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## Urla Peninsula in the Neolithic Period\*

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## Neolitik Çağ'da Urla Yarımadası

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### Yazar Notu

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### Abstract

The Urla Peninsula has been an attractive area for human settlement since ancient times due to its mild climate, fertile soils and maritime opportunities. The extensive excavations and researches that have been done since 1990s have provided crucial insights about prehistoric and historical periods of the area. This paper aims to clarify the cultural developments in this area in the Neolithic period while making primarily use of the archaeological researches. This study was based on the data essentially obtained in the surface surveys conducted by us. In additionally, findings of excavations and other surveys on the peninsula, were also evaluated. Cultural and chronological assessments are based on the İzmir region's stratigraphic data from Ulucak, Ege Gübre and Yeşilova. Researches in these settlements brings to a mind the process beginning in the Aceramic period expanding approximately one thousand years. The data obtained from this process has been derived from the fertile plain settlements of Tepeüstü and Çakallar. Findings at Urla İskelesi and Çeşme-Bozalan indicate that Neolithic settlements were located in coastal regions, too. Red-slipped ware constitutes a significant part of the artefacts which were recovered during the researches. Other important archaeological finds are stone tools such as grinding stones and polished axes, as well as flint and obsidian cores, blades, and scrapers. The data on hand demonstrated the last phases of the Neolithic, namely the Late Neolithic. During this time, existing settlements were expanded, new settlements were established, and economic activities were increased in the İzmir region. It has been also indicated the radiocarbon results roughly corresponds to the first quarter of the 6th millennium BC.

Keywords: Bozalan, Çakallar, Late Neolithic, red-slipped ware, Tepeüstü

### Öz

İlman iklimi, bereketli toprakları ve denizsel olanakları bakımından Urla Yarımadası, erken dönemlerden itibaren cazip bir yaşam alanı olmuştur. 1980'lerden itibaren yoğunlaşan kazı ve araştırmalar, bölgenin prehistorik ve historik dönemlerinin aydınlatılmasında önemli veriler sağlamıştır. Bu yazıda Neolitik Dönem'de bölgedeki kültürel gelişmelerin tanımlanması amaçlanmıştır. Bu dönemle ilgili veriler büyük ölçüde yüzey araştırmalarından gelmektedir. Çalışmamız, esas olarak tarafımızca yürütülmüş bulunan araştırmalarda elde edilen veriler temelinde şekillenmiştir. Bunun yanı sıra yarımadaadaki kazılar ve araştırmalarda yapılan tespitler de değerlendirilmiştir. Kültürel ve kronolojik değerlendirmelerde, İzmir bölgesindeki Ulucak, Ege Gübre ve Yeşilova'da saptanan stratigrafik veriler esas alınmıştır. Bu yerleşimlerde yapılan çalışmalar, olası Akeramik Dönem'den başlayan ve yaklaşık bin yılı kapsayan bir süreci ortaya koymaktadır. Urla Yarımadası'nda bu döneme ait veriler, esas olarak her biri verimli ovalara nazır Tepeüstü ve Çakallar yerleşimlerinden gelmektedir. Urla İskelesi ve Çeşme-Bozalan'da yapılan tespitler, Neolitik yerleşimlerin kıyı kesimlerinde de yer aldığını göstermektedir. Yüzey araştırmalarında saptanan buluntularda Kırmızı Astarlı Keramik geniş yer tutmaktadır. Öğütme taşı ve balta gibi taş aletler ile çakmaktaşı ve obsidyenden çekirdek, dilgi ve kazıyıcılar başlıca diğer buluntuları oluşturmaktadır. Mevcut veriler, Neolitik sürecin son evrelerini, diğer bir deyişle Geç Neolitik Dönem'i yansıtmaktadır. Bu dönemde, İzmir bölgesinde mevcut yerleşimlerin büyüdüğü, diğer yandan yeni yerleşimlerin kurulduğu ve ekonomik faaliyetlerin arttığı anlaşılmaktadır. Radyokarbon sonuçları, bu dönemin kabaca MÖ 6. binyılın ilk çeyreğini kapsadığını ortaya koymaktadır.

Anahtar Kelimeler: Bozalan, Çakallar, Geç Neolitik, kırmızı astarlı keramik, Tepeüstü

## Urla Peninsula in the Neolithic Period

The Urla Peninsula, extending into the Aegean Sea from the centre of the western Anatolian coast, serves as a bridge between the Anatolian mainland and the Aegean (Fig. 1). This strategic location has resulted in the peninsula being inhabited by cultures associated with both regions throughout history. Ongoing excavations and research have uncovered evidence of cultural processes dating back to the earliest periods.

Two hand axes found in Özbek and Narlıdere regions<sup>1</sup> in 1969 are indicative of human presence in the Urla Peninsula since the Lower Paleolithic (Kansu, 1963, p. 106). Recent surveys in the Karaburun region revealed Lower Paleolithic finds at Kömürburnu, the northernmost point of the peninsula (Çilingiroğlu et al., 2016, pp. 2-3). Similarly, the discoveries made in Rodaphnidia on Lesbos show that Paleolithic people had also reached the islands near the mainland (Galanidou, 2013). Furthermore, various findings suggest that the communities dominating the sea routes inhabited the Aegean islands during the Mesolithic period (Sampson, 2014). However, data regarding the Western Anatolian coasts during this period are currently limited to the finds in the Mordoğan region (Çilingiroğlu et al., 2016, pp. 3-5).

Data regarding the Neolithic in the Urla Peninsula is limited. The first identification of this period occurred in 1994 during surveys conducted by H. Erkanal, leading to the discovery of a settlement at Tepeüstü, north of Barbaros village (Erkanal & Günel, 1996, p. 306) (Fig. 2). While examining the internal structure of the EBA-II bastion at Liman Tepe on Urla İskelesi in 1997, Neolithic sherds were recovered from the backfill soil (Erkanal, 1999a, p. 326; Erkanal, 2001, pp. 306-307). It is likely possible that this backfill soil was inherited from the ancient cultural deposits within the Liman Tepe settlement area. Unfortunately, the high groundwater level in the southern part of the site restricts the investigation of the early layers. In 2005, a sounding excavation conducted by Çeşme Museum revealed fragments of Neolithic vessels at Bozalan within the city (Aktaş, 2005; Caymaz, 2008: p. 5). Additionally, a group of finds discovered at Kömürburnu during the Karaburun surveys were identified as Neolithic (Çilingiroğlu & Dinçer, 2018). Moreover, in 2005, a settlement was discovered at Çakallar, south of Gülbahçe Bay (Derin, 2006, pp. 4-5). Surface finds indicate that Neolithic and Chalcolithic communities inhabited in this area (Caymaz, 2008, p. 6) (Fig. 3). Detailed studies had been conducted at the settlements of Tepeüstü and Çakallar as part of our surveys in Urla District between 2015-2022.<sup>2</sup> Hence, this article will discuss the Neolithic Period of the Peninsula in the light of data from Central Western Anatolia. The locations of the settlements mentioned are shown in Fig. 1, and no further references are provided.

## Neolithic Settlements

Some of the known settlements are situated on hills overlooking the plains, while others are located on near the sea. This suggests that Neolithic communities established a settlement pattern that leveraged both agricultural and maritime opportunities. Additionally, it is noteworthy that a contemporary community was active in the Agio Gala cave on the neighboring island of Chios (Hood, 1981, pp. 14-25). In addition, the areas of Çeşme and Urla İskelesi exhibit harbor characteristics. Likewise, Tepeüstü is located on the edge of the Barbaros plain which currently supports four villages, whereas Çakallar is situated on the edge of the Mandalan plain. These plains and their surroundings are well-suited for various agricultural activities, particularly olive cultivation and viticulture. The abundance and variety of shells observed on the surface in Çakallar indicate that the sea which is approximately an

<sup>1</sup> For the localization of the find sites, see. Caymaz, 2008, p. 4

<sup>2</sup> The research was conducted with the permission of the General Directorate of Cultural Heritage and Museums of the Ministry of Culture and Tourism and supported by Nevşehir Hacı Bektaş Veli University within the framework of BAP (Scientific Research Projects). The surveys were carried out by the team consisting of Tayfun Caymaz, Mehmet Emeç, Şahin Menteşe, Ferhan Erim, Muammer İreç, Sedef Erincik, M.Servet Akpolat, Handan Yıldızhan, Ayşe Yılmaz, Yıldırım Şimşek and Ayberk Tüfekçi. Furthermore, Murat Erbey, Kemal Ergün, Eray Kıpık and Mehmet Erincik from the Urla region provided land consultancy, public relations, transportation and technical support. Inventory and study material found during the survey were delivered to the İzmir Archaeological Museum Directorate, while the other finds were left in place after documentation. The material used in this article belongs to the survey project, whereas the map, drawings and photographs belong to the survey archive.

hour's walk away, was also exploited for the food economy. At Tepeüstü, there is a well and that well draws water from the bottom and it also provides water to a nearby fountain (Fig. 2). Çakallar is situated along the stream bearing the same name and which stream currently flows during only the rainy season (Fig. 3). Surveys indicated that both settlements cover an area of around one hectare. However, it could be inferred while paying attention to the situation of the destruction of the northern section of the highway construction and the covering of the southern section by the Byzantine layer that the Neolithic settlements at Çakallar covered wider area (Fig.3).

## Pottery and Other Finds

The primary source of finds is Tepeüstü and Çakallar, with other sites including Liman Tepe, Bozalan, and Kömürburnu which will be clearly scrutinized in the forthcoming paragraphs.

