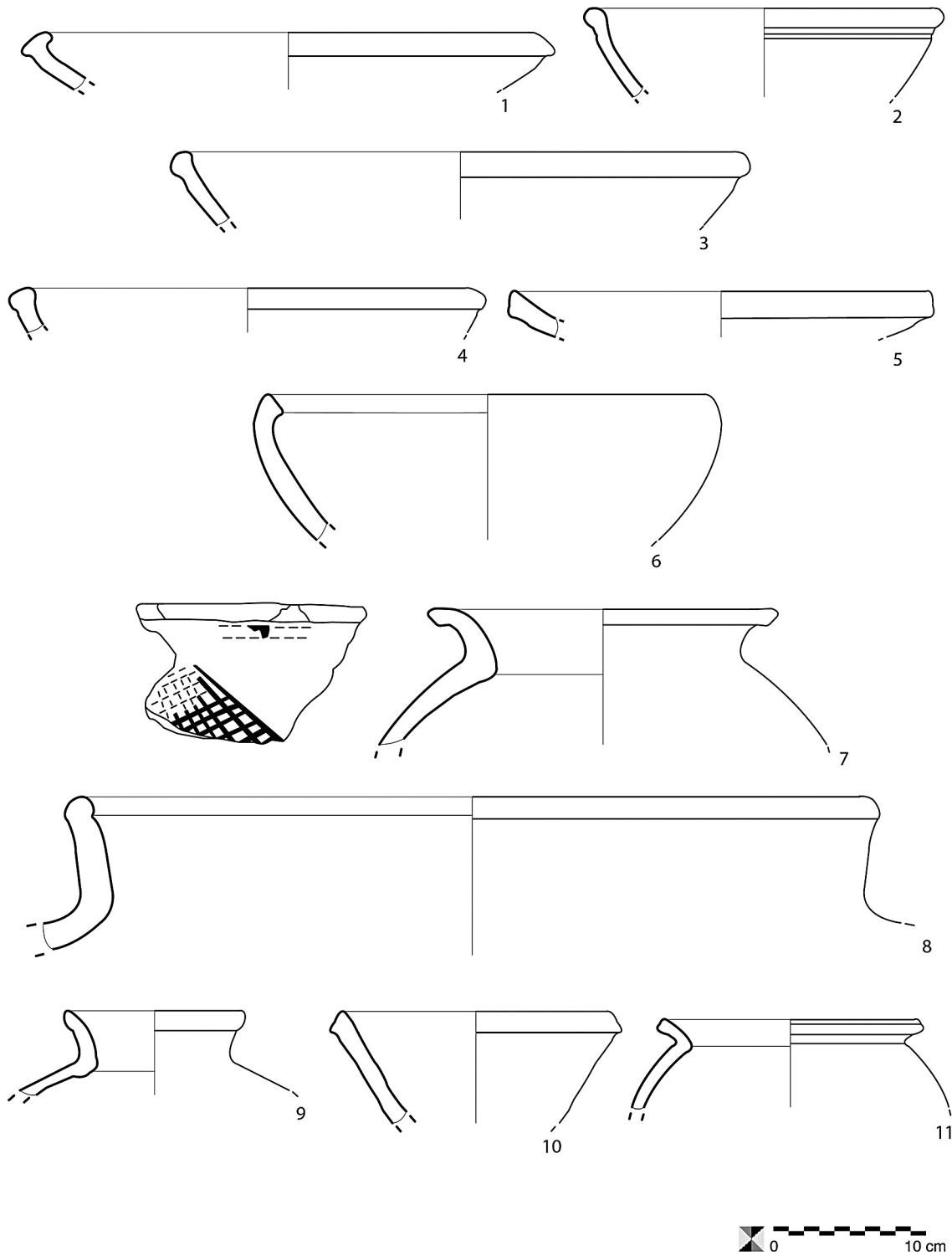


Fig. 9. Late Chalcolithic 3–5 pottery from the LoNAP area. (© LoNAP Archives)



settlements of historical periods. This may also explain the scarcity of Uruk types in the survey collections. An extremely cautious approach is therefore necessary in evaluating these early data. As a final general consideration, one can say that the Late Chalcolithic pottery under examination already provides some interesting insights into the material culture of the region. The ceramics show a number of clear traits that are shared with the reference ceramic sequences, especially from the adjacent Jezirah, where the period has been studied in more detail on the basis of stratified contexts (but see above for the gaps that still need to be filled). At the same time, the period also apparently shows a certain degree of originality, as suggested by the very limited occurrence of a few of the most important hallmarks of the period (e.g., Coba bowls and casseroles). This may imply the occurrence of a “border” perhaps along the Tigris for the occurrence of the Late Chalcolithic 3–5 horizon (as defined in the Syrian Jezirah and southeastern Turkey).<sup>12</sup> This fact probably indicates (especially if seen in connection with the very limited presence of southern Mesopotamian types) the presence of a strong local and autonomous mid–final Late Chalcolithic ceramic tradition, whose nature will be investigated during the next steps in the study of the LoNAP pottery.

### The Early Bronze Age

As in previous surveys (Wilkinson and Tucker 1995; Eidem and Warburton 1996; Ur 2010; Algaze, Hammer, and Parker 2012; Ur et al. 2013), the classification of the third-millennium pottery has been split into two main phases: Ninevite 5 and mid–late third millennium. Recent works on this topic have proposed different pottery production phases, especially the Associated Regional Chronology for the Ancient Near East and the East Mediterranean Project (ARCANE), the aim of which was to try to correlate the ceramic sequences of the most important sites and regions of the third millennium. At present, ARCANE has published only the Jezirah volume (Lebeau 2011) and an interregional volume on the pottery (Lebeau 2013), while results from the Tigridian region are forthcoming. In the future, detailed analyses focused on specific LoNAP cases might provide more detailed periodizations of the retrieved ceramics in accordance with the above-mentioned studies.

### The Ninevite 5 Period (ca. 3100–2600 B.C.)<sup>13</sup>

Of the ca. 1,350 third-millennium potsherds, only 9% belong to the Ninevite 5 period. Painted Ninevite 5 pottery is rare, with only 23 sherds recognized as belonging to this tradition (Fig. 10:1–6). The fabric is fine, buff to yellowish, and the surfaces are usually smoothed. Potsherds are mainly decorated with geometric patterns (triangles, grids, ovals, wavy lines, etc.) that are black in color, although a few purple/dark-red specimens are attested (see Fig. 10:3, 5). These have parallels at several northern Mesopotamian sites, such as Nineveh (Gut 1995: pls. 72:1099, 1106; 78:1149), Tell Mohammed ‘Arab (Roaf and Killick 1987: fig. 3), Tell Fisna (Numoto 2003: figs. 7–11), Tell Jessary (Numoto 1990: fig. 4:64, 65), Tell Leilan (Schwartz 1988: fig. 46:7, 8), Tell Brak (Matthews, Matthews, and McDonald 1994: fig. 5:1; Matthews 2003a: 5.57:28), and Tell Karrana 3 (Rova 1993: pl. XXIV:150, 165). The majority of the rims collected are beaded (see Fig. 10:2, 5), a common type for Ninivite 5 pottery (Mallowan 1964: 145; Schwartz 1985: 56; Rova 1988: 59; 1993: 68), with a few exceptions of simple out-turned and slightly thinned rims (see Fig. 10:1), which mainly belong to carinated cups. Some pedestal-base fragments were also recovered (Fig. 10:7–9), both painted and plain versions (see Fig. 10:7, 9), with parallels at Tell Karrana 3 (Rova 1993: pls. XXIV:152, 153; XLIV:508–520), Nineveh (Gut 1995: pls. 83:1182–84, 85:1189, 91:1275), Tell Tuwajj (Numoto 2003: fig. 3:108, 114), Tell Mohammed ‘Arab (Killick 1986: fig. 3:2), Tell Leilan (Schwartz 1988: figs. 35:4, 6; 38:1, 2; 46:4–6), and Tell Brak (Matthews 2003a: fig. 5.57:9); one (see Fig. 10:8) is corrugated and painted black on the external surface.<sup>14</sup>

Among the unpainted Ninevite 5 potsherds, the most frequent type is ribbed fine ware (Fig. 10:11, 12). It has been found in many early third-millennium contexts—for example, at Nineveh (Gut 1995: pls. 90:1272–74; 91:1277, 1278), Tell Karrana 3 (Rova 1993: pl. XXV:191–94), Tell Mohammed ‘Arab (Roaf 1983: fig. 3:9–12), Tell Kutan (Bachelot 2003: fig. 19), Tell Brak (Matthews 2003a: figs. 5.57:13–16, 5.68:22–24), and Tell Leilan (Schwartz 1988: figs. 38:1–3, 42:7–14). This type may be recognized by the presence of horizontal ribs or grooves and a gray/greenish fine-grained fabric. Usually the ribbed decoration occurs on the upper part of the vessel.

Incised patterns (e.g., for simple triangles, see Fig. 10:10; zigzag or wavy lines, Fig. 10:13; and herringbone

<sup>12</sup> Similar evidence has been retrieved in the area of Zakho, thus in the northernmost Iraqi section of the Tigris, by the Eastern Khabur Archaeological Survey (P. Sconzo, pers. comm.).

<sup>13</sup> For a general discussion of the Ninevite 5 period, see Roaf 2000; Rova and Weiss 2003; and Rova 2013.

<sup>14</sup> See Telul eth-Thalathat V (Fukai, Horiuchi, and Matsutani 1974: 73, fig. 16) and Tell Leilan (Schwartz 1988: fig. 36:1, 2) for similar specimens.

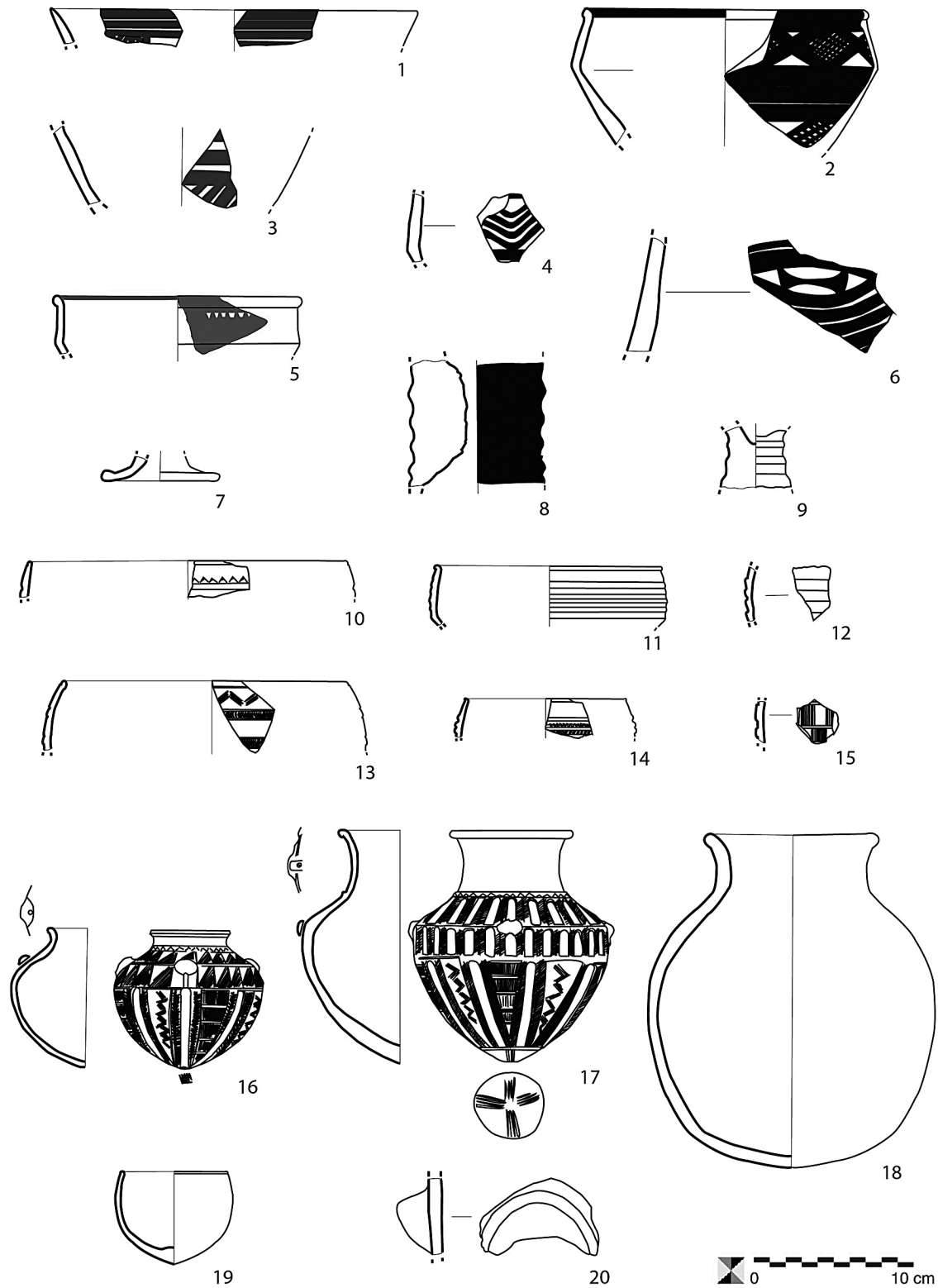


Fig. 10. Ninevite 5-period pottery from the LoNAP area. (© LoNAP Archives)

pattern, **Fig. 10:14**) seem to be more frequent than excised ones (mainly broad excisions creating the appearance of raised panels [**Fig. 10:15**]). All are motifs well attested in Ninevite 5 contexts, with the best examples from Tell Brak (Matthews 2003a: figs. 5.61:2–5, 5.66:15, 5.67:4), Tell Barri (Biscione 1998: fig. 16:1), Tell Khazna I (Munchaev and Merpert 1994: fig. 25:1), Tell Fisna (Numoto 2003: fig. 12:102), Tell Leilan (Schwartz 1988: figs. 31:11, 14; 32:4, 12, 15; 40:2–6; 43:11), Nineveh (Gut 1995: pl. 93:1299–1301, 1305–1307), Tell Mohammed ‘Arab (Roaf 1983: fig. 4:2), Tell al-Raqā‘i (Curvers and Schwartz 1990: fig. 21:1; Fortin and Schwartz 2003: fig. 7:2), and Tell Karrana 3 (Rova 1993: pls. XXV:196, 197; XXVIII:244). Also, some specimens with both incised and excised Ninevite 5 decoration are attested (see below).

Concerning forms, as is the case for the painted Ninevite 5 types, the incised/excised sherds come from carinated cups with inturned and beaded rims (see **Fig. 10:10, 11, 13, 14**). Exceptional among the survey material was a find of seven complete vessels from a grave cut by slope erosion at Tell Amerikie 3, dated to the period at issue (**Fig. 10:16–19**). Four are small, heart-shaped carinated jars with straight necks, beaded rims, and pointed bases; all have incised and excised decoration from the neck to the base, while the neck is plain. In addition to the incised/excised decoration, these four small jars have two or four perforated lugs on the carination (**Figs. 10:16, 17; 11**). This jar type is common in the Ninevite 5 period and has parallels, for instance, at Nineveh (Gut 1995: pl. 91:1286), Tell Kutani (Bachelot 2003: fig. 17:3), Tell Mohammed ‘Arab (Bolt and Green 2003: figs. 13:2; 21:11, 26), Tell Jigan (Numoto 1992: fig. 3:35), and Tell Brak (Matthews 2003a: fig. 5.66:11). Two globular wide-mouthed jars with beaded rim and rounded base (see **Fig. 10:18**) and a small cup with beaded rim and pointed base (see **Fig. 10:19**) were also discovered in the grave. A few crescent-shaped pot lugs (**Fig. 10:20**), a type also common in this earlier phase (Schwartz 1988: fig. 35:1, 2; Curvers and Schwartz 1990: fig. 19:2; Numoto 1992: fig. 9:105; Matthews 2003a: figs. 5.56:18; 5.58:4, 15, 30; Nicolle 2006: fig. 7-3:1–4), were collected as well.

The first impression is that the LoNAP survey Ninevite 5 material belongs mostly to the central part of the period—namely, the Intermediate, Painted/Early Incised, and Incised/Excised phases (Rova 2003a: 5). At present, there is no evidence of the earliest phases (Terminal Uruk and Transitional: Rova 2003a: 4, 5), even though these are attested at several sites in the Eski-Mosul area (see, e.g., Rova 1988; 2003b; and Numoto 1998; 2003); nor has the latest phase (Late Excised: Rova 2003a: 5) been found, although it is especially common in the Khabur region of Syria (see, e.g., Calderone and Weiss 2003; Fortin and

Schwartz 2003; and Rova 2003a) and only occasionally present in northern Iraq (see, e.g., Roaf and Killick 2003).

#### *Mid–Late Third Millennium B.C. (ca. 2600–2000 B.C.)*

Of the ca. 1,350 Early Bronze Age potsherds, 91% belong to the mid–late part of the third millennium B.C. The most easily recognizable types are the jars with comb-incised decorations (**Fig. 12:1, 2**), together with other variants of incised (**Fig. 12:3–5**) and impressed patterns (**Fig. 12:6–9**). These usually appear on quite thick sherds, probably belonging to medium–large jars, and have several parallels at many sites of northern Mesopotamia, such as Tell Hamoukar (Colantoni and Ur 2011: fig. 23), Tell Brak (Oates 2001: figs. 403:299; 405:324, 325), Chagar Bazar (McMahon and Quenet 2007: pl. 3.20:98, 99), Tell Beydar (Rova 2003c: pl. 9), Tell Mohammed Diyab (Nicolle 2006: fig. 7.19:2), Nineveh (McMahon 1998: fig. 9:4–6), Tell Taya (Reade 1968: pl. LXXXV:20), and Tell Jessary (Numoto 1990: fig. 8:147–49). The fabric is straw tempered, and colors vary from buff to greenish. Incised decorations such as the triangle pattern (see **Fig. 12:3–5**; ARCANE EJZ Type 112; Rova 2011: pl. 21:1) and comb-incised decorations (see **Fig. 12:1, 2**) seem to characterize the Akkadian period (see the parallels at Tell Taya [Reade 1968: pl. LXXXIV:1], Tell al-Rimah [Postgate, Oates, and Oates 1997: pl. 27:c], and Tell Brak [Oates 2001: fig. 403:300, 301]).<sup>15</sup>

Comb-impressed decorations as well as herringbone patterns (see **Fig. 12:6–9**) seem to be more typical of the post-Akkadian period, although they are also attested in the late Akkadian phase—for instance, at Tell Brak (Oates 2001: fig. 406:346–49).

Quite common are the flat and flat-concave bases (**Fig. 12:10–13**); these are sometimes string cut (a technique attested at Tell Beydar [Gavagnin and Mas 2014: figs. 9:3, 4; 10:14], Tell Bderi [Pfälzner 1988: Abb. 17k], Tell Brak [Oates 1982: fig. 2:20, 25], and Tell Melebiye [Lebeau 1993: pls. 154:10, 155:8]) and belong to either bowls (see **Fig. 12:10–12**) or beakers (see **Fig. 12:13**). The fabric can be chaff tempered, but fine specimens with few mineral inclusions are also present. Colors vary from orange to buff to greenish.

Among the rim types, the most often attested are folded jar rims (**Fig. 12:3, 15**), with variant folded ridged jar rims (**Fig. 12:9, 14**). These jar rims are often associated with comb-incised decorations. They have been

<sup>15</sup> They may have a sporadic and occasional continuation also into the post-Akkadian phase—for example, at Chagar Bazar (McMahon and Quenet 2007: pl. 3.20:98, 99) and Tell Brak (Oates 2001: fig. 405:317–19).





**Fig. 11.** Ninevite 5 incised/excised small jar. (Photo by M. Gatti; © LoNAP Archives)

found from the EJZ 3b (Weiss et al. 1990: fig. 26:1; Oates 2001: fig. 460:1363–66, 1369; Gavagnin and Mas 2014: figs. 6:2, 4–11; 9:11–14) to the Akkadian period (Oates 2001: figs. 429:864, 865; 444:1266; McMahon and Quenet 2007: figs. 3.43:194–200, 3.44:201–4; Colantoni and Ur 2011: fig. 27:154–155) and later. Colors range from buff to yellow to greenish.

Less often attested are the beaded-rim cups (**Fig. 13:4–6**), characteristic of the Akkadian and post-Akkadian periods (McMahon and Quenet 2007: 86; Ur 2010: 243; Rova 2011: 73). This rim shape was also typical of the Ninevite 5 period, but the latest specimens are thinner or flattened. The thinned variant of the beaded rim usually belongs to the so-called recessed beaker rims (**Fig. 13:7**), which have been found at Tell Beydar (Bretschneider and Jans 1997: pl. I:5), Chagar Bazar (McMahon and Quenet 2007: pl. 3.9:40–43), and Tell Brak (Oates 2001: fig. 422:716–22), while the flattened version usually belongs to the so-called inturned outside folded rim bowls (**Fig. 13:8, 9**), which are known at Tell Brak (Oates 2001: fig. 419:649–51) and Chagar Bazar (McMahon and Quenet 2007: pls. 3.12:66; 3.13:68, 69). The fabric of the beakers

is fine and uniform, pale gray to green in color, while bowls may also have a few straw inclusions and colors vary from orange to buff to green.

More characteristic of the mid-third millennium B.C. (EJZ 3a–3b) are indented jar rims (**Fig. 13:1–3**) and cooking pots with triangular rims and lugs (**Fig. 13:10, 11**). The first type is mainly present in common chaff-tempered ware with buff color and was found, for example, at Tell Beydar (Gavagnin 2012a: tav. 39:1, 41:2, 42:2), Tell Leilan (Calderone and Weiss 2003: fig. 10:1–3), Tell al-Raqa'i (Curvers and Schwartz 1990: fig. 6:18), and Tell Brak (Oates 2001: fig. 459:1544, 1547, 1548). The second type is characterized by a gritty fabric with medium–large-sized mineral inclusions, characteristic of cooking ware; colors vary from brown to orange. This rim type is well attested at several sites, such as Tell Beydar (Gavagnin and Mas 2014: pls. 5:44, 45; 6:17), Chagar Bazar (McMahon and Quenet 2007: pl. 3.53:225), Tell Hamoukar (Colantoni and Ur 2011: fig. 28), and Tell al-Raqa'i (Curvers and Schwartz 1990: fig. 5:3). This kind of cooking pot is characteristic of the EJZ 3 period, even though it also occurs in small amounts in Akkadian (EJZ 4) levels (Rova 2011: 74).

Just a few specimens of the lid-seated storage jar (**Fig. 13:13**) have been found. Parallels are seen, for example, at Chagar Bazar (McMahon and Quenet 2007: pl. 3.35:166) and Tell Mohammed Diyab (Nicolle 2006: fig. 7:21, 2, 3), along with gray-ware round bowl rims (**Fig. 13:12**) recovered at Tell Hamoukar (Colantoni and Ur 2011: fig. 20:67–73).

