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ABSTRACT

The Late Chalcolithic Pottery of the Malatya and Altınova Regions

Distinct but Overlapping Communities of Practice

Maria Bianca D'Anna – Akiva Sanders – Pamela Fragnoli

This paper focuses on the ceramic industries from the Malatya and Altınova Plains in the Upper Euphrates Region of Eastern Turkey at the end of the Late Chalcolithic Period (LC 5, ca. 3400–3200 BCE). We introduce the products of these industries in their historical contexts, by connecting them with regional trends from the end of the Early Chalcolithic Period, in their geographic contexts, by comparing them to ceramic assemblages from Upper Mesopotamia and Central Anatolia, and in their architectural and social contexts. The picture that emerges is one in which enduring local traditions of ceramic production continue alongside newly introduced traditions that preserve their distinctiveness in appearance, function, and production techniques, although they were mostly produced locally. The products of the various potter communities that were involved in these parallel industries were integrated on matters of food storage, preparation, and consumption that cross-cut these communities while also emphasizing their distinctiveness. However, despite these overall similarities, deep differences in paste recipes, production techniques, and inter-regional connections between the close-by Malatya and Altınova Plains persist during every period addressed in this paper.

KEYWORDS

Arslantepe (Malatya), Tepecik (Elazığ), Pottery, Late Chalcolithic

MARIA BIANCA D'ANNA – AKIVA SANDERS – PAMELA FRAGNOLI

The Late Chalcolithic Pottery of the Malatya and Altınova Regions

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Introduction

1 Located north of the Taurus range, which separates the Anatolian highlands and mountains from the Syro-Mesopotamian lowlands, the Upper Euphrates Region has often been the subject of scholarly interest, specifically concerning the way that it was affected by and to what extent it became an integrated part of different ›cultures‹, ›interaction spheres‹, or ›phenomena‹ – the Uruk and Kura-Araxes ones in particular. In this work we focus on the end of the Late Chalcolithic Period (hereafter LC), when the presence of Uruk-style material culture was widespread across Mesopotamia and the so-called Kura-Araxes expansion was beginning to unfold across Eastern Anatolia. In particular, we present and discuss the ceramic productions from Arslantepe, located in the Malatya Plain, and Tepecik, in Altınova, while also integrating evidence from other excavated sites in both regions, such as Değirmentepe, Norşuntepe, and Tülintepe from the Early Chalcolithic and the initial phases of the LC Period (fig. 1). At the end of the LC Period the ceramic assemblages at both Tepecik and Arslantepe consisted of well-defined categories of pots with divergent morpho-functional and aesthetic features that were produced according to different operational sequences. Our aim is to compare the two assemblages and explore the various dimensions and possible significance of their diversity. A brief presentation of the earlier ceramic productions in the Upper Euphrates Region will serve to better contextualize the different paths that these nearby sub-regions of the Malatya Plain and Altınova took after the Ubaid Period.

2 The Late Chalcolithic (LC) is a long-lasting phase, which covers some 1500 years from ca. 4700 to 3200 BCE according to the latest ^{14}C dates available; these are summarized in a table (fig. 2). Here we compare Arslantepe LC absolute chronology obtained from 86 samples dated via the beta counting method and 13 samples dated via

Title Page: Aerial photo of Tepecik during the 1972 field season

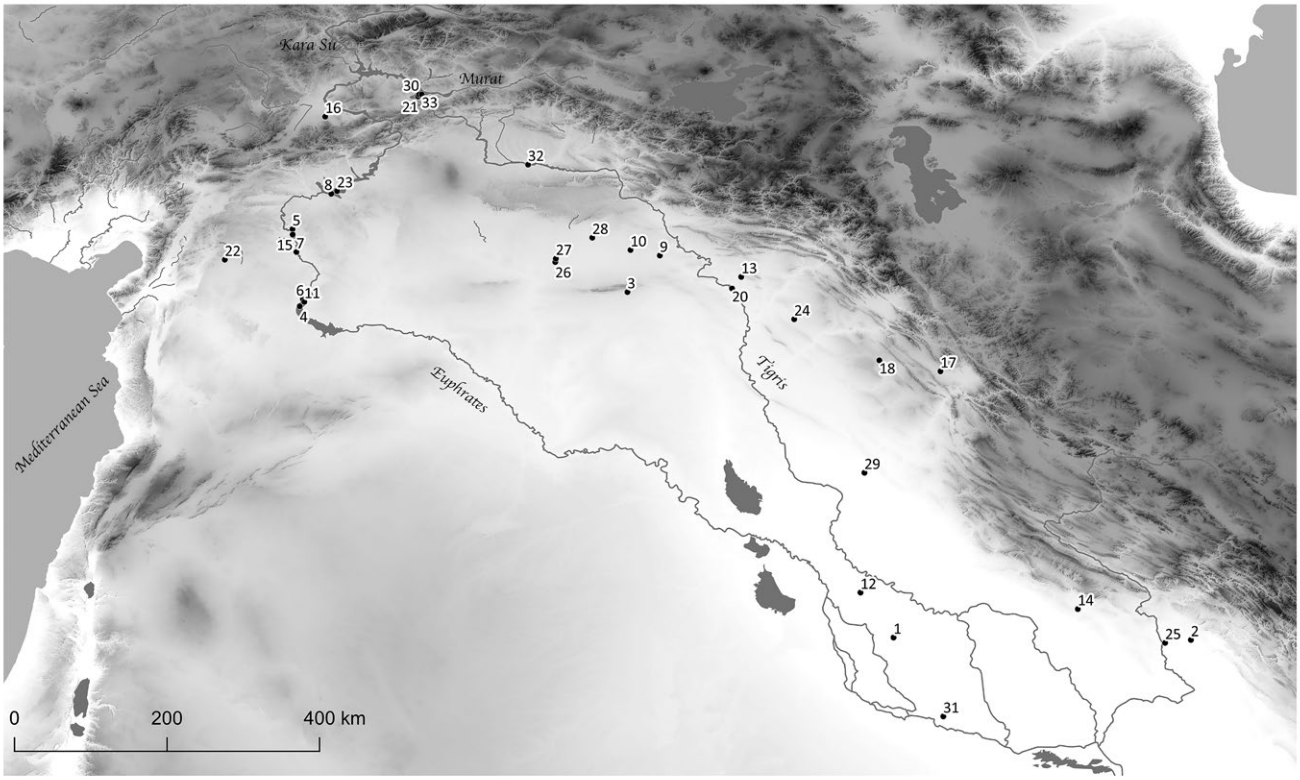

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Fig. 1: Map with main Late Chalcolithic sites: 1 Abu Salabikh; 2 Chogha Mish; 3 Grai Resh; 4 Habuba Kabira South Qannas; 5 Hacınebi Tepe; 6 Jebel Aruda; 7 Jerablus Tahtani; 8 Kurban Höyük; 9 Tell el-Hawa; 10 Tell Hamoukar; 11 Tell Sheikh Hassan; 12 Tell Uqair; 13 Tepe Gawra; 14 Teppe Farukhabad; 15 Zeytinli Bahçe Höyük; 16 Arslantepe; 17 Gerdi Resh; 18 Girdi Qala; 19 Logardan; 20 Nineveh; 21 Norşuntepe; 22 Oylum Höyük; 23 Samsat; 24 Surezha; 25 Susa; 26 Tell Brak; 27 Tell Feres al-Sharqi; 28 Tell Leilan; 29 Tell Rubeidheh and Tell Hassan; 30 Tepecik; 31 Uruk; 32 Giricano; 33 Korucutepe

Accelerator Mass Spectrometry with that of Surezha in the Erbil Plain[1]. Dates from both sites confirm an earlier absolute dating of the LC compared to traditional chronologies[2].

	Arslantepe	Surezha	Uruk	Upper Mesopotamia Late Neolithic
Late Chalcolithic 5	ca. 3400–3200 BCE (Period VI A)		End: 3350–3300 BCE	
Late Chalcolithic 4	ca. 3900–3400 BCE (Period VII)	ca. 3700–3400 BCE		
Late Chalcolithic 3		ca. 3850–3700 BCE		
Late Chalcolithic 2	ca. 4700–3900 BCE (Period VIII)	ca. 4500–3850? BCE		
Late Chalcolithic 1		ca. 5100–4500? BCE		
Ubaid		ca. 5500–5100? BCE		
Halaf-Ubaid Trans.		ca. 5800–5500 BCE?		ca. 5300–5100 BCE
Halaf				ca. 5900–5300 BCE

2

Fig 2: Most recent absolute dating for the Late Neolithic, Early Chalcolithic and Late Chalcolithic Periods

1 See Stein – Alizadeh 2016–2017; Stein 2017–2018.

2 Before this new data, the LC Period was believed to cover the time span between ca. 4200 and 3000 BCE (see for example Wright – Rupley 2001). Keeping in mind that these time slots simply establish a general framework and that changes in material culture might have occurred in different moments at different places, it seems reasonable that the earliest evidence of post-Ubaid/LC 1 Period in Northern Mesopotamia and the Upper Euphrates Region can be dated to 4800/4700 BCE at the latest and that the LC 5 Period in the same regions, as well as the Late Uruk in Southern Mesopotamia, might have ended earlier at ca. 3200 BCE (see also van Ess 2015 for Uruk/Warka).

3 In the second table (fig. 3) all the available dates for the Altınova sites from the pre-Early Bronze Age are reported[3]. It is difficult to integrate this data into our discussion for two reasons: firstly, all dates have a rather large standard deviation and, secondly, a single ^{14}C determination for one architectural level cannot establish a reliable absolute chronology.

Tepecik 16A Level 3 Building 1 Room BT2	3694–3377 BCE (95.5 %)
Norşuntepe J19 III/IV (possibly Level 8)	4040–3800 BCE (95.5 %)
Norşuntepe J18 III/IV (possibly Level 10)	4460–4233 BCE (95.5 %)
Korucutepe (Late ›Early Chalcolithic‹ V: Halaf?)	5470–5074 BCE (95.4 %)
Korucutepe Late Chalcolithic (XXX)	4330–4057 BCE (95.5 %)
Korucutepe Late Chalcolithic (XXX)	4317–4045 BCE (95.4 %)
Korucutepe Late Chalcolithic (XXXV)	4228–3716 BCE (95.5 %)
Fatmalı Kalecik	5292–4996 BCE (95.4 %)
Fatmalı Kalecik A7 (›Early Chalcolithic‹)	4777–4458 BCE (95.4 %)

3

Fig. 3: ^{14}C dates available for the pre-Early Bronze Age levels of Tepecik, Norşuntepe, Korucutepe and Fatmalı Kalecik

4 According to changes in the ceramic assemblages, the archaeological periodization of Upper Mesopotamian LC consists of five sub-phases, while in Southern Mesopotamia a tripartite chronology is commonly followed (i.e., Early, Middle, and Late Uruk Periods). Previously to the Santa Fe meeting[4], tripartite chronologies were also adopted for Upper Mesopotamia[5]. The adoption of a new chronological scheme had the positive consequence of overcoming inappropriate definitions of the northern LC, such as ›indigenous northern Uruk‹[6]. At Arslantepe three main phases have been identified (Periods VIII, VII, and VI A in the site sequence).

5 It has often been emphasized that the LC Period is the phase of earliest urbanization and state formation in Mesopotamia, for during this period we see a progressive increase in the evidence of economic stratification and social inequality. Entire regions were characterized by complex settlement patterns, with larger urban centers hosting monumental buildings and ceremonial districts. Complex bureaucratic systems were developed with clay sealings and *bullae* acting as actual documents. This bureaucratic environment provided the background for the emergence of writing in both Southern and Northern Mesopotamia at the very end of the LC, although only in the form of numerical tablets in the latter region. Within this new urban and hierarchical organization of society, the specialization of crafts was also an important element. Craft specialization implies a higher degree of economic integration and represents a significant component of social complexity[7].

6 In previous studies[8], researchers have also emphasized the increasing conformity of material culture throughout Mesopotamia in the LC. In levels dating to the middle and final phases of the LC Period, Southern Mesopotamian material culture is found at various Upper Mesopotamian sites. In addition, some settlements such as Tell Sheikh Hassan and Habuba Kabira South were founded along the Middle Euphrates River Valley, apparently by people coming from the south during this period. At the end

3 Data from Di Nocera 2000 and Esin 1981 (Tepecik). By re-calibrating the dates with IntCal 13, no significant differences emerged. For the Late Uruk Period level of Tepecik two other dates were attempted but they turned to be too recent (3000 ± 70 BP and 2912 ± 76 BP). The indication in Roman numerals for the Norşuntepe samples remains a mystery, as is also confirmed by G. M. Di Nocera, who received the data directly from H. Hauptmann (Di Nocera pers. comm. October 2019). However, we know that the first date was established on the basis of a sample collected on October 1st, 1973. At the end of the 1973 field season the team excavated Level 8 in the sounding J–K 18–19; as the sample originates from the square J19 it could have been collected in structure 7, 9 or 11 (which is actually only a small corner of a room dug near the excavation's limits). The second sample was collected on June 15th, 1974. The 1974 season was the last at Norşuntepe, and it began on May 23rd (Hauptmann 1982, 41); in J–K 18–19 they excavated Levels 9 and 10. It is possible that, after 25 days of excavations, when the availability of running water became urgent, they were digging Level 10, which is the lowermost level reached in this trench.

4 Rothman 2001.

5 Gut 1995; Helwing 2000.

6 For example, Oates 1993.

7 Costin 1991; for the case of LC Arslantepe, see also Fragnoli 2021.

8 E.g., Algaze 2004.

of the Late Chalcolithic (Phase 5 or Late Uruk Period), all of Mesopotamia apparently shared the same Uruk-style pottery.

7 However, this picture of the increasing scale and centralization of society has become more nuanced thanks to research which has explored diverse forms of social complexity in the Greater Mesopotamian world. Recent research in the Kurdistan Region of Iraq has provided a counterexample to the monotonic trajectories recorded in some other areas of Mesopotamia. Excavations along the Western Zagros piedmont have highlighted a persistent absence of urbanization and a continuation of local forms of material culture up until the end of the LC[9]. One case that challenged the often-assumed connection between urbanization and centralization is Tepe Gawra, a small site (less than 1.5 ha) where we see the settled area of the mound progressively decreasing and being replaced by a few monumental buildings. Here there is also evidence of administrative activities and workshops during the first half of the LC Period[10].

8 Arslantepe provides a further example of political and social differentiation in conjunction with economic centralization and practices of controlled redistribution that developed outside an urban structure or a complex landscape in terms of settlement hierarchy[11]. Here, many differences from the Uruk world are visible in the material culture, from the ways spaces and buildings were planned and arranged, to how everyday and more special objects were made and used or seals were decorated. Altogether, these differences materialize a form of power that was more secular and personal than the one observed in Southern Mesopotamia and that was possibly able to manifest control over a body of commoners that included more mobile communities.

The Malatya-Elaziğ Region: The State of the Art

9 Our knowledge of the Upper Euphrates Region is generally limited to two main areas. One is the Malatya Plain, where surveys and excavations have been carried out in a sustained way for decades. After two short-term French expeditions, Arslantepe has been excavated continuously since 1961 by an Italian team from Rome University. Around 1970, works started in the southwestern parts of the mound, where the prehistoric levels were well-preserved and more accessible. Thanks to this long-lasting commitment, the entire Late Chalcolithic sequence has been exposed in different sectors of the *höyük* and often in large areas, providing us with rich datasets. All the ceramic materials are available either at the Malatya Museum or at the excavation house, and are already presented in numerous publications[12]. The other area is the one now covered by the Keban Dam reservoir along the course of the Murat River, the southern tributary of the Euphrates east of Keban.

10 From the 1970s onwards the Euphrates and Murat rivers became an almost seamless succession of artificial lakes. These immense reservoirs profoundly changed not only the landscape and the microclimate, but also our knowledge of the settlement history of the region. The generally narrow Keban reservoir becomes larger in two areas: Aşvan, a 115 km^2 zone characterized by sedimentary rocks, and the alluvial plain of Altınova, a 370 km^2 intramountainous depression where the majority of ancient and modern sites were located. Since the mid-1970s all the cultural heritage and modern settlements of the region have been submerged, and 25,000 people needed to resettle[13].

9 D'Anna et al. 2022.
10 Tobler 1950; Frangipane 2016; Frangipane 2018a; Rothman 2002.
11 Frangipane 2018b.
12 Frangipane – Palmieri 1983; D'Anna 2010; D'Anna 2019.
13 Kolars 1986, 64.

The Karakaya Dam[14], which was completed in 1987, blocked the course of the Euphrates further south, approximately halfway between Malatya and Adıyaman, creating a reservoir 150 km long and covering a total area of 300 km^2. The area most affected by this dam is the northern part of the Malatya Plain, along the course of the Euphrates and Tohma rivers.

11 Between the end of the 1960s and the 1980s, the constructions of the Keban and Karakaya dams were accompanied by intense salvage field work in the region. Besides archaeological surveys[15], the excavations exposed Chalcolithic material culture and/or occupations at Çayboyu[16] and Fatmalı Kalecik[17] in Aşvan; Tepecik, Norşuntepe, Korucutepe and Tülintepe in Altınova; and Değirmentepe[18] and İkiz Tepe[19] in the Malatya Province. Indeed, when archaeological research started in Altınova, the ancient history of this region was rather nebulous and concrete interest in this area emerged nationally and internationally only when its submersion was an imminent threat[20]. A team from Istanbul University worked at both Tepecik and Tülintepe for several months each year from 1968 to 1974[21], Norşuntepe was excavated by the Istanbul branch of the German Archaeological Institute[22], and three excavation campaigns were carried out at Korucutepe by an international team of Chicago, Los Angeles and Amsterdam universities[23]. Even though Chalcolithic occupations are attested at Norşuntepe, Tülintepe, and Korucutepe, none of these sites seems to have been occupied during the final LC 5 Period, which is the main focus of the present work.