### *Tepeüstü and Çakallar*

In general, the pottery from Tepeüstü and Çakallar is handmade, monochrome and well-fired. The paste generally includes small grit. In addition, Red-Slipped Ware is widespread (Fig. 4-7). Its slip colour varies in shades of red, including light, dark, brownish, yellowish and orange. Burnishing ratio of the vessels is mostly moderate; however, there are also well-burnished vessels in a considerable amount. This type of pottery is typical and characteristic in Ulucak IV (Çilingiroğlu et al., 2004, p. 39; 2012, p.143), Ege Gübre IV-III (Sağlamtimur, 2007, p. 374), Yeşilova III-1 (Derin, 2007, p. 380), Çukuriçi VIII (Horejs, 2012, p. 19) and Dedecik-Heybelitepe A (Herling et al., 2008, p. 21) in the İzmir region. During surveys conducted in this region, similar pottery has been identified in Moralı (French, 1965, p. 18), Küçük Yamanlar Tepesi (Meriç, 1993, p. 145), Nemrut Höyük (Meriç, 1993, p. 145; Caymaz, 1998, p. 65), and Arap Tepe (Caymaz, 1998, pp. 59-61; Caymaz, 2006, p. 60; Lichter, 2002, p. 162). Pottery from the Agio Gala Lower Cave on the island of Chios also primarily red-slipped and burnished (Hood, 1981, p. 14). Brown, yellow, cream, and white slipped sherds are exceptionally rare in Tepeüstü-Çakallar pottery. Both settlements have a few amounts of coarse ware. The Neolithic pottery of the Urla Peninsula closely resembles that of İzmir and its immediate environs in terms of form. Open vessels encompass a variety of shapes, including bowls with convex profiles (Fig. 10: 1-3)<sup>3</sup>, shallow bowls (Fig. 10: 4-6)<sup>4</sup>, miniature bowls (Fig. 10: 7-8), deep bowls with S-profiles (Fig. 10: 9-12)<sup>5</sup>, and bowls with straight profiles (Fig. 10: 13-14)<sup>6</sup>. Closed vessels commonly feature S-profile jars (Fig. 11: 1-6)<sup>7</sup>. It's often difficult to distinguish between this type of jars and deep bowls with S-profiles (Mellaart, 1970, p. 104). Other prominent jar forms include conical-necked jars (Fig. 11: 7)<sup>8</sup>, short-necked jars (Fig. 11: 8-10)<sup>9</sup>, jars with everted rims (Fig. 11: 11-12)<sup>10</sup> and neckless jars (Fig. 11: 13-14)<sup>11</sup>. Among the large-sized jars are those featuring conical or

3 For similar bowls, see. Moralı (French, 1969, fig. 3: 6-8, 14. Ulucak IV (Çilingiroğlu et al., 2004, fig. 21, 1-3; 26: 6).

4 For similar bowls, see. Ege Gübre IV-III (Sağlamtimur, 2012, fig. 16: 6, Ozan, 2015, draw. 5b), Yeşilova IV 1-2 (Derin & Caymaz, 2013, draw. 1: 1; 2014, draw. 5: 6).

5 For similar bowls, see. Ege Gübre IV-III (Sağlamtimur, 2012, fig. 12: 1-10; fig. 16: 3); Ulucak IV (Çilingiroğlu et al., 2004, fig. 21: 8; fig. 22: 14; fig. 29, 3, 6-8; Yeşilova IV 1-2 (Derin & Caymaz, 2013, draw 1:3).

6 For similar bowls, see. Agio Gala (Hood, 1981, fig 5: 10-11).

7 For similar jars, see Dedecik-Heybelitepe A (Herling et al., 2008, abb 4:1); Ege Gübre (Sağlamtimur, 2012, fig. 10: 4, 7-9), Ulucak IV (Çilingiroğlu et al., fig. 26, 11-12; fig. 29: 5-6; Yeşilova IV 1-2 (Derin et al., 2009, draw. 12: 62); Derin & Caymaz, 2013, draw. 1: 5).

8 For similar jars, see Agio Gala (Hood, 1981, FİG. 6. 20; Ege Gübre IV-III (Sağlamtimur, 2012, fig. 10: 7-9); Yeşilova IV 1-2 (Derin & Caymaz, 2014, draw. 5: 4; Ulucak IV (Çilingiroğlu et al., 2004, fig. 24: 8-10)

9 For similar jars, see Dedecik-Heybelitepe A (Herling et al., 2008, abb. 4, 2, 4, 6); Ege Gübre IV-III (Sağlamtimur, 2012, fig. 13: 4-6, 8-9; fig. 10: 4-6; fig. 16: 1); Ulucak IV (Çilingiroğlu et al., 2004, fig. 21: 5, 9, 14-16); Yeşilova IV 1-2 (Derin et al., 2009, çiz. 12; 61; Derin & Caymaz, 2013, draw. 1: 4).

10 For similar jars, see Agio Gala (Hood, 1981, pp. 13-18).

11 For similar jars, see Ege Gübre (Sağlamtimur, 2012, fig. 11: 8-10; fig. 13: 2-3, 7); Moralı (French, 1969, fig. 3: 21-23); Ulucak (Çilingiroğlu et al., 2004, fig. 21: 17)

cylindrical necks (Fig. 12)<sup>12</sup>, jars with flattened rims (Fig. 13: 1-4)<sup>13</sup>, and jars with ledges below the rim (Fig. 13: 5)<sup>14</sup>, often characterized by large lugs (Fig. 13: 6). There are no handles being identified among the surface findings, while vertical tubular lugs were commonly utilised on the vessels (Fig. 14: 1-11), a feature observed across all known sites in the region.<sup>15</sup> At Agio Gala, tubular lugs with one end extended (tailed lugs) are a local feature (Hood, 1981, p. 220; Fig. 5-11; Fig. 6: 17-18). In addition, pierced or unpierced other lugs observed (Fig. 6: 12-17).<sup>16</sup> Bases are round or oval in shape and simple<sup>17</sup> or slightly high<sup>18</sup> in profile (Fig. 15). Notably, a fragment of a ring base was discovered at Çakallar (Fig. 15: 9)<sup>19</sup>. The amount of decoration in the pottery of Tepeüstü-Çakallar is rare. During the surveys conducted since the 1990s, apart from a single sherd (Fig. 16: 3), no painted pottery has been uncovered, though sherds decorated with fingernail impression have been retrieved (Fig. 16: 1-2). Painted decoration remains uncommon at the sites in the İzmir region, while impressed decoration is relatively more common (Çilingiroğlu et al., 2004, p. 40; 2012, p. 143; Derin et al., 2009, p. 12). At Ege Gübre III, the proportion of pottery with impressed decoration approaches 1% (Sağlamtimur, 2012, p. 200). However, it is noted that this type of decoration was absent in the immediately preceding phase (IV) (Ozan, 2015, p. 211). Fragments of vessels with impressed decoration were also discovered at Dedecik-Heybelitepe A (Herling et al., 2008, abb. 4: 7-8), Arap Tepe (Caymaz, pl. xviii: 116; 2004, fig. 15: 4; Caymaz, 2006, draw. 4: 3) and Nemrut Höyük (Caymaz, 1998, pl. xxi: 133; Caymaz, 2004, fig. 15: 2; Lichter, 2002, fig. 1). Additionally, a small number of vessel fragments featuring relief decoration were found at Çakallar (Fig. 16: 4-5)<sup>20</sup>.

Clay finds include a loom weight made from sherd (Fig. 16: 6)<sup>21</sup>, oval-shaped sling missiles (Fig. 16: 7-8)<sup>22</sup>, fragments of spoons (Fig. 16: 10-11), and female figurines (Fig. 16: 12-13). Moreover, a clay stamp (seal or pintadera) was found in Çakallar (Fig. 16: 9). Unlike the common examples, the handle of the stamp is attached to the oval body from the side, featuring a deeply carved spiral motif on its surface (Caymaz et al., 2022, p. 316, draw. 2). The primary raw materials utilised in the chipped stone industry are flint and obsidian. During our surveys, flint resources were discovered in the Adatepe locality near Çakallar, Duba Tepe in Urla Çeşmealtı, and Hekim Island. Obsidian finds account for approximately 20-25% of the discoveries. Macroscopic observations indicate the presence of obsidian originating from both Central Anatolia and Melos. Chipped stone artefacts comprise of conical cores, blades, bladelets, scrapers (Fig. 17), and a leaf-shaped arrowhead (Fig. 19: 4). In the northwest corner of the Çakallar Neolithic settlement area, chipped stone finds are remarkably abundant. The significant presence of conical cores in particular is pointing out the existence of a workshop at this location (Fig. 3). Primary stone tools being discovered at Tepeüstü and Çakallar were grinding stones, axes, chisels, handstones, and polishers (Fig. 8, 9, 18). Additionally, pendants could be another group of finds in this category<sup>23</sup> (Fig. 19: 1-3).

12 For similar jars, see Ulucak VI (Çilingiroğlu et al., 2004, fig. 22: 12, 21).

13 For similar jars, see Alibeyli (French, 1969, fig. 3: 1); Arap Tepe (Caymaz, 1998, pl. xiv, 88-92; 2004, fig. 8: 1-5; 2006, draw. 2: 2-5); Ege Gübre IV-III (Sağlamtimur, 2012, fig. 10: 1-2; fig. 13: 2-3, 7); Moralı (French, 1969, fig. 4: 7-13); Nemrut Höyük (Caymaz, 1998, pl. xix: 122-123; 2004, fig. 8: 6-4); Ulucak IV (Çilingiroğlu et al., 2004, , fig. 23: 5; fig. 24, 16; fig. 26: 23; fig. 28: 4-5); Yeşilova IV 1-2 (Derin et al, 2009, fig. 12: 63; Derin & Caymaz, 2013, draw. 1: 6 2014, draw. 5: 1).