One fragment of a relief snake decoration (**Fig. 13:14**), which is very distinctive for the Akkadian and post-Akkadian periods, has been found. Parallels are known from Assur (Beuger 2007: pl. 39:1), Tell Beydar IIIb (Rova 2003c: 489; Gavagnin 2012a: pl. 110:1, 2), Tell Brak (Oates 2001: fig. 407:356, 357, 359, 360), Tell Mohammed Diyab (Nicolle 2006: figs. 7.17:7, 7.23:7), and Chagar Bazar Phase IIb (McMahon and Quenet 2007: fig. 3.28:129). Some specimens were also found in EJZ 3b contexts—for instance, at Tell Leilan Period II (Schwartz 1988: fig. 30:2) and Tell Melebiyeh Level 2 (Lebeau 1993: pl. 184:8). Rope decoration (**Fig. 13:15, 16**) is well attested in the Akkadian and post-Akkadian periods (Fielden 1977: pl. XI:4; Oates 2001: figs. 425:815; 428:862, 863; 437:1079, 1080; 452:1417–22; McMahon and Quenet 2007: pl. 3.19; Rova 2011: 78; Gavagnin 2012b: tav. 111:7–9).

The mid–late third millennium B.C. is represented by a large number of potsherds (the fourth most abundant period, after the Islamic, Neo-Assyrian, and Middle Bronze Age periods), belonging to numerous types covering the entire second half of the third millennium B.C. The most noticeable aspect of this corpus is the presence of many



Fig. 12. Mid- to late third-millennium pottery from the LoNAP area. (© LoNAP Archives)

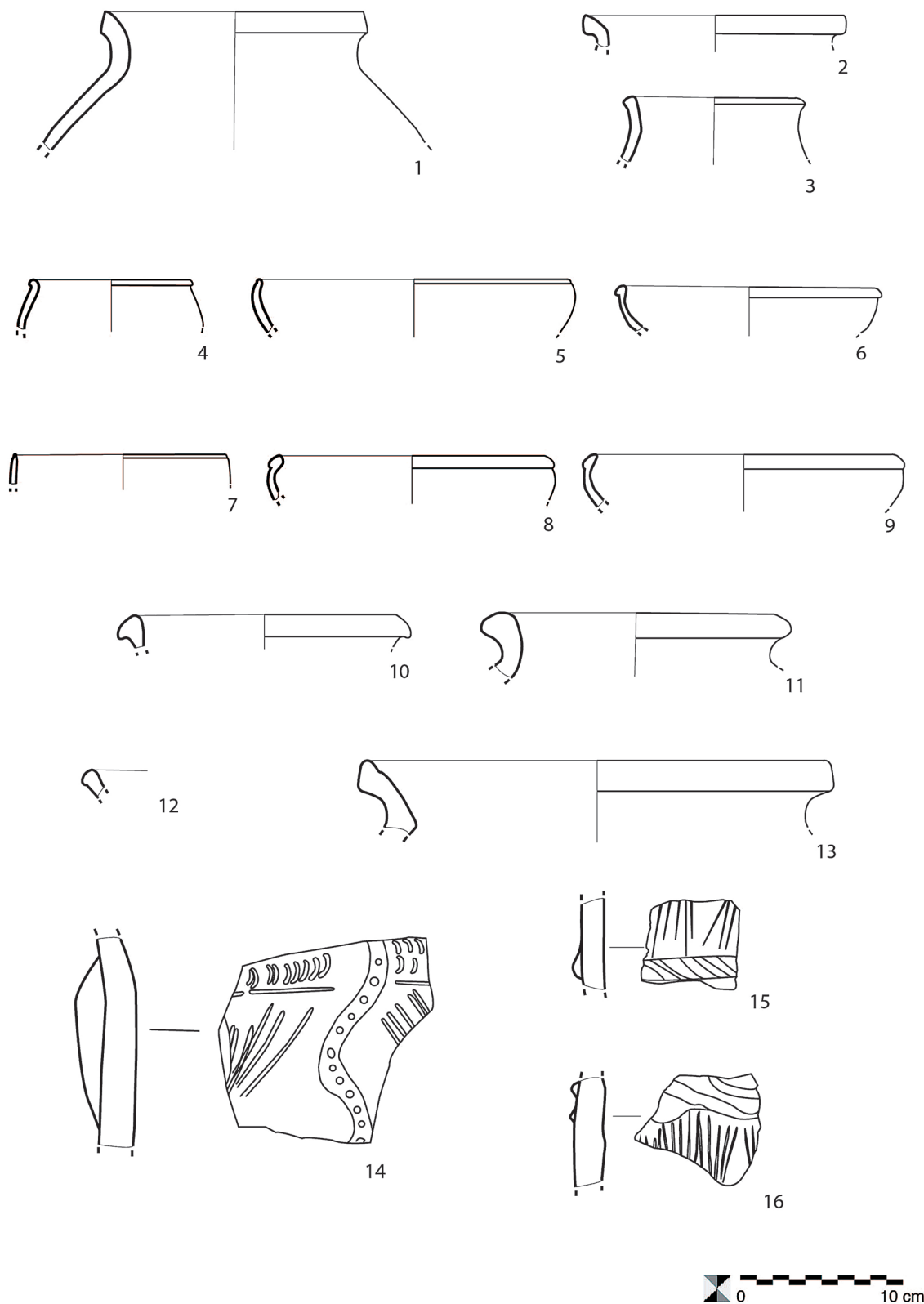


Fig. 13. Mid- to late third-millennium pottery from the LoNAP area. (© LoNAP Archives)



parallels with Tell Beydar EJZ 3 pottery.<sup>16</sup> This is somehow in contrast with recent research by the ARCANE Project, suggesting that the mid-third millennium/EJZ 3 is scarcely represented in the upper Tigris.

A possible explanation lies in the ware types retrieved during the survey activities. Almost all of the collected types for this period are common ware; only a few fine-ware fragments have been identified. As the common ware types have a long duration (some forms start in the Ninevite 5 period and persist throughout the mid-late third millennium B.C.), the presence of a significant number of potsherds dated to the middle part of the third millennium B.C. has to be “taken with caution.” Only a more detailed study of the material will clarify the real situation.

This discrepancy between the LoNAP and the ARCANE Project evidence could also be due to the fact that the majority of the data from the Tigridian region of the ARCANE Project comes from old excavations and publications, when pottery of the mid-third millennium B.C. was poorly known. Moreover, it is also possible that the pottery production of the LoNAP area, which is characterized by small settlements—maybe with pottery of local production (see Morandi Bonacossi and Iamoni 2015)—differs from that of larger urban sites.

### The Middle Bronze Age (ca. 2000–1600 B.C.)

The Middle Bronze Age (ca. 20th–17th centuries B.C.) is principally characterized by the presence of the so-called Khabur Ware, a ceramic production distinguished by a monochrome painted decoration on the vessel's external surface, mainly on the upper part and on the rim (Oates, Oates, and McDonald 1997: 63; Postgate, Oates, and Oates 1997: 52; Pfälzner 2007: 242). Khabur Ware has a long tradition, which is usually considered to start at the beginning of the second millennium B.C. and continue throughout the entire Middle Bronze Age (Stein 1984; Oguchi 1997; 2001) until the Mitannian period (Oguchi 1997: 196–98; 2000; Oates, Oates, and McDonald 1997: 63–64; Pfälzner 2007: 243–44). A possible continuation (Younger Khabur Ware) well into the Late Bronze Age (even perhaps as far as the early 13th century B.C. [Pfälzner 2007: 242]) also has been proposed, although this seems to be restricted to only a few types—in particular, beakers and cups (Stein 1984; Pfälzner 2007: 242). Internal chronological subdivisions have also been suggested on the basis of decorative motifs (e.g., Hrouda 1957; 1961; Pfälzner 1995; 2007; Oguchi 1997;

1998; 2001; Postgate, Oates, and Oates 1997: 53) as well as on the types of fabric (Pfälzner 1995: 38–41, 238–40; 2007: 242–43; contra Koliński 2001: 27–28).

Among the LoNAP materials, the Middle Bronze Age is, after the Islamic period, the phase with the highest number of potsherds (more than 2,100). Most are of Painted Khabur Ware, which occurs with both the common/chaff-tempered and fine/mineral-tempered variants. With a few exceptions—triangles and dots (Fig. 14:4), which have a likely parallel in Ristvet 2005: A1.7, 12, 13—sherds of this ware are decorated with red/brown horizontal painted bands (Fig. 14:1–3, 5–7). Similar types can be found, for instance, at Tell Rijim (Koliński 2000: pls. 41A, B; 34A, D; 28A), Tell al-Rimah (Postgate, Oates, and Oates 1997: pl. 90), and Tell Brak (Oates, Oates, and McDonald 1997: fig. 193:308–13).

Rims are mostly thickened and squared (Fig. 14:2, 4–6), although a few rounded specimens were also recovered (see Fig. 14:1, 3), either completely painted or with painted parallel dashes on the top (see Fig. 14:7). Bowls with rounded carination and rounded rims (see Fig. 14:1, 3) have also been found in Mitannian levels—for instance, at Tell Nemrik (Reiche 2014: pl. 4:7) and Tell Brak (Oates, Oates, and McDonald 1997: figs. 190:203–4, 192:280)—and seem to belong to the “Transitional Khabur Ware” (Pfälzner 2007: 242–43).

Burnished gray ware is well attested too. It is also common in the Mitannian period, although with different vessel forms and different, usually lighter, gray coloring (Oates, Oates, and McDonald 1997: 65–66; Pfälzner 2007: 241). In the LoNAP area, it occurs with bowls characterized by thickened or incurved rims (Fig. 14:10, 11) that frequently display a grooved decoration on the outer surface. This type is well known especially in the eastern Jezirah and in the upper Tigris, as its presence at Tell Brak (Oates, Oates, and McDonald 1997: figs. 188:170–75, 189:176–84) and Tell al-Rimah (Postgate, Oates, and Oates 1997: pls. 44:265, 266; 45:278, 279) demonstrates. It may be found, though much more rarely, in common ware.

Channel bases are also quite frequent in upper Mesopotamia (Postgate, Oates, and Oates 1997: pls. 44:254–60; 54:464–65, 468; Koliński 2000: pls. 42; 43A, B; McDonald and Jackson 2003: figs. 7.25:7, 8; 7.26:13, 14) and occur both in common and in gray ware (Fig. 14:8, 9). In addition, just a few specimens of horizontally grooved jar shoulders were identified (Fig. 14:12, 13), some of them with painted decoration and parallels at Tell Rijim (Koliński 2000: pls. 36B–F, 38A–C).

To sum up, the Middle Bronze Age is well represented among LoNAP materials, although only a few pottery types seem to occur. Within a ceramic production characterized by the ubiquitous use of chaff

<sup>16</sup> For a detailed table of the different correlated phases of the ARCANE Project, see Lebeau 2013.

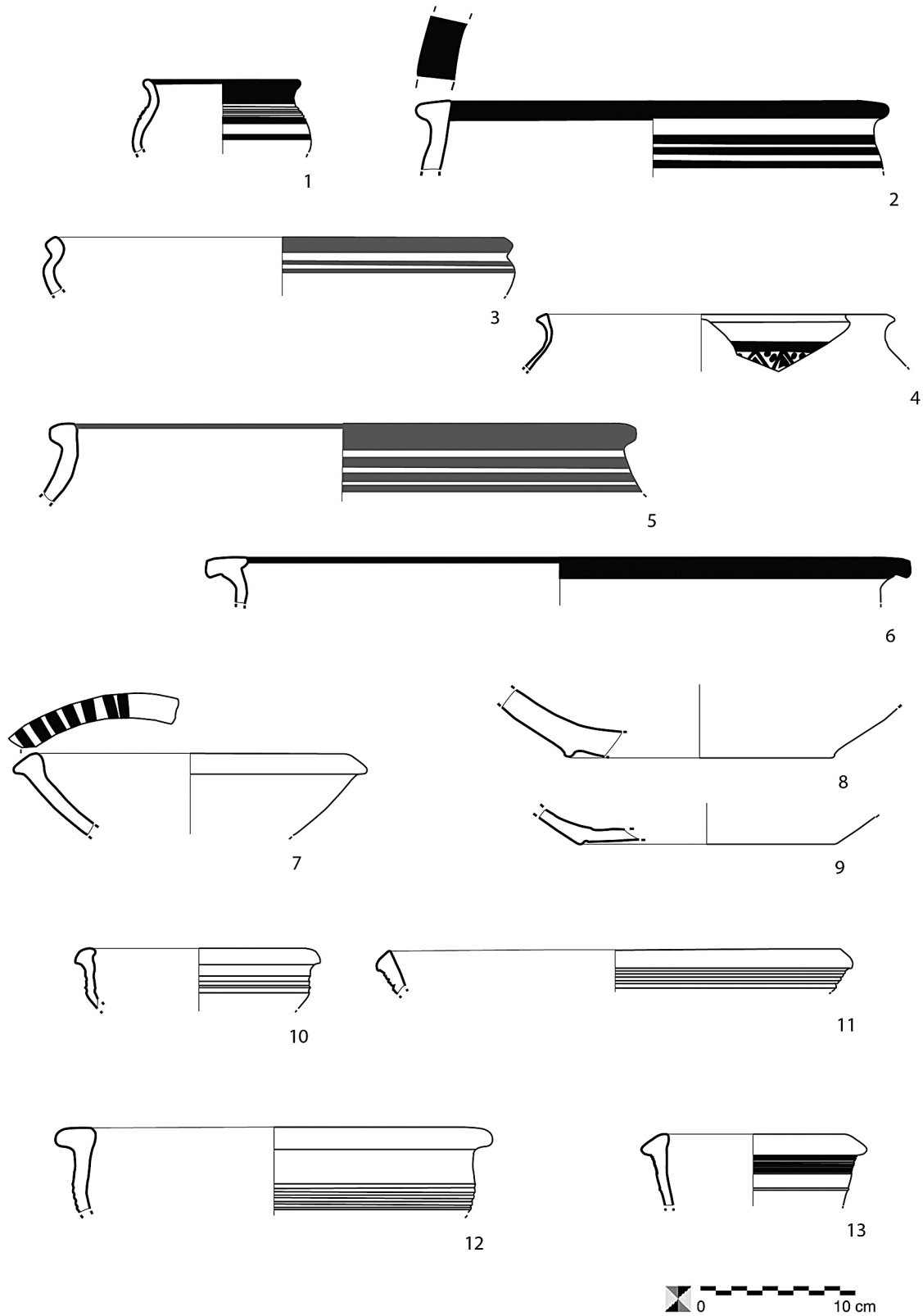


Fig. 14. Middle Bronze Age pottery from the LoNAP area. (© LoNAP Archives)

to temper the fabrics for both painted and unpainted vessels, the discovery of painted Khabur Ware potsherds in considerable quantities is remarkable. Such an occurrence hints at the strong presence of this ceramic tradition in the LoNAP area during the Middle Bronze Age and the early Late Bronze Age and stresses, in particular, the existence of strong, distinct links with the ceramic tradition of the Syrian Jezirah.

### The Late Bronze Age (ca. 1600–1200 B.C.)

The Late Bronze Age includes the Mitannian (16th–15th centuries B.C.) and the Middle Assyrian periods (14th–11th centuries B.C.). Concerning pottery production, numerous excavations in the Khabur basin, such as Tell Brak (Oates, Oates, and McDonald 1997), Tell Fekheriye (McEwan et al. 1958; Hrouda 1961; Pruß and Baghdo 2002; Bonatz et al. 2008), Tell Barri (Coppini 2008; D’Agostino 2008), Tell Bderi (Pfälzner 1988; 1995), and Tell Sheikh Hamad (Pfälzner 1995), and in northern Iraq (Tell al-Rimah: Postgate, Oates, and Oates 1997; Tell Nemrik: Reiche 2014; Khirbat Hatara: Cellerino 1997; and Tell Rijim: Bielinski 1987; Koliński 2000), have provided a ceramic sequence that encompasses the Mitannian and Middle Assyrian periods. Although differentiation in shapes and fabrics has been identified and discussed for the Late Bronze Age, especially between Mitannian and Middle Assyrian production, some continuity in forms has also been emphasized.

In general, in almost all previous surveys these two periods were combined (see, e.g., Meijer 1986: 33, 42; Lyonnet 1992: 107–8, 122–23; fig. 6a, b; Eidem and Warburton 1996: 57–58; Ur 2010; Algaze, Hammer, and Parker 2012: 31–33, fig. 23). When they were separated, usually just the Nuzi Ware was recognized (Lyonnet 1992: 107; Wilkinson and Tucker 1995: 98, 115, figs. 71, 72; Algaze, Hammer, and Parker 2012: 31, fig. 23:17–19). However, in light of recent excavation results from Tell Brak, Tell al-Rimah, Tell Fekheriye, and Tell Bderi, a safe subdivision between Mitannian and Middle Assyrian periods now seems possible, since diagnostic forms (e.g., red-banded bowls for the Mitannian and sharply carinated plates for the Middle Assyrian), as well as different fabrics and surface treatments, can be identified.

### The Mitannian Period (16th–15th Centuries B.C.)

At present, only 111 potsherds have been attributed to this phase; the low number of Mitannian fragments could be due to the fact that the ceramic tradition of this pe-

riod is less known,<sup>17</sup> but also because more attention has been given to Nuzi Ware (see Hrouda 1957; and Cecchini 1965) and, in general, to other classes of painted ware. Only a few studies have thus far focused on the common ware (see Pfälzner 1995; and Duistermaat 2008).

In two years of survey campaigns, just three fragments of Nuzi White-Painted Ware have been recovered (Fig. 15:1–3). The fabric is fine and uniform, with few mineral inclusions, and is buff in color. The sherds are decorated with geometric patterns composed of lines and dots painted in white on a black or dark brown background, a motif that is well known at Tell Barri (D’Agostino 2008: fig. 4:4–6; 2014: fig. 1:16–19), Tell Brak (Oates, Oates, and McDonald 1997: figs. 96, 97, 197:431, 198:439), and Tell al-Rimah (Postgate, Oates, and Oates 1997: pl. 21). However, the very low number of sherds should not be surprising, since painted Nuzi Ware was probably a “luxury production” associated only with important sites or contexts (Hrouda 1957: 39; see also Cecchini 1965: 19–20; Pecorella 1990: 262–63; Pfälzner 1995: 231; and Postgate, Oates, and Oates 1997: 54).

A good diagnostic type for the period at issue is the red-painted plates (Fig. 15:4–6), also known as “red-banded bowls” (Pecorella 1993: 531–37) or “red-edged bowls and plates” (Oates, Oates, and McDonald 1997: 73, figs. 187, 188). Only a few specimens of this type were found, all of which have simple, thickened rims and straw-tempered fabric. The inner side and a small part of the outer side of the rim are painted red or brown, while the body is buff. This kind of bowl is typical of Mitannian pottery production, as is shown by its presence in such Mitannian contexts as Tell Nemrik (Reiche 2014: pl. 2:3–5), Khirbat Hatara (Cellerino 1997: fig. 1:11), Tell Bderi (Pfälzner 1995: pl. 1d–f), Tell Barri (D’Agostino 2008: fig. 5:7; 2014: fig. 1:20–22), Tell al-Rimah (Postgate, Oates, and Oates 1997: pl. 34:105–12), Tell Sabi Abyad (Duistermaat 2008: fig. IV:1m), and Tell Brak (Oates, Oates, and McDonald 1997: fig. 187:142–47). It has also been occasionally discovered in Early–Middle Assyrian levels at Tell Sheikh Hamad (Pfälzner 1995: 162–63) and Tell al-Rimah (Postgate, Oates, and Oates 1997: 73, pl. 34).

The most recognizable diagnostic type for the Mitannian period is the pie-crust pot stand (Fig. 15:7–9). About 25 potsherds belonging to this type were found in the 2012 and 2013 seasons. All are chaff tempered and

<sup>17</sup> In light of the intrinsic difficulty in distinguishing Mitannian from Middle Bronze Age types, this number must be considered as very preliminary. A detailed analysis of second-millennium pottery specifically focused on the identification of Mitannian types is currently being carried out by C. Coppini. This will provide a complete overview of the Mitannian pottery surveyed in the LoNAP area.

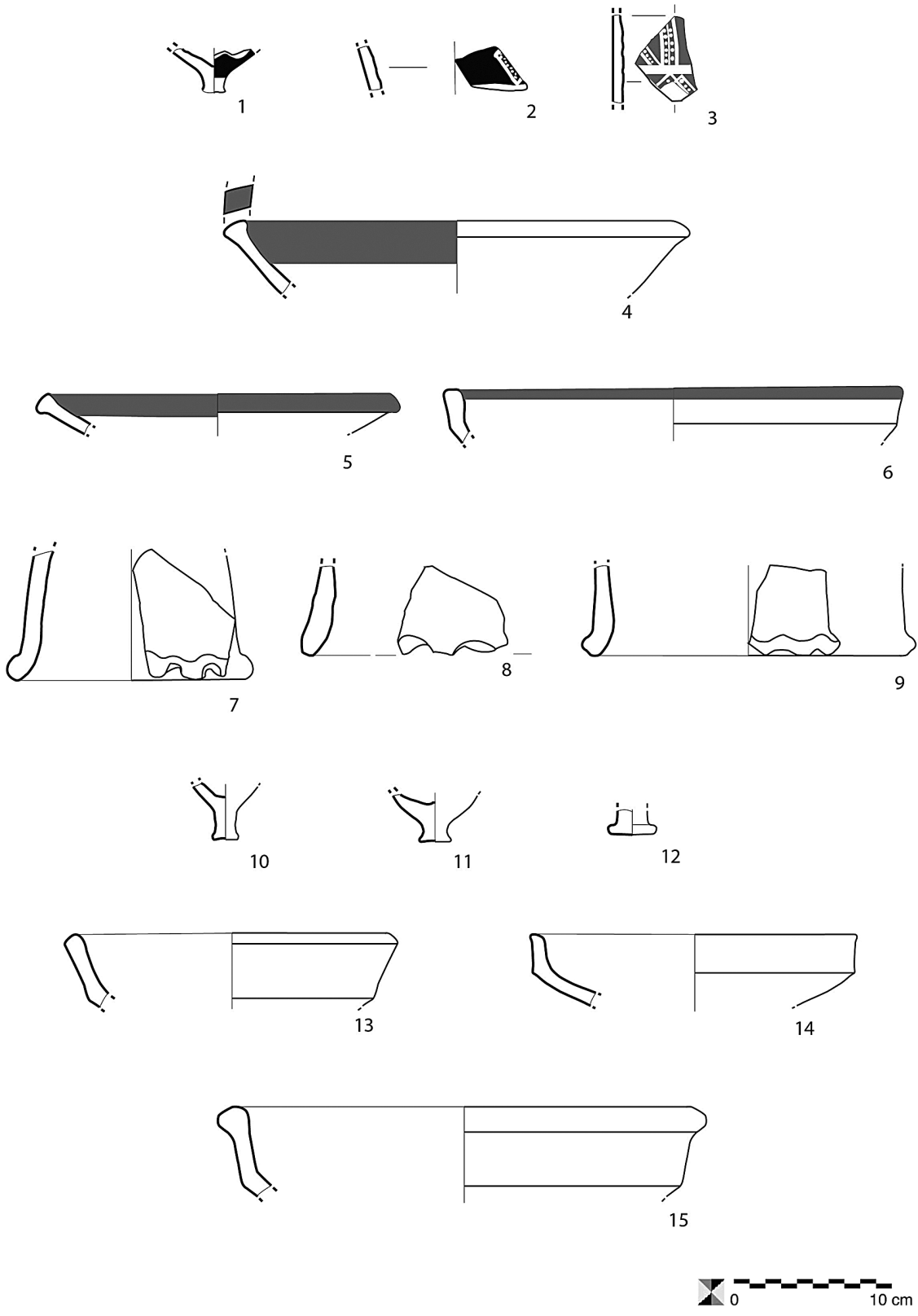


Fig. 15. Mitannian-period pottery from the LoNAP area. (© LoNAP Archives)



buff in color; the rim is usually straight or slightly out-turned. The same kind of pot stand was found at Tell Nemrik (Reiche 2014: pl. 5:8, 9), Tell al-Rimah (Postgate, Oates, and Oates 1997: pls. 93, 94), Tell Brak (Oates, Oates, and McDonald 1997: fig. 215:663–66), Tell Bderi (Pfälzner 1995: pl. 57b, c), Tell Barri (D’Agostino 2008: fig. 6:8), and Kilik Mishik (Rouault and Calini in press). Pie-crust pot stands have also been reported in Middle Bronze Age (Tell Rijim: Koliński 2000: 35, pls. 20A, 21B, 22; and Qurd Khaburstan<sup>18</sup>) and Middle Assyrian contexts (at Tell Fekheriye<sup>19</sup> and Qasr Shemamokh<sup>20</sup>). However, with respect to their shape and fabric, the LoNAP project specimens discussed here closely resemble pieces from Mitannian contexts, so an attribution to the Mitannian period would seem reasonable.<sup>21</sup>

Pedestal (stump) base (Fig. 15:10–12) and carinated bowls (Fig. 15:13–15) complete the Mitannian assemblage. Carinated bowls are present both in the Mitannian and Middle Assyrian phases, but those from the second period seem to have sharper carination and a more concave profile, while those from the first have simple, straight rims and occur in both common and gray ware (Pecorella 1993: 535–37; Oates, Oates, and McDonald 1997: 65–66; Duistermaat 2008: fig. IV:1a; Reiche 2014: pl. 2:8).