12 Korucutepe had a diameter of ca. 180/200 m and was 16 m in height. Besides Bronze and Iron Age levels, a Late Neolithic and Chalcolithic sequence, which probably ended in the mid-LC Period, was excavated with few architectural remains. Particularly interesting are two inhumations in tombs built with mud-bricks with rich grave goods that also include silver ornaments and a 16 cm-long silver dagger. The construction of the tombs in mud-bricks and the rich assemblage of funerary recall the burials of Tepe Gawra VIII, where gifts included gold, electrum and lapis lazuli[24]. A peculiarity of the Korucutepe burials is the relatively abundant presence of silver.

13 Norşuntepe consisted of a high, conical mound and a terrace with a more gentle slope, especially towards the south; the *höyük* measured 110 by 140 m at its base, but the total size of the settlement including the terrace was much greater (ca. 800 × 600 m). The mound was 30 m high at its peak, and the site has been emerging from the reservoir since at least 2004. To investigate the most ancient levels on the site, H. Hauptmann opened two trenches along the lower western slope (fig. 4): in the larger trench, J–K 18–19, ten levels were excavated, while the first four were deeply eroded and a large later defensive wall disturbed the levels up to the 7th one. Twenty-eight levels were recognized in the nearby *Tiefgrabung* (squares J–K 17), but only in Level 6 were significant architectural remains preserved. Further east at a slightly higher elevation (square L 19), a sterile level was found below the Early Bronze I vestiges. This finding, coupled with the lack of late Uruk-style residual materials in later fills, points

14 Özdoğan 1977, 4.

15 Özdoğan 1977; Whallon 1979.

16 Aksoy – Diamant 1973.

17 Wright – Whallon 1970; Wright – Whallon 1998.

18 Esin 1983; Esin – Harmankaya 1986; Esin – Harmankaya 1987; Esin – Harmankaya 1988.

19 Esin – Harmankaya 1991.

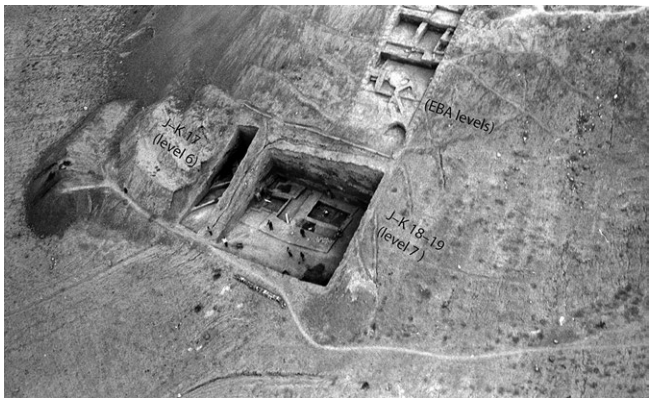
20 Özdoğan 2006.

21 Esin 1971; Esin 1972; Esin 1974; Esin 1976a; Esin 1976b; Esin 1979a; Esin 1979b; Esin 1982; Esin 1993; Esin – Aserbük 1974; Esin – Aserbük 1982.

22 Hauptmann 1969/1970; Hauptmann 1971; Hauptmann 1972; Hauptmann 1974; Hauptmann 1976; Hauptmann 1979; Hauptmann 1982; Schmidt 1996; Gülçur 2000.

23 van Loon 1978.

24 Rothman 2002.



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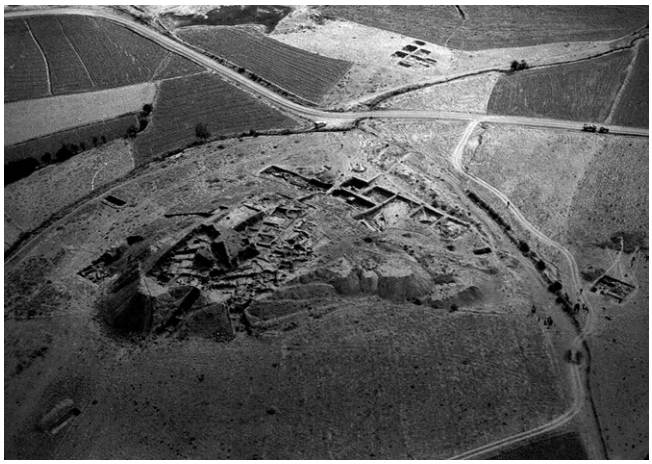

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Fig. 4: Aerial photo of Norşuntepe during the 1972 field season

Fig. 5: Aerial photo of Tepecik during the 1972 field season

to an abandonment of the site in the second half of the 4th millennium BCE.

14 Despite its name, Tepecik (fig. 5) was one of the largest mounds in Altınova; it measured ca. 3 ha and was 17 m high, but anthropogenic deposits continued well below the modern surface. Similarly to Arslantepe, Tepecik had a complex stratigraphy as a result of long-lasting occupations that shifted through time, from the Neolithic Period to the Middle Ages.

15 Chalcolithic levels were exposed in two areas. Taking advantage of a large cut into the north-eastern part of Tepecik main mound, a trench was opened in the squares 6–7/N–O to investigate some emerging stone architecture dated to the Early Bronze Age. A deep sounding was excavated just south of this operation in square 8–O. The sounding was 5 × 5 m large and occupied the north-western quarter of square 8–O, but for safety reasons it was reduced to 4 × 4 m in the lower part and further to ca. 1.7 × 1 m in the lowest two meters[25]. The virgin soil was reached at a depth of 22.55 m below the modern surface. The excavation took place at the very beginning of the work at Tepecik, during the field seasons in 1969 (up to Level 14) and 1970 (down to the virgin soil), and its aim was to obtain data concerning the earliest occupations on the site. Twenty-nine ›cultural layers‹ were detected in sounding 8–O, but only a few structures, such as a fireplace in Level 19 and a »floor paved with stones and sherds« in Level 24, could be recognized[26]. In the upper layers, besides the Early Bronze Age pottery mentioned in the publications, some pieces could actually be dated later (fig. 6, 1. 2: even if relatively coarse vegetal-tempered and badly fired, they might be Late Bronze Age rather than LC[27]; the same goes for the single grey, fine, burnished carinated cup). An abundant, though highly fragmentary, amount of LC materials was collected in this sounding, and can be mostly dated to the earliest phases of the LC Period. No Uruk-style pottery was found, although one large fragment of a ›Red-Black Burnished Ware‹ jar might be dated to the end of the LC Period (fig. 6, 3). Although very limited, sounding 8–O informs us that the occupation in this part of Altınova dates back to the Neolithic Period (fig. 6, 17–23) and continued into the early phases of the LC (fig. 6, 4–16).

16 In addition to this deep sounding, two LC 5 Period buildings were excavated in Level 3 of a trench located southwest of the main mound in squares 14–16 A–B–AB, to which we will refer here as Tepecik West (fig. 16). Two lower Levels (4 and 5) were also reached. Levels 4 and 5 do not have any excavated architecture associated with them, so we will focus in what follows on Level 3[28].

25 Esin 1971, 123; Esin 1972, 156 f.

26 Esin 1972, 157 pl. 111, 2.

27 See Manuelli 2013, fig. III, 31, 10 no. 1285.

28 According to personal communication with M. Özdoğan (2021), the area further west to this trench yielded Late Chalcolithic and earlier ceramics; also in this case, time constraints did not allow for proper investigation.

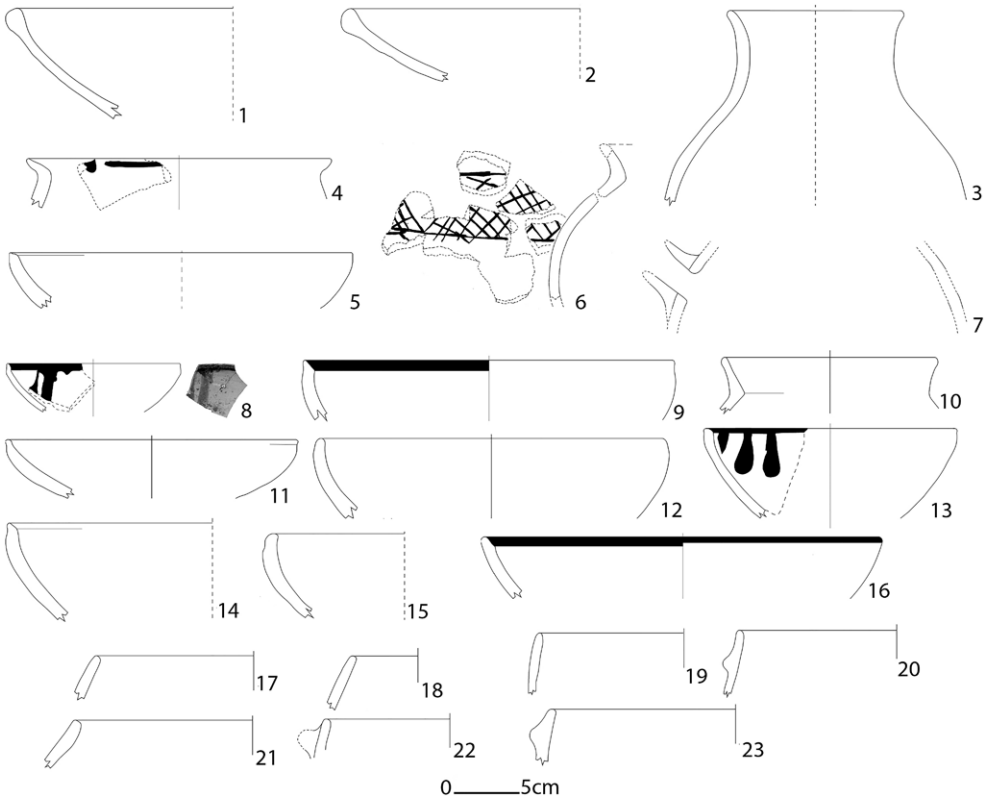

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Fig. 6: Selected ceramics from Tepecik 8–O sounding. 1. 2: Late Bronze Age bowls; 3: Red-Black Burnished Ware jar; 4–16: early LC pots; 17–23: Neolithic so-called Dark-Faced Burnished Ware. Scale 5 cm

Taking a Step Back

The Early Chalcolithic Periods in the Upper Euphrates Region

17 The beginning of the LC Period has been identified during the first half of the 5th millennium as a time when there was the breakdown of the Ubaid interaction sphere and a process of regionalization in ceramic production. During the Early Chalcolithic or Ubaid Period (i.e., Ubaid 3–4 in Southern Mesopotamia/Northern Ubaid in Upper Mesopotamia: ca. 5300–4700 BCE), a peculiar ceramic style characterized by black-painted motifs on ›Light-Colored Wares‹ – the so-called Black-on-Buff Ware – is attested at Southern and Northern Mesopotamian sites, as well as along the western coast of the Persian Gulf. The Mesopotamian Ubaid-Period settlements also shared a peculiar architectural model of large, tripartite, free-standing buildings for both domestic and non-domestic structures and a number of objects, such as clay sickles, tokens, and labrets, as well as practices of cranial modification, which are also attested in the so-called ophid-like figurines. The causes and significance of such similarities have been interpreted in different ways[29].

18 Recently, a stronger emphasis has been placed on the local diversity of the Ubaid communities[30]. This diversity is particularly noticeable in the Upper Euphrates Region. For example, an Early Chalcolithic village was excavated by U. Esin at the site of Değirmentepe in the Malatya Plain during the construction of the Karakaya dam. The material culture at Değirmentepe shows some Ubaid elements integrated with local features. At Değirmentepe, the characteristic Ubaid-style tripartite houses were not free-standing, but were rather arranged next to one another, sharing the same walls. G. Stein and R. Özbal have pointed out that this agglutinative pattern testifies to a completely

29 See Carter – Philip 2010 for a relatevely recent summary on this question.

30 Pollock 2010; Stein 2010.

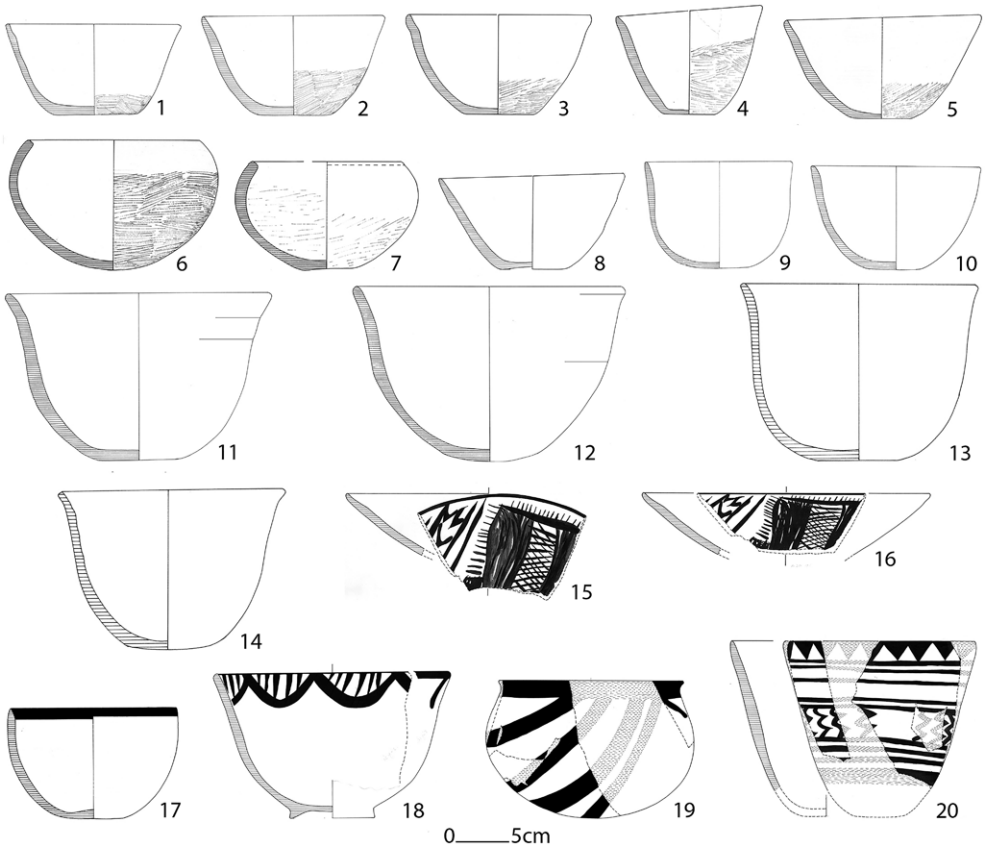

Fig. 7: Değirmentepe open-shaped containers. 1–5: so-called Coba Bowls; 6–14: light-colored bowls with and without scraping; 15–20: light-colored painted ware. Scale 5 cm

7

different organization of community life, when compared to the typical Ubaid villages where the tripartite houses are always well separated from one another[31].

19 The pottery found in this level includes Ubaid or Ubaid-related productions, such as the so-called Coba Bowls (fig. 7, 1–5; typically scraped but possibly some mold-made pieces are also attested: fig. 10) and a ›Cream-Colored Ware‹ with or without painted decoration (fig. 7, 8–20; fig. 8)[32]. However, Ubaid-style ceramics form only a limited part of the assemblage; also found are local Kitchen Ware and deep, closed-shaped containers in what Esin defined as ›Dark-Colored Burnished Ware‹, which is characteristic of the Upper Euphrates Region (fig. 9).

20 A similar panorama seems to characterize Altınova as well. Here, large-scale excavations of Ubaid occupations are missing, but at the site of Tülintepe Ubaid pottery was found once again associated with local dark and burnished productions. These are generally referred to as ›Dark-Faced Burnished Ware‹ and ›Graphite‹ or ›Mica Burnished Ware‹ (fig. 11), and they had been abundantly present at the site since the previous Halaf Period.