14 For similar jars, see Agio Gala (Hood, 1980, fig. 7: 26, 28); Ege Gübre IV-III (Sağlamtimur, 2012, fig. 13: 1); Hacılar VI (Mellaart, 1970, fig. 55: 18); Ulucak IV (Çilingiroğlu et al., 2004, fig. 26: 22); Yeşilova IV 1-2 (Derin & Caymaz, 2013, draw. 1: 7)

15 For similar lugs, see Arap Tepe (Caymaz, 1998, Pl. XVI; 2004, fig. 9: 3-4); Çukuriçi VIII (Horejs, 2012, fig. 6: B); Dedecik-Heybelitepe A (Herling et al., 2008, Abb. 4: 1, 3, 5); Ege Gübre III (Sağlamtimur & Ozan, 2012, fig. 2), Moralı (French, 1965, fig. 5: 1-3), Nemrut Höyük (Caymaz, 1998, Pl. XXI: 130-132; 2004, fig. 10: 3-4); Ulucak IV (Çilingiroğlu et al., 2004, fig. 21: 25-26; fig. 23: 17-19), Yeşilova III-1 (Derin, 2007, Photo. 5: e-h)

16 For this type of lug, see Arap Tepe (Caymaz, 1998, Pl. XVIII: 15; 2004, fig. 11: 4); Ege Gübre IV-III (Ozan, 2015, Draw: 4e-g); Ulucak IV, (Çilingiroğlu et al., 2004, fig. 22: 8-10; fig. 23: 7, 20; fig. 25: 11; fig. 26: 32; fig. 27: 16; fig. 28: 9-11)

17 For similar bases, see Ege Gübre (IV-III) (Sağlamtimur, 2012, fig. 14: 7); Ulucak IV (Çilingiroğlu et al., 2004, fig. 21: 17-18, 20, 23-24; fig. 25: 6-9; fig. 26: 24-25)

18 For similar bases, see Arap Tepe (Caymaz, 1998, Pl. XV; 2004, fig. 13: 5-7); Ege Gübre (Sağlamtimur, 2012, fig. 14: 1-4, 12-13); Nemrut Höyük (Caymaz, 1998, Pl. XX; fig. 13: 1-4); Ulucak IV (Çilingiroğlu et al., 2004, fig. 21: 21-22; fig. 23: 8-11; fig. 25: 2-4; fig. 26: 26-29).

19 For this type of base, see Arap Tepe (Caymaz, 1998, Pl. XVI; 2004, fig. 14; 2006, Draw. 3: 4-6; Lichter, 2001, fig. 1); Ege Gübre IV-III (Sağlamtimur, 2012, fig. 14: 6-8; 10-11; Ozan, 2013, fig. 2); Moralı (French, 1969, fig. 4: 28, 31).

20 For similar decoration, see Ege Gübre IV-III (Sağlamtimur, 2012, fig. 18).

21 For similar finds, see Ege Gübre IV-III (Sağlamtimur, 2007, 375); Ulucak IV (Çilingiroğlu et al., 2004, fig. 33: 5-6)

22 For similar finds, see Ulucak IV (Çilingiroğlu et al., 2004, fig. 32; Çilingiroğlu et al., 2012, fig. 11)

23 For similar pendants, see Hacılar (Mellaart, 1970, fig. 176: 3,5-7)

### ***Liman Tepe***

At Liman Tepe, the largest prehistoric settlement on the Urla Peninsula, evidence of the Neolithic Period primarily manifests through a group of pottery recovered from the backfill soil in the EBA II bastion. However, high groundwater hinders the cultural layers of this period and also the Chalcolithic period (Erkanal, 1999a, p. 326; 2001, pp. 306-307). The Neolithic pottery finds from Liman Tepe consist of a vertical tubular lug and three amorphous sherds. These sherds are characterised by a light red and yellowish red paste, predominantly containing white-coloured small grit and very dense fine white mica. Remnants of a light red thin slip were observed on the well-fired and time-worn sherds (Caymaz, 2002, pp. 17-18, pl. 79: e, pl. 122: 1; 2004, fig. 9: 5).

### ***Bozalan***

During the sounding excavations conducted in the Bozalan locality of Çeşme Sakarya Mahallesi in 2005, sherds were, some of which are red slipped and burnished, which were examined by Erkanal. Erkanal, who conducted the Liman Tepe and Bağlararası excavations, identified these sherds as being belonging to the Neolithic period (Aktaş, 2005). However, hitherto, no scientific publication has been issued on this subject.

### ***Kömürburnu***

A group of pottery discovered from Kömürburnu in Karaburun has been identified as Neolithic (Çilingiroğlu & Dinçer, 2018; Çilingiroğlu et al., 2018). It has been reported that this pottery is predominantly red-slipped, lacking well-burnished sherds. The paste contains a significant amount of temper, and the surfaces are porous due to the burning of chaff inclusions during the firing process (Çilingiroğlu & Dinçer, 2018, p. 75). The vessel forms exhibit a remarkable homogeneity and simplicity, characterized by simple convex bowls, hole-mouth jars, flat-based jars and short-necked jars as the primary forms (Çilingiroğlu & Dinçer, 2018, p. 76; Çilingiroğlu et al., 2018, p. 33). It is noteworthy that Kömürburnu pottery have no vertical tubular lugs and impressed decorated sherds. Furthermore, the dense straw admixture which is causing porosity on the surfaces distinguishes it from the pottery found at Tepeüstü-Çakallar.

### ***Other Settlements***

The reports in another survey programme conducted in the Urla Peninsula indicate the discovery of Neolithic pottery at Burgaz, Tümbek Tepe and Kale Tepe locations (Ersoy & Koparal, 2010, p. 131; Ersoy et al., 2011, p. 347; Koparal et al., 2020, p. 443). However, detailed information regarding these finds was not provided. Subsequently, during our exploration of the Burgaz location in Özbek village in 2022, specifically in the area referred to as Aşağı Burgaz, Early Bronze pottery was observed spread over an area of approximately 1 acre although no Neolithic finds were encountered (Caymaz et al., 2024, p. 422). Furthermore, during our surveys in the Bademler village area, the designated Tümbek Tepe location could not be found. Kale Tepe, situated on the Urla-Çeşme road, was initially discovered in 1996 during research conducted by Erkanal. It was evaluated as a small strategic citadel within the Early Bronze Age defense system on the peninsula (Erkanal, 1999a, p. 331; 1999b, pp. 238-239; 2001, p. 313). There are no Neolithic pottery finds that have been seized in the following years (Caymaz, 2002, p. 75).

## **Chronology**

Excavations and researches conducted since the 1990s have yielded significant insights into the Neolithic Period in Central Western Anatolia. Accordingly, it appears that the first settlements in the region emerged in the second quarter of the 7<sup>th</sup> millennium BC (Çilingiroğlu et al. 2012, pp. 151-152; Çevik & Abay, 2016, p. 187; Horejs,

2017, p. 17). The settlers, who established Ulucak VI, Çukuriçi XIII and Ekşi Höyük 7, constructed structures with red-painted plaster floors (Çilingiroğlu et al. 2012, p. 149; Horejs, 2015, p. 297, Çevik & Abay, 2016, p. 188; Dedeoğlu et al., 2023, p. 9). Despite the recovery of four small and abraded sherds from Çukuriçi, it was determined that they belonged to that layer but did not significantly contribute to the material culture (Horejs, 2015, p. 305). Notably, no pottery finds were reported in Ulucak VI and Ekşi Höyük 7 (Çilingiroğlu et al., 2012, p. 149; Çilingiroğlu & Çakırlar, 2013, p. 21; Dedeoğlu et al., 2023, p. 7).

In the mid-7<sup>th</sup> millennium BC, communities that mastered pottery making began to emerge in the region. These communities settled a top preexisting cultural deposits at Ulucak and Çukuriçi, while also establishing settlements directly on virgin soil at Yeşilova. The pottery produced by these newcomers reflects sophisticated production techniques, characterised by brown, red and cream slipped and burnished surfaces. Contrary to the tradition that have been observed in the Lakes District, paint decoration is not commonly practiced within these communities.

Towards the end of the 7<sup>th</sup> millennium BC, the region experienced the emergence of the Neolithic Period (Derin et al., 2009, p. 15). This period, spanning several centuries, witnessed the expansion of existing settlements and the proliferation of population, alongside the establishment of new settlements on virgin soil at Ege Gübre and Dedecik-Heybelitepe. Surface finds at Küçük Yamanlar Tepesi, Arap Tepe, Nemrut Höyük, and Moralı reflect this new period. That new period closely tied to the Neolithic tradition, but demonstrates a high level of technical progress. Well-fired Red-Slipped Ware prevails significantly, while coarse ware is present in smaller proportions. Typical forms are S-profile bowls, large shallow bowls, S-profile jars, conical and cylindrical-necked jars and large jars with flattened rims. Vertical tubular lugs on vessels are commonly observed. The prevalence of paint decoration is minimal, instead, impressed decoration with the tip of a fingernail or a stick, among other methods, emerges as characteristic of the period. Sherds featuring this decoration were found across all phases of Ulucak IV (Çilingiroğlu et al., 2004, fig. 21; 23; 25-27; 29), with Ege Gübre III exhibiting a higher occurrence compared to other sites (Sağlamtimur, 2012, fig. 19-20). Additionally, besides Dedecik-Heybelitepe A, pieces with impresso decoration were also discovered at Arap Tepe and Nemrut Höyük (Caymaz, 1998, pl. xviii: 116; pl. xxi: 133; Lichter, 2002, fig. 1; Herling et al., 2008, abb. 4: 7-8).