### *The Middle Assyrian Period (14th–11th Centuries B.C.)*

The Middle Assyrian period, with 1,215 potsherds, is characterized by an elevated standardization of forms and fabrics, which is in agreement with Pfälzner’s proposal (1995: 106; contra Duistermaat 2008; D’Agostino 2014). In general, the Middle Assyrian period of the LoNAP survey is characterized by low-quality pottery production, with a high proportion of chaff tempers and a small number of vessel forms.

The most frequent shapes are carinated bowls and plates (Fig. 16:1–3). These, also known as “Knickwand-schalen” (Pfälzner 1995: 132–33), are the hallmark of the Middle Assyrian phase (Fig. 17), with parallels from Tell Nemrik (Reiche 2014: pl. 13:1–6), Tell Barri (Anastasio 1998: fig. 7:4–6; D’Agostino 2008: fig. 7:1; 2014: fig. 2:1–11), Khirbat Hatara (Cellerino 1997: fig. 2:19–20), Tell al-Rimah (Postgate, Oates, and Oates 1997: pls. 28–30), and Tell Brak (Oates, Oates, and McDonald 1997: figs. 181:1–10; 182:38–41) for the bowls, and from Tell Bderi (Pfälzner 1995: pl. 1d–f), Tell Brak (Oates, Oates,

and McDonald 1997: fig. 181:11, 12, 28), Tell al-Rimah (Postgate, Oates, and Oates 1997: pls. 35–37), and Khirbat Hatara (Cellerino 1997: fig. 1:11) for the plates.

Two further forms also considered to be “standard types” for the Middle Assyrian period (see Pfälzner 1995: 235–43; and D’Agostino 2008: 532) are the collared-rim jars (Fig. 16:4, 5), with occurrences at Tell Nemrik (Reiche 2014: pl. 14:4), Tell Brak (Oates, Oates, and McDonald 1997: fig. 183:45), Tell Sabi Abyad (Akkermans and Rossmesl 1990: fig. 8:15; Duistermaat 2008: figs. IV:29n; IV:31a; IV:81c, f), Tell Sheikh Hamad (Pfälzner 1995: pls. 87a, 122b), and Tell Barri (Anastasio 1998: fig. 14:1, 2; D’Agostino 2008: fig. 7:1), and the squared-rim jars (Fig. 16:6–9), with comparisons from Tell al-Rimah (Postgate, Oates, and Oates 1997: pl. 86:993), Tell Nemrik (Reiche 2014: pl. 14:1, 2), Tell Sabi Abyad (Duistermaat 2008: figs. IV:23b, IV:56a, e), and Tell Bderi (Pfälzner 1995: pl. 148a). Less common among the LoNAP materials, but also of high diagnostic value, are the coarse ring bases (Fig. 16:10, 11) that were also found at Tell Sheikh Hamad (Pfälzner 1995: pl. 97a) and Tell Barri (D’Agostino 2014: fig. 2:9, 10).

Numerous nipple bases (Fig. 16:12–15) were found; these are quite common in Middle Assyrian contexts (e.g., Khirbat Hatara: Cellerino 1997: fig. 7:87; Tell Brak: Oates, Oates, and McDonald 1997: fig. 183:48, 49, 51; and Tell al-Rimah: Postgate, Oates, and Oates 1997: pl. 72:729). They also continue in Neo-Assyrian levels—in particular, in fine ware (e.g., Nineveh: Lumsden 1999: fig. 8:52, 53; Khirbet Khatuniyeh: Curtis and Green 1997: figs. 1:272, 273; 38:160).

### **The Iron Age**

#### *The Neo-Assyrian Period (ca. 10th–7th Centuries B.C.)*

Neo-Assyrian pottery is widespread and well characterized in terms of typology, manufacturing, and decoration, with homogeneous and standardized production, even though specific features for different sites have been highlighted (Anastasio 2010: 1–3). Assyrian capitals, such as Nimrud (Lines 1954; Oates 1959; Hausleiter 1999a), Nineveh (Lumsden 1999), Assur (Haller 1954; Hausleiter 1999b; Beuger 2007), and Khorsabad (Loud 1936; Loud and Altman 1938), as well as important excavated sites such as Khirbat Hatara (Fiorina 1997; Negro 1997), Tell al-Rimah (Postgate, Oates, and Oates 1997), Tell Billa (Speiser 1933), Khirbet Khatuniyeh (Curtis and Green 1997), and Balawat (Oates 1974; Curtis, Collon, and Green 1993), have provided us with pottery repertoires dated mainly to the seventh century B.C. The early Neo-Assyrian periods (ninth–eighth centuries B.C.) have

<sup>18</sup> G. Schwartz, pers. comm.

<sup>19</sup> C. Coppini, pers. comm.

<sup>20</sup> See Masetti-Rouault and Calini in press.

<sup>21</sup> The pie-crust pot stands known from Middle Assyrian levels have more everted rims and a coarser fabric, while the Mitannian specimens have straighter walls and rims.

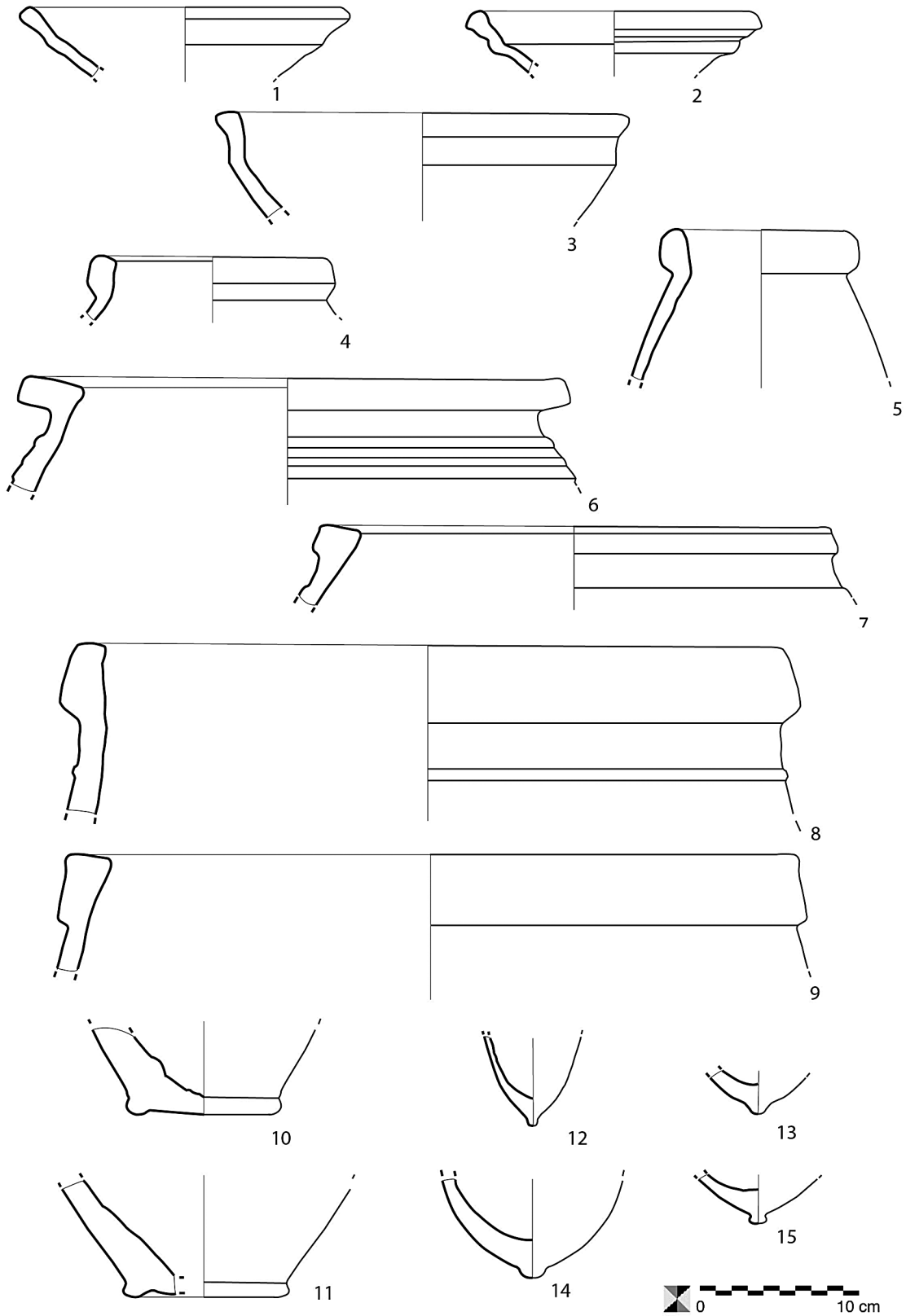


Fig. 16. Middle Assyrian-period pottery from the LoNAP area. (© LoNAP Archives)



**Fig. 17.** Middle Assyrian carinated bowl. (Photo by M. Gatti; © LoNAP Archives)

been investigated at Qasrij Cliff (Curtis 1989; Simpson 1990). LoNAP, thanks to its position in the hinterland of Assyrian capitals, provides a unique opportunity for us to understand the northern extension of the Neo-Assyrian ceramic tradition and to assess whether (and if so, in what way) the ceramic production here differs from that at larger urban sites.

The Neo-Assyrian period has the highest number of sites; with respect to sherd quantity (almost 2,100), only the Islamic period and Middle Bronze Age have more. The fabric is usually straw tempered, but mineral-tempered specimens were also recovered. With regard to surface color and treatments, most Neo-Assyrian sherds are roughly smoothed and buff in color, although yellowish/greenish and orange fragments are present as well.

The most common forms are the thickened-rim bowls (Fig. 18:1–8), both with (see Fig. 18:6–8) and without carination (see Fig. 18:1–5), and the necked-rim jars (Fig. 18:9–11). The thickened-rim bowls are common and were also found in other regional surveys—that is, in the Wadi Ajij (Bernbeck 1993: Abb. 99 l–r, 102e–h), North Jezirah (Wilkinson and Tucker 1995: fig. 73:18–19), and Tell Leilan (Gavagnin 2012c: fig. 3:b, c), as well as at numerous sites such as Nineveh (Lumsden 1999: fig. 4:7–11), Khirbat Hatara (Negro 1997: fig. 2:14–16), Khirbet Khatuniyeh (Curtis and Green 1997: fig. 35:122–29), Tell Rad Shaqrah (Reiche 1999: fig. 5a–g), Tille Höyük (Blaylock 1999: fig. 5:1, 2), Tell Ahmar (Jamieson 2000: fig. 3:1–9), and Tell Sheikh Hassan (Schneider 1999: figs. 6, 7). Since this type has also been found in post-Assyrian levels—for instance, at Khirbet Qasrij (Curtis 1989: figs. 28, 29, 79–100) and Khirbet Khatuniyeh (Curtis and Green 1997: fig. 55:350, 351)—it is probable that the thickened-rim bowl continued to be produced and possibly evolved into the shallow (grooved) carinated bowl.

Necked-rim jars are also a typical Neo-Assyrian form and are attested at several sites, such as Nineveh (Lumsden 1999: fig. 6:28–35), Fort Shalmaneser (Oates 1959: pl. XXXVIII:93–99), Tell Rad Shaqrah (Reiche 1999: figs. 9a–g;l; 10a–d, n–s), Tell Ahmar (Jamieson 2000: fig. 2:4), Khirbet Khatuniyeh (Curtis and Green 1997: figs. 41:179–87; 44; 47:214–16), Abu Dhair (Green 1999: fig. 5:21), and Seh Gubba (Green 1999: fig. 7:5–7). A few examples were also recovered from the early Neo-Assyrian levels at Qasrij Cliff (Curtis 1989: fig. 11:49–53) and the post-Assyrian levels at Khirbet Qasrij (Curtis 1989: figs. 32–38), indicating that this form continued throughout the Neo-Assyrian period and afterward.

Less often attested but also quite common are the bowls with ribbed rims (Fig. 18:14, 15); parallels are found at Khirbat Hatara (Negro 1997: fig. 2:17–21), Fort Shalmaneser (Oates 1959: pl. XXXV:12–16), Nineveh (Lumsden 1999: fig. 5:12–14), Kar-Tukulti-Ninurta (Schmidt 1999: 5:9, 10), Tell Rad Shaqrah (Reiche 1999: fig. 3a–d), Tell Jurn Kabir (Eidem and Ackermann 1999: fig. 8:10), Tille Höyük (Blaylock 1999: fig. 5:11, 12), Tell Sheikh Hassan (Schneider 1999: fig. 4), Tell Ahmar (Jamieson 2000: fig. 4:1–4), and Assur (Haller 1954: pl. 6aa–al). Bowls with ribbed rims and swollen convex bases (Fig. 18:12, 13) are attested at Assur (Haller 1954: pl. 3f, h, i), Khirbet Khatuniyeh (Curtis and Green 1997: figs. 40:172; 42:188, 190), Nimrud (Lines 1954: pl. XXXIX:1–3), Kar-Tukulti-Ninurta (Schmidt 1999: Abb. 4:17, 18; 5b:26), and Tell Rad Shaqrah (Reiche 1999: fig. 12b–d). Jars with folded rims (Fig. 18:16, 17) occur at Tell Rad Shaqrah (Reiche 1999: fig. 10e–l), Tell Ahmar (Jamieson 2000: fig. 6:13–17), and in the upper Khabur (Anastasio 1999: fig. 6f), lower Khabur (Morandi Bonacossi 1999: figs. 10d, 13a), and North Jezirah survey areas (Wilkinson and Tucker 1995: fig. 73:24, 25). Folded-rim jars are also attested in post-Assyrian levels at Khirbet Qasrij (Curtis 1989: fig. 37), Nippur (McCown and Haines 1967: pl. 28:15), and Ur (Woolley 1962: pl. 50:148). Just a few fragments of so-called Palace Ware, or a similar fine greenish ware, were collected.

The Neo-Assyrian material seems to fit well with the pottery tradition of this period and has many parallels in the above-mentioned reference sites. A noteworthy and somewhat unexpected trait is, however, the high presence of mineral-tempered fabrics; this contrasts with usual Neo-Assyrian production, which mostly features straw-tempered fabrics. Several LoNAP potsherds show typical Neo-Assyrian forms but with mineral-tempered, gritty fabric; this might be due to its very late production date (mineral-tempered fabrics become more common in the following periods, e.g., post-Assyrian) or because it is a local production characterized by the use of different fabric types.

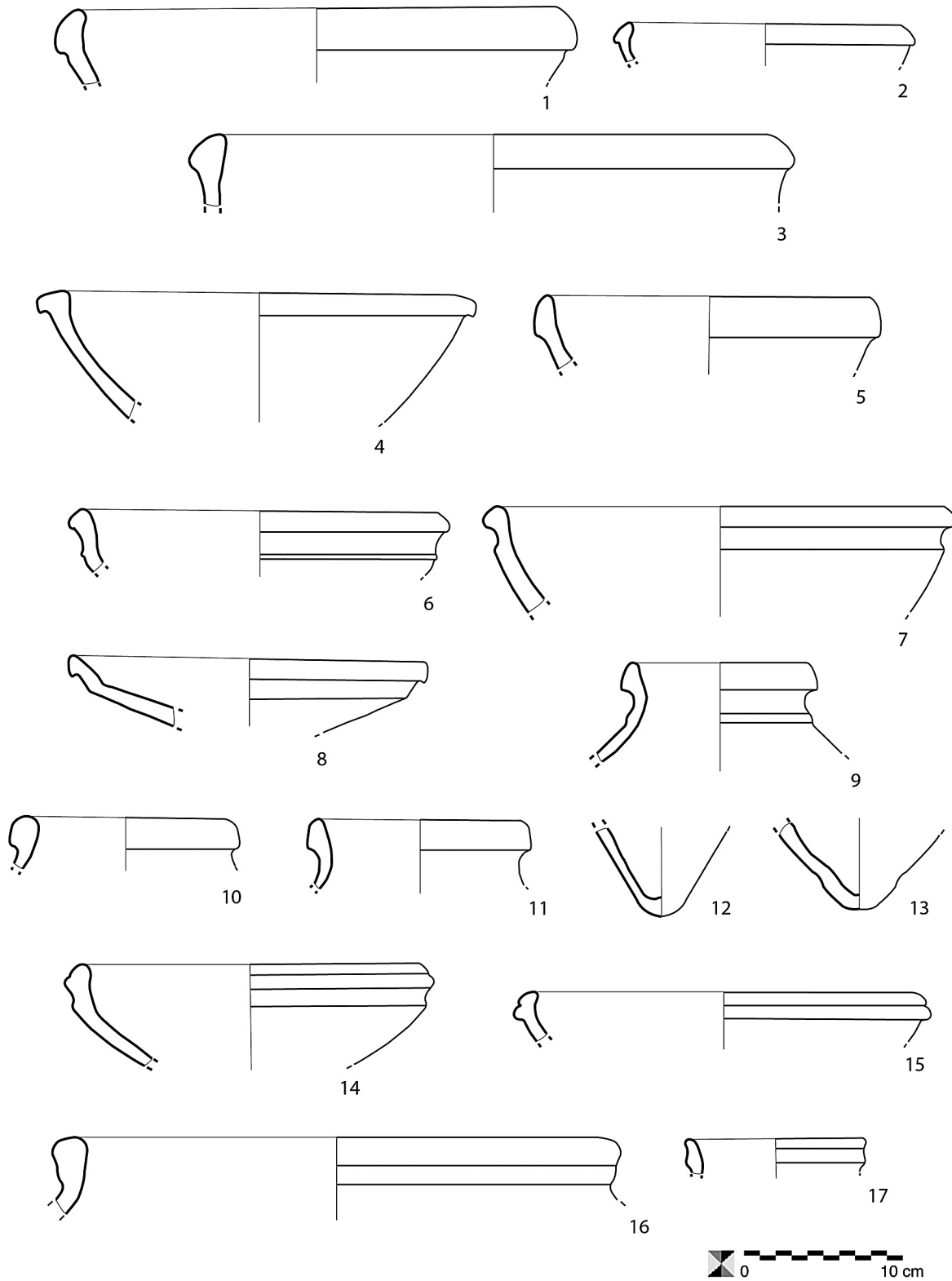


Fig. 18. Neo-Assyrian-period pottery from the LoNAP area. (© LoNAP Archives)



The prevalence of mineral-tempered fabrics might be correlated with the absence (or very sparse presence) of Palace Ware or fine ware, which could be related also to the small size of settlements (see Morandi Bonacossi and Iamoni 2015). That is, both the fabric types and the scarcity of fine ware could be a direct consequence of the rural character of the majority of surveyed sites, which implies a likely absence of major urban centers and related palace administrations and hence a lesser presence of fine ware in the LoNAP-surveyed ceramics. Future research will attempt to verify this possible correlation.

*Post-Assyrian /Achaemenid Period (612 B.C.–  
Late Fourth Century B.C.)*

Although several scholars have discovered evidence of the Achaemenid period in Assyria (Moorey 1980; Dalley 1993; 2014; Kuhrt 1995; Curtis and Green 1997; Curtis 2003), the material culture still remains obscure. Various attempts have been made to define a chronological classification of the ceramic assemblages for this period in northern Mesopotamia (Bernbeck 1993; Wilkinson and Tucker 1995: 100–101; Morandi Bonacossi 1999), and a post-Assyrian/Achaemenid occupation has been archaeologically documented by several excavations, as well as by surveys within the upper Tigris basin (Wilkinson and Tucker 1995: 102). Some of the sites, such as Khirbet Qasrij (Curtis 1989), have also demonstrated the existence of a late Assyrian ceramic horizon that lasted perhaps two generations after the fall of the Assyrian Empire. Among these sites, Tell Sheikh Hamad on the River Khabur constitutes the most reliable example, as widely demonstrated by the data from the “Red House.” This is a particularly interesting case, since the study of post-Assyrian pottery has been carried out on a significant number of stratified sherds regarding both the earlier and later periods of occupation in the building (Kühne 2005; Kreppner 2006; 2008).

As mentioned above, only diagnostic sherds were collected during the LoNAP survey. In the case of the post-Assyrian/Achaemenid period, the operation was very difficult. Since the study of the post-Assyrian/Achaemenid pottery of northern Mesopotamia has evolved only slightly in recent years, the discussion presented here is based mainly on the presence or absence of the period’s most frequently occurring and diagnostic types.