21 At Korucutepe, during Phase A, fragments of Halaf pottery are also associated with the so-called Dark-Faced Burnished Ware (strata IV–V). From stratum XIV, the painted Ubaid pottery appears[33] and from stratum 5 (end of Phase A) we also find Chaff-Tempered Ware. In the whole of Phase A, however, the Dark-Colored and Burnished Wares, often with applied decorations such as impressed horizontal clay bands, constitute as much as the 80 % of the production. Similarly, at Norşuntepe, S. Gülçur[34] distinguished three wares characterized by dark shades: Ware 1, or ›dunkel polierte Ware‹

31 Stein – Özbal 2007.
32 Esin 1983.
33 van Loon 1978, 7.
34 Gülçur 2000.

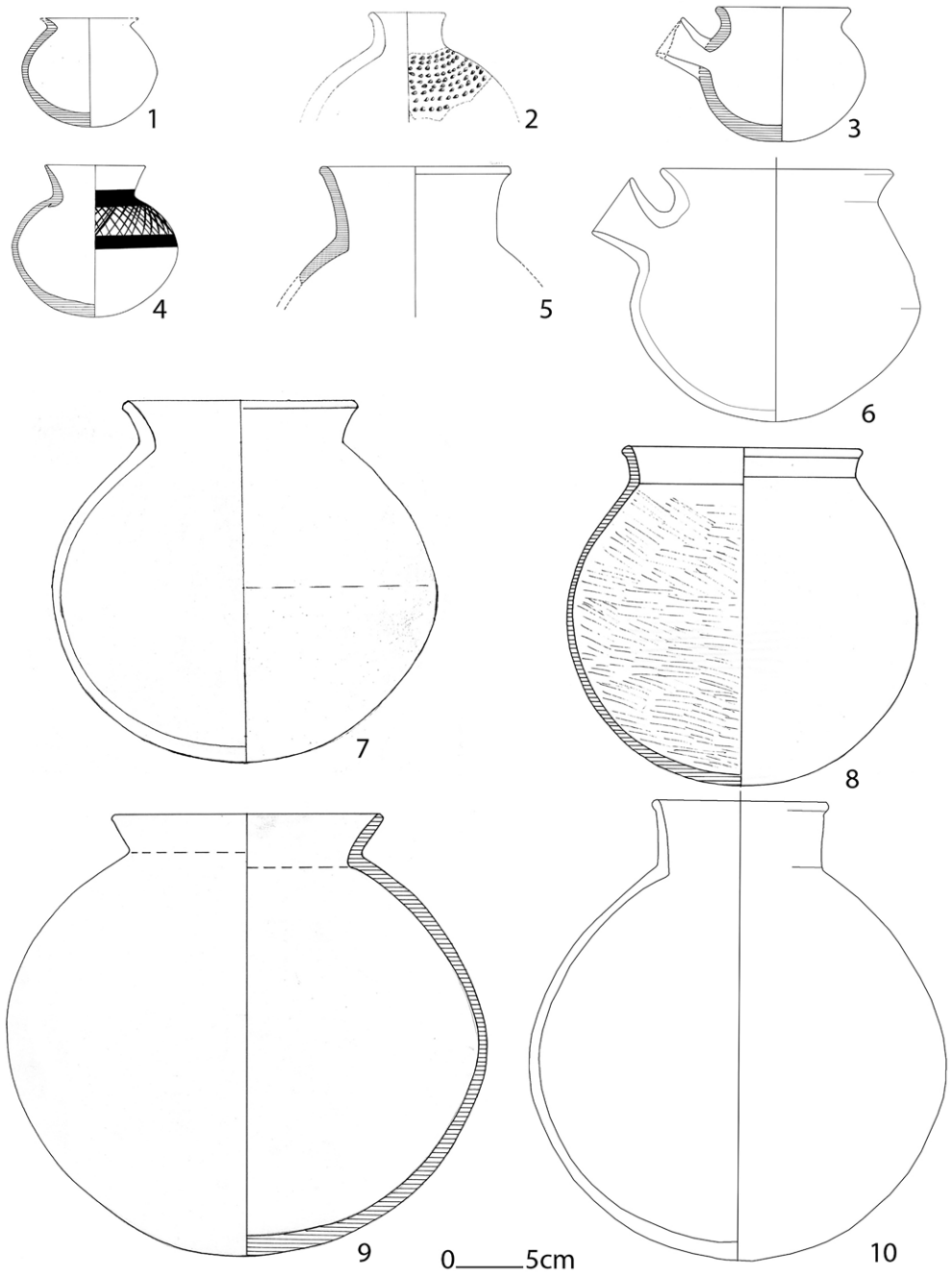

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Fig. 8: Değirmentepe light-colored close-shaped containers. Scale 5 cm

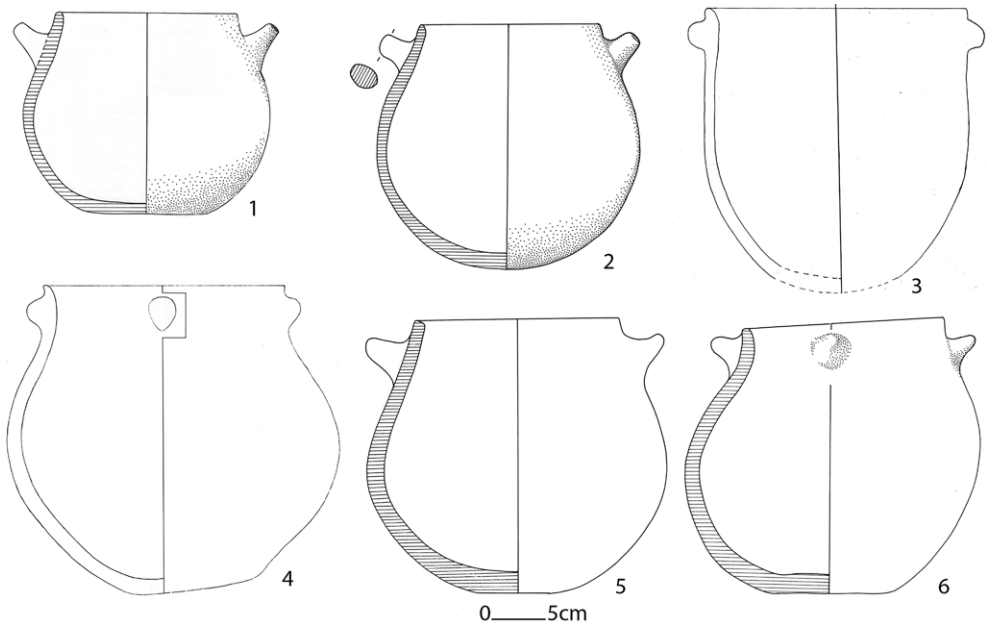

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Fig. 9: Değirmentepe dark-colored cooking ware. Scale 5 cm

10 11

Fig. 10: Surface treatments on Ubaid-period bowls from Değirmentepe. Scale 5 cm

Fig. 11: Tülintepe examples of so-called Dark-Faced Burnished Ware (left) and Mica-Slipped Ware (right). Scales 5 cm

(Dark-Faced Burnished Ware), Ware 2 or ›Graphitüberzug Ware‹ (Graphite-Slipped Ware), with very shiny grey surfaces and a metallic appearance[35], and the Dark Unburnished Ware 3 (Kitchen Ware; see above, fig. 9), which is much less attested. Shapes and decorations are also shared among all these sites: the typical bag-shaped and hole-mouthed jar with a simple rim often includes lugs or an applied clay band, which is sometimes incised. On bowls, small round lugs are sometimes present.

22 At Tülintepe, a whitish, unburnished type of ceramic is also attested. This looks very similar to the light-colored matt ceramics (both slipped and un-slipped) that have been found in the Malatya Plain as well, at the small site of İkiz Tepe (fig. 12). After a few weeks of exploration by the Değirmentepe team, İkiz Tepe is now on the shore of the Karakaya reservoir and has been further surveyed by the project directed by G. M. Di Nocera[36].

23 The excavations at Arslantepe have not yet reached these levels, but we do know that there is an Ubaid and a Halaf Period occupation, thanks to unmistakable residual painted ceramics and some fragments of the ›local‹ productions found in later deposits[37].

24 To sum up, during the Early Chalcolithic Period, similar ceramic productions were apparently produced within the Malatya and Altınova Plains. In the area of Malatya and Elazığ, the circulation of Ubaid pottery with Mesopotamian origins took place within local contexts with a strongly conservative ceramic tradition that co-existed with the new Ubaid wares through time. In both areas, Mesopotamian Ubaid-style and local ceramics formed a varied assemblage with apparently important functional differences, as is testified at the better-documented site of Değirmentepe, where cooking and some storage practices were performed in local types of ceramics, characterized generally by a shiny and dark appearance and often featuring lugs and handles. At the same time, the storage of liquids as well as the consumption of food and beverage were done with light-colored, matt Ubaid-like wares, such as elegant painted bottles, necked jars, and bowls, but also more roughly made, scraped mass-produced bowls. This points to both the co-existence of different social milieux where food was consumed and the emergence of formalized events that went beyond solely the domestic sphere[38].

25 Moreover, evidence of widespread sealing practices, in the form of both seals and *cretulae* found in several buildings, supports the likelihood that these were new forms of economic integration and control within different sub-groups of the

35 Whallon 1979 refers to ›Graphite-Slipped Ware‹, while Esin generally wrote about ›Mica-Slipped Ware‹ (Esin – Aserbük 1974; Esin 1982; Esin 1993).

36 D'Anna et al. 2008; Di Nocera 2008.

37 See Balossi Restelli 2019, fig. X, 68, 9. 10.

38 See Kennedy 2012, 131.

community. Değirmentepe also presents other important features. The size of the Ubaid-Period occupation probably corresponds to the whole archaeological mound, ca. 3 ha, which is a significant size for Eastern Anatolia, and the presence of slags, copper ores and crucibles points to relevant metallurgical activities at the site[39]. Therefore, at least in the Malatya Plain, we see some incipient forms of economic differentiation, concentration of population and formal commensal events, which are similar to trends in Mesopotamia as a whole. What we want to stress here, is the co-existence of Mesopotamian styles with different, local, ceramic traditions, which can also be divided functionally.

The LC 1–2 Periods in the Upper Euphrates Region

26 At the beginning of the LC Period all over Upper Mesopotamia, we see a drastic drop and ultimately a disappearance of painted wares[40]. This aesthetic change is accompanied by an increasing use of chaff as temper (which allows quicker drying and firing procedures), faster treatments of vessel surfaces by the adoption of scraping as a finishing technique, and the mass-production of bowls, which was already attested in some northern Late Ubaid contexts. Besides these general characteristics, the entire first half of the LC Period saw increased regionalization between Northern and Southern Mesopotamia, Northern Mesopotamia and Eastern Anatolia, and at a more regional level between the Malatya and Altınova Plains[41]. In Altınova, the dark and burnished ›local‹ ceramics of the earlier tradition apparently continue to be attested in the earliest LC levels, even though in many multi-period tell-sites, it is difficult to estimate the weight of potential residual pottery in later contexts, especially in filling layers[42].

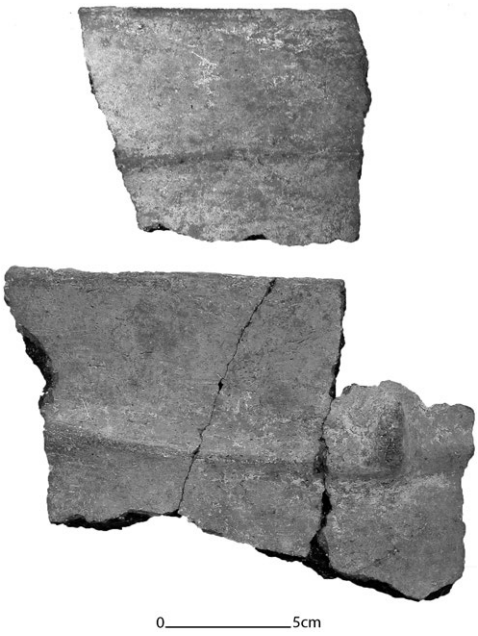

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Fig. 12: Light-colored unburnished ceramics from Ikiz Tepe (Malatya). Scale 5 cm

27 In Altınova, early LC levels have been more extensively dug at Norşuntepe, where part of an edifice with a large hall was excavated in the lowermost level reached in the larger trench on the western slope (J–K 18–19, Level 10). This level also yielded a high concentration of coarse truncated-conical bowls, heavily tempered with chaff, that attest to the mass-production of containers for food/drink consumption. In Level 10, most of these containers were concentrated in one room, which may have been a kind of storage space. At Norşuntepe, these ›Wide Flower Pots‹ present rough, unfinished external surfaces. From a macroscopic evaluation, a large majority of them seem to be mold-made (fig. 13 right) and only sometimes scraped, rather than only scraped, as is very often the case at other LC sites (to judge from various publications)[43]. In the southern extension of Tell Hamoukar, S. Al Quntar and colleagues have documented Wide Flower Pots, both mold- and hand-made, in the LC 1–2 levels[44]. Another helpful comparandum can be found at Tepe Gawra, where, starting in level XI, A. J. Tobler notes that »the more common variety [of bowls] has a flat base, sharply expanding sides, and ›rough, irregular surfaces‹«[45].

39 Özbal 1984; Özbal 1986.

40 See Sanders 2020.

41 See Helwing 2000; Frangipane 2012.

42 We can take an example from our experience at Arslantepe, where in the rooms of the LC 5 Period residual pottery and non-datable tiny fragments might account for the 20 to up 50 % of counted sherds (D'Anna 2019); these rooms are wonderful examples of primary contexts, destroyed in a rapid conflagration and with walls often preserved to more than 1.5 m in height. As a matter of fact, residual ceramic frequently occurs in mud-bricks or might end up in the deposit when ruins are levelled and filled up to build new construction.

43 See for example Schwartz 1988, pl. 15; Matthews 2003.

44 Al Quntar et al. 2011, 157, fig. 6, 1–4; see also Abu Jayyab 2012.

45 Tobler 1950, 152, our emphasis.

Fig. 13: Close-ups of Norşuntepe Mass-Produced Bowls

13

28 According to S. Gülçur's counts[46], 5302 fragments of this type of bowl come from Norşuntepe Level 10; this represents 56 % of all materials pertaining to this architectural complex and, more importantly, corresponds to 91.2 % of this ware in the entire sequence of trench J–K 18–19. Already in Level 9, the percentage sharply drops to about 7.4 % of the material from this building phase. In the deep sounding J–K 17, 53.6 % of these bowls are found concentrated in Levels 7 to 11, which might therefore be contemporary with Level 10 in J–K 18–19. Chaff-tempered pots with painted triangles and filled with a cross-hatched motif are also attested at Norşuntepe (fig. 14)[47] and they find good comparisons in the Upper Tigris and Eastern Jazeera at sites such as Tepe Gawra, Giricano, and Tell Hamoukar, to mention only the better-known ones[48]. Fine impressed carinated beakers and the so-called Sprig Ware found in LC 1–2 levels at Norşuntepe (fig. 14) are again to be found in some areas of Northern Mesopotamia, for example at Tepe Gawra XI–IX and Tell Hamoukar[49], although not Giricano. In the collection present at Istanbul University from Tülintepe and Tepecik, we could not find any pieces of mass-produced bowls similar to Norşuntepe and Tepe Gawra, nor are these reported in previous publications. However, a few sherds of fine stamped Gawra Ware are attested at Tülintepe (fig. 14), although none were found at Tepecik. Conversely, fragments of painted jars in the same style as examples from Tepe Gawra and Norşuntepe were found in the deep sounding in square 8–O at Tepecik, but not in the Tülintepe collection. A few pieces are also attested at Arslantepe (fig. 14).

29 At Tülintepe, we find some scraped bowls with a simple profile or thinned rim. Scraping also occurs on bowls either with a bead rim or with an internally beveled and painted rim. At Norşuntepe, the bowls with an internally beveled rim with or without a painted band are mostly common in Levels 5–7 in trench J–K 18–19 (although individual occurrences are also found in Levels 8 and 9, but these might be out of context); in J–K 17 they are attested only in the uppermost six levels. At Norşuntepe and Tülintepe some of the painted bowls occur with scraping on the exterior, while at Tepecik they are rarely scraped. As the scraping on this bowl is also attested at Hamoukar LC 1, where they present a more roundish profile as at Tülintepe, it appears that Tülintepe and Norşuntepe have a complete LC 1–2 sequence, while Tepecik was possibly not occupied during the LC 1 Period, or at least not in area 8–O.

30 At Arslantepe LC 1–2 (Period VIII), no mold-made, truncated-conical Wide Flower Pots are attested[50]. Most commonly ceramics are mix-tempered and coarse. Light

46 Gülçur 2000, tab. 2–6.
47 Gülçur 2000, fig. 48, 7. 12.
48 Tobler 1950, cat. 408; Al Quntar et al. 2011, figs. 7. 19; Schachner 2020, figs. 156–158.
49 Tobler 1950, pl. CXLV; Al Quntar et al. 2011, figs. 8. 9.
50 Balossi Restelli 2012, fig. 5 j–l.

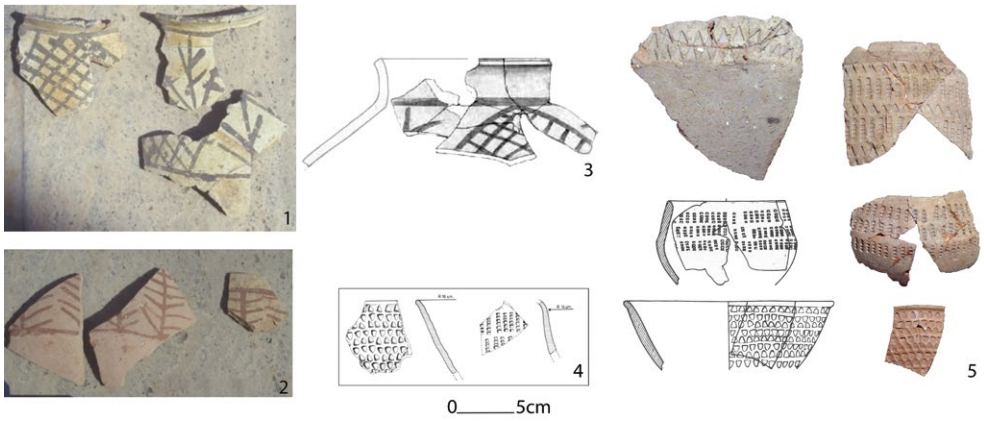

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Fig. 14: ›Gawra-related‹ wares from 1. 2. 5: Norşuntepe; 3: Arslantepe; 4: Tülintepe

scraping typically covers the body of dark-colored globular jars with short everted collars (mostly cooking pots)[51], which are very typical of this period together with burnished bowls with multiple grooves under the rim[52]. Both types are not attested in Altınova, but comparisons can rather be found at Oylum Höyük in the Gaziantep Province[53] and for a few types with Hammam et-Turkman (VB) on the Balikh River[54]. ›Light-Colored Chaff-Faced Wares‹ are also present and are used to produce both bowls and jars. The decoration is provided by simple incised patterns: typically, on the ›Dark-Colored Scraped Ware‹ incisions are very light, while on light-colored vegetal-tempered wares the lines are deeper and larger. The functional repertoire is more varied and also includes small and large vessels that seem suitable for liquid contents.