This period, characterised by the dominance of Red Slipped Ware, is identified as the Late Neolithic Period at Ulucak IV (Çilingiroğlu et al., 2004, p. 10; Çevik & Vuruşkan, 2015, p. 583). Conversely, at Çukuriçi, the Late Neolithic Period is conceived as a broader temporal span, stretching from the mid-7<sup>th</sup> millennium BC to the early 6<sup>th</sup> millennium BC (Horejs, 2017, p. 17). Remarkably, Level VIII, the final phase of this process, partially overlaps with the Ulucak IV.

The settlements of Tepeüstü and Çakallar in the Urla Peninsula have parallels with various sites, including Ulucak IV, Ege Gübre III, Yeşilova IV 1-2, Dedecik-Heybelitepe A, Arap Tepe, Küçük Yamanlar Tepesi, Nemrut Höyük, Moralı and Agio Gala Lower Cave, particularly in terms of the presence of Red-Slipped Ware and similar vessel types. The pottery finds from Liman Tepe and Bozalan also appear to align with this overarching trajectory, showcasing similar surface characteristics. It is noted that the red-slipped pottery recovered in Kömürburnu lacks vertical tubular lugs and impressed decoration, leading to suggestions that this pottery can be dated to the late 7<sup>th</sup> millennium BC (Çilingiroğlu & Dinçer, 2018, p. 34). This assessment is further supported by the absence of impressed decoration in the early phase (IV) of Ege Gübre (Ozan, 2015, p. 211). However, it is crucial to emphasise the presence of impressed decoration from the outset of Ulucak IV (Çilingiroğlu et al., 2004, p. 40).

Radiocarbon results derived from Ulucak IV, Ege Gübre IV-III and Yeşilova IV 1-2 indicate that the period characterised by developed villages commenced roughly in the late 7<sup>th</sup> millennium BC and concluded around 5700 BC (Çilingiroğlu et al., 2012, p. 151-152; Derin, 2012, p. 183; Sağlamtimur, 2012, p. 201). These communities, having attained an advanced stage of Neolithic civilisation, appear to have abruptly vanished from the stage of history. There is no trace of sudden climate change, devastating epidemics and wars. Apparently, Neolithic villages

were abandoned during their heyday for a reason we do not yet know. Subsequently, communities with completely different pottery culture emerged in the region. These new communities settled a top Neolithic deposits at Ulucak and Ege Gübre. Radiocarbon dating places the settlement identified as Ulucak III within the period 5640/5600-5500 BC (Eroğlu & Çevik, 2015, p. 37; Çevik & Abay, 2016, p. 188). Although the temporal gap between the abandonment of Neolithic villages and the establishment of Chalcolithic settlements appears relatively brief in that transition, there is no clear relationship between preceding and succeeding cultures.

## Conclusion

This paper is aimed to describe and assess the cultural developments within the Neolithic Period in the Urla Peninsula, while employing a chronological framework. Our study drew primarily from data gathered during surveys conducted by us between 2015 and 2022 and supplemented the information from other pertinent surveys. It should be noted that the reliance on survey findings caused limitations and challenges in our assessments. However, the fact that various phases of the Neolithic process have been significantly elucidated in the excavations in and around the İzmir region enables us to define surface surveys at a reliable level. Within this framework, the cultural and chronological attributions based on pottery, are composed of the predominant category of surface surveys. The pottery recovered in the peninsula exhibits homogeneity in terms of both paste and surface characteristics and forms. Most vessels are red slipped and burnished with a minimal presence of coarse vessels. Principal vessel forms include S-profile bowls and jars, necked jars, large jars with flattened rims, and wide shallow bowls. While the occurrence of impressed decoration on closed vessels, which is mostly done with fingernails or a tool, is scarce and it serves as a distinctive feature. This pottery culture, characterised by these features, resonates closely with the last phase of the Neolithic period observed in the settlements of the İzmir region. Key settlements embodying this cultural phase include Ulucak IV, Ege Gübre IV-III, Yeşilova IV 1-2 and partially Çukuriçi VIII. The data could attest to the emergence of these settlements during a period of rapid growth and development towards the end of the 7<sup>th</sup> millennium BC. Consequently, a wave of new Neolithic communities migrated to the region, with some of the communities settled into abandoned settlements, while others established new ones. The traces of new communities in Central Western Anatolia are discernible across a broad geographic expanse, spanning from the Torbalı and Akhisar plains to the Urla Peninsula and the neighbouring island of Chios. During this period, agriculture and animal husbandry emerged as the principal economic activities within the settlements investigated through excavations in the İzmir region. Additionally, fishing also played an important role in coastal and near-coastal settlements. In the Urla Peninsula, Tepeüstü and Çakallar are located on the peripheries of fertile plains, and they remain some of the most agriculturally productive. Pottery finds, albeit limited in quantity, attest to the existence of Neolithic settlements at Liman Tepe on Urla İskelesi and Bozalan near the Çeşme harbour. As population densities and economic activities surged, there was an increase in the production of stone and chipped stone tools. The primary stone tools recovered from surveys are grinding stones, handstones, polishers and pendants. Chipped stone tools such as conical cores, blades and scrapers are common, most of which are made of local flint. Macroscopic observations revealed the presence of both Central Anatolian and Melian obsidian. The majority of the recovered cores are conical-shaped. It is understood that there was a workshop in the northwest of Çakallar, where this type of core is concentrated (Fig. 3). Noticeable clay artefacts include a stamp seal or pintadera featuring a side handled, alongside fragments of female figurines. Other clay finds comprise sling missiles and spoons. It is noteworthy that no bone artefacts were discovered during the surveys.

At present, we have a lack of data regarding the presence of earlier Neolithic phases on the peninsula. However, while taking into consideration the convenient living condition of the geographical area, it could be anticipated that it would not have been excluded from the regional developments that they belong.

As observed throughout the region, the Neolithic villages of the Urla Peninsula ceased to exist by the end of the first quarter of the 6<sup>th</sup> millennium BC for some reasons that still remain unknown. The red faced vessels and stone tool fragments mixed with the soil of olive groves, vineyards and crop fields in Tepeüstü and Çakallar serve as the visible remnants of these villages. According to our survey, Çakallar was inhabited by a Chalcolithic community towards the end of the 6<sup>th</sup> millennium BC, while the area around Tepeüstü remained uninhabited until the Early Bronze Age.



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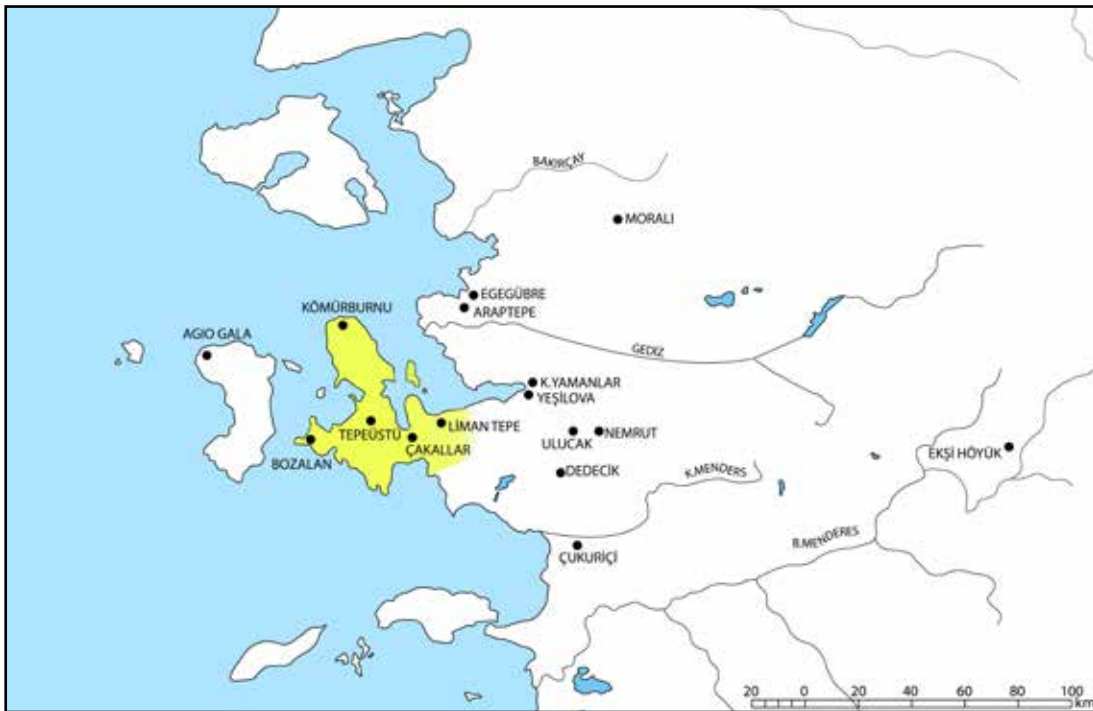
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## Figures

