

Ulucak Höyük: the pottery emergence in Western Anatolia

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ABSTRACT – *It has been increasingly clear that pottery was adopted as a continuous technology during the first quarter of the 7th millennium BC in a wide region, from Upper Mesopotamia through Central Anatolia and the Lakes District region. However, the absence of pottery in the basal level at Ulucak Höyük shows the presence of a pre-ceramic sequence in western Anatolia, before c. 6600/6500 cal BC. This article discusses the earliest pottery assemblage from Ulucak (6600/6500–6200 cal BC) and compares it with the later ceramic sequences at the site. Ultimately, the functional and typological developmental sequence of Neolithic pottery at Ulucak Höyük and its temporo-spatial relations with other Neolithic sites in Anatolia will be assessed.*

KEY WORDS – *Ulucak Höyük; Neolithic; pottery; Western Anatolia; pre-ceramic*

Ulucak Höyük: pojavn lončenine v zahodni Anatoliji

IZVLEČEK – *Vse bolj je jasno, da je bilo lončarstvo kot tehnologija sprejeto neprekinjeno v prvi četrtini 7. tisočletja pr. n. št. na širokem območju od zgornje Mezopotamije do osrednje Anatolije in območja jezer. Kljub temu odsotnost lončenine v najglobljih plasteh na najdišču Ulucak Höyük kaže na obstoj predkeramične sekvence v zahodni Anatoliji, in sicer pred ok. 6600/6500 pr. n. št. V članku razpravljamo o najzgodnejšem zbiru lončenine iz Ulucaka (6600/6500–6200 pr. n. št.) in ga primerjamo s kasnejšimi sekvencami keramike na tem najdišču. Na koncu ocenjujemo funkcionalno in tipološko razvojno sekvenco neolitske lončenine na najdišču Ulucak Höyük in njeno časovno in prostorsko povezavo z drugimi neolitskimi najdišči v Anatoliji.*

KLJUČNE BESEDE – *Ulucak Höyük; neolitik; lončenina; zahodna Anatolija; predkeramični neolitik*

Introduction

7000 cal BC has generally been regarded as the dividing line between the pre-pottery Neolithic and the pottery Neolithic in Southwest Asia. As Neolithic sites with a domestic economy in Western Anatolia and further west were founded after 7000 cal BC, it has been premised that the Neolithic way of life in these regions started with pottery as part of the Neolithic package. Therefore, declarations of the absence of pottery in some Neolithic sites in the West are met with widespread scepticism (Reingruber 2015), despite the fact that pottery technology was not em-

braced by all Neolithic communities at the same time in the East, such as those in the Southern Levant and Cyprus (Nieuwenhuys, Campbell 2017: 168). The basal levels of all Neolithic sites such as Yeşilova, Ege Gübre and Dedecik-Heybelitepe in Western Anatolia founded after 6500 cal BC revealed pottery. However, the situation at a few sites in the region which were founded in the first half of the 7th millennium BC is a rather complex one. The basal level of Çukuriçi Höyük (XIII) dating to 6680–6600 cal BC yielded only a few ceramic sherds (Horejs

2019.77), while none have been found in the basal level at Ulucak (VI), exposed in Trench L13 and partly in L12 and K13. Ulucak VI consists of at least three sub-phases and is dated to 6850–6500 cal BC by sixteen ^{14}C dates (Çevik 2016; Çevik, Erdoğan 2020). Nonetheless, a few ceramic sherds coming from a fill between Level V and the latest phase of Level VI may indicate that sporadic occurrences of pottery at Ulucak can be dated to post-6600 cal BC. In fact, a similar situation is observed in the earliest level of Uğurlu

(VI) on the island of Gökçeada (Imbros). The latest phase of Uğurlu VI, dated to 6600 cal BC, yielded a number of ceramic sherds, although the earlier phase (6700 cal BC) is devoid of pottery (Erdoğan 2017.79). What this indicates is that pottery technology is yet unknown during the initial phase of Neolithic occupation (c. 6850–6600 cal BC) in Western Anatolia and possibly also at Knossos on Crete (Efstratiou et al. 2013). This technology was adopted by the Neolithic communities in the region at around 6600 cal BC, or slightly later. However, the term ‘Initial Neolithic’ for this earliest occupational phase is more appropriate, as the pre-ceramic sequence in western Anatolia is represented by a full-fledged agricultural and herding system (Çakırlar 2012).

The Neolithic pottery from the later phases of Ulucak Höyük (Levels Vb through IV) has already been published (Çilingiroğlu 2012). Thus, this paper presents the earliest pottery assemblage (Vc-e) from Ulucak, dating to 6600/6500–6200 cal BC. A comparison with the later pottery sequence at the site is then presented. Ultimately, the developmental sequence of the Neolithic pottery from Ulucak Höyük will then be contextualized within the wider region, including Anatolia and Northern Mesopotamia.

The early ceramic sequence in Anatolia and Northern Mesopotamia: an overview

The earliest pottery in Southwest Asia is dated from the 9th millennium BC through the early 8th millennium BC, seen at Boncuklu Höyük (c. 8300–7800 cal BC) in Central Anatolia (Fig. 1) and Kfar Hahorah (c. 8750–7500 cal BC) in the Southern Levant (Spataro et al. 2016; Fletcher et al. 2017; Biton et al. 2014). These earliest ceramics in PPNB contexts are not frequent and generally consist of thick-walled



Fig. 1. The Neolithic sites mentioned in the text.

open vessels with vegetable temper, although some sherds from Boncuklu also contain mineral inclusion. These early attempts of ceramic use, however, cannot be followed in the subsequent periods or in the wider region. Thus, it has been suggested that pottery became an integral part of the material world after it was adopted as a continuous technology starting from the beginning of the 7th millennium BC, or even somewhat earlier (Nieuwenhuys, Campbell 2017.172).