Grooved-top jar specimens (Fig. 19:1, 2) have been found at several LoNAP sites, such as Jerahiyeh (1), Tell Balyuz (7), Site 147, and Site 174, and seem to represent a well-identified type within a broader regional context. Evidence from the Eski Mosul area, indeed, shows that the type was particularly widespread in the upper Tigris

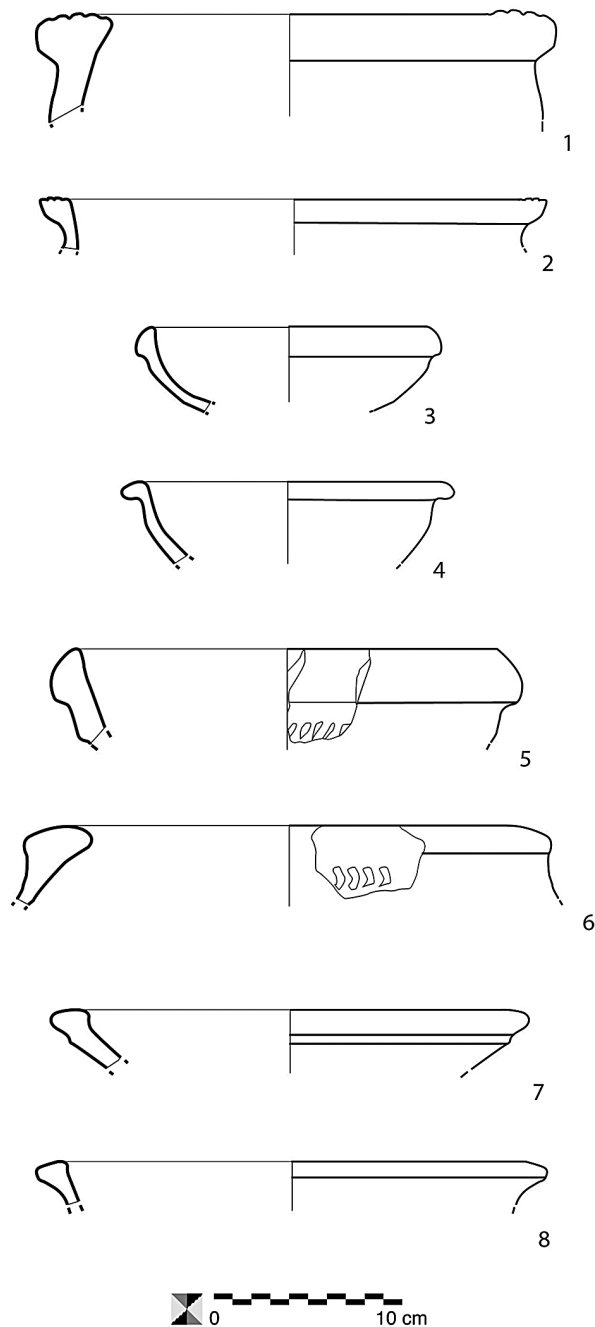


Fig. 19. Post-Assyrian/Achaemenid-period pottery from the LoNAP area. (© LoNAP Archives)

basin (Goodwin 1995: figs. 33:7, 51:2; Curtis and Green 1997: fig. 49:227, dated to the late Assyrian period). Similar specimens have been discovered also at Tell Sheikh Hamad (Kreppner 2006: pl. 44:6–9). The temper of these specimens still resembles that of the Assyrian types, with quite abundant chaff and occasional grit. Colors vary from green to buff to light brown.

Shallow (grooved) carinated bowls (**Fig. 19:3, 4**) have been excavated at several sites with late Assyrian/post-Assyrian occupation, such as Khirbet Khatuniyeh (Curtis and Green 1997: fig. 55:353), Kharabeh Shattani (Goodwin 1995: fig. 35:3), Khirbet Qasrij (Curtis 1989: fig. 30:107–10), and Tille Höyük in southern Anatolia (Blaylock 1999: fig. 13:8, 9, 14). However, a similar form was also associated with a late occupation (Hellenistic) in the excavations carried out by David Oates at Nimrud (1968: 130, 132, fig. 15:34–37).

Flat-rim bowls (**Fig. 19:7, 8**) also occur and have regional parallels with specimens found at Nimrud (Oates 1959: pl. 35.4), Kharabeh Shattani (Goodwin 1995: figs. 32:3; 33:6, 9–11), and Khirbet Khatuniyeh (Curtis and Green 1997: fig. 56:362) in the North Jazira Survey (Wilkinson and Tucker 1995: fig. 74:1, 2), in the Tell Leilan survey (De Aloe 2003: tav. 51:2), and in the Tell Hamoukar area (Ur 2010: fig. B.29:6—even if slightly different from the usual specimens). The most relevant comparisons, however, come from Tell Sheikh Hamad (Kreppner 2006: pls. 47, 48). As a matter of fact, it is sometimes difficult to distinguish with certainty between a post-Assyrian carinated bowl and a Neo-Assyrian exemplar, even if the former sometimes contains much less chaff than the latter.

Pottery types with notched exteriors (**Fig. 19:5, 6**) also seem to be quite characteristic of the period, although they have also been found in later strata. At Jebel Khalid, potsherds with external incised notches have been associated with material dated to the late fourth/early third centuries B.C. (Jackson and Tidmarsh 2011: fig. 71:4, 7, 8). In the Diyala basin, a late Achaemenid/early Hellenistic burial in a jar decorated with incised notches has been excavated at Mahmudiyah (Rutten 1996: 61, fig. 5) and dated to the very late fifth/early fourth centuries B.C. It must be added that the decoration does not occur on a specific form but seems to be used rather indiscriminately on medium-sized and large jars with grooved tops, as well as on shallow (grooved) carinated bowls. On the basis of comparisons with material from other sites in the area, this decoration occurs commonly on jars with grooved tops (Anastasio 2007: Abb. 49, Wadi Ajij).<sup>22</sup> Although no specimen of this ware has been found in excavations or surveys in the upper Tigris basin, a similar type (but with a less articulated decorative pattern) is known from the North Jazira Survey (Wilkinson and Tucker 1995: fig. 74:6–8), even if labeled with a different name. It is possible that the specimens found by Wilkinson and Tucker are

imitations of or have evolved from the Tell Sheikh Hamad types.

A similar situation can also be observed for “crescent-stamped” ware, which is characterized by the presence on the outer body surface of small, incised crescents, most likely obtained by the impression of the fingernail directly onto the clay. The most common shapes are jars and hole-mouth jars; these have a sandy fabric containing a small amount of chaff as compared with other post-Assyrian pottery. Similar types have been found at Khirbet Khatuniyeh (with also a dog-tooth-pattern decoration [Curtis and Green 1997: fig. 68:541]) in the Eski Mosul area, and in the North Jazira Survey (Wilkinson and Tucker 1995: fig. 74:26, 27).

Despite the recent ongoing investigations in the region, an understanding of post-Assyrian/Achaemenid pottery in northern Mesopotamia remains only partially achieved, and more data are necessary for a better definition of the real changes that occur after the fall of Nineveh.

## From Gaugamela to the Sasanians

### *The Hellenistic Period (Late Fourth–Late Second Centuries B.C.)*

The Hellenistic assemblage collected by the LoNAP team is quite abundant: 1,193 sherds have been dated with certainty to this chronological phase. It is one of the periods most well represented in terms of the number of settlements as well as pottery.

The most diagnostic Hellenistic pottery type is the so-called incurved-rim bowl (also known as *Echinus* bowl) (**Fig. 20:1–6**; variant **Fig. 20:8**), which is found from the Levantine coast as far as Central Asia (Fenn and Römer-Strehl 2013). It has quite a fine fabric, whose color varies from buff to orange, usually tempered with a small amount of grit and very little or no chaff (**Fig. 21**). A distinctive feature of the incurved-rim bowls is the painting that usually covers the upper part (both internal and external) of the bowls and, occasionally, the whole body. The colors range from reddish to blackish, and usually the distribution of the paint on the surface is rather uneven; the vessels were probably dipped into a mix of clay and coloring agent first on one side and then on the other. The result of this procedure is a scalloped effect on the bowl. Sometimes the paint trickled along the external and internal bowl surfaces, creating a very irregular line of decoration.

The incurved-rim bowl resembles the Attic-inspired varnished pottery that is quite common in the Levant at sites such as Tarsus (Jones 1950: 153) and Antioch (Waagé 1948: 11, pls. 2:73–77; 3:78–80). Incurved-rim bowls have in fact been interpreted as an imitation of this type, although the differences in surface treatments

<sup>22</sup> Notch-decorated pottery has also been found at Tell Barri and dated between the end of the seventh and late sixth centuries B.C. (Bombardieri and Forasassi 2008: 286–88).

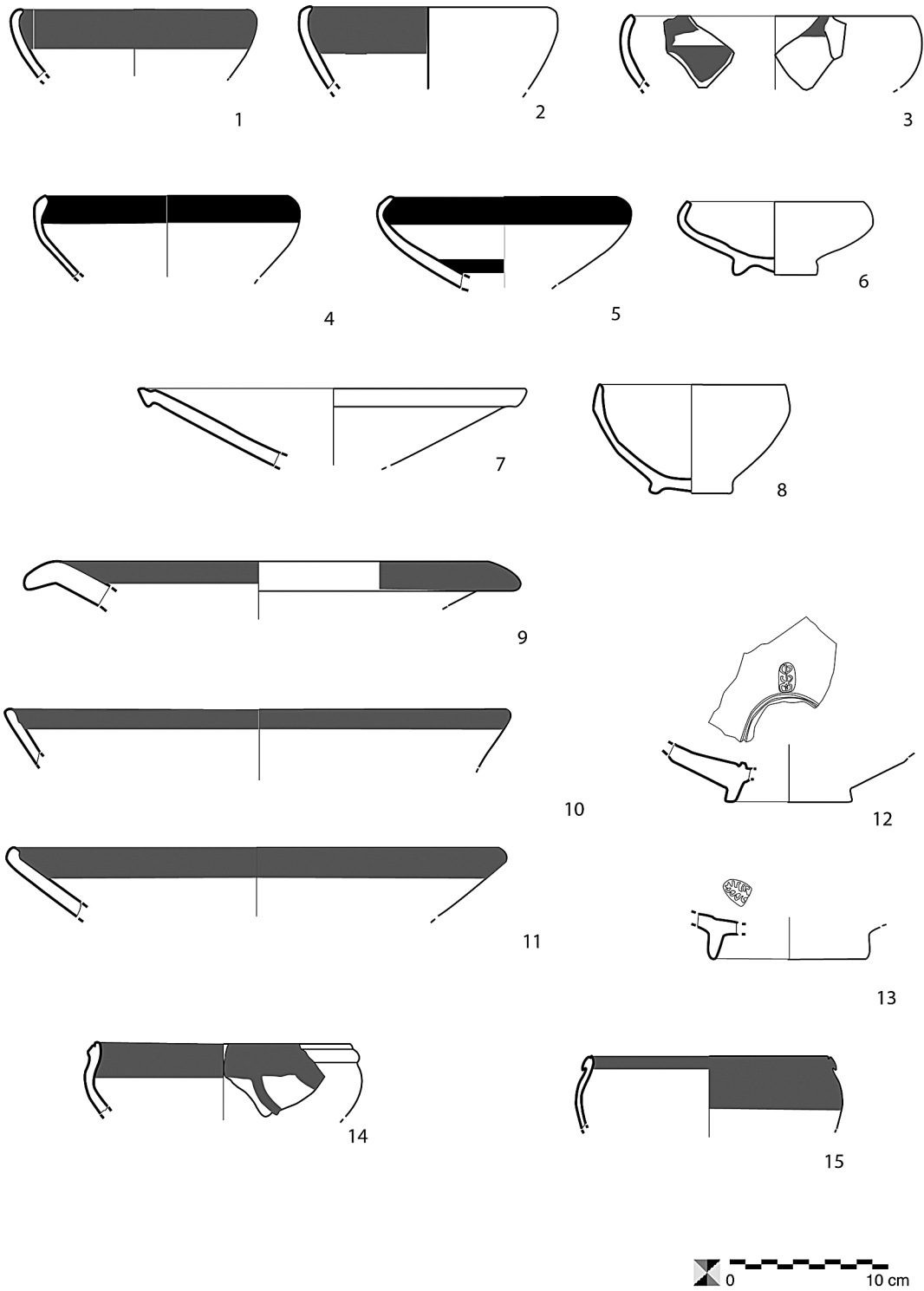


Fig. 20. Hellenistic/Seleucid-period pottery from the LoNAP area. (© LoNAP Archives)



Fig. 21. Hellenistic incurved-rim bowl. (Photo by M. Gatti; © LoNAP Archives)

and their great frequency in the region suggest that we are dealing with a regional variant (Jackson and Tidmarsh 2011: 12) rather than a simple imitation, as originally proposed by Oates (1968: 123). They are widely documented in several Near Eastern sites (from the southern Levant to northern Syria). Selected sites that have yielded this type include Tel Dor (Guz-Zilberstein 1995: 289–90, fig. 6:1), Hippos (Młynarczyk 2011: pls. 243:7–9; 244:36–38; 245:50), Hama (Christensen and Johansen 1971: fig. 4:44–50), Dura Europos (Toll 1946: 109, fig. 37; Cox 1949: 20), and Jebel Khalid (Jackson and Tidmarsh 2011: 12, fig. 11:1–20). The type is also common in easternmost inner regions; it is found in the Syrian Jezirah at Tell Barri (Venco Ricciardi 1982: fig. 4:28; Parmegiani 1998: 295, fig. 1:10–15), Tell Beldar (Martín Galán 1997: pl. III), and Tell Halaf (Hroudá 1961: pl. 72, 69); in the Iraqi Tigris basin at Nimrud (Oates and Oates 1958: 124–53, pls. 15, 16), Nineveh (Campbell Thompson and Hamilton 1932: 82, pl. LII), Khirbet Khatuniyeh (Curtis and Green 1997: fig. 65:478–81), Tell Mohammed ‘Arab (Roaf 1984: fig. 3c), and Khirbat Hatara (Venco Ricciardi 1997: fig. 2:18–27) and has been collected on several sites during a number of surveys in the northern Mesopotamian region. Incurved-rim bowls have been found during the Upper Khabur Survey (Dorna-Metzger 1996: 364, figs. 5, 6), the Tell Hamoukar Survey (Ur 2010: 282, fig. 31B:1–3), in the Tell Leilan region (De Aloe 2003: tav. 5:1–10), in the Cizre-Silopi Survey (Algaze, Hammer, and Parker 2012: fig. 27:1), in the Jaghjagh River Valley (Oates and Oates 1990: 234), and in the North Jazira Survey (Wilkinson and Tucker 1995: fig. 75:1–4.).

Incurved-rim bowls have been also attested in southern Anatolia at Sultantepe (Lloyd 1952: 103, fig. 1:28–30, 39, 41, 42) and Hacinebi Tepe (McMahon 1996: fig. 16d, e); in the Balikh River valley at Hammam et-Turkman (Lázaro 1988: pls. 159, 160, both with other Hellenistic Period X sherds); in central and lower Mesopotamia at Tell ed-Der (Rutten 1996: fig. 3:1) and Abu Qubur, where they have been dated to the very late fifth century B.C. (Rutten 1996: fig. 3:2); in the Diyala basin and Babylonia (Cellerino 2004: 131, fig. 7:28–33; 133, fig. 8:34–38), Seleucia (Valtz 1991: fig. 1:4), Uruk (Hoh 1979: pl. 48:1, 17; Duda 1979: pls. 61:117, 62:11; Finkbeiner 1993: Abb. 6:725), Sippar (Haerinck 1980: pl. 10:2), Larsa (Lecomte 1993: fig. 5 and possibly fig. 2), and Ur (Woolley 1962: pl. 39:21–23); in the Fars, from Susa (Labrousse and Boucharlat 1972: fig. 52:2); and in the Persian Gulf at Failaka (Hannestad 1983: pl. 47:470; Bernard, Gachet, and Salles 1990: fig. 10:187). Recent ongoing excavations in the Caucasus region have shown the presence of incurved-rim bowls even in Iberia, at Dedoplis Gora (modern Georgia; Furtwängler et al. 2008: pls. 17:9, 10; 18:26, 29) and, with a slightly different surface treatment, in Azerbaijan at Oğlanqala (Ristvet et al. 2012: fig. 20:15).<sup>23</sup> The chronology of the incurved-rim bowls spans from the late fourth century B.C. to the Augustan period, with a peak in frequency between the third and very early first centuries B.C.<sup>24</sup>

Plates are also quite common in the LoNAP area (Fig. 20:7, 9–11). According to the rim type, they may belong to a large variety of forms, such as normal shallow plates and the more famous “fish plate” with out-turned rim (Rotroff 1997). The fabric appears to be pinkish or light buff, quite fine, and with very rare inclusions (occasionally limestone). Usually the collected plate or fish-plate sherds are painted both outside and inside, in colors ranging from reddish to brown and even blackish. The presence of the paint brings to mind the black-varnished western pottery, to which the Hellenistic plates of Mesopotamia are perhaps related (Oates 1968: 123). Some specimens also bear stamped palmette-shaped marks on the inner surface of the base (Fig. 20:12–13).<sup>25</sup> For

<sup>23</sup> Jackson and Tidmarsh 2011: 13. It has also been observed that the capacity of these vessels resembles the volumes of individual servings in late fourth-century B.C. Athens (Rotroff 1997: 161). Although the idea is interesting, the lack of reliable data on the topic means that definite conclusions cannot be reached. Studies on the capacity and shape have suggested that the incurved-rim bowls were probably used not for drinking (the curve of the rim would have made it impossible) but rather for serving soups or stews (the rim shape would have helped to avoid spillage).

<sup>24</sup> Lise Hannestad (1983: 15–17) also proposes a shorter time span (fourth–second centuries B.C.).

<sup>25</sup> The occurrence of palmette stamps on bowls and plates in the Hellenistic period goes back to fourth-century Greece, where these



this type, very strict and reliable comparisons have been found at Nimrud (Oates 1968: fig. 15).

The Hellenistic fish plate is quite widespread in the Near East, occurring from the Levantine coast to northern Syria and Mesopotamia, at Tel Dor (Guz-Zilberstein 1995: fig. 6.3, 11), Jebel Khalid (Jackson and Tidmarsh 2011: figs. 18.5–11, 19, 20), and in the Syrian and Iraqi Jezirah (Wilkinson and Tucker 1995: fig. 75:8–10; Ur 2010: fig. B.31:13, 16), at Hacinebi (McMahon 1996: fig. 16a, b), Nimrud (Oates 1968: fig. 15:3–5), and Babylon (Cellerino 2004: fig. 6). It must be added, however, that many of the collected Hellenistic bases, classified simply as “Hellenistic bases,” could possibly belong to fish plates. This must be taken into account when considering the percentages of this ceramic type. Bowls with a ribbed rim (occasionally painted) are also attested (Fig. 20:14–15).

Among the very distinctive types of the Hellenistic period, the survey sherds from closed vessels mainly belong to the so-called rolled-over rim (or folded-rim) jar (Fig. 22:1–4), which is characterized by a rim with a central hollow in the outer part. The type has numerous variants (Fig. 22:5) and could possibly have been developed from the similar Neo-Assyrian-period type. The collected specimens usually have a yellow/orange surface and a slightly sand-tempered fabric with few mineral inclusions. No handles have been recorded on this type. Rolled-over rims are frequent in the Hellenistic Near East, such as in the Euphrates basin at Jebel Khalid (Tidmarsh and Jackson 2011: figs. 59, 60, with possible variants, some handled) and Tell es-Sweyhat (Holland 1976: fig. 6:32, 33). In northern Mesopotamia, the rolled-over rim (or folded-rim) has been found in various sites, such as Qasrij Cliff and Khirbet Qasrij (Curtis 1989: 499), in the North Jazira Survey (Wilkinson and Tucker 1995: 102, type 65), at Tell Fisna (Numoto 1988: fig. 33:370–73 and possibly 378), and at Tell Mohammed ‘Arab (Roaf 1983: fig. 6:33, 38, 40).

Other diagnostic types of the period are the dog-tooth-decorated sherds (Fig. 22:9–11), although only a relatively small number of these was collected in the LoNAP area. The type has a slightly sand-tempered fabric with a few small mineral inclusions. Surface colors vary from pale yellow to brown and reddish. The decoration, upward-pointing incised triangles, is usually on the shoulder of the vessel.

Impressed dog-tooth jars have been collected in nearby areas both in post-Assyrian and Hellenistic levels. The type is widely present in the Tigris basin at Kharabeh Shattani (Goodwin 1995: fig. 56:11), Khirbet Khatuni-

yeh (Curtis and Green 1997: figs. 63:462, 463; 68:541, 542), as well as in western Jezirah at Tell Barri and Tell Beydar (Martín Galán 1997: pl. IV:4). Other attestations come from more distant areas, such as the upper Syrian Euphrates Valley at Jebel Khalid (Jackson and Tidmarsh 2011: fig. 71:8). Several dog-tooth-impressed sherds were also collected during various surveys in northern Mesopotamia. They provide a valid geographic distribution for the type: the Tell Leilan survey (De Aloe 2003: figs. 46:1, 63:8–10, 82:3, 86:2–5; specimens are notably smaller than usual), the Cizre-Silopi Survey (Algaze, Hammer, and Parker 2012: fig. 26:13, preliminarily dated to the post-Assyrian period), and the North Jazira Survey (Wilkinson and Tucker 1995: fig. 75:15–17). Bag-shaped jars (Fig. 22:7, 8) and hard-gritty rim jars (Fig. 22:6) are both less often attested but not totally absent.

The Hellenistic pottery collected during the LoNAP survey shows the unmistakable traits of the regional northern Mesopotamian assemblage, composed of both local types and imitations of western productions. The high proportion of diagnostic types, such as incurved-rim bowls and rolled-over rim jars, might indicate the existence of a sort of common material culture horizon that pervaded the entire Hellenistic world as well as the likely pivotal role of the upper Tigris basin area in this period.

### *The Parthian Period (Late Second Century B.C.–A.D. 224)*

The preliminary analysis of the pottery collected in the 2012 and 2013 seasons of the LoNAP has shown that the Parthian occupation of the region was quite intense, and the number of Parthian sites (147) is the highest among the periods following the fall of the Assyrian Empire (and before the Islamic period). Of the sherds collected, 1,062 have been related to the Parthian phase.

One of the most frequent types in the LoNAP area is the hole-mouth jar, occasionally with grooved rim (Fig. 23:1–4). It usually has a quite fine-grained fabric with small amounts of temper, usually small-sized grit or calcareous inclusions. Fabric colors vary from buff to orange and light brown; surfaces are generally slightly slipped in buff or light brown. The type is quite well represented in the LoNAP area and is one of the two most frequent Parthian types (together with the flat collared-rim type). Its abundance in the area fits well with its wider diffusion in northern Mesopotamia; it is known from Assur (Hauser 1996: figs. 6e, 7h) and ‘Ain Sinu (Oates 1968: fig. 24:99, 100) and has been collected in the North Jazira Survey area (Wilkinson and Tucker 1995: fig. 76:20, 21, 29, 30, with a slightly different rim). In the western areas of northern Mesopotamia, the type has been excavated at

marks appear for the first time on Attic Black-Glaze pottery (see Corbett 1955: 172–86).