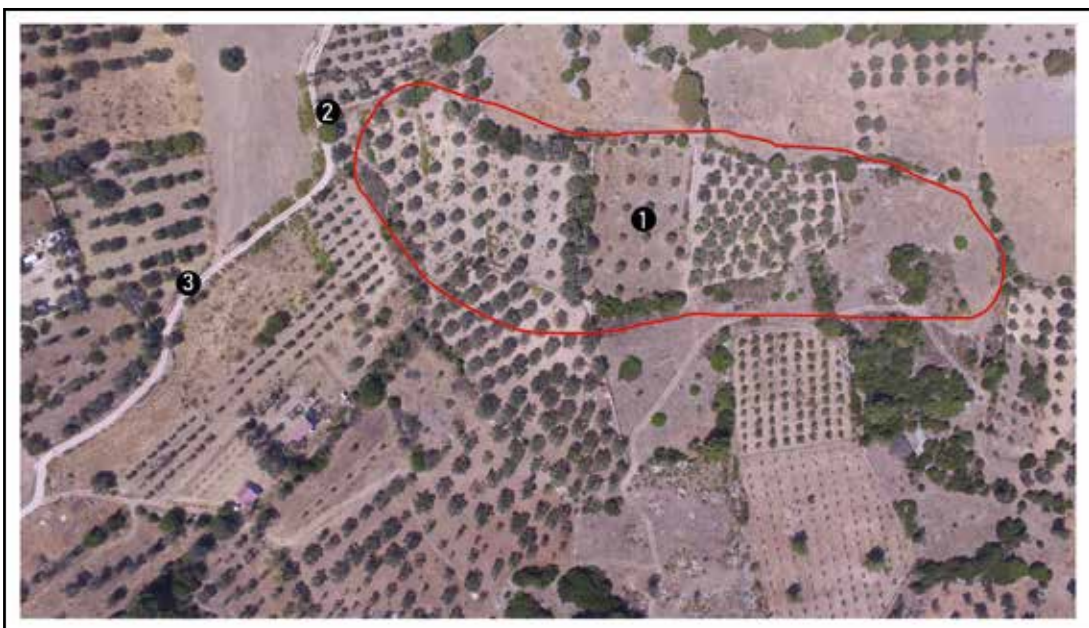
**Figure 1**

*Neolithic Settlements in and around the Urla Peninsula*



**Figure 2**

*Tepeüstü: 1.The Area where Late Neolithic Finds are Concentrated, 2.Well, 3.Barbaros Village Road*



**Figure 3**

*Çakallar. 1.Late Neolithic Settlement, 2.Early Chalcolithic Settlement, 3.Chipped Stone Workshop, 4.Çakallar Creek, 5. İzmir-Çeşme Highway*