Sites which have both PPNB levels and successive levels with early ceramics suggest a strong continuity in material culture between the two periods (Nieuwenhuys et al. 2010.76; Nishiaki, Le Mière 2005.57; Cruells et al. 2017.28). The earliest pottery horizon in Northern Mesopotamia and the Northern Levant is characterized by mineral tempered, burnished wares, dated to between 7000 and 6700 cal BC (Campbell 2017). The nature of mineral temper shows intra-site variation and mainly consists of basalt, calcite and carbonate. The surface colour is generally dark (grey, dark grey and black) although light colours (cream, buff, pinkish, pale and yellowish brown) also occur. Possibly in order to distinguish them from the later mineral tempered wares (i.e. dark faced burnished wares, DFBW) the earliest ceramics have been labelled ‘early mineral ware’ in Tell Sabi Abyad (Nieuwenhuys et al. 2010.75; Nieuwenhuys 2017.19), ‘early dark ware’ in Tell Seker Al-Aheimar (Nishiaki, Le Mière 2005.61), ‘black series’ in Akarçay Tepe and Tell Halula (Arimura et al. 1999.239; Cruells et al. 2017.37), ‘Kerkh Ware’ in Tell El-Kerkh 2 (Tsuneki, Miyake 1996.114), ‘mineral tempered burnished ware’ in Salat Camii Yanı (Miyake 2017.56) and ‘sandy ware’ in Yumuktepe (Balossi-Restelli 2004.115; 2017.84–85). The average thickness of the vessel walls of this period is

about 10mm, while the shapes are rather simple including hole-mouth convex sided bowls and hemispherical bowls with flat bases. Ledge handles and pierced knobs are also typical. Decoration do not appear to have been characteristic during this early stage of pottery production, although some painted sherds were recorded in Tell Sabi Abyad and Tell Seker Al-Aheimar (Nieuwenhuysse et al. 2010.79–80; 2017.20–21; Nishiaki, *Le Mière* 2005.62).

This earliest pottery horizon is replaced by plant tempered coarse ware in Upper Mesopotamia (Akkerman et al. 2006; Nieuwenhuysse et al. 2018.12; Arimura et al. 2005.238–239; Özdoğan 2009.30), while ‘mineral tempered dark face burnished wares’ represent the dominant ware type both in Cilicia and the Northern Levant (Balossi-Restelli 2004; Odaka

2013). Although the variety of shapes and the amount of ceramics increased after around 6700 cal BC, the real quantitative increase in the pottery assemblage appears to have taken place during the last quarter of the 7th millennium onwards (Nieuwenhuysse, Akkerman 2019.112). It is in this later period that the shapes of the vessels are also diversified, including distinctively articulated necked jars, carinated bowls, plates and large storage jars which show utilitarian aspects of pottery use, from storage to food preparation and drinking (Akkerman et al. 2006.147–148). ‘Red slipped/washed wares’ first appeared in the Amuq B horizon, although they never became an important component of the pottery assemblage (Çilingiroğlu 2009.204). With regard to decoration, impressed wares are both seen in Cilicia (Yumuktepe XXIX-XX) and Upper Mesopotamia after around 6700 cal BC, while painted decoration increasingly predominated starting from the last quarter of the 7th millennium BC onwards (Nieuwenhuysse, Akkerman 2019.107; Tekin 2017.110; Arimura et al. 2000.237).

Technological traits (mineral temper, closed shapes with handles, and burnishing) suggest that cooking may have been one of the functions of the earliest ceramics (Le Mière 2017.14; Nieuwenhuysse, Campbell 2017.181). However, their low frequency, restricted shapes and smaller capacity, suggest against their use in everyday commensality within the routine domestic sphere (Nieuwenhuysse, Campbell 2017.182). Thus, even if they did function as cooking utensils that held food or drink, this may still have been related to a special event, with a special type of contents or for a selected number of people. In general, these early vessels are not considered to be a stage that led to a culinary revolution (Nieuwenhuysse, Campbell 2017.182).

Çatalhöyük (East) provides the early pottery sequence in Central Anatolia, dating from the end of the 8th millennium BC onwards. The earliest ceramic horizon (Levels XII-VIII/VII) is mainly characterized by plant tempered wares with thick walls, ranging 10–25mm (Last 2005; Özdöl 2012). The surface colour of this wares is buff, cream, light grey and rarely red, called ‘cream burnished ware’ or ‘cream organic ware’ (Mellaart 1966; Yalman 2006). As was the case in Upper Mesopotamia and the Northern Levant, the shapes show restricted variety and mainly consist of bowls (Mellaart 1966; Özdöl 2012). Bowls with convex or straight profiles, and hemispherical bowls, are typical. Lugs and handles are absent, while flat bases with rounded and

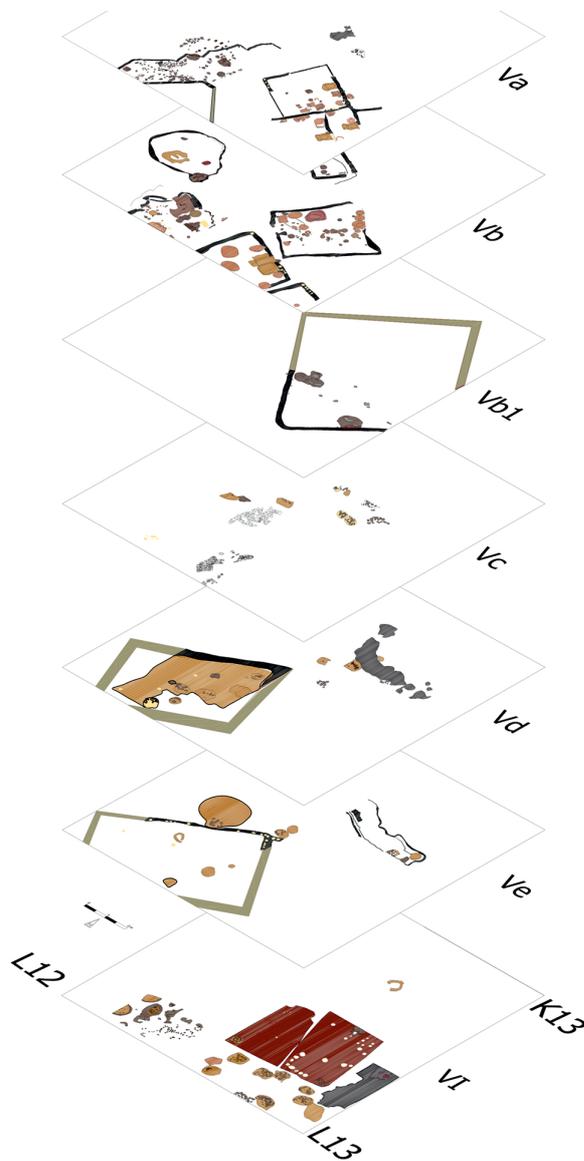


Fig. 2. Drawing of architectural remains from Level VI through Level V in Trenches L13, K13 and L12.