31 In these levels, 15 % of the counted sherds at Arslantepe belong to an assemblage of so-called mass-produced bowls, which are made in a light-colored chaff-tempered ›Plain Ware‹ and are usually better fired than the rest of the pots[55]. Their shape is characterized by a round base, which is always scraped[56]. There, the mass-produced bowls, although more common than other types of open-shaped containers, are more coarsely and quickly made than ›mass-produced‹. In contrast, the coarser bowls from Norşuntepe J–K 18–19 Level 10 can really be said to have been mass-produced in a large number of pieces.

32 As highlighted in previous publications by different scholars[57], the ceramics from Arslantepe are rather different from those found in Altınova in terms of both fabrics and shapes. However, at Korucutepe, during the second half of Phase B, light brown pottery with predominantly mineral inclusions but which has also been tempered with straw becomes common. This description seems to fit well with the Arslantepe VIII most common ware. The surfaces of these ceramics are sometimes untreated, but in other cases they are either scraped or burnished. We also find rare specimens with incised or impressed decoration. One of these from stratum XXXIX[58] recalls the incised ceramics of Period VIII of Arslantepe and LC Oylum Höyük.

33 In general, Arslantepe Period VIII ceramics have very little in common with the Upper Mesopotamian LC 1 and 2, while the villages of Altınova testify to shared

51 Balossi Restelli 2012, fig. 4.
52 Balossi Restelli 2012, fig. 6.
53 Özgen et al. 1999.
54 Akkermans 1988.
55 Balossi Restelli 2012, 239.
56 Balossi Restelli 2012, fig. 5 j–l.
57 D'Anna 1999; Balossi Restelli 2012; Frangipane 2012.
58 Brandt 1978, tab. 107, 5; 140, 2 right.

models and technologies of ceramic production with the Eastern Upper Mesopotamian world. The Malatya and Altınova Plains showed mutual contact during the previous Ubaid Period, not only because of the shared Ubaid influences adopted in both areas but also from the signs of more local productions that related to everyday practices of food preparation and storage. In Altınova, these ›local‹ ceramics were probably still produced in the early LC, but this does not seem to have been the case in the Malatya Plain, where the change at the end of the Ubaid Period seems more radical.

34 So far, there is no evidence of economic and social differentiation at LC 1–2 Arslantepe (Period VIII); the settlement was probably small and no monumental communal buildings have been discovered. On the contrary, the presence of a building with evidence of large-scale commensal practices at Norşuntepe associated with metalworking in the same level might indicate the presence of households that were able to concentrate resources. The presence of the same fine table ware at Norşuntepe, Tülintepe, and in the Eastern Upper Mesopotamian sites (see above) might indicate some form of special and exclusive commensal occasions that could distinguish members of these elite groups/households within the community, but integrate them at an intercommunal level.

The LC 3–4 Periods in the Upper Euphrates Region

35 The following LC 3–4 horizon is once again a phase with few direct parallels in ceramic assemblages between the Malatya and Altınova Regions. Divergences mostly concern the formal repertoires, while chaff-tempered and often chaff-faced wares are the norm in both areas and well beyond. At Arslantepe, the vegetal-tempered pastes are coarser and include more chaff than in Altınova, where we can generally talk only about chaff-tempered, rather than chaff-faced, ware.

36 Again, thanks to the work of S. Gülçur, the data from the larger trench at Norşuntepe shows a marked increase of chaff-tempered/faced wares from 22 % in Level 10 to 56 % of the pottery of J–K 18–19 Level 5[59]. In Altınova, bowls with a club rim seem to continue from the previous phase and form a significant part of the open-shaped assemblage. A few pieces at Tepecik are executed in a sort of ›Grey Ware‹, as they are in Eastern Upper Mesopotamia and east of the Tigris during the LC 3 Period[60]. Jars with internally grooved rims are another common element in the two areas.

37 Arslantepe LC 3–4 ceramics were excavated in a large number of different contexts that cover a long stratigraphic sequence in various parts of the mound. LC 3–4 pottery shows elements that point to a new organization of the production and a richer repertoire of shapes, which suggest a need for more specialized kinds of containers. There is also a strong taste for red-slipped and burnished surfaces, which are much rarer in Altınova but can be found in Phase F of the Amuq sequence[61]. The mass production of bowls escalated, and through time a truncated-conical profile became more typical. Two main groups within the assemblage can be defined by their manufacturing technique: the handmade vases, which form a smaller part, and those produced with the help of a rotating device, which are typically chaff-faced or chaff-tempered and which also include potters' marks. While some pots were still produced at a household level, the majority of the pottery was produced within a more centralized system. Indeed, the settlement during Period VII grew in size from the previous Period VIII, and through time also became more internally structured, becoming a kind of ›proto-urban center‹ where homes belonging to different social classes began to be segregated in different areas.

59 Gülçur 2000, tab. 3.

60 Hijara 1976, 76; Gut 2002; Al Quntar – Abu Jayyab 2014; Gavagnin et al. 2016, fig. 9, 2; Vallet et al. 2017, 79; Minc et al. 2019; Sconzo 2019, 151; Renette et al. 2021, figs. 10, 1; 11, 3.

61 Braidwood – Braidwood 1960, 238–241.

38 According to the recent study by F. Balossi Restelli, the ceramic repertoire of the LC 3–4 Period at Arslantepe comprises eight different wares and nine functional groups, which are further subdivided into 37 formal types, each one of which is often realized in different wares[62]. In other words, some morpho-functional groups of containers are produced not only in different pastes but also in different production circuits.

39 Both at Arslantepe and in Altınova, some very typical ceramic types of LC 3 Northern Mesopotamia, such as ›Casseroles‹ and ›Hammerhead-Rim Bowls‹, are totally missing. A very similar phenomenon is observable in the Zagros piedmont in the Kurdistan Region of Iraq; here, Casseroles and Hammerhead-Rim Bowls are extremely rare, if not absent, at many sites in the Sulaymaniyah province (in the Shahrizor, Bazian and Chamchamal Plains)[63] and Erbil Plain[64]. Nor are they attested in the surface collections of the EPAS, UGZAR, MAFGs, LoNAP and EHAS survey projects[65].

40 During the LC 3–4 the ceramic assemblage at Arslantepe seems rather conservative over time, but changes in both the ceramics and their social context can be seen toward the end of the LC 4 Period. In this phase, a new class of hand-made, burnished either monochrome or bichrome ceramics appeared, which was realized with raw materials that were locally available but never used in the past[66]. The bichrome ›Red-Black Burnished Ware‹ had a long history further west, where it is already attested in the beginning of the 6th millennium in the Eastern and Western Central Anatolia around 5200 BCE and the Black Sea Region by 4800 BCE[67]. Secondly, jars with cylindrical necks seem to be a novelty of the LC 4 Period at Arslantepe. Thirdly, a specialized sheep- and goat-oriented husbandry characterizes the economic life by the end of the LC 4 at Arslantepe. Finally, two large tripartite public buildings where a huge quantity of mass-produced bowls was used were constructed in this phase. From the deposition of numerous clay sealings in these ceremonial buildings, we can infer that the large-scale consumption of food in events such as work feasts took place under some form of administration[68].

The LC 5 Periods: Arslantepe VI A and Tepecik West 3

Architecture and Site Organization

41 The LC 5 Period at Arslantepe (Period VI A) was probably a relatively short phase, which eventually ended due to a violent and abrupt conflagration that allowed the preservation of numerous finds on the floor of the buildings belonging to the final use phase. These have already been discussed in detail in a number of publications[69]. The shape and organization of the architecture (fig. 15), the sophisticated metallurgy, the frequent use of stamp rather than cylinder seals, and the symbolic and stylistic elements of both glyptic repertoire and wall paintings all follow specific local traditions. During this period, the settled area at Arslantepe mainly hosted a complex of public

62 Balossi Restelli 2019, tab. X, 3.

63 Vallet et al. 2017; Giraud et al. 2019; Renette et al. 2021; D'Anna et al. 2022.

64 Peyronel et al. 2019.

65 I.e., the Erbil Plain Archaeological Survey (Ur 2015; Ur 2017; Ur et al. 2013); the Upper Greater Zab Archaeological Reconnaissance Project (Koliński 2016); the French Archaeological Mission in the Governorate of Sulaymaniyah; the Land of Nineveh Archaeological Project (Morandi Bonacossi 2015; Gavagnin et al. 2016; Iamoni 2016); the Eastern Khabur Archaeological Survey (Pfälzner 2015; Pfälzner – Sconzo 2016; Sconzo 2019).

66 Fragnoli – Palmieri 2017.

67 Schoop 2011, fig. 7, 1.

68 D'Anna – Guarino 2010.

69 Amongst others: Frangipane – Palmieri 1983; Frangipane 1997; Frangipane 2007; Frangipane 2010; D'Anna 2012; Frangipane 2016; D'Anna 2019.

Fig. 15: Arslantepe Period VI A architecture. Scale 15 m

buildings, in which elites performed different economic, political and administrative activities. Buildings were arranged next to one another, terracing what was already an artificial hill at that time. One repeated plan presents a larger room joined on one side to two smaller spaces and a staircase well. Most of these bipartite buildings display special features, such as platforms and unusual fire installations, and in their rooms large assemblages of ceramic vessels have often been found. At Arslantepe we also have widespread evidence of administrative control that was mainly exerted over food, as sealing practices were most frequently attested on ceramic containers. During the LC Period power relations and obligations between different sectors of the society were largely constructed around food management and through new forms of formal commensality, such as the redistribution of meals and feasts.

42 In Altınova, LC 5 levels were excavated only at Tepecik, where in squares 14–16 A–B–AB (Tepecik West Level 3, see above), below an Early Bronze Age 1 layer with pits (Level 2), two mud-brick buildings on stone foundations were exposed (fig. 16)[70]. So far, these buildings have not been completely published, so we will include a summary of their architecture and finds here. At the beginning of the Level 3 occupation, a southern building (the ›Old Building‹) was constructed, of which only the eastern part remains preserved. Shortly after this, the northern building (Building 1) was built. Both of these buildings had monumental stone foundations and were used together until the final phase of the use of Building 1, Phase 3a, when its plan was significantly altered. In its original construction, Building 1 was possibly inspired in form by the tripartite building plan that had already been abandoned at Arslantepe VI A[71]. The middle section of the building, which was open at both ends, suggests some sort of gate or entrance-way to a larger functional section of the site, which remains unexcavated. In this central section (spaces CF, FD and BM), bowls and small jars have been found. This passageway is marked on either side by header stones in the building's stone foundations and is continued to the west of the building by two lines of unworked stones. Given its location on the western foot of the mound, this building might have functioned as a gate for the site itself. Further southwest, area BK is possibly a courtyard delineated by the walls of both buildings and several irregular lines of stones; however, it contained a relatively large concentration of ceramics, which is surprising for an open space[72].

43 In addition to the architectural interpretation of Building 1 as a gate or passage-way, we cannot overlook the fact that the assemblage of finds within the building suggests a much richer set of functions within the social life of the Tepecik settlement. As a matter of fact, in the earlier-use phase of the Level 3 buildings, there were a number of areas containing assemblages of objects that suggest different industrial, storage-related, food preparation, as well as consumption activities both within and outside these buildings[73]. Area BK, an outside courtyard area which was delineated by the walls of both buildings and several irregular lines of stones, contained a ceramic assemblage that suggests both storage and consumption functions. The discovery of five complete storage jars with sizes from small to large and a spouted bottle suggests a significant concentration of liquid and semiliquid resources. These storage vessels concentrate in the southeastern portion of the courtyard. The types of complete consumption vessels found, such as ›Handmade Burnished Bowls‹, a ›Beveled-Rim Bowl‹, a ›High-Stemmed Bowl‹, and a cup, also suggest the consumption of several different types of food and drink.

70 Esin 1982; Sanders 2021, 99–107.

71 Esin 1982, pl. 69.

72 Sanders 2021, fig. 2, 21.

73 See Sanders 2021, fig. 2, 20.

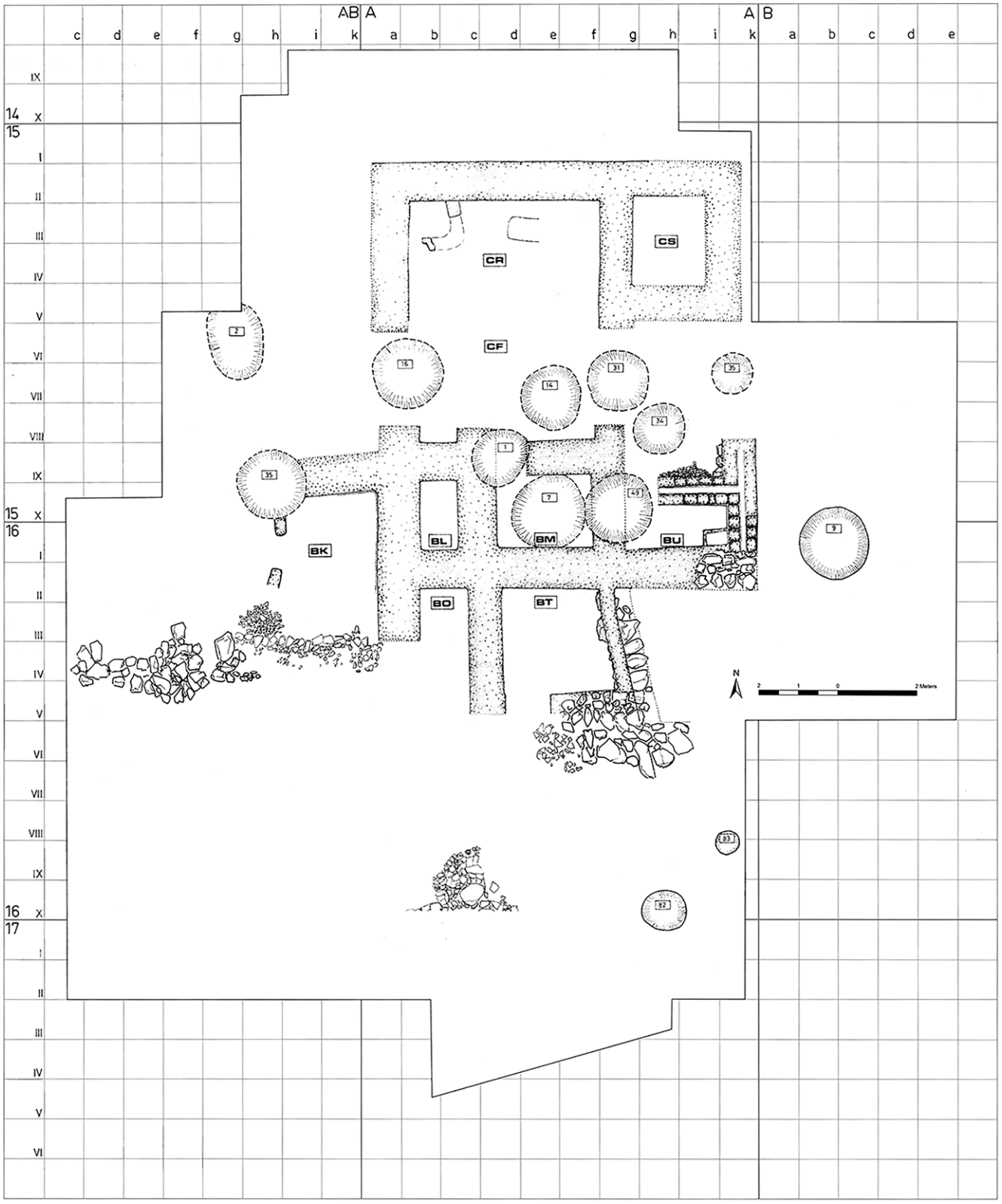

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Fig. 16: Tepecik West (squares 14–15–16/AB–A–B) Level 3: plan of the younger Phase 3a. Scale 2 m

44 A second functional area is the central section of Building 1 (passageway CF and the adjoining rooms FD and BM), where a variety of food and drink consumption and serving vessels were found, including small Handmade Burnished Jars, a ›Four-Lugged Jar‹ with simple plastic decoration, Handmade Burnished Bowls, and a Beveled-Rim Bowl.

45 Moving southward, we find two possible areas of concentrated craft production. The first is room BT, which joins Building 1 to the Old Building. This room was found to contain two spindle whorls and a perforated sherd, as well as a bone awl, a clay andiron, and a grinding stone. These findings point to a number of different craft activities that may have taken place in this space, including small-scale textile production, leatherworking, and food, cosmetic, or paint preparation. Further south, a concentration of bone and copper awls in the northern room of the Old Building indicates a more focused industrial use for parts of this building, which were possibly related to leather working. However, the seemingly leisurely abandonment of the Old Building makes it likely that the finds in this building are biased by the removal of many items that were still serviceable to other areas that were still in use.

