

Tatlıgöl Höyük: A New Archaeological Location in the Bafra Plain

Atila Türker – Ondokuz Mayıs University of Samsun

[The Tatlıgöl Höyük is located in a special natural environment surrounded by lakes and floodplains on the Bafra plain at the Kızılırmak (Halys) delta which is the coastal part of North-Central Anatolia. The mound is not only accessible by land but is also connected to the Black Sea by river. Its hinterland is, therefore, one of the densest areas in the Black Sea Region of Anatolia in terms of the number of settlements and the diversity of periods. The settlement consists of three mounds totalling 16 hectares in size. Copper/bronze daggers, spearheads, rings, cymbals, maceheads, and lead bowls found in the mound constitute the metal artifacts group, while shaft-hole axes and maceheads constitute the stone artifacts group. Terracotta artifacts consist of spindle whorls and loom weights related to weaving. These sophisticated artifacts have distinctive aspects that provide new and important contributions to the literature. Since systematic excavation was impossible due to illegal excavation, analogical methods were used to compare and evaluate the finds. The study includes finds of everyday life as well as those of prestige and symbolic/ceremonial nature. Despite the small number of imports, most of the finds were produced and shaped according to the taste and skills of local artisans, and the reflection of regional characteristics was dominant. Nevertheless, it is not difficult to see the interactions resulting from the long-distance trade in which the site was indirectly involved. At the same time, this group of findings point out indirect evidence for the existence of an elite group that managed a complex organization in the region. The characteristics of the artifacts suggest the existence of a necropolis area. The artifacts can be dated mainly from the Early Bronze Age II to the Middle Bronze Age (2500-1800 BC) in terms of type analogs and derivatives. All this also necessitates the Zalpa/Zalpuwa debate in terms of its location and the nature of the artifacts.]

Keywords: Anatolia, Bafra, Metal Artifacts, Stone Artifacts, Terracotta Artifacts, Early and Middle Bronze Age, Zalpa/Zalpuwa.

1. Introduction

The Bafra Plain is among the regions with the highest number of old settlements in the Black Sea Region Coastal Region. Its wide and flat topography, transport alternatives, agriculture and livestock breeding areas offered by the Kızılırmak Delta and relatively favorable climatic conditions have provided a rich and viable environment compared to other coastal areas of the

Black Sea. The existing data show that life in the region started in the Palaeolithic Age¹ and continued uninterruptedly after the Early/Middle Chalcolithic Age, following the interruption in the Neolithic Age.² The number of settlements increased significantly during the Early Bronze Age. Although the number decreased in the Middle Bronze Age, they were homogenously distributed throughout the plain. İkiztepe, the only excavated site in the Bafra Plain, has revealed this stratigraphic information in detail.³ Further information is obtained from archaeological surveys, accidental finds, and artifacts acquired by museums and private collections through acquisitions.⁴ The finds from Tatlıgöl Höyük, the subject of this article, are one of these artifact groups consisting of a total of 17 pieces recovered during illicit excavations.

The finds of Tatlıgöl Höyük consist of metal, stone, and terracotta artifacts found by the field owner through illicit diggings and the findings of the surveys conducted in 2016 and 2019.⁵ In particular, the metal and stone artifact groups have led to a reconsideration of the archaeological stratigraphy at this northern tip of Anatolia and have necessitated a re-evaluation of cultural and periodic relationships. The settlement has a special location, connected to the Black Sea by water, and also consists of a settlement group of three hills. Therefore, the evaluation of the finds and the location of Tatlıgöl Höyük has been chosen as the subject of this article.

The finds were compared and dated using the analogical method. In the comparisons, norm and style similarities, as well as dissimilarities, were emphasized. Thus, we tried to understand whether the artifacts in question were transported to Tatlıgöl Höyük or whether they were produced locally. Information exchange, interaction, adaptation and unique aspects were followed. Finally, the function and meaning of the artifact group were questioned. In addition to terracotta loom weights and pottery sherds, the metal and stone artifacts from Tatlıgöl attracted attention with their distinctive features. These findings can be considered together with the North-Central Anatolia and Anatolian surroundings, with a particular focus on the Bafra Plain.

2. Location and Environmental Features

Tatlıgöl Höyük is located in the Afurcuk Neighbourhood of the Taşköprü Town, 12 km east-northeast of the Bafra District of Samsun Province, at the site of “Zekeriya'nın Evi” 1 km northeast of the neighborhood. Today, the mound is located 1 km from the lake Tatlıgöl, on the shore of the shallow floodplain of the lake and connected to the Black Sea by a canal to Kumcağız Pier. W. J. Hamilton witnessed that Kumcağız Pier on the old road from Samsun to Bafra was actively used in maritime transport until the last century.⁶

In addition to Kızılırmak, nine different rivers have formed the “New Alluvial” delta plain of Bafra. The plain’s south is divided into “Old Alluvial” and “Mountainous”. Nearly twenty large and small set lakes and lagoons, six of which are large (Liman, Gernek, Balık, Uzun, Tatlı, and

1. Türker 2021: 9-11.

2. Dönmez 2006.

3. Alkım et al. 1988; 2003.

4. Türker 2023.

5. Türker 2017; Türker - Tınl-Özbilgin 2022.

6. Hamilton 1842: 294.

Gıncı Lake), are lined up along the eastern coast of the new alluvial delta plain; they are all called together “Balıklı Gölleri” (fig. 1).

Karaboğaz Lake forms the western lake embankment of the plain. The lakes are shallow and have floodplains. Depending on the season, their depths do not exceed 1,5 m and 3 m at the deepest part. Dunes rising up to 8 m along the coast form a dam between the sea and the lakes.⁷ A recent multi-proxy study on the Kızılırmak terraces revealed that the interaction between lakes and land took its current appearance as of the 7.9 ka cal BP event.⁸

The Kızılırmak delta where the lakes are located is a wildlife zone and today also a Ramsar Convention site where 341 documented bird species and dozens of fish species live. The last two large dams on Kızılırmak (Altinkaya and Derbent) have altered the water regime, climatic structure and physical appearance of the plain. The 1926 map of the plain reveals that the mentioned lakes covered a larger area, and the coastline has changed considerably. Since the dams were planned for agriculture through water channels, the Tatlıgöl lake and its surroundings were also altered. Although the mound and its vast plain surroundings are today suitable for agriculture and partly for hunting, forests remain in small clusters.⁹

3. Exploration and Research

The settlement consists of three mounds (Mounds I-III) on the southern shore of Tatlıgöl Lake: The East Mound (Mound I) measures ca. 310 x 210 m (990 m²) and is 7 m high, while the West Mound (Mound II) measures ca. 230 x 120 m (750 m²) and is 4 m high. The South Hill (Mound III), about 200 m south of Mound II, measures about 120 x 130 m (420 m²) and is 4 m high (fig. 2).

Shallow wetlands largely bound the mound area. Tatlıgöl Lake is located on the northern shore of Mound I and Mound II. A pond separates the two mounds. The lake also surrounds the east side of Mound I. Between these mounds and Mound III is another shallow wetland, part of which is now used for paddy cultivation.

Since half of Mound I was already plowed during our field survey, it was impossible to make extensive observations. In Mound III, observation in the cultivated area was also limited since the harvest had not yet been done. The group of finds that constitute the subject of this paper was acquired by the property owner through illicit diggings in Mound II. Although informed that they had been collecting the artifacts while plowing their fields, the owner was caught by a gendarmerie raid in 2014 when they were about to sell them. It was confirmed that the artifacts were recovered from Mound II during the site visit and recorded in the minutes. After examining the artifacts at the Samsun Archaeological Museum,¹⁰ we had the opportunity to investigate the mound on-site during the 2016 and 2019 field studies within the scope of the Samsun Region Archaeological Survey

7. Akkan 1970; Öner 1996: 195.

8. Dating was performed by analyses targeting palaeoenvironmental change using palaeoecological ostracod assemblages and *Cyprideis torosa*, Berndt et al. 2019: 4.

9. Turoğlu 2010: 102-104; Öztürk - Sesli 2015.

10. Our work on the artifacts was carried out with the permission of the Directorate of Samsun Archaeological Museum (number - date: 155.01/12 - 06/01/2015); our field research was completed with the license of the General Directorate of Cultural Heritage and Museums (Project Nr. YA015501/2016 and 2019).

Project. We observed ceramic fragments, a small number of grinding stone fragments on the mounds, and a large number of mudbrick fragments and slags (fig. 3), which must belong to architectural elements on Mound I-II.¹¹

4. Identification and Comparison of Find Groups

The number of artifacts recovered from the illicit diggings at Tatlıgöl Höyük, excluding the amorphous pottery sherds, consists of 17 pieces in total. The finds, whose figure numbers are given below, can be divided into metal, stone and terracotta groups. The survey also yielded pottery sherds, fragments of grinding stones and pestles, and a large number of slags.

4.1. Metal Group

The metal finds consist of a copper/bronze dagger, one spearhead, two copper/bronze cymbals, two copper/bronze rings/bracelet, an embossed bronze macehead and a lead bowl.

Dagger

The copper/bronze dagger is a long-pointed spearhead (or sword)¹² with broad and straight shoulders (fig. 4.1, 9.1). The flat rectangular short hilt blade thickens slightly towards the broad shoulder. The shoulder with a flat profile is slightly rounded at the edges and narrows towards the tip. The body has a diamond-shaped cross-section. The broken tip must end in a tapering point. A thin spring under the handle, recessing into the body at shoulder level, is extended towards the edges. This recess must have been used to fix the handle. The groove starting at the center of the recess continues to the tip; the groove is fluted on one side and embossed on the other. The starting point on the embossed side is also thickened. It is intact except for small abrasion fractures at the tip and edges.

The long-pointed copper/bronze spearhead with broad and straight shoulders has no exact parallel.¹³ There are many spearhead variants in Anatolia. The broad and flat-shouldered type from Tatlıgöl only allows for narrower comparisons in this compositional aspect. The closest analog of the type is the stone mould from layer Ib of the Kültepe Kaneş Karum.¹⁴ However, the negative length of the Kültepe mould (20 cm) is 10 cm shorter than that of Tatlıgöl. Straight-shouldered moulds were also found in Malatya Akçadağ¹⁵ and Gaziantep Araban.¹⁶ It can be compared with the thick-handled and low-shouldered swords¹⁷ found in tombs A, K and S of Alaca Höyük in

11. Türker 2017: 121; Türker et al. 2022: 198.

12. It is controversial whether spearheads of this type and size, which developed from the shape of a dagger, should be called “long spearhead”, “dagger” or “sword”, and both terms are frequently used in the literature, for discussion see Schultz 2006: 215. See also Gernez 2007: 433 ff.

13. In terms of general characteristics, it can be compared with the types of “slight thickening down the centre of the blade”, see Maxwell-Hyslop 1946: 3-5, pl. I; cf. Müller-Karpe 1994a: fig. 1.

14. Özgüç 1986: pl. 42/44, 86-2a-b; Kulakoğlu - Kangal 2011: 278, nr. 259-260.

15. Müller-Karpe 1994b: taf. 34, 4C.

16. Müller-Karpe 1994b: taf. 95/1.

17. Koşay 1938: pl. LXXXI, 26; Koşay 1951: pl. CLXXXII, CCIII. According to Koşay (1938: 115), the sword found in Tomb A appears to have been deliberately broken before being placed in the grave.

terms of shoulder angle and with a bronze dagger¹⁸ from the Karataş-Semayük necropolis (EBA II-III) in terms of composition.

Spearhead

The spearhead is slotted (fig. 4.2, 9.2). The barrel is inflated. Its short and thin handle has a square cross-section. Its slightly low shoulders narrow towards the pointed end. The shoulders are disproportionate and only one is not well-filed. The body cross-section is elliptical in the upper and lower half and diamond-shaped in the center. The body width is centered in the middle, and the upper half narrows towards the shoulders.

A slotted spearhead is drilled in the upper half (where the body narrows) at the center of both wings; the hole shows traces of wear. The thickened groove on both sides, starting below the handle, centers the body and continues to the tip. The body of the spearhead is deformed in the upper and lower halves, slightly bent in both directions. Except for the abrasions on the edges, it is intact.

Slotted spearheads are highly speculative. The earliest examples of slotted spearheads are characterized by the so-called “Cypriot Type”,¹⁹ known for having thin, long holes. However, the hook-like curvature of the shaft and the knobbed-like thickening of the shaft end are unique features that spread to the Aegean (Cyclades and Troia), Cilicia (Tarsus), Syria (Til Barsip), Levant (Megiddo) and Iran (Tepe Hisar).²⁰ The bronze spearhead (EBA III) found at Gözlükule/Tarsus,²¹ where is destroyed by a violent fire, is schematically the closest analog of the Tatlıgöl Lake. In Anatolia, it is mainly known in Central and North-Central Anatolia.²² Two slotted bronze spearheads found in the necropolis of Gerze-Hıdırlı (Sinop) were dated to the Transitional Period of İkiztepe.²³ Like Horoztepe²⁴ samples, among the Anatolian types, there are also types other than the thin-hooked handles and knob tip.²⁵ The Cilician-Syrian types’ angular characteristics suggest they should be considered subtypes. Local features are also found in Central and North-Central Anatolia. These features include a bulging barrel and a narrowing of the upper half of the body towards the handle. Bittel suggested that the specimen from Ordu (length: 33,4 cm) must belong to the same context as the earlier deppotfund and that each fragment there could be from a long period of time. He compared it with the points from Troia and Alaca Höyük T Tomb and expressed the first skepticism about the distribution of Cypriot types and stating that the Troia points may be earlier, but that there must be a relationship between them.²⁶ Özgüç and Erkanal further criticized

18. Mellink 1969: 322, fig. 22.

19. Schaeffer 1948: 42 ff.

20. Mellink 1956: 47-48, fig. 2a-e; Stronach 1957: 107-113. See also Gernez 2007: Carte 43.

21. Goldman 1956: 281, 290, fig. 428/93. A bronze axe, three daggers, three chisels, and a toggle pin were all found together in caches in Room 56, idem 281, fig. 18, 98-101, 56-57, 60, 226.

22. Gernez 2011: 334-335, fig. 4.

23. Dönmez 2010: 154, 164, fig. 11; see also Bilgi 2001: 5, fig. 120, 123, 125.

24. The Horoztepe grave yielded slotted spearheads with knuckled shafts (Özgüç - Akok 1958: pl. VIII/7-9) and with leaf stems (Özgüç - Akok 1958: pl. XIX/1-5).

25. Özgüç 1956; Erkanal 1977.

26. Bittel 1950: 54; cf. Przeworski 1935.

this relationship by emphasizing this type's local characteristics.²⁷ Stronach compared the Ordu sample with Til Barsip and Tarsus EBA III and dated it to 2300-2100 BC, suggesting it is locally isolated and should correspond to the same period.²⁸ At İkiztepe, a slotted arsenic copper spearhead with a different form was found in the necropolis area.²⁹

Although our Tatlıgöl Höyük sample is close to the EBA II-III examples mentioned above, these types are known to have been used until the late 18th century BC (MBA) in Kültepe,³⁰ Hattuša/Büyükkale IVd³¹ and the burned layer (Layer IV) of Büklükale.³² The Anitta Dagger from Kültepe presents a stylistic development of the Central Northern Black Sea types. Indeed, Özgüç stated the following about the Anitta Dagger: "Kültepe dagger, which is the latest of all the Cypriot examples from Anatolia, Syria, and Iran, is even isolated chronologically from its closest parallels. In addition, it was impossible to find any sort of parallel for it among the many metal weapons recovered from karum Kaniš."³³ No similar finds have yet been found in the ongoing excavations at Kültepe. The Anitta Dagger was found in the debris of Layer II of the Official Warehouse Building, north of the temples section of the hill, and the layer in which the dagger was found has been dated with the Ib metal vessel and the tablet archive 80 m away. In his later publication, Özgüç expressed that it was found "at the base of the building" instead of "in the debris of the building". The upper holes of the Akkadian inscribed Anitta Dagger are worn due to binding and both holes have been soldered; i.e., it has been repaired.³⁴ It is not difficult to guess that the spearhead, which seems to have been used for an extended period of time, had a prestige value for its period to the extent that the name of a Kuššara king was inscribed on it.

Although the inscription on the Anitta Dagger is dated to Layer Ib, the spearhead itself may have been produced during Layer II or earlier. Based on the body and type characteristics of the spearhead, it can be assumed that it is a spearhead of the North-Central Anatolian type. This may suggest that Anitta procured this dagger from somewhere close to the region, and perhaps Kuššara should be searched in this region! Perhaps he engraved his name on the spearhead after the Zalpuwa campaign (CTH 1) as a token of his victory.³⁵

Copper Cymbals

The long-handled and disk-shaped cymbals are well preserved, except for minor deformations and fine cracks on the disks. They were manufactured by the cast technique, as evidenced by the connection of the handle to the disk and the absence of weld marks. The inside of the stem, narrowing towards the upper part, is half-hollow in both samples. Measurements are very close to each other.

27. Özgüç 1956: 35; Erkanal 1977: 42.

28. Stronach 1957: 109.

29. Bilgi 1993: 71-72, fig. 2; 2001b: 63, fig. 94.

30. Özgüç 1956: 33-36.

31. Schirmer 1969: 58-59, taf. 46, nr. 246, cf. Boehmer 1972: 75, taf. XII/199.

32. Matsumura - Baştürk 2018: 491, fig. 7.

33. Özgüç 1956: 36 (dimensions of the Kültepe example with its handle: h. 29,1 cm, w. 2,1-4,4 cm).

34. Özgüç 1956: 34; Erkanal 1977: 41.

35. For the historical framework and recommendations see in detail Sir Gavaz 2006: 9 ff.; Barjamovic 2011: 117-118.

Both of the two copper cymbals have five mushroom knobs on the upper end, with four on the sides and one on the top. The only difference between the two is that one has a flat head attachment (fig. 4.3, 9.3), while the other has a spherical one (fig. 4.4, 9.4).

In Anatolia, the long-handled cymbals can be classified into two main types. One of these is the knob-headed unattached type, representing the numerically widespread group.³⁶ The other one –for the time being– is only known from the North-Central Anatolia Region with mushroom attachments on the upper end. They are represented by a small number of samples. They include a pair of finds from the Durağan (Sinop) region,³⁷ a pair from the Gümüşhacıköy (Amasya) region in the Haluk Perk Collection,³⁸ and one example each of Anatolian origin in the Sadberk Hanım Museum³⁹ and the Kunsthandel Museum München.⁴⁰ These samples are dated to the end of the Late EBA (EBA III). Although they are similar to the finds from Tatlıgöl, they all have different attachment forms. This may be because of the use of wax-casting moulds in their production, as suggested for the München Kunsthandel Museum example.⁴¹ The examples suggest that these mushroom-shaped types are not found outside North-Central Anatolia and reflect a regional taste.

Copper/Bronze Rings (Bracelet)

The blunt ends of the round-sectioned copper rod bent into a ring overlap. One (fig. 5.2, 9.6) has cut stripes on both ends, and the other (fig. 5.1, 9.5) is without any finishing on the ends.

Copper/bronze rods cast into rings or spirally bent after casting are a widespread artifact assemblage from the Early Bronze Age onwards, and many moulds have been found.⁴² They are generally referred to as bracelets because of their diameter and section thickness. The best-known examples are the bronze rings unearthed in many graves in the Demircihüyük-Sarıket necropolis dating to an extended period from EBA II to the MBA.⁴³ Arsenic copper bangles on both feet of a skeleton belonging to Layer 11 (EBA II) of the İkiztepe Mound III excavation,⁴⁴ copper/bronze bracelets from the Resuloğlu cemetery,⁴⁵ and a pair of bronze (copper?) bracelets from the Alaca Höyük Tomb T can be compared to the fig. 5.1 ring of Tatlıgöl.⁴⁶

The best-known examples in Anatolia are the bronze and silver bracelets⁴⁷ and moulds⁴⁸ unearthed at Kültepe. A massive silver bracelet with stripes decoration among the burial gifts dated

36. Alaca Höyük tombs A and T (Arık 1937: 79-81, pl. CCLXXVI- CCLXXVII, Al. 1816-1817, Al.1816-1817; Koşay 1938: 79 ff., pl. LXXXI), the so-called “depotfunds” from Soloi-Pompeipolis (Bittel 1940, 198, fig. 15-16, taf. VI, S 3395-3396) and the Horoztepe finds (Özgüç - Akok 1958: fig. 20, pl. VII/3-7) are the most recognized works of this group.

37. Bilgi 2001a (today in Samsun Museum, Inv. nr. 13-1/84); 2001b: 5, fig. 40, tab. 5/57.

38. Bilgi 2014: 40, nr. HPM6724.

39. Anlağan 1990: fig. 9.

40. Buchholz - Drescher 1987: 46, fig. 6b.

41. Buchholz - Drescher 1987: 51.

42. Cf. Müller-Karpe 1994b: 131 ff., pl. 50-53.

43. Seeher 2000: 63 ff (EBA: G37, G79, G202, G261, G295, G441; MBA: G13, G600).

44. Bilgi 2001a: fig. 93; 2001b, 6, 16, 31, fig. 173-174/93.

45. Yıldırım 2006: 11, fig. 17a.

46. Arık 1937: pl. CCLCCVIg, CCLXXVII, Al. 1101-1102.

47. Özgüç 1986: 72, pl. 69/5-6; Kulakoğlu - Kangal 2011: cat. nr. 354-358.

48. Özgüç 1986: 38, pl. 80-81.

to layer Ib⁴⁹ and a pair of silver bracelets similar to those found in the Eskiypar EBA III treasure⁵⁰ are some of the closest analogs of the Tatlıgöl fig. 5.2 find. Another bronze ring with a band finish is in the Samsun Museum (purchase), identified as a bangle and dated to EBA II.⁵¹

Bronze Macehead

Bronze macehead with shaft-hole (fig. 5.3, 9.7); fine groove marks and irregular hollow cavities inside the handle hole indicate casting marks. The spherical body is decorated with low spiral reliefs facing the center on three sides. These spirals, which open at the center again, connect to the opposite side surface and circulate the wide body. The lower surface has a slight knobbed-macehead protrusion of the casting mould between two spirals.

The gold macehead from Alaca Höyük Tomb K⁵² is the closest analog of the bronze example with spiral low relief from Tatlıgöl and can be dated to this tomb.⁵³ Metal macehead finds are rare around Samsun and the Bedeş/Soğukçam find from the Bafra Plain is the only known example.⁵⁴ The Bedeş/Sogukçam find was compared and dated with the Alaca Höyük Tomb B, the Demircihüyük-Sarıket Necropolis and an artifact from the Çorum Museum.⁵⁵ The finds from the Kağmı Deresi site (Felahiye, Kayseri)⁵⁶ can also be compared in terms of composition.

Lead Bowl

The lead bowl is partly incomplete and deformed, but its form is clearly recognizable (fig. 5.4). It has a narrow rim and body with rounded shoulders and a flat base slightly thickened inward (fig. 9.8).

The bowl can be compared in terms of form with terracotta vessel finds from Demircihüyük phases O-M,⁵⁷ EBA III layer of Tarsus-Gözlükule⁵⁸ and Kaneş Karum II-Ib.⁵⁹

Prior to EBA, the earliest lead finds in Anatolia consisted of a few exceptions, such as a few beads from Neolithic Çatalhöyük (Layer IX) and a disc-shaped plate fragment from Chalcolithic Pekmeztepe/Aphrodisias (Layer VII). The number, artistry and variety increased during EBA, and these were found mainly among grave goods and in hoards.⁶⁰ The significant number of lead jugs (at least 32) found in the Demircihüyük-Sarıket necropolis, which corresponds to the Demircihüyük phases K-L (between EBA II and early EBA III), is considered a paradoxical situation because no similar lead or terracotta jugs were found at the site. The interpretation for this

49. Özgüç 1986: 29, pl. 119/5 (dia. 5,8 cm, thick. 0,8 cm).

50. Özgüç - Temizer 1995: 619, pl. 119/1-2.

51. Bilgi 2001a: 4-7, 10, 31; Bilgi 2001b: 16, 31, fig. 175 (dia. 8,8 cm, thick. 0,5 cm).

52. Koşay 1951: pl. CLXXXII, fig. 2 (h. 3,4 cm., dia. 4,3 cm, hole dia. 2,1 cm).

53. Alaca Höyük Tomb K was dated to Layer 7 (EBA II) by Kosay (1938) and to Layer 6 (EBA III) by Orthmann (1963: 32-38, tab. 6).

54. Bilgi 1994: fig. 6/44 (EBA III).

55. Bilgi 1994: 256, fig. 6/44; 2001b: 65, fig. 73.

56. Kodan 1987: 582, fig. 20 (5,4 x 5,1 cm).

57. Efe 1988: 13 ff., fig. 25, taf. 43, Type 14b.

58. Goldman 1956: pl. 264/400-402, 355/410.

59. Özgüç 1950: 68-70, pl. LXIX-LXX; Özgüç - Özgüç 1953: pl. XXVIII.

60. Baykal-Seeher - Seeher 1998: 115; Savaş 2006: 35.

was that these containers were specifically crafted for burial purposes.⁶¹ The lead jugs found in the Demircihüyük-Sarıket necropolis are considered to resemble Syrian Bottles in form, and their production sites to be Central Anatolian EBA centers in the Çorum-Tokat-Amasya line.⁶² It is known that lead plate and bowl forms first appeared in Mesopotamia during the Early Dynastic Period;⁶³ the Tatlıgöl lead bowl is –for the time being– the earliest known lead bowl example in Anatolia. The small number of lead vessels may be due to their relatively low value and high bulk in comparison to other metals, as witnessed by the cuneiforms from Kültepe.⁶⁴

We do not know whether the lead bowl was deformed over time under the soil or was deliberately rendered unusable. We know that many grave goods were deformed and left in the graves in Anatolia, and this practice can be observed in Resuloğlu graves⁶⁵ not far from Tatlıgöl.

4.2. *Stone Artifacts*

Two of the recovered stone artifacts are shaft-holed axes and three stone maceheads.

Stone Axes

Both axes have shaft holes. Both axes are made of dark green-colored stone,⁶⁶ and the surfaces are very well polished and smoothed. There are no signs of use or wear. A shaft hole has been drilled in the center with a hand or simple bench drill, and the groove marks have been removed. Only their types are different.

The body of one of the axes (fig. 6.1, 10.1) is flattened and widened in the shape of a halberd towards the bottom below the shaft hole, while it is slightly narrowed towards the top towards the square-sectioned hammer surface. This axe type, which has a square top and widens towards the chisel, has been known in various variants in the surrounding cultural geographies of the Black Sea and Anatolia since the Chalcolithic Age,⁶⁷ as in the copper and stone examples from the Varna necropolis.⁶⁸

The body of the other axe (fig. 6.2, 10.2) is slightly convex. The body has evenly spaced and ordered groove lines. The body section is round in the center and oval on the upper and lower swatting surfaces. It is a rather original example. Although stone axe types with a shaft hole in the center of the curved body are known from Troia I in Anatolia,⁶⁹ the Tatlıgöl example is quite unique.

Both axes reflect the lustrous surface charm of siliceous dolerite green stone with a velvety texture. Based on the absence of signs of use/wear and the uniqueness of the second one in

61. Baykal-Seeher - Seeher 1998: 117.

62. Baykal-Seeher - Seeher 1998: 119; Seeher 2000: 52. Özgüç (1978: 32) stated that heavy lead vessels were among the metal vessels of Merzifon and Havza origin sold in the antique markets of İstanbul and Ankara, but did not provide further details on these artifacts.

63. Baykal-Seeher - Seeher 1998: 118.

64. Erol 2019: 801.

65. Yıldırım 2006: 8-11; Zimmermann 2010: 369-370.

66. These stones with the same color, texture and grain could be “dolerite”.

67. Müller-Karpe 1974.

68. Boyadzhiev 2011; Hansen 2013: 141 ff; Heeb 2014: 31 ff; see also Tylecote 2002.

69. Schliemann 1881: nr. 620; Blegen et al. 1950: nr. 33-134, 36-289, 37-362.

particular, it is possible to conclude that they were designed for a special purpose. They have a symbolic function as ceremonial axes rather than for everyday use, and it is likely that they were left as grave goods and even designed solely for this purpose.

Stone Maceheads

Three stone maceheads were found at Tatlıgöl. One has an oblate-spherical body (fig. 6.3), while the other is pear-shaped (fig. 6.4). Both have shaft holes and polished surfaces. The last example (fig. 6.5, 10.5), which at first glance resembles a grinding stone and had not yet been drilled for a shaft hole, could also be considered a ready-to-be-worked macehead, considering its conical shape and smooth surface. Similarly, the spherical stone artifact found at Alishar was also considered an unfinished macehead.⁷⁰ Of these, fig. 6.3 and 6.5 have the same color, texture and grain characteristics and have a Mohs scale hardness of 4.5-5.0. The other sample (fig. 6.4) has hardness of 5.5-6.0 which could be hematite.

The oblate-spherical macehead from Tatlıgöl (fig. 6.3, 10.3) is among the most common weapon types dating back to the Pre-Pottery Neolithic in Southwest Asia and Anatolia,⁷¹ and the most common in Anatolia, especially in the EBA.⁷² Among these, the Demircihüyük-Sarıket Necropolis yielded the widest spectrum. Here, oblate-spherical bodies⁷³ are more common than biconical⁷⁴ and narrow-sphere forms.⁷⁵ Fifteen are of stone and 6 of bronze/copper. They were recovered from graves and scattered in the necropolis.⁷⁶ At Demircihüyük, the settlement of the necropolis, similar oblate-spherical examples were unearthed in the EBA layers.⁷⁷ Widely used in Anatolia and its neighboring regions until the middle of the 1st millennium BC,⁷⁸ these oblate-spherical forms are the closest examples of the Tatlıgöl fig. 6.3 macehead. Other grave finds of this type in North-Central Anatolia can be compared with the stone threaded on a golden rod from tomb K at Alaca Höyük⁷⁹ and the bronze example found in a pithos burial dating to the late phase of the EBA at Resuloğlu.⁸⁰ Similar samples were also found in the upper phase of Alishar Layer IV and Layer II.⁸¹

The closest known examples of the pear-shaped bodied macehead (fig. 6.4, 10.4) were found in the Alishar excavations. All were found in Layer II; one is grey diorite, and all others are hematite; the hematite specimens were considered to be imported.⁸² The best-known examples of pear-shaped maceheads were found in the hoard from Nahal Mishmar, the most illustrious

70. Schmidt 1932: 172, fig. 232, b 1125.

71. Rosenberg 2003: 95-98.

72. Baykal-Seeher - Seeher 1998: 52.

73. Baykal-Seeher - Seeher 1998 (EBA: G21, G160-161, G169, G231, G243, G270, G278, G334, G564, MBA: G341).

74. Baykal-Seeher - Seeher 1998 (EBA: G422, G493).

75. Baykal-Seeher - Seeher 1998 (EBA: G434).

76. Baykal-Seeher - Seeher 1998: 52, fig. 57.

77. Obladen-Kauder 1996: 178, pl. 83/8-19.

78. Muhle 2008.

79. Koşay 1951: pl. CLXXXII/1.

80. Yıldırım - Ediz 2008: 447, fig. 13.

81. Schmidt 1931: 93, fig. 138; 1932, 165.

82. Schmidt 1931: 165-166.

representative of the Ghassulian Culture (Chalcolithic Age), and there is no doubt that they were used for ritual-ceremonial assemblages by the prestige-bearer.⁸³ These types are more common in the Akkadian - Ur III period geography than in Anatolia; therefore, it has been suggested that they should be dated to the 3rd millennium BC.⁸⁴ This suggestion is consistent with the idea that this hematite type, which is not very common in Anatolia, was imported.

4.3. *Terracotta Finds*

Terracotta artifacts are related to weaving and include a spindle head and three loom weights.

Spindle Whorl

The terracotta spindle head is asymmetrical-conical (fig. 10.6). This type, which has no special indication of decoration, is common in Anatolia and difficult to date to a specific period.⁸⁵

Loom Weights

The three terracotta loom weights have an oval shape with a thick body that tapers upwards (fig. 7, 10.7-9). Their dimensions are close to each other. This type of loom weight, which began appearing as early as the Chalcolithic Age and became widespread in the MBA, is recorded as “Anatolian Type”.⁸⁶

They are represented by many specimens in the EBA II - MBA layers of İkiztepe⁸⁷ near Tatlıgöl, also known as the center where the greatest number of loom weights were recovered in Anatolia.⁸⁸ Large numbers of similar types of loom weights were found during the surveys in the Bafra Plain.⁸⁹

4.4. *Pottery*

A large number of pottery sherds were observed at the surface of the Tatlıgöl mounds. We identified the green and yellow glazed ware as Medieval (Byzantine or Turkish-Islamic). The few direct rim monochromes are grouped as Iron Age. The sherds, classified as EBA according to their surface characteristics, are amorphous, and it is difficult to be sure about their dating. The specimens with a profile, of which we share a selected group here, are classified as Late EBA - MBA; all were found in Mound I. The absence of ceramics from this period in Mound II may be indirect evidence that this area was used as a necropolis.

All of the MBA pottery from Tatlıgöl is wheelmade. Nearly all of them are very poorly preserved. The paste of the sherds fired at medium and high temperatures is finely gritty, and some also contain calcite. The vessels classified belong to straight and open bowls (fig. 8.1-3) and holemouth vases (fig. 8.4-5). A spout fragment (fig. 8.8) may belong to a teapot-like vessel. It is difficult to periodize the sherds belonging to larger and thicker-walled vessels such as pithos. Only

83. Gosic - Gilead 2015: 166, 169-171; see also Bar-Adon 1980.

84. Muhle 2008: 148.

85. Yılmaz 2022: 23-24.

86. Tütüncüler 2022: 63. For the typological distribution of loom weights, see also Massa 2016: 205, Fig. 7.11-14.

87. Alkım et al. 1988: 97, pl. XL, LV, LXXIV; 2002: 24, 51, pl. XVII-XVIII, XXXII-XXXIII.

88. Yılmaz 2022: 24-25.

89. Türker 2017: 119, fig. 1/12-13; Türker et al., 2019: 218, 221, fig. 15/11-14.

a group of horizontal handle sherds (fig. 8.6-7) could be assigned to the MBA. A horizontal handle sherd with abundant lime temper is among the numerous slag fragments observed on the surface (fig. 8.9).

5. General Evaluation

The Tatlıgöl Höyük itself and its finds can be examined from different perspectives. Due to the lack of systematic excavation and findings analyses, we lack reliable stratigraphy, context, and information about the production technology. Nevertheless, the location and size of the Tatlıgöl Höyük are remarkable in its region and the Anatolian scale. Its sophisticated finds have distinctive aspects that provide new and vital contributions to the literature.

The mound is located in a special natural environment surrounded by lakes and floodplains in the Bafra delta plain of the Kızılırmak River in the coastal part of North-Central Anatolia. It was connected to the Black Sea by river transport as well as land transport. Considering the dense settlement pattern of the Bafra Plain in its hinterland,⁹⁰ Tatlıgöl undoubtedly utilized its periodical advantages in site selection, as evidenced by the fact that it was settled on a large (around 16 ha) area consisting of three hills.

In the case of Bafra Plain, where the Tatlıgöl mound is located, the geographies of Samsun and North-Central Anatolia can be evaluated together. The Bafra Plain is one of the densest areas in the Black Sea Region of Anatolia in terms of the number of settlements and period diversity.⁹¹

The systematic excavations at İkiztepe not only provided a long chronological sequence from the Chalcolithic to the Iron Age but also served as the main reference for dating other settlements in the plain. More than thousand metal weapons, tools, jewellery, and symbols were recovered from the necropolis alone,⁹² but only a few of them can be indirectly compared with the finds from Tatlıgöl. The reason for this may be the local taste and skill in production, as in İkiztepe. As a matter of fact, we know that there are many metal artifacts in the Samsun Region that have been brought to museums through illicit diggings or purchases. Some may have been imported to the region through trade, but most were locally produced.⁹³ The emphasis on local character also provides a perspective for the artifacts from Tatlıgöl. Özgüç's conclusion that "the Samsun region has its own unique metal school"⁹⁴ comes to mind at this point. The fact that the artifacts cannot be compared with their exact counterparts can be explained by the artifacts being produced by the artisans of Tatlıgöl or obtained from the surrounding area. Where the community came from is a different matter, and one can only speculate on the origins and interaction of the tradition. Despite

90. Türker 2023.

91. Türker 2023: 65, graphic 1-2.

92. Bilgi 1994: 257.

93. Bilgi 1994.

94. Özgüç 1978: 36. Özgüç (1963: 12) also considered it likely that the metalworking and art, and especially the trade, were directly managed by the chiefs and believed that these workshops must have been located in Eastern and Northeastern Anatolia. Bilgi (1994: 257-258) stated that the results of the İkiztepe excavations are clear evidence for the local development of workshops in the region. Özdoğan (2023: 42) explained the process as follows: "Small localized central chiefdoms of Anatolia, unable to manage the intense mechanisms of trade and exchange, were gradually replaced by regional powers".

all this, it is possible to evaluate Tatlıgöl in terms of concept and composition, with locations in Anatolia dating from EBA II to the MBA.

The actual intensive contacts are mostly observed within the framework of North-Central Anatolia. In spite of their specific differences, some distinct types necessitate a wider geographical view of Anatolia and its neighbors. Thus, the metal, stone, and terracotta artifact groups can be both dated and understood in terms of their contact with different regions. We can discuss these in terms of specific artifacts.

Bedeş/Soğukçam in the Bafra Plain, where a spearhead and a bronze macehead (among other weapons) similar to the Cypriot type were found, Bengü (Mengü), where a lugged axe was found, and the ancient city of Amisos,⁹⁵ where a Hittite type a shaft-hole axe was found, mark the few locations in Samsun where the origins of metal artifacts are well-documented.

The macehead⁹⁶ found at Bedeş/Soğukçam,⁹⁷ categorized as a flat settlement, is of particular importance in terms of its unique form, allowing for specific comparison and dating. Bedeş/Soğukçam is only about 20 kilometers air distance from the Tatlıgöl mound. The macehead is considered similar to the one from the Demircihüyük-Sarıket necropolis as well as a golden specimen from Alaca Höyük Tomb B,⁹⁸ one each from the vicinity of Afyon,⁹⁹ Çavdarlı Höyük, and Haymana-Oyaca,¹⁰⁰ and one from Oymaağaç-Göller¹⁰¹ due to its knobbed form.

However, the Bedeş/Sogukukçam specimen stands out with its local peculiarities rather than the places mentioned, and the projections on it are more similar to the mushroom knobs on the Tatlıgöl cymbals (fig. 9.3).¹⁰² As mentioned in the article (supra), cymbals with this type of attachment are found only in the provinces surrounding Samsun. Therefore, the spiral-relief bronze macehead from Tatlıgöl (fig. 9.7) is unique. It makes a new contribution to the maceheads made of metal in Anatolia, like that made by a copper macehead from the Chalcolithic Can Hasan 2B¹⁰³ and an iron (or iron ore) macehead from the Late Chalcolithic grave at Korucutepe,¹⁰⁴ followed by a bronze example from Alaca Höyük Tomb K¹⁰⁵ in the EBA (apart from the type just mentioned), a bronze example from Resuloğlu dated to the late phase of the EBA,¹⁰⁶ and a bronze example from Kağrı Deresi Mevkii.¹⁰⁷ Speaking of maceheads, it is worth mentioning the hematite pear-shaped

95. Bilgi 1994: 255-256.

96. Bilgi 1994: 256, fig. 44 (EBA III); 2004: 63, 22nd BC (arsenical cooper).

97. Alkım 1974: 10, map. 1.

98. Arık 1937: pl. CLXXIII Al. 243.

99. Muhle 2008: 503, nr. 1271.

100. Seeher 2000: 52.

101. Özgüç 1980: 470, pl. VI-VII.

102. Zimmermann (2007: 68) discusses the technology that characterized the Circumpontic Metallurgical Province through similar attachment types in many other examples, such as a bronze ceremonial standard from Horoztepe and standards from the Alaca Höyük Tomb B, citing their circulation as evidence of a multifaceted movement spanning millennia.

103. French 2010: 75-77, fig. 57/1.

104. Brandt 1978: 61, pl. 110/2. Yakar (1984: 73) thought this could be hematite (LC/EBA I).

105. Koşay 1938: pl. CLXXXII/2.

106. Yıldırım - Ediz 2008: fig. 13.

107. Kodan 1987: 582, fig. 20.

in the stone group (fig. 10.4). With exceptions such as Alishar (supra), these are common in the southern neighbors of Anatolia at the end of the EBA; it is not a far-fetched suggestion to think that they were imported to Tatlıgöl and date them to the same period.

These artifacts, as well as the shaft-hole stone axes and stone maceheads, the copper/bronze rings, the lead bowl, and the copper/bronze spearheads, represent a particular and symbolic group that may have been ceremonial or grave goods. The diversity and physical condition of the assemblage suggest the possibility of a necropolis.¹⁰⁸

In particular, the comparable locations of the metal artifacts are well-attested in North-Central Anatolia.¹⁰⁹ We also know from numerous examples that the joked lead bowl (fig. 9.8), as well as the slight deformation of dagger and spearhead (fig. 9.1-2), were part of the burial ritual, if not for recycling. The fact that the shaft-hole stone axes (fig. 10.1-2) were never used again fits the concept of grave goods if not trade.

A final note on these can be made for the spearheads. The two copper/bronze spearheads are of different types, except for the thin and short shafts. Although there are many variants of these, there are no exact analogs. The one with a slot (fig. 9.2), in particular, resembles the Cypriot type, but its composition points to the existence of a local type in the central-northern half of Anatolia. We have already discussed the possibility of a northern influence on the Anitta Dagger when describing the artifact (supra); it is, therefore, necessary to address a debate in the literature. In this debate, the country of Zalpuwa and the location of the city of Zalpa at its center play a key role.

According to ancient Assyrian and Hittite texts, there was more than one city of Zalpa, one in northern Syria and one north of Kaneš.¹¹⁰ Suggestions for the location of the northern Zalpa include İkiztepe¹¹¹ and Paşaşeyh mounds¹¹² in the Bafra Plain and Oymağaç Höyük¹¹³ to their south. Since the last suggestion matches Nerik, this option can be eliminated! In the Legend of Zalpa and the Kaneš Queen's Narrative, we know that the queen put the 30 boys she gave birth to in chests and left them in the river and that the river took them to the sea in the country of Zalpuwa.¹¹⁴ If the river she left them in was the Halys and the river took them to was the Black Sea, then it would be more plausible to suggest the city of Zalpa in the country of Zalpuwa to be İkiztepe or Tatlıgöl as the Halys forms a delta and reaches the Black Sea through Tatlıgöl! Of course, unless excavations are

108. For suggestions and discussions, see also Türker et al. 2015: 116-123; Türker 2022: 328-330.

109. Bilgi 2001b; Türker et al. 2015.

110. Barjamovic 2011: 107.

111. Alkım 1979: 157. For suggestions and discussions see also Sir Gavaz 2006: 9 ff, n. 69.

112. Dönmez-Beyazıt 2005: 110.

113. Bilgi (1998: 69), who partially agreed with Alkım's (1979) suggestion, stated that İkiztepe was in the country of Zalpa, but that Zalpa could not be a one-to-one match with İkiztepe, and suggested that Zalpa could be Oymağaç Höyük. The excavations and the fragments of cuneiform tablets found at Oymağaç Höyük have shown that Oymağaç must be the city of Nerik (Klinger 2009). The fact that Hittite texts list Nerik and Zalpuwa together among the cult centers plundered by the Kaška tribes, which we know from these texts to be in the north, around the Middle Black Sea, provides secondary evidence for the search for Zalpa near the Black Sea, cf. Barjamovic 2011. Haas (1977: 18 ff.), on the other hand, considered Kaneš king Anitta's use of the phrase "I have [subdued] all the countries inland from the sea from Zalpuwa" in CTH 1 to indicate that Zalpa was located on the Black Sea coast and that İkiztepe might be a suitable location for it.

114. Otten 1973.

carried out, obtaining explanatory findings to confirm this will be impossible. Still, excluding Tatlıgöl from the equation about the historical-geographical location suggestions would be wrong.

6. Conclusion

Located on the coastal part of the delta plain where the Halys flows into the Black Sea, the Tatlıgöl Höyük stands out with its sophisticated finds. The artifacts revealed that this was a significant settlement. The artifacts found are mainly dated to EBA II-MBA. They include those of everyday life as well as those of prestige value and symbolic/ceremonial features, which also strengthens the possibility that there must have been a necropolis area within or adjacent to the settlement. The numerous slags found on the surface may reinforce the hypothesis that the production was essentially local production.

It is possible to see local elements and the interaction of the North-Central Anatolian environment predominantly in the Tatlıgöl artifacts. Production was oriented towards local demand and supply, and artifacts were shaped according to the taste and skills of local and regional artisans. The few imported artifacts can be considered indicators of long-distance trade. The evidence that trade was organized and intensive is weak, but it is at least conceivable that they were an indirect part of a commercial network. The local cycle was sufficient for the inhabitants of Tatlıgöl, one of the northernmost locations of the trade network; the lifestyle conditions offered by the natural environment may not have necessitated participation in a long-distance organization.

This article introduces a new location and local derivatives of familiar artifact groups to the literature. Therewith, the Zalpa/Zalpuwa debate aside, it cannot clearly present how large and important a center we are dealing with; this will only become evident through systematic excavations and the data of further analyses.

7. Bibliography

- AKKAN, ERDOĞAN 1970. *Bafra Burnu Delice Kavşağı Arasında Kızılırmak Vadisinin Jeomorfolojisi*. Ankara: Ankara Üniversitesi Basımevi.
- ALKIM, U. BAHADIR 1974. "Tilmen Höyük ve Samsun Bölgesi Çalışmaları (1971)". *Türk Arkeoloji Dergisi* XX(2), pp. 5-16.
- ALKIM, U. BAHADIR 1979. "İkiztepe Kazısı: İlk Sonuçlar", *Türk Tarih Kongresi VIII*(1), pp. 151-157.
- ALKIM, U. BAHADIR, ALKIM, HANDAN and BILGI, ÖNDER. 1988. *The First and Second Seasons' Excavations (1974-1975)*. Ankara: Türk Tarih Kurumu Yayınları.
- ALKIM, U. BAHADIR, ALKIM, HANDAN and BILGI, ÖNDER. 2003. *İkiztepe II. Üçüncü, Dördüncü, Beşinci, Altıncı, Yedinci Dönem Kazıları (1976-1980)*. Ankara: Türk Tarih Kurumu Yayınları.
- ANLAĞAN, ÇETİN 1990. "Sadberk Hanım Müzesi'nde Bulunan Bir Grup Eski Tunç Çağı Eseri", *Türk Tarih Kongresi X*(1), pp. 65-70.
- ARIK, R. OĞUZ 1937. *Türk Tarih Kurumu Tarafından Yapılan Alaca Höyük Hafriyatı 1935'teki Çalışmalara ve Keşiflere ait İlk Rapor*. Ankara: Türk Tarih Kurumu Yayınları.
- BAR-ADON, PESSAH 1980. *The Cave of Treasure the finds from the caves in Nahal Mishmar*. Jerusalem: Israel Exploration Society.

- BARJAMOVIC, GOJKO 2011. *A Historical Geography of Anatolia in the Old Assyrian Colony Period*. Copenhagen: Museum Tusculanum Press.
- BAYKAL-SEEHER, AYŞE and SEEHER, JÜRGEN 1998. "Gefäße aus Blei in der Frühen Bronzezeit Anatoliens". In G. Arsebük, M. J. Machteld and W. Schirmer (eds), *Light on Top of the Black Hill Studies presented to Halet Çambel*. pp. 115-121, İstanbul: Ege Yayınları.
- BERNDT, CHRISTOPHER, FRENZEL, PETER and ÇINER, ATILA 2019. "Intraspecific Length Variation and Shell Thickness of the Ostracod *Cyprideis torosa* (Jones, 1850) as a Potential Tool for Palaeosalinity Characterization". *Geosciences* 9(2), pp. 83. <https://doi.org/10.3390/geosciences9020083>
- BILGI, ÖNDER 1993. "1974 ve 1986 Kazı Dönemlerinde Bulunan Tunç Silahların Işığı Altında İkiztepe'nin Önasya'daki Önemi". *Türk Tarih Kongresi* X(1), pp. 71-77.
- BILGI, ÖNDER 1994. "Samsun Müzesi Protohistorik Çağ Silahları ve Orta Karadeniz Bölgesi Maden Sanatı Hakkında Yeni Gözlemler". *Türk Tarih Kongresi* XI(1), pp. 253-272.
- BILGI, ÖNDER 1998. "MÖ 2. Binyılda Orta Karadeniz Bölgesi". In S. Alp and A. Süel (eds.), *III. Uluslararası Hititoloji Kongresi Bildirileri / Acts of the IIIrd International Congress of Hittitology, Çorum, September 16-22, 1996*. pp. 63-75, Çorum: Çorum Belediyesi Yayını.
- BILGI, ÖNDER 2001a. "Orta Karadeniz Bölgesi Protohistorik Çağ Maden Sanatının Kökeni ve Gelişimi". *Belleten* 65(242), pp. 1-36.
- BILGI, ÖNDER 2001b. *Protohistoric Age Metallurgists of the Central Black Sea Region A New Perspective on the Question of the Indo-Europeans' Original Homeland*. İstanbul: TASK Vakfı Yayınları.
- BILGI, ÖNDER 2004. "İkiztepe Mezarlık Kazıları ve Ölü Gömme Gelenekleri 2000-2002 Dönemleri". *Anadolu Araştırmaları* 17(1), pp. 25-50.
- BILGI, ÖNDER 2014. "Introduction: Haluk Museum Gümüşhacıköy Collection". In H. Perk (ed.), *The Anatolian Early Bronze Age Collective Foundling in The Haluk Perk Museum Collection*. pp. 12-13, İstanbul: Mat Ofset.
- BLEGEN, CARL W., CASKEY, JOHN L., RAWSON, MARIAN and SPERLING, JEROME 1950. *Troy General Introduction The First and Second Settlements, Volume I, Part: 1*. Princeton: Princeton University Press.
- BITTEL, KURT 1940. "Der Depotfund von Soloi-Pompeiopolis". *Zeitschrift for Assyriologie und Vorderasiatische Archäologie, Neue Folge* XII(46/1), pp. 183-205.
- BITTEL, KURT 1950. *Grundzüge der Vor- und Frühgeschichte Kleinasiens*. Tübingen: Verlag Ernst Wasmuth.
- BOEHMER, R. MICHAEL 1972. *Die Kleinfunde von Bogazköy aus den Grabungskampagnen 1931-1939 und 1952-1969*. Berlin: Gebr. Mann Verlag.
- BOYADZHIEV, KAMEN 2011. "Development and distribution of close combat weapons in Bulgarian Chalcolithic". *Studia Praehistorica* 14, pp. 265-281.
- BRANDT, ROELOF W. 1978. "Phases A-B, The Chalcolithic Age". In M. N. van Loon (ed.), *Korucutepe Final Report on the Excavations of the Universities of Chicago, California (Los Angeles) and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968-1970, Volume 2*. Pp. 61-63, Amsterdam: North-Holland Publishing Co.
- BUCHHOLZ, HANS-GÜNTER and DRESCHER, HANS 1987. "Einige frühe Metallgeräte aus Anatolien". *Acta Praehistorica et Archaeologica* 19, pp. 37-70.
- DÖNMEZ, ŞEVKET 2006. "Recent Observations on the Cultural Development of the Central Black Sea Region before the Early Bronze Age II". In B. Erciyas and E. Koparal (eds.), *Settlement*

Archaeology Series 1: Black Sea Studies Symposium Proceedings. pp. 89-98, İstanbul: Ege Yayınları.

DÖNMEZ, ŞEVKET 2010. "An Overview of the 2nd Millennium BC and Iron Age Cultures of the Province of Sinop in Light of New Research". *Ancient Civilizations from Scythia to Siberia* 16(1-2), pp. 153-176.

DÖNMEZ, ŞEVKET and BEYAZIT, A. YURTSEVER 2005. "A General Look at the Central Black Sea Region of Turkey during the Middle Bronze Age and a New Approach to the Zalpa Problem in the Light of New Evidence". In J. G. Dercksen (ed.), *Anatolia and the Jazira during the Old Assyrian Period: Old Assyrian Archives*. pp. 101-135, Leiden: Nederlands Instituut voor het Nabije Oosten.

EFE, TURAN 1988. *Demircihüyük die Ergebnisse der Ausgrabungen 1975-1978, Band III, 2. Die Keramik 2, C., Die Frühebronzezeitliche Keramik der Jüngeren Phasen (ab Phase H)*. Mainz am Rhein: Verlag Philipp Zabern.

ERKANAL, HAYAT 1977. *Die Äxte und Beile des 2. Jahrtausend in Zentralanatolien*. München: Beck, C. H. Verlag.

EROL, HAKAN 2019. "Old Assyrian Metal Trade, Its Volume and Interactions". *Belleten* 83(298), pp. 779-806.

FRENCH, DAVID 2010. *Can Hasan I: The Small Finds*. London: British Institute of Archaeology at Ankara, Monograph Series 45.

GERNEZ, GUILLAUME 2007. *L'armement en métal au Proche et Moyen-Orient: des origines à 1750 av. J.-C.* PhD Thesis, Paris: Université Panthéon-Sorbonne. <https://theses.hal.science/tel-00339404>

GERNEZ, GUILLAUME 2011. "The exchange of products and concepts between the Near East and the Mediterranean: the example of weapons during the Early and Middle Bronze Ages". In K. Duistermaat and I. Regulski (eds.), *intercultural contacts in the Ancient Mediterranean. Proceedings of the International Conference at the Netherlands-Flemish Institute in Cairo, 25th to 29th October 2008*. pp. 327-341, Leuven: Peeters publishing.

GOLDMAN, HETTY. 1950. *Excavations at Gözlü Kule, Tarsus, Volume II, Text & Plates, from the Neolithic through the Bronze Age*. Princeton: Princeton University Press.

GOSIC, MILENA and GILEAD, ISAAC 2015. "Casting the sacred: Chalcolithic metallurgy and ritual in the southern Levant". In N. Laneri (ed.), *Defining the Sacred: Approaches to the Archaeology of Religion in the Near East*. Pp. 161-175, Oxford: Oxbow Publisher.

HAAS, VOLKERT 1977. "Zalpa, Die Stadt am schwarzen Meer und das althethitische Königtum". *Mitteilungen des Deutschen Orient Gesellschaft* 109, pp. 15-26.

HAMILTON, W. JOHN 1894. *Researches in Asia Minor, Pontus and Armenia with some account of their Antiquities and Geology, Volume I*. London: Cambridge University Press.

HANSEN, SVEN 2013. "Innovative Metals: Copper, Gold and Silver in the Black Sea Region and the Carpathian Basin During the 5th and 4th Millennium BC". In S. Burmeister, S. Hansen, M. Kunst and N. Müller-Scheeßel (eds.), *Metal Matters: Innovative Technologies and Social Change in Prehistory and Antiquity*. pp. 137-167, Rahden: Verlag Marie Leidorf GmbH.

HEEB, JULIA 2014. *Copper Shaft-Hole Axes and Early Metallurgy in South-Eastern Europe: An Integrated Approach*. Oxford: Archaeopress.

KLINGER, JÖRG 2009. "The cult of Nerik – revisited". In F. Pecchioli, G. Daddi and C. Torri (eds.), *Central-North Anatolia in the Hittite period. New perspectives in light of recent research*.

- Acts of the international conference held at the University of Florence, 7-9 February 2007.* pp. 97-107, Roma: Studia Asiana 5.
- KODAN, HAMDİ 1987. "Kayseri Müzesindeki Eski Tunç Çağı Defnesi". *Belleten* 51(200), pp. 581-586.
- KOŞAY, H. ZÜBEYR 1938. *Türk Tarih Kurumu Tarafından Yapılan Alaca Höyük Hafriyatı 1936'daki Çalışmalara ve Keşiflere Ait İlk Rapor*. Ankara: Türk Tarih Kurumu Yayınları.
- KOŞAY, H. ZÜBEYR 1951. *Les Fouilles d'Alaca Höyük Entreprises par la Societe d'Histoire Turque: Rapport Preliminaire sur les Travaux en 1937-1939*. Ankara: Türk Tarih Kurumu Yayınları.
- KULAKOĞLU, F. and KANGAL, SELMIN 2011. *Anatolia's Prologue Kültepe- Kanesh- Karum: Assyrians in Istanbul, Exhibition Catalog*, İstanbul: Kayseri Büyükşehir Belediyesi Kültür Yayınları.
- MASSA, MICHELE 2016. *Networks before Empires: Cultural Transfers in West and Central Anatolia during the Early Bronze Age*. PhD Thesis, London: University College London.
- MATSUMURA, KIMIYOSHI and BAŞTÜRK, ELİF 2018. "Büklükale Kazıları 2016". *Kazı Sonuçları Toplantısı* 39(2), pp. 489-500.
- MAXWELL-HYSLOP, RACHEL 1946. "Daggers and Swords in Western Asia: A Study from Prehistoric Times to 600 B.C.". *Iraq* 8, pp. 1-65.
- MELLINK, MACHTELD J. 1956. "The Royal Tombs at Alaca Höyük and the Aegean World". In S. S. Weisberg (ed.), *The Aegean and the Near East Studies Presented to Hetty Goldman on the Occasion of her Seventy-fifth Birthday*. pp. 39-58, Locust Valley - New York: J. J. Augustin Publisher.
- MELLINK, MACHTELD J. 1969. "Excavations at Karataş-Semayük in Lycia, 1968". *Archaeological Journal of America* 73(3), pp. 319-331.
- MUHLE, BARBARA 2008. *Vorderasiatische Keulen und ihr Umfeld vom 9. bis ins frühe 1. Jt. v. Chr. Typologie und Deutung*. PhD Thessis, München: Philosophie an der Ludwig-Maximilians-Universität.
- MÜLLER-KARPE, HERMAN 1974. *Handbuch der Vorgeschichte, Band 3: Kupferzeit*. München: C.H. Beck'sche Verlag.
- MÜLLER-KARPE, ANDREAS 1994a. "Anatolische Bronzeschwerter und Südosteuropa". In C. Dobiati (ed.), *Festschrift für Otto-Herman Frey zum 65. Geburtstag*. Pp. 431-444, Marburg: Marburger Studien zur Vor- und Frühgeschichte, 16.
- MÜLLER-KARPE, ANDREAS 1994b. *Altanatolisches Metallhandwerk*. Neumünster: Wachholtz Verlag.
- OBLADEN-KAUDER, JULIA 1996. *Demircihüyük Die Ergebnisse Der Ausgrabungen 1975-1978, Band IV, Die Kleinfunde, B: Die Kleinfunde aus Ton, Knochen und Metall*. Mainz am Rhein: Verlag Philipp von Zabern.
- ORTHMANN, WINFIELD 1963. *Die keramik der frühen Bronzezeit aus Inneranatolien*. Berlin: Verlag Gebr. Mann.
- OTTEN, HEINRICH 1973. *Eine althethitische Erzählung um die Stadt Zalpa*. Wiesbaden: Otto Harrassowitz.
- ÖNER, ERTUĞ 1996. "Samsun ve Çevresinin Jeomorfolojisi". *Atatürk Kültür Dil ve Tarih Yüksek Kurumu Coğrafya Bilim ve Uygulama Kolu Coğrafya Araştırmaları* 4, pp. 191-224.
- ÖZDOĞAN, MEHMET 2023. "The Making of The Early Bronze Age in Anatolia". *Old World: Journal of Ancient Africa and Eurasia* 3(1), pp. 1-58. <https://doi.org/10.1163/26670755-20230007>

ÖZGÜÇ, TAHSİN 1950. *Ausgrabungen in Kültepe Bericht über die im Auftrage der Türkischen Historischen Gesellschaft 1948 Durchgeführten Ausgrabungen*. Ankara: Türk Tarih Kurumu Yayınları.

ÖZGÜÇ, TAHSİN 1956. "The Dagger of Anitta". *Belleten* XX(77), pp. 33-36.

ÖZGÜÇ, TAHSİN 1963. "Early Anatolian Archaeology in the Light of Recent Research". *Anadolu / Anatolia* 7, pp. 1-21.

ÖZGÜÇ, TAHSİN 1978. *Maşat Höyük I: Excavations at Maşat Höyük and Investigations in its Vicinity*, Ankara: Türk Tarih Kurumu Yayınları.

ÖZGÜÇ, TAHSİN 1980. "Some Early Bronze Age Objects from the District of Çorum". *Belleten* 44(175), pp. 467-474.

ÖZGÜÇ, TAHSİN 1986. "New Observations on the Relationship of Kültepe with Southeast Anatolia and North Syria during the Third Millennium". In J. V. Canby (ed.), *Ancient Anatolia: Aspects of Change and Cultural Development: Essays in Honor of Machteld J. Mellink*. pp. 31-47, Madison: The University of Wisconsin Press.

ÖZGÜÇ, TAHSİN and AKOK, MAHMUT 1958. *Horoztepe An Early Bronze Age Settlement and Cemetery*. Ankara: Türk Tarih Kurumu Yayınları.

ÖZGÜÇ, TAHSİN and ÖZGÜÇ, NİMET 1953. *Ausgrabungen in Kültepe Bericht über die im Auftrage der Türkischen Historischen Gesellschaft 1949 Durchgeführten Ausgrabungen*. Ankara: Türk Tarih Kurumu Yayınları.

ÖZGÜÇ, TAHSİN and TEMİZER, RACI 1993. "The Eskiyyapar Treasure". In M. J. Mellink, E. Porada and T. Özgüç (eds.), *Aspects of Art and Iconography: Anatolia and Its Neighbors Studies in Honor of Nimet Özgüç*. pp. 613-628, Ankara: Türk Tarih Kurumu Yayınları.

ÖZTÜRK, DERYA and SESLİ, F. AHMET 2015. "Shoreline Change Analysis of the Kizilirmak Lagoon Series". *Ocean & Coastal Management* 118/B, pp. 290-308. <https://doi.org/10.1016/j.ocecoaman.2015.03.009>

PRZEWORSKI, STEFAN 1935. "Der Grottenfund von Ordu ein beitrage zu den Kleinasiatichen-Kaukasischen beziehungungen am ende des II. Jh. v. Chr". *Archiv Orientalní* VII(3), pp. 390-414.

ROSENBERG, MICHAEL 2003. "The Strength of Numbers: From Villages to Towns in the Aceramic Neolithic of Southwestern Asia". In M. Özdoğan, H. Hauptmann and N. Başgelen (eds.), *From Village to Cities: Early Villages in the Near East: Studies Presented to Ufuk Esin*. pp. 91-101, İstanbul: Arkeoloji ve Sanat Yayınları.

SAVAŞ, S. ÖZKAN 2006. *Çivi yazılı Belgeler Işığında Anadolu'da (İ.Ö.2. Bin Yılında) Madencilik ve Maden Kullanımı*. Ankara: Türk Tarih Kurumu Yayınları.

SCHAEFFER, CLAUDE F. A. 1948. *Stratigraphie Comparée et Chronologie de L'Asie Occidentale (IIIe et IIe Millenaires)*. London: Oxford University Press.

SCHLIEMANN, HEINRICH 1881. *Ilios, Stadt und Land der Trojaner: Forschungen und Entdeckungen in der Troas und Besonderes auf der Baustelle von Troja*, Leipzig: F.A. Brockhaus.

SCHIRMER, WULF 1969. *Die Bebauung am Unteren Büyükkale-Nordwesthang in Boğazköy Ergebnisse der Untersuchungen der Grabskampagnen 1960-1963*. Berlin: Gebr. Mann Verlag GmbH.

SCHMIDT, ERICH F. 1931. *Anatolian through the Ages Discoveries at the Alishar Mound 1927-29*. Chicago: University of Chicago Press.

SCHMIDT, ERICH F. 1932. *The Alishar Hüyük: Seasons 1928 and 1929 (OIP XIX/I)*. Chicago: University of Chicago Press.

SCHULZ, CHRISTIAN E. 2006. "Zum Aufkommen des Schwertes". *Anodos: Studies of the Ancient World* 4-5, pp. 215-229.

SEEHER, JÜRGEN 2000. *Die Bronzezeitliche Nekropole von Demircihüyük-Sarıket Ausgrabungen des Deutschen Archäologischen Instituts in Zusammenarbeit mit dem Museum Bursa, 1990-1991*. Tübingen: Ernst Wasmuth Verlag.

SİR GAVAZ, ÖZLEM 2006. "Hitit Kenti Zalpa'nın Yeri Üzerine". *Anadolu / Anatolia* 31, pp. 1-18.

STRONACH, DAVID B. 1957. "The Development and Diffusion of Metal Types in Early Bronze Age Anatolia". *Anatolian Studies* 7, pp. 89-125.

TUROĞLU, HÜSEYİN 2010. "Kızılırmak Deltası ve Yakın Çevresinin Jeomorfolojik Özellikleri ve İnsan Yaşamındaki Etkileri". *Anadolu Araştırmaları* 19(1), pp. 99-111.

TÜRKER, ATILA 2017. "Samsun Bölgesi 2016 Yılı Prehistorik-Protohistorik Dönem Arkeolojik Yüzey Araştırması", *Araştırma Sonuçları Toplantısı* 35(1), pp. 117-146.

TÜRKER, ATILA 2021. "Karadora: Bafra Ovası'nda Yeni Bir Prehistorik Lokalite", *Cedrus* IX, pp. 1-19. <https://doi.org/10.13113/CEDRUS.202101>

TÜRKER, ATILA 2022. "Kuzey-Orta Anadolu'nun MÖ 3. Binyıldaki Görünümü Üzerine Kısa Notlar". In M. Işıklı, E. Fidan, A. Türker, M. A. Yılmaz (eds.), *MÖ III. Binyılda Anadolu*. pp. 325-334, İstanbul: Ege Yayınları.

TÜRKER, ATILA 2023. "Bafra Ovası'nda Yerleşimin Başlangıcı ve İlk Topluluklar Üzerine Öneriler". In O. Köse (ed.), *Tarihi, Sosyal ve Kültürel Yönleriyle Bafra, Cilt-1*. pp. 57-75, Ankara: Berikan Yayınevi.

TÜRKER, ATILA and TIRIL-ÖZBİLGİN, C. GİZEM 2022. "Samsun Kıyı Kesimi 2019 Yılı Arkeolojik Yüzey Araştırması Raporu". *2019-2020 Yılı Yüzey Araştırmaları, Cilt: 1*. pp. 193-210, Ankara: T.C. Kültür ve Turizm Bakanlığı Yayınları.

TÜRKER, ATILA, ÖZDEMİR, CELAL and BOZKURT, DERYA 2015. "Orta Karadeniz Bölgesi Erken Tunç Çağı Ölü Gömme Geleneklerine Bir Bakış". In Ö. İpek and R. İbiş (eds.), *5. Çorum Kazı ve Araştırma Sempozyumu, 10 Aralık 2015, Çorum*. pp. 105-132, Çorum: Çorum Valiliği İl Kültür ve Turizm Müdürlüğü Yayını.

TÜRKER, ATILA, ŞARBAK, AYŞEGÜL, ÇIRAK, M. TOLGA AND TIRIL, C. GİZEM 2018. "Devret Höyük Ölü Gömme Gelenekleri ve Mezar Uygulamaları", *TÜBA-AR Special Issue* 1, pp. 107-137. <https://doi.org/10.22520/tubaar.2018.os.01.007>

TÜRKER, ATILA, ÇİZİKÇİ, S. YAŞAR and TIRIL, C. GİZEM 2019. "Samsun Bölgesi Post-Neolitik Dönem Arkeolojik Yüzey Araştırması 2017 Yılı Çalışma Raporu". *Araştırma Sonuçları Toplantısı* 36(1), pp. 213-236.

TÜTÜNCÜLER, ÖZLEM 2022. "MÖ 2. Binde Türkiye Coğrafyasında Tekstil Sektöründe Üretim Süreci". In D. Yılmaz (ed.), *Neolitik Çağ'dan Demir Çağı Sonuna Kadar Anadolu'da Dokumacılık*. pp. 51-79, İstanbul: Ege Yayınları.

TYLECOTE, R. F. 2002. *A History of Metallurgy*. (2nd Edition), London: Maney Publishing.

YAKAR, JAK 1984. "Regional and Local Schools of Metalwork in Early Bronze Age Anatolia: Part I". *Anatolian Studies* 34, pp. 59-86.

YALÇIN, ÜNSAL and YALÇIN, GÖNÜL 2018. "Könige, Priester oder Handwerker? Neues über die frühbronzezeitlichen Fürstengräber von Alacahöyük". In Ü. Yalçın (ed.), *Anatolian Metal VIII: Eliten-Handwerk-Prestigegüter*. Pp. 91-122, Bochum: Der Anschnitt, Beiheft 39.

YILDIRIM, TAYFUN and EDİZ, İSMET. 2008. "2006 Yılı Resuloğlu Eski Tunç Çağı Mezarlık Kazısı", *Kazı Sonuçları Toplantısı* 29(2), pp. 443-454.

YILMAZ, DERYA 2022. "Arkeolojik Buluntular Işığında Neolitik Çağ'dan Erken Tunç Çağı Sonuna Kadar Anadolu'da Dokumacılık". In D. Yılmaz (ed.), *Neolitik Çağ'dan Demir Çağı Sonuna Kadar Anadolu'da Dokumacılık*. pp. 5-50, İstanbul: Ege Yayınları.

ZIMMERMANN, THOMAS 2007. "Anatolia as a Bridge from North to South? Recent Research in the Hatti Heartland". *Anatolian Studies* 57, pp. 65-75.

ZIMMERMANN, THOMAS 2010. "Verbogen, zerschlagen, zerhackt - Spurenekstatischer Inszenierungen in frühbronzezeitlichen Gräbern Anatoliens". *Colloquium Anatolicum* 9, pp. 367-384.

8. Figures

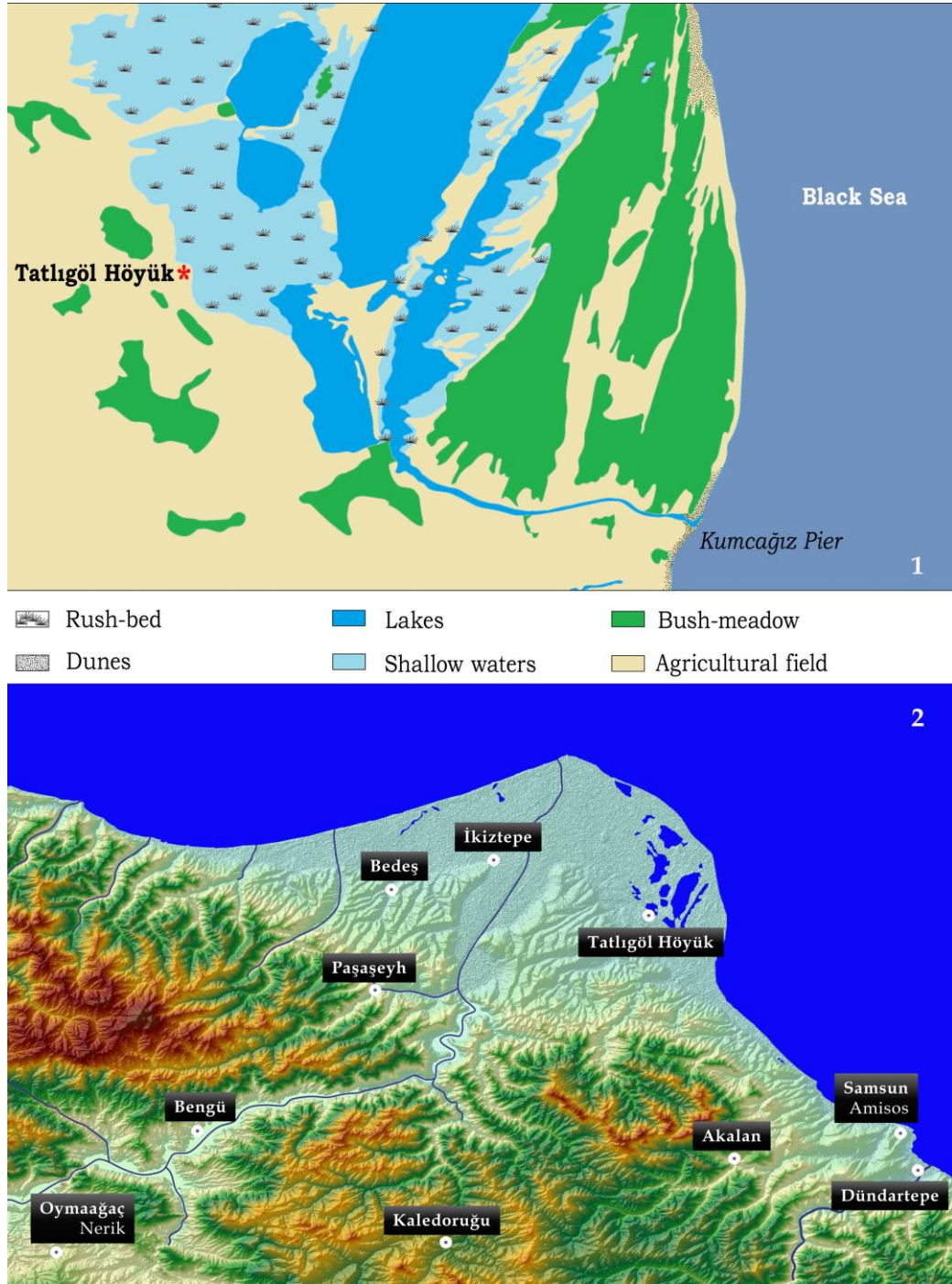


Figure 1. Map of locations for main finds around Tatlıgöl Höyük (1), and Bafra Plain (2)



Figure 2. Aerial photograph of Tatlıgöl Höyük



Figure 3. Architectural examples of burnt adobe pieces on mound surface



Figure 4. Copper/Bronze dagger (1), spearhead (2), and Copper Cymbals (3-4)



Figure 5. Copper/Bronze Rings (1-2), bronze macehead (3), and lead bowl (5)



Figure 6. Stone axes (1-2) and maceheads (3-5)

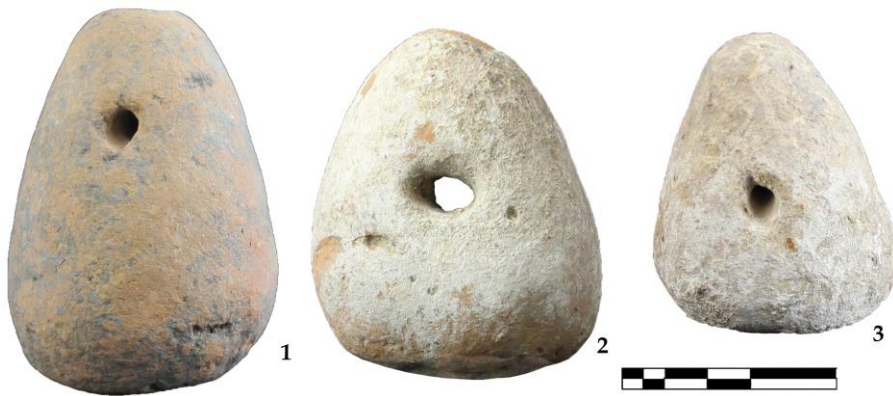


Figure 7. Terracotta Loom Weights

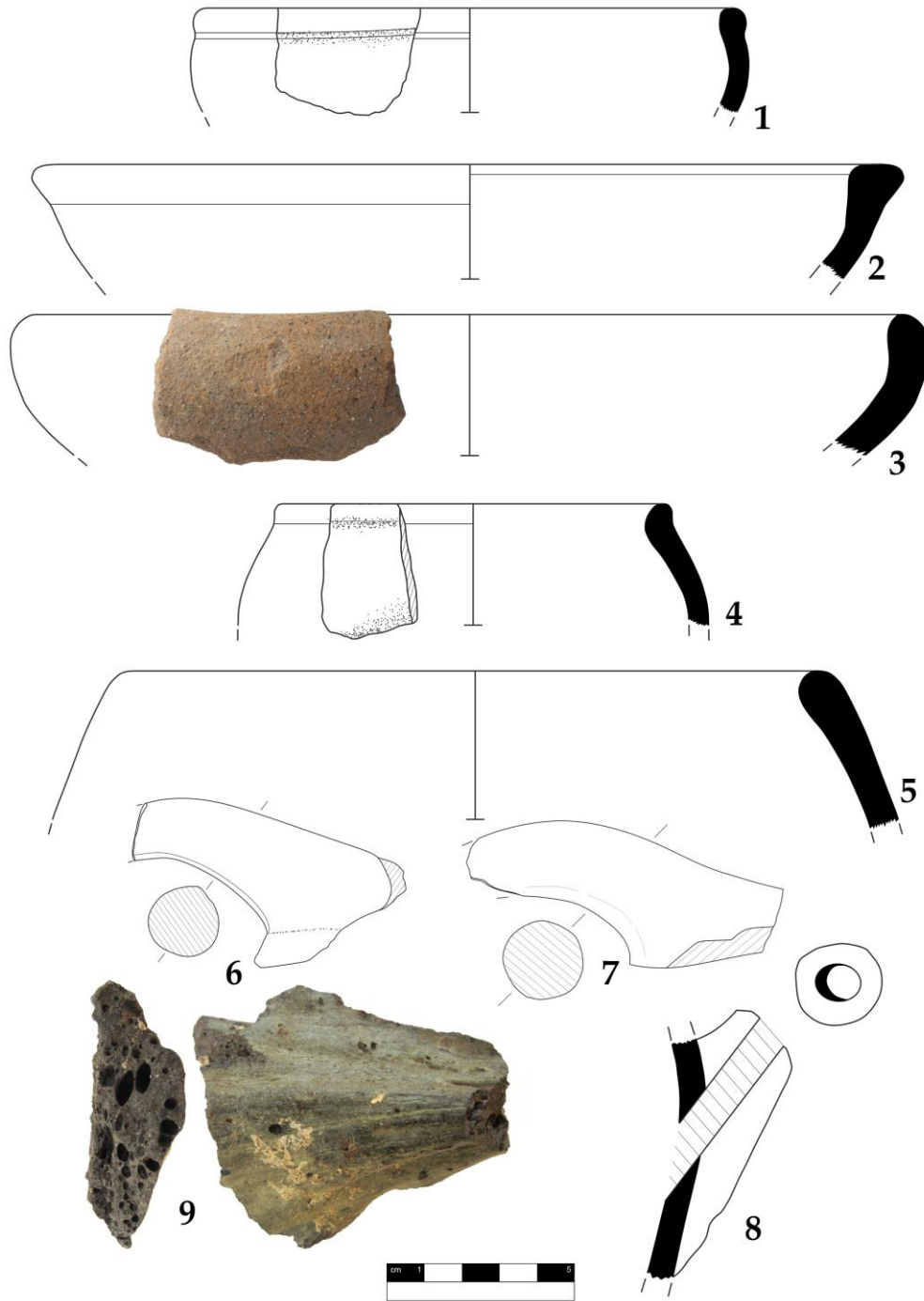


Figure 8. Pottery sherds

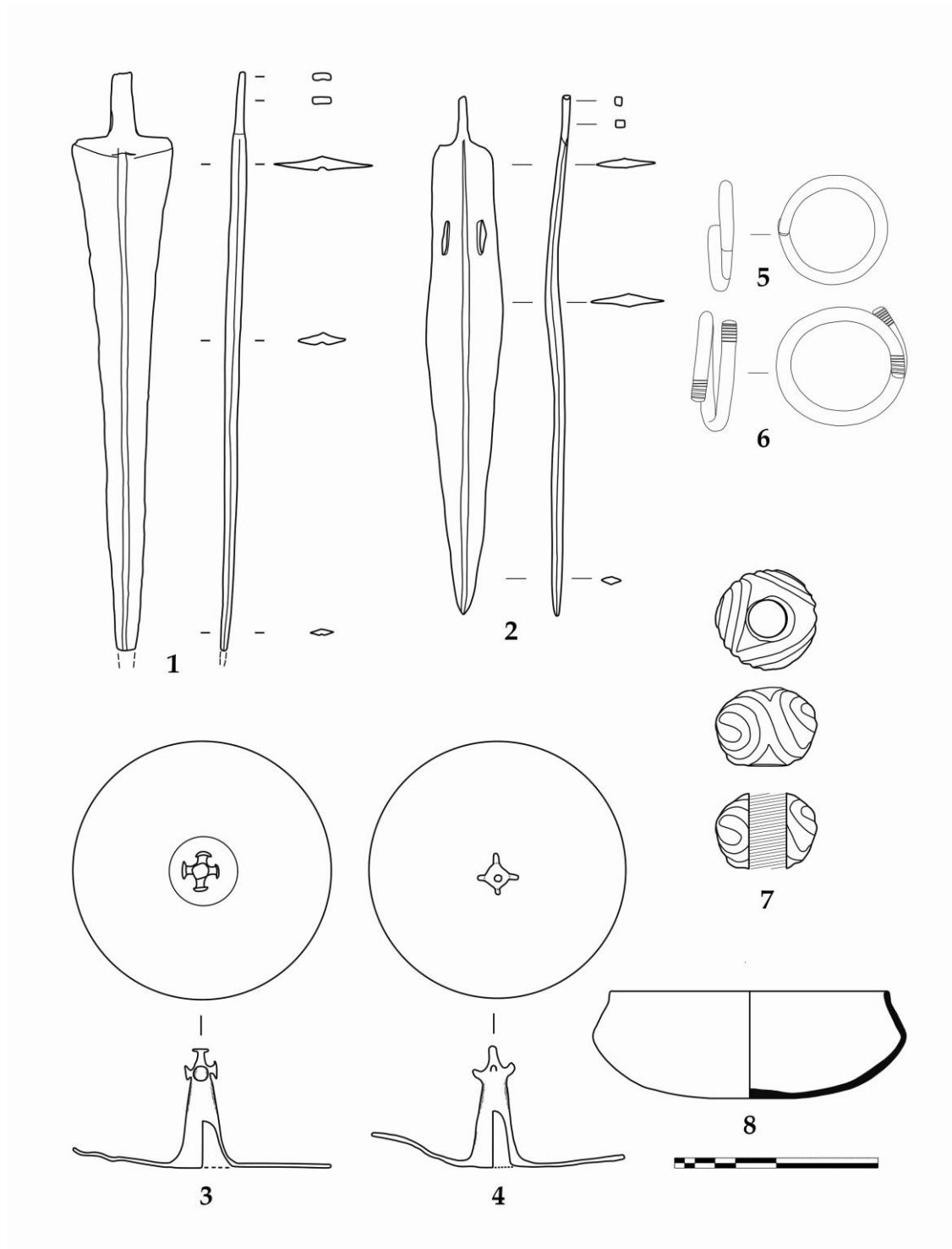


Figure 9. Drawing of metal artifacts

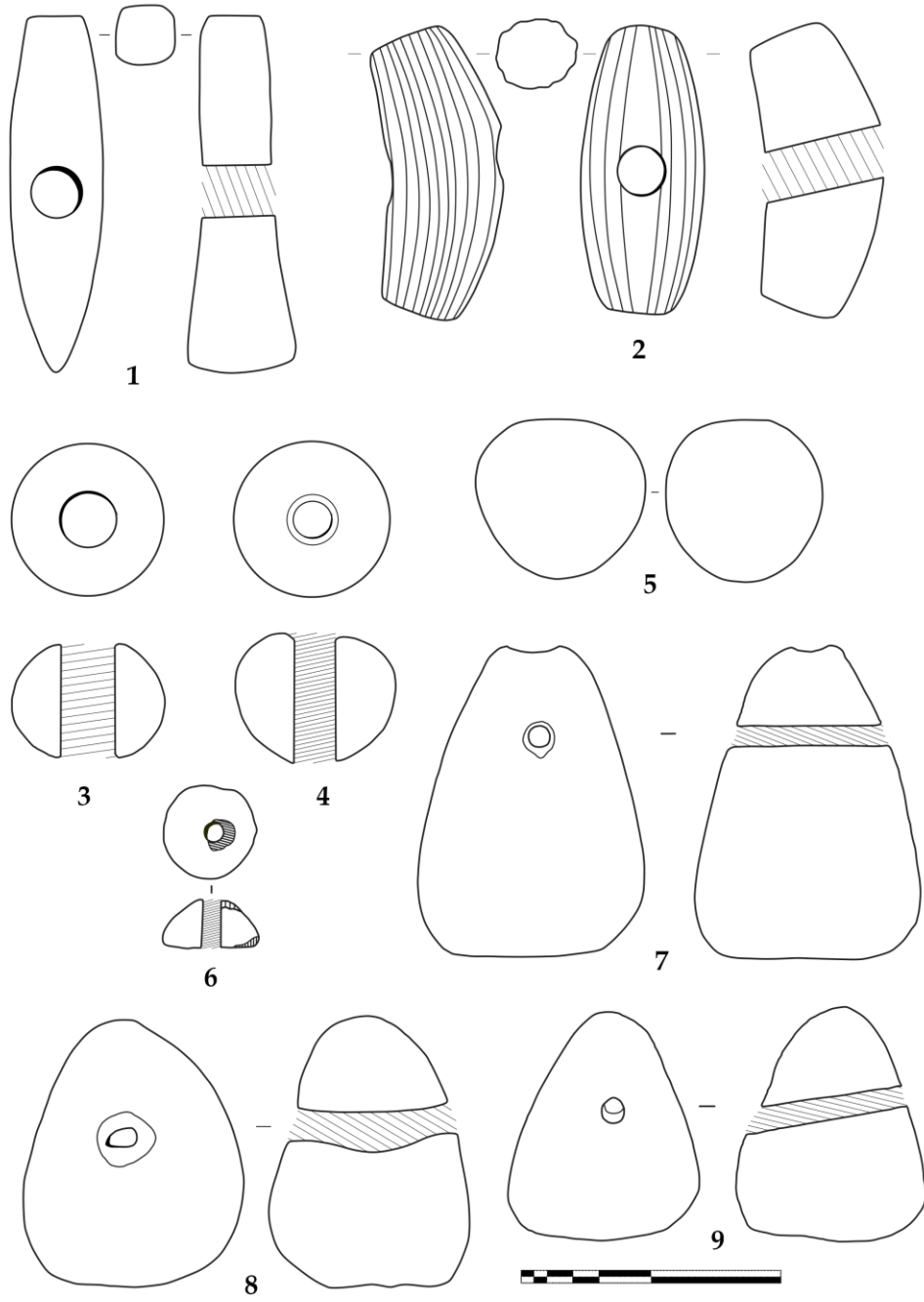


Figure 10. Drawings of stone (1-5) and terracotta (6-9) artifacts