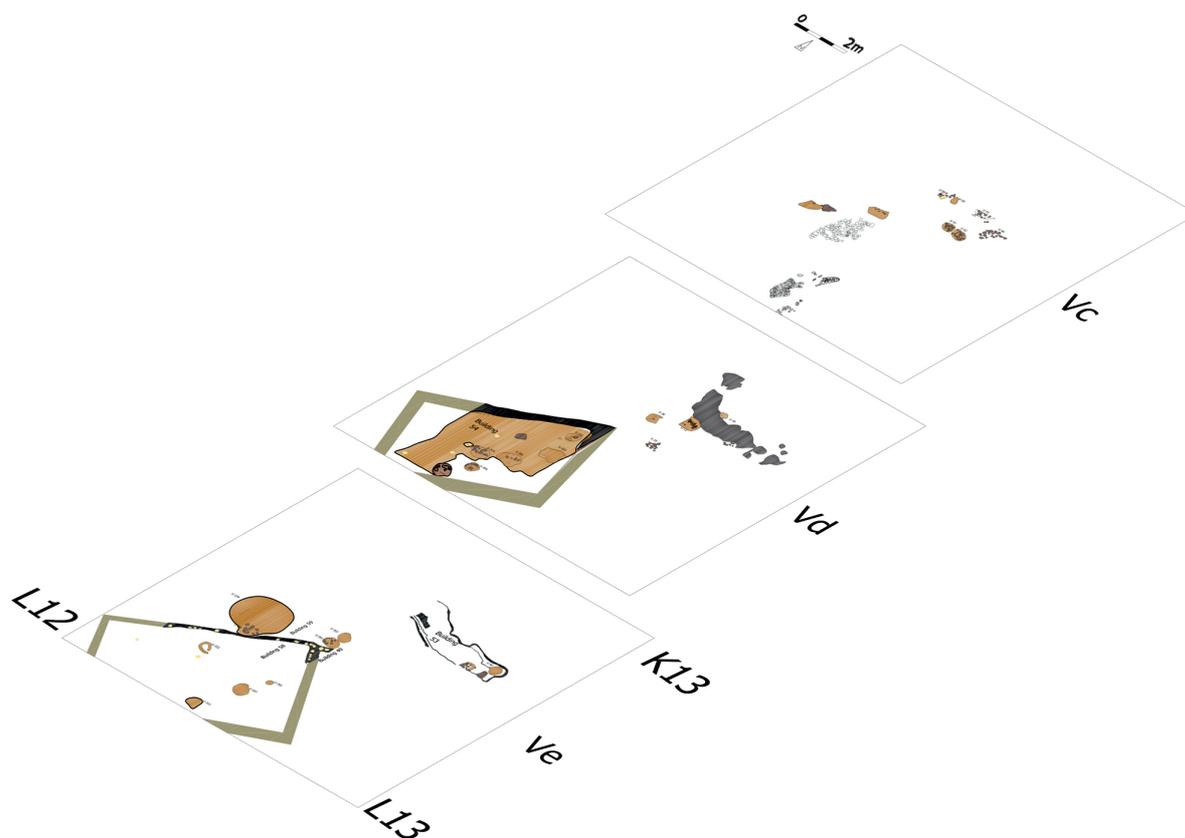


Fig. 3. Drawing of Levels Vc-e in Trench L12.

angular junctions are common. A few oval bases are also noted. Mineral tempered wares are first introduced in Level VIII/VII at around 6700/6600 cal BC, while a small percentage of light wares are part of the assemblage in Çatalhöyük (Özdöl 2014.32; Last 2005.106). Mineral tempered pottery, locally called ‘dark gritty wares’ or ‘dark standard ware’, became a dominant ware type between Levels VII-IV, although it then decreased continuously in the upper levels. This ware group is thin-walled (4–8mm) and its mineral temper includes quartz and various volcanic-originated minerals (Last 2005.105). Their surface colour is generally black, brown and reddish brown. Among the common shapes are hole-mouth jars with globular bodies and vertically perforated lugs, S-profiled collar necked jars, and also bowl types known from the earlier period (Özdöl 2014.32–38; Last 1996.116). It has been suggested that the dichotomy between dark and light surface colours in the pottery assemblage may reflect the functions of the pots, which generally consist of bowls and special forms (Özdöl 2012). In the upper levels (IV-I), dating to 6400/6300–6000 cal BC, bowls and lighter surface colours including cream, orange and red became more frequent. It is of particular interest that mineral tempered red-slipped and burnished wares became the dominant surface treatment in Level III,

although a few red-slipped wares first appeared in Level VI (Özdöl 2008.379; Rosenstock et al. 2019.175). Moreover, developed forms such as sharply carinated bowls with everted rims, vessels with pronounced ‘S’ profiles and necked jars, together with ledge handles and vertically perforated tubular lugs, ring and footed (disc) bases are also seen in Çatalhöyük IV-I (Özdöl 2014.38–39). Nonetheless, large storage jars are so far only known from the West mound sequence (Rosenstock et al. 2019.175). Decoration including incision, relief and paint is sporadically found in Levels IV-I (Özdöl-Kutlu 2014.41–42), although painted decoration is fully integrated into the ceramic assemblage in the sequence of West Mound in Çatalhöyük. In fact, the frequency of pottery is low through the Neolithic sequence at Çatalhöyük, while an increase in pottery production has been recorded in the West Mound sequence (Rosenstock et al. 2019.175).