46 In Phase 3a (fig. 17), after the Old Building fell out of use, area CF retained its function as a passageway, but the overall plan of Building 1 became less symmetrical. This perhaps highlighted the spatial needs of the industrial functions of particular rooms, rather than the cohesive monumental appearance of the building. In the northern part of the building, room CR seems to have been used for concentrated metal production, with copper ore and slag being found in the vicinity of a large hearth[74]. A miniature bowl that might have been used as a crucible was also found nearby in area CF. The northern portion of area BK, now a better-defined room delineated by mud-brick walls, again seems to have been used for storage. While still containing some diminished evidence for ritualized consumption events in the form of a fenestrated High-Stemmed Bowl and a relief-decorated small Burnished Jar, there are also remains of a wider range of industrial activities: flint blades, bone awls, a grinding stone, and perforated sherds. Room BT in this later phase seems to have been used for food preparation and small-scale consumption with cooking pots, a pestle, a cup, and jars.

47 The interpretation of the room BU is surely more complicated. In this small space there was a concentration of flint blades which were likely intended for agricultural use, several of which were found in a small jar[75] as well as flint nodules in the corresponding trench[76]. However, a ›Cooking Pot‹ and a number of Beveled-Rim and Plain Ware Bowls were also present in this space, together with a built mud-brick chamber burial of a baby that included a necklace made of stone beads[77]. This burial accords with the mortuary evidence for social stratification from birth that can be seen at Arslantepe and other LC Northern Mesopotamian sites, such as Tepe Gawra or (earlier) Tell Abada[78], but its discovery in what seems to be either a small storeroom or a workshop within a public building is somewhat puzzling. However, the combination of industrial and ritualized functions in room BU is reminiscent of room BK in the same phase.

48 The precise functions of the architectural spaces at LC 5 Arslantepe and Tepecik differ significantly. Those at Arslantepe emphasize feasting, administrative and symbolic functions, while those at Tepecik emphasize production. However, in both cases, we are presented with a set of buildings that are monumental in scale, mainly non-domestic in function, and that served to centralize economic aspects of their respective settlements. The scale of the attested economic activities is more intense at Arslantepe than at Tepecik, but we do not know whether this reflects an actual difference between the two sites, or whether it is rather the results of the different sizes of the excavated exposures at the two sites.

74 See Esin 1982, 109.
75 Sanders 2021, fig. 2, 22.
76 See Esin 1974, 135.
77 See Esin 1979a, 109.
78 Jasim 2021, 20–28. 117 f.

17

Fig. 17: Tepecik West (squares 14–15–16/AB–A–B) Level 3: plan of the older Phase 3. Scale 2 m

Features of the Ceramic Assemblages of Arslantepe VI A and Tepecik West 3

49 As has already been noted years ago by M. Frangipane[79], within the ceramic assemblage of the LC 5 Period at Arslantepe there is a strong correspondence between wares and forms. In other words, a repeated co-occurrence of technological and cultural choices typifies not only clays and tempering materials, manufacturing techniques, surface finishing, and firing techniques, but also the forms and functions of vessels. This led to a reduced number of *chaînes opératoires*, which strongly differ from each other. This also seems to be the case for Tepecik to a certain extent.

50 For the case of Arslantepe, a diachronic perspective highlights the few elements of continuity between the final VII and the VI A ceramics, i.e. the use of some raw materials and paste recipes[80], and the presence of mass-produced coarse bowls as well as of the much rare Handmade Burnished Ware. Elements of discontinuity with the previous phase are much more evident. For example, the organization of the production changed: in Period VI A ›potters' marks‹ disappear and the distinction between handmade and ›turned‹ pots also marked morpho-functional groups, indicating a stronger segmentation of the overall ceramic craft. This segmentation is also tangible in the operational sequence between people that procured the raw materials and those dedicated to potting practices[81]. The repertoire of shapes also changed along with the functional composition of the assemblage, which in Period VI A includes very large pithoi, necked jars, and bottles to store and serve beverages. Beakers suitable for drinking became rare, and generally the whole assemblage of bowls and jugs to eat and drink became extremely limited in its variety of shapes, while the High-Stemmed Bowls, which were rare during Period VII, became a relatively more frequent item.

51 In the following paragraphs we will present the different groups of pots which feature in both Arslantepe and Tepecik assemblages. However, as we discussed above, the Arslantepe and Tepecik research projects have very different histories, which profoundly impact the quantity and quality of the archaeological information, the type of analysis and the comparisons which can be made among these different datasets.

52 Light-Colored Wares are the largest group of ceramics at LC 5 Arslantepe and were formed or finished on turning devices (fig. 19. 20). Coarse, Semi-Fine and Fine pastes have been recognized. While only the size and concentration of inclusions distinguish ›Coarse‹ from ›Semi-Fine Wares‹, the absence of straw differentiates the ›Fine Ware‹, in which organic tempering material is virtually missing. At Tepecik, Light-Colored Wares includes fine pastes with abundant sand.

53 At Arslantepe, the Mass-Produced Bowls were made using the ›Coarse Ware‹ (fig. 19, 1–12). Fragments of Uruk-style mold-made Beveled-Rim Bowls (BRB) are very rare, while the local, wheel-coiled mass-produced conical bowls (Mass-Produced Bowls, MPB) form about 60 % of the total assemblage, and up to 80 % of sherds in contexts related to food redistribution. At Tepecik, chaff-tempered BRBs are attested (fig. 18, 1–4), but they were again not found in huge numbers. Meanwhile, the Arslantepe type of Mass-Produced Bowl is totally absent at Tepecik. Macroscopic observation of Arslantepe and Tepecik BRBs shows some differences in the internal surface (fig. 24), which are the result of different gestures either in pressing the clay inside the mold or in regularizing the inner side. The ones from Arslantepe present some horizontal lines which are possibly the result of the wet hand rotating all along the upper part of the inner bowl's walls.

79 Frangipane – Palmieri 1983.

80 Fragnoli – Palmieri 2017.

81 Fragnoli 2021.

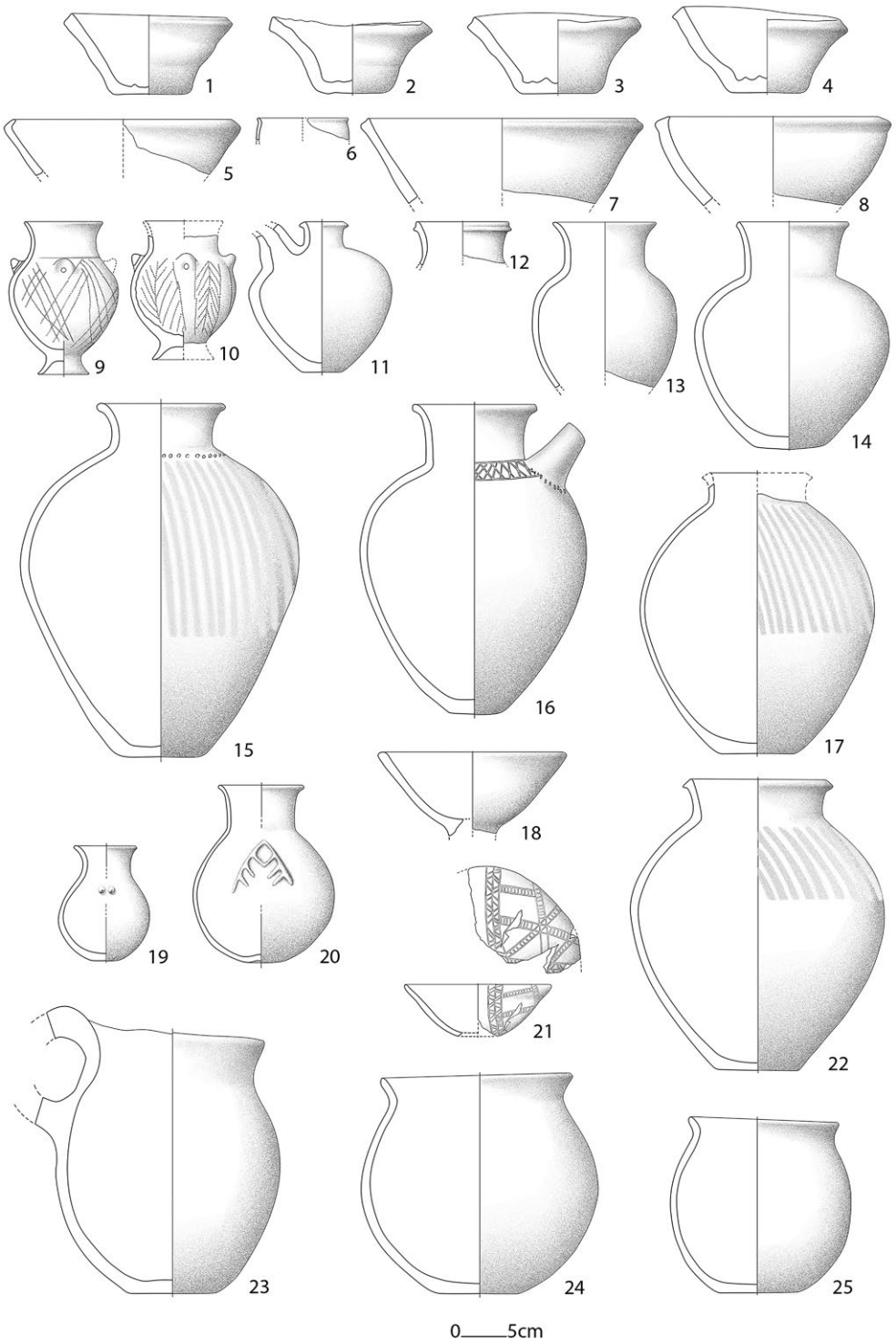

Fig. 18: Tepecik West Level 3 pottery. 1–4: Beveled-Rim Bowls; 5. 7. 8. 13: Light-Colored Ware, tempered with vegetal inclusions, bowls are wheel-coiled; 6. 9. 11: fine, sand-tempered ware; 15–17. 22: Uruk-style ceramics; 18–21: Handmade Burnished Wares; 23–25: Coarse Kitchen Ware

18

These lines are also reported on exemplars from Tell Humeida (dated to the Middle Uruk Period), Tell Qannas, Tello, and Susa[82]. These marks seem absent on the Tepecik BRBs.

54 Other types of chaff-tempered or fine, sand-tempered bowls occur at Tepecik, such as inverted-rim bowls and bowls with a thickened rim (fig. 18, 5–8). These types also appear further south along the Middle Euphrates, at Hassek Höyük and at Habuba Kabira South[83], but not at Arslantepe. A few small fragments of club-headed-rim bowls at Tepecik West might be residual, out of-context material.

82 Montero Fenollós – Sanjurjo Sánchez 2021, 110.

83 E.g., Strommenger et al. 2014, cat. G.124. G.127–129.

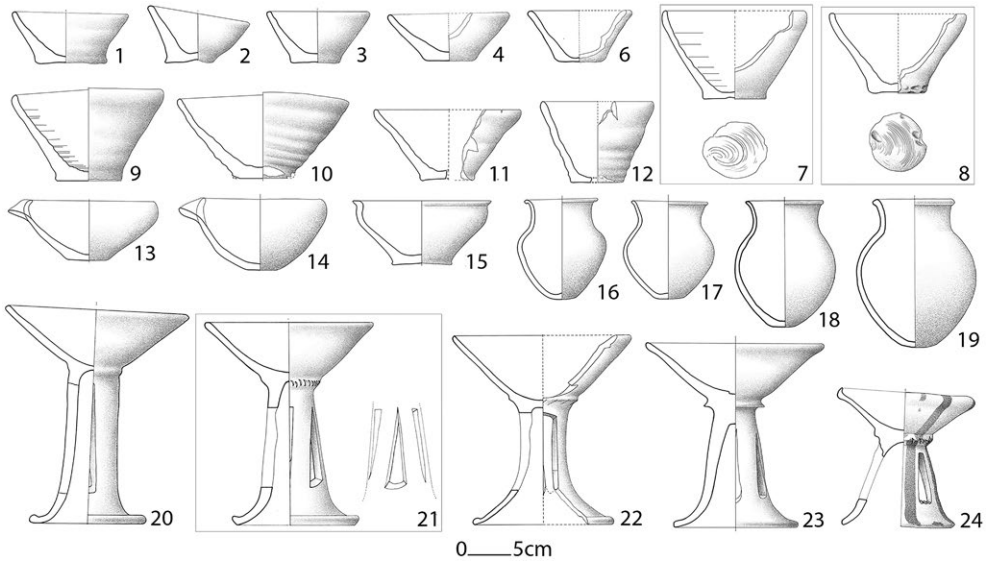

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Fig. 19: Arslantepe VI A Light-Colored Wares. 1–8: Coarse Mass-Produced Bowls; 13–23: Fine Light-Colored Ware bowls, jarlets and High-Stemmed Bowls; 24: Light-Colored vegetal tempered painted High-Stemmed Bowl

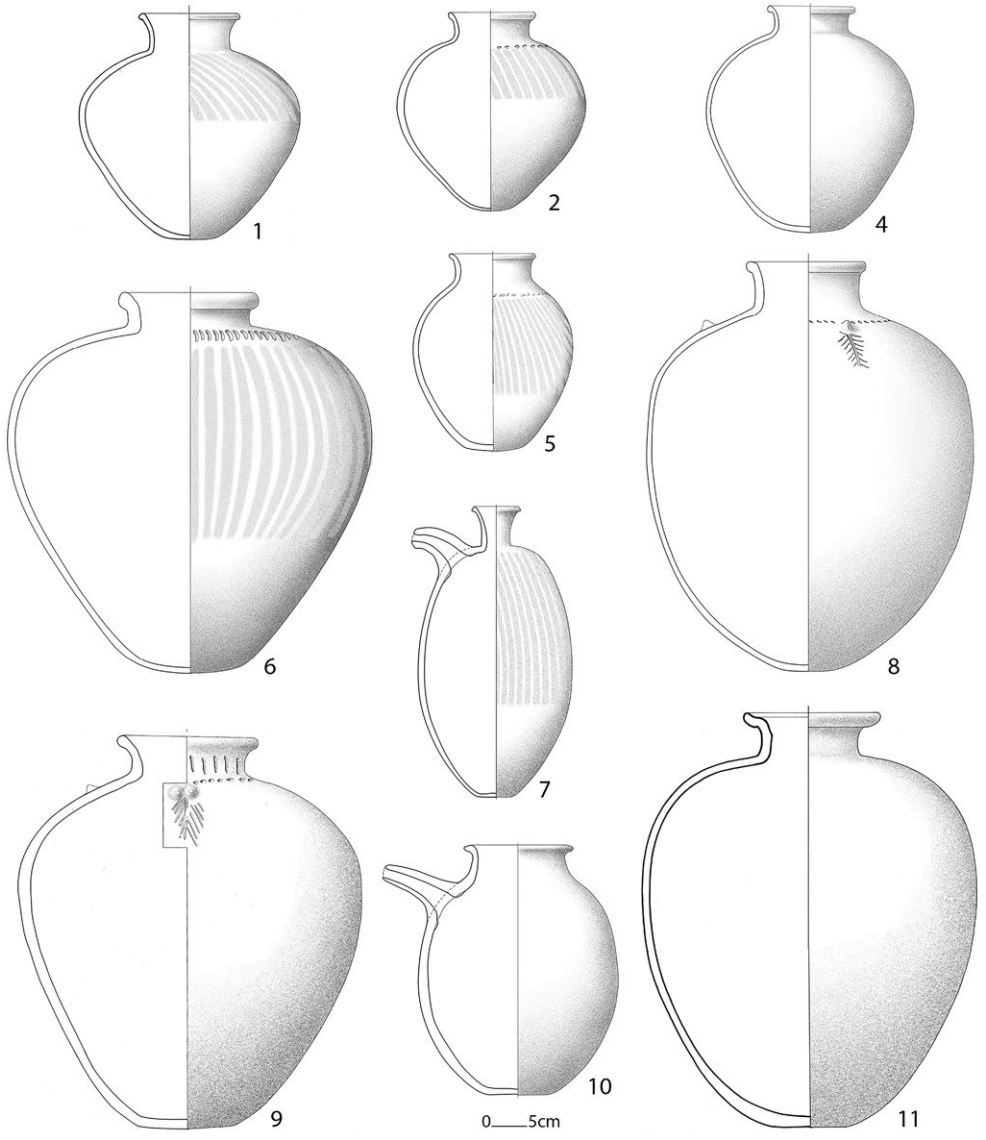

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Fig. 20: Arslantepe VI A Light-Colored Semi-Fine Ware

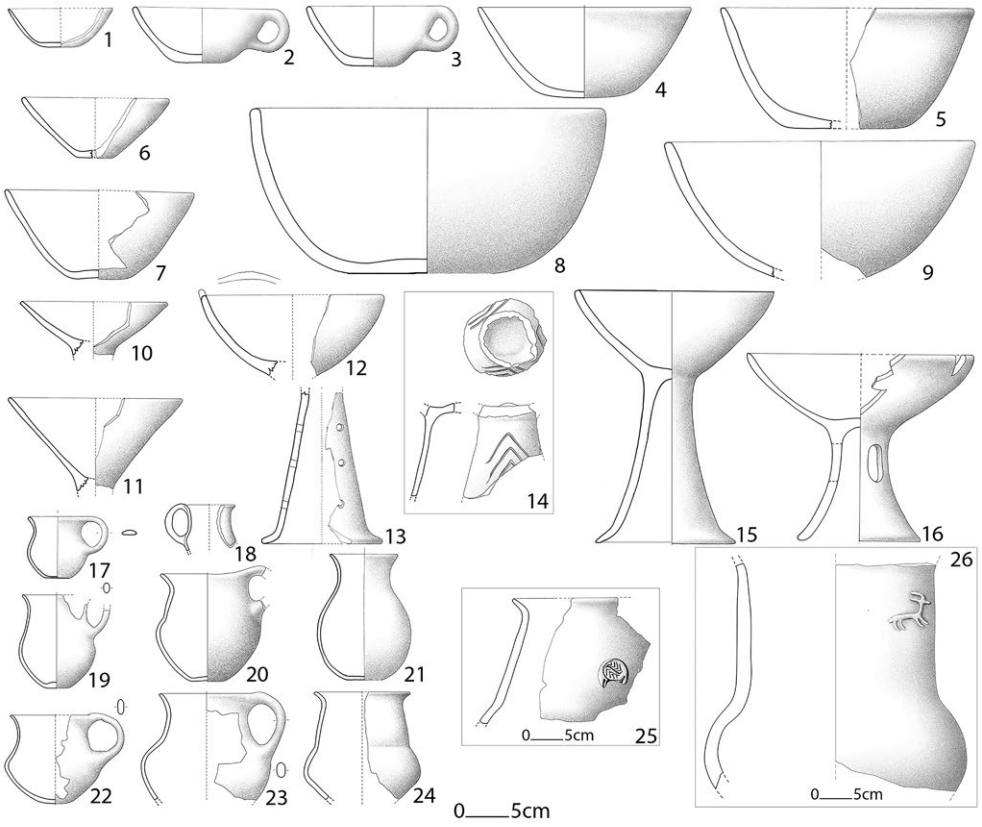

Fig. 21: Arslantepe VI A Handmade Burnished Wares

21

55 Semi-Fine Ware at Arslantepe is used for some bottles but mostly for the typical necked jars with a more-or-less prominent shoulder, some of which are decorated with the so-called reserved slip motif and occasionally feature a row of impressions or incisions on the shoulder (fig. 20). This functional category already emerged in late Period VII, as we have seen, but in Period VI A the shape of these jars and their decoration show strong affinities with Late-Uruk Mesopotamian models. However, in contrast to the Uruk-style pots, the examples at Arslantepe typically include vegetal temper, with sand-tempered finer fabrics being very rare. Moreover, in comparison to Uruk-style jars, shoulders are generally less expanded, lips have different forms, and surfaces are often slightly burnished.