**Figure 4-5**

*Late Neolithic Pottery from Tepeüstü*





**Figure 6-7**

*Late Neolithic Pottery from Çakallar*



**Figure 8**

*Grinding Stones from Tepeüstü*



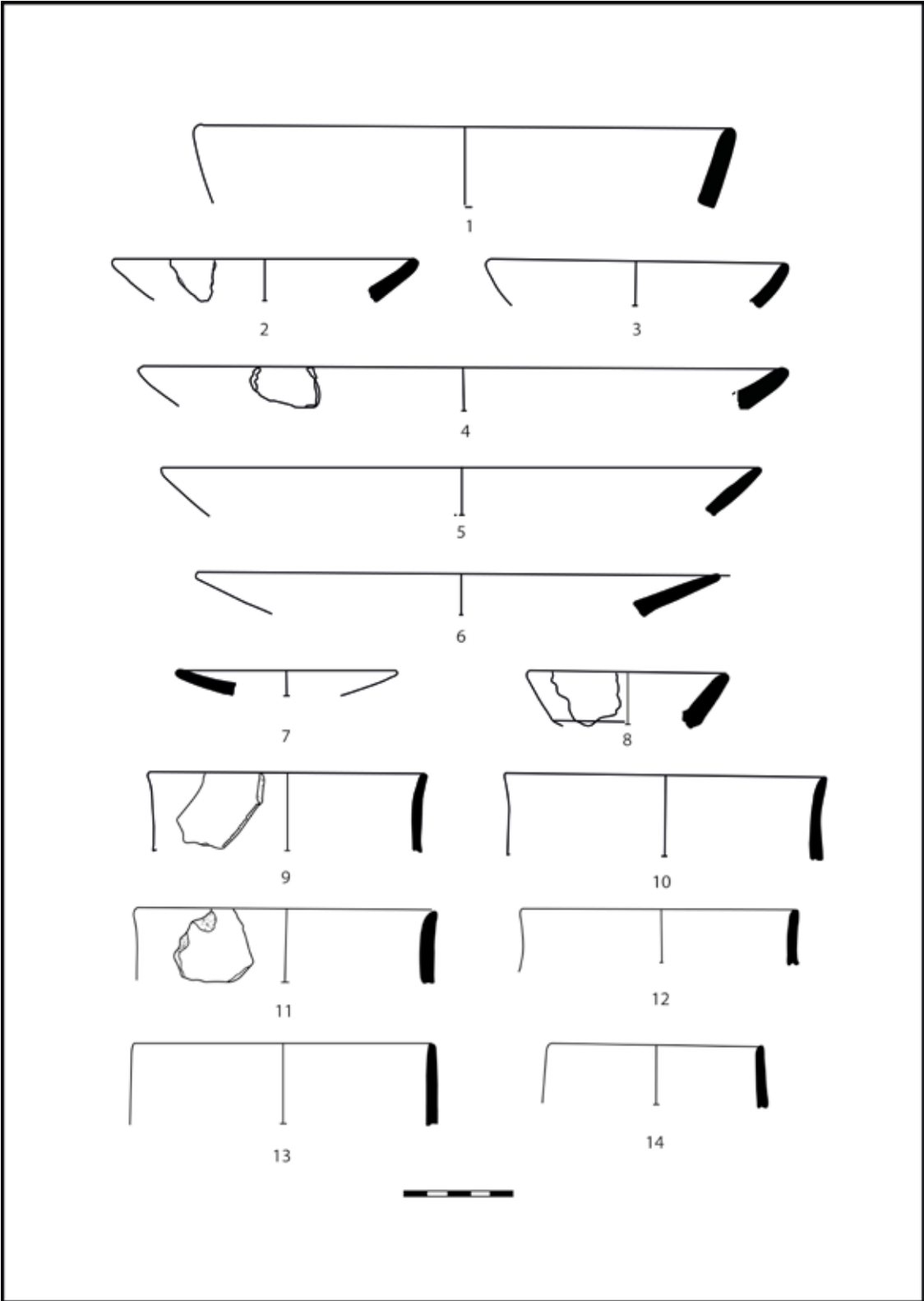
**Figure 9**

*Stone Tools from Çakallar*



Figure 10

*Bowls from Tepeüstü and Çakallar*