Mineral tempered wares, however, do not seem to have been a common feature in the pottery assemblage from Central Anatolia, as the organic tempered wares attested through the Neolithic period in Tepecik-Çiftlik have shown (Bıçakçı et al. 2012.96–98). The pottery from the earliest levels (9–5) in Tepecik-Çiftlik, dating to the first half of the 7th millennium

BC, is characterized by plant tempered wares with both dark and light surface colours. Hole-mouth bowls and bowls with straight walls are typical shapes, while handles/lugs and decoration are not recorded in this early pottery assemblage (Godon 2011.321; Bıçakçı et al. 2012.97). A few mineral tempered wares, some of which have impressed decoration are thought to have been imported (Godon 2005.97). A small number of red-slipped sherds in Level V, which is dated slightly earlier than 6300 cal BC, has been considered as an intrusion from Level 3, where this ware type is frequently found. Level 3 (c. 6000 cal BC) marks the diversification of shapes such as carinated bowls, necked jars and large-sized storage jars (Godon 2005.95). This is also the period when the relief decoration of Levels V-IV was replaced by incised decoration, and the amount of organic temper increased in relation to large-sized jars.

Regarding the function of the initial pottery from Central Anatolia, a recent study on lipids suggests that both mineral and plant tempered wares from Çatalhöyük were used for cooking purposes starting from c. 6860 cal BC, although lipid residues have been found more often in dark mineral tempered wares when compared to plant tempered cream wares (Pitter 2013). It is interesting to note that both hole-mouth jars and bowls were used for cooking purposes.

In the Lakes District region, Bademağacı is the only site where one may infer the characteristics of the pottery assemblage during the early 7th millennium BC. The early horizon in Bademağacı is termed the Early Neolithic I (ENI), including Levels 9 through 5. The earliest occupation phases at Bademağacı are dated to c. 7000–6700 cal BC based on a single ¹⁴C date from EN I-8. (Duru 2012. 20). EN I levels reveal mica tempered wares with pink, beige, dark grey and greyish brown surface colours (Duru 2007.347; 2012.18). Their surface is poorly burnished. The form variety is restricted and consists of



Fig. 4. Jars from building closing deposit (Building 54).

hemispherical bowls with slightly inverted or everted rims and hole-mouth jars with flat bases. In addition to a few vertically placed pierced lugs in Levels 7–5, some new forms are added such as vessels with flattened rims, sharply carinated jars and flaring shallow bowls. Since these developed forms have generally been recorded in Anatolia during the second half of the 7th millennium BC, this has led to the reconsideration that the pottery from Levels 7–5 either belong to a time-period later than mid-7th millennium BC, or these shapes were experienced earlier in this region than elsewhere. Certain changes occurred during the EN II period (Levels 4–1) in Bademağacı (Duru 2012.19). The surface colour tended to be darker, with tones of brown and grey. Earlier shapes continued, while the number of carinated, slightly ‘S’ profile large bowls with an everted rim increased. Oval forms, disc bases and tubular lugs were introduced. Large-sized storage

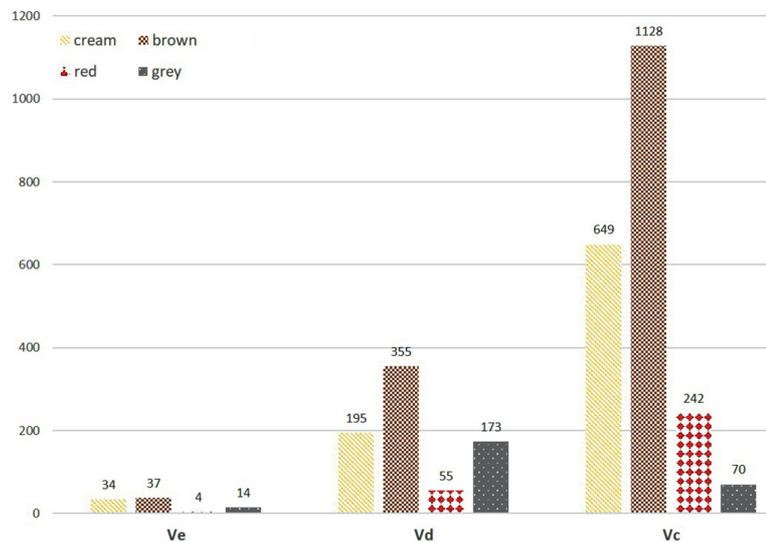


Fig. 5. Distribution of ware types in levels Vc-e.

jars have only been attested in the latest phase of EN II (*Duru 2003: 559*). Decoration is rarely seen, including relief and paint. Mineral tempered wares from Hacilar IX-VI appear to have been contemporary with EN II in Bademağacı. Light surface colours including cream, light grey and buff dominate in the pottery assemblage of Hacilar IX and VIII, although red surfaces are also present (*Mellaart 1970*). Nonetheless, the frequency and quality of the red-slipped burnished wares increased in Hacilar VII-VI. Tubular lugs, pierced knobs, oval bases and sporadic paint decoration are found starting from Level IX onwards. Painted wares increasingly became dominant after Hacilar V.