56 At Tepecik, Semi-Fine Ware tempered only with sand in various quantities and some mica was used to make jars and bowls, while fabrics more similar to the Arslantepe Semi-Fine Ware were also used for jars (fig. 18, 5. 7. 8. 13). Even when present, vegetal inclusions are fewer than at Arslantepe. The sand-tempered pastes found at Tepecik recalls both the Late Uruk Mesopotamian and the local EBA 1 ›Plain Simple Wares‹. At LC 5 Hassek Höyük, B. Helwing also describes both the sand-tempered and sand-and-fine-chaff-tempered fabrics (her wares B and C)[84]. At Tepecik, necked jars are often decorated with reserved slip bounded by rows of incisions and nail-impressions[85], the latter of which are very similar to some Arslantepe exemplars. Surfaces are

84 See also Helwing 2000. Similar trends seem to be attested at Zeytinli Bahçe in the LU levels and at Tilbeshar. The use of vegetal temper during the Late Chalcolithic Period is actually a rather complex issue, and it is not possible to simply equate grit-tempered wares with ›real‹ Uruk wares and vegetal-tempered wares with ›local‹. Moreover, both kinds of ceramics are always locally produced (Emberling – Minc 2016). Recent data show that the Uruk Period pottery at Uruk itself starts to be realized consistently in grit-tempered fabrics only in the LU Period, while before vegetal temper is largely present, and not only in Beveled-Rim Bowls (M. van Ess pers. comm. 30.10.2018).

85 Esin 1982, pl. 72, 21–23.

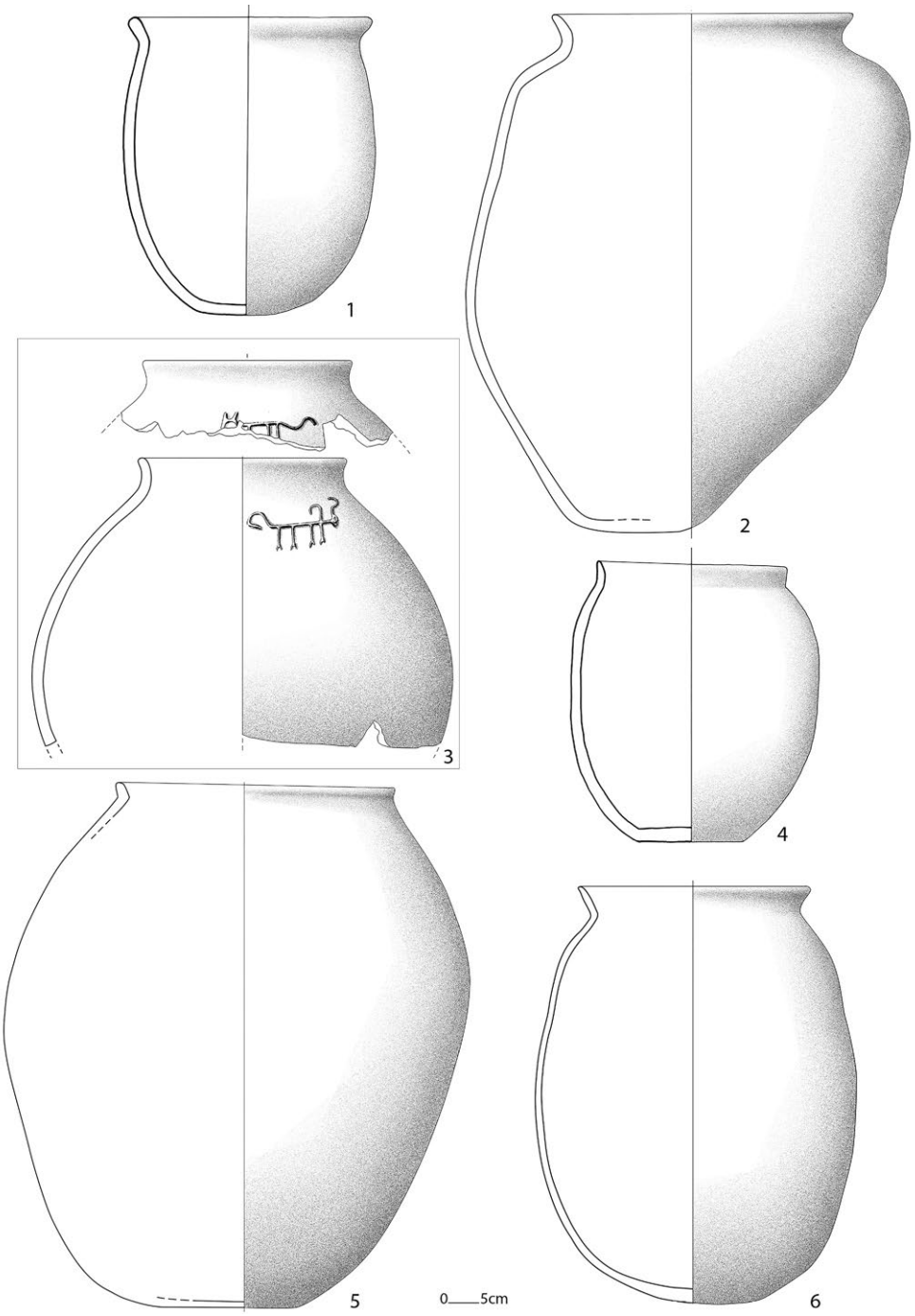

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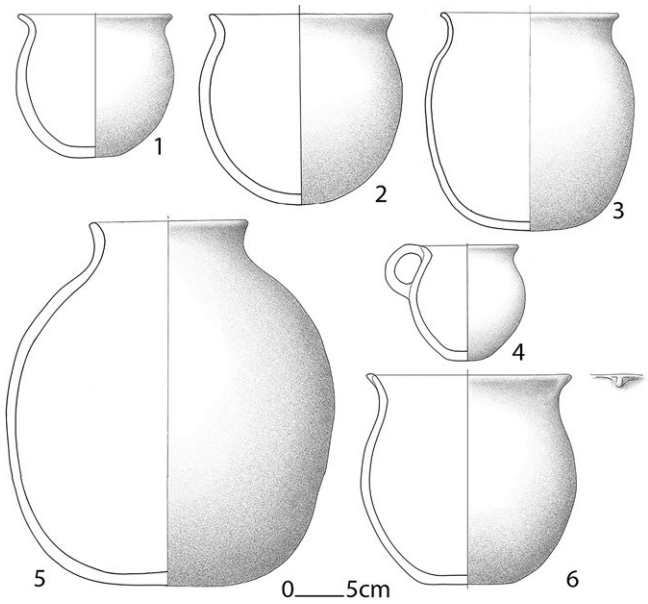
Fig. 22: Arslantepe VI A Common Ware, storage containers

smoothed and never burnished, in contrast to some examples at Arslantepe. Some body sherds of closed-shaped containers also present a whitish or very pale brown slip.

57 At Arslantepe, the Fine Light-Colored Ware without vegetal temper is apparently more flexible because it is used to make different shapes: small jarlets with a sinuous profile, High-Stemmed Bowls, Beaked Bowls, and some bottles (fig. 19, 13–23; fig. 20, 7. 10). At Tepecik, Light-Colored Ware High-Stemmed Bowls seem to be rather rare, Beaked Bowls are not attested, and the Fine jarlets include more Mesopotamian features, such as pierced-nose lugs. Two Uruk-style miniature jarlets have been found at Arslantepe too: one with four pierced lugs is very similar to the Tepecik examples[86], and the other is made of a sandy Fine Ware that was Red-Slipped and Burnished. The

86 See also Hassek Höyük: Helwing 2002, cat. 184.



23

Fig. 23: Arslantepe VI A Common Ware, cooking pots

ware of the latter jarlet is similar to ›Uruk Red Ware‹. Similarly to the results obtained by L. Minc in several Mesopotamian sites[87], vessels with clear Uruk features are also produced locally at Arslantepe.

58 At both sites, some fine jarlets with sinuous profiles are red-slipped and burnished. At Arslantepe only a single Uruk Red Ware pot is attested. This is a miniature jarlet which was found in a ceremonial context (Temple B) alongside local pots and two Uruk-style bottles without spouts[88]. At Tepecik, some pieces are extremely fine, and indeed finer than the Arslantepe Fine Ware, with very little sand and very small and extremely sparse voids.

59 Among Light-Colored Ware vessels, some small jarlets with a sinuous profile, pierced nose lugs, and a small base or short foot, often decorated with rows of small incised points or lines, are particular to Tepecik (fig. 18, 9. 10)[89]. The fragments at Istanbul University show a relatively high variety of fabrics that are generally fine and well fired, with mineral (e.g., fig. 25) or mixed mineral-chaff temper. Colors vary from greyish to pink, light buff, and brownish orange. Fragments of this Tepecik-type jarlet were also found at LC 5 Hassek Höyük[90].

60 At both sites, the assemblages mentioned above are joined by a group of Handmade Burnished Wares (HBW), either bi- or monochrome, and it seems that the open shapes outnumber the closed ones in this group (fig. 18, 19–21; 20). Macroscopically, fabrics are generally finer at Tepecik. There, especially in monochrome vessels, mineral pastes with very few voids are more common than at Arslantepe, where pastes are often mix-tempered and are generally coarser.

61 At Arslantepe, petrographic analysis showed that HBWs are made using non-calcareous clay and a broad spectrum of different kinds of inclusions, both organic and inorganic[91]. Here, Red-Black (RBBW), Black (BBW), and Monochrome Brownish to greyish (MBW) Wares are represented. Open shapes are always bichrome, while closed-shaped

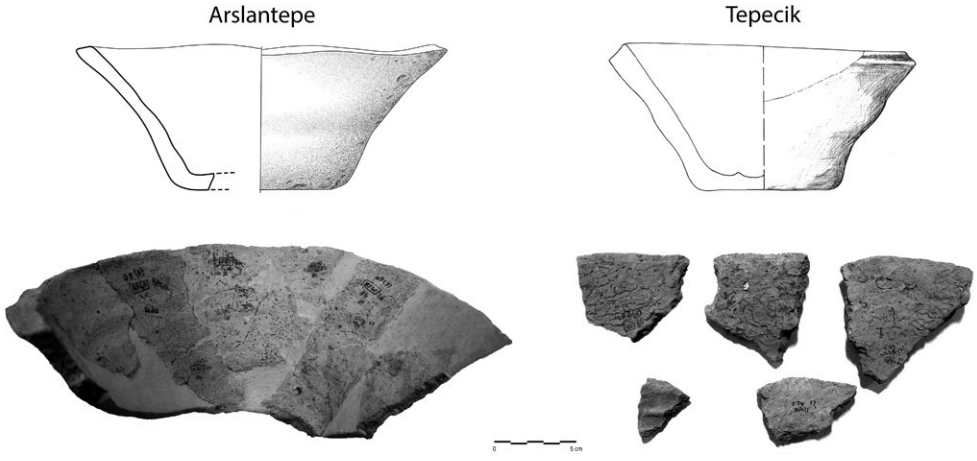


Fig. 24: Arslantepe VI A and Tepecik West 3 Beveled-Rim Bowls. The photos show the internal side of the bowls. Scale 5 cm

24

87 Emberling – Minc 2016.
88 Frangipane 1997, figs. 10. 11.
89 Esin 1982, pl. 72, 27–31.
90 Helwing 2002, fig. 76.A6; pl. 87.433.
91 Fragnoli 2018.

25

26

Fig. 25: Fragments of a footed jarlet with pointed decoration. Scale 5 cm

Fig. 26: Fragment of a GBW High-Stemmed Bowl. Scale 5 cm

containers can be either mono- or bichrome. In the RBBW the two colors alternate on the open- and closed-shape containers, so that the black is external in closed shapes and internal in the bowls. It seems that the identical pattern is registered at Tepecik as well. At Arslantepe, together with the other open-shaped containers, High-Stemmed Bowls form a large part of this assemblage. These present a variety in the shapes of both feet and bowls. Decorations of the stem also vary among cut-out, incised and applied motifs and, interestingly, they also show the highest petrographic variability among HBW shapes[92]. Bowls with one handle are a peculiar feature of Arslantepe, not being attested at Tepecik. Large jars and pithoi are extremely rare.

62 At Tepecik, the HBW assemblage is more varied in terms of wares and includes the following: ›Grey Burnished Ware‹ (GBW); ›Brown Burnished Ware‹ (BrBW); ›Black Burnished Ware‹ (BBW); and ›Red-Black Burnished Ware‹ (RBBW).

63 The GBW presents fine-to-medium mineral inclusions, which are sometimes abundant, and have very few voids. Cross-sections are typically brown with grey cores, testifying to a non-uniform, reducing firing. Surfaces are always well polished, and sometimes it seems that a slip might have been applied (fig. 26). In previous work on Tepecik ceramic, this ware has been classified as ›Uruk Grey Ware‹, which is in fact a very different production with a very different shape repertoire. Considering the pieces in the collection at Istanbul University and the drawings grouped as ›Gri Mal‹ (Grey Ware) in the Tepecik archive, we see that bowls with straight or slightly convex profiles have especially been produced in this ware, together with High-Stemmed Bowls which feature convex bowl profiles (fig. 18. 26) and some small-to-medium jars, but only occasionally with relief decoration.

64 The BrBW seems to be quite uncommon and also includes mainly open shapes. One fragment of a handled jar is particularly intriguing (fig. 27). It originates from Level 3, and the handle recalls the Kura-Araxes lugs[93]. Similar handles on jars are attested in Anatolia at Sos Höyük (Erzurum) in Level 5A (LC), featuring both monochrome and bichrome wares[94]. The fabric of this piece presents rare mineral inclusions of small and medium sizes and extremely few voids, which are very small. The interior is roughly dry-smoothed while the external surface (pinkish to reddish grey in the Munsell chart) is well-burnished.

92 Fragnoli 2018.

93 See for example Lamb 1954, 29.

94 Sagona – Sagona 2020, figs. 7, 1. 3; 13, 2. 3.

27

Fig. 27: Fragment of a BrBW jar. Scale 5 cm

65 The BBW presents not only black surfaces but also black cross-sections. Macroscopically, mineral inclusions are prevalent, but organic inclusions are present too, including sparse vegetal matter such as chaff. Also in this case, fragments of open-shape containers are more frequent than those of closed-shaped ones, which possibly testifies to the additional use of this ware to produce vessels intended for food and beverage consumption.

66 The RBBW presents the typical bichrome cross-section and the alternating pattern on closed- and open-shaped containers. This ware includes mix-tempered fabrics that are in some cases macroscopically very similar to those at Arslantepe. At Tepecik, bichrome burnished pots also include jars of larger dimensions, and, in this case, the burnishing is much less accurate than on bowls and smaller jars. At least one jar with an S-shaped profile is identical to Arslantepe pieces. At Tepecik, mono- but especially bichrome HBW bowls present a geometrical decorative pattern incised on the exterior (e.g., fig. 18, 21; 29, 1)[95].

67 As previously mentioned, the RBBW has a long history in Central Anatolia, and it is likely that the firing technology used to produce bichrome pots was borrowed in the Upper Euphrates Valley from the west. We tend to see fewer formal affinities than other colleagues[96] within these two regions in terms of shapes, noting that the most striking similarities are in fact those with very simple profiles. One convincing commonality between Arslantepe, on the one side, and Alişar Höyük and Alacahöyük, on the other, consists of the bichrome bowl with one handle[97].