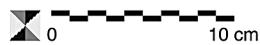
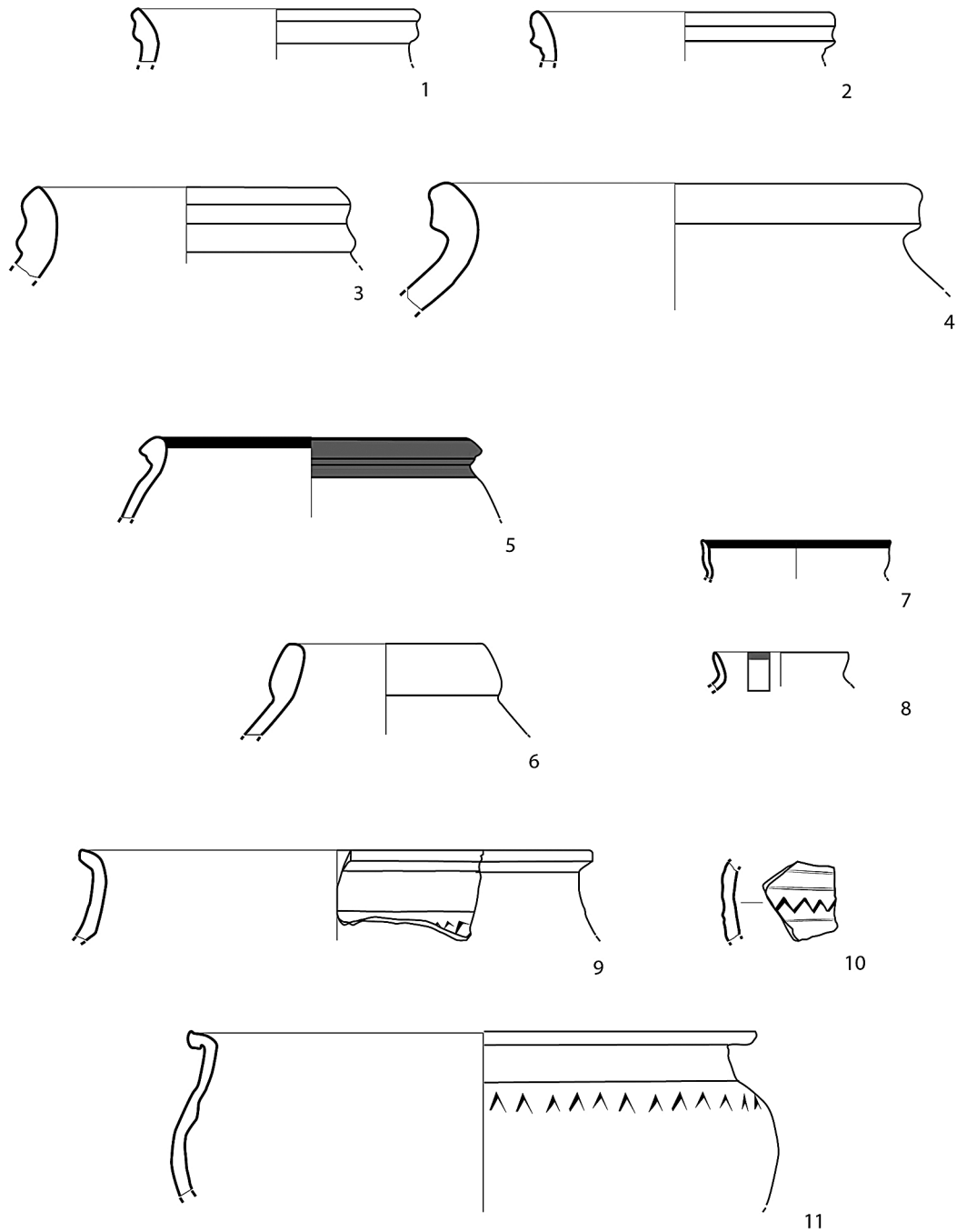


Fig. 22. Hellenistic/Seleucid-period pottery from the LoNAP area. (© LoNAP Archives)

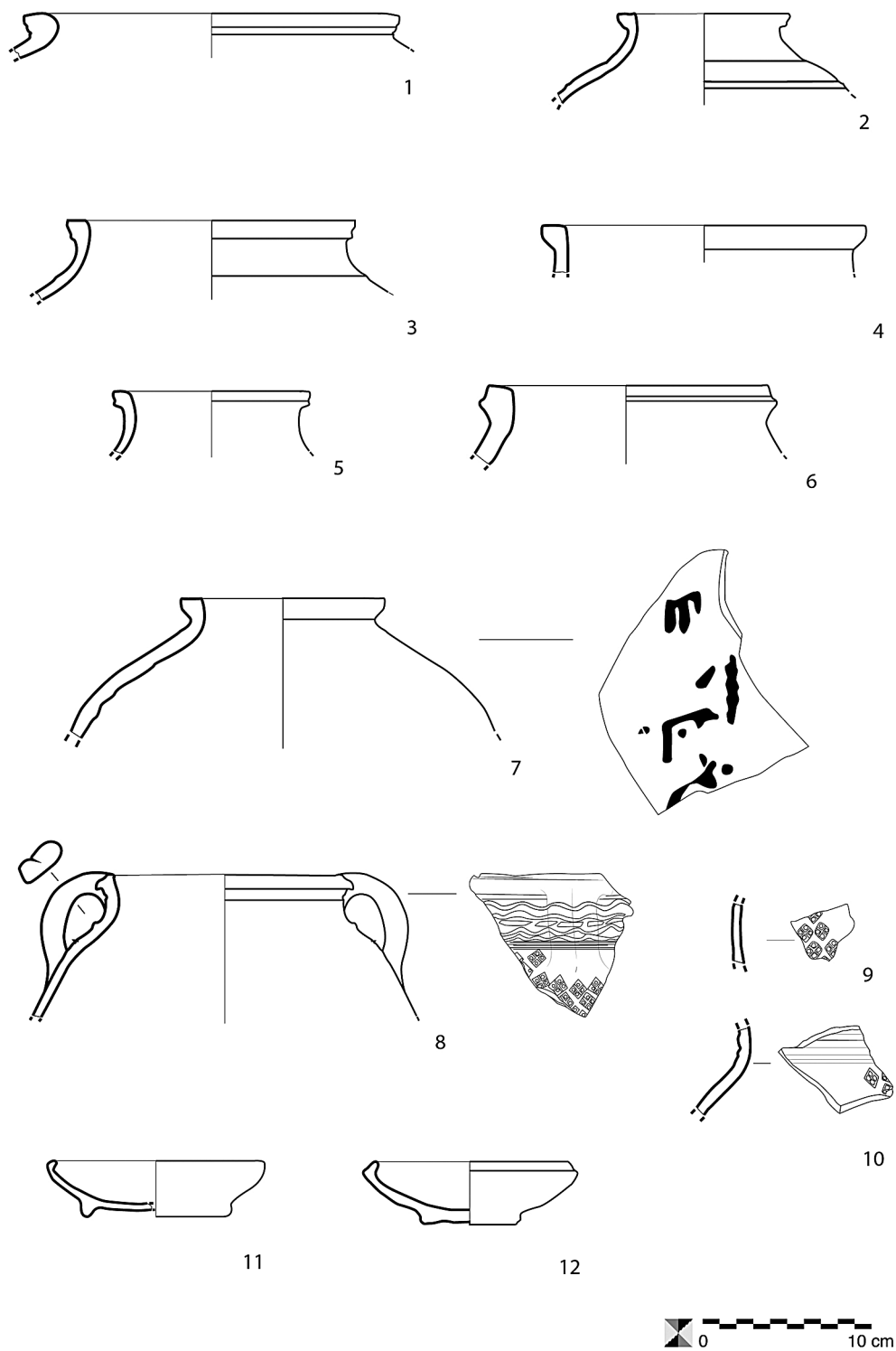


Fig. 23. Parthian-period pottery from the LoNAP area. (© LoNAP Archives)

Tell Barri (Palermo 2012: fig. 2a, b) and collected in the Tell Leilan Survey (De Aloe 2003: tav. 21:1, 2.).

Flat collared-rim jars (**Fig. 23:5**) have a fabric similar to the hole-mouth jars, sometimes with frequent lithic inclusions. The slip may have the same color as the fabric, from buff to light brown and occasionally orange. These have a square rim with a small ridge immediately above the shoulder, and they can be double-handled as well. Concave band-rim jars (see **Fig. 23:6**) are less attested.

Straight-necked (and occasionally grooved) jars (see **Fig. 23:7**) also occur in the LoNAP area. A slightly squared rim and a straight neck, which is occasionally grooved externally, characterize the type. The fabric is fine and almost without inclusions; colors vary very little, from whitish to pink. The surface is usually covered by a thin slip, which can be white, light pink, or (rarely) light brown. An unusual feature of the straight-necked jars is the inner surface, which can be entirely covered with bitumen. The tar-lined surface was probably necessary, as the vessels were most likely used to store liquids.

The type is quite widespread in the region, having been found in excavations at 'Ain Sinu (Oates 1968: figs. 22:49–54, 59; 23:66, 67) and Tell Barri (Venco Ricciardi 1982: fig. 3:1, 2; Pierobon Benoit 2008: fig. 16a; Palermo 2013: 480, fig. 8, upper row) and collected during the Upper Khabur Basin Survey (Dorna-Metzger 1996: figs. 20, 21), the Tell Hamoukar Survey (Ur 2010: fig. B.33:4–10), and the North Jazira Survey (Type 115 in Wilkinson and Tucker 1995). Similar specimens have also been collected at Hatra (Venco Ricciardi 2008: fig. 8b:8, and possibly fig. 10b:1, 2, 4) and in its hinterland (Ibrahim 1986: pls. 202, 203).

Among the most distinctive Parthian ceramics in Mesopotamia, diamond-stamped pottery is widely considered most diagnostic of all (**Figs. 23:8–10, 24**). The decoration has been found impressed on both jugs and two-handled jars. It is usually associated with such types as straight- or grooved-rim jars and rarely with flat collared-rim jars. The pattern consists of a “diamond” motif, which is composed of smaller diamonds containing impressed dots. The number of dots, as well as the number and arrangement of the diamonds on the vessels, is variable. Sometimes the diamond-stamped decoration is combined on the body of the vessel with other decorative patterns, such as wavy lines and vertical rocker-pattern motifs (**Fig. 24**).

Unfortunately, the diamond-stamped decoration has been found at very few sites in the LoNAP area, most likely because of its rarity among surface materials. However, it occurs mainly on sites with a clear and reliable Parthian assemblage, such as Tell Balyuz (Site 7),

Tell Amyan (Site 29), Tell Gomel (Site 40), and Site 111. It should also be noted that most of the straight-necked jar sherds collected might have had such a decoration, and the differentiation of the two types could therefore be misleading.

Diamond-stamped pottery is quite well known in northern Mesopotamia. It has been found during excavations at 'Ain Sinu (Oates 1968: figs. 21:28, 22:49, 50, 54, 55), Hatra (Venco Ricciardi 1998: fig. 10b:2), Tell Mahuz (Venco Ricciardi 1970–1971: fig. 91:41), and Tell Barri (Pierobon Benoit 1998: 221, fig. 34; Palermo 2013: 480, fig. 8), as well as collected by the survey projects such as the North Jazira Survey (Wilkinson and Tucker 1995: type 76, fig. 76:1–8; this one also has the rocker-pattern decoration), in the Upper Khabur Survey (Dorna-Metzger 1996: 363–76), the Tell Leilan Survey (De Aloe 2003: figs. 49:2; 54:3; 63:12; 65:1; 67:5; 70:1, 2; 73:2; 79:14; 82:5), the Tell Hamoukar Survey (Ur 2010: 337, fig. C.22:17–19), in the Jaghjagh River basin (Oates and Oates 1990: 234, pl. 65a), and in the Hatra hinterland (Ibrahim 1986: pls. 187–92). Diamond-stamped sherds have a quite reliable terminus ante quem in the first half of the third century A.D., as demonstrated by the excavations carried out by Oates at 'Ain Sinu (1968: 145, 148). This type seems to be absent in contexts later than that period and relatively scarce in major Parthian sites while occurring abundantly in the western areas of northern Mesopotamia, which were controlled by the Romans between the early second and the late fourth centuries A.D.<sup>26</sup> The low number of diamond-impressed sherds collected during the first two LoNAP seasons could support this western diffusion, but we still lack the reliable regional stratigraphic sequences needed to push the argument further.

Green- and whitish-glazed pottery (**Fig. 23:11, 12**) occurs less commonly, although the rarity of the type among surface materials, and the difficulty of a precise identification with respect to the wider group of Partho-Sasanian glazed wares, make it quite difficult to recognize. The most common shapes are bowls and plates, whereas closed forms are very rarely found. The sherds collected in the LoNAP area all come from sites with a certain Parthian phase. They have a yellow or very pale brown sand-tempered fabric, no particular inclusions, and the inner and outer surfaces are completely covered with turquoise, light green, or whitish glaze, which is distinguished by a characteristic *craquelée* effect.

White- and green-glazed pottery has been retrieved at 'Ain Sinu (Oates 1968: fig. 21:5–29), Assur (Hauser

<sup>26</sup> Go to <https://www.britishmuseum.org/pdf/Pottery%20seminar.pdf>, p. 40.





Fig. 24. Parthian diamond-stamped pottery. (Photo by R. Palermo; © LoNAP Archives)

1996), Hatra (Venco Ricciardi 2008: fig. 8a:1–4) and its surroundings (Ibrahim 1986: pl. 207:45–48), as well as at Khirbat Hatara (Venco Ricciardi 1997: fig. 3:3, 4), Tell Mohammed ‘Arab (Roaf 1984), and in the western areas at Tell Barri (Venco Ricciardi 1982: 61–62, figs. 37–43) and in the area of Tell Leilan (De Aloe 2003: tav. 45). Green-glazed bowls and plates, however, can also be dated to the late Hellenistic period in the region (Da Conceição Lopes et al. 2011: fig. 3). In the upper Euphrates region, green-glazed pottery sherds have also been dated to the very late Hellenistic period—for example, at Jebel Khalid (Jackson and Tidmarsh 2011: 431–85; for green-glazed bowls and plates, see, in particular, figs. 137–46). A further interesting piece of evidence is the total absence of so-called Brittle Ware, which is usually dated to the Partho-Roman period and is quite common in the western areas and the lower Syrian Khabur region—for example, at Tell Barri (Amodio 2008: 322–36), in the Upper Khabur Survey (Dorna-Metzger 1996: 368, figs. 23, 24), at ‘Ain Sinu (Oates 1968: fig. 23:75–85), and at Tell Sheikh Hamad (Römer-Strehl 2005: figs. 612–30). The absence of this type in areas east of the Tigris could perhaps be related to the Roman presence only west of the river, although later specimens of pseudo-Brittle

Ware have also been found in eastern regions (see, in this respect, Vokaer 2011). Very few exemplars of this type, whose chronological range fluctuates between the fifth and ca. the seventh/eighth centuries C.E., were collected during the LoNAP survey.

Parthian-period pottery in the LoNAP area clearly reflects the regional context of upper Mesopotamia as far as both the types and fabrics are concerned. Data retrieved by LoNAP thus confirm a wider diffusion of certain types (in different quantities) previously thought to be less present in the areas east of the Tigris.

### The Sasanian Period (A.D. 224–Seventh Century A.D.)

Sasanian-period occupation has been identified at 78 sites, notably fewer occupations than in the preceding Parthian and Hellenistic periods. This may be due to a partial shift to nomadism (Wilkinson and Tucker 1995: 69–71) during the Sasanian period. Yet it could also be that Sasanian material culture (notably common ware) is just not easily recognizable, and so the actual total site number might be larger. In any case, the most prominent sites are Site 364 (25 sherds), Khirbat Taha (Site 362; 18

sherds), Germak Kebir (Site 337; 15 sherds), and Site 464 (11 sherds), all of which are located in the Navkur plain.<sup>27</sup>

Corrugated-rim jars (**Fig. 25:1–4**) represent almost 25% of the total sherds collected. They have a brown sand-tempered fabric with visible grit inclusions. Two or more corrugations are present externally on the rim. Corrugated-rim jars are quite recognizable as Sasanian markers in the region, as shown by their discovery in several surveys and excavation projects in both eastern and western Jezirah. They have been collected in surveys at Tell Leilan (De Aloe 2003: tav. 46:3) and Tell Hamoukar (Ur 2010: fig. B.35:1–3), while in the eastern area they were found during the North Jazira Survey (Wilkinson and Tucker 1995: fig. 77:1–3) and at Kharabeh Shattani (Simpson and Watkins 1995: fig. 62:3 and possibly 9). Corrugated-rim jars were also found in the Cizre-Silopi Survey area (Algaze, Hammer, and Parker 2012: fig. 28:13–15).

Sasanian Stamped Ware (**Figs. 25:5–9, 26**) has always played a key role in the framework of Sasanian material culture in northern Mesopotamia, being the most recognizable indicator of Sasanian presence on a site (Simpson 1996; 2013). The decoration usually appears on jars or large vessels. The fabric is quite well sand-tempered, with small- to medium-sized grit. Colors vary in a very narrow range from light brown to brown. In the LoNAP area, Sasanian stamped pottery was found in 22 sites out of a total of 78 Sasanian sites—that is, 28.2%—and 33 sherds were collected, slightly more than 10% of the total. The specimens gathered during the LoNAP survey fit perfectly into the typological and iconographical framework of the type (**Fig. 26**). The stamps are round in shape (usually defined by a notched circle) and represent wild animals such as goats, stags, rams, scorpions, birds, and, in one case, a horse with rider. A straight-arm cross, a plant, and/or a star are sometimes combined with the figure within the circle or represented alone. Decoration of this type might have been strongly influenced by metalware as well as other artifacts—for example, textiles and stuccos (Simpson 1996: 101). A very recent contribution by St. John Simpson suggestively connects the iconography of the stamped decorations to the mixed traits of lower-class Sasanian society between the fourth and the seventh centuries, where Christian motifs (cross) and Zoroastrian imagery (stags/rams) coexisted as decorative patterns on daily-use objects (Simpson 2013: 109).

<sup>27</sup> There is interesting evidence concerning Site 364 and Germak Kabir (Site 337): at Site 364, 25 out of 39 reliably dated sherds are Sasanian; and at Germak Kabir, 15 out of 19 identified sherds are Sasanian (four have been dated to the Early Islamic period). This could indicate that, unlike in the previous phases, some newly founded villages (i.e., which did not occupy previously settled locations) emerged during the Sasanian period.

Similar specimens have been found throughout the whole of northern Mesopotamia and dated to between the fifth and seventh centuries A.D. Sasanian stamped sherds were also recovered at Nineveh (Layard 1853: 491; Campbell Thompson and Hutchinson 1931: 77; Campbell Thompson and Mallowan 1933: 177, fig. 77), at Nuzi (Ehrich 1939: 38, pls. 136C, 137A), in the Zagros Mountains in the area of the Shanidar Cave (Solecki 1981: 1–2, 6–7, pls. I, II), at Kharabeh Shattani in the Eski Mosul area (Simpson and Watkins 1995: fig. 62:17), and at Tell Barri in the western Jezirah (Pierobon Benoit [ed.] 2008: fig. 19). In addition, they have been collected in the North Jazira Survey (Wilkinson and Tucker 1995: fig. 77:6–9) and the Tell Hamoukar Survey (Ur 2010: fig. B35:6, 7). Sasanian stamped sherds have been also found elsewhere: in the Eski Kifri area (Rich 1836 1: 20), in the Hamrin basin (Jakob-Rost, Wartke, and Wesarg 1983: 119, fig. 50), and in the Diyala basin (Adams 1965: 131), at Borsippa (Simpson 1996) and Samarra (Sarre 1925: pl. III).

Other forms and types of pottery were also uncovered from this period, although in much smaller quantities. Grooved slashed rims (**Fig. 25:10**) are not so frequently attested, while Honeycomb Ware (**Fig. 25:11**) is scarcely present in the LoNAP area. Honeycomb Ware, moreover, can be also related to later periods (Venco 1984: 50; Simpson 1996: 100). Turquoise-Glazed Ware is also present, but in a relatively small amount.

Sasanian-period pottery is often quite hard to identify, at least with regard to survey material, and also given the continuation of some types from the Parthian period into later centuries. Alongside the highly diagnostic types, the common ware horizon in particular still remains barely known due to the scarcity of excavated ceramic sequences.

## Conclusions

The ceramic material collected in the LoNAP area is to a great extent characterized by a limited number of features, in some cases contrasting. On one hand, most of the assemblages contain typical and quite easily recognizable ceramic forms, for which there are significant parallels (in particular, for the historical periods—e.g., Middle Bronze Age, Hellenistic, and Parthian phases) in the Syrian Jezirah, as well as in the already available, though limited, information from the upper Tigris basin. This permits us to insert the LoNAP ceramic horizon into a wider regional framework that links most regions of upper Mesopotamia, which, in turn, suggests the occurrence of wider ceramic traditions across the region.