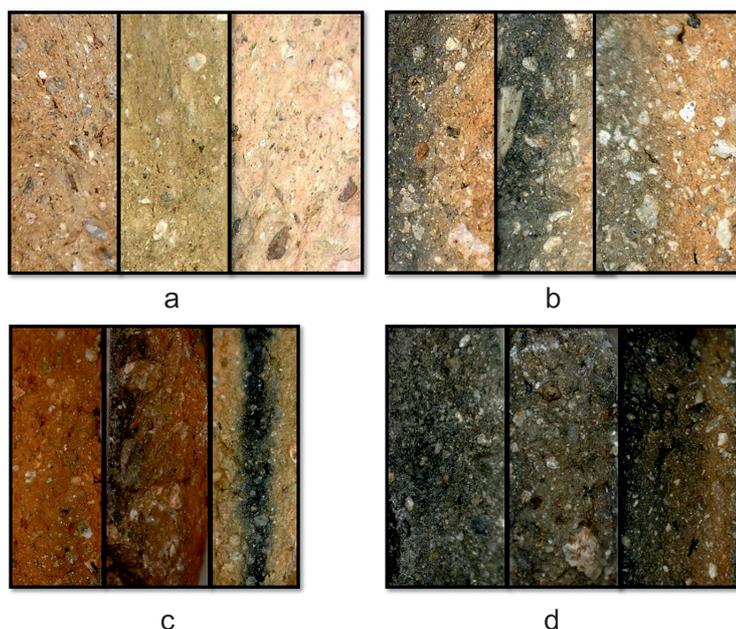


Fig. 6. Fabrics of cream (a), brown (b), red (c) and grey (d) wares.

The following can be inferred from the brief survey of the early pottery sequence in Anatolia and Upper Mesopotamia:

- Pottery was integrated into the material culture of the wider region around 7000–6700 cal BC. This early sequence appears to have been homogeneous in terms of both the low quantity of sherds and restricted variety of forms consisting of mainly bowls with flat bases. Lugs and handles are not found in the earliest ceramic assemblage from Cilicia, Central Anatolia and Lakes District, although pierced knobs and ledge handles sporadically accompanied the vessels in Upper Mesopotamia.
- The earliest pottery horizon started with mineral tempered wares in Upper Mesopotamia, the Northern Levant, Cilicia and the Lakes District, while in Central Anatolia it began with plant tempered wares. Mineral temper remained the characteristic feature of the pottery assemblage throughout the Neolithic period in Cilicia and Lakes District regions, whereas it was introduced to Central Anatolia at a slightly later date, possibly more or less at the same time when plant tempered wares become dominant in Upper Mesopotamia. Nonetheless, plant temper persisted through the Neolithic period in the Cappadocia region.
- The early pottery sequence in the region can be characterized by both dark (brown, grey or black) and light surface colours (cream, buff, beige). Red-slipped burnished wares are a later phenomenon

that were found in the late 7th (Lakes District) and early 6th millennium BC (Central Anatolia). Impressed decoration on DFBW appears to have been a main decorative technique in Cilicia and Upper Mesopotamia (from c. 6700 cal BC onwards), while painted wares become predominant during the late 7th (Upper Mesopotamia) and early 6th millennium BC (Lakes District and Central Anatolia).

- Pottery production started in small numbers with simple shapes, and gradually developed over a few centuries. Nonetheless, it was fully integrated into the material culture after the late 7th millennium BC, as has been shown by the diversification of shapes including necked jars, carinated vessels and storage jars, as well as by variations in handles/lugs and bases types.
- Both technological traits and lipid analysis suggest that mineral tempered wares were used for cooking.

Stratigraphical and contextual setting of the early pottery in Ulucak

Ulucak Höyük is located 25km east of Izmir in west-central Turkey (Fig. 1). The Neolithic occupation at the site, which is designated by Levels VI through IV, is dated from 6850 to 5700 cal BC. As has been explained above, Ulucak VI (6850–6500) is devoid of pottery. If a few body sherds are not intrusive, which can be dated to sometime around 6600–6500 cal BC, then they do not display any difference than those found in the earliest phase of Ulucak V. The earliest

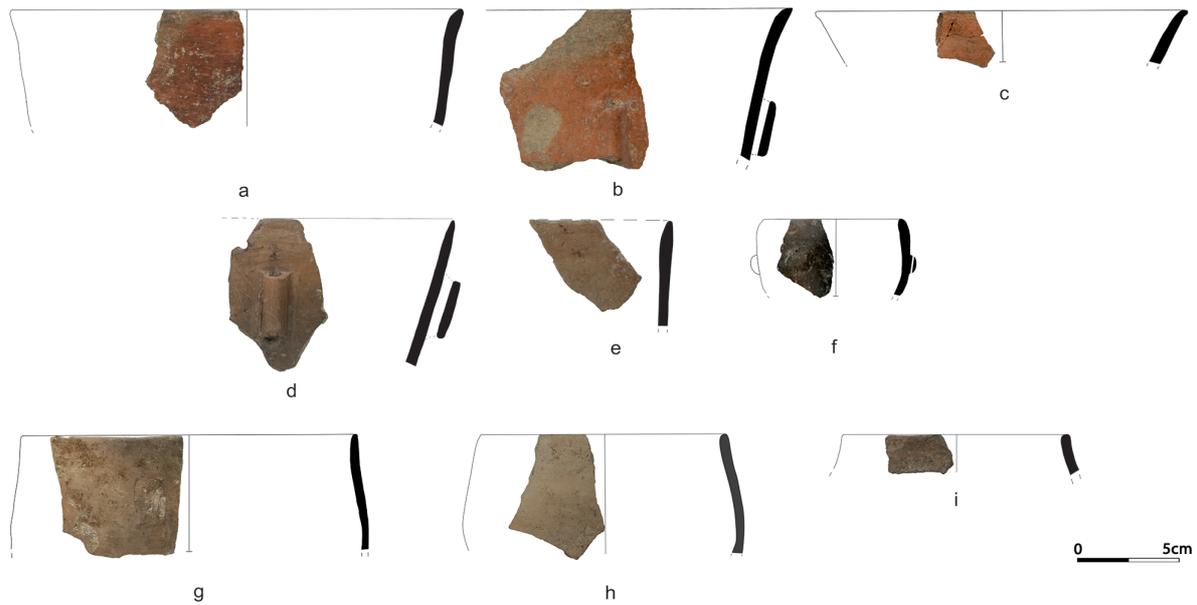


Fig. 7. Bowls from Levels Vc-e.