68 At both sites, a hand-made, medium-to-coarse ›Common Ware‹ (CW) is also used for storage jars and cooking pots (fig. 18, 23–25; 22. 23). At Arslantepe, these share similar raw materials with the Handmade Burnished Wares, and indeed CW pots are sometimes slightly burnished. At Tepecik, CW pastes are generally grit-tempered with less vegetal inclusions than at Arslantepe. An additional Reddish Coarse ware has no comparison with Malatya. Cooking Pots show very similar profiles at both sites, but again at Arslantepe vegetal temper is more present, and at Tepecik external surfaces are well smoothed and slightly burnished, which is much rarer at Arslantepe.

Minero-petrographic Analysis of Selected LC 5 Vessels from Tepecik: Preliminary Observations

69 A total of 17 vessels dating to the LC 5 Phase were sampled for petrographic analysis, in order to distinguish local from non-local products, characterize ceramic raw materials, and assess the paste preparation modes. The sampling includes a variety of Light-Colored and Handmade Burnished Wares (Fig. 18. 29. 30).

70 Most of the Light-Colored Wares were produced with local raw materials from the Late Cretaceous Elazığ magmatics[98], as they contain a mix of volcanic and intrusive rocks ranging from mafic to acidic terms. Such a variety of lithological units is especially found from a distance of 5 km north of the site. Besides volcanic and intrusive rocks, single minerals also appear, such as quartz, calcite, plagioclase, K-feldspar, biotite, amphibole and clinopyroxene. Local pastes are tempered with vegetal matter, the shape and assemblage of which are generally not compatible with agricultural by-products, with the exception of one Semi-Fine jar with reserved slip (sample 6/18) and one jarlet

95 See also Esin 1982, pl. 74, 5.

96 Frangipane – Palmieri 1983, 361; Palumbi 2008; Çalışkan Akgül 2012; Çalışkan Akgül 2012–2013.

97 Arslantepe: D'Anna 2019, fig. 4.110; Alişar: Çalışkan Akgül 2012–2013, pl. 42, 5; 47, 5. 6; Alaca: Orthmann 1963, Taf. 3 2/03.

98 Turan et al. 1995.

Samples	Level	Description
1/18	T.73 15–A 3 BU	Cooking Pot
3/18	T.72 16–A BK	Uruk-style pierced nose-lug jar (fig. 29)
4/18	T.73 15–A 3	Semi-Fine jar with reserved slip
5/18	T.71 16–A 2	Semi-Fine jar with incised decoration (out of context) (fig. 29)
6/18	T.71 16–A 2	Semi-Fine jar with reserved slip and incised decoration (similar to Arslantepe) (out of context)
10/18	T.71 16–A 3	BrBW jar
12/18	T.73 16–B 3	Plain Simple wheel-turned bowl (fig. 30, 2)
13/18	T.74 15–A 3	Bowl with scraping on the lower external surfaces
15/18	T.71 16–A 3	RBBW jar with troncoconical neck (fig. 30, 4)
17/18	T.73 16–A 3 BT	GBW greyish-brown High-Stemmed convex bowl (fig. 30, 6)
22/18		BRB
25/18	T.72 16–AB 1	Footed jarlet with impressed dots (out of context)
26/18	T.74–328 14–A 3	Footed jarlet with impressed dots (fig. 25)
27/18	T.72 15–16–AB 3 BK	GBW bowl with incised decoration (fig. 30, 1)
29/18	T.73 16–A 3 BT	GBW (High-Stemmed?) bowl with convex walls (fig. 30, 3)
30/18	T.73 16–A 3 BZ	RBBW bowl (fig. 30, 5)
32/18		RBBW jarlet

28

Fig. 28: List of samples for archaeometric analyses of Late Chalcolithic pottery from Tepecik West

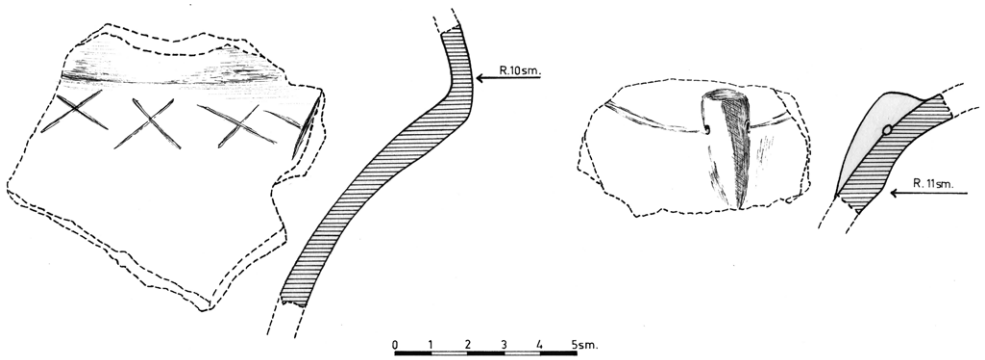


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Fig. 29: Samples 5 (left) and 3 (right). Scale 5 cm

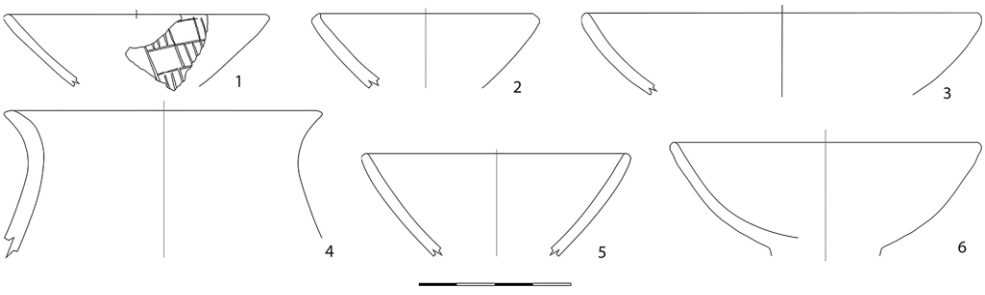

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Fig. 30: Selection of sampled pots for archaeometric analyses. Scale 10 cm

with impressed dots (sample 25/18). The grain-size distribution of local pastes is generally bimodal with a predominance of the fine fraction (< 0.9 mm) over the coarse one (1–2 mm), which is almost exclusively composed of vegetal temper. The slight optical activity of the clay matrix and the presence of preserved phytoliths in the voids left by the burnt vegetal matter indicate relatively low firing temperature, i.e. lower than 800 °C. Moreover, most of the thin sections exhibit a black core due to incomplete oxi-

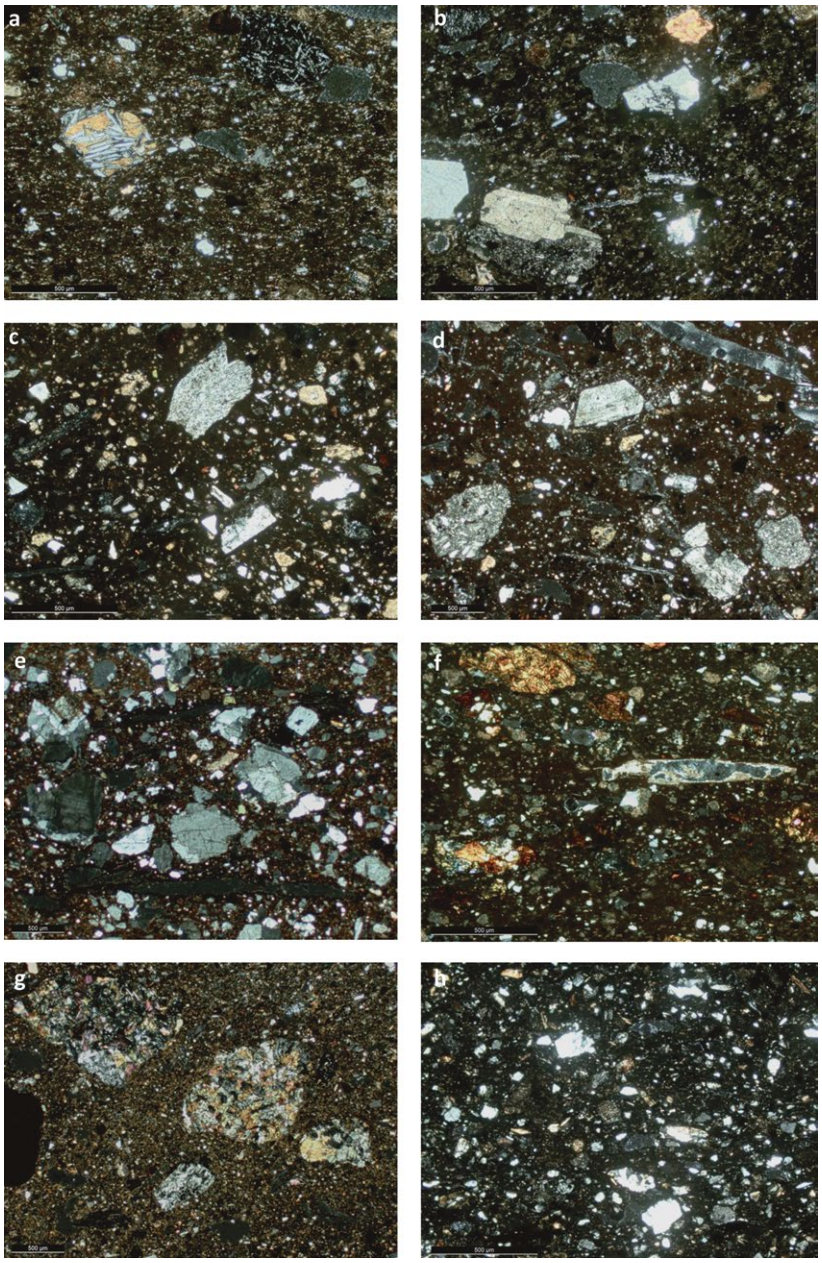

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Fig. 31: Thin-section microphotographs under crossed-polarized light of selected LC 5 vessels from Tepecik. a. b: Uruk pierced-nose lug jar (sample 3/18); c: Semi-fine jar with reserved slip (sample 4/18); d: Beveled-Rim Bowl (sample 22/18); e: cooking pot (sample 1/18); f: Semi-fine jar with Uruk-style decoration (sample 5/18); g: Medium-large RBBW jar with truncated-conical neck (sample 15/18); h: Monochrome GBW high-stemmed convex bowl (sample 17/18)

dizing firing atmospheres (perhaps due to short firing times).

71 Differences within the local productions suggest the use of various geological outcrops and paste preparation modes. One footed jarlet with impressed dots and one plain bowl contain distinctively less vegetal temper (samples 12/18 and 25/18). The highest incidence of vegetal temper occurs in the Beveled-Rim Bowl 22/18, which is also distinguished by the coarsest grain-size distribution of both vegetal and mineral inclusions (until 3.2 mm and 25 %). Furthermore, the pierced-nose lug 3/18 is distinguished by the presence of mudstones, claypellets and gabbros.

72 Except for one semi-fine RBBW Bowl (sample 30/18), the Handmade Burnished Wares are produced with raw materials and paste preparation which are different from those used for the Light-Colored Wares. Each sample of the HBW has a distinct recipe due to the occurrence of a broad range of different metamorphic and ophiolitic rocks – such as gneisses, metagabbros, quartz-schists, marbles, metavolcanics and amphibolites – as well as related minerals. The shape of voids left by the burnt vegetal temper indicate the use of different types of non-processed grasses. The HBW is also distinguished by variegated grain-size distributions. The finest pastes contain inclusions with sizes and frequencies not exceeding 1 mm and 10 %, while the inclusions of the coarsest ones show a maximum size and frequency of 4 mm and 30 %. Their matrix is non-calcareous and exhibit a high optical activity, which suggest firing temperatures lower than 850 °C.

73 The ophiolitic and metamorphic lithologies recurring in the Handmade Burnished Wares are available over large areas south of the site, but at distances that cannot be defined as strictly local. The Late Cretaceous ophiolitic sequences of Guleman and Kömürhan are exposed about 15 km south and south-west of the site[99]. The Pütürge metamorphics are located beyond 20 km to the southwest and include metacarbonates, granitic gneisses, metapelites and amphibolites[100]. Among the non-local vessels made of metamorphic materials there are also one Beveled-Rim Bowl (sample 13/18) and two Light-Colored Semi-Fine jarlets (samples 5/18 and 26/18), one of which features reserved slip, incised decoration and more obvious Uruk-like qualities.

99 Parlak et al. 2012.

100 Erdem – Bingöl 1995.

74 These results reveal both differences and similarities with the contemporary assemblages from Arslantepe. In general, the ceramic pastes from Tepecik are finer and poorer in vegetal temper compared to those from Arslantepe, which often show a polymodal grain-size distribution with size peaks up to 7 mm[101]. This concerns both the Light-Colored and Handmade Burnished Wares, but further observations can be made concerning each of these wares. At Arslantepe the Light-Colored Ware is produced with a higher number of recipes (n=8) which are mostly obtained through variations on the same theme, i.e. by processing and mixing the same basic ingredients differently (vegetal temper, intermediate to sialic lavas and gabbros). Although ceramic pastes are, as mentioned above, generally richer in vegetal temper, a number of them are also totally lacking in vegetal temper, a practice which has not yet been observed in Tepecik. The Light-Colored assemblages also differ by the type of vegetal temper, which at Arslantepe more often consists of agricultural by-products. As opposed to those from Tepecik, Light-Colored vessels are always produced locally at Arslantepe, although the few Uruk-style exemplars are produced with distinct recipes.

75 The Handmade Burnished Ware is made with more established recipes at Arslantepe. Two ceramic pastes, which are dominated by gneisses and metagabbros respectively, are recurrent among the Handmade Burnished Ware from Arslantepe[102]. Interestingly, similar pastes occur in one cooking pot (sample 1/18) and one handmade GBW bowl (sample 29/18) from Tepecik. The affinities concern not only the type of raw materials but also the coarse grain-size distribution. At any rate, the producers of the handmade production from Arslantepe and Tepecik, including both HBW and cooking pots, shared similar choices, such as the exploitation of relatively wide and more distant sources within the southern Anti-Taurus mountains, the use of various types of grasses as temper, and short firing times at relatively low temperatures.

Concluding Remarks on the End of the LC Period in the Malatya-Elazığ Region: A View from the Pottery

Some Thoughts about Chronology

76 The presence at both sites of types and elements typical of the Late Uruk chronological horizon as well as affinities in the composition of the two assemblages, initially prompted a contemporary dating of Tepecik West 3 and Arslantepe VI A. However, there are a number of elements at Tepecik West 3 that – we believe – point to a slightly later date of this level in comparison to Arslantepe VI A[103]. These elements include the following components: a) the sinuous footed jarlets with incised decorations, which find good comparisons in both the Upper and Middle Euphrates EBA 1 at Hassek Höyük and the Birecik cemetery[104]. At Arslantepe, footed jarlets with similar profiles and sometimes painted decoration were found in Level VI B2 (EBA 1b)[105]; b) the HBW bowls decorated with geometric incisions. This decoration interestingly recalls similar motifs which occur on some RBBW pot stands of the beginning of the Early Bronze Age at Arslantepe (EBA 1 or Period VI B)[106]. As a matter of fact, many fragments of these decorated bowls were found in the upper EBA 1a Level (Tepecik West 2) as well; c) the presence of a few fragments of lids, which is again a typical item of the Arslantepe EBA 1a (VI B1) and Kura-Araxes cooking kit, not attested during the LC 5 at Arslantepe; and d) the

101 Fragnoli – Palmieri 2017.
102 Fragnoli 2018.
103 See also Sanders 2021.
104 Gerber 2005, pl. 39, 93. 99. 1089; Sertok – Ergeç 1999, fig. 7 j.
105 Frangipane – Palmieri 1983, 550.
106 E.g., Palumbi 2008, fig. 6.20.9.

presence of straight bone pins with incised decoration under the head at both Tepecik West 3 and Arslantepe VI B1[107]. At Tepecik West 3, bone pins with a T-shaped head also occur; this type is typical of the Arslantepe VI A Period.

77 For Tepecik West 3 we have only one ^{14}C date available[108], which was obtained from a sample from Building 1, Room BT and seems to be inaccurate because it predates LC 5, namely ca. 3694–3377 BCE (95.5 %). The new AMS dates available for LC and EBA 1 Arslantepe show that the LC 4–5 at Arslantepe (i.e., the end of Period VII and Period VI A) can be dated within a time span of ca. 200 years beginning around 3400 BCE and that the EBA 1 occupations (i.e., Periods VI B1 and 2) lasted from ca. 3200 to 2900 BCE[109]. The dates of Periods VI A and VI B1–2 are particularly ›packed‹. The impressions that we gain is that Period VI A (LC 5) was perhaps a very short phase at the site and that the stratigraphically significant events after the fire which ended this occupational phase were particularly short-lasting. The short length of the Arslantepe VI A Phase provides an opportunity for incorporating a slight asynchrony between the occupations of the Arslantepe VI A and Tepecik West 3, which would lead the LC 5 Phase Tepecik to be situated at around 3200 BCE.