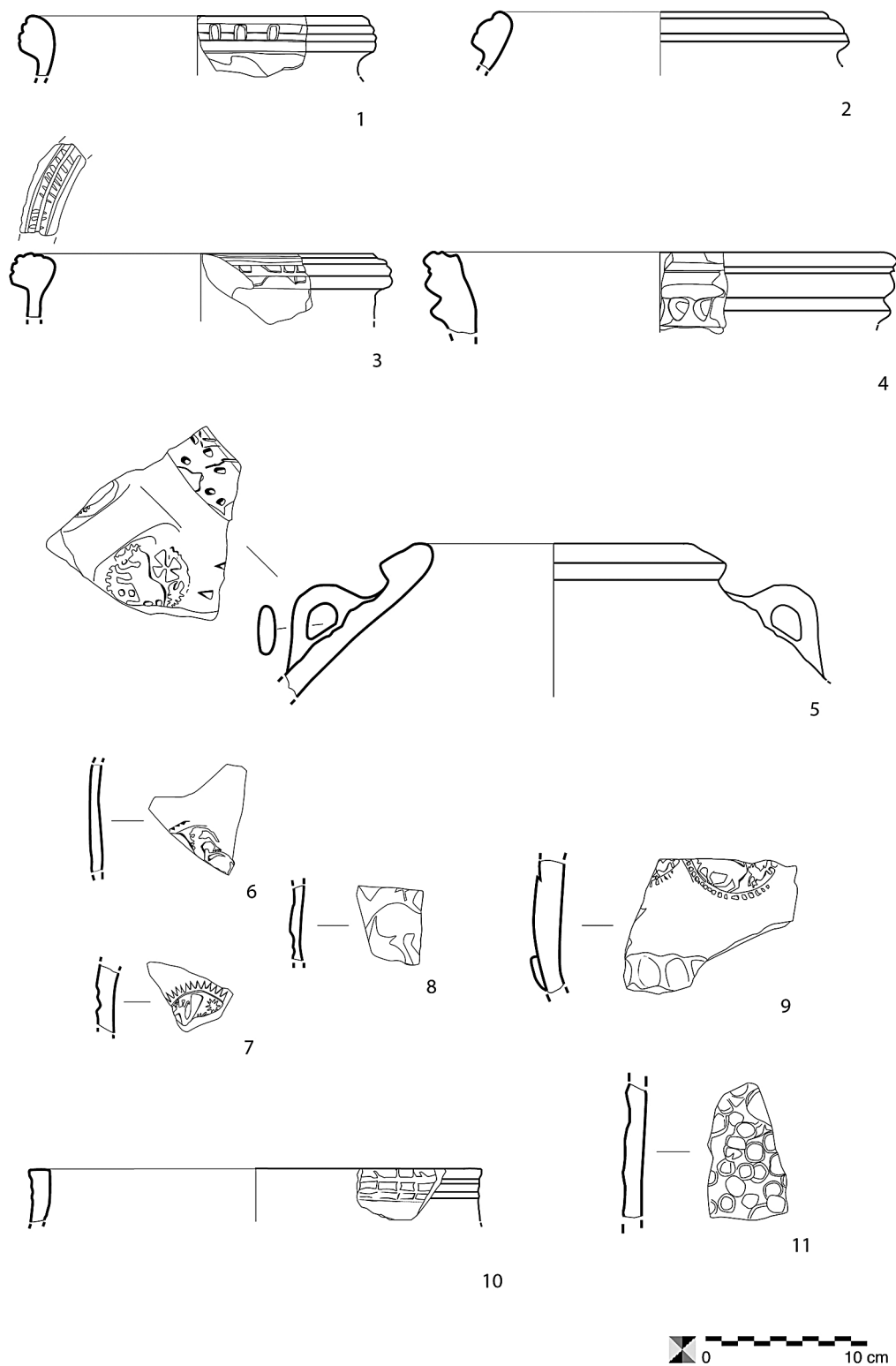


Fig. 25. Sasanian-period pottery from the LoNAP area. (© LoNAP Archives)





Fig. 26. Sasanian stamped pottery (Photo by R. Palermo; © LoNAP Archives)

On the other hand, this preliminary study has also highlighted the occurrence of a certain degree of regionalism. Local traits emerge more markedly in the LoNAP area in some specific periods, during which the ceramic repertoire seems to lack some of the types that are considered hallmarks in the ceramic traditions of neighboring regions (e.g., Late Chalcolithic) or may show the occurrence of fabric productions different from those usually attested (e.g., Neo-Assyrian). This phenomenon will be a crucial target for future research but will only be understood if investigated in close connection with the settlement pattern data, the interregional contacts, and the socioeconomic processes that have occurred in the region. This analysis will permit us to verify (and better understand) the stronger or weaker impact of “foreign” political entities (e.g., from southern Mesopotamian/Uruk polities to the expansion of the Parthian and Sasanian Empires) on the ceramic evidence under analysis.

The results thus far obtained constitute a solid base for a better archaeological understanding of a region still

poorly, if not totally, unknown. In particular, they are a starting point for a subsequent, more detailed characterization of the region’s ceramic traditions: the next seasons will be devoted to achieving this task, with a particular focus on those periods that showed pottery with distinctive—and, up to now, less-known—local traits.

### Authors’ Contributions

All co-authors contributed jointly to the introduction, the section on Methods, and the Conclusions. Marco Iamoni wrote the sections on the Pottery Neolithic and Pre-Halaf period, the Halaf period, the Northern Ubaid period, and the Late Chalcolithic period, including the section called “Influences and Contacts.” Katia Gavagnin wrote the sections on the Early Bronze Age, the Middle Bronze Age, the Late Bronze Age, and the Iron Age. Rocco Palermo wrote the section on the post-Assyrian period, the Hellenistic period, the Parthian period, and the Sasanian period.

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## References

- Adams, R. M.  
1965 *Land behind Baghdad: A History of Settlement on the Diyala Plains*. Chicago: University of Chicago Press.
- Akkermans, P. M. M. G.  
1988 The Period IV Pottery. Pp. 181–286 in *Hammam et-Turkman I: Report of the University of Amsterdam's 1981–84 Excavations in Syria*, Vol. 1, ed. M. N. Van Loon. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 63. Leiden: Nederlands Historisch-Archaeologisch Instituut te Istanbul.  
2013 Tell Sabi Abyad, or the Ruins of the White Boy: A Short History of Research into the Late Neolithic of Northern Syria. Pp. 29–43 in *100 Jahre archäologische Feldforschungen in Nordost-Syrien—eine Bilanz: Internationales Symposium des Instituts für Vorderasiatische Archäologie der Freien Universität Berlin und des Vorderasiatischen Museums der Staatlichen Museen zu Berlin vom 21. Juli bis 23. Juli 2011 im Pergamonmuseum*, ed. D. Bonatz and L. Martin. Schriften der Max Freiherr von Oppenheim Stiftung 18. Wiesbaden: Harrassowitz.
- Akkermans, P. M. M. G., and Rossmeisl, I.  
1990 Excavations at Tell Sabi Abyad, Northern Syria: A Regional Centre on the Assyrian Frontier. *Akkadica* 66: 13–60.
- Akkermans, P. M. M. G., and Schwartz, G.  
2003 *The Archaeology of Syria: From Complex Hunter-Gatherers to Early Urban Societies (c. 16,000–300 BC)*. Cambridge World Archaeology. Cambridge: Cambridge University Press.
- Akkermans, P. M. M. G.; Cappers, R.; Cavallo, C.; Nieuwenhuyse, O.; Nilhamn, B.; and Otte, I. N.  
2006 Investigating the Early Pottery Neolithic of Northern Syria: New Evidence from Tell Sabi Abyad. *American Journal of Archaeology* 110: 123–56.
- Algaze, G.  
1986 Habuba on the Tigris: Archaic Nineveh Reconsidered. *Journal of Near Eastern Studies* 45: 125–37.
- Algaze, G.; Hammer, E.; and Parker, B.  
2012 The Tigris-Euphrates Archaeological Reconnaissance Project: Final Report of the Cizre Dam and Cizre-Silopi Plain Survey Areas. *Anatolica* 38: 1–115.
- Al-Quntar, S.; Khalidi, L.; and Ur, J.  
2011 Proto-Urbanism in the Late 5th Millennium BC: Survey and Excavations at Khirbat al-Fakhar (Hamoukar), North-East Syria. *Paléorient* 37 (2): 151–75.
- Amodio, M.  
2008 La Brittle Ware da Tell Barri. Pp. 322–36 in *Tell Barri: Storia di un insediamento antico tra Oriente e Occidente*, ed. R. Pierobon Benoit. La parola del passato 63. Naples: Macchiaroli.
- Anastasio, S.  
1998 La ceramica medioassira di Tell Barri/Kahat. Pp. 135–86 in *Tell Barri/Kahat 2: Relazione sulle campagne 1980–1993 a Tell Barri/Kahat, nel bacino del Habur (Siria)*, ed. P. E. Pecorella. Documenta Asiana 5. Rome: Istituto per gli studi micenei ed egeo-anatolici, Consiglio nazionale delle ricerche; Florence: Dipartimento di scienze dell'antichità "G. Pasquali," Università degli studi di Firenze.
- 1999 Prospection archéologique du Haut-Khabur occidentale (Syrie du N.E.): Preliminary Information on the Pottery of the Iron Age. Pp. 173–91 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. Altertumskunde des Vorderen Orients 10. Münster: Ugarit-Verlag.
- 2007 *Das obere Habur-Tal in der Jazira zwischen dem 13. und 5. Jh. v. Chr.: Die Keramik des Projektes "Prospection Archéologique du Haut-Khabur Occidental (Syrie du N.E.)"*. Florence: Centro editoriale toscano.
- 2010 *Atlas of the Assyrian Pottery of the Iron Age*. Subartu 24. Turnhout: Brepols.
- Bachelot, L.  
2003 Tell Kutun. Pp. 153–91 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Bader, N. O., and Le Mière, M.  
2013 From Pre-Pottery Neolithic to Pottery Neolithic in the Sinjar. Pp. 513–20 in *Interpreting the Late Neolithic of Upper Mesopotamia*, ed. O. P. Nieuwenhuyse, R. Bernbeck, P. M. M. G. Akkermans, and J. Rogasch. Papers on Archaeology of the Leiden Museum of Antiquities, Egyptology 9. Turnhout: Brepols.
- Baird, D.; Campbell, S.; and Watkins, T., eds.  
1995 *Excavations at Kharabeh Shattani*, Vol. 2. University of Edinburgh, Department of Archaeology Occasional Paper 18. Edinburgh: Department of Archaeology, University of Edinburgh.
- Ball, W.  
1997 Tell Shelgiyya: An Early Uruk "Sprig Ware" Manufacturing and Exporting Centre on the Tigris. *Al-Rafidan* 18: 93–101.
- Ball, W.; Tucker D.; and Wilkinson, T. J.  
1989 The Tell al-Hawa Project: Archaeological Investigations in the North Jazira 1986–87. *Iraq* 51: 1–66.
- Bernard, V.; Gachet, J.; and Salles, J.-F.  
1990 Apostilles en marge de la céramique des états IV et V. Pp. 241–84 in *Failaka: Fouilles françaises, 1986–1988*, ed. Y. Calvet and J. Gachet. Travaux de la Maison de l'Orient 18. Lyon: Maison de l'Orient.
- Bernbeck, R.  
1993 *Steppe als Kulturlandschaft: Das 'Agig-Gebiet Ost-syriens vom Neolithikum bis zur islamischen Zeit*. Berliner Beiträge zum Vorderen Orient Ausgrabungen 1. Berlin: Reimer.

- Bernbeck, R., and Nieuwenhuys, O.  
2013 Established Paradigms, Current Disputes and Emerging Themes: The State of Research on the Late Neolithic in Upper Mesopotamia. Pp. 17–37 in *Interpreting the Late Neolithic of Upper Mesopotamia*, ed. O. P. Nieuwenhuys, R. Bernbeck, P. M. M. G. Akkermans, and J. Rogasch. Papers on Archaeology of the Leiden Museum of Antiquities, Egyptology 9. Turnhout: Brepols.
- Beuger, C.  
2007 Keramik der spätfrühdynastischen bis spätassyrischen Zeit von Assur: Eine Bearbeitung unter chronologischen Gesichtspunkten. Ph.D. dissertation, Freie Universität Berlin.
- Bielinski, P.  
1987 Tell Raffaan and Tell Rijim 1984–85: Preliminary Report on Two Seasons of Polish Expedition. Pp. 13–19 in *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, ed. State Organization of Antiquities & Heritage, Ministry of Culture & Information. Mosul: Dar Al-Kutub.
- Biscione, R.  
1998 La sequenza del III millennio a Tell Barri/Kahat: L'area B. Pp. 35–64 in *Tell Barri/Kahat 2: Relazione sulle campagne 1980–1993 a Tell Barri/Kahat, nel bacino del Habur (Siria)*, ed. P. E. Pecorella. Documenta Asiana 5. Rome: Istituto per gli studi micenei ed egeo-anatolici, Consiglio nazionale delle ricerche; Florence: Dipartimento di scienze dell'antichità "G. Pasquali," Università degli studi di Firenze.
- Blaylock, S.  
1999 Iron Age Pottery from Tille Höyük, South-Eastern Turkey. Pp. 263–86 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Bolt, D., and Green, A.  
2003 The Burial of the Dead. Pp. 519–62 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Bombardieri, L., and Forasassi, C.  
2008 La ceramica di età neobabilonese a Tell Barri e in Mesopotamia settentrionale. Pp. 276–91 in *Tell Barri: Storia di un insediamento antico tra Oriente e Occidente*, ed. R. Pierobon Benoit. La parola del passato 63. Naples: Macchiaroli.
- Bonatz, D.; Bartl, P.; Glibert, A.; and Jauß, C.  
2008 Bericht über die erste und zweite Grabungskampagne in Tell Feheriye 2006 und 2007. *Mitteilungen der Deutschen Orient-Gesellschaft* 140: 89–135.
- Braidwood, R. J., and Braidwood, L. S.  
1960 *Excavations in the Plain of Antioch*, Vol. 1: *The Earlier Assemblages, Phases A–J*. Oriental Institute Publications 61. Chicago: University of Chicago Press.
- Breniquet, C.  
1987 Nouvelle hypothèse sur la disparition de la culture de Halaf. Pp. 231–41 in *Préhistoire de la Mésopotamie: La Mésopotamie préhistorique et l'exploration récente du Djebel Hamrin, Paris, 17–18–19 décembre 1984*, ed. J.-L. Huot. Paris: Editions de CNRS.
- Bretschneider, J., and Jans, G.  
1997 Spätfrühdynastische und akkadische Keramik von der Hügelkuppe (Akropolis–Feld F). Pp. 135–43 in *Tell Beydar: The 2000–2002 Seasons of Excavations, the 2003–2004 Seasons of Architectural Restoration; A Preliminary Report*, ed. M. Lebeau and A. Suliman. Subartu 15. Turnhout: Brepols.
- Brustolon, A., and Rova, E.  
2007 The Late Chalcolithic Period in the Tell Leilan Region: A Report on the Ceramic Material of the 1995 Survey. *Kaskal* 4: 1–42.  
2008 The Late Chalcolithic Settlement in the Leilan Region of Northeastern Syria: A Preliminary Assessment. Pp. 357–81 in *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East, Madrid, April 3–8, 2006*, Vol. 1, ed. J. Córdoba Zoilo, M. Molist, C. Pérez Aparicio, I. Rubio de Miguel, and S. Martínez Lillo. Madrid: Ediciones Universidad Autónoma de Madrid; Centro Superior de Estudios sobre el Oriente Próximo y Egipto.
- Calderone, L., and Weiss, H.  
2003 The End of the Ninevite 5 Period at Tell Leilan. Pp. 193–220 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Campbell, S.  
1995 The Halaf Pottery. Pp. 55–90 in *Excavations at Kharabeh Shattani*, Vol. 2, ed. D. Baird, S. Campbell, and T. Watkins. University of Edinburgh, Department of Archaeology Occasional Paper 18. Edinburgh: Department of Archaeology, University of Edinburgh.  
2000 The Burnt House at Arpachiyah: A Reexamination. *Bulletin of the American Schools of Oriental Research* 318: 1–40.
- Campbell, S., and Fletcher, A.  
2010 Questioning the Halaf-Ubaid Transition. Pp. 69–83 in *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.
- Campbell Thompson, R., and Hamilton, R. W.  
1932 The British Museum Excavations on the Temple of Ishtar at Nineveh, 1930–31. [*Liverpool*] *Annals of Archaeology and Anthropology* 19: 55–116.
- Campbell Thompson, R., and Hutchinson, R. W.  
1931 The Site of the Palace of Ashurnasirpal at Nineveh, Excavated in 1929–30 on Behalf of the British Museum. [*Liverpool*] *Annals of Archaeology and Anthropology* 18: 79–112.

- Campbell Thompson, R., and Mallowan, M. E. L.  
1933 The British Museum Excavations at Nineveh, 1931–32. [*Liverpool*] *Annals of Archaeology and Anthropology* 20: 71–186.
- Carter, R. A., and Philip, G.  
2010 Deconstructing the Ubaid. Pp. 1–22 in *Beyond the Ubaid: Transformations and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.
- Cecchini, S. M.  
1965 *La ceramica di Nuzi*. Studi semitici 15. Rome: Centro di studi semitici, Istituto di Studi del Vicino Oriente, Università di Roma.
- Cellerino, A.  
1997 Hatara, livello 7: La ceramica mitannica e medio-assira. *Mesopotamia* 32: 189–223.  
2004 La ceramica del sondaggio di Shu-Anna a Babilonia. *Mesopotamia* 39: 93–167.
- Christensen, A. P., and Johansen, C. F.  
1971 *Hama: Fouilles et recherches, 1931–1938*, Vol. 3, Part 2: *Les poteries hellénistiques et les terres sigillées orientales*. Copenhagen: Fondation Carlsberg.
- Colantoni, C., and Ur, J. A.  
2011 The Architecture and Pottery of a Late Third-Millennium BC Residential Quarter at Tell Hamoukar, North-Eastern Syria. *Iraq* 73: 21–69.
- Coppini, C.  
2008 Mitannian Pottery from Tell Barri. Pp. 477–91 in *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East, Madrid, April 3–8, 2006*, Vol. 1, ed. J. Córdoba Zoilo, M. Molist, C. Pérez Aparicio, I. Rubio de Miguel, and S. Martínez Lillo. Madrid: Ediciones Universidad Autónoma de Madrid; Centro Superior de Estudios sobre el Oriente Próximo y Egipto.
- Corbett, P. E.  
1955 Palmette Stamps from an Attic Black-Glaze Workshop. *Hesperia* 24: 172–86.
- Cox, D. H.  
1949 *Dura Europos: Final Report*, Vol. 4, Part 1: *The Greek and Roman Pottery*. New Haven, CT: Yale University Press.
- Crawford, H.  
2010 The Term “Hajji Muhammad”: A Re-Evaluation. Pp. 163–68 in *Beyond the Ubaid: Transformations and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.
- Curtis, J.  
1989 *Excavations at Qasrij Cliff and Khirbet Qasrij*. Saddam Dam Report 10; Western Asiatic Excavations 1. London: British Museum Publications.  
2003 The Achaemenid Period in Northern Iraq. *Assyrian International News Agency*. [www.aina.org/articles/curtis.pdf](http://www.aina.org/articles/curtis.pdf) (accessed January 6, 2016).
- Curtis, J.; Collon, D.; and Green, A.  
1993 British Museum Excavations at Nimrud and Balawat in 1989. *Iraq* 55: 1–37.
- Curtis, J., and Green, A.  
1997 *Excavations at Khirbet Khatuniyeh*. Saddam Dam Report 11. London: Published for the Trustees of the British Museum by British Museum Press.
- Curvers, H. H., and Schwartz, G. M.  
1990 Excavations at Tell al-Raqāʿi: A Small Rural Site of Early Urban Northern Mesopotamia. *American Journal of Archaeology* 94: 3–23.
- Da Conceição Lopes, M.; Cabral, R.; Tome, A.; Vaz, A. M.; and Costa, T.  
2011 Tell Beydar 2009, Field C: Preliminary Report. Pp. 275–81 in *Tell Beydar: The 2004/2–2009 Seasons of Excavations, the 2004/2–2006 Seasons of Architectural Restoration; A Preliminary Report*, ed. M. Lebeau and A. Suleiman. Subartu 29. Turnhout: Brepols.
- D’Agostino, A.  
2008 Between Mitanni and Middle-Assyrians: Changes and Links in Ceramic Culture at Tell Barri and in Syrian Jazirah during the End of the 2nd Millennium BC. Pp. 525–47 in *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East, Madrid, April 3–8, 2006*, Vol. 1, ed. J. Córdoba Zoilo, M. Molist, C. Pérez Aparicio, I. Rubio de Miguel, and S. Martínez Lillo. Madrid: Ediciones Universidad Autónoma de Madrid; Centro Superior de Estudios sobre el Oriente Próximo y Egipto.  
2014 The Upper Khabur and the Upper Tigris Valleys during the Late Bronze Age: Settlements and Ceramic Horizons. Pp. 169–200 in *The Archaeology of Political Spaces: The Upper Mesopotamian Piedmont in the Second Millennium BCE*, ed. D. Bonatz. Topoi 12. Berlin: De Gruyter.
- Dalley, S.  
1993 Nimrud after 612 BC. *Altorientalische Forschungen* 20: 134–47.  
2014 Itineraries of Nakht-hor and Alexander in Assyria. *Kaskal*: 171–81.
- De Aloe, I.  
2003 Un’analisi delle ceramiche dalla ricognizione di Tell Leilan—Siria nord orientale—nel contesto dell’alta Mesopotamia tra Ellenismo ed età sassanide. M.A. thesis, Università Ca’ Foscari, Venice.
- Dorna-Metzger, F.  
1996 Hellenistic and Parthian-Roman Pottery from the Upper Khabur Survey: A Preliminary Study. Pp. 363–75 in *Continuity and Change in Northern Mesopotamia from the Hellenistic to the Early Islamic Period: Proceedings of a Colloquium Held at the Seminar für Vorderasiatische Altertumskunde, Freie Universität Berlin, 6th–9th April 1994*, ed. K. Bartl and S. R. Hauser. Berliner Beiträge zum Vorderen Orient 17. Berlin: Reimer.
- Duistermaat, K.  
2008 *The Pots and Potters of Assyria: Technology and Organisation of Production, Ceramic Sequence and*

- Vessel Function at Late Bronze Age Tell Sabi Abyad, Syria*. Papers on Archaeology of the Leiden Museum of Antiquities 4; Near Eastern Archaeology. Turnhout: Brepols.
- Ehrich, R.W.  
1939 The Later Cultures at Yorgan Tepe. Pp. 545–69 in *Nuzi: Report on the Excavation at Yorgan Tepe near Kirkuk, Iraq*, Vol. 1, ed. R. F. S. Starr. Cambridge, MA: Harvard University Press.
- Eidem, J., and Ackermann, R.  
1999 The Iron Age Ceramics from Tell Jurn Kabir. Pp. 309–24 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Eidem, J., and Warburton, D.  
1996 In the Land of Nagar: A Survey around Tell Brak. *Iraq* 58: 51–64.
- Felli, C.  
2003 Developing Complexity: Early to Mid-Fourth Millennium Investigations; The Northern Middle Uruk Period. Pp. 53–96 in *Excavations at Tell Brak*, Vol. 4: *Exploring an Upper Mesopotamian Regional Centre, 1994–1996*, ed. R. Matthews. McDonald Institute Monographs. Cambridge: MacDonal Institute for Archaeological Research; London: British School of Archaeology in Iraq.
- Fenn, N., and Römer-Strehl, C., eds.  
2013 *Networks in the Hellenistic World: According to the Pottery in the Eastern Mediterranean and Beyond*. BAR International Series 2539. Oxford: Archaeopress.
- Fielden, K.  
1977 Tell Brak, 1976: The Pottery. *Iraq* 39: 245–55.  
1981 A Late Uruk Pottery Group from Tell Brak, 1978. *Iraq* 43: 157–66.
- Finkbeiner, U.  
1993 Uruk-Warka: Fundstellen der Keramik der Seleukiden- und Partherzeit. Pp. 3–16 in *Materialien zur Archäologie der Seleukiden- und Partherzeit im südlichen Babylonien und im Golfgebiet: Ergebnisse der Symposien 1987 und 1989 in Blaubeuren*, ed. U. Finkbeiner. Tübingen: Wasmuth.
- Fiorina, P.  
1997 Khirbet Hatara: La stratigrafia. *Mesopotamia* 32: 7–62.  
2001 Khirbet Hatara: La ceramica del livello 1. *Mesopotamia* 36: 1–48.
- Fortin, M., and Schwartz, G. M.  
2003 The Middle Khabur in the Third Millennium BC. Pp. 221–48 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Frangipane, M.  
1997 A 4th-Millennium Temple/Palace Complex at Arslantepe-Malatya: North–South Relations and the Formation of Early State Societies in the Northern Regions of Greater Mesopotamia. *Paléorient* 23 (1): 45–73.
- Fukai, S.; Horiuchi, K.; and Matsutani, T.  
1974 *Telul eth-Thalathat*, Vol. 3: *The Excavation of Tell V; The Fourth Season (1965)*. Tokyo University Iraq-Iran Archaeological Expedition Report 15. Tokyo: Yamakawa.
- Furtwängler, A.; Gagoshidze, I.; Löhr, H.; and Ludwig, N.  
2008 *Iberia and Rome: The Excavations of the Palace at Dedoplis Gora and the Roman Influence in the Caucasian Kingdom of Iberia*. Schriften des Zentrums für Archäologie und Kulturgeschichte des Schwarzmeerraumes 13. Langenweißbach: Beier & Beran.
- Gavagnin, K.  
2012a La ceramica del III millennio da Tell Beydar (campagne 1992–2002). Ph.D. dissertation, Università degli Studi di Torino.  
2012b The Neo-Assyrian and Post-Assyrian Settlement in the Leilan Region (North-Eastern Syria) on the Bases of the Survey's Pottery Analysis. Pp. 243–57 in *Broadening Horizons 3: Conference of Young Researchers Working in the Ancient Near East, Barcelona, 19–21 July 2010*, ed. F. Borrel Tena, M. Bouso García, A. Gómez Bach, C. Tornero Dacasa, and O. Vicente Campos. Congressos 8. Bellaterra: Servei de Publicacions, Universitat Autònoma de Barcelona.  
2012c The Neo-Assyrian and Post-Assyrian Settlement in the Leilan Region, Northeastern Syria: Some Preliminary Results. Pp. 573–92 in *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East, 12 April–16 April 2010, the British Museum and UCL, London*, Vol. 1: *Mega-Cities & Mega-Sites—The Archaeology of Consumption & Disposal—Landscape, Transport & Communication*, ed. R. Matthews and J. Curtis. Wiesbaden: Harrassowitz.
- Gavagnin, K., and Mas, J.  
2014 Early Jezirah 3b Pottery from Tell Beydar, Syria: Selected Inventories from the Latest Season of Excavation. Pp. 49–72 in *Proceedings of the 8th International Congress on the Archaeology of the Ancient Near East, 30 April–4 May 2012, University of Warsaw*, Vol. 2: *Excavation and Progress Reports—Posters*, ed. P. Bieliński, M. Gawlikowski, R. Koliński, D. Ławecka, A. Sołtysiak, and Z. Wygnańska. Wiesbaden: Harrassowitz.
- Goodwin, J.  
1995 The First Millennium BC Pottery. Pp. 91–141 in *Excavations at Kharabeh Shattani*, Vol. 2, ed. D. Baird, S. Campbell, and T. Watkins. University of Edinburgh, Department of Archaeology Occasional Paper 18. Edinburgh: Department of Archaeology, University of Edinburgh.
- Green, A.  
1999 The Ninevite Countryside: Pots and Places of the Eski-Mosul Region in the Neo-Assyrian and Post-Assyrian Periods. Pp. 91–126 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria*



