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Between Foraging and Farming:
Critically Evaluating the Archaeological
Evidence for the Southern Levantine Early
Pre-Pottery Neolithic Period

The Neolithic and the Chalcolithic Periods
in Northern Thrace

Stone Statues and Balbals in Turkic World

Elazığ-Malatya Yöresi Duvar Resmi
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Archaeology in Turkey: The Stone,
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Ord. Prof. Dr. Sayın Ekrem Akurgal'ın
anısına sunulur.

Yayın Kurulu

This volume of TÜBA-AR is dedicated to the memory of Ord. Prof. Dr. Ekrem Akurgal, Honorary Member of the Turkish Academy of Sciences, who passed away on 1th November 2002.

Editorial Board

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Besin Toplayılıcıktan Tarıma: Güney Levant'ta Çanak Çömleksiz İlk Neolitik Evrenin Arkeolojik Verilerinin Eleştirisel Değerlendirilmesi

*** Ian KUIJT**

Keywords: South Levant, radiocarbon, EPPNB, Jericho, foraging
Anahtar sözcükler: Güney Levant, radiokarbon, İlk Çanak Çömleksiz Neolitik B, Eriha, besin toplayılıcık

Hem yeni gelişmekte olan hem de daha önceleri yayınlanan malzemelerin tekrardan değerlendirilmesine dayanarak, Güney Levant'tan ele geçen radiometrik, mimari ve ölü gömme adetlerine ait verilerin incelenmesi Çanak Çömleksiz Neolitik A / Pre-Pottery Neolithic A (PPNA) ile Orta Çanak Çömleksiz Neolitik B / Middle Pre-Pottery Neolithic B (MPPNB) evreleri arasında zaman ve kültür bakımından güçlü bir sürekliliğin bulunduğunu önermekteyim. Bundan başka, Güney Levant'tan ele geçen veriler, Çanak Çömleksiz Neolitik A/Pre-Pottery Neolithic A (PPNA) ile Orta Çanak Çömleksiz Neolitik B/ Middle Pre-Pottery Neolithic B (MPPNB) arasında İlk Çanak Çömleksiz Neolitik B / Early Pre-Pottery Neolithic B (EPPNB) gibi bir geçiş evresini gösteren kanıtları taşımamaktadır.

Güney Levant'ın geçiş evresine (EPPNB) ait önerilen tip yerleşmelerin eleştirisel değerlendirilmesi, bu yerleşmelerin zaman içersinde arkeolojik veriler için yanlışsız bir saptamayı sağlayacak temel ölçütleri (radiometrik ve arkeolojik kazılara dayanan tarihleme) yansıtmamaktadır. PPNA ve MPPNB yerleşmeleri olan Eriha, Zahrat adh- Dhra'2, Ain Ghazal, Netiv Hagdud, Tel Aswad Ib ve Harvat Galil'in yayınlanmış uyarlamalı Radiokarbon tarihlemeleri, bu evreler arasında kronolojik bir boşluk olmadığını göstermektedir. Nihayet, Güney Levant PPNA ve MPPNB nin göreceli olarak kısa süren geçiş evresi M.Ö. 8 400 civarında oluşmuştur ve bu süreç çok değişik bir şekilde ve birkaç yüzyıl sonra Kuzey Suriye ve Türkiye'deki yerleşmelerde de ortaya çıkmaktadır.

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1. Introduction

Archaeologists, like all social scientists, formulate interpretations on the basis of available data and revise these interpretations when new data become available. Revision of and reflections on current interpretations require reconsideration of the intellectual foundations of our arguments, as well as an understanding of the historical genesis of such arguments. Such discussion can center on the meanings of specific archaeological data sets, the links between archaeological data and human behavior, and how archaeological data sets can be organized into cultural-historical schemes. In the case of cultural-historical schemes, discussion and debate among researchers often center upon which criteria can and should be used to segment a continuous trajectory of human behavior in some meaningful way. One, but by no means the only, example of this is seen in the ways in which archaeologists have interpreted changes in material culture from the Pre-Pottery Neolithic A (PPNA) to the Middle Pre-Pottery Neolithic B (MPPNB) periods in the southern Levant (today defined by the modern political units of Jordan, Israel, the Palestine Autonomous Authority, and southern Syria). These include which archaeology data sets (e.g. the appearance of generalized bipolar core reduction or the appearance of rectangular architecture) should be utilized to define the transition from the PPNA and MPPNB phase in different areas of the Near East, and if this transition should be viewed as one of local cultural continuity or abrupt replacement of specific populations by other populations.

In the context of the southern Levant, researchers since the mid-1970's have generally employed a cultural-historical framework that envisions a transitional Early Pre-Pottery Neolithic B (EPPNB) phase between the PPNA cultures, such as found at the settlements of Netiv Hagdud and Jericho, and the MPPNB period occupations at 'Ain Ghazal, Jericho, and Yiftahel. Although poorly defined in the southern Levant this transitional phase is based, at least partially, on the assumption of a similar cultural-historical phase seen at the Neolithic sites of Çayönü, Jerf el Ahmar, and Mureybet and is believed to be independently supported by several archaeological sites in the southern Levant (Figure 1).

While widely accepted by researchers, I believe that consideration of recently published data raises serious questions about the archaeological foundations for the EPPNB phase of the southern Levant. As articulated elsewhere (Kuijt 1998), I remain concerned about the intellectual foundation for the cultural-historical construct of the EPPNB in the southern Levant, and the fact that this cultural-historical unit is based on remarkably limited archaeological data from both the southern Levant and Anatolia. This concern centers on several points. First, the original formulation of the EPPNB as a cultural-historical unit in the southern Levant was based upon the assumption that if such a phase exists in the northern Levant that it should also be found in the southern Levant. Thus, the materials from several sites, such as Tell Aswad, were interpreted in reference to the expectation of preliminary excavation results from Mureybet. Second, support for the cultural-historical construct of the southern Levantine EPPNB is currently based upon a number of type sites that do not meet basic criteria for the accurate placement of archaeological data sets in time. Third, researchers have argued that there is a distinct chronological "gap" between the late PPNA and early MPPNB, and that the EPPNB should be the cultural manifestation that filled this gap. In this paper I want to do several things: 1) highlight that, as currently articulated, the EPPNB in the southern Levant is based upon remarkably poor data (specifically the wide-spread reference to undated & unex-

cavated sites), and 2) consider how calibrated radiocarbon measurements illustrates that there is no distinct chronological "gap" between these periods.

I suggest that examination of architectural and mortuary evidence from currently available data from the southern Levant highlight that there is a strong case for temporal and cultural continuity between the PPNA and MPPNB periods in settlements, many of which appear to be centered around the Jordan Valley. I argue, moreover, that this transition occurred at around 8,400 B.C.[1] Before discussing the argument of sufficient archaeological evidence to support a southern Levantine EPPNB phase, it is necessary for me to outline some of the key aspects to my approach of how culture-history is constructed in archaeology and what material manifestations can be used to confidently develop such chronologies. First, like most archaeologists I view the successful construction of cultural-historical schemes as being based upon minimum standards of data, and for archaeological research on individual type sites to have followed a traditional research trajectory (Figure 2). In general, these standards do not change with the excavation of different periods of time or geographical location. As part of this, I believe that the only definitive way under which researchers can understand material patterning (architecture, lithic technology, mortuary practices) through time is by absolute dating methods such as radiocarbon dating. In unfortunate cases where it is not possible to date layers of a site through radiometric means, it is possible to bridge from one collection / site to another on the basis of demonstrated similarity in patterning. Such a procedure requires, of course, homogenous and tight patterning from the dated and undated sites. The strength of the interpretation is, moreover, linked to the similarity of cultural materials between the two settlements, the spatial proximity of the two settlements, the radiometric dating of the original site, and an independently defined determination of the temporal longevity of a specific phenomenon that provides the bridge between these two data sets / settlements (e.g. the projectile points from site A and B are all el-Khiam projectile points, the sites are in close proximity to each other, and while the deposits from site A cannot be dated there are radiocarbon samples from site B that are in direct association with recovered el-Khiam projectile points).

Second, I argue that while the study of stone tool technology and specific tool forms can be used to organize cultural-historical schemes, it remains to be demonstrated that in all cases this should take precedent over other phenomena (specifically, subsistence systems, economy, architecture and mortuary practices) and that these should be used judiciously. I concur with Bar-Yosef (1981) that there are distinctive tool types that are discrete in time and space, but I suggest that with some tool types researchers have assumed, rather than demonstrated, that these can be utilized to define a period of time in way that prioritizes them over other material patterns. Specifically, I suggest that in developing cultural-historical schemes in select cases, major transitions in subsistence practices, architectural systems, and mortuary practices are as important, perhaps even more important, than lithic typology. In the case of the EPPNB, I believe that the construction of culture-historical phases must be primarily based on strong evidence for major changes in these categories, and secondarily on the development and longevity of projectile point styles.

Finally, as an Near Eastern archaeologist who studies lithic technology, I believe that the successful use of stone tool typologies to develop cultural-historical schemes requires that we first consider technological systems of core reduction, blade production and organization, and

then go on to consider typological changes and variability that occurs on the items that are produced on blanks. In the case of the MPPNB, for example, most researchers focus on systems of core reduction and blade production with the purpose of producing long blades from bi-directional cores, and secondarily considering the shaping of these blades into one of several projectile point shapes, such as Helwan or Jericho projectile points. Such an approach must be based on both a consideration of technological changes in blade production (e.g., the development of generalized bipolar core systems compared to earlier single platform blade cores) as well as typological changes in the objects that are produced by these technological changes (e.g., how different projectile points are manufactured from the same blades). Having now outlined the context for some of the broader arguments for the utility and importance of lithic technology and typology in the construction of cultural-historical frameworks, I want to turn to a consideration of the historical genesis and intellectual foundations of the EPPNB phase.

2. The EPPNB: Historical Context and Genesis

In the case of the southern Levantine EPPNB, it is necessarily to briefly explore the historical context of this cultural-historical phase. Kenyon (1957), in her landmark excavations at Jericho from 1952-1958, provided the first solid evidence to indicate that the Pre-Pottery Neolithic of the southern Levant should be divided into at least two different cultural phases. On the basis of variation in architectural systems, mortuary practices, and material culture between the upper and lower levels at Jericho, Kenyon (1957) proposed a two-part division of the Pre-Pottery Neolithic into the Pre-Pottery Neolithic A and the Pre-Pottery Neolithic B periods. From its inception in the 1950's until the late 1970's this classification scheme remained largely unmodified, and the overall framework continues to be widely accepted as the major cultural and chronological divisions for the Pre-Pottery Neolithic in the southern Levant. Alternative cultural-historical treatments are presented by Cauvin (1977, 2000) and Moore (1985).

Excavations conducted during the 1970s and 1980s furnished new data on site-level chronology, architecture, and stone tool technology, permitting several researchers to identify important variability within the PPNB sequence of the Levant. Based on architectural and stone tool evidence at the key site of Mureybet in the northern Levant, J. Cauvin (1977, 2000) noted that material and cultural variability in the PPNB was chronologically based. Similarly, in his Neolithic synthesis, Mellaart (1975:55) mentions that select layers at Beidha, Munhata, and some of the Syrian PPNB sites may represent an early PPNB phase. Mellaart and Cauvin's early published attempts to divide the Pre-Pottery Neolithic was further developed by Bar-Yosef (1981:564-565) who explicitly argued that in the southern Levant the PPNB sequence should be provisionally subdivided into three phases: an Early, Middle, and Late phases. As an important expansion on the previously noted transition from circular/oval residential structures to rectangular ones (Aurenche 1981, Flannery 1972; Kenyon 1957), Bar-Yosef (1981:562) provided an initial outline of the diagnostic aspects of the differences between the PPNB and PPNA, arguing that the following were characteristic of the PPNB period: 1) the use of generalized bipolar cores (naviform) for blade production; 2) heat treatment of flints; 3) the high frequencies of arrowhead types shifting from Helwan, Jericho, Byblos and Amuq points; 4) changes in the morphological features of axes, sickle blades, and retouched blades. Based on archaeological levels from sites then known in the southern Levant, Bar-Yosef's synthesis and divi-

sion of the PPNB represented a significant conceptual revision of the Neolithic cultural-historical sequence with the recognition that there was material and cultural variability within the PPNB sequence.

Continued field research and publication of previous research in the 1980's has continued to sharpen our understanding of the material and chronological change within southern Levantine PPNA and PPNB sequences, as well as areas further to the north. In an overdue and much needed integration of new Levantine data from the PPNB, Rollefson (1989, 2001) explores how individual Levantine Pre-Pottery Neolithic sites fit into either an Early, Middle, Late Pre-Pottery Neolithic B phase, and/or the PPNC / Final PPNB phase which appears to date from ca. 6,700 to 6,400 B.P. While focused on the possible links between paleoclimatic culture change through time, Goring-Morris and Belfer-Cohen (1998) provide a detailed overview of southern Levantine Neolithic paleoclimatic and cultural changes, and identify the existence of the EPPNB. Additional research at Jerf el Ahmar, Syria, provides important additional data on this phase. Although not published in its final form, the excavators of this site have outlined important evidence for cultural continuity with the Jerf el Ahmar sequence (Stordeur 2000a, b; Stordeur and Abbes 2002)

In what is unquestionably the most direct and clear presentation of arguments for the EPPNB in the southern Levant, Gopher (1996) provides a valuable articulation of the central arguments and archaeological sites used to support the cultural-historical construct of the EPPNB. Building upon earlier works (e.g. Bar-Yosef 1981), Gopher (1996) identifies three sites from excavated southern Levantine PPNB that he believes date to the EPPNB and several other sites that, while not as clearly understood, also date to the EPPNB. In addition, on the basis of the recovery of Helwan projectile points Rollefson (1996) has recently identified the site of Abu Hudhud as dating to the EPPNB period. While these sites are generally accepted as supporting arguments for the southern Levantine EPPNB phase, close examination of these sites illustrates that many of them are undated, unexcavated, or very limited in scale, and require researchers to reconsider the archaeological foundations upon which the southern Levantine EPPNB has been defined.

2.1. The southern Levantine EPPNB: Looking North for Analogs

As is discussed elsewhere (Gopher 1996; Kuijt 1998), the supportive arguments for the southern Levantine Early Pre-Pottery Neolithic B period are generally founded upon the following arguments: 1) the EPPNB has been defined as a distinct cultural phase in the northern Levant (e.g., Çayönü, Jerf el Ahmar, and Mureybet); 2) lithic materials from the EPPNB were recovered at Tel Aswad; 3) there are several archaeological sites in the southern Levant that are culturally distinct from the PPNA and MPPNB and chronologically fit between them; 4) there is a chronological "gap" between the late PPNA and early MPPNB; and, 5) Helwan projectile points are indicative of a distinct EPPNB phase. In many ways the intellectual genesis for the EPPNB in the southern Levant is based upon the assumption that the existence of such a transitional phase at Mureybet IV necessitated the existence of a similar cultural-historical phase in the south-central Levant, some 350 km away.

In developing arguments for a southern Levantine EPPNB period, researchers have focused considerable attention upon the settlement of Tell Aswad as a type-site for the EPPNB. Based on his excavations, de Contenson (1995) argues that Tell Aswad phase IB includes many characteristic PPNB chipped stone tool and is represen-

tative of an independent phase dating to 8,500 B.C. As argued elsewhere (Kuijt 1998), the interpretation of these dates is problematic for several reasons. First, it must be recognized that the cultural material upon which the phase IB designation is based was recovered from the upper 35-45cm of cultural deposits from a single four by four meter area and, therefore, may well represent charcoal and chipped stone materials from multiple Neolithic occupations. Second, the two radiocarbon dates from phase IB are 9,340±120 b.p. (GIF-2370) and 9,270±120 b.p. (GIF-2371) and, therefore, do not of themselves support arguments for an occupation starting at 8,500 B.C. Considering the small size of the excavated area (4 x 4 meters), the shallow nature of the deposits, the lack of architecture and the potential for mixing near the surface, it is very difficult to ascertain the representative nature of these materials and how they may or may not fit into the southern Levantine cultural-historical sequence.

In many ways discussion of a southern Levantine EPPNB phase has been founded, be it explicitly or implicitly, upon the untested assumption that there should be a similar chronological phase in the southern Levant as is argued for the northern Levant. The examination of the southern Levant from the North is perhaps most clearly illustrated when considering the excavations at Tell Aswad, the only excavated Pre-Pottery Neolithic settlement in southern or central Syria that has the possibility to inform us about cultural links between the northern and southern Levant. In his analysis de Contenson, originally interpreted the Tell Aswad lithic assemblage as being related to the cultural materials from Tell Mureybet. When discussing the flint assemblage of Tel Aswad IA, for example, later termed Aswadian, de Contenson (1989:58) argues: "The assemblage resembles that of contemporaneous Mureybet III but shows few connections with Jericho PPNA". Examination of the materials from Jericho, Netiv Hagdud, and Dhra' illustrate the contrary: that published Tel Aswad IA materials are very similar to those from the southern Levant. Similarly, when discussing the tools of phase IB radiocarbon dating to approximately 8,500 B.C. de Contenson states: "[they]. . . can be compared to that from Mureybet IVA, which is also dated in the same period" (de Contenson. 1989). Given the similarities in materials from Tell Aswad and sites to the south, and that the excavations of Mureybet have yet to be published, de Contenson's intellectual linking of the materials from Tell Aswad and Muryebet seems both dated and unnecessary, and has arguably biased the interpretive foundation of research by looking to the north in exclusion of other areas. In sum, the early genesis of the EPPNB as a cultural-historical unit was imposed on the southern Levant from the northern Levant.

2.2. The Southern Levantine EPPNB: Criteria for Accepting Sites and Tautological Foundations

A number of studies (Bar-Yosef 1981; Gopher 1996; Rollefson 1989) have listed several sites that are perceived as supporting arguments for the existence of an EPPNB cultural-historical phase (see Table 1 & 2). These works represent an important departure from previous research as they attempt to establish the case for a southern Levantine EPPNB on the basis of material from the southern Levant, not in reference to the northern Levant. In many ways these sites have been put forward as type cases for the EPPNB, and are used explicitly or implicitly as supportive evidence for this chronological / cultural construct. As with archaeological sites used to support arguments for the initial peopling of the New World, for these sites to be broadly accepted by researchers they need to meet specific criteria (Figure 2).

To be acceptable as type sites with a specific temporal and cultural context in the past, research at individual archaeolo-

gy sites should be based on the excavation of cultural materials rather than use of surface collections, the use of radiocarbon dating to directly place cultural materials in a chronological order rather than the use of undated cultural materials to generate cultural-historical schemes, a limited degree of mixing and bioturbation so that the depositional context and associations are readily definable, and a basic understanding of site formation processes. As illustrated in figure 2, the intellectual process of developing cultural-historical sequences can be envisioned as a pathway of research steps. While there are variations, the overall trajectory from the initiation of a research program to the development of a regional cultural-historical framework is clear and well understood by archaeologists. It is, moreover, usually necessary for researchers to have completed earlier stages in this process (e.g., excavating part of a settlement and radiocarbon dating this occupation) before developing arguments for a regional cultural-historical framework. Altogether, this provides a means of better understanding and evaluating the support, or lack of support, for regional temporal systems.

From this perspective, it is unnerving to recognize that arguments for an EPPNB phase have not followed this widely accepted pathway for developing cultural-historical frameworks. In point of fact, most of the sites used to support arguments for the EPPNB have not been excavated, and / or are undated by radiometric means. Specifically, three out of the ten sites are undated and based on surface collections (Nahal Levan 109, Michmoret 26 / 26 A, Abu Hudhud), another three out of the ten have had some excavation, but are undated by any radiometric means (Mujahiya, Nahal Oren, and Abu Salem), and one of them comes from a cave context (Sefunim) that is likely to have been subjected to considerable bioturbation and mixing of materials.

The site of Sefunim is clearly problematic. Sefunim is a cave site, and like most caves in the Near East it contains prehistoric archaeological materials from multiple periods of time, including the Middle Paleolithic, the Upper Paleolithic, the Epipaleolithic, multiple Neolithic layers, and a Chalcolithic occupation. The excavator, A. Ronen (1984), notes the presence of multiple pit features and mixing of materials. Several radiocarbon samples have been processed from the site. Ronen describes Layer V at ca. 8,600 B.C. as being PPNA, not as EPPNB. In light of the complex site formation processes at this cave, the multiple occupations that occurred in this small space, and limited material culture recovered, there is no way researchers can be confident in their cultural or temporal designation of the Neolithic deposits from Sefunim. As such, it is difficult to see how Sefunim can serve as a type site for any period of the Neolithic.

From the perspective of even minimal standard requirements (the use of radiocarbon dating with results that are consistent with recovered cultural material) for developing a cultural-historical sequence in which we can deal with both the sequence and timing of cultural materials, it is clear that the seven out of the ten type sites used to support arguments for the EPPNB can provide no detailed chronological understanding other than they probably fit at some point between or within the PPNA and early stages of the MPPNB. Their placement in time is, in short based on the presence of Helwan projectile points and bipolar cores, and the assumption that these date to a specific phase. This is especially true for sites (e.g. Nahal Levan 109, Michmoret 26 / 26A, and Abu Hudhud) where our understanding is based on surface collections, no excavation, and no radiocarbon dating. In sum, our interpretation of all of these sites must remain highly suspect, and in a broader sense, that arguments fails to recognize that both individually and collectively

these archaeological sites have not been evaluated from the commonly accepted and widely-practiced standards for developing temporal and cultural reconstructions.

What then about the remaining archaeological sites frequently used to support arguments for a southern Levantine EPPNB phase? While appearing to substantiate arguments for the EPPNB, I argue that the remaining archaeology sites (Horvat Galil, Aswad IB, and Wadi Jilat 7) are also problematic and do not provide unambiguous support for a cultural-construct of the EPPNB in the southern Levant. As discussed earlier, arguments for Tell Aswad as an EPPNB type-site are seriously undermined by limited recovered data, with recovered materials are from only the upper 45 cm zone. As Baird (1997) notes, Wadi Jilat 7 is widely cited as evidence for an EPPNB occupation (e.g. Gopher 1996: 155). Excavations by Garrard *et al.* (1994) at Jilat 7, located in the Azraq Basin, resulted in the recovery of el-Khiam, Helwan, Jericho and Byblos projectile points, Hagdud truncations, high proportions of bladelets, single platform and change of orientation blade/bladelet cores, and opposed platform blade/bladelet cores including some generalized bipolar types (all from the basal levels of adjoining areas A and C). Gopher (1996:155) argues that the percentages of some of these tools change through the identified three layers and implicitly suggests that this reflects change through time, and presumably one or more of these layers reflecting an EPPNB occupation.

While there is no question that most, if not all, of this lithic assemblage predates the MPPNB occupation at the settlement, it is not clear how much they predate the MPPNB, and perhaps more importantly, the placement of these in the past is complicated by the associated radiocarbon samples that do not fit. There are several possible explanations for the material patterning from Wadi Jilat 7, including that the there were several occupations from different phases of the Pre-Pottery Neolithic with some later mixing, that different types of projectile points diffused at a later time to this area, and/or that as a settlement located in the desert, the cultural practices at Wadi Jilat 7 may have occurred at a different period of time from that of settlements in the Mediterranean zone of the southern Levant. At the moment the chronological placement of the lithic materials and occupations from Wadi Jilat 7 is entirely based on typological analogy with similar materials from other sites (often the undated sites discussed earlier), not by direct radiometric measures that are consistent with the lithic materials. While raising some interesting possibilities and potentially supporting arguments for the EPPNB, the clear disjunction between radiocarbon measurements and associated lithic materials, the lack of radiometric measures in stratigraphic order, and with clear associations with lithic technology, illustrates that at the moment it is not possible to use the evidence from Wadi Jilat 7 as a building block for arguments for the EPPNB.

One of the other archaeology sites cited as an EPPNB settlement is the Pre-Pottery Neolithic site of Horvat Gilil (Gopher 1994, 1996). As noted elsewhere (Gopher 1996) excavations at this site identified rectangular architecture, fine plaster floors, subfloor burials and some evidence for an economic system focused on hunting and cereal growing. The projectile points are dominated by Helwan points and with fewer Jericho and Byblos point types. Unlike most of the other EPPNB type-sites, there are two radiocarbon dates from Horvat Gilil (Table 2). Gopher argues that the remains from Horvat Gilil belong in the EPPNB phase on the basis of projectile point seriation and the radiocarbon dates (Gopher 1996: 154). Examination of other materials presents an alternative chrono-

logical perspective: the architectural practices, use of fine plaster for floors, and subfloor burial practices from Horvat Gilil are characteristic of MPPNB settlements. Horvat Gilil, and the MPPNB levels of Jericho, 'Ain Ghazal, and Kfar HaHorish have the same overall architectural, burial, and technological systems, rectangular to sub-rectangular structures, plaster floors, sub-floor burials, generalized bipolar core production, and the use of large projectile points manufactured on large central blades from bipolar cores. The only significant differences between the occupation of Horvat Gilil, and those of MPPNB Jericho and 'Ain Ghazal, is seen in the presence / greater percentage of Helwan projectile points at Horvat Gilil and that one of the radiocarbon dates from Horvat Gilil (Gif-2370) appears to be somewhat earlier than those from Jericho and 'Ain Ghazal.

As will be discussed in a later section of this essay, radiocarbon calibration of samples from Horvat Gilil, Jericho (PPNA and MPPNB) and 'Ain Ghazal (MPPNB) indicate that it is very difficult to distinguish between the dates of occupation of these settlements, and the radiocarbon dates from Horvat Gilil fit well with those from commonly accepted MPPNB settlements. The lithic technology and architecture are clearly different from what is seen in the PPNA. Thus, I would argue that the results of the excavation at Horvat Gilil illustrate clear affinity to the MPPNB. From this perspective then, the settlement of Horvat Gilil can be interpreted as representing the early stages of the MPPNB. If one accepts that architecture and mortuary practices inform us about major cultural changes, and that specific technological systems and tool forms like Helwan projectile points transcend cultural-historical boundaries (that is to say similar point styles are found early MPPNB contexts), then the argument can be made that the occupation of Horvat Galil should be categorized as an early MPPNB occupation.

While there is a wide-range of perspectives regarding the existence of the EPPNB in the southern Levant, I believe that most researchers would agree that for archaeology sites to be accepted as type cases for a specific period of culture-history, and presumably representative of the economic, social, and technological context of this period, then these sites must meet defined criteria (specifically, data have been recovered from excavation, not surface collections, and they are dated by high resolution radiocarbon measurements that are consistent with the associated material culture) and be based upon independent data. Of the settlements implicitly or explicitly identified as EPPNB type-sites, I suggest that only Horvat Gilil meets acceptable minimum criteria levels, and therefore, can inform us on any detailed level about culture-history of the southern Levant. As noted previously, however, I believe that good arguments can be made that the materials from Horvat Gilil are representative of the MPPNB rather than the EPPNB. Regardless if one interprets the materials from Horvat Gilil as representing the EPPNB or MPPNB, it is clear that overwhelming majority of settlements commonly cited as type-sites for the EPPNB can provide researchers with no detailed understanding of the culture-historical sequence of the southern Levant.

Moreover, problems of material-radiocarbon associations at other sites (e.g., Wadi Jilat 7) make it impossible to directly use the remains from other sites to build a cultural-historical sequence in the absence of other independent data. To build such a cultural-historical foundation requires independent, well-dated, sources or the intellectual foundation for such an argument becomes tautological. For example, interpretations of the EPPNB chronological placement of some (but which?) of the Wadi Jilat 7 materials is at least partially based on perceived similarities to the material from Nahal Levan 109. Nahal Levan 109 is

indirectly dated on the basis of comparison to other undated sites, which are in turn indirectly dated by sites such as Wadi Jilat 7. On this level, acceptance of a southern Levantine EPPNB phase is based, be it implied or explicitly (e.g., Gopher 1996) upon tautological arguments and unacceptable data sets. If nothing else, the application of minimum site level criteria (Figure 2) illustrate that that further archaeological research is necessary to support arguments for a southern Levantine EPPNB phase on the basis of independent, well-dated archaeological data sets, rather than claims of affinity to sites to the northern Levant and circular arguments on the basis of undated and poorly understood archaeological data sets.

3. The chronological "gap" between the late PPNA and early MPPNB: Contrary evidence from Radiocarbon calibration

One of the key misconceptions used to support claims of an EPPNB phase is the perceived chronological "gap" between the late PPNA and early MPPNB (e.g. Goring-Morris and Belfer-Cohen 1998; Gopher 1996). Goring-Morris and Belfer-Cohen 1998:86 exemplify this perception when they note that there is "...chronological gap of ca. 200-400 uncalibrated years between the latest PPNA dates and those from the early Middle PPNB...". Gopher argues that new data have changed this when he (1996:152) comments: "The conclusion so far is that there is a time gap of some few hundreds uncalibrated C14 years between the end of the PPNA and the MPPNB in the southern Levant - and thus, it was correct to retain a slot for an EPPNB entity". Although debate continues over this perceived gap (see Goring-Morris and Belfer-Cohen 1998; Gopher 1996 for differing opinions), in a series of recent publications Gopher (1990, 1996: 152) argues that this gap is filled by several archaeology sites, most convincingly by Horvat Galil, and what he sees as the transitional PPNA and PPNB levels from Jericho. While I agree this data gap has been filled, I argue that the available evidence indicates that it is not filled by a cultural phase that is distinct from those before and after. Rather, we see that the start of the MPPNB is earlier than originally recognized. This is based on the assumption that similarities in architectural systems, mortuary practices, and the appearance of generalized bipolar core forms inform us about major cultural changes, and that variation in tool forms like Helwan projectile points are of secondary importance. Similarly, I believe that analysis of published materials from Jericho illustrate that there is no clear evidence for a transitional EPPNB level at Jericho. In fact, examination of stratigraphic, radiometric, and architectural evidence from several areas illustrate a relatively rapid transition (c. 200 year) from the PPNA to the MPPNB with no strong evidence for a chronological gap (see Kuijt 1998).

Consideration of calibrated radiocarbon samples and stratigraphic information from Jericho, 'Ain Ghazal, Zahrat adh-Dhra' 2, Tell Aswad IB, and Horvat Galil illustrate that there is good evidence for chronological continuity between the late PPNA and early MPPNB at some settlements in the southern Levant. Calibrated radiocarbon dates from Jericho and Zahrat adh-Dhra' 2 in the southern Levant indicate that the PPNA ended at approximately 8,400 B.C. Radiocarbon dated charcoal samples from several round/circular semi-subterranean structures at Jericho[2] provide a total of six radiocarbon dates that when plotted on the basis of probability on OxCal illustrate an occupation concentration centered around 8,400 B.C. (Table 3, Figure 3 and 4). Examination of the stratigraphic relationship between Pre-Pottery Neolithic house forms and their associated radiocarbon dates at Jericho Square FI outlines that the transition between the PPNA and MPPNB occupational horizons (defined by architecture and radiocarbon

dates). This demonstrates that there was a general continuity of occupations at Jericho at this period and that this transition probably occurred at around 8,400 B.C. (Figure 4). It should also be noted that this pattern of overall cultural continuity and the timing of the architectural transition is also seen in Kenyon's excavations in area M at Jericho.

Recent research at Zahrat adh-Dhra' 2 also illustrates the continuation of the PPNA up to at least 8,500 B.C. in the southern Levant (Edwards *et al.* 2001; Sayej 2001, 2002. Excavations have uncovered the remains of several oval or circular structures, a lithic technology that is generally similar to those seen at other PPNA sites, such as Netiv Hagdud (Nadel 1997) and Dhra' (Goodale, *et al.* 2002; Kuijt 2001). Radiocarbon dates, all from good contexts and on wood charcoal, include 9,323±59 (WK-9444), 9,440±50 (OZE-606), 9,470±50 (OZE-607), and 9,490±50 (OZE-605). Dovetailing with these final PPNA dates, as well as those from Jericho, the 'Ain Ghazal radiocarbon dates of 9,100±140 (AA-1164), 9,030±80 (GrN-12960), 9,200 ±110 (GrN-12966), and 9,050 ±80 (GrN-12965) indicate that the earliest occupation during the MPPNB occurred at around 8,400 B.C. (Rollefson *et al.* 1992). Needless to say, it should be kept in mind that all of these radiocarbon samples provide a range of possible dates based on statistical probability within which this transition occurred. Nevertheless, when viewed collectively, they illustrate a recurring pattern, based on associations between different architectural forms and radiocarbon samples, that outline that in select areas of the south-central Levant region the architectural transition occurred at around 8,400 B.C.

4. Discussion

Beyond the paucity of clearly dated and excavated sites used to support arguments for a EPPNB phase, I am also concerned that current cultural-historical debate on the EPPNB is almost entirely centered on consideration of chipped stone typology. Among researchers today discussion, definition and justifications for the EPPNB do not center on understanding broader economic and social changes within Neolithic behavior. In many ways the southern Levantine EPPNB has been exclusively defined as a technological adaptation (e.g., the presence or absence of Helwan projectile points and generalized bipolar core technology), with limited reference to economic and social dimensions rooted in archaeological data. From this perspective we are forced to return to the question of how are we to defined cultural-historical systems, and just as importantly, are archaeologists employing the same criteria with the same interests (the grand social-economic cultural-historical transition vs. technological developments in stone tool manufacture).

Ultimately the critical question is what criteria should be used to define different phases, and how different do they have to be to be given a different label? Based on available data from archaeological sites that met minimum standards for acceptance as case studies (defined by Horvat Galil, for example), I believe that there even if one accepts arguments for an EPPNB phase this cultural manifestation does not differ from what we see for the early MPPNB.

To make this argument let me take the opposing side of the argument I have been making in this paper. Let us assume that:

1) there is sufficient well-dated (radiocarbon dated) evidence for an EPPNB cultural-historical phase in the southern Levant,

2) we have correctly identified that Helwan points are discrete in time and space and that these are undisputed hallmarks of the EPPNB period,

3) we can substantiate this by radio-

carbon measurements from the only clearly dated possible EPPNB sites of Horvat Galil and Tell Aswad IB.

Even if we accept all these assumptions, what do we know about the "EPPNB period" and how does this manifestation differ substantially from the MPPNB other than through a greater percentage of Helwan projectile points? The architectural and mortuary evidence from Horvat Galil is quite similar to that seen at such accepted MPPNB settlements as Kfar HaHoresh or Yiftahel. The architecture is rectangular / semi-rectangular and with plastered floors at Horvat Galil, Jericho and 'Ain Ghazal. People at these settlements all employed generalized bipolar core technological systems and manufactured large projectile points. From the standpoint of lithic technology and architecture people in these sites engaged in very similar practices.

Finally, calibrated radiocarbon samples (Table 3, Figures 4 & 5) illustrate that the occupations of Tell Aswad IB, Horvat Galil, and the Jericho samples (phases VIII-IX) are very close in time with available PPNA dates being just before early MPPNB dates. So if there is no chronological "gap", if these people used the same architectural systems, buried their dead the same way, relied on similar subsistence systems, used generalized bipolar core reduction and are remarkably similar on all levels of material culture (with the exception of people producing and using more Helwan projectile points other than some other types), then what grounds are there for defining them as being from a different cultural-historical phase? Ultimately the question that I am asking is what substantial subsistence, architectural, or mortuary evidence do we have to demonstrate that these manifestations are sufficiently different from the MMPNB occupations of 'Ain Ghazal, Jericho and Kfar HaHoresh to warrant the construction of a different cultural-historical phase?

Consideration of all other phases of the PPNB, as well as arguments for a final PPNB or PPNC phase, are based on demonstrated major observable changes in architecture, mortuary practices, subsistence practices and stone tool technology. Why should we use different acceptance criteria for defining the EPPNB than we used for defining the Final PPNB / PPNC? I argue that we need to employ the same criteria when looking at these cultural-historical units, and that as currently articulated, arguments for the EPPNB are tautological, based on poor data, and unnecessarily lose track of the broader behavior and evolutionary picture (presumably two of the major goals in constructing cultural-historical schemes) by prioritizing relatively minor typological change in specific tool forms.

Needless to say, this critique of the EPPNB as a cultural-historical framework raises a number of issues. First, is the question of what kinds of material culture can / should be used for developing cultural-historical sequences. Along these lines I am assuming that the technological transition from single platform core to generalized bipolar core systems is more important in helping us understand the transition from the PPNA to the PPNB than the typological classification of Helwan projectile points. As one of several types of large projectile points manufactured on large blades from generalized bipolar cores, Helwan points appear early in the PPNB sequence. It may be, moreover, that these projectile points are manufactured in greater frequencies in the northern areas of the southern Levant compared to other areas. Understanding the broader pattern of spatial and temporal distribution on the basis of excavated and radiocarbon dated settlements from a range of ecological contexts is clearly critical to resolving the cultural-historical definition of the EPPNB.

Second, I believe that currently there are insufficient data to support arguments for a pan-southern Levantine cultural-historical transitional unit between the PPNA and MPPNB. Having noted this, I believe that future research may illustrate variation in the timing of new ways of life in specific ecological or cultural regions. This is clearly demonstrated when considering variation in the pathways to different forms of architecture in desertic areas, and the fact that in some areas circular and rectangular architectural systems co-existed in different areas. It is entirely possible that we will see the same thing within micro habitats (e.g., highland adaptations taking longer than in the Jordan Valley than major valley areas) in the southern Levant for different economic, technological, and architectural systems in the same period of time. In this case there may be solid ground for arguing for the brief co-existence of different cultural systems in different geographical areas. Such an argument must be, however, based on demonstration of clear contemporarily of occupation (based on radiocarbon dating) and clear differences in material culture, such as architecture and stone tool technology. In short, such an argument must be based upon the same robust site acceptance criteria applied to other archaeology sites.

Finally, it is necessary to consider the implications of these results vis-à-vis our understanding of the Neolithic of northern areas of the Levant, such as northern Syria and Turkey. Strong arguments have been made for the existence of a transitional EPPNB phase at Çayönü, Jerf el Ahmar, and Tell Mureybet. These highlight the evolution of generalized bipolar core reduction as well as true naviform core reduction several hundred years before it is found in the southern Levant. In some cases this technological package appears to be associated with multiple types of architecture, such as a Jerf el Ahmar (Stordeur 2000; Stordeur and Abbes 2002). While the nature of this association has yet to be fully defined, this appears to be something very different from what is seen in the southern Levant. It represents, moreover, an earlier appearance of opposable core forms than seen in the southern Levant. This clearly raises the possibility of these technological systems rapidly diffused into southern areas several hundred years after appearing in the northern Levant (see Gopher 1994 for further discussion of this). If this pattern is supported by future research, it will be necessary to consider if this is representative of the inter-regional sharing of technologies and social practices, the movement of people from one area into another, or some combination of the two. Whatever the answer to this question, it is clear that future research will be necessary to fully understand the connections and process of diffusion between Anatolia and the southern Levant.

In sum, arguments for a pan-Levantine EPPNB cultural-historical temporal unit are undermined by several issues: a) radiocarbon evidence outlining a PPNA occupation up to approximately 8,500 B.C. at Jericho and Zahrat adh-Dhra' 2 ; b) radiocarbon evidence outlining the start of the MPPNB occupations just after this point at Jericho and 'Ain Ghazal; c) the lack of definitive radiocarbon and stratigraphic data from Tell Aswad level IB; d) the logical fallacy that the existence of a EPPNB phase in the northern Levant supports arguments for a similar entity in the southern Levant; and e) the lack of radiocarbon-dated single component settlements with clear stratigraphic association of architectural forms and stone tool technology. On the basis of these problems, and drawing upon new radiocarbon calibrations, I believe that the most plausible interpretation of the available data is that the cultural transition from the PPNA to the MPPNB was quite rapid, and probably occurred at around 8,400 B.C. within large early agricultural settlements situated

along the Jordan Valley between Damascus and the Dead Sea. To understand why and when this transition occurred in different ecological areas, as well as if the changes in the archaeological record are sufficient for a totally different cultural designation, it will be necessary for researchers to focus upon the description, analysis, and radiocarbon dating of occupational horizons of individual settlements in the southern Levant. Such data, if accompanied by clear stratigraphic analysis, chronometric control and associated architecture, will hopefully avoid the logical problems currently plaguing arguments for existence of an EPPNB phase and allow researchers to debate the more important question of when is there sufficient cultural and material differences to employ different cultural-historical labels.

Acknowledgments

It is hoped that this essay will be taken in the spirit that it is intended: as a serious consideration of archaeological data sets and how we as archaeologists organize these data sets, not as a personal affront to individuals who have a different perspective on the arguments presented in this essay. Critical evaluation of old and incorporation of new data is critical for the development and on-going refinement of cultural-historical schemes so that these schemes are consistent with our available archaeological data. I hope that this essay contributes to this process of reflection and at the same time maintains a spirit of collegiality and friendship. This essay draws upon conversations with many researchers over many years and has been supported directly and indirectly by numerous sources of funding. Most importantly this research has been directly supported by a travel and research grant from the Institute for Scholarship in the Liberal Arts at the University of Notre Dame that made it possible to discuss this research with members of the CNRS in Vallbonne, France, and members of the Prehistory Department of the University of Istanbul, Istanbul, Turkey over February-March 2002. The core of this essay emerged while visiting archaeologists at these institutions with a draft being produced while sitting in seat A-35 on an Air France flight from Paris to Chicago. D. Binder, Y. Garfinkel, O. Bar-Yosef, B. Finlayson, N. Goodale, G. Rollefson, D. Baird, A. Belfer-Cohen, N. G. Morris, G. Sayej, A. Garrard, M Chesson, and several anonymous reviewers provided critical comments on this essay and have been instrumental in the development and shaping of the arguments put forward in this essay. I have tried to address the comments and critiques of these reviewers, or conversely, clarify my arguments, and to accurately represent the opinions of others. Due to other professional commitments, and in a few cases disagreement with the main arguments of this paper, several researchers declined to review and comment on this essay. I am especially grateful to G. Rollefson for providing detailed comments on this paper, for his on-going and noble attempts to turn my words into English, and for serving as a critical and diplomatic foil for the arguments presented in this work and a long list of others over the last few years. While not agreeing with some / most of the concepts and interpretations presented in this manuscript, the constructive, and at times lively, debate with Gary and the rest of these individuals has immeasurably improved the clarity and organization of this paper.

NOTES:

1 . Readers are referred to the following for more detailed considerations of chronological-historical sequences for the southern Levant (Bar-Yosef 1981; Bar-Yosef 1991; Cauvin 1977; Gebel 1987; Kuijt and Bar-Yosef 1994; Rollefson 1989; Rollefson et al. 1992) (Figure 1).
2 Trench I, stage VI, structure BA phase DI x-xi; structure CA; and; stage VIIIa, structure AR

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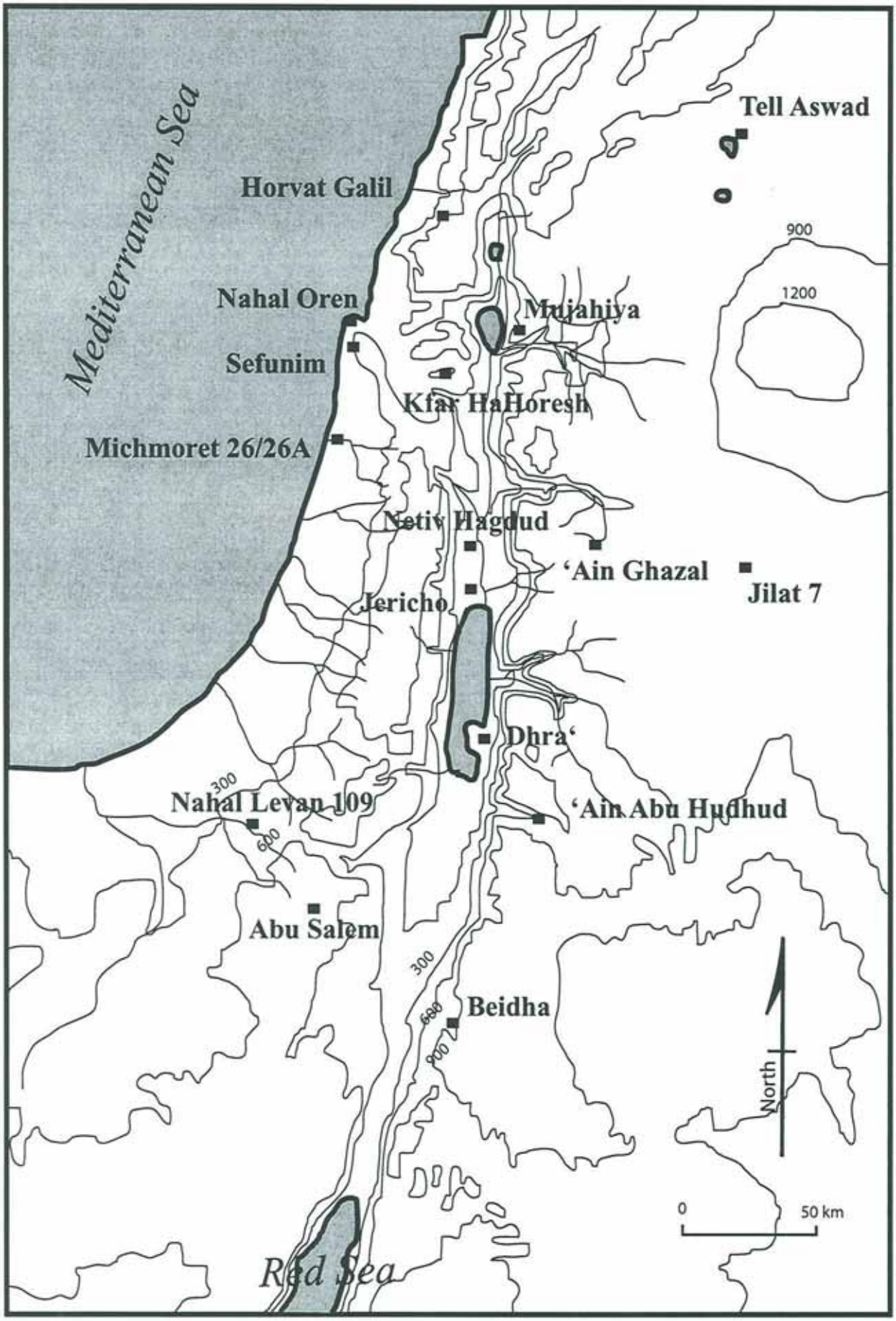

Figure 1. Location of Neolithic sites discussed in this paper.

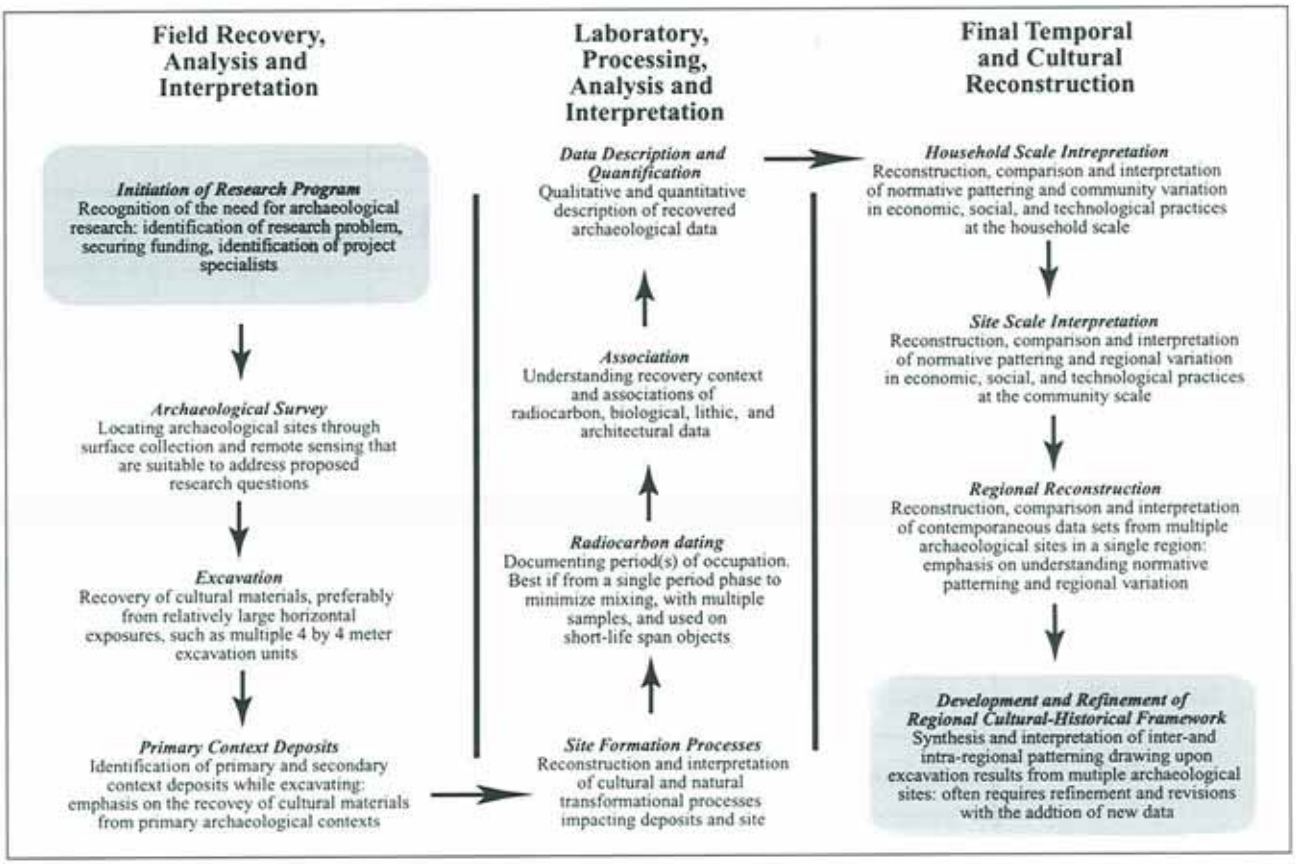

Figure 2. Pathway for the development of regional cultural-historical frameworks highlighting necessary research stages

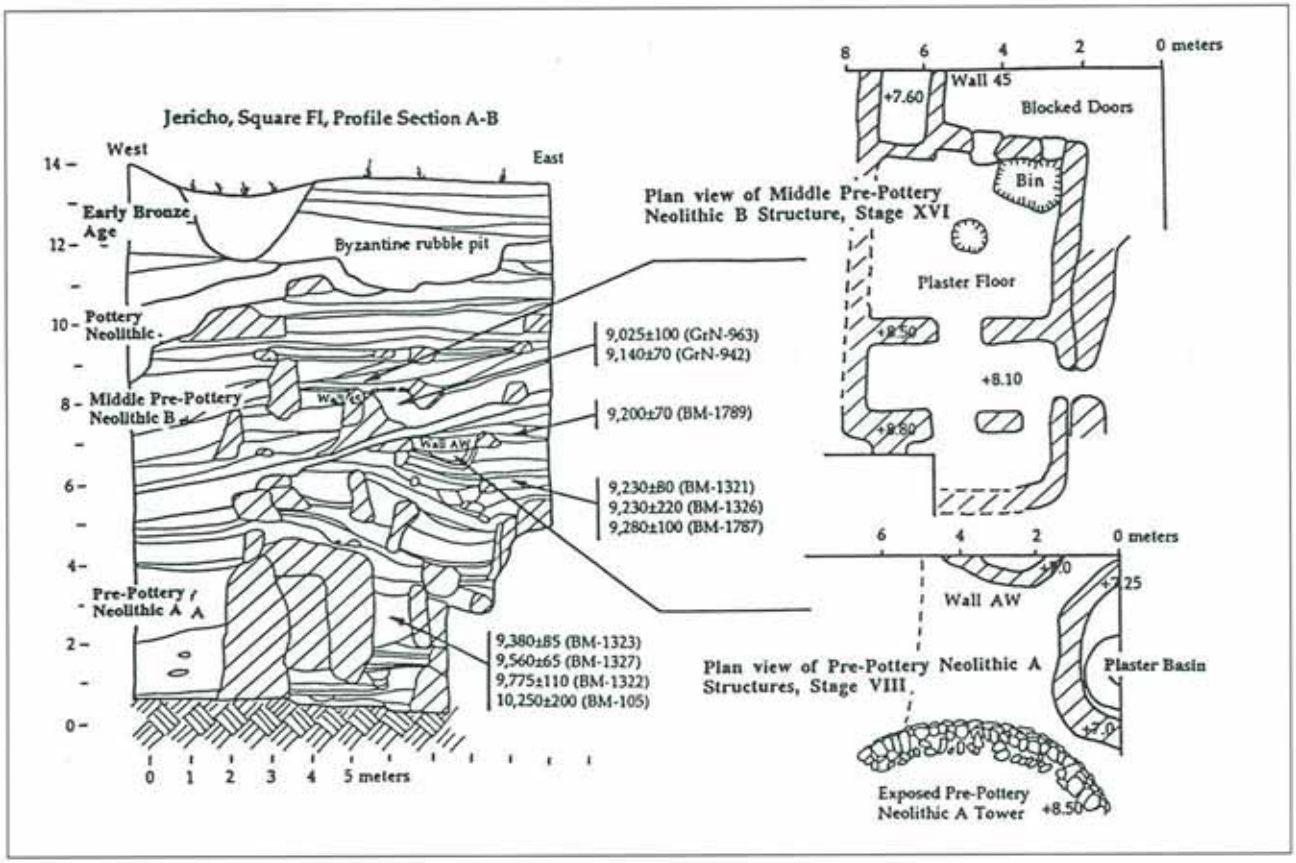

Figure 3. Cross-section of Trench I, Jericho, stratigraphic placement of radiocarbon dates, and associated plan views of PPNA and MPPNB structures.

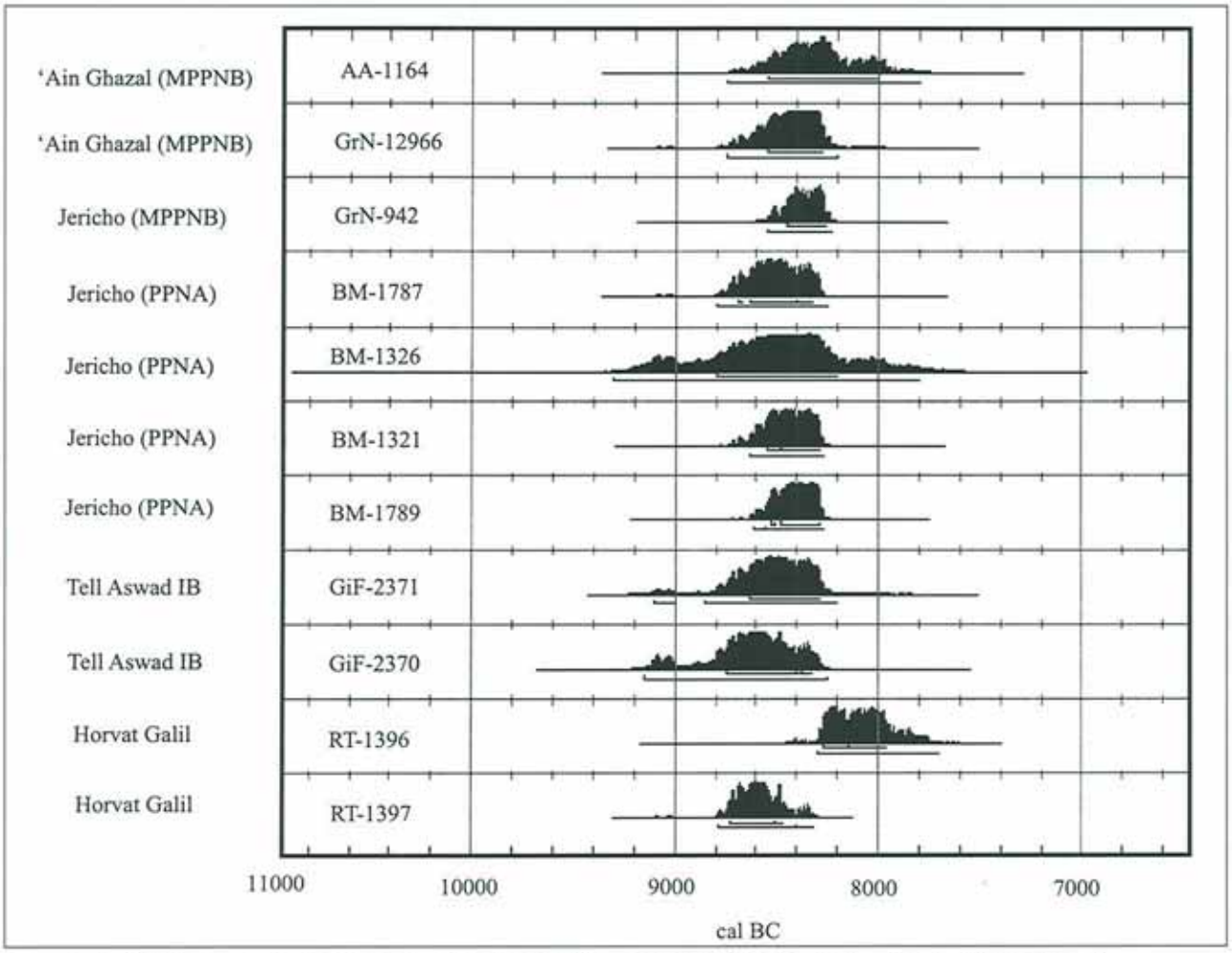

Figure 4. Calibrated Radiocarbon plots for PPNA and MPPNB samples from 'Ain Ghazal, Jericho, Tell Aswad IB, and Horvat Galil (From OxCal)

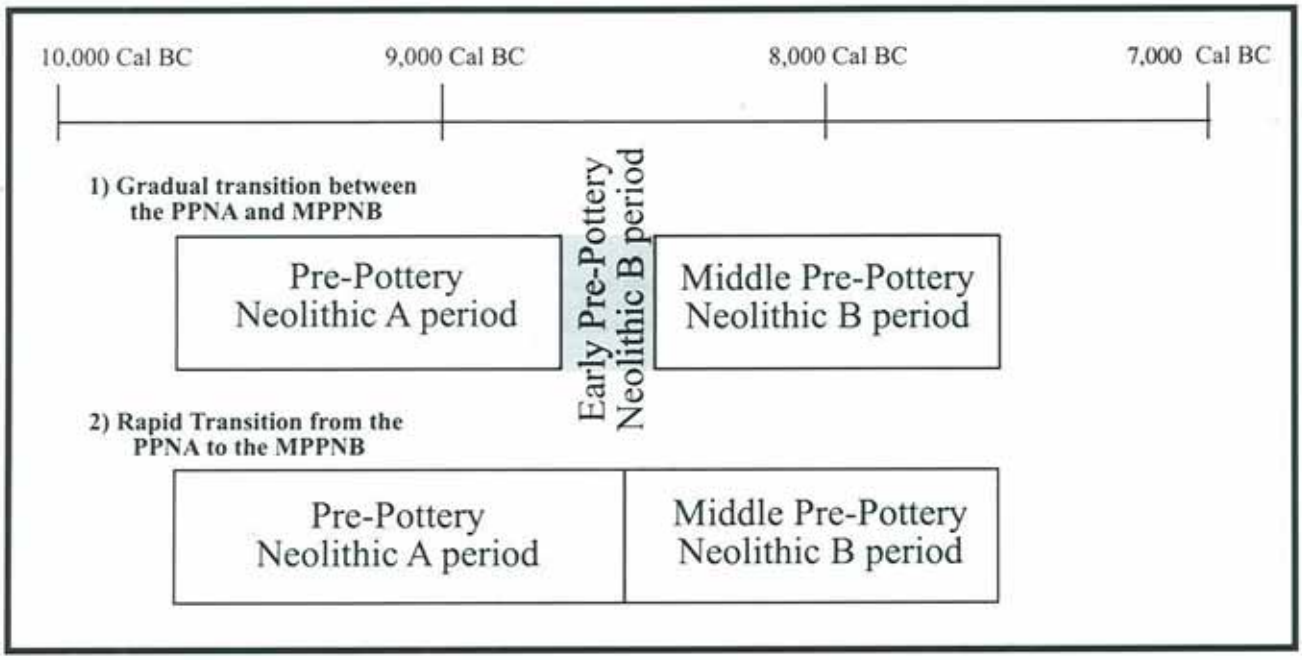

Figure 5. Alternative models for the transition from the Pre-Pottery Neolithic A to the Middle Pre-Pottery Neolithic B phase in the Southern Levant

Site	Site type	Excavation	Absolute dating	Architecture	Concerns	References
Mujahiya	Open air	Yes	None	Oval-circular	Undated excavated collection. While identified as EPPNB this collection may well have PPNA materials as well.	Gopher 1990, 1996
Horvat Galil	Open air	Yes	Yes	Rectangular	Many aspects of material culture could fit in the MPPNB, other than percentage of projectile points there are no substancial differences from MPPNB assemblages	Gopher 1994, 1996
Aswad I A/B	Open air	Yes	Yes	None	Context and stratigraphy unclear. Limited horizontal exposure	De Contenson 1995
Sefunim	Cave	Yes	Yes	None	Cave, multiple occupation periods, with high probability of mixed deposits	Ronen 1984
'Ain Abu Hudhud	Open air	None	None	Oval-circular & Rectangular	Undated surface collection with unknown context	Rollefson 1996
Nahal Lavan 109	Open air	None	None	None	Undated surface collection with unknown context and likely with deflation of cultural materials	Burian et al. 1976
Michmoret 26 / 26A	Open air	None	None	None	Undated surface collection with unknown context and likely with deflation of cultural materials	Burian and Friedman 1965
Wadi Jilat 7	Open air	Yes	Yes	Oval-circular	Muliple periods of occupation and C14 dates do not appear to be related to excavated cultural materials	Garrard et al. 1994
Abu Salem	Open air	Yes	None	Circular	Undated excavated collection	
Nahal Oren	Open air	Yes	None	Not clear	Undated, multiple occupation periods, highly turbated with complex stratigraphy	

Table 1. Type sites for an Early Pre-Pottery Neolithic B cultural-historical phase, southern Levant (based on Gopher 1996 and Rollefson 2001).

Site	Date	Sample Number
'Ain Ghazal	9,100 ± 140	(AA-1164)
'Ain Ghazal	9,200 ± 110	(GrN-12966)
Jericho	9,140 ± 70	(GrN-942)
Jericho	9,280 ± 100	(BM-1787)
Jericho	9,280 ± 220	(BM-1326)
Jericho	9,230 ± 80	(BM-1321)
Jericho	9,200 ± 70	(BM-1789)
Tell Aswad IB	9,320 ± 120	(Gif-2371)
Tell Aswad IB	9,390 ± 120	(Gif-2370)
Horvat Galil	9,000 ± 100	(RT-1396)
Horvat Galil	9,390 ± 70	(RT-1397)

Table 2. Uncalibrated wood charcoal radiocarbon samples from 'Ain Ghazal, Jericho, Tell Aswad and Horvat Galil plotted in Figure 4.

The Neolithic And the Chalcolithic Periods in Northern Thrace

Neolitik ve Kalkolitik Devirlerde Kuzey Trakya

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Keywords: Neolithic, Chalcolithic, cult house, settlement
Anahtar sözcükler: Neolitik, Kalkolitik, kutsal mekan, yerleşme

Klasik tanımlamayla Trakya'nın tarihöncesi devirlerinde "Kuzey Trakya" diye adlandırılan bölge, orta ve yukarı Meriç arasındaki havzayı ve bu nehrin kolları olan Tunca ve Arda nehirlerini kapsar. Yerleşmelerde iki ana grup egemendir: düz yerleşmeler ve höyükler. Bölgede bakır cevheri ve çakmaktaşı gibi ham maddeler oldukçu azdır. Rodop dağlarının doğusunda Son Kalkolitik Devre tarihlenen küçük tapınaklar mevcuttur.

Yazar bölgede yürütülen tarihöncesi araştırmaların tarihçesini irdelemekte, Doğu Balkan'lardaki Neolitik gelişimin başlangıcına ve Kuzey Trakya'nın Neolitik ve Kalkolitik devirlere ait tarihlerinin güncelleştirilmesine dikkati çekmektedir. Ayrıca çanak çömlek topluluğunun nitelikleri, evler, yerleşme düzenleri, ölü gömme adetleri, insan biçimli kaplar ve heykelcikler, pişmiş topraktan sunaklar ve ev ve/yahut tapınak modelleri hakkında bilgi verilmektedir. Gene Kuzey Trakya bölgesinde Neolitik ve Kalkolitik süreçteki terimsel ayrımlar üzerinde durulmaktadır.

Northern Thrace[1], a classic region for prehistoric studies in Thrace, covers the catchment area of the Lower and Middle Maritsa River, including its tributaries – the Tundza and Arda rivers. The basic Neolithic and Chalcolithic sites types are the remains of settlements, classified in two main groups: open-air settlements and mounds (tells). The remains of raw material procurement (copper mines and flint deposits) are quite rare. In the Late Chalcolithic, there were also small sanctuaries on several peaks of the Eastern Rhodope Mountains. Until now, attention has been focused on the mounds, whose dimensions (with height up to 18 m and diameters up to 250 m) make them the most significant sources of diverse data about the prehistoric period (Neolithic, Chalcolithic, Bronze Age).

Three antiquity loving Frenchmen conducted the first excavations of prehistoric sites in Northern Thrace in the late 19th and the early 20th century. However, V. Mikov initiated prehistoric research in the area by trenching tells Yunatsite (near Pazarcık) and Vesselinovo (near Yam-

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**Editors note: We are grateful to Mr. Kenneth Boden for his efforts to review the english text of this article.
[1] The term Northern Thrace (or Bulgarian Thrace) is an artificial one, similar to the names of the other two parts of the region and it is usually used for the scientific nomenclature.

bol) in the 1930s. In 1947-57, V. Mikov and G. I. Georgiev excavated a part of the Tell Karanovo (near Nova Zagora). In the 40's and 50's, P. Detev excavated the tell at Kapitan Dimitrievo (near Peshtera), Jasatepe (in Plovdiv), and Bikovo (near Nova Zagora). The 60's, 70's, and the early 80's were a period in which the most intensive investigations in Northern Thrace took place. G. I. Georgiev thoroughly excavated Tell Azmak (near Stara Zagora) and Tell Kazanlık as well as the multi-layer settlement Çavdar (near Zlatitsa). M. Dimitrov thoroughly excavated mound Çatalka (near Çirpan) and trenched Tell Starozagorski Mineralni Bani (near Stara Zagora), Tell Mădretz (near Radnevo), Tell Okrăzhna Bolnitza in Stara Zagora, and the Kaloyanovetz open-air settlement (near Stara Zagora). P. Detev investigated a large part of the Muldava open-air settlement (near Assenovgrad). E. Černich and A. Raduncheva explored the Aibunar copper mines near Stara Zagora. A. Raduncheva entirely excavated Rakotovo and the Simeonovgrad open-air settlements, as well as parts of mound Sedlare near Krumovgrad, and M. Kănçev partially excavated the mound of Sădievo (near Nova Zagora) and the Hlebozavoda open-air settlement in Nova Zagora. The number of surveys decreased in the second half of the 80's and 90's. The excavations at Tell Karanovo (V. Nikolov and S. Hiller) and Tell Kapitan Dimitrievo were renewed. J. Lichardus started the investigations of the Drama micro-region near Yambol. A. Raduncheva started the excavations at Dolnoslav Tell near Assenovgrad. The results of the excavations would form a reliable basis to reconstruct the late prehistoric life-way patterns of the region. However, only short reports have been published on these excavations and this makes the complex study more difficult. There are no general studies reflecting the most recent activity in the study area.

The most important, comprehensive, reliable and thoroughly or partially accessible information about excavated sites comes from Karanovo, Azmak, Jasatepe, Kazanlık, Rakitovo, Çavdar, Muldava, Kapitan Dimitrievo, Drama, and Hlebozavoda. Tell Karanovo is the most important of all since its stratigraphy is the basis for the Karanovo sequence. This sequence was established by V. Mikov and G. I. Georgiev, reworked by G. I. Georgiev (Georgiev 1961), and complemented by the author of this study (Nikolov 1997a; Nikolov 1997b; Nikolov 1998a) - based on the results of the continuing Bulgarian-Austrian archaeological excavations (Hiller, Nikolov 1997). The sequence includes nine stages, the first six being related to the Neolithic, the next two - to the Chalcolithic, and the last one to the Early Bronze age. The validity of the Karanovo sequence is applicable to nearly all parts of Northern Thrace. Recently emerged evidence proves, however, that a number of specific features of the culture, which developed in the westernmost parts of the area, allow, at least for certain chronological periods, the differentiation of local cultural phenomena.

The Neolithic Period

The conventional model of the Neolithic cultural phenomena in Northern Thrace was proposed by G. I. Georgiev in 1959/1961 and includes four successive Neolithic periods that affected the entire region. It positively influenced the way investigators have thought about the general pattern of the Neolithic in Southeast Europe, but excavations in the following two decades showed that the development of Neolithic culture in Thrace was much more varied than had been previously outlined. The "dynamic" model of the Neolithic in Thrace includes six stages (Nikolov 1993: 185-186; Nikolov 1998a) and is presented in brief as follows:

Stage I. The Early Neolithic pottery assemblage almost covers the whole of

Thrace, i.e., nearly the whole catchment area of the Maritsa river as well as the Upper Mesta region and (in its first phase) the Sofia Basin.

Stage II. The Early Neolithic Karanovo II pottery assemblage develops in the northeastern part of Northern Thrace (excluding the Kazanlık area), while the development of Karanovo I culture continues in the rest of the region.

Stage III. The Middle Neolithic Proto-Karanovo III pottery assemblage covers the northeastern parts of Northern Thrace while the development of Karanovo I culture continues in the rest of the region.

Stage IV. The Late Neolithic pottery assemblage, Karanovo III, exists in the northeastern parts of Northern Thrace while the development of Karanovo I culture continues in the rest of the region.

Stage V. The Late Neolithic pottery assemblage Karanovo III-IV covers almost all of Northern Thrace.

Stage VI. The Late Neolithic pottery assemblage, Karanovo IV, covers the northeastern parts of Northern Thrace (east from the Kazanlık-Haskovo line), while Kapitan Dimitrievo pottery assemblage develops in the western parts of Northern Thrace.

The red slipped ware, sometimes painted white, is the most characteristic feature of the Karanovo I Early Neolithic pottery assemblage in Northern Thrace. The rest of the fine (thin-walled) ware is gray or brown, well or very well smoothed, decorated with plastic ornaments or in some cases with flutings, incisions, or a pattern of dots. The following shapes are among the most typical for the pottery assemblage: tulip-shaped vessels on a pedestal base, flat-based tulip-shaped beakers, vessels with a spherical body and tall cylindrical necks, hole-mouth jars with a relatively short neck, the *wannen*[2] with a slightly S-shaped profile or convex sides, jar-like bowls, bowls with a rounded body, and semi-spherical plates (the last three types are often on a short cylindrical base).

The Karanovo II Early Neolithic pottery assemblage in the northeastern parts of Northern Thrace preserves almost all the features of the previous period, but the red slipped (and white painted) wares totally disappear. All other technological groups and types continue their development, though some display certain specific features; at least one new shape appears: a *wanne* on a pedestal base. Fluted and channeled decorations are also quite common.

The Proto-Karanovo III Middle Neolithic pottery assemblage in the northeastern parts of Northern Thrace preserves a lot of features typical for the preceding assemblage; the basic Early Neolithic ware types continue to exist. However, at least two new shapes appear and soon spread on a relatively wide area; they develop (though slightly modified) until the end of the Neolithic. The flat-based tall cylindrical mugs have a strip or stick-like knobbed handle, the knob being conical, cylindrical, or with concave walls. The dishes with relatively big rim diameters have a slightly thickened rim that is either undecorated or decorated with shallow oblique channelling. There are also certain indications for the appearance of small jugs. The new shapes have dark, very well smoothed or burnished surfaces. The decorative element are quite similar to the Early Neolithic ones - incised, excised, pricked dots, channelled and plastic ornamentation - though with certain peculiarities, e. g. vertical and especially horizontal or oblique wide channelling covers the entire body of the vessel, burnished bands filled with dots and compositions with such bands, round

[2] The author uses the german term Wanne (pl. Wannen) to describe a certain type of a straight-sided bowl. Since there is no appropriate term in english, the german word will be used in the text.

plastic appliqués with a shallow finger impression, plastic knobs, etc. The Proto-Karanovo III pottery assemblage is represented by two versions. The Karanovo II-III variant is recorded in the northeastern parts of Northern Thrace, and its range coincides with the range of the Karanovo II cultural phenomenon; the Karanovo II-III pottery assemblage shows the transition from Karanovo II to Karanovo III. Karanovo I-III is found only in Tell Kazanlık, where Karanovo II culture does not develop; the Karanovo I-III pottery assemblage possesses features typical for the transition from Karanovo I to III.

Together with the shapes from the preceding period, plates and bowls with rounded sides and open and hole-mouth jars, the Karanovo III Late Neolithic pottery assemblage from northeastern parts of Northern Thrace also includes several specific significant pottery types that represent, mainly, the grey-black very well smoothed wares or burnished wares: thickened-rim dishes on four tall cylindrical legs; deep bowls with thickened parts at the rim and a flat base; pear-shaped jugs with tall vertical handles with mushroom-shaped knobs, and flat-based on four short cylindrical legs; cylindrical mugs with tall vertical strips or stick-like knobbed handles; cylindrical or conical *wannen*; biconical bowls, whose rounded carination is in the middle of the body. The decoration, incised or channeled, is mostly on the thickened part of dishes and on bowl rims. Plastic ornaments and incisions are relatively rare (on the exterior surface of the vessel). The barrel-shaped bowl with a rough exterior surface, decorated with impressions and plastic ornaments becomes an important significant shape.

The development of the aforementioned shapes continues in the Karanovo III-IV Late Neolithic pottery assemblage, though some new shapes appear, but they most often form a new series. The ware is usually dark, very well smoothed or burnished. The sophisticated decoration techniques from the previous period continue but new ones appear as well and the decoration gets more complicated. The re-production of tall mugs with a tall vertical knobbed handle continues, and is sometimes mushroom-shaped. The pear-shaped jugs with a tall vertical knobbed handle undergoes change; the body is often biconical and bigger than before; the vessels are flat based or on four legs of medium height. The tall vertical handle has certain peculiarities: there is a plastic or channeled decoration on the upper part of the mushroom-shaped knob and/or on the handle itself. The thickened-rim dishes have four tall legs or very wide cylindrical pedestal bases; sometimes the rim is slightly profiled upwards. The carinated plates are a new shape and become a typical element of the discussed pottery assemblage. The carination is just below the rim; the rim is specifically profiled, sometimes with channelled decoration. The base is small and flat. However, some of these vessels are flared, have a complicated rim and a tall hollow pedestal *with* vertical rectangular openings. *Wannen* are cylindrical or conical. A new series of *wannen* appears and becomes one of the most important characteristic features of the pottery assemblage: the bowler-shaped hat *wannen* with a conical body and flared rim, often decorated. The new bowls with biconical body and a shorter upper part are also typical for the assemblage. They usually have a thickened carination and thinner rim, and channeling sometimes covers the upper body part. The bowls with cylindrical upper and conical lower part are quite massive and the upper part is sometimes decorated with horizontal S-shaped relief. Deep bowls with almost cylindrical upper part and a vertical knobbed handle appear. Shallow bowls, with an almost cylindrical or carinated body on four tall cylindrical legs, are rare but a firm indicator of the period.

The Karanovo IV Late Neolithic pottery assemblage in the eastern parts of Northern Thrace shares most of the features of the previous one: cylindrical *wannen*, tall knob handled pear-shaped jugs, cylindrical mugs with tall knobbed handles, thickened-rim dishes sometimes on four tall legs, barrel-shaped bowls with plastic decoration, and carinated plates. The most typical vessels, however, are the conical plates with deeply incised decoration filled with white plaster on both exterior and interior sides, the biconical bowls, the jars with biconical bodies and relatively tall necks (sometimes with two opposite knobbed handles) and the jars covered with channelling. This last ware is dark and the surface is often coated with a smeared reddish slip and most often burnished or polished.

The Kapitan Dimitrievo IV Late Neolithic pottery assemblage in the western parts of Northern Thrace preserves a lot of the elements of the preceding Karanovo III-IV assemblage. The ware is dark, black, grey-black or dark brown, very well smoothed or burnished, and rarely polished. The most characteristic forms are the carinated plates, the biconical bowls with short upper part (in both cases the carination is thickened and the exterior upper part of the body is covered with channelling), deep or shallow thickened-rim plates (the rim is often decorated with channelling or incised and encrusted lines), *wannen* with flared rims, conical plates with straight or slightly concave sides (in some cases their interior surface is covered with incised wide lines), jugs with tall handle (few examples), biconical jars with two strip handles, and big jars with cylindrical neck and two small handles (Nikolov 1999b: tabl. 4-9).

The Neolithic architecture in Northern Thrace is relatively well studied. All houses were built on the ground. The walls were made of wooden (oak) posts, fixed in the ground (at a depth of 70-90 cm) and interwoven with (hazel) twigs; both sides of the construction are daubed with clay. The gabled roof was covered with straw or reed. The buildings in the settlements were used only as living places though production activities were also performed there and, at least in some case, rituals related to the house cult. The houses were square, rectangular or slightly trapezoid in plan and consist of one, rarely two or extremely rare three rooms. There was a small number of houses (at Tell Karanovo mainly) with a small room annex attached to one of the walls. The houses were one-storey as a rule, but recent evidence for two-story houses has come to light at Tell Karanovo and Tell Kapitan Dimitrievo. An earthen rampart protected some of the settlements. For some parts of the overbuilt area, a preconceived plan was followed.

The richest evidence for Early Neolithic houses comes from Tell Karanovo (at least 20 houses), from the South sector mainly (Hiller 1997). Most of them were square, rectangular, or slightly trapezoidal, and contained a single room, though a few contained two rooms; one of the houses was of the megaron type. The rest were square or rectangular, single-room or two-room (as an exception) but with an annex. The area of the single-room houses varied between 21-53 sq. m, and the two-room houses varied between 49-63 sq. m. The houses with an annex were between 45-67 sq. m. The entrance was usually in the southern or the eastern wall (except the megaron-house, whose entrance was at the western wall). The oven was usually close to one of the house walls; there were ovens in some of the annexes as well. The houses in the South sector were re-built in the same location or near the same location for centuries; they were situated along a street oriented NNE-SSW, ca. 2 m wide and paved with pebbles, sherds and animal bones. The houses in the Northeastern sector were situated along two streets cros-

sing each other, oriented along the four cardinal points, and paved as described above (Georgiev 1961: 62).

The earliest Early Neolithic villages at Tell Azmak were enclosed by an earthen rampart. The excavator (Georgiev 1967: 146-148) wrote about 23 houses (most of them single-room), which varied between 22-50 sq. m. The only exception was a big three-room building (chain-like plan), which had a total area of 109 sq. m and ovens in all premises. The interior walls of one square house were decorated with a plastic geometric composition. A massive three-partial quern with a grinding stone was unearthed in another building. Remains of ovens and clay bins were found in all houses.

The Early Neolithic layer of Tell Okrāzhna Bolnitza yielded the remains of two single-room houses adjoined; both were destroyed by fire with their household inventory intact. The total area of the adjoined houses was 47 sq. m, and the entrances faced east. The numerous cylindrical bins, the quern, and the two domed ovens were very well preserved.

The Early Neolithic multi-layer settlement, Čavdar, was surrounded from its three sides by an earthen rampart, whose ends reached the bank of the adjacent river, protecting the forth side. The foundations (plans) of more than a dozen of houses were unearthed, single-room and several two-room, square, rectangular, and slightly trapezoidal in plan (Georgiev 1981: 69-81). Their area varied between 26-55 sq. m. The entrances faced south or southeast, and the oven was usually at the opposite wall.

The Early Neolithic multi-layer settlement at Rakotovo yielded the remains of at least 18 single and two-room houses, being predominantly elongated and trapezoidal in plan, and varying between 23-49 sq. m in size. They were arranged in groups of three or four and faced the northeast or the northwest. A cult structure was found in one of them.

Part of a two-storey house was unearthed in the Early Neolithic layer of Tell Kapitan Dimitrievo (Nikolov 1999a: 14-18). A big domed oven, a quern with a grinding stone to the side, and several bins were found on the ground floor. There was at least one domed oven on the upper floor. This is the earliest excavated two-story building in Southeast Europe.

The four Early Neolithic houses excavated at the multi-component settlement of Muldava were single-roomed houses, approximately square, and between 16-49 sq. m in size (Detev 1968: 13-41). They were built close to each other, and their diagonals were oriented along according the four cardinal directions.

Well-preserved houses at Tell Karanovo, in the Late Neolithic deposits, are related to the Karanovo III period. They were destroyed by fire. The two houses excavated in the Northeastern sector have specific plans (Nikolov 1997c). The first one was rectangular with a small annex attached to the eastern wall and a total area of 46 sq. m; the main room consisted of a rectangular room and an L-shaped "corridor" along its northern and western walls. The second house was rectangular, 57 sq. m; its interior was divided by two walls into a big room and two "corridors" along its northern and western walls. Part of a big burnt two-story house, rectangular in plan, was excavated in the N-S sector. The oven, the grinding stone and the bins were on the second (residential) floor, supported by a great number of posts. The ground floor had obviously been used for economic activities since no traces of structures or installations were found there.

The Late Neolithic deposits of Tell Kazanlık (Karanovo III period) yielded the

remains of four rectangular houses, varying between 38-51 sq. m. Three of them were single-room structures, and the forth one was a three-room structure (chain-like plan) with an oven in one of the rooms.

The excavations at the Hlebozavoda Late Neolithic open-air settlement, (Karanovo IV period) revealed 15 single and two-room rectangular houses (three of them being megaron-houses), oriented predominantly N-S, the entrances face south (Kançev, Kançeva 1988). The two-room houses had an oven in one of the rooms only. The area of the houses varied between 27-54 sq. m and were situated either in groups or at a certain distance from each other.

It is hard to estimate how long a Neolithic house might have been used; it is commonly thought to be a period between 30-50 years. One thing is for sure, the periodic reconstruction of the settlement was carried out only if the settlement was destroyed or abandoned. Every building was renewed after its destruction (intentional or otherwise) in the same place and following the same approximate plan.

About seventy Neolithic burials were documented in Northern Thrace[3]. All of them were found within the settlements, between houses as a rule, though sometimes beneath house floors. The burials (inhumations in a flexed position) were in small and shallow grave pits (in some cases garbage pits were reused); the body placed most often on its side (left or right) and, quite rarely, on its back. The exceptions were burials where the body was placed in a flexed position on its abdomen, in an extended position on its back, and in an extended position on its abdomen. Two graves were excavated at Tell Karanovo, containing skeletal remains of many individuals, and in no anatomic order (i.e., collective secondary burials). There is evidence that secondary burials were related to several single burials, including the rare case of a scull buried separately from the body. There is an exclusive group, the double burial of an adult and a child. The orientation of the bodies in the pit was obviously unregulated by Neolithic burial rites; orientation in all directions was documented, with slightly more bodies aligned between the West and the North. Children and old people were primarily buried in villages, with females prevailing among elderly individuals. There are very few burials of middle-aged people. The selection of people buried within the village could be related to certain aspects of the prevailing religious-mythological system; old farmers probably believed that the bodies of deceased children had to remain in the village to quickly facilitate reincarnation, and the souls of respectable adult members of the community had to likewise remain in the village to help or protect their living relatives. However, another theory also seems reasonable: individuals of lower status (mostly children and women) were buried within the village; higher status individuals were buried in a different way that required greater effort and care. Quite a few burial goods were found in graves, and almost all, without exception, in the graves of adults; there was only one object as a rule (a vessel, a bone pin, a flint tool) and, quite rarely, several grave goods (a vase and a grinding stone, a bead and a pebble, bone pins and beads; bone awls and a stone ball). No Neolithic cemeteries were found in Northern Thrace. Where and how all the other thousands of inhabitants of the area were buried is a question still awaiting an answer.

It is impossible to discuss all aspects of Neolithic culture in Northern Thrace within the framework of this paper, I will, therefore, mention just a few more elements.

Most of the Early Neolithic anthropomorphic vessels have a nearly spherical

3 The summary is based on data collected by K. Baçvarov, (Baçvarov 1994) to whom I am grateful.

lower body and a tall relatively narrow neck. The details are then modelled in relief. The face is always depicted just below the rim. The nose and the eyebrows are in relief, and the eyes are usually marked by incision. In some cases, the face is shaped in relief and stands against the surface as if attached to the neck by appliqué. The mouth is rarely marked. Sometimes two or more vertical or oblique parallel lines are incised below or around the eyes. A vase presents the richest evidence from Tell Kazanlık (Georgiev 1972: Taf. VI, 1). Besides the face, the breasts, the vulva, and the arms had been shaped. One of the hands points to the genitals, and the other is raised upwards. Within the context of the Mother-Earth (the anthropomorphic vessels are related to the cult of the Mother-Earth), this pose could be interpreted as a request to the Sky God for a matrimonial alliance, i.e., the birth or harvesting of a new crop.

An anthropomorphic vessel of unusual shape was found at Tell Jasatepe and is related to the Late Neolithic (Georgiev 1961: Taf. XIII, 2). Its body consists of a tall cylindrical neck turned downward into two arched pipes (maintaining the neck diameter), both of which reach the oval flat base. The central part of the body remains hollow. The anthropomorphic face (a relief nose and eyes-incisions) is modeled below the rim.

Another type of anthropomorphic vessel is extremely rare and is related to the Early Neolithic. The only vessel, entirely preserved, came from Rakitovo (Matsanova 1996: tab. 6, 1). It is a standing hollow steatopygous anthropomorphic figure with a short upper body. The vessel is red slipped and white-painted. A relief nose is modeled below the rim. The hands are on the abdomen.

An anthropomorphic face is modeled on an Early Neolithic pot from tell Azmak (Georgiev 1967: Abb. 7a). A relief band outlines the upper part of the face, the nose and the eyebrows are also modeled in relief, and the eyes are depicted by oval finger impressions. There are two vertical incisions below the nose that give grounds to interpret the image as a female one.

The main iconographic type of the Early Neolithic anthropomorphic clay figurines is a female figure with massive buttocks, the legs joined or slightly set apart, the upper part of the body is relatively short, narrow, and oval or flattened. The upper part of the head is flat, and the main features on the face are usually the relief nose and the incised eyes. The pubic triangle is also marked. In many cases the figurines have flat feet and could stand upright. Some figurines have their upper torso slightly bent forward. All figurines described are made of three parts: the two buttocks were modelled separately and then joined, and the upper part of the body was added later. The arms are sometimes omitted. Often they are depicted as two relatively short horizontal stumps. There are figurines with arms quite naturalistically rendered, the right hand is behind the body and reaches the haunch, and the left one is in front and holds the belly up (Georgiev 1961: Abb. 3, 1). The buttocks of the figurines are sometimes decorated with parallel-incised lines or dots. The upper part of the figurines is undecorated. The only exceptions are several figurines with an incised line or zigzag below the relief nose. This element, and some other features, closely relates the figurines to the anthropomorphic Early Neolithic vases. The figurines should be interpreted in a similar way, i. e. as images of the Mother Goddess. The Early Neolithic figurines are fragmented in almost all cases. Since they were made from three parts they could easily be broken under certain circumstances, e.g., during certain rituals.

The second Early Neolithic iconographic type includes figurines with a massive conical or prismatic schematic body, made of one piece of clay. These figurines present a schematic standing human body with some indications of anthropomorphic features. The upper part is flattened and the hair is usually marked by incision. The eyes and the relief nose are also rendered, and there are finger impressions or vertical strokes below the face. The breasts are sometimes modelled. The lower part of the body is decorated with parallel incised lines.

The Early Neolithic figurines made of white marble are relatively rare and represent a standing female anthropomorphic figure. The lower part is usually rounded and the legs are slightly set apart. The waist is relatively slender, the arms are two horizontal stumps, and the head is cylindrical and rounded. A figurine from Tell Azmak (Georgiev 1967: Abb. 11) is elaborated very carefully; it has massive buttocks and the pubis triangle is incised.

The seated anthropomorphic figurines are very rare in the Early Neolithic. They represent women. The lower part of a figurine from Tell Karanovo is decorated with dark paint.

The second Late Neolithic iconographic type includes cylindrical or prismatic anthropomorphic figurines. They have relatively small dimensions and are very schematic. The face consists of a relief nose and incised eyes. The hair is often indicated, and the body is sometimes decorated with incisions.

The lower part of the Late Neolithic figurines is schematized as a rule, the legs are added later. The waist is indicated and the upper torso is wider and relatively flat, rounded, or modeled with two short triangular stumps. The head is: (1) elongated and cylindrical with a relief nose, and the eyes are sometimes marked by incisions or (2) widened a little toward a cylindrical neck, and the face is modeled by two concave surfaces, the eyes are modeled in relief. Sometimes the hair is marked on the back of the cylindrical head (with horizontal incisions). Two plastic knobs mark the breasts and the triangular stumps-arms are sometimes horizontally perforated. This main iconographic type is usually covered with rich decoration, incisions and/or dots. The pubis is often indicated (the vulva is sometimes marked with a lozenge), and the neckline is marked by incisions. Incisions or bands with dots decorate the lower part of the figurine. A relatively rare version of this type has quite naturalistically rendered lower part of the body, a more rounded upper part and a cylindrical head. One of the best specimens of this version (from Tell Karanovo) represents a hermaphrodite (Georgiev 1961: Abb. 3, 2): beside the breasts the male and female genitals are modeled. The figurine is decorated with brown paint. Beside the relief nose, the eyes (and the eyelashes) and the eyebrows are indicated. The hair is marked, and a kind of braid or hanging ornament is attached to it. A wide belt, decorated with hanging ornaments, encircles the waist. A second hermaphrodite figurine was found recently (at Tell Kapitan Dimitrievo). The upper part of the body is flat and widened, the legs are slightly set apart, the breasts and the male genitals are modeled.

The third Late Neolithic iconographic type unites the relatively naturalistic seated female figurines that appear in this period. They are very few in number, but their appearance indicate a change in belief about the Mother Goddess. The first version is represented by female figures sitting on a movable chair (a rounded object), and the second, in which the chair is modelled inseparably from the female body. The legs are always joined together, the upper torso is rounded, the arm-

stumps rendered, and the head is cylindrical. The most exquisite representatives of this group are two figurines from Tell Karanovo and Drama. The first figurine has a very tall cylindrical head with a relief nose and rich red and brown painted decoration. The breasts and the pubic triangle are marked. The breasts and the knees of the second figurine (Fol, Katincarov, Lichardus 1989: Taf. 35) are marked by relief knobs, the nose and the ears are also modelled in relief. There is a shallow hole at the top of the cylindrical head.

The first male figurines appear in the Late Neolithic period. The denotation of these images was probably a man of high social status (a tribal chieftain?), worshipped while still living, or as a spirit-patron. Unfortunately, not one single whole male figurine is preserved, and several well-elaborated heads are interpreted as male.

Several marble female figurines came from the Late Neolithic sites. They represent a standing female figure with folded arm. The heads of the two figurines from Tell Jasatepe (Detev 1976: obr. 54) are cylindrical and absolutely schematic, the pubic triangle and the line separating the legs are marked by incisions. The buttocks are fat and the upper part of the body is flat. The preserved torso of the figurine from tell Kazanlık (Katinçarov 1969) seems to have been elaborated very carefully.

The Early Neolithic is the time when relief anthropomorphic images appear on the exterior surface of certain ceramic vases. They represent standing female figures with their legs thrown open and the triangle between them marking the vulva. The arms are in various positions: raised up in a gesture of adoration, one hand raised up and the other on the abdomen (pointing to the vulva sometimes), or both arms point down. The relief images most probably represent the Mother Goddess.

The Neolithic tripods (altars) consist of bowls elevated by three or (as an exception) four legs (Vandova 1997). They are made of clay, shaped as an equilateral triangle (only a few pieces are square). The outer surface of the tripods is usually decorated with incisions or dots, almost always filled with white matter. The inner surface and the lower part of the receptacle are very often painted white (a symbol of fertility). The described female relief images on big vases are of crucial importance for the understanding of the tripod's denotation. There is an obvious parallel between these images and every single side of the tripod. The anthropomorphic images are related to the Mother Goddess, which enables the interpretation of the tripods as a symbol of the Mother Goddess's womb. Two versions of this tripod could be regarded as a good illustration of such an interpretation: tripods with a convex-shaped central part of the lower edge, and the ones with a "hanging" middle part of the receptacle.

The so-called "sling bullets" are quite common at the Neolithic sites. They are relatively small objects with an elongated symmetrically rounded biconical shape or oval and elongated with slightly pointed ends. They are made of clay and are well fired, and their cross-section is round or oval. The objects are usually regarded as sling (bolas) "bullets" but the traditional interpretation could hardly explain why the "sling bullets" are often found in groups (up to 15-20 pieces) near the oven or quern of Neolithic houses. These objects are probably seed models and were used in certain rites of the Neolithic farmers, probably in the ritual cycle, related to the sowing of cereals.

A big Early Neolithic vase in the shape of a deer came from the multi-layer settlement of Muldava (Detev 1968: obr.

25, 26). The animal is represented standing on its four legs, its neck craned and the head raised upwards; the ears, the mouth and the short antlers are modeled. There is a cylindrical neck to the opening on the back. The vase is white on red painted: two horizontal bands of the "wreath of fertility" motif on the body (the negatively executed spiral-and-meander design stands out on the white background), the neck and the legs are decorated with three white bands. It is quite difficult to interpret the vase, but the "wreath of fertility" composition has been interpreted as an ideogram of the endless solar road, and we could therefore assume that this vase is related to a solar cult. Another big Early Neolithic zoomorphic vase came from the multi-layer settlement of Rakitovo (Matsanova 1996: tab. 8). It is in the shape of a bull with a massive body, standing on four legs. There is a cylindrical neck to the opening on back. The vase is undecorated. The bull participates in the early farming religious and mythological system as a partner of the Mother Goddess.

A swastika-decorated amulet perforated in the middle and carved out of jasper came from the multi-component settlement of Kardjali (Pejkov 1986: Abb. 3). The iconography of the object has been interpreted as frog legs. Ancient belief regarded frog legs as a prevention against sterility, and helped promote normal pregnancy. On the other hand, the swastika in the clockwise direction symbolized the regenerative power of the sun. The relation between the sun and the frog is easy to see: frogs appear and disappear in a period of about 6 months, i.e., they repeat the solar cycle. The united symbol "swastika with frog legs" was obviously considered by the Neolithic farmers as possessing an extraordinary power. If the object from Kardjali had been an amulet, it would have been worn by a woman with the purpose of invoking fertility.

Stamp seals are not common finds (Makkay 1984: 11-12, 16, 30, 68). The lower part of the seal (the face) is either round, elongated rectangular, or elongated oval in shape; they have a conical handle. The face bears an incised pattern, most often consisting of wavy or zigzag lines. The spiral design – the composition consisting of short parallel strokes or a lozenge and spiral-and-meander designs – are quite rare. Stamp seals were probably used as amulets attracting luck and success.

The Chalcolithic

The model of the Chalcolithic in Northern Thrace, proposed by G.I. Georgiev in 1959/61, includes two successive periods: Karanovo V (Maritsa) and Karanovo VI, related to the Early and the Late Chalcolithic (Georgiev 1961). The differentiating criteria, however, are not precise. A transitional phase, called Maritsa IV and related to the Middle Chalcolithic, was defined by H. Todorova based on the pottery ornamentation (Vajsova 1966). J. Lichardus shares the thesis of the two partial periods of the Chalcolithic, and the artificial assemblage of the Maritsa IV phase as being related to Karanovo VI culture (see Fol, Katincarov, Lichardus 1989: 65-70). The chronology proposed by J. Lichardus seems more appropriate from a methodological point of view since it recognizes first and foremost the change of the most dynamic element of the old artificial assemblage: pottery shape and ornamentation. The lack of concrete and specific comprehensive studies on the matter does not allow me to propose a reliable chronology for the Chalcolithic in Northern Thrace; since I regard the two partial periods as being more appropriate, I use it in this particular study. It is also difficult to define the exact territorial range of the two Chalcolithic cultures, though it is clear that at the time of Karanovo V culture, the assemblage of the westernmost parts of Northern Thrace

contains many Central Balkan elements, while at the time of the Karanovo VI culture the western region is part of a transitional zone between the two big Late Chalcolithic cultural complexes of the Central and the Eastern Balkans.

The Karanovo V Early Chalcolithic pottery assemblage includes a relatively small number of typical shapes. The body of vessels is usually rounded. The semispherical plates are quite common, some of which are relatively thick-walled, with lighter surface color and are decorated on both sides with incised designs filled with white matter; others are thin-walled, with dark surface (gray or gray-black) and sometimes covered with positively executed graphite-painted designs. The outer surface of the lily-shaped bowls is usually decorated with incised ornaments of a ladder type filled with white matter. The wide bowls with almost straight sides at the upper body, decorated with sets of incised lines and rows of punched depressions, are filled with white matter, and are very typical. The deep bowls have more variety: bowls with convex walls or biconical bowls with rounded carination, some of them decorated with incised lines filled with white matter and bands covered with red ochre; other bowls are decorated only with graphite-painted designs or with graphite-painted and encrusted designs. There are also spherical slightly carinated jars with short necks, decorated with incised and encrusted designs. The conical bowls with a complicated rim profile, decorated with graphite-painted designs and red ochre appear in the pottery assemblage of the western part of the region. Some of the vases have a pedestal base during the first half of the period; the incised and encrusted decoration, sometimes complemented by bands of red ochre, predominates. The positive graphite-painted designs are typical for the whole period, and especially for the second half.

The Karanovo VI Late Chalcolithic pottery assemblage includes a greater variety of shapes. The tendency towards biconical shapes is quite obvious. The decoration covers the upper part of the body and is painted with graphite in negative execution. The incised and white-filled designs, mainly of the ladder type, are still present in the pottery during the early phases of the period. The shell-stamped decoration and nail-impressed decoration are typical of the late phases. The dishes are conical, carinated, or thickened at the rim. The bowls with a tall upper part consist of a cylindrical upper and conical lower part, and the upper part is either slightly S-shaped in profile or consists of two cylinders with nearly the same diameters. The bowls with short upper parts are biconical. There are, however, bowls with rounded carinations, sometimes with a profiled rim; the biconical bowls with a carination at the middle part of the body are common as well. The deep bowls are slightly biconical with a rounded carination or have cylinder-conical bodies; sometimes the rim is profiled. Hole-moth jars are quite common; the body is spherical or slightly biconical. There are two-handled constricted-neck jars with plastic decoration. Constricted-neck jars with two strap handles beginning from the rim and ending at the most protruding middle part of the undecorated body and the *askos* with an arched handle are typical for the latest phases. The open jars include big storage vessels with a cylindrical upper body, a conical lower body, part and a handled lid.

The Late Chalcolithic pottery assemblage in the western parts of Northern Thrace (Tell Yunatzite and tell Kapitan Dimitrievo) has not been studied thoroughly; it is positive however that there are shapes typical for both the Maritsa valley and the Central Balkan region. Besides the shapes already presented, the biconical two-handled constricted-neck jars, the jars with a vertical knobbed

handle, and the tall biconical jars with two opposite horizontal arched handles are quite common. The graphite-painted decoration is relatively rare, and the positive designs and compositions are dominant.

The Chalcolithic architecture in Northern Thrace is not only more poorly known but there are also very few articles published. All buildings are constructed on the ground. The wattle-and-daub construction typical for the preceding period was used; the walls were made of wooden (oak) posts, fixed in the ground, interwoven with (hazel) twigs. Both sides of the walls were daubed with clay. Evidence for the pisé technique application has come from recent excavations (Sedlare, Drama, Yunatsite). The gabled roof was covered with straw or reed. The buildings in the settlements were mainly residential though production activities were also performed there. Evidence exists that at least in the Late Chalcolithic there were special cult buildings (Azmak, Dolnoslav). As it was in the Neolithic, the houses were square, rectangular or slightly trapezoid in plan. They consisted of one room, though rarely two or three rooms can be found. The Chalcolithic houses were usually one-story, but there is evidence for two-story buildings (Drama). An earthen rampart or a rampart and a ditch protected some villages. Only certain parts of the area followed a preconceived plan.

A considerable number of Early Chalcolithic houses were revealed during the early campaigns at Tell Karanovo, but the relevant data has scarcely been published (Georgiev 1961: Taf. XVII, 2) The unearthed houses were oriented north-south, and contained a horse-shoe shaped oven with two lateral extensions at the northern wall facing the entrance. Some houses consisted of two rooms. Traces of "streets" were recorded, and the recent campaigns at sector N-S confirmed this evidence, though no complete house plans were unearthed in the small excavated area.

The Tell Jasatepe Early Chalcolithic deposits yielded a single-roomed building (20 sq. m) used as a workshop for the production of tools (Detev 1959: 42). The floors of at least four more houses, all of them single-roomed, were between 30-50 sq. m in size; the oven was in the middle part of the room (Detev 1976: 121). The houses were oriented on a north-south axis.

The Tell Drama Early Chalcolithic deposits yielded the remains of 45 houses, between 24-40 sq. m, with the exception of a house of 94 sq. m (Fol, Katincarov, Lichardus 1989: 53-61). The houses were oriented north-south, rectangular or slightly trapezoidal in plan, and all of them contained a single-room. They were made of wattle-and-daub construction but only the big house mentioned above yielded evidence for pillars supporting the gabled roof. There were ovens in almost all houses. Narrow "streets" were revealed between the houses as was an empty space that probably functioned as the village square. A ditch and a low rampart enclosed the village.

The data about the Late Chalcolithic architecture, obtained during the early excavations at Tell Karanovo is scarcely published (Georgiev 1961: Taf.XVII, 2). The houses were orientated in the same direction, but the oven was situated in one of the corners facing the entrance.

The Chalcolithic villages of Tell Azmak were encircled by an earthen rampart that existed in the previous period; a wooden palisade was added in the Chalcolithic on the top of the rampart (Georgiev 1969: 142-145). The Early Chalcolithic houses were arranged in rows or in small groups; they did not face the same direction. The Late Chalcolithic villages con-

sisted of not less than 20 houses, but data was published for 3 buildings only. One of them has three-rooms, is more than 100 sq. m, and is oriented on an east-west axis. The inner walls were painted with red ocher. Not a single oven or a quern was found in the house but there were benches of clay in two of the rooms. The big dimensions of the building, its central location in the village, and the peculiarities of its interior enable us to interpret it as a non-residential building. Another very large building was unearthed in the same village; it consisted of two rooms, ca. 170 sq. m, north-south oriented. The inner surface of the walls was white with ocher. Neither an oven nor a quern was found. The later village yielded a big house, ca. 80 sq. m, oriented on a north-south axis. The entrance was on the south wall, and the oven and the quern were in the north-eastern corner.

The Late Chalcolithic village at Tell Drama was encircled by a ditch and a low rampart; the ditch was 10 m wide at its widest and up to 3 m deep. Its entrance (4m wide) faced south-west. Remains of 27 single-room buildings, probably residential, were revealed (Fol, Katincarov, Lichardus 1989: 40-48; Lichardus, Fol, Getov 1996: 17-21). The houses were oriented in different directions (from north-south to northwest-southeast) and were rectangular or slightly trapezoidal. The houses were made of the traditional wattle-and-daub construction, but reed was used both for the wattle and the roof. There was evidence that some of the walls were constructed of timber and pisé. The inner surface of some walls was decorated with red paint. A specific feature was a pit, shallow but wide, under the timber floor of every house; it probably served to protect against wetness, and as a storage place.

Few Chalcolithic burials were discovered in Northern Thrace. An Early Chalcolithic female burial came from Tell Okrazhna bolnitza-Stara Zagora; the skeleton Liedina flexed position. Several Late Chalcolithic burials unearthed at Tell Čatalka yielded skeletons in a flexed position; one of the burials contained a shell necklace, and another contained a stone axe. No Chalcolithic cemeteries have been found until now in Northern Thrace. The human remains of the burnt last village of Tell Yunatsite deserve special attention. Twenty-nine male, female, and juvenile skeletons with different orientations and positions were revealed under the houses, and 10 more flexed skeletons and 3 skulls were found in the space between the houses. According to the excavators' observations, the inhabitants of the village were victims of violence, since the skeletons did not bear traces of burial rites, and the flexed skeletons were buried in a hurry without grave goods.

The diversity of Chalcolithic culture in Northern Thrace prevents a detailed study within the framework of this paper. I will touch upon a few more elements.

Ore extraction and metallurgy are characteristic of the time (Černich 1978; Todorova 1986: 144-151). The main region, where oxide copper ores were exploited, is to the north of Stara Zagora. The most numerous ore vanes are recorded in Ai bunar. Their exploitation started in the Early Chalcolithic, probably as early as the beginning of the period. The ore was obtained by heating the rock with fire followed by a quick cooling with water; then the ore was extracted with stone hammers and bone tools. Traces from further processing of the ore are quite scarce; the remains of an Early Chalcolithic furnace for copper melting were found in the vicinity of Tell Okrāzhna Bolnitza. The copper tools were cast in a mould and then finished by forging. Several stages are recognized in the copper production during the Chalcolithic: I - the production of small objects (pins, awls, beads, pendants); II - the production of

bigger copper tools with an unduly large amount of metal was incorporated in them (e. g. the wedge-shaped axes); III - the highly efficient production of tools made from a minimal amount of copper, and the increased variety of types (wedges, wedges-axes, hammer-axes, spear heads, awls, pins, chisels and ornaments); IV (the end of the Chalcolithic period) - this stage is characterized by the universalization of tool functions (e. g. the adze-axes appeared). The role of metallurgy in the development of Chalcolithic culture in Northern Thrace is extremely important, although it still needs to be investigated in greater depth.

Early Chalcolithic anthropomophic figurine includes clay figures of the standing female body with the legs joined or slightly set apart, the arm and the face are quite schematic. Usually the upper part of the body is flat, with stump-like arms often decorated with incisions. The Jasatepe collection (Detev 1959: fig.75-78; Detev 1960: fig. 49) includes figurines with a rotund haunch, a slender waist, a rounded chest, and spherical head with a schematic face, made by two finger impressions. The legs are slightly set apart, and their lower part is conical and without feet. The vulva is marked in relief; the breasts are indicated by plastic knobs, sometimes a V-shaped "neckline" is incised; the place of the ears is sometimes marked by one or two perforations. The incised decoration consisted of parallel oblique or horizontal lines covering the lower part of the body; in some cases spirals were incised on the behind.

Another early Chalcolithic iconographic figurine type includes the rare seated female figure. The figurine from Tell Pazardzik (Höckmann 1968: Taf. 39) presents a woman, probably pregnant, sitting on a disk-like chair. The haunch and the shoulders are excessively wide. The breasts are small, and the back is modeled naturalistically. The legs are joined. The hands are on the abdomen. The head is shaped as a lozenge with a schematic face. The figurine is covered with an incised decoration, emphasizing the breasts, the abdomen, and the haunch. The figurine is dressed, the neckline and the end of the dress are marked; the dress covers the knees but the pubic triangle is indicated by incisions. The figurine is interpreted as an image of the Mother Goddess.

Male clay figurines are quite rare in the Early Chalcolithic and are always fragmented. The face is modeled naturalistically to a certain extent and obviously bears portrait features; all anatomic face elements are presented, in most cases the ears have one or more often two sided perforations. The sophistication of social organization increased the ritual and mythological role of the tribal chieftain, and he probably gained priestly functions as well. It is obvious that two aspects of his activity were inseparable and probably reflected the belief that at a certain moment of the yearly cycle the tribal chieftain was also the husband of the Mother-Earth Goddess. For that reason, the male figurines can be regarded as portrait images of high-ranking representatives of the early farming community.

Early Chalcolithic culture includes some highly schematized anthropomorphic images as well. At least two flat clay figurines come from Tell Karanovo, presenting a highly stylized standing anthropomorphic figure with two legs and a head (Hiller, Nikolov 1993-1994, Abb. 10 e, f). The figurines are undecorated but the eyes and probably the navel are marked.

Late Chalcolithic standing female clay figurines are quite common (Nikolov 1988: 233-234). The body is modelled naturalistically (the haunch is slightly widened, the abdomen is big). The arms are stumps, and the head and face are schematic (the ears are sometimes marked by several side perforations, and there is a

row of dots below the mouth). Only a few figurines are either decorated with simple incised motives or the pubis is marked.

The female bust with schematic head and face, arm-stumps and a cylindrical body are quite typical for the Late Chalcolithic.

The seated Late Chalcolithic figurines are modeled separately from the four-legged chairs with a back. The body of the figurine is slightly bent backwards. The breasts, the hands on the abdomen, and the joined legs are modeled. These figurines are not decorated as a rule, but a figurine from Tell Djadovo is entirely covered with incised and encrusted decoration. The head of a figurine from Tell Dolnoslav is rounded, with a small "hat", and the hands are on the abdomen (Le premier or 1989: fig. 40). The figurine is covered with a cream slip, and the schematic face is painted with parallel horizontal red lines.

A special figurine from Tell Čatalka can be assigned to the seated figurines (Raduncheva 1976: Fig. 63). It is a schematized seated female figurine with stretched legs upon which is a small vessel; the arms hold the vessel, and the face is raised upwards. The figure of a small child is modeled on the back of the figurine. Seated female figurines with a vessel on their knees are ritually related to the rain invocation.

The standing marble figurines are typical for the Late Chalcolithic (Nikolov 1988: Abb. 60, 166, 167). The first iconographic type includes a schematized body emphasizing three main parts: head, breasts, and buttocks. The head is oval, sometimes with a small "hat" or laterally extending ears. The middle part of the body is lozenge-shaped, and the lower part is conical. The pubic triangle is also marked. The second iconographic type includes figurines that are more carefully modeled. The head is oval, the face is presented in detail, and the ears have three or four perforations. The breasts are modeled more naturalistically, and the hands are on the abdomen. The lower part of the body is conical, and the feet are sometimes separated. The pubic triangle is marked by incisions.

A group of bone figurines in the Late Chalcolithic mirror the marble ones. These are the so-called flat bone figurines (idols) that have smaller dimensions and were probably worn as amulets (Nikolov 1988: Abb. 5). Some figurines have copper rings in the ear-perforations, a torque on the neck, a copper belt on the waist, and the lower part of the legs is covered by thin copper plates. The flat bone figurines are images of the Mother Goddess and were worn as amulets for fertility.

The Late Chalcolithic is characterized by a great variety of male figurines. The number of male figurine heads increases considerably. It is obvious that the function of male characters diversified in the Late Chalcolithic (Nikolov 1991). Unlike female images, male images represent portrait features (Raduncheva 1976: Fig. 73-77). The mouth is marked in almost all cases, and often there are some small shallow holes, which probably indicate a kind of decoration, characteristic for persons of high social rank. Female figurines, interpreted as images of the Mother Goddess also bear such decoration; obviously the represented male had the top role in her cult. There is an analogy between the same Mother Goddess's figurines and the perforations on most of the Late Chalcolithic male heads' ears. The eyes and the nose are modeled naturalistically, sometimes the eyebrows and the eyelashes are marked; some figurines are bearded and the hair is marked.

The appearance of scepters, the first specific symbols of the highest level of the social hierarchy is related to the soci-

al and ideological changes in the Late Chalcolithic. A zoomorphic scepter, made of antler was found at Tell Karanovo.

Tell Racev yielded two seated male figurines with arms stretched forward (Le premier or 1989: 20). The head of one of the figurines is preserved; the face is modeled rather naturalistically. Parts of a big standing male figurine were found at Tell Dolnoslav (Le premier or 1989: fig. 32, 34). The head is naturalistically modeled, the eyes are marked with pieces of shell, and the arms are stretched forward.

The hollow Late Chalcolithic anthropomorphic figurines could be divided into two groups: figurines with a body consisting of one piece and figurines with a movable head-lid. The first group is represented by the figurine from Tell Starozagorski bani, having very big dimensions and two faces looking in opposite directions (Nikolov 1988: Abb. 3). There is a schematic face on both sides with several side perforations, and arms folded at the abdomen. The legs are massive and separated. The double-faced figurine represents a male and a female in one body; there are breast on one of the "sides", and the figurine probably represents the idea of the indivisible responsibility of the Mother Goddess and the tribal chieftain for the fulfillment of the natural and the social cycle. There is a part missing in all figurines from the second group. A hollow male body with a modeled phallus was found at Tell Gabarevo (Nikolov 1988: Abb. 14). The left hand is on the abdomen, and the right one touches the phallus. The legs are short and massive. The figurine was obviously used in a ritual that included pouring liquid through the phallus-tubule. Most of the movable heads-lids have schematized features and represent males. The head from Tell Gabarevo is naturalistic; it is notable for the red-painted diadem on the forehead (Nikolov 1988: Abb. 68). The face of the head from Tell Mihailovo is broad and oval with side-perforations at the ends and a relief nose, incised ellipsoid eyes, and finger-impressions below the nose.

One more group consisting of Late Chalcolithic female images should be added to the hollow anthropomorphic figurines (Georgiev 1961: Taf. XXVI, 6; Nikolov 1988: Abb. 173). They have a schematic elongated body, hollow stumps-arms in a gesture of adoration, schematized face, and the breasts are modeled occasionally. The face is marked by a relief nose, an incised mouth with a row of finger-impressions beneath, and side perforations indicating the ears. The Mother Goddess is probably pregnant, and the vertical incised bands on her body symbolize torrents of water. These figurines were probably elements related to the ritual of the rain invocation.

Flat clay loom weights with an incised sign or signs were found in Late Chalcolithic sites. Numerous weights from Tell Karanovo are marked with an incised hanging triangle lacking the base, sometimes with a short vertical stroke inside or with a lozenge with an inscribed cross. Both signs are female symbols. There are different signs on loom weights from other sites (e.g., a six-pointed figure reminiscent of a double axe but having additional knobs on a loom weight from Tell Starozagorski bani). The image could be interpreted as a bee or butterfly symbol related to the Mother Goddess. There are parallels of the specific sign on Late Chalcolithic figurines as well. The described signs impart anthropomorphic character to the loom weights and relate them to the Mother Goddess.

Late Chalcolithic sites yielded a great number of special type of bone figurines. They are made of metapodic bones and reminds one of a schematized standing human body. There are one or two side perforations at the upper end (the

"ears"). The figurines were probably worn as amulets.

There are also relatively big T-shaped anthropomorphic figurines made of bone (Nikolov 1988: Abb. 170). Their upper part (the head) is widened, the middle part (the neck) is narrow, and the lower part (the body) is bell-shaped. There are perforations for copper rings (at the "head") and attachment for clothes (at the "body").

The number of zoomorphic vessels in the Late Chalcolithic increases. There is also a change in the design of their modeling. Sometimes the upper part of the head is a movable lid, and sometimes the head-lid, covering the mouth of the vessel is missing (or probably has never existed). A Late Chalcolithic bull-shaped vessel, was found at Tell Cyrillovo; the animal is standing on its legs, the mouth of the vessel is on the forehead. Both sides of the body are decorated. The Tell Karanovo Late Chalcolithic deposits yielded a vessel shaped as an animal of unknown species (Georgiev 1961: Taf. XXXII, 5). The vessel is almost rectangular with four short legs. The nose and the eyes are modeled in relief on the head-lid. The back part of the head, the neck, and the body are decorated. The last group of vessels represents standing four-legged animals and includes the images of a hedgehog (Nikolov 1988: Abb. 8). There are several vessels of this kind. The body is rounded and densely covered with conical knobs. The modelled neck ends with an opening. These vessels probably have not had a lid shaped as a head. Bird-shaped vessels are relatively rare. A Late Chalcolithic vessel from Tell Sadievo probably represents a partridge (Nikolov 1988: Abb. 175); it has a short cylindrical neck but probably never had a head-lid. Another Late Chalcolithic vessel (from Tell Rumanya) is a schematized image of a water bird (Nikolov 1988: Abb. 47). The body is shaped as a symmetrical bowl with an immovable lid and there is a side cylindrical relatively long neck without a head-lid.

The zoomorphic vessels also include two Late Chalcolithic "rhytons" shaped as a bull horn (Nikolov 1988: Abb. 80). They have an arched handle connecting the two ends of the vessel and are decorated with red painted rings. The two vessels were found at Tell Starozagorski bani.

A vessel with a zoomorphic body on four massive legs, a head with an opening at the top and a wide anthropomorphic face was found in the Late Chalcolithic layer of Tell Okrzhna Bolnitza. The mouth is modeled as a spout, the nose is in relief and the ears have perforations for copper rings; the ellipsoid eyes are painted in graphite, and the pupils are marked with dots. The body of the vessel is decorated with complicated graphite painted motifs.

Early Chalcolithic altars have three or four legs, an inscribed receptacle, and zoomorphic elements - such as a protome of a ram or he-goat - attached to the rim of the receptacle (Detev 1959: fig. 82; Georgiev 1961: Taf. XX). Decoration on the out side is incised and often filled with white matter. There are also short four-legged altars with flat upper surfaces (shaped as tables).

The rectangular four-legged altars with flat upper surfaces are very typical for the Late Chalcolithic; two elongated bow-shapes eyes are incised on one of the long sides. The Late Chalcolithic figurines of the Mother Goddess often have eyes with the same shape and reconfirms the relation between these objects and the cult of the Goddess.

There are Early Chalcolithic three-legged tripods with shallow receptacles and an anthropo-zoomorphic head attached to one of the corners.

Chalcolithic clay models of houses present two main house types: a hut and a house with vertical walls and gabled roof. Depending on the dimensions, they are either hollow or have a round opening. Various architectural elements are sometimes modeled in relief, (e.g., the crossing beams forming the gable). Incised lines on the roof and the walls also mark some of the construction features. The models are likely related to the cult of the house-spirit protector, who obviously was imagined as a snake.

Oven models are typical for the Chalcolithic, especially in its later stages. They usually have a horseshoe-shape and a small platform in front of the entrance. The dome of the oven is rounded and sometimes decorated with incised lines.

Sanctuaries appear in the Chalcolithic, inclusively at some sites. Fragments of walls with a complex polychrome decoration were found at Tell Karanovo and Tell Azmak. Buildings with ritual functions were unearthed also at Tell Dolnoslav; a relief face with painted elements was found on the wall of a building. A Late Chalcolithic clay model of a sanctuary from Tell Starozagorski bani (Nikolov 1988: Abb. 17) is represented on a high hollow podium, and the "sanctuary complex" consists of a building with a gabled roof flanked by two high hollow columns widening as funnels at the top. Small clay altars were found at Late Chalcolithic sites; they are shaped as the gabled façade of a building, probably a sanctuary. Images are incised usually on both sides. Anthropomorphic protectors are modeled on an artifact from Tell Sadievo. These small altars are probably sanctuaries in miniature.

Stamped seals are not very common in Chalcolithic deposits (Makkay 1984: 13, 22, 30-31, 44). They have rounded faces and a conical handle. The images incised on the face belong to the two main types: a spiral or concentric circles. The signs incised on the face of a big Late Chalcolithic stamp seal from Tell Karanovo (Nikolov 1988, Abb. 181) were interpreted years ago as the oldest form of writing. They are separated in four sectors by two lines crossing each other at a right angle.

Discussion

The culture of the Neolithic and the Chalcolithic of Northern Thrace has been presented with a minimal amount of interpretation. The available evidence and the observations could be used to study the cultural phenomena and historical processes in Thrace and the vast regions of Anatolia and the Southeastern Europe. Even a short exposé on these aspects requires a special study, that is why I am going to comment on few that I consider most topical.

1.The late prehistoric period in Northern Thrace has fixed time limits: it starts with the establishment of the first sites with pottery and smoothed stone tools and ends with the late graphite painted pottery; according to the calibrated ^{14}C dates it lasts at least two thousand years and covered the 6th and the 5th millennium. This period is subdivided archaeologically into the Neolithic and Chalcolithic periods. The criteria for the beginning of the Chalcolithic are derived from the pottery assemblage, i.e., the appearance of graphite painted pottery reflecting the emergence of copper metallurgy. The inner sequence and chronology of the two periods, proposed by specialists, are based on specific features of the pottery assemblage; a final version was used in this study. In the mid 80's, J. Lichardus proposed a sequence and chronology of the late prehistory in Northern Thrace, and according to his system, the Chalcolithic period includes the Karanovo VI period only (Lichardus, J., Lichardus-Itten, M., Bailloud, G., Cauvin, J. 1985: 367-

412). The relevant criteria however are not sought in the excavated evidence but are formulated on the basis of interpretation. With this cultural and historical sequence, J. Lichardus is trying to relate Northern Thrace to the Middle European model, but in fact emphasizes the differences with the Near Eastern model, which is valid for Northern Thrace. The correct methodological approach requires evidence from excavation to build chronology. The picture is complicated and what is needed is the creation of an overall concept for the sequence and the chronology of the late prehistory of the Southeast Europe.

However, the essential question about the sequence and chronology of Northern Thrace is still open. The difference between the two stages within the Chalcolithic seems to be in conformity with the facts from a methodological point of view, but specifying the criteria for the study of the Thracian pottery will provide a detailed and working subdivision.

2. The problem of continuity and discontinuity in the development of the late prehistory of Northern Thrace has been discussed many times in various publications. Almost no one doubts that there is a considerable continuity in the Neolithic and the Chalcolithic assemblages in the region. On the other hand, the assumption of two thousand-years of development without external contact seems quite illogical. There is evidence of foreign elements in the assemblages of Northern Thrace, which could be interpreted as the result of a foreign influences or an infiltration of groups from neighbouring regions. Despite this, serious demographic changes have not been demonstrated.

The only study that addresses this problem is based on the Neolithic pottery from Tell Karanovo (Nikolov 1998a: 154-161). The study supports the idea of continuous dynamic development of artifactual assemblages in northeastern parts of Northern Thrace with the permanent emergence of new signs and the gradual dying out of old ones. The existing continuity is beyond any doubt but is accompanied by more or less expressive innovations. A more notable change is observed at the transition between the Karanovo I and Karanovo II periods, when the admixtures in the paste change, and the red slipped and painted pottery disappear as a technological group. All other elements, however, continue to exist unchanged.

At least four transformations of the Neolithic assemblages could be differentiated in Northern Thrace (see the sequence of the Neolithic and the territorial range of the Neolithic periods). The Karanovo variant with six stages of development is characteristic in the northeastern parts of the Thrace. The Kazanlık variant has four stages of development. The Kapitan Dimitrievo variant has four stages of development and covers the western part of Northern Thrace. A variant with three stages of transformation ought to exist in the Eastern Rhodope area, but not enough evidence exists to say for sure.

3. There is no doubt that the origin of early Neolithic cultures with painted pottery in the central parts of the Balkans arrived from the South and especially from South-West Anatolia. Important evidence supporting such a thesis comes not only from the indisputable typological similarities between assemblages but the geographical link connecting the two regions, forming an enormous arch that linked the Aegean islands from the Taurus to the Carpathian basin. Two other neighboring regions - North and especially North-West Anatolia and the eastern parts of the Balkan peninsula (up to Moldavia) - remain between this "exterior" arch and the Black Sea; in contrast with the "exterior" arch, the early Neolithic

culture in the "interior' arch is characterized by dark unpainted (with few exceptions) pottery.

A number of arguments, presented in the last two decades, support the Mesta and especially the Struma valleys as routes for the distribution of Anatolian elements into the Central Balkan area (Nikolov 1989a). An assumption was made that the Early Neolithic culture in Northern Thrace penetrated through the central Balkan zone (Nikolov 1989b: 29-30). Part of the Hoca Çeşme site situated on the Maritsa estuary was excavated (Özdoğan 1993: 182-186): the results from the excavations stirred interest in the old thesis that the origin of the Neolithic in Thrace (and in the South-East Europe as well) is a result of a cultural interaction with Anatolia via the Straits.

According to the Hoca Çeşme evidence, a small group of early Neolithic farmers, bearers of a specific culture, quite different from the Thracian one, settled on the Aegean coast of Eastern Thrace, near the Maritsa estuary in the early 6th century BC. There is no doubt that this group came from the western Anatolian coast (Özdoğan 1998). As early as its establishment, though situated on a hill, the village of the Anatolian settlers was surrounded by a massive stone wall. The first two village development phases yielded small round houses, with walls of stone or stone and timber construction. The vessels have flat bases, orange-red or black slipped, and are undecorated. The plan and the character of the village changed during the third phase, though the stone enclosure wall was still in use. The houses were similar to the ones in the Thracian inland - rectangular in plan with walls made of wattle-and-daub. Red slipped and white painted vessels - typical for the Thracian inland - appear.

The Hoca Çeşme assemblage has also been found at the eponymous site at the Maritsa estuary in Thrace. Only one site dating to the first half of the 6th Millennium - Yarımburgaz cave near Istanbul - was excavated in Eastern Thrace (Özdoğan, Miyake, Özbaşaran Dede 1991: 66-74). It was inhabited by an early farming group, belonging to the Fikirtepe culture from Northwestern Anatolia. Elements of Hoca Çeşme influence are only observed in pottery technology (e.g., specific colours and burnishing). The nearest sites of Karanovo I culture to Hoca Çeşme are the ones in Krumovgrad and Kardjali in the East Rhodope area. Two sherds similar to the ones from the Hoca Çeşme phases I and II were found at Krumovgrad (Stefanova 1998: fig. 2 *2,3*). The head of a female clay figurine of an Anatolian type was found in Makri, Western Thrace, near the Maritsa estuary (Efstratiou 1993: fig. 10 *C*). The find has no reliable stratigraphic position but could be related chronologically to the Makri I layer, contemporary with the late stages of Karanovo I culture. For the present, there is no other evidence supporting a probable distribution of Anatolian characteristics in Thrace.

The assumption of a migration route from Anatolia to Europe via the Straits and Thrace was made several decades ago. In the 80's and 90's, evidence supporting the idea of a stream of people flowing from Anatolia via the Aegean to the Central Balkan zone was revealed, but another thesis was proposed, namely the one for the distribution of early farming Karanovo I culture in Thrace moving from west to east, i.e. from the Upper Maritsa valley to the Maritsa estuary (Nikolov 1989b: 29-30). The results from the archeological excavations in Eastern Thrace in the 80's and especially at Hoca Çeşme in the early 90's definitely rejected the thesis for large-scale migrations of early farming groups via the Straits in the early 6th millennium BC. The founders and the inhabitants of Hoca Çeşme were settlers from Western Anatolia who settled down on the uninhabited Aegean

coast but obviously met the hostile neighbourhood of the Karanovo I culture. To provide for the security of their people they had to erect and keep in repair a stonewall enclosure, an unfamiliar phenomenon in Thrace until the Early Bronze age. Nevertheless, in Hoca Çeşme phase III, the assemblage was "thracianized" to a considerable extent, i.e., it adopted many characteristics of the surrounding Karanovo I culture, and later on the Anatolian settlers were obviously entirely assimilated.

The painted Early Neolithic pottery is distributed from west to east in Thrace and reaches the Lower Tundca and Maritsa valleys (in some cases even further east) with a certain delay in comparison to the Central Balkan zone. For that reason, the duration of the painted pottery period in Northern Thrace varies in the different parts of the area: it is longest in the western provinces, and shortest in the northeast. The painted Early Neolithic pottery dies out gradually, but in the opposite direction, from east to west. The dark Neolithic pottery appears first and has its longest life in the northeastern parts of Northern Thrace, and its shortest life in the west. The origin of the dark unpainted pottery must be sought in the "interior" arch mentioned above, i. e. in the so-called Circumpontic zone (Nikolov 1998b). The gradual distribution of this pottery in Northern Thrace is not related, however, to ethnic and demographic changes[4].

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[4] The text was translated in English by Tatiana Stefanova (Archaeololgical Institute with Museum-Sofia), to whom I am deeply indebted. For certain number of the colour photos I am obliged to the friendly help of Nikolai Genov, the rest were made by the author (3-5, 10, 14, 18, 34). The drawings are made by J. Kostova (art assistant in the Archeological Institute with Museum-Sofia in the 60-s) (plates 1-3, 10-12, 14, 17, 19-21, 23), Austrian students at the Salzburg University, participating in the Bulgarian-Austrian team excavating tell Karanovo (plates 4-9, 15, 16, 18), by S. Goshev (plate 13), N. Vassileva (plate 22) and G. I. Georgiev (plate 24).

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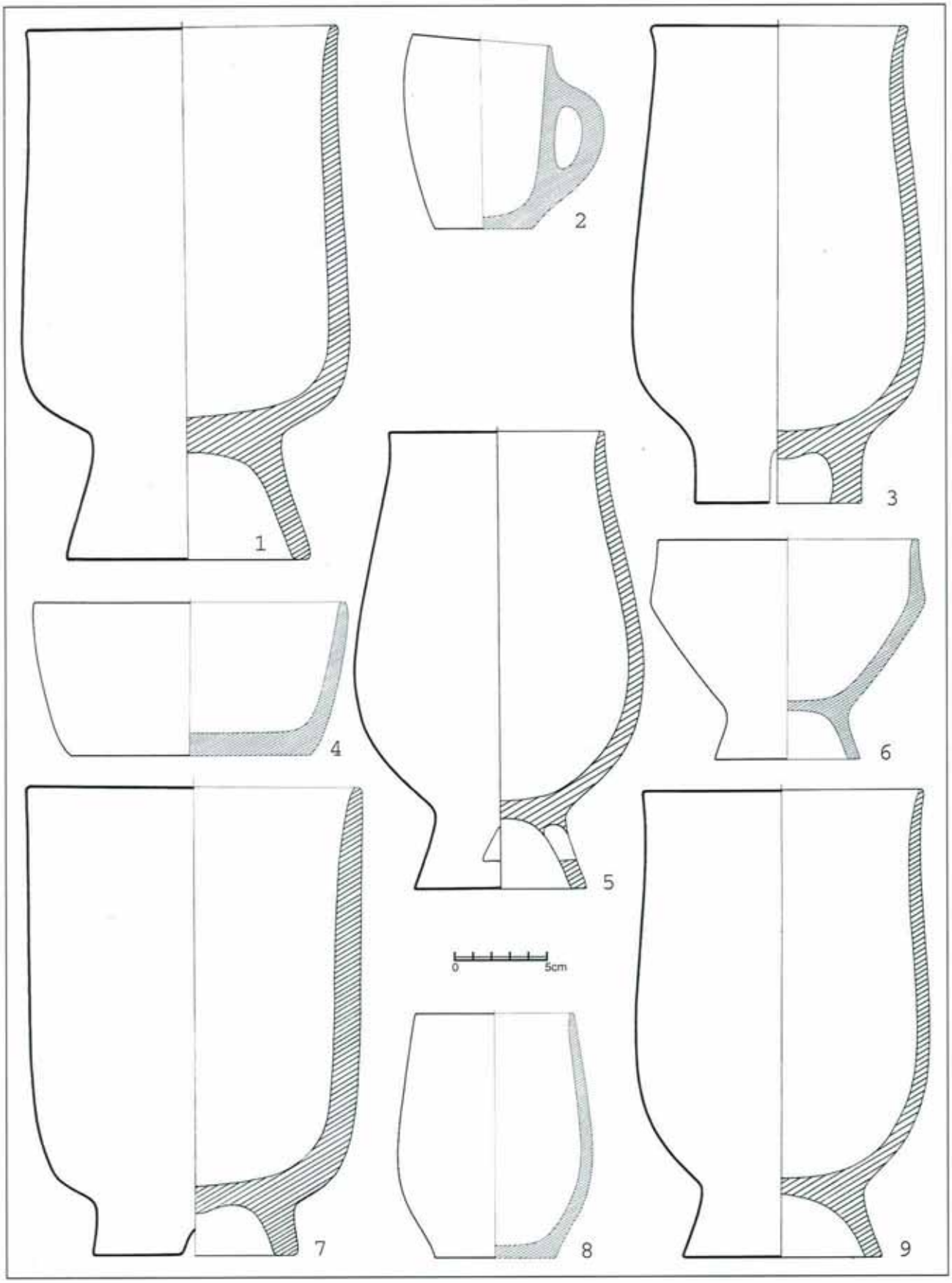
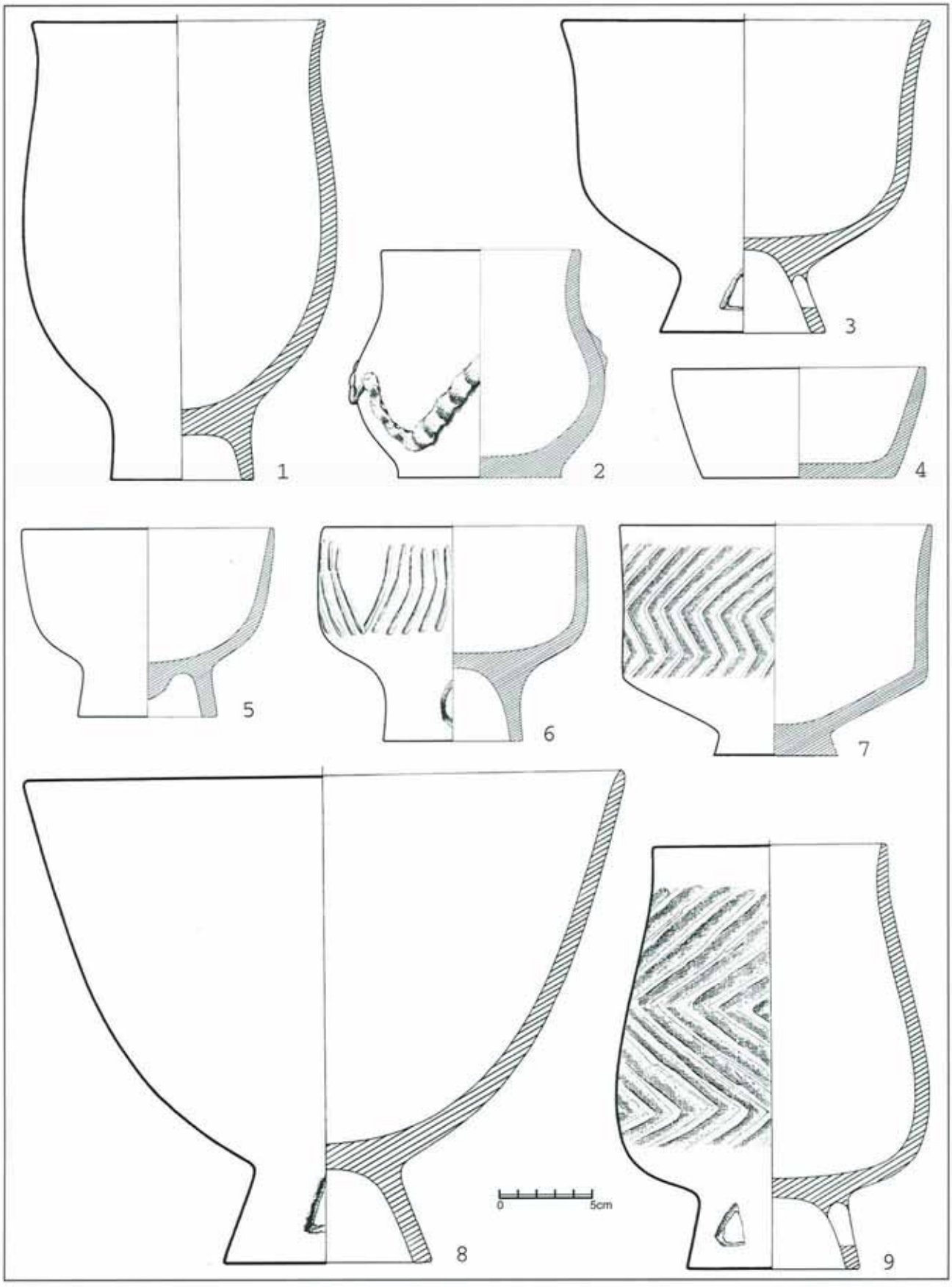


Plate 1. Tell Karanovo, Nova Zagora region. Pottery. Early Neolithic.



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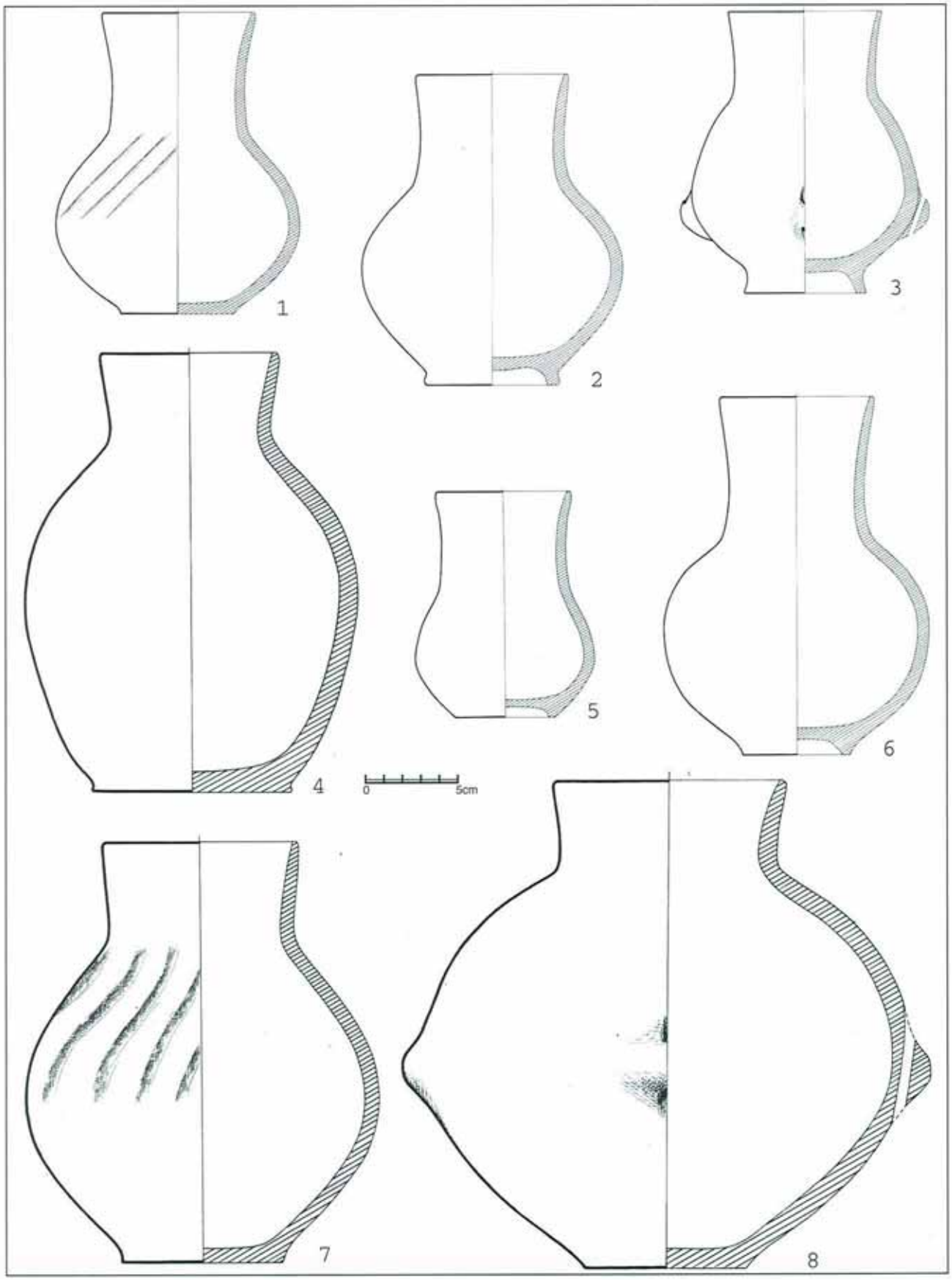

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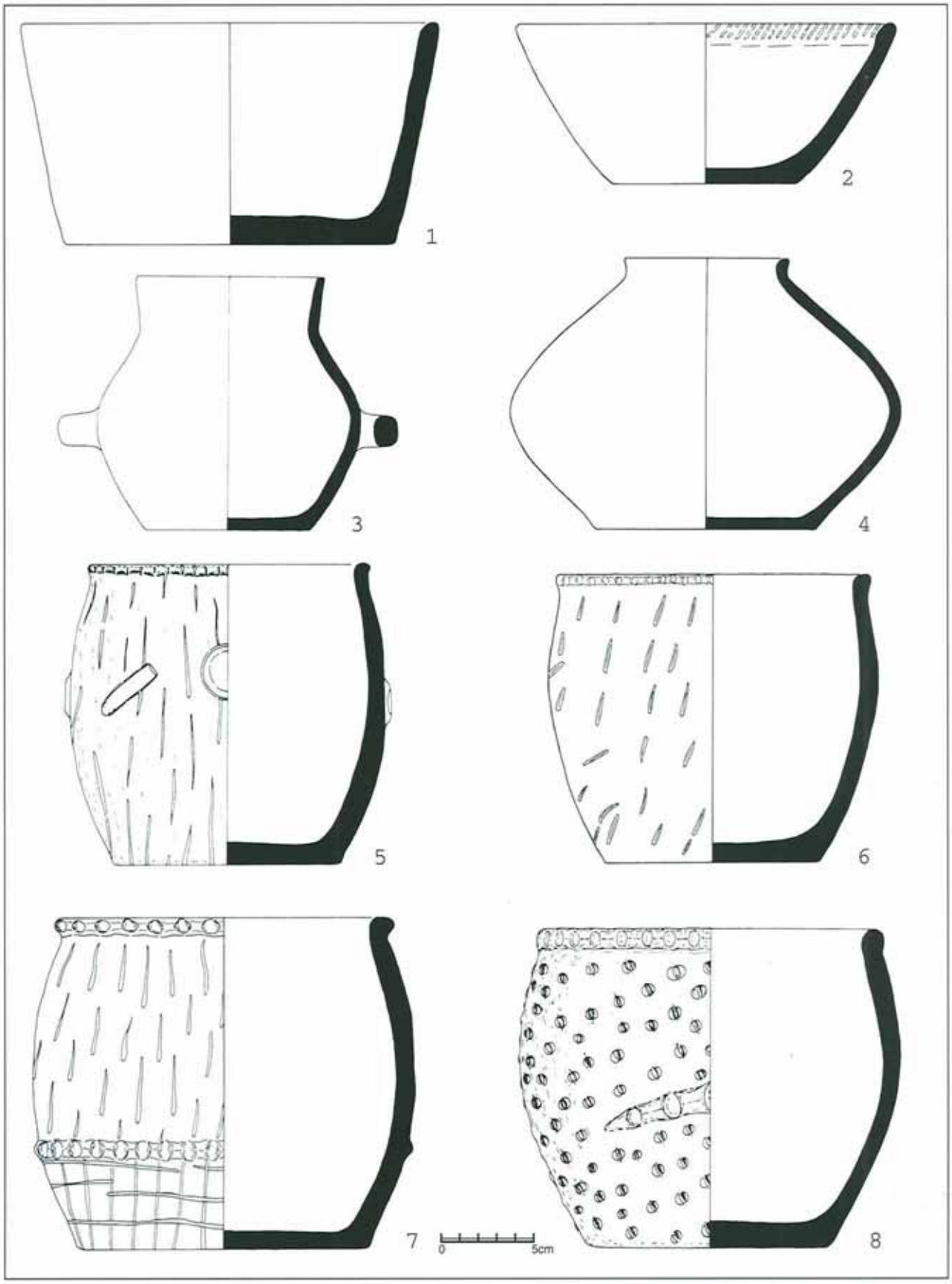

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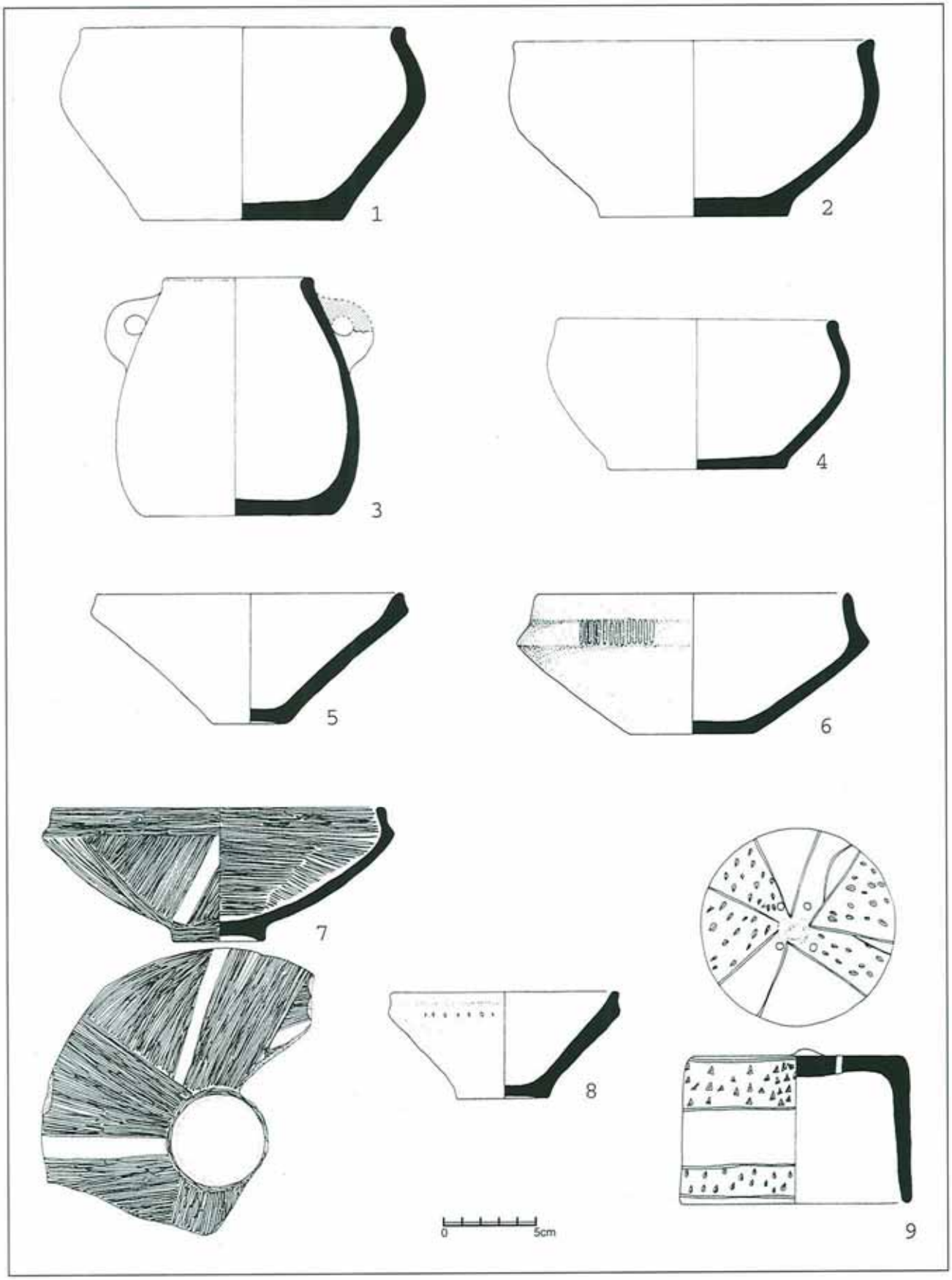

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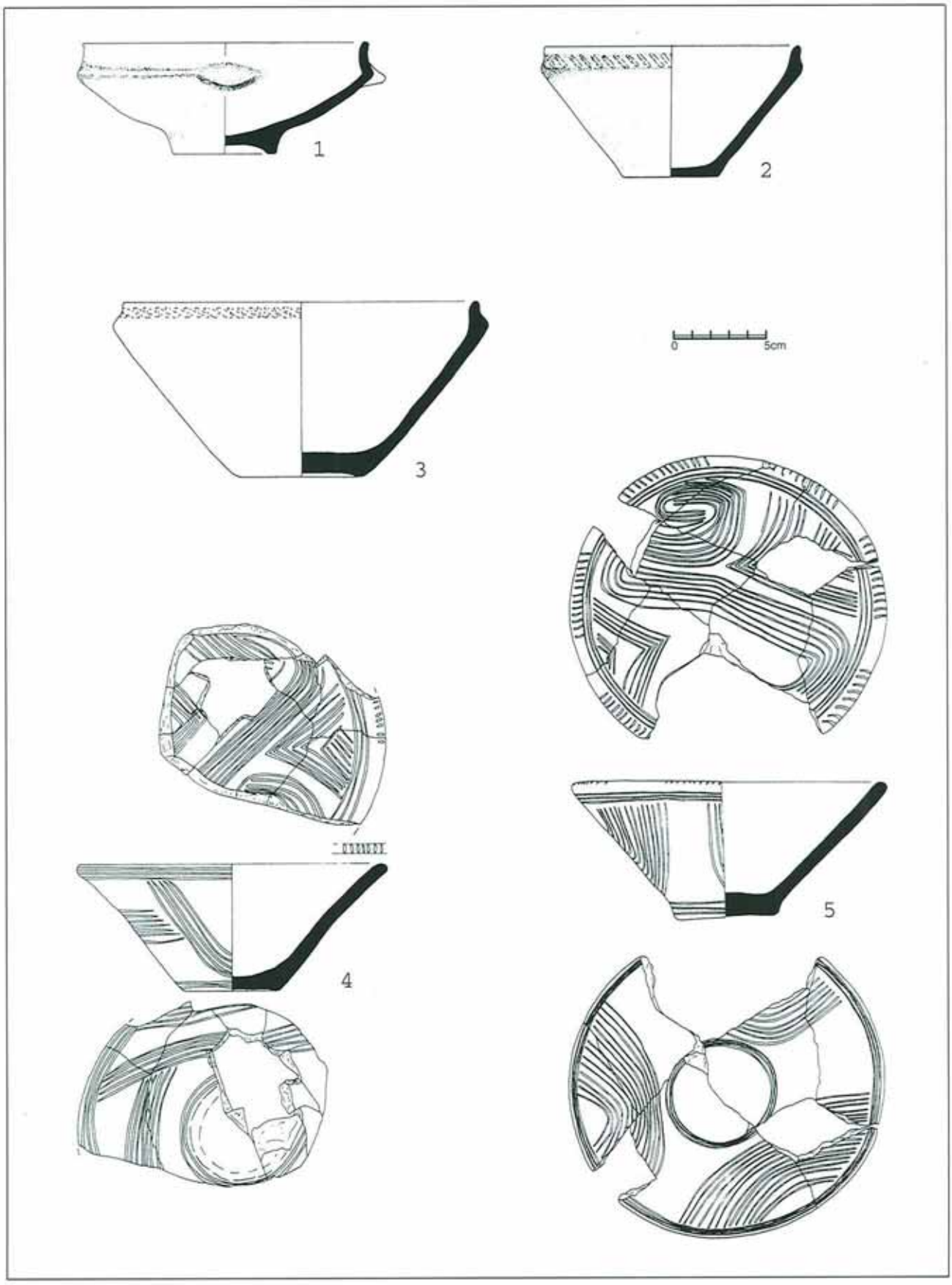

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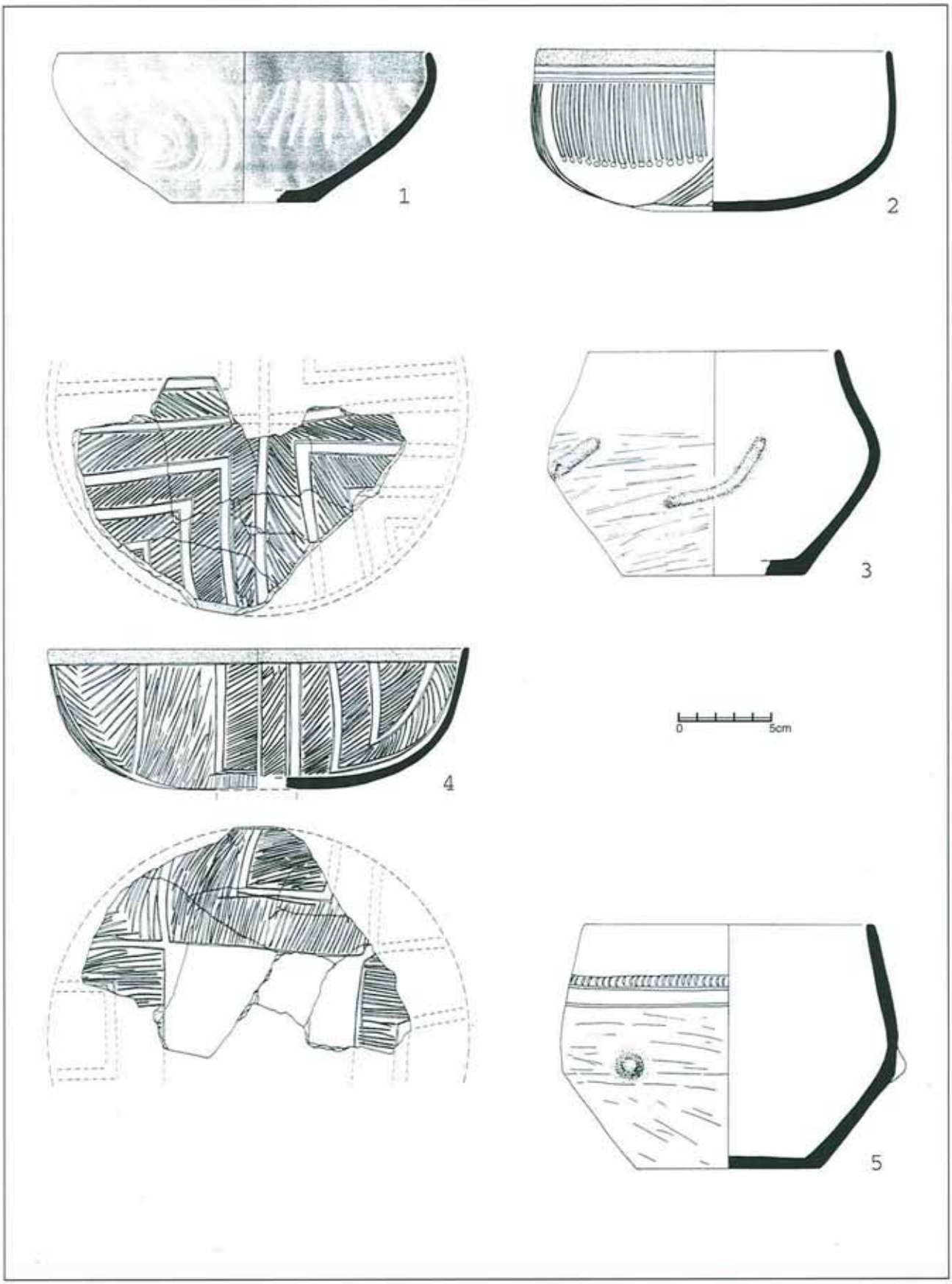
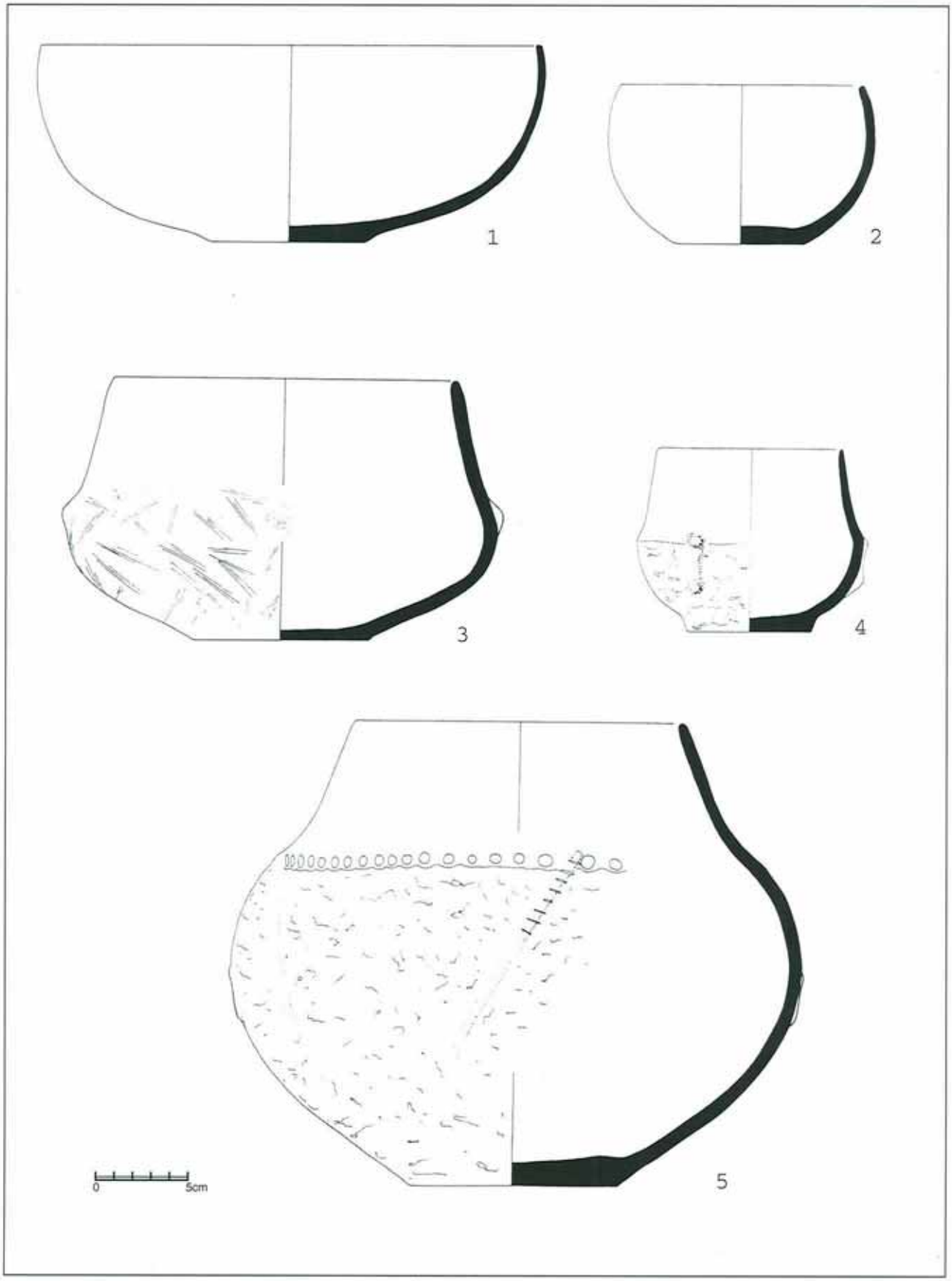


Plate 7. Tell Karanovo, Nova Zagora region. Pottery. Early Chalcolithic.



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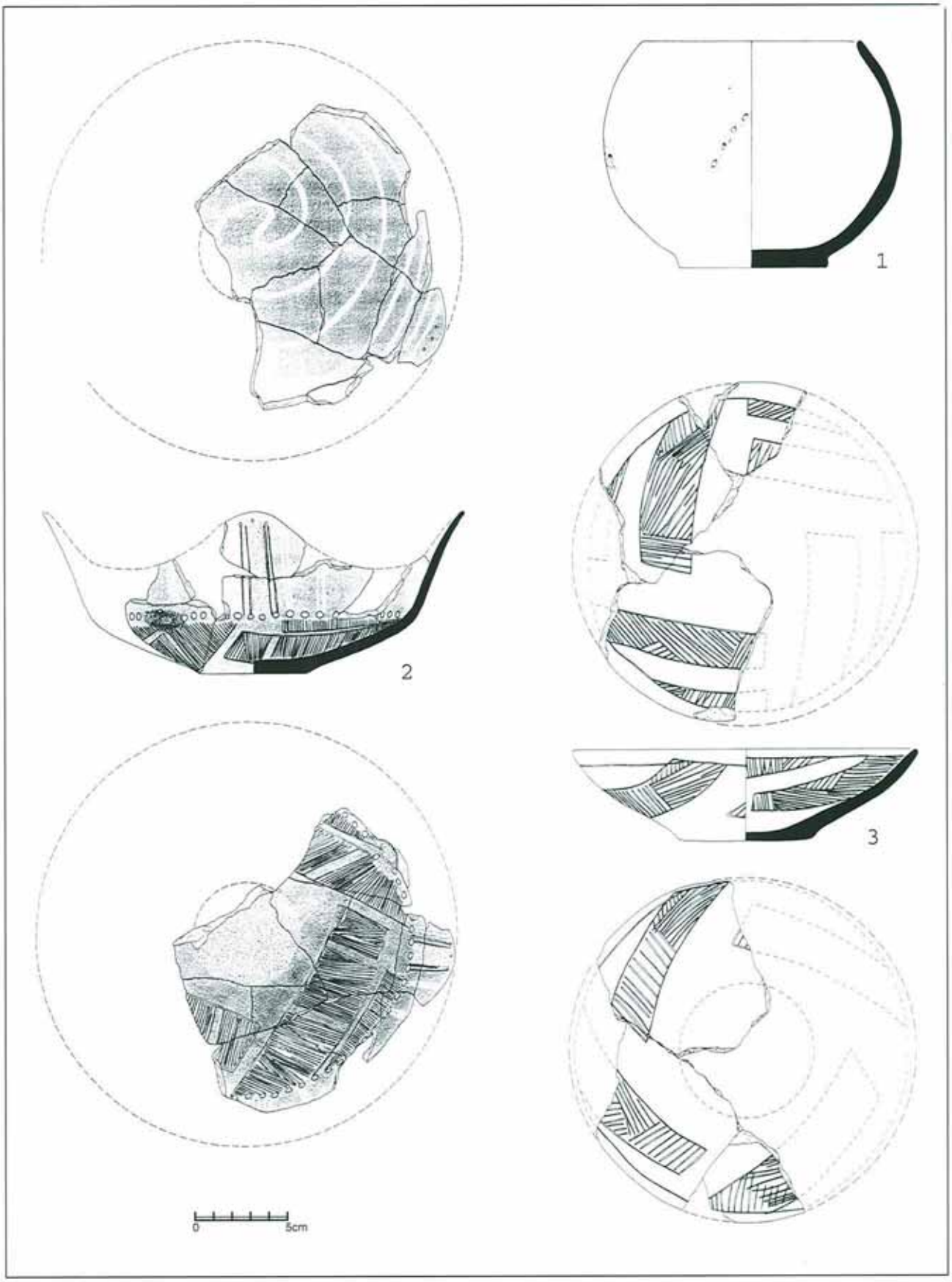

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