**Figure 11**

*Jars from Tepeüstü and Çakallar*

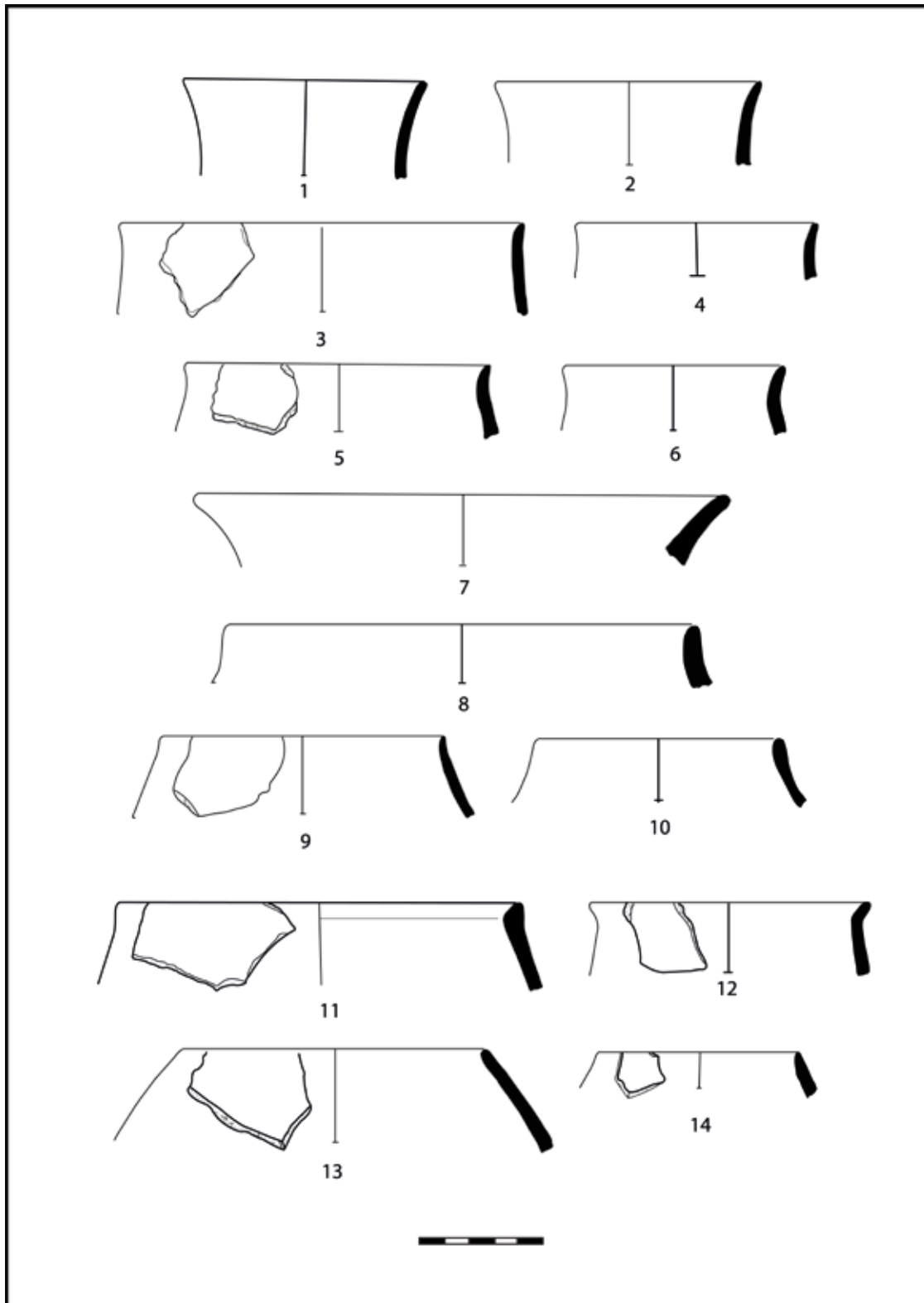
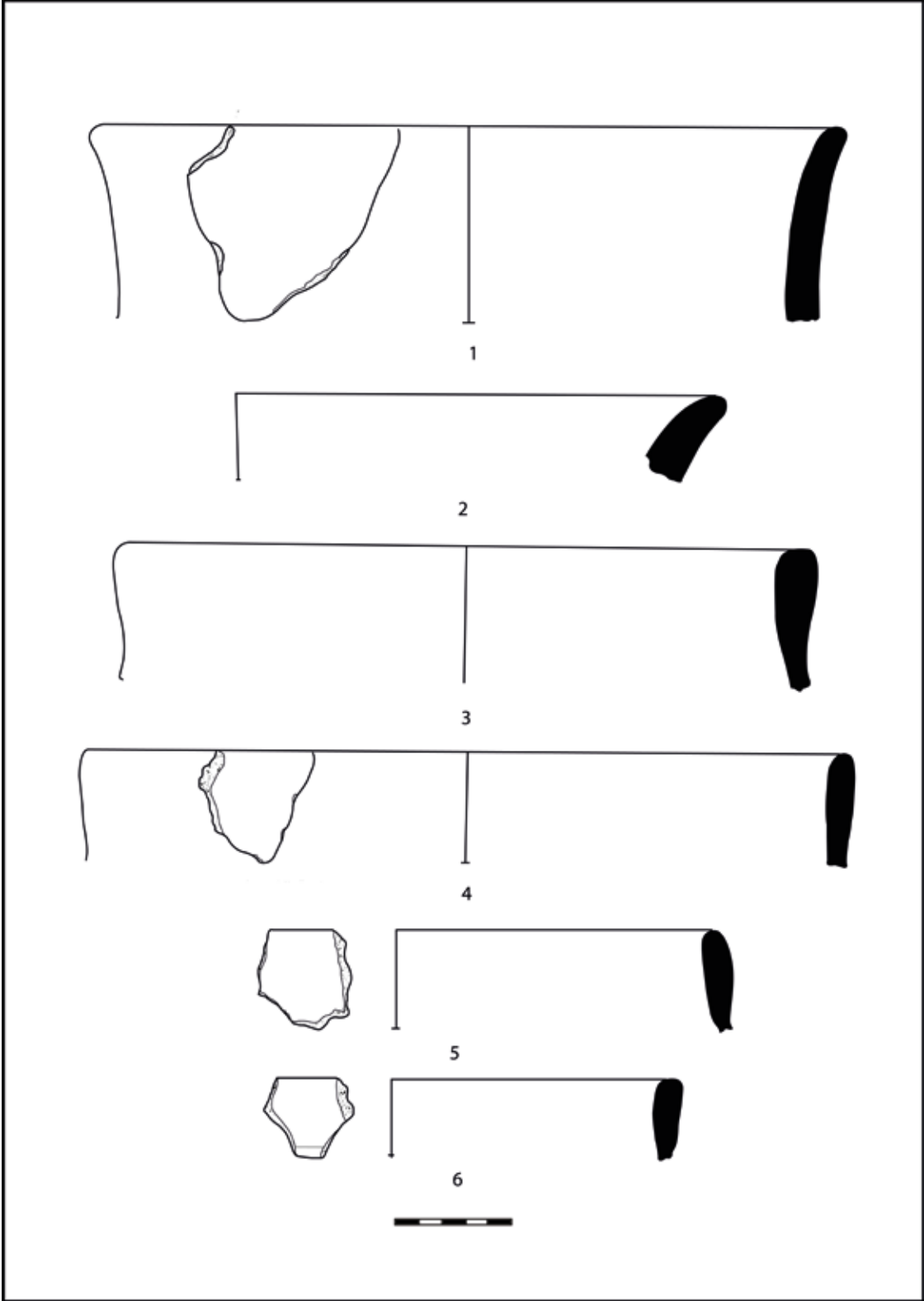




Figure 12

Large Jars from Tepeüstü and Çakallar



**Figure 13**

*Large Jars from Tepeüstü and Çakallar*

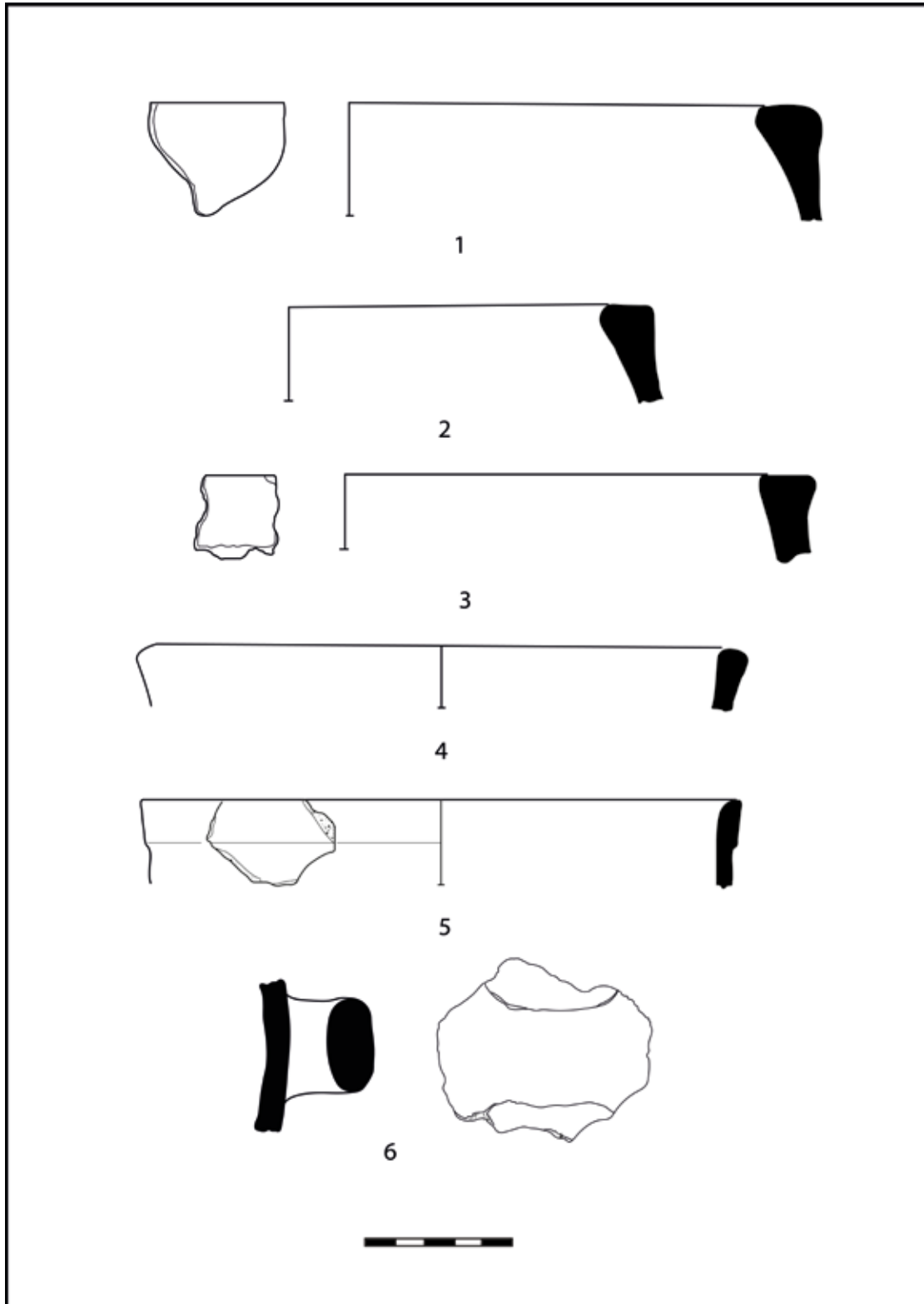
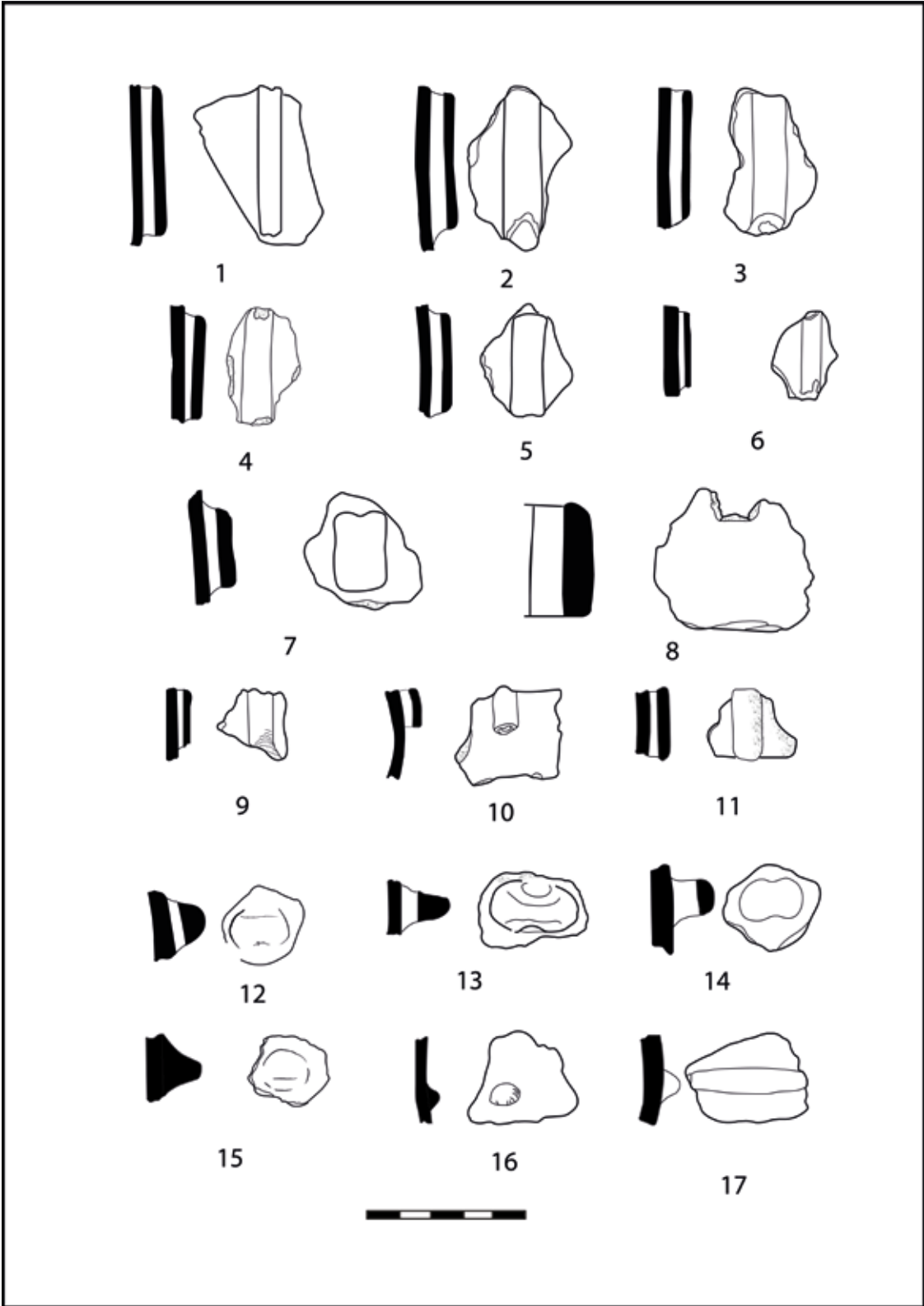