- and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions, ed. A. Hausleiter and A. Reiche. *Alttertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Gut, R. V.  
1995 *Das prähistorische Ninive: Zur relativen Chronologie der frühen Perioden Nordmesopotamiens*. 2 vols. Baghdader Forschungen 19. Mainz am Rhein: Zabern.
- Guz-Zilberstein, B.  
1995 The Typology of the Hellenistic Coarse Ware and the Selected Loci of the Hellenistic and Roman Periods. Pp. 289–433 in *Excavations at Dor: Final Report*, Vol. 1B: *Areas A and C: The Finds*, ed. E. Stern. Qedem Reports 2. Jerusalem: Institute of Archaeology, Hebrew University of Jerusalem, in cooperation with the Israel Exploration Society.
- Haerinck, E.  
1980 Les tombes et les objets du sondage sur l'enceinte de Abū Ḥabbah. Pp. 53–79 in *Tell ed-Der*, Vol. 3: *Sounding at Abu Habbah (Sippar)*, ed. L. de Meyer. Publications du Comité belge de recherches historiques, épigraphiques et archéologiques en Mésopotamie 4. Leuven: Peeters.
- Haller, A.  
1954 *Die Gräber und Gräfte von Assur*. Ausgrabungen der Deutschen Orient-Gesellschaft in Assur A, Die Baudenkmäler aus assyrischer Zeit 7; Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 65. Berlin: Mann.
- Hannestad, L.  
1983 *The Hellenistic Pottery from Failaka: With a Survey of Hellenistic Pottery in the Near East*. 2 vols. Danish Archaeological Investigations on Failaka, Kuwait; Ikaros, the Hellenistic Settlements 2; Jutland Archeological Society Publications 16/2. Aarhus: Jysk Archæologisk Selskab.
- Hauser, S. R.  
1996 The Production of Pottery in Arsacid Ashur. Pp. 55–85 in *Continuity and Change in Northern Mesopotamia from the Hellenistic to the Early Islamic Period: Proceedings of a Colloquium Held at the Seminar für Vorderasiatische Altertumskunde, Freie Universität Berlin, 6th–9th April 1994*, ed. K. Bartl and S. R. Hauser. Berliner Beiträge zum Vorderen Orient 17. Berlin: Reimer.
- Hausleiter, A.  
1999a Neo-Assyrian Pottery from Kalhu/Nimrud, with Special Reference to the Polish Excavations in the "Central Building" (1974–76). Pp. 17–60 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Alttertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- 1999b Graves, Chronology and Ceramics: Some Considerations on Neo-Assyrian Assur. Pp. 127–47 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Alttertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Helwing, B.  
2012 Late Chalcolithic Craft Traditions at the North-Eastern "Periphery" of Mesopotamia: Pottery vs. Smiths in the Southern Caucasus. *Origini* 34: 201–20.
- 2013 The Chalcolithic of Northern Iran. Pp. 79–92 in *The Oxford Handbook of Ancient Iran*, ed. D. T. Potts. Oxford Handbooks. Oxford: Oxford University Press.
- Hoh, M.  
1979 Die Grabung in UE XVIII, 1. 29 Kampagne. *Baghdader Mitteilungen* 29–30: 28–46.
- Hole, F.  
2013 Constrained Innovation: Halafian Ceramics. Pp. 77–87 in *Interpreting the Late Neolithic of Upper Mesopotamia*, ed. O. P. Nieuwenhuyse, R. Bernbeck, P. M. M. G. Akkermans, and J. Rogasch. *Papers on Archaeology of the Leiden Museum of Antiquities, Egyptology* 9. Turnhout: Brepols.
- Holland, T. A.  
1976 Preliminary Report on Excavations at Tell es-Sweihat, Syria 1973–4. *Levant* 8: 36–70.
- Hrouda, B.  
1957 *Die bemalte Keramik des zweiten Jahrtausends in Nordmesopotamien und Nordsyrien*. Istanbuler Forschungen 19. Berlin: Mann.
- 1961 Tell Fecheriye: Die Keramik. *Zeitschrift für Assyriologie und vorderasiatische Archäologie* 54: 201–39.
- Iamoni, M.  
2014 L'Alto Tigri fra preistoria e protostoria: Sequenze stratigrafiche e occupazione del territorio dal Tardo Neolitico Ceramico al Tardo Calcolitico. *Mesopotamia* 49: 75–96.
- Ibrahim, J. K.  
1986 *Pre-Islamic Settlement in Jazirah*. Baghdad: State Organization of Antiquities & Heritage, Ministry of Culture & Information, Republic of Iraq.
- Jackson, H., and Tidmarsh, J.  
2011 *Jebel Khalid on the Euphrates*, Vol. 3: *The Pottery*. Mediterranean Archaeology Supplement 7. Sydney: Meditarch.
- Jakob-Rost, L.; Wartke, R.-B.; and Wesarg, B.  
1983 Tell Owessat. *Sumer* 39: 103–36.
- Jamieson, A. S.  
2000 Identifying Room Use and Vessel Function: A Case-Study of Iron Age Pottery from Building C2 at Tell Ahmar, North Syria. Pp. 259–303 in *Essays on Syria in the Iron Age*, ed. G. Bunnens. *Ancient Near Eastern Studies Supplement* 7. Leuven: Peeters.

- Jones, F. F.  
1950 The Pottery. Pp. 149–296 in *Excavations at Gözlu Küle, Tarsus*, Vol. 1: *The Hellenistic and Roman Periods*, ed. H. Goldman. Princeton, NJ: Princeton University Press.
- Karsgaard, P.  
2010 The Halaf-Ubaid Transition: A Transformation without a Center? Pp. 51–68 in *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.
- Kepinski, C.  
2011 New Evidence from Grai Resh, Northern Iraq—The 2001 and 2002 Seasons: A Pre-Uruk Expansion Site from the Late Chalcolithic Period. *Zeitschrift für Orient-Archäologie* 4: 47–85.
- Killick, R.  
1986 The Eski Mosul Region. Pp. 229–44 in *Ĝamdat Našr: Period or Regional Style? Papers Given at a Symposium Held in Tübingen, November 1983*, ed. U. Finkbeiner and W. Röellig. Beihefte zum Tübinger Atlas des Vorderen Orients, Geisteswissenschaften 62. Wiesbaden: Reichert.
- Koliński, R.  
2000 *Tell Rijim, Iraq: The Middle Bronze Age Layers*. BAR International Series 837. Oxford: Archaeopress.  
2001 *Mesopotamian Dimātu of the Second Millennium BC*. BAR International Series 1004. Oxford: Archaeopress.
- Kreppner, F. J.  
2006 *Die Keramik des "Roten Hauses" von Tall Šēḫ Ḥamad/Dūr-Katlimmu: Eine Betrachtung der Keramik Nordmesopotamiens aus der zweiten Hälfte des 7. und aus dem 6. Jahrhundert v. Chr.* 2 vols. Berichte der Ausgrabung Tall Šēḫ Ḥamad/Dūr-Katlimmu 7. Wiesbaden: Harrassowitz.  
2008 The Continuity of Ceramic Production after the Fall of the Neo-Assyrian Empire: New Data from the Red House of Tell Sheikh Hamad. Pp. 167–78 in *Proceedings of the 4th International Congress on the Archaeology of the Ancient Near East, 29 March–3 April 2004, Freie Universität Berlin*, Vol. 2: *Social and Cultural Transformation—The Archaeology of Transitional Periods and Dark Ages—Excavation Reports*, ed. H. Kühne, R. M. Czichon, and F. J. Kreppner. Wiesbaden: Harrassowitz.
- Kühne, H.  
2005 *Magdalu/Magdala: Tall Šēḫ Ḥamad von der post-assyrischen Zeit bis zur römischen Kaiserzeit*. 2 vols. Berichte der Ausgrabung Tall Šēḫ Ḥamad/Dūr-Katlimmu 2. Berlin: Reimer.
- Kuhrt, A.  
1995 The Assyrian Heartland in the Achaemenid Period. Pp. 239–54 in *Dans les pays des Dix-Mille: Peuples et pays du Proche-Orient vus par un Grec; Actes de table ronde internationale, organisée à l'initiative du GRACO, Toulouse, 3–4 février 1995*, ed. P. Briant. Palas 43. Toulouse: Presses Universitaires du Mirail.
- Labrousse, A., and Boucharlat, R.  
1972 La fouille du palais du Chaour à Suse en 1970 et 1971. *Cahiers de la délégation archéologique française en Iran* 2: 61–167.
- Layard, A. H.  
1853 *Discoveries among the Ruins of Nineveh and Babylon: With Travels in Armenia, Kurdistan, and the Desert; Being the Result of a Second Expedition Undertaken for the Trustees of the British Museum*. New York: Harper.
- Lázaro, A.  
1988 The Period X Pottery. Pp. 499–559 in *Hamman et-Turkman I: Report of the University of Amsterdam's 1981–84 Excavations in Syria*, Vol. 2, ed. M. N. Van Loon. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 63. Leiden: Nederlands Historisch-Archeologisch Instituut te Istanbul.
- Lebeau, M.  
1993 *Tell Melebiya: Cinq campagnes de recherches sur le Moyen-Khabur (1984–1988)*. Akkadica Supplement 9. Leuven: Peeters.
- Lebeau, M., ed.  
2011 *Jezirah*. ARCANÉ 1. Turnhout: Brepols.  
2013 *Ceramics*. ARCANÉ Interregional (ARCANÉ-IR) 1. Turnhout: Brepols.
- Lecomte, O.  
1993 Stratigraphical Analysis and Ceramic Assemblages of the 4th–1st Centuries BCE Babbar of Larsa (Southern Iraq). Pp. 17–39 in *Materialien zur Archäologie der Seleukiden- und Partherzeit im südlichen Babylonien und im Golfgebiet: Ergebnisse der Symposien 1987 und 1989 in Blaubeuren*, ed. U. Finkbeiner. Tübingen: Wasmuth.
- Lines, J.  
1954 Late Assyrian Pottery from Nimrud. *Iraq* 16: 164–67.
- Lloyd, S.  
1952 Sultantepe, Part II: Post-Assyrian Pottery and Small Objects Found by the Anglo Turkish Joint Expedition in 1952. *Anatolian Studies* 4: 101–10.
- Lloyd, S.; Safar, F.; and Braidwood, R. J.  
1945 Tell Hassuna Excavations by the Iraq Government Directorate General of Antiquities in 1943 and 1944. *Journal of Near Eastern Studies* 4: 255–89.
- Loud, G.  
1936 *Khorsabad I: Excavations in the Palace and at the City Gate*. Oriental Institute Publications 38. Chicago: University of Chicago Press.
- Loud, G., and Altman, C. B.  
1938 *Khorsabad II: The Citadel and the Town*. Oriental Institute Publications 40. Chicago: University of Chicago Press.
- Lumsden, S.  
1999 Neo-Assyrian Pottery from Nineveh. Pp. 3–15 in *Iron Age Pottery in Northern Mesopotamia, Northern*

- Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Alttertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Lupton, A.  
1996 *Stability and Change: Socio-Political Development in North Mesopotamia and South-East Anatolia, 4000–2700 B.C.* BAR International Series 627. Oxford: Tempus Reparatum.
- Lyonnet, B.  
1992 Reconnaissance dans le Haut Habur: Étude de la céramique. Pp. 103–32 in *Recherches en Haute Mésopotamie: Tell Mohammed Diyab; Campagnes 1990 et 1991*, ed. J.-M. Durand. Mémoires de N.A.B.U. 2. Paris: Société pour l'étude du Proche-Orient ancien.
- Mallowan, M. E. L.  
1964 Ninevite V. Pp. 142–54 in *Vorderasiatische Archäologie: Studien und Aufsätze; Anton Moortgat zum 65. Geburtstag gewidmet von Kollegen, Freunden und Schülern*, ed. K. Bittel, E. Heinrich, B. Hrouda, and W. Nagel. Berlin: Mann.
- Mallowan, M. E. L., and Cruikshank Rose, J.  
1935 Excavations at Tall Arpachiyah 1933. *Iraq* 2: 1–178.
- Martín Galán, R.  
1997 La culture matérielle des niveaux séleuco-parthes. Pp. 35–46 in *Tell Beydar, Three Seasons of Excavations (1992–1994): A Preliminary Report*, ed. M. Lebeau and A. Suleiman. Subartu 3. Turnhout: Brepols.
- Masetti-Rouault, M. G., and Calini, I.  
In press Materials from French Excavations in Erbil Area (2011–2013): Qasr Shemamok. In *Proceedings of the International Conference "Archaeological Research in the Kurdistan Region of Iraq and Adjacent Areas," Athens, Greece*, ed. K. Kopanias and J. MacGinnis. Oxford: Archaeopress.
- Matthews, R. J.  
2003a A Chieftdom on the Northern Plains: Early Third-Millennium Investigations; The Ninevite 5 Period. Pp. 97–191 in *Excavations at Tell Brak, Vol. 4: Exploring an Upper Mesopotamian Regional Centre, 1994–1996*, ed. R. Matthews. McDonald Institute Monographs. Cambridge: McDonald Institute for Archaeological Research; London: British School of Archaeology in Iraq.  
2003b Traces of Early Complexity: Late Fifth to Early Fourth-Millennia Investigations; The Early Northern Uruk Period. Pp. 25–52 in *Excavations at Tell Brak, Vol. 4: Exploring an Upper Mesopotamian Regional Centre, 1994–1996*, ed. R. Matthews. McDonald Institute Monographs. Cambridge: McDonald Institute for Archaeological Research; London: British School of Archaeology in Iraq.
- Matthews, R. J.; Matthews, W.; and McDonald, H.  
1994 Excavation at Tell Brak, 1994. *Iraq* 56: 177–94.
- McCown, D. E., and Haines, R. C.  
1967 *Nippur I: Temple of Enlil, Scribal Quarter, and Soundings; Excavations of the Joint Expedition to Nippur of the University Museum of Philadelphia and the Oriental Institute of the University of Chicago*. Oriental Institute Publications 78. Chicago: Oriental Institute of the University of Chicago.
- McDonald, H., and Jackson, N.  
2003 A House on the Hill: Second-Millennium Investigations—The Middle Bronze Age. Pp. 271–320 in *Excavations at Tell Brak, Vol. 4: Exploring an Upper Mesopotamian Regional Centre, 1994–1996*, ed. R. Matthews. McDonald Institute Monographs. Cambridge: McDonald Institute for Archaeological Research; London: British School of Archaeology in Iraq.
- McEwan, C. W.; Braidwood, L. S.; Frankfort, H.; Güterbock, H. G.; Haines, R. C.; Kantor, H. J.; and Kraeling, C. H.  
1958 *Soundings at Tell Fakhariyah*. Oriental Institute Publications 79. Chicago: University of Chicago Press.
- McMahon, A.  
1996 The Achaemenid-Hellenistic Level at Hacinebi Tepe. *American Journal of Archaeology* 100: 222–29.  
1998 The Kuyunjik Gully Sounding, Nineveh, 1989 & 1990 Seasons. *Al-Rāfidān* 19: 1–32.
- McMahon, A., and Quenet, P.  
2007 A Late Third Millennium BC Pottery Assemblage from Chagar Bazar (Area D, Phase II). Pp. 69–242 in *Chagar Bazar (Syrie) II: Les vestiges "post-akkadiens" du chantier D et études diverses*, ed. Ö. Tunca, A. McMahon, and A. M. Baghdo. Publications de la Mission archéologique de l'Université de Liège en Syrie. Leuven: Peeters.
- Meijer, D. J. W.  
1986 *A Survey in Northeastern Syria*. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 58. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- Merpert, N. Y., and Munchaev, R. M.  
1987 The Earliest Levels at Yarim Tepe I and Yarim Tepe II in Northern Iraq. *Iraq* 49: 1–36.
- Młynarczyk, J.  
2011 Hellenistic Pottery Deposits at Hippos of the Dekapolis: Contribution to the Study of Hellenistic Ceramics Production and Distribution on the Sea of Galilee. Pp. 577–90 in *Epistēmōnikē synantēsē gia tēn ellēnistikē keramikē, Aígio, 4–9 Aprilíou 2005: Praktiká*, ed. E. Kotsou and M. Kazakou. Athens: Ekdosí tou Tameiou archaiologikōn porōn kai apallotriōseōn.
- Moorey, P. R. S.  
1980 *Cemeteries of the First Millennium BC at Deve Hüyük, near Carchemish, Salvaged by T. E. Lawrence and C. L. Woolley in 1913 (With a Catalogue Raisonné of the Objects in Berlin, Cambridge, Liverpool, London and Oxford)*. BAR International Series 87. Oxford: B.A.R.

- Morandi Bonacossi, D.  
1999 Die eisenzeitliche Keramik der TAVO-Geländebegehung des Unteren Hübür-Gebiets. Pp. 193–229 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International “Table Ronde” at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Morandi Bonacossi, D., and Iamoni, M.  
2015 Landscape and Settlement in the Eastern Upper Iraqi Tigris and Navkur Plains: The Land of Nineveh Archaeological Project, Seasons 2012–2013. *Iraq* 77: 9–39.
- Munchaev, R., and Merpert, N. Y.  
1994 Da Hassuna a Accad: Scavi della Missione russa nella regione di Hassake, Siria di Nord-Est, 1988–1992. *Mesopotamia* 29: 5–48.
- Negro, F.  
1997 Hatara, livello 8: La ceramica neoassira. *Mesopotamia* 32: 163–87.
- Nicolle, C.  
2006 *Tell Mohammed Diyab 3: Travaux de 1992–2000 sur les buttes A et B*. Paris: Editions Recherche sur les civilisations.
- Nieuwenhuys, O. P.  
2007 *Plain and Painted Pottery: The Rise of Late Neolithic Ceramic Styles on the Syrian and Northern Mesopotamian Plains*. Papers on Archaeology of the Leiden Museum of Antiquities 3; Near Eastern Archaeology. Turnhout: Brepols.
- Nieuwenhuys, O. P.; Akkermans, P. M. M. G.; and van der Plicht, J.  
2010 Not So Coarse, Nor Always Plain—The Earliest Pottery of Syria. *Antiquity* 84: 71–85.
- Nieuwenhuys, O.; Jacobs, J.; and van As, B.  
2002 The Ceramics. Pp. 35–124 in *Tell Boueid II: A Late Neolithic Village on the Middle Khabur (Syria)*, ed. A. Suleiman and O. Nieuwenhuys. Subartu XI. Turnhout: Brepols.
- Numoto, H.  
1988 Excavations at Tell Fisna. *Al-Rāfidān* 9: 1–72.  
1990 Findings from Tell Jessary. *Al-Rāfidān* 11: 201–36.  
1992 Ninevite 5 Pottery from Tell Jigan Area C. *Al-Rāfidān* 13: 139–58.  
1998 Late Uruk and Transitional Ninevite 5 Pottery from Tell Thalathat No. 5. *Al-Rāfidān* 19: 53–73.  
2003 Ninevite 5 Pottery from Tells Fisna and Thuwajj and Its Relative Chronology in Mosul Region. Pp. 83–152 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Oates, D.  
1968 *Studies in the Ancient History of Northern Iraq*. London: Published for the British Academy by Oxford University Press.
- 1974 Balawat (Imgur Enlil): The Site and Its Buildings. *Iraq* 36: 173–78.
- Oates, D., and J. Oates  
1958 Nimrud 1957: The Hellenistic Settlement. *Iraq* 20: 114–57.  
1990 Aspects of Hellenistic and Roman Settlements in the Khabur Basin. Pp. 227–48 in *Resurrecting the Past: A Joint Tribute to Adnan Bounni*, ed. P. Matthiae, M. N. van Loon, and H. Weiss. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 67. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.  
1993 Excavations at Tell Brak 1992–93. *Iraq* 55: 155–99.
- Oates, D.; Oates, J.; and McDonald, E., eds.  
1997 *Excavations at Tell Brak, Vol. 1: The Mitanni and Old Babylonian Periods*. McDonald Institute Monographs. London: British School of Archaeology in Iraq; Cambridge: McDonald Institute for Archaeological Research.
- Oates, J.  
1959 Late Assyrian Pottery from Fort Shalmaneser. *Iraq* 21: 130–46.  
1960 Ur and Eridu: The Prehistory. *Iraq* 22: 32–50.  
1982 Some Late Early Dynastic III Pottery from Tell Brak. *Iraq* 44: 205–19.  
1987 A Note on ‘Ubaid and Mitanni Pottery from Tell Brak. *Iraq* 49: 193–98.  
2001 The Third Millennium Pottery. Pp. 151–216 in *Excavations at Tell Brak, Vol. 2: Nagar in the Third Millennium BC*, ed. D. Oates, J. Oates, and H. McDonald. McDonald Institute Monographs. London: British School of Archaeology in Iraq; Cambridge: McDonald Institute for Archaeological Research.  
2010 More Thoughts on the Ubaid Period. Pp. 45–49 in *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.  
2011 Late Chalcolithic 1–2: Tell Hammam et Turkman and Tell Brak. Pp. 177–85 in *Correlates of Complexity: Essays in Archaeology and Assyriology Dedicated to Diederik J. W. Meijer in Honour of His 65th Birthday*, ed. B. S. Düring, A. Wossink, and P. M. M. G. Akkermans. Uitgaven van het Nederlands Instituut voor het Nabije Oosten te Leiden 116. Leiden: Nederlands Instituut voor het Nabije Oosten.
- Oates, J.; McMahon, A.; Karsgaard, P.; Al-Quntar, S.; and Ur, J.  
2007 Early Mesopotamian Urbanism: A New View from the North. *Antiquity* 81: 585–600.
- Oguchi, H.  
1987 Tell Musharifa. Pp. 49–54 in *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, ed. State Organization of Antiquities & Heritage, Ministry of Culture & Information. Mosul: Dar Al-Kutub.