78 Two large pits (K537 and K538) which cut into the area between Temple B and A830 and in the upper strata fill of the yard behind the storerooms (fig. 15) just after the destruction of the Arslantepe VI A complex in ca. 3200 BCE may provide a contemporary context to Tepecik West Level 3. As we highlighted above, Uruk-style ceramics are very rare among the in situ finds and are virtually absent in dumps at Arslantepe VI A (which are of course earlier events within the VI A Period). On the other hand, 27 fragmentary BRBs and gritty Plain Simple fragments of jars have been found in these pit contexts that are stratigraphically later than the VI A Period but that are sealed by the VI B1 Period floors. This stratigraphic event, which is limited to this part of the large excavated area, suggests an increased use of Uruk-style ceramics in-between the two main archaeological phases labelled as VI A and VI B1. The similar increased presence of Uruk-types at Tepecik West 3 might suggest that this phase is, in fact, contemporary with the tightly bounded pit phase at Arslantepe.

79 At the end of the LC Period, Mesopotamian influences or elements are visible at Arslantepe and Tepecik, but at slightly different moments in the histories of the two sites. At Arslantepe, in the economic organization, the Period VI A community is structurally akin to the Mesopotamian political economy, but Uruk-style material culture is at its apex immediately after the destruction of the complex and right before the moment (Period VI B1) in which the Kura-Araxes ties are strongest. Conversely, the Uruk-style elements in the Tepecik material culture lines up with a clear occupational phase. This might have resulted from a series of factors, but the different connections that the Malatya and Elazığ Regions shared with the Mesopotamian world in previous phases might had played a significant role.

Some Thoughts about Diversity

80 One of the main characteristics of the Arslantepe VI A ceramics is the high degree of internal variability within a rather limited number of main shapes, which, to the contrary, are quite different from one another, and are generally produced in particular wares. The differences between wares are extremely clean-cut and each is characterized by a coherent and specific *chaîne opératoire*. Even though the panorama of wares appears to be richer at LC 5 Tepecik, here too the dissimilarities between groups of containers are generally high, especially in the appearance, color, and even texture

107 Sanders 2020, 14.

108 Esin 1981.

109 Vignola et al. 2019.

of surfaces. What is always emphasized is the different interregional affinities that Light-Colored and the Handmade Burnished Wares show, i.e. Mesopotamian/Uruk and Anatolian, respectively. From archaeometric analyses we know that all the ceramics at Arslantepe and most of the ceramics at Tepecik were locally produced. Here, we want to focus on the co-existence of different ceramic traditions within the LC Tepecik and Arslantepe communities.

81 At both sites, ceramics are made in a variety of ways, from the way in which pots were formed to how they were finished, decorated, and fired. The resulting technological styles include markedly different sets of actions and choices that transformed different raw materials into diverse – aesthetically and to some degree functionally – cultural objects.

82 Pottery making is a social practice, which is replicated within segments of the society, i.e. communities of practice, as understood by E. Wenger as the social contexts in which members learn how to do things in the right way[110]. In discussing the complexity of communities as multiple supra-household social entities, C. Steidl emphasizes the possible overlapping of different forms of the same practice; as she writes, »[w]hen people preserve multiple ways of enacting the same practice(s), that is a sign that those different practices may represent different affiliations between them«[111], i.e., different communities.

83 At Arslantepe, we know that different clays were used to make the Light-Colored Wares, on the one hand, and the Handmade Burnished Wares and Common Wares, on the other[112]. A similar dichotomy in the patterns of raw material procurement distinguishes the Light-Colored from the Handmade Burnished Wares at Tepecik (see above). Archaeometric analysis has shown that the outcrops to the east of the site were used to make the LCW and those which were further away to the south of Arslantepe were used to shape HBW and CW pots beginning at the end of Period VII. The LCW and HBW define at least two different groups or communities of potters who frequented distinctive landscapes, one of which was closer to the site and possibly to the cultivated fields, and the other of which was closer to the piedmont south, more suitable for herding activities. Preliminary petrographic results point to a similar scenario for the Tepecik LC 5 ceramic production. In parallel, the two groups of wares are typically tempered with different organic components. At Arslantepe, agricultural byproducts (chaff) define the first group and a range of organic matter, including animal dung, the second. We propose to see all these differences as linked with two economic components of Arslantepe society, namely the agricultural and pastoral practices, as it is also exemplified by vegetal motives incised on the LCW necked jar and animal motives applied on both HBW and CW. These communities ›created‹ and ›dwelled in‹ different taskscapes[113], possessing their own temporalities and paces. A similar dichotomy in the patterns of raw material procurement distinguishes the Light-Colored from the Handmade Burnished Wares at Tepecik, although fewer agricultural byproducts can be seen in the site's LCW assemblage.

84 However, all wares at both sites occur in all contexts and, generally speaking, the functional differences between these groups of vessels implies a strong integration of the different pots in all those practices involving food and beverages that sustained the everyday and out-of-the-ordinary life at the site. The different communities, as well as their affiliations that we ›see‹ at the level of technological styles, are highly integrated in the manifold forms of food preparation, at least at the level of the main and most

110 Wenger 1998.

111 Steidl 2019, 6.

112 Fragnoli – Palmieri 2017; Fragnoli 2018.

113 Sensu Ingold 1993.

variegated tools used in these practices. Food preparation and storage was achieved using both LCW containers (bottles and necked jars of various dimensions) and CW large-mouthed jars, pithoi and cooking pots as well as a few large jars and pithoi made in RBBW. The analysis of use wear on Arslantepe VI A ceramics has shown that foodstuffs fermented in both the LCW necked jars and the CW pithoi[114]. At Arslantepe, both food preparation and storage were performed – although with meaningful differences, especially in quantitative terms – in a variety of contexts, such as the residences, the elites' storerooms, the two temples, and the weapons' buildings. At Tepecik, these functions seem to have been performed in open courtyards as well.

85 A few types of containers crosscut wares at both Tepecik and Arslantepe, such as bowls, High-Stemmed Bowls, and small jarlets, which are in fact produced in both Light-Colored Wares and Handmade Burnished Wares. In other words, a high degree of intersection between wares and pots that look very different but are functionally coherent occur among the vessels used for food consumption (bowls and HSBs) and/or serving (the small jarlets, which could have easily been used as beakers). We include the HSBs among the vessels for food/beverage consumption as a result of a use wear analysis that showed both abrasive and erosive wear resulting from mechanical and chemical stress on the interiors of the bottoms, along the walls, and along the lip of HSBs[115].

86 Food consumption was richly articulated in a variety of practices with very different temporalities in both the private and public spheres, such as the redistribution of meals, feasts, drinking events, and ordinary meals. Arslantepe Mass-Produced Bowls occur not only in contexts linked to redistribution, but also in the temples and the weapons' building. Thus, they were used in eating and drinking in contexts beyond the strict redistributive circuits, and, for example in Temple B and the weapons' building, together with High-Stemmed Bowls. The assemblage of open shapes at Tepecik seems more varied and embraces more Light-Colored Ware bowls as well as Black and Grey Burnished Wares bowls and High-Stemmed Bowls, but these too are spread across a variety of social contexts. There, consumption events were performed in a variety of different social and architectural settings, including outdoor areas, craft production areas, and a funerary context within Building 1, and each setting included consumption vessels comprising a mix of different wares and forms. This variety of shapes and wares at both sites is probably linked to different circuits and social milieux in which food and beverages were shared and consumed, and the diversification of commensal events was crucial in the formation and reproduction of hierarchically differentiated social groups as well as individual and collective subjectivities[116].

Final Comments

87 The beginning of the LC Period in the Malatya-Elazığ Region marks a sharp decrease and then disappearance not only of painted wares but also the ›local‹ Dark-Colored Burnished Ceramics, including the so-called Mica-Slipped Ware, and the Dark Unburnished Kitchen ware. Important transformations also concern the way in which pots were produced, with a strong emphasis on speed rather than on care, as is visible in some surface finishing such as scraping. In comparison to the well-fired Halaf and Ubaid vessels, vegetal-tempered LC pots are often less uniformly fired, and chaff decreased drying and firing times. Even though the local Late Neolithic and Early Chalcolithic pro-

114 D'Anna 2019.
115 D'Anna 2019.
116 See also D'Anna 2012; D'Anna 2019.

ductions too were badly fired, their surface treatments required time and expertise, and so other forms of care. The rhythm of production of at least some specific containers, such as the Mass-Produced Bowls, increased, and this might have implied changes in the organization of the production with new and different forms of specialization[117].

88 As the crow flies, only 100 km separate the Malatya and Altınova Plains. However, these 100 kilometers comprise steep mountains and gentle hills, with few connecting routes. One of the easiest connections seems to be the Euphrates River Valley itself. Even though not distant geographically, the early LC ceramic assemblages in the Malatya and Altınova Plains have fewer elements in common than one might expect. At the beginning of the Late Chalcolithic Period, vegetal tempered wares seem more widespread in Altınova than at Arslantepe, where mix-tempered wares are not uncommon. The presence of several early LC types not only at Norşuntepe but to a lesser extent also at Tülintepe and Tepecik, along the Turkish stretch of the Tigris River Valley, on the Eastern Syrian Jazeera and the Northern trans-Tigridian Region in Iraqi Kurdistan, points to a stronger connection of Altınova with the Mesopotamian communities in comparison to the Malatya Plain. However, the Handmade Burnished Wares points to clear connections between the Malatya and Altınova Plains in terms of technological know-how, which was presumably favored by frequenting similar areas for herding activities.

89 By the end of the LC Period, in the Uruk ›global village‹, Northern and Southern Mesopotamian communities used locally produced Uruk-style pottery as well as Uruk-style seals, and people lived in houses or performed rituals in temples with a typical tripartite Uruk plan. But this is not the case in the Upper Euphrates Region. There, the LC 5 is characterized not only by Uruk-related pottery (which shows a lot of technological and formal differences from their Mesopotamian counterparts), but also by locally specific production and ceramics with connections to central and possibly Eastern Anatolia. All these ceramics are mostly locally produced but differ by the procurement and processing of raw materials. Thanks to archaeometric analyses, our work shows that this local production made use of distinct recipes, which were also distinct from those of the region's Handmade Burnished Wares and Common Wares. We believe that the co-existence of Mesopotamian and Anatolian elements in the ceramic productions of Tepecik and Arslantepe at the end of the LC 5 Period shows the fluid and situational nature of cultural and social identities at this time, reflecting a multifaceted and multi-cultural horizon in these two areas of Eastern Anatolia. Both Mesopotamian-like and Anatolian-like ceramic traditions are at the same time and to the same degree extraneous and new, but they are also local (as raw materials were all locally available) and to a certain extent rooted in the previous period. At Tepecik as well as at Arslantepe, thin-section petrography clearly shows the use of distinct raw materials as well as differences in paste preparations for the Light-Colored Wares, on the one side, and Handmade Burnished Wares, on the other. The latter are distinguished by a strong variety of recipes made of raw materials which were available over more distant and wider areas (15–20 km) than those exploited for the Light-Colored Wares. Moreover, archaeometric analyses confirmed the possible circulation of some HBW pots between the two sites. Concerning the LCW, the most striking differences between those found at Tepecik and those found at Arslantepe concern the use of vegetal temper and the provenance of Uruk-type vessels. At Tepecik, the vegetal temper occurs in lower amounts and usually does not derive from agricultural by-products. However, the total lack of vegetal temper in a few vessels is only observable at Arslantepe, but never at Tepecik. Consistently with the evidence further south, the Uruk-type pottery was also produced locally in the

117 Fragnoli – Frangipane 2021.

Malatya and Altınova Plains, but some Uruk-like vessels could have been imported to Tepecik, which was not the case at Arslantepe.

90 One of the major differences between the Malatya-Elazığ Region and the Mesopotamian Plains is that no phenomena of urbanization are attested during the LC Period in the former region. Thus, LC urbanism and state formation might not coincide and rather reflected varied phenomena, in which different societal components played different roles. Henry Wright pointed out that Late Chalcolithic Mesopotamia was a region characterized by a strong polycentricity, with »many experiments in hierarchical organization emerging in the distinct heartlands of Lower Mesopotamia and Upper Mesopotamia at the end of the fifth millennium«[118]. Norşuntepe in the LC 1–2 and at least Arslantepe in the LC 4 and 5 Phases can be considered as good instances of Wright's early polycentricity.

91 Even though they were probably not precisely contemporaneous, the two LC 5 occupations at Arslantepe and Tepecik show the co-presence of different ceramic traditions with very different aesthetics and very diverse technological know-hows. Throughout the entire Late Chalcolithic Period and even in the previous Early Chalcolithic and Neolithic phases, the Malatya and Elazığ Region (taken altogether) is characterized by a mixture of strong local traditions, that might have persisted for several centuries, and ›elements‹ which originated from (or were simply shared with) more distant communities. These commonalities sometimes concern the shape of containers, and so formal ›models‹, and sometimes technologies, or the right way to do things. In summary, they imply different forms and spaces of interactions with other distant communities, whether Anatolian or Mesopotamian.

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118 Wright 2005, 156.

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ZUSAMMENFASSUNG

Die spätchalkolithische Keramik in den Regionen Malatya und Altınova

Unterschiedliche, aber sich überschneidende Gemeinschaften von Praktiken

Maria Bianca D'Anna – Akiva Sanders – Pamela Fragnoli

Dieser Beitrag befasst sich mit der Keramikindustrie in den Ebenen von Malatya und Altınova in der Region am oberen Euphrat in der Osttürkei am Ende des Spätchalkolithikums (LC 5, ca. 3400–3200 v. Chr.). Wir stellen die Produkte dieser Industrien in ihrem historischen Kontext innerhalb regionaler Trends im ausgehenden frühen Chalkolithikum, in ihrem geographischen Kontext mit Vergleichen zu keramischen Sammlungen aus Obermesopotamien und Zentralanatolien und in ihrem architektonischen und sozialen Kontext vor. Es ergibt sich ein Bild, in dem tief verwurzelte, lokale Traditionen der Keramikherstellung neben neu eingeführten Traditionen fortbestehen, die ihre Besonderheiten in Aussehen, Funktion und Herstellungstechniken bewahren, obwohl sie meist lokal hergestellt wurden. Die Erzeugnisse der verschiedenen Töpfergemeinschaften, die an diesen parallelen Industrien beteiligt waren, wurden in den Kontext der Nahrungsmittellagerung, -zubereitung und -konsum integriert, der diese Gemeinschaften überspannte und gleichzeitig ihre Eigenart betonte. Trotz dieser allgemeinen Ähnlichkeiten bestehen jedoch in jedem der hier behandelten Zeiträume tiefgreifende Unterschiede bei den Warenrezepturen, Produktionstechniken und interregionalen Verbindungen zwischen den benachbarten Ebenen von Malatya und Altınova.

SCHLAGWÖRTER

Arslantepe (Malatya), Tepecik (Elazığ), Keramik, Spätchalkolithikum

ÖZET

Malatya ve Altınova Yöresinin Geç Kalkolitik Dönem Keramiği

Ortak Uygulamalardaki Fark ve Benzerlikler

Maria Bianca D'Anna – Akiva Sanders – Pamela Fragnoli

Bu çalışma, Türkiye'nin Doğusunda, Yukarı Fırat bölgesinde yer alan Malatya Ovası ve Altınova'da bulunan Geç Kalkolitik dönemin sonu (GK 5, yaklaşık M.Ö. 3400–3200'ler) seramik endüstrilerine odaklanmaktadır. Bu endüstrilerin ürünlerini; tarihsel bağlamları içinde, Erken Kalkolitik dönemin sonundan itibaren görülen bölgesel eğilimler içinde, coğrafi bağlamlarında, Yukarı Mezopotamya ve Orta Anadolu'daki seramik buluntu toplulukları ile karşılaştırmalı olarak, mimari ve sosyal bağlamları içinde ele almaktadır. Sonuçta ortaya, seramik üretiminin derin ve yerel geleneklerinin yanı sıra, görünüm, işlev ve üretim teknikleri açısından farklılıklarını koruyan, çoğunlukla yerel üretim yeni geleneklerin de yer bulduğu bir tablo çıkmaktadır. Bu birbirine paralel endüstrilerin içinde yer alan çeşitli çömlekçi topluluklarının ürünleri, bu toplulukları birbirine bağlayan ve aynı zamanda onların ayırt edici özelliklerini vurgulayan gıda depolama, hazırlama ve tüketim bağlamlarına entegre edildi. Tüm bu benzerliklere rağmen, yakındaki Malatya ovası ve Altınova arasındaki seramik hamuru tarifleri, üretim teknikleri ve bölgeler arası bağlantılar arasındaki her dönemde varlığını sürdüren derin farklılıklar da bu yazıda ele alınmıştır.

ANAHTAR SÖZCÜKLER

Arslantepe (Malatya), Tepecik (Elazığ), çanak çömlek, Geç Kalkolitik

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Fig. 21: after original drawings from Archive Missione Archeologica Italiana in Anatolia Orientale (redrawn: Maria Bianca D'Anna)
Fig. 22: after original drawings from Archive Missione Archeologica Italiana in Anatolia Orientale (redrawn: Maria Bianca D'Anna)
Fig. 23: after original drawings from Archive Missione Archeologica Italiana in Anatolia Orientale (redrawn: Maria Bianca D'Anna)
Fig. 24: Left: © Archive Missione Archeologica Italiana in Anatolia Orientale; Right: © Tepecik Archive, Istanbul University (photos: Maria Bianca D'Anna)
Fig. 25: Maria Bianca D'Anna
Fig. 26: Maria Bianca D'Anna
Fig. 27: Maria Bianca D'Anna
Fig. 28: Table made by Pamela Fragnoli
Fig. 29: Tepecik Archive, Istanbul University
Fig. 30: after original drawings from Tepecik Archive, Istanbul University (redrawn: Maria Bianca D'Anna)
Fig. 31: © Pamela Fragnoli

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