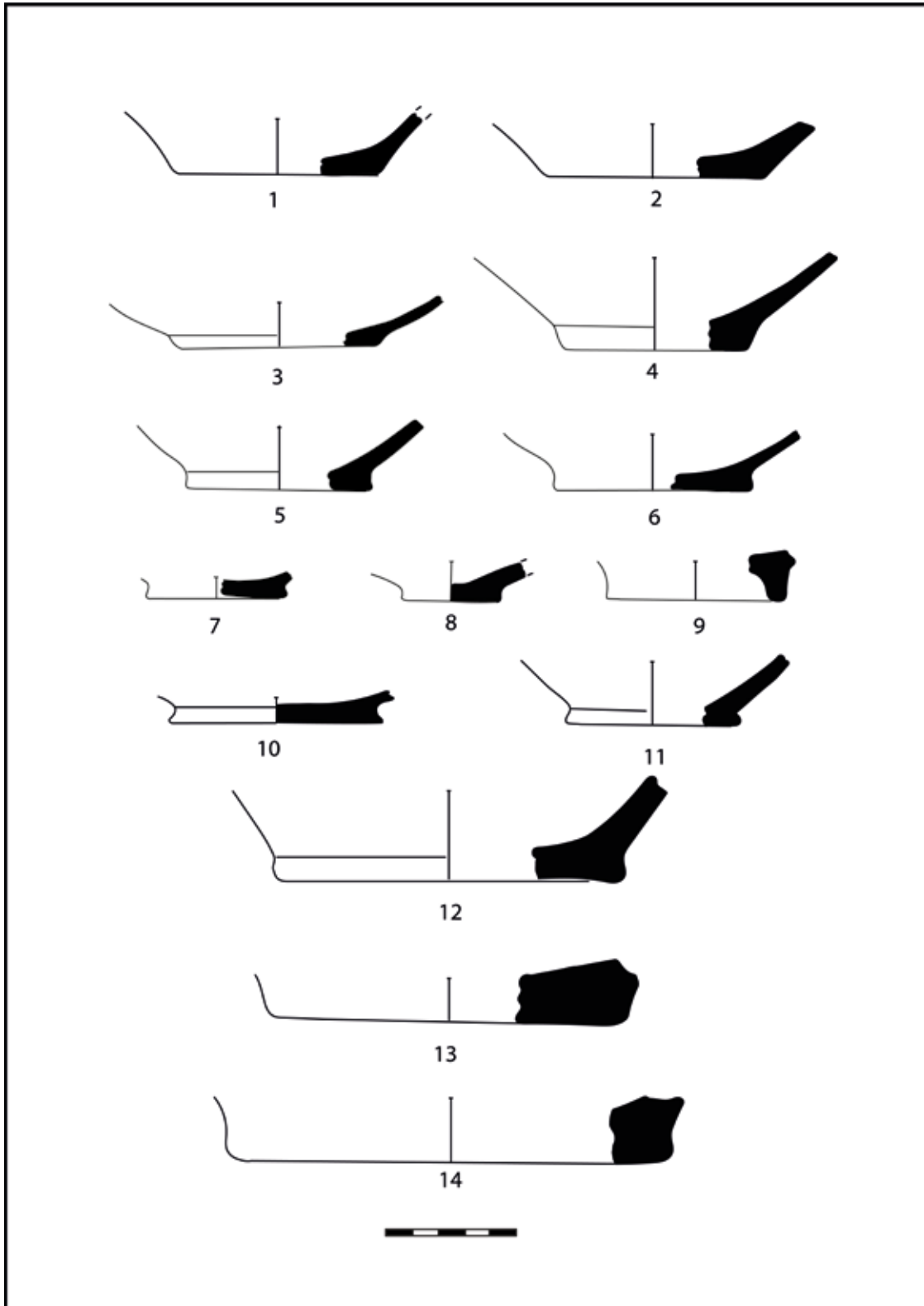
Figure 14

Lugs from Tepeüstü and Çakallar

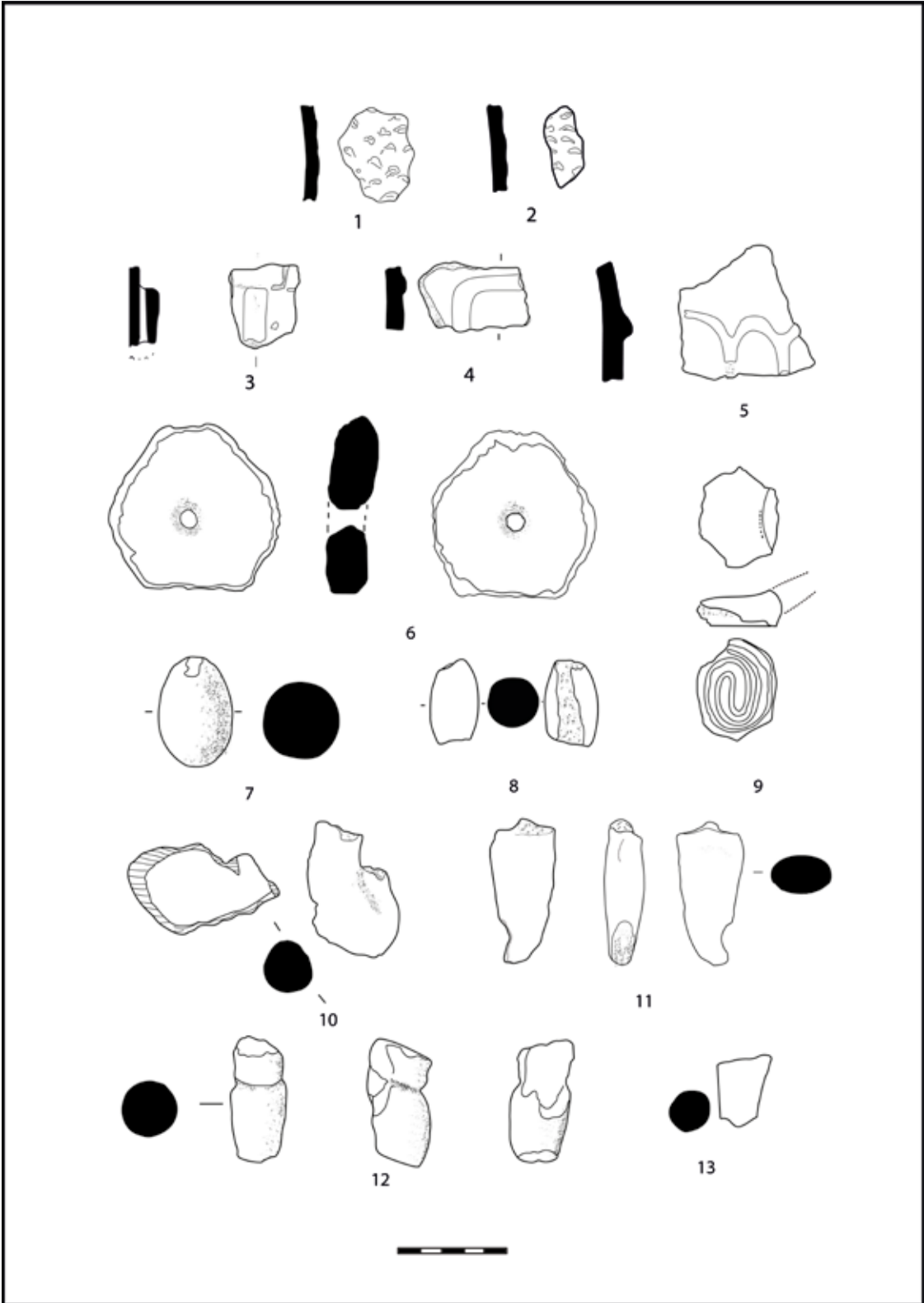


**Figure 15**

*Bases from Tepeüstü and Çakallar*

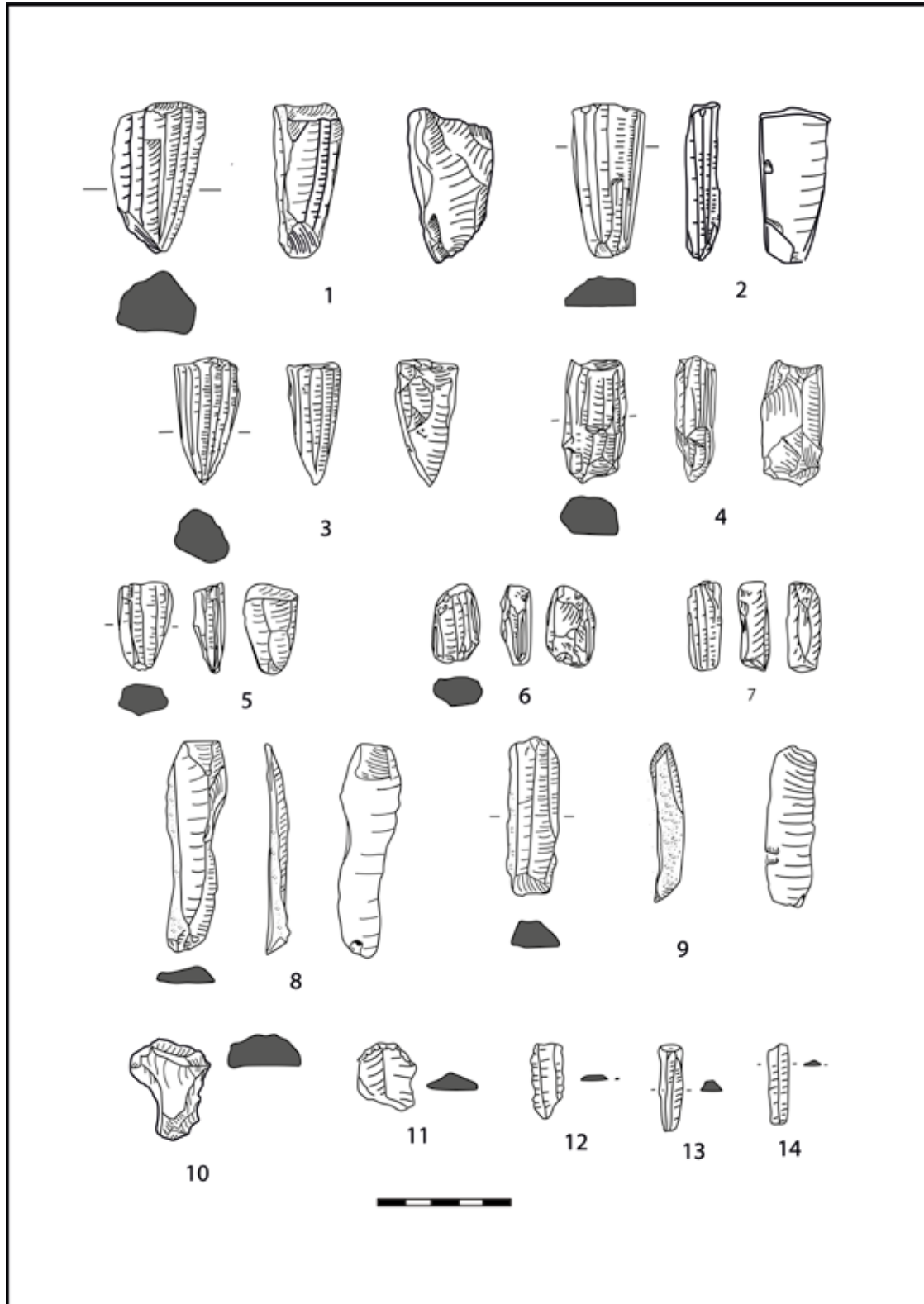


**Figure 16**  
*Decorated Sherds and Clay Finds Tepeüstü and Çakallar*

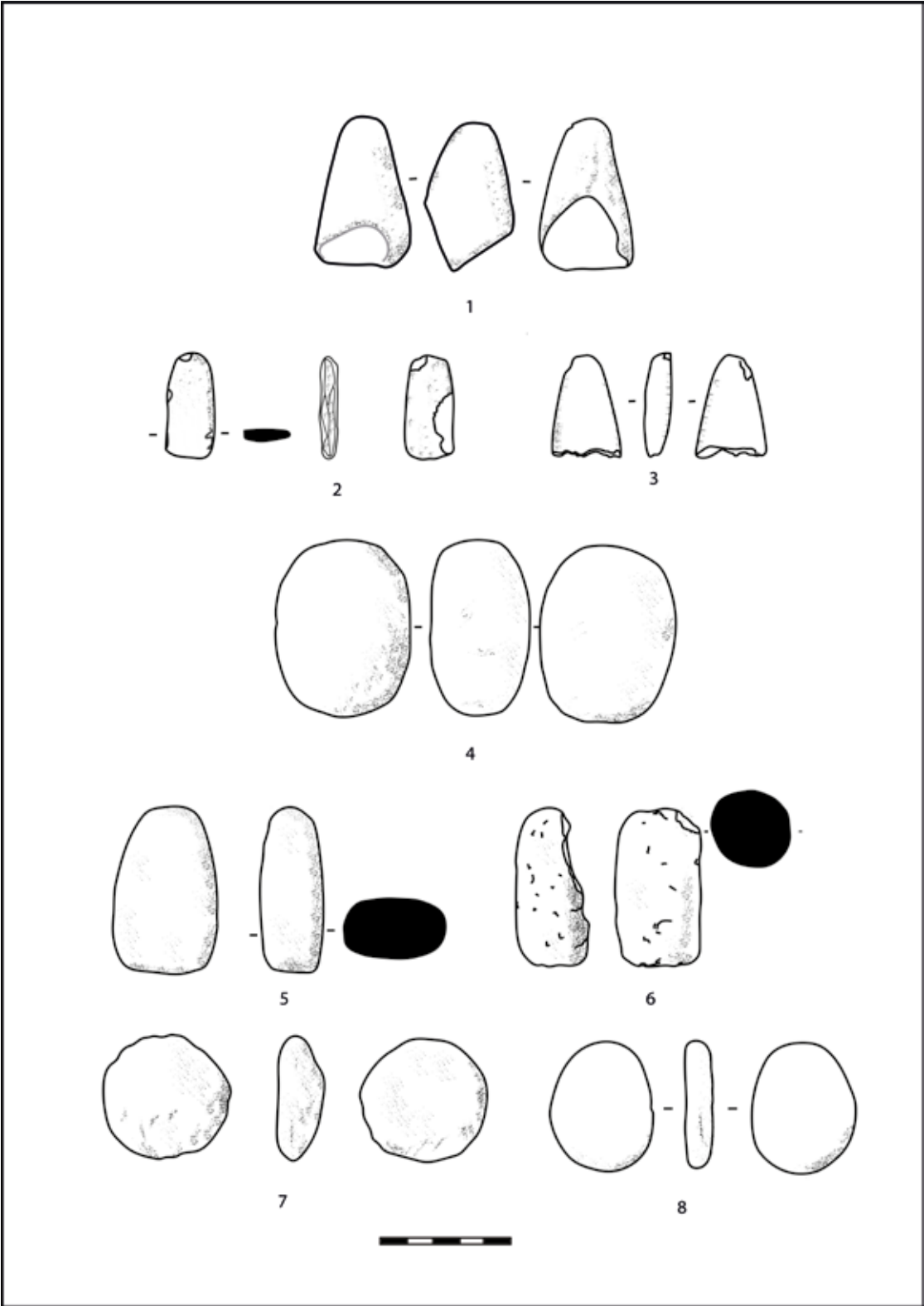


**Figure 17**

*Chipped Stone Finds from Tepeüstü and Çakallar*



**Figure 18**  
*Stone Tools from Tepeüstü and Çakallar*



**Figure 19**

*Stone Pendants and Flint Arrowhead from Çakallar*