- 1997 A Reassessment of the Distribution of Khabur Ware: An Approach from an Aspect of Its Main Phase. *Al-Rāfidān* 18: 195–224.
- 1998 Notes on Khabur Ware from Sites outside Its Main Distribution Zone. *Al-Rāfidān* 19: 119–33.
- 2000 The “Late” Khabur Ware Problem Once Again. *Al-Rāfidān* 21: 103–26.
- 2001 The Origins of Khabur Ware: A Tentative Note. *Al-Rāfidān* 22: 71–87.
- Palermo, R.
- 2012 A Parthian Storage Room in Tell Barri. Pp. 636–46 in *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East, 12 April–16 April 2010, the British Museum and UCL, London*, Vol. 3: *Fieldwork & Recent Research—Posters*, ed. R. Matthews and J. Curtis. Wiesbaden: Harrassowitz.
- 2013 Evidence of Destruction in Tell Barri: Historical and Archaeological Perspectives. Pp. 473–85 in *Destruction: Archaeological, Philological and Historical Perspectives*, ed. J. Driessen. Louvain-la-Neuve: Presses Universitaires de Louvain.
- Parker, B. J.
- 2010 Networks of Interregional Interaction during Mesopotamia’s Ubaid Period: A Study Sponsored by the Curtiss T. and Mary G. Brennan Foundation. Pp. 339–60 in *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. Studies in Ancient Oriental Civilization 63. Chicago: Oriental Institute of the University of Chicago.
- Parmegiani, N.
- 1998 La ceramica ellenistica e romana di Tell Barri (Siria). Pp. 267–304 in *Tell Barri/Kahat 2: Relazione sulle campagne 1980–1993 a Tell Barri/Kahat, nel bacino del Habur (Siria)*, ed. P. E. Pecorella. Documenta Asiana 5. Rome: Istituto per gli studi micenei ed egeo-anatolici, Consiglio nazionale delle ricerche; Florence: Dipartimento di scienze dell’antichità “G. Pasquali,” Università degli studi di Firenze.
- Pearce, J.
- 2000 The Late Chalcolithic Sequence at Hacinebi Tepe, Turkey. Pp. 115–43 in *From the Euphrates to the Caucasus: Chronologies for the IVth–IIIrd Millennium B.C.*, ed. C. Marro and H. Hauptmann. Varia Anatolica 11. Istanbul: Institut français d’études anatoliennes d’Istanbul.
- Pecorella, P. E.
- 1990 Tell Barri/Kahat durante il II millennio. Pp. 259–75 in *Resurrecting the Past: A Joint Tribute to Adnan Bounni*, ed. P. Matthiae, M. N. van Loon, and H. Weiss. Uitgaven van het Nederlands Historisch-Archaeologisch Instituut te Istanbul 67. Istanbul: Nederlands Historisch-Archaeologisch Instituut te Istanbul.
- 1993 Uno scavo oltre la linea e alcuni problemi ceramici. Pp. 530–38 in *Between the Rivers and Over the Mountains: Archaeologica Anatolica et Mesopotamica Alba Palmieri Dedicata*, ed. M. Frangipane, H. Hauptmann, M. Liverani, and P. Matthiae. Rome: Dipartimento di Scienze Storiche Archeologiche e Antropologiche dell’Antichità, Università di Roma “La Sapienza.”
- Pfälzner, P.
- 1988 Tell Bderi 1985: Bericht über die erste Kampagne. *Damaszener Mitteilungen* 3: 223–386.
- 1995 *Mittanische und Mittelassyrische Keramik: Eine chronologische, funktionale und produktionsökonomische Analyse*. 2 vols. Berichte der Ausgrabung Tall Šēḥ Ḥamad/Dūr-Katlimmu 3. Berlin: Reimer.
- 2007 The Late Bronze Age Ceramic Traditions of the Syrian Jazirah. Pp. 231–91 in *Céramique de l’âge du bronze en Syrie*, Vol. 2: *L’Euphrate et la région de Jézireh*, ed. M. Al-Maqdissi, V. Matoian, and C. Nicolle. Bibliothèque archéologique et historique 180. Beirut: Institut français d’archéologie du Proche-Orient.
- Pfälzner, P., and Sconzo, P.
- 2015 First Results of the Eastern Ḥabur Archaeological Survey in the Dohuk Region of Iraqi Kurdistan: The Season of 2013. *Zeitschrift für Orient-Archäologie* 8: 4–32.
- Pierobon Benoit, R.
- 1998 Tra l’Ellenismo e il Medioevo: Dati e problemi a Tell Barri. Pp. 199–256 in *Tell Barri/Kahat 2: Relazione sulle campagne 1980–1993 a Tell Barri/Kahat, nel bacino del Habur (Siria)*, ed. P. E. Pecorella. Documenta Asiana 5. Rome: Istituto per gli studi micenei ed egeo-anatolici, Consiglio nazionale delle ricerche; Florence: Dipartimento di scienze dell’antichità “G. Pasquali,” Università degli studi di Firenze.
- 2008 Tell Barri: Sito di frontiera? Pp. 169–202 in *Tell Barri: Storia di un insediamento antico tra Oriente e Occidente*, ed. R. Pierobon Benoit. La parola del passato 63. Naples: Macchiaroli.
- Pierobon Benoit, R., ed.
- 2008 *Tell Barri: Storia di un insediamento antico tra Oriente e Occidente*. La parola del passato 63. Naples: Macchiaroli.
- Postgate, C.; Oates, D.; and Oates, J.
- 1997 *The Excavations at Tell al Rimah: The Pottery*. Iraq Archaeological Reports 4. Warminster: Published for the British School of Archaeology in Iraq and the Directorate of Antiquities by Aris & Phillips.
- Pruß, A., and Baghdo, A. M.
- 2002 Tell Fecheriye: Bericht über die erste Kampagne der deutsch-syrischen Ausgrabungen 2001. *Mitteilungen der Deutschen Orient-Gesellschaft* 134: 311–29.
- Reade, J. E.
- 1968 Tell Taya (1967): Summary Report. *Iraq* 30: 234–64.
- Reiche, A.
- 1999 Iron Age Pottery from Tell Rad Shaqrah (North-East Syria). Pp. 231–59 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of*



- the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- 2014 Late Bronze Age Pottery from Nemrik (Northern Iraq). Pp. 251–93 in *Recent Trends in the Study of Late Bronze Age Ceramics in Syro-Mesopotamia and Neighbouring Regions: Proceedings of the International Workshop in Berlin, 2–5 November 2006*, ed. M. Luciani and A. Hausleiter. *Orient-Archäologie* 32. Rahden: Leidorf.
- Rich, C. J.  
1836 *Narrative of a Residence in Koordistan, and on the Site of Ancient Nineveh: With Journal of a Voyage down the Tigris to Bagdad and an Account of a Visit to Shirauz and Persepolis*. 2 vols. London: Duncan.
- Ristvet, L.  
2005 Settlement, Economy, and Society in the Tell Leilan Region, Syria, 3000–1000 BC. Ph.D. dissertation, University of Cambridge.
- Ristvet, L.; Gopnik, H.; Bakhshaliyev, V.; Lau, H.; Ashurov, S.; and Bryant, R.  
2012 On the Edge of Empire: 2008 and 2009 Excavations at Oğlanqala, Azerbaijan. *American Journal of Archaeology* 116: 321–62.
- Roaf, M. D.  
1983 A Report on the Work of the British Archaeological Expedition in the Eski Mosul Dam Salvage Project, from November 1982 to June 1983. *Sumer* 39: 68–77.  
1984 Excavations at Tell Mohammed 'Arab in the Eski Mosul Dam Salvage Project. *Iraq* 46: 141–56.  
1998 A Group of Pottery from Mohammed Arab Period 1. Pp. 131–49 in *About Subartu: Studies Devoted to Upper Mesopotamia*, Vol. 1: *Landscape, Archaeology, Settlement*, ed. M. Lebeau. Subartu 4/1. Turnhout: Brepols.  
2000 Ninive-5-Kultur. *Reallexikon der Assyriologie* 9: 434–39.
- Roaf, M., and Killick, R.  
1987 A Mysterious Affair of Styles: The Ninevite 5 Pottery of Northern Mesopotamia. *Iraq* 49: 199–230.  
2003 The Relative Chronology of the Ninevite 5 Sites in the Tigris Region and Beyond. Pp. 73–82 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.
- Römer-Strehl, C.  
2005 Untersuchungen zur Keramik der seleukidischen und parthisch-römischen Zeit vom Tall Šēḫ Ḥamad. Pp. 197–312 in *Magdalu/Magdala: Tall Šēḫ Ḥamad von der postassyrischen Zeit bis zur römischen Kaiserzeit*, Vol. 1, by H. Kühne. *Berichte der Ausgrabung Tall Šēḫ Ḥamad/Dür-Katlimmu* 2. Berlin: Reimer.
- Rothman, M. S.  
2002 *Tepe Gawra: The Evolution of a Small, Prehistoric Center in Northern Iraq*. University Museum Monograph 112. Philadelphia: Museum of Archaeology and Anthropology, University of Pennsylvania.
- Rothman, M. S., ed.  
2001 *Uruk Mesopotamia & Its Neighbors: Cross-Cultural Interactions in the Era of State Formation*. School of American Research Advanced Seminar Series. Santa Fe, NM: School of American Research Press.
- Rotroff, S. I.  
1997 *Hellenistic Pottery: Athenian and Imported Wheel-made Table Ware and Related Material*. 2 vols. Athenian Agora 29. Princeton, NJ: American School of Classical Studies at Athens.
- Rouault, O., and Calini, I.  
In press Materials from French Excavations in Erbil Area (2010): Kilik Mishik. In *International Conference "Archaeological Research in the Kurdistan Region of Iraq and Adjacent Areas," Athens, Greece*, ed. K. Kopanias and J. MacGinnis. Oxford: Archaeopress.
- Rova, E.  
1988 *Distribution and Chronology of the Nineveh 5 Pottery and of Its Culture*. *Archeologia e storia dell'arte del Vicino oriente antico; Contributi e materiali di archeologia orientale* 2. Rome: Università degli studi di Roma "La Sapienza."  
1993 Pottery. Pp. 37–136 in *Tell Karrana 3: Tell Jikan, Tell Khirbet Salih*, ed. G. Wilhelm and C. Zaccagnini. *Baghdader Forschungen* 15. Mainz am Rhein: Zabern.  
1999–2000 A Tentative Synchronisation of the Local Late Chalcolithic Ceramic Horizons of Northern Syro-Mesopotamia. *Mesopotamia* 34–35: 175–99.  
2003a Ninevite 5 Relative Chronology, Periodization and Distribution: An Introduction. Pp. 1–10 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.  
2003b Tell Karrana 3: Ceramic Evidence for the Late Uruk/Ninevite 5 Transition. Pp. 11–24 in *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*, ed. E. Rova and H. Weiss. Subartu 9. Turnhout: Brepols.  
2003c The III Millennium Pottery Morphology: The Typology Principles, the Coding System and Some Preliminary Results. Pp. 395–490 in *Tell Beydar, the 1995 to 1999 Seasons of Excavations: A Preliminary Report*, ed. M. Lebeau and A. Suleiman. Subartu 10. Turnhout: Brepols.  
2011 Pottery. Pp. 49–127 in *Jezirah*, ed. M. Lebeau. *ARCANE* 1. Turnhout: Brepols.  
2013 The Ninevite 5 Period in Northeast Syria. Pp. 107–18 in *Archéologie et histoire de la Syrie*, Vol. 1: *La Syrie de l'époque néolithique à l'âge du fer*, ed. W. Orthmann, P. Matthiae, and M. Al-Maqdissi. *Schriften zur vorderasiatischen Archäologie* 1/1. Wiesbaden: Harrassowitz.

- Rova, E., and Weiss, H., eds.  
2003 *The Origins of North Mesopotamian Civilization: Ninevite 5 Chronology, Economy, Society*. Subartu 9. Turnhout: Brepols.
- Rutten, K.  
1996 Late Achaemenid and Hellenistic Pottery from the Tombs of Mahmudiyah, Abu Qubur and Tell ed-Der. *Northern Akkad Project Reports* 10: 7–38.
- Sarre, F.  
1925 *Die Keramik von Samarra*. Ausgrabungen von Samarra 2. Berlin: Reimer.
- Schmidt, C.  
1999 Die Keramik der Areale A-F in Kar-Tukulti-Ninurta. Pp. 61–90 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Schneider, E.  
1999 "Assyrische" Schalen aus Tell Sheikh Hassan (Syrien) und ihre Stellung innerhalb der Keramik des assyrischen Einflußgebiets. Pp. 347–75 in *Iron Age Pottery in Northern Mesopotamia, Northern Syria and South-Eastern Anatolia: Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Nieborów (1997) and Other Contributions*, ed. A. Hausleiter and A. Reiche. *Altertumskunde des Vorderen Orients* 10. Münster: Ugarit-Verlag.
- Schwartz, G. M.  
1985 The Ninevite 5 Period and Current Research. *Paléorient* 11 (1): 53–70.  
1988 *A Ceramic Chronology from Tell Leilan: Operation 1*. Yale Tell Leilan Research 1. New Haven, CT: Yale University Press.  
2001 Syria and the Uruk Expansion. Pp. 233–64 in *Uruk Mesopotamia & Its Neighbors: Cross-Cultural Interactions in the Era of State Formation*, ed. M. S. Rothman. School of American Research Advanced Seminar Series. Santa Fe, NM: School of American Research Press.
- Simpson, St. J.  
1990 Iron Age Crop Storage and Ceramic Manufacture in Rural Mesopotamia: A Review of the British Museum Excavations at Qasrij Cliff and Khirbet Qasrij in Northern Iraq. *Bulletin of the Institute of Archaeology, University of London* 27: 119–40.  
1996 From Tekrit to the Jaghjagh: Sasanian Sites, Settlement Patterns and Material Culture in Northern Mesopotamia. Pp. 87–126 in *Continuity and Change in Northern Mesopotamia from the Hellenistic to the Early Islamic Period: Proceedings of a Colloquium Held at the Seminar für Vorderasiatische Altertums-kunde, Freie Universität Berlin, 6th–9th April 1994*, ed. K. Bartl and S. R. Hauser. *Berliner Beiträge zum Vorderen Orient* 17. Berlin: Reimer.
- 2013 Rams, Stags and Crosses from Sasanian Iraq: Elements of a Shared Visual Vocabulary from Late Antiquity. Pp. 103–17 in *Animals, Gods and Men from East to West: Papers on Archaeology and History in Honour of Roberta Venco Ricciardi*, ed. A. Peruzzetto, F. Dorna-Metzger, and L. Dirven. BAR International Series 2516. Oxford: Archaeopress.
- Simpson, St. J., and Watkins, T.  
1995 The Late Sasanian and Islamic Ceramics from Kharabeh Village. Pp. 175–84 in *Excavations at Kharabeh Shattani*, Vol. 2, ed. D. Baird, S. Campbell, and T. Watkins. University of Edinburgh, Department of Archaeology Occasional Paper 18. Edinburgh: Department of Archaeology, University of Edinburgh.
- Solecki, R. L.  
1981 *An Early Village Site at Zawi Chemi Shanidar*. Bibliotheca Mesopotamica 13. Malibu, CA: Undena.
- Speiser, E. A.  
1933 The Pottery of Tell Billa. *Museum Journal* 23: 249–308.
- Stein, D.  
1984 Khabur Ware and Nuzi Ware: Their Origin, Relationship, and Significance. *Assur* 4: 1–65.
- Stein, G. J.  
1999 *Rethinking World-Systems: Diasporas, Colonies, and Interaction in Uruk Mesopotamia*. Tucson: University of Arizona Press.  
2001 Indigenous Social Complexity at Hacinebi. Pp. 265–305 in *Uruk Mesopotamia & Its Neighbors: Cross-Cultural Interactions in the Era of State Formation*, ed. M. S. Rothman. School of American Research Advanced Seminar Series. Santa Fe, NM: School of American Research Press.  
2010 Local Identities and Interaction Spheres: Modeling Regional Variation in the Ubaid Horizon. Pp. 23–44 in *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East*, ed. R. A. Carter and G. Philip. *Studies in Ancient Oriental Civilization* 63. Chicago: Oriental Institute of the University of Chicago.  
2012 The Development of Indigenous Social Complexity in Late Chalcolithic Upper Mesopotamia in the 5th–4th Millennium BC—An Initial Assessment. *Origini* 34: 125–51.
- Stronach, D.  
1994 Village to Metropolis: Nineveh and the Beginnings of Urbanism in Northern Mesopotamia. Pp. 85–114 in *Nuove fondazioni nel Vicino Oriente antico: Realtà e ideologia; Atti del colloquio 4–6 dicembre 1991, Dipartimento di Scienze Storiche del Mondo Antico, Sezione di Egittologia e Scienze Storiche del Vicino Oriente, Università degli Studi di Pisa*, ed. S. Mazzoni. *Seminari di orientalistica* 4. Pisa: Giardini.
- Tobler, A. J.  
1950 *Excavations at Tepe Gawra*, Vol. 2: Levels IX–XX. Museum Monographs 2. Philadelphia: Published

- for the American Schools of Oriental Research by University of Pennsylvania Press.
- Toll, N. P.  
1946 *The Excavations at Dura-Europos: Preliminary Report on the Ninth Season of Work, 1935–1936, Part 2: The Necropolis*. New Haven, CT: Yale University Press.
- Ur, J. A.  
2010 *Urbanism and Cultural Landscapes in Northeastern Syria: The Tell Hamoukar Survey, 1999–2001*. Tell Hamoukar 1; Oriental Institute Publications 137. Chicago: Oriental Institute of the University of Chicago.
- Ur, J. A.; Jong, L. de; Giraud, J.; Osborne, J. F.; and MacGinnis, J.  
2013 Ancient Cities and Landscapes in the Kurdistan Region of Iraq: The Erbil Plain Archaeological Survey 2012 Season. *Iraq* 75: 89–117.
- Ur, J. A.; Karsgaard, P.; and Oates, J.  
2007 Early Urban Development in the Near East. *Science* 317: 1188.
- Ur, J. A., and Wilkinson, T. J.  
2007 Settlement and Economic Landscapes of Tell Beydar and Its Hinterland. Pp. 305–27 in *Beydar Studies*, Vol. 1, ed. M. Lebeau and A. Suleiman. Subartu 21. Turnhout: Brepols.
- Valtz, E.  
1991 New Observations on the Hellenistic Pottery from Seleucia-on-the-Tigris. Pp. 45–56 in *Golf-Archäologie: Mesopotamien, Iran, Kuwait, Bahrain, Vereinigte Arabische Emirate und Oman*, ed. K. Schippmann, A. Herling, and J.-F. Salles. Internationale Archäologie 6. Buch am Erlbach: Leidorf.
- Venco Ricciardi, R.  
1970–1971 Sasanian Pottery from Tell Mahuz (North Mesopotamia). *Mesopotamia* 5–6: 427–82.  
1982 La ceramica partica. Pp. 55–75 in *Tell Barri/Kahat 1: Relazione preliminare sulle campagne 1980 e 1981 a Tell Barri/Kahat, nel bacino del Habur*, ed. P. E. Pecorella and M. Salvini. Rome: Istituto per gli studi micenei ed egeo-anatolici, Consiglio nazionale delle ricerche.  
1984 Sasanian Pottery from Choche (Artisans' Quarter) and Tell Baruda. Pp. 49–57 in *Arabie orientale, Mésopotamie et Iran méridional de l'âge du fer au début de la période islamique: Réunion de travail, Lyon, 1982, Maison de l'Orient*, ed. R. Boucharlat and J.-F. Salles. Histoire du Golfe; Éditions Recherche sur les civilisations mémoire 37. Paris: Éditions Recherche sur les civilisations.
- 1997 Hatara, livello 9: La ceramica ellenistica. *Mesopotamia* 32: 131–61.
- 1998 Preliminary Report on the 1995 Excavations at Hatra. *Mesopotamia* 33: 261–73.
- 2008 Hatra e il suo territorio: Un problema storico. Pp. 139–68 in *Tell Barri: Storia di un insediamento antico tra Oriente e Occidente*, ed. R. Pierobon Benoit. La parola del passato 63. Naples: Macchiaroli.
- Vokaer, A.  
2011 *La Brittle Ware en Syrie: Production et diffusion d'une céramique culinaire de l'époque hellénistique à l'époque omeyyade*. Mémoires de la Classe des Lettres 3; Fouilles d'Apamée de Syrie 2. Brussels: Académie royale de Belgique.
- Waagé, F. O.  
1948 *Antioch-on-the-Orontes*, Vol. 4, Part 1: *Ceramics and Islamic Coins*. Princeton, NJ: Princeton University Press.
- Watkins, T., and Campbell, S.  
1986 *Excavations at Kharabeh Shattani*, Vol. 1. University of Edinburgh, Department of Archaeology Occasional Paper 14. Edinburgh: Department of Archaeology, University of Edinburgh.
- Weiss, H.; Akkermans, P.; Stein, G. J.; Parayre, D.; and Whiting, R.  
1990 1985 Excavations at Tell Leilan, Syria. *American Journal of Archaeology* 94: 529–81.
- Wilkinson, T. J., and Tucker, D. J.  
1995 *Settlement Development in the North Jazira, Iraq: A Study of the Archaeological Landscape*. Iraq Archaeological Reports 3. Warminster: Published for the British School of Archaeology in Iraq and the Department of Antiquities & Heritage, Baghdad, by Aris & Phillips.
- Woolley, L.  
1962 *The Neo-Babylonian and Persian Periods*. Publications of the Joint Expedition of the British Museum and of the University Museum, University of Pennsylvania, Philadelphia to Mesopotamia; Ur Excavations 9. London: British Museum; Philadelphia: University Museum, University of Pennsylvania.