phases of Ulucak V(c-e) have been exploited in trenches of L13, L12 and K13, covering an area *c.* 135m² (Fig. 2). These three early sub-phases of Ulucak V differed from the upper layers by the absence of clay images including figurines and stamps, and are dated to 6530–6200 cal BC, based on 33 radiocarbon samples including both short- and long-lived species (Çevik, Erdoğan 2020). Three successive building phases of Level Vc-e are stratigraphically well defined in L12, whereas open spaces with cobble-paved hearths and patchy traces of pebble paved surfaces characterized the remains uncovered in L13 and K13. As such, only the pottery assemblages from Trench L12 will be evaluated here. The earliest phase (Ve) is represented by three post-framed buildings (nos. 58–59 and 40) that have common walls. In Level Vd, Building 54 was directly constructed on Building 58, while the other two buildings (40 and 59) no longer survived (Fig. 3). No building has been recovered in Level Vc, but a circular stone wall and two ovens have been recorded. All buildings of the earliest two phases were burnt. The entire inventory of Building 58 was emptied before Building 54 was erected. The burnt debris of the walls and the roof of Buildings 54 and 59 were removed. In fact, the deliberate closing of these two buildings is also suggested by the structured deposits covered by lime plaster that were recovered immediately above the buildings. It is interesting to note that vessels were part of these building's closing deposits. A bowl sherd (Fig. 7d), with a repairing hole, was found together with the mandible of animal, a bone tool and a few chipped stone tools in the closing deposit of Building 59 (Ve). Besides two beakers and a jar with a convex body

from the floor of Building 54 (Vd), a total of five pots together with scapulae and a grinding stone were found in a closing deposit of the same building. One of the two jars from this latter deposit was placed upside down, sealing the one below, possibly indicating some ritual role (Fig. 4).

The pottery of Ulucak Early Vc-e

Pottery from Ulucak Vc-e is characterized by mineral tempered wares with thin walls. Three main ware types can be defined according to their surface colours, including dark brown/grey, cream/buff and red/reddish brown (Fig. 5). However, cream/buff and dark brown/greyish brown wares dominated the pottery assemblage through the early sequence, although the amount of red surface colours gradually increased towards the upper layers. One may also see a sharp increase in the amount of pottery from Level Ve through to Level Vc. The total volume of excavated soil from each level is 5m³ (Ve), 7.5m³ (Vd) and 14.25m³ (Vc). Accordingly, the 88 sherds from Level Ve represent a density of about 18 sherds per cubic meter of soil, while ceramic density in Vc is more than ten times higher, at about 197 sherds per cubic meter of soil.

The paste of the dark brown and grey wares is porous and coarse, and includes white and grey grits (Fig. 6.b-d). However, the matrix of the paste of cream/buff (Fig. 6.a) and red wares (Fig. 6.c) is less porous, while their texture is rather denser. The temper of the latter wares shows a high variety of density and typology. The core of the fabrics sug-

gests a diversity in firing techniques. The cream/buff wares are fully oxidized, while brown wares are generally not fully oxidized, as has been suggested by bitone cores with black and orange. Most of red-slipped wares are fully oxidized, although some have a black colour in the middle and orange external part. Almost all vessels are burnished from poor to medium, and generally have mottled surfaces. Nonetheless, from Level Vc onwards medium and fine burnished wares become frequent.



Fig. 8. Jars and beakers from Levels Vc-e.

Hole-mouth bowls (Fig. 7.i) and slightly S-profiled bowls with thin walls (4–9mm) and flat rounded bases are common in the earliest phase (Ve) (Fig. 7.a-b; Fig. 9.a, c). Vertically placed tubular lugs are known from this phase onwards. In the subsequent levels (Vd-c) hole-mouth jars with simple, inverted and slightly everted rims, and slightly S-profiled jars with globular bodies, are integrated into the pottery assemblage (Fig. 8.a-d, g-k). Horizontally placed pierced knobs and tubular lugs are typical on these jars. Among the common bowl shapes are hole-mouth, hemispherical and those with straight walls (Fig. 7.c-h). Besides the bowls and jars, a few beakers (Fig. 8.e-f) were also recorded. Disc and flat bases with angular junctions are commonly seen (Fig. 9. b, d-g). The walls of the vessels become thicker in Level Vc (2–17mm). No decorated pottery has yet been found in the earlier sequence of Trench L12. However, a few red-on-cream painted sherds consisting of simple strips are known from trenches L13 and K13 (Fig. 10). These painted sherds resemble those found in Hacilar IX and VII (Mellaart 1970.Figs. 47, 49), and definitely belong to the phase earlier than Level Vb, although their precise subphase has yet to be determined.

The earliest pottery from Ulucak shared certain similarities with those found in the Lakes District. First, pottery production in these two regions began with mineral tempered wares. Cream/buff and grey surface colours, and the base types (flat/disc), may be compared with the pottery from Bademağacı EN I-II layers and Hacilar IX-VIII. However, in this region there seems to have been no equivalent to the dark brown burnished wares, which are a very distinctive feature of the early pottery assemblage in Ulucak.

Furthermore, the early ceramics of Ulucak differed from Hacilar IX-VI and Bademağacı EN II by the absence of vessels with pronounced ‘S’ profiles, whereas these shapes are increasingly dominant from Ulucak Vb onwards. Straight-sided bowls and those with a slight ‘S’ profile in Ulucak are reminiscent those from at Bademağacı EN I (9–5), although the former have tubular lugs. The developed forms such as carinated vessels and flattened rim jars from Bademağacı EN I layers are not known from the earlier sequence of Ulucak. Nonetheless, flattened rim jars first occurred in the later phases of Ulucak V, as will be detailed below. The parallels of hole-mouth jars can be found in the wider region, including Central Anatolia (Çatalhöyük VII-IV; Özdöl 2012) and the Lakes District (Bademağacı EN I/8–5 and EN II, Duru 2012; and Hacilar IX-VI, Mellaart 1970). Additionally, the sporadic appearance of painted sherds in the second half of the 7th millennium BC appears to have been common in both regions.

Comparing the early pottery sequence with later phases at Ulucak

By taking ware types and differences in form, chronological value can be drawn between the earlier and later pottery sequences in Ulucak. Brown, grey and cream slipped and burnished wares with thin walls are dominant through the early sequence (Vc-e) at the site, despite sporadic occurrences of red-slipped burnished wares starting from the earliest level onwards. However, red-slipped burnished wares started to be an integral part of the pottery assemblage (30–35%) during the period of Late V(a,b),

from 6200 cal BC onwards. Nonetheless, a more prominent increase of red-slipped burnished wares (80–90%) has been attested in Ulucak IV after 6000 cal BC, when pottery production was specialized (Çilingiroğlu 2012). The recent discovery of a six-roomed pottery workshop, which revealed a large number of clay loaves, unfinished coil vessels, red hematite lumps and the remains of pigmented grinding stones used for powdering hematite, shows that pottery production at Ulucak was a specialized activity that took place beyond domestic units at the beginning of the 6th millennium BC (Çevik 2016). Evidence from this workshop indicates that various techniques were used to obtain red surface colours in this later period, by direct addition of hematite to the paste and by slipping. Mineral temper is characteristic through Level V, whereas plant tempered wares became part of the pottery assemblage during Level IV. In fact, during the early 6th millennium BC plant tempered paste was peculiar to ceramic production and the making of anthropomorphic figurines.

The shapes of Early V(c-e) also differed from Late V(a-b). Bowls and jars with pronounced ‘S’ profiles, jars with thick flattened rims and ring bases are found starting from Ulucak Vb onwards (Fig. 11). Although slight carinations are recorded on the belly of some bowls, sharp carinated bowls are never integrated into the assemblage. Tubular lugs and horizontally placed pierced knobs are seen throughout the Neolithic sequence at Ulucak, whereas small unpierced knobs emerged after Vb. The capacity of the hole-mouth jars in Early V is rather low, less than 5 litres. Despite a total absence of a whole pot belonging to a group of jars with thick flattened rims in Vb, their capacity appears to have been higher than those from earlier hole-mouth jars. The volume of jars is significantly increased in Level IV, when distinctive long-necked jars with a capacity of more than 50 litres are first attested (Çilingiroğlu 2012.75). Mud plastered silos and clay boxes in Ulucak V disappeared, while their function was fulfilled with large-sized jars after 6000 cal BC. The general absence of handles on these storage jars may suggest that they were not transported or kept in fixed locations at domestic units. Besides large-sized jars with simple, sharply everted and bead rims, splaying

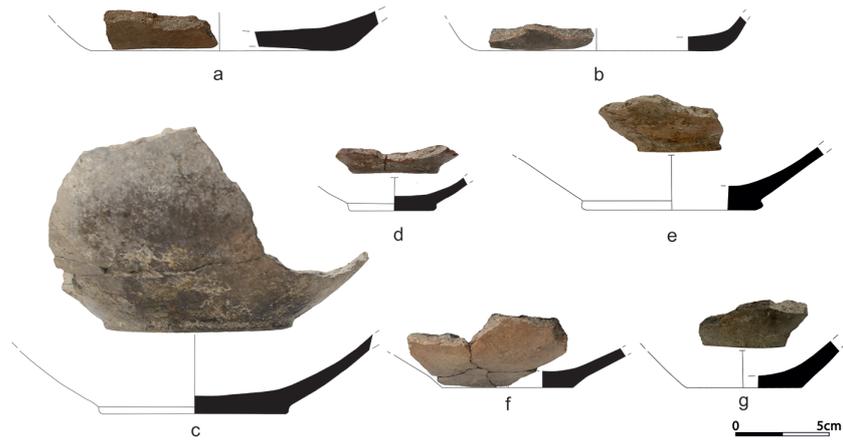


Fig. 9. Base types from Levels Vc-e.

bowls, oval forms and anthropomorphic vessels are also integrated into the assemblage in Ulucak IV.

Decoration is rare and never become an important component of the Neolithic pottery in Ulucak, or for that matter in Central-Western Anatolia in general. Paint decoration is evident starting from the earliest sequence at Ulucak, while impressed wares (Va) and relief decoration (Vb) are sporadically found since the late V sequence onwards. In contrast to the insignificant number of painted sherds, the high quantity of red-slipped burnished wares in the early 6th millennium BC suggests that these may have been one of the media which established the symbolic network within and between the communities in Central-Western Anatolia.

Regarding the function of these vessels, an analysis of organic residues from ceramics indicates that cooking was one of the functions of the Ulucak pottery (Özbal et al. 2013.107–108, 114). Milk lipids have been found in one of the ceramic sherds from Level IV, while eight ceramic sherds including one from the earliest sequence yielded samples with ruminant (cattle, goat and sheep) and non-ruminant (pig) fats. It is also interesting to note that some of the ceramics appear to have been covered with bees-



Fig. 10. Painted sherds from trenches L13 and K13.

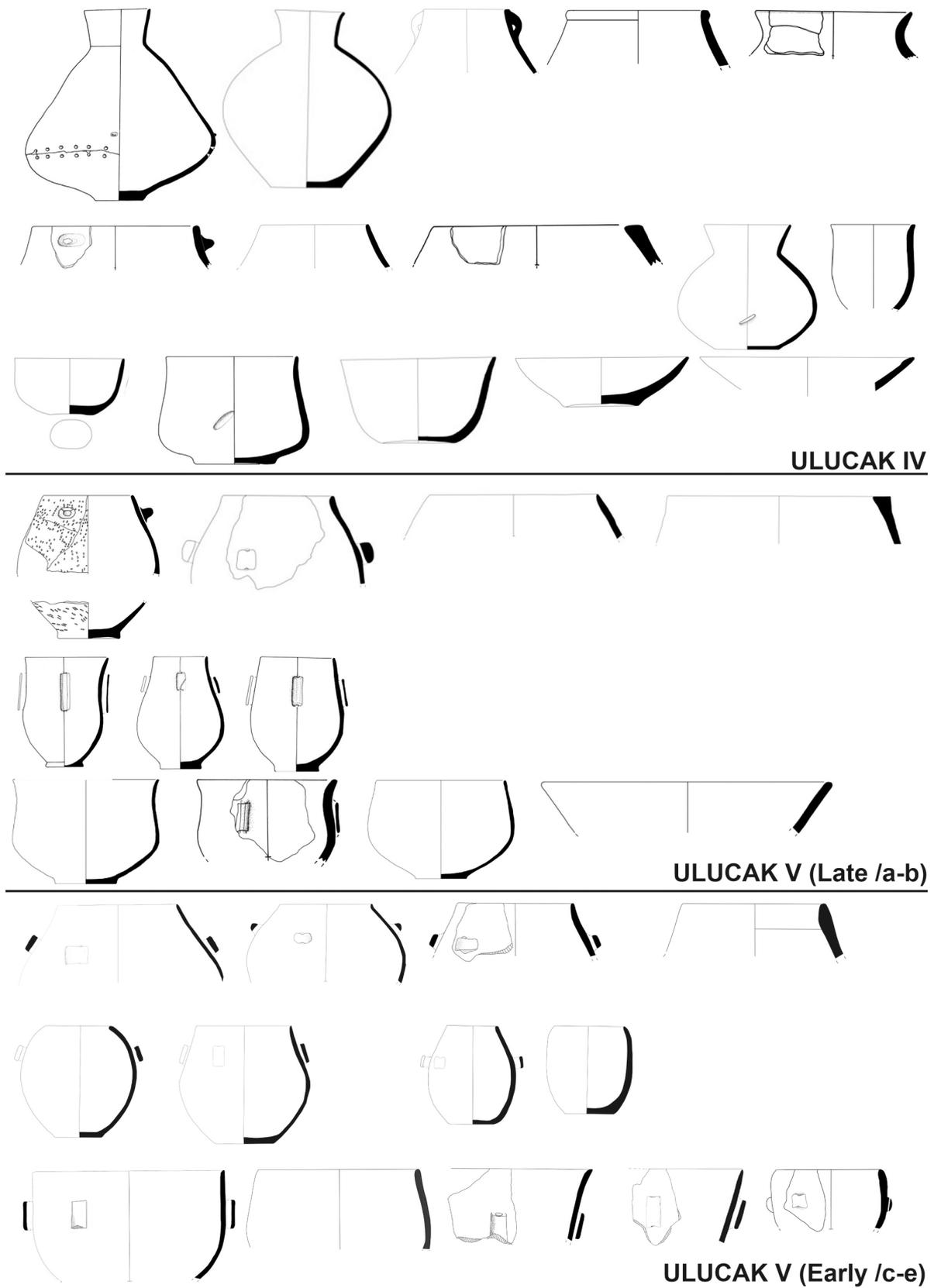


Fig. 11. Typological development of pottery from Level V through IV.

wax, possibly to prevent the permeability of vessels, as shown by the traces from a ceramic sherd in Ulucak IV (Özbal 2017:224). Consequently, even at the earliest occupation phases at Ulucak ceramics seem to have met all requirements, including cooking, serving, drinking, and storage to a lesser extent, despite the limited variety of forms and their low frequency. Diversification of forms, however, has been evidenced at Ulucak after the 6th millennium BC, more or less at the same time as at other Neolithic sites in Anatolia and Upper Mesopotamia.

Concluding remarks

The present state of evidence suggests that pottery production began in a wider area, from Upper Mesopotamia through the Lakes District region, during the first quarter of the 7th millennium BC. However, the absence of pottery and any other clay objects in the initial occupation phase (VI) at Ulucak clearly shows the presence of pre-ceramic phases in central-western Anatolia between 6850–6600 cal BC. The pre-ceramic sequence before 6600 cal BC in the Aegean is not only attested in Ulucak but also in Uğurlu, on the island of Gökçeada, and Knossos on Crete. Moreover, clay images including anthropomorphic figurines and clay stamps were integrated into the material assemblage at Ulucak later than pottery, around 6250/6200 cal BC. Hence, most of the material assemblage that is conventionally known as the ‘Neolithic package’ did not ‘arrive’ at the region in one instance. The Neolithization process of the region, however, is beyond the scope of this paper. The present state of evidence suggests that the initial Neolithic and adoption of pottery in the region should be considered separately. The social boundaries of the local communities in western Anatolia appear after the initial Neolithic to have been continuously changed through various networks.

The earliest pottery from Ulucak V with its thin walls and elaborated surface treatment suggests that the technology was introduced from the outside. Despite some peculiarities, the early pottery assemblage from Ulucak seems to be more akin to that found in the Lakes District. The origin of these mineral tempered wares is yet unknown, although their simultaneous occurrence at the same time in a wider region suggests multiple origins. Similar to other regions, pottery use at Ulucak begins with low quantity items and a restricted variety of shapes. Their number and variety of forms then increase from the late 7th millennium BC onwards. Contrary to earlier assumptions, pottery was not only used for serving

and storage (Çilingiroğlu 2012) but also for cooking, and right from its inception at the site. However, their low frequency during the initial phases of the Neolithic may still indicate that they were used for special occasions. The context of early ceramics at Ulucak can be assumed from their special deposits. Certain animal bones, grinding stones and bone tools were already part of the building closure deposit in Level VI (Çevik 2019), while pottery was quickly integrated into this package in the following period. Thus, whole pots and sherds from the special deposits found above Buildings 59 and 54 may well have been the remains of vessels which were used for the preparation and serving of special foods and drinks during the feasting rituals of a building closure.

Dark (mostly dark brown) and light (cream/buff) slipped burnished wares with less curvy profiles represent more than 90 percent of the total ceramic assemblage during the early phases of Ulucak. Accordingly, their chronological value for the third quarter of the 7th millennium BC in Central-Western Anatolia can be presumed. Nevertheless, pottery assemblages in the same region were dominated by red-slipped burnished wares (80–90%) from 6000 cal BC onwards, when painted pottery became an important component of the ceramics in Anatolia and elsewhere. Therefore, red-slipped burnished wares seem to have been a significant media for Central-Western Anatolian communities in the negotiation of their identities at an intra and inter-regional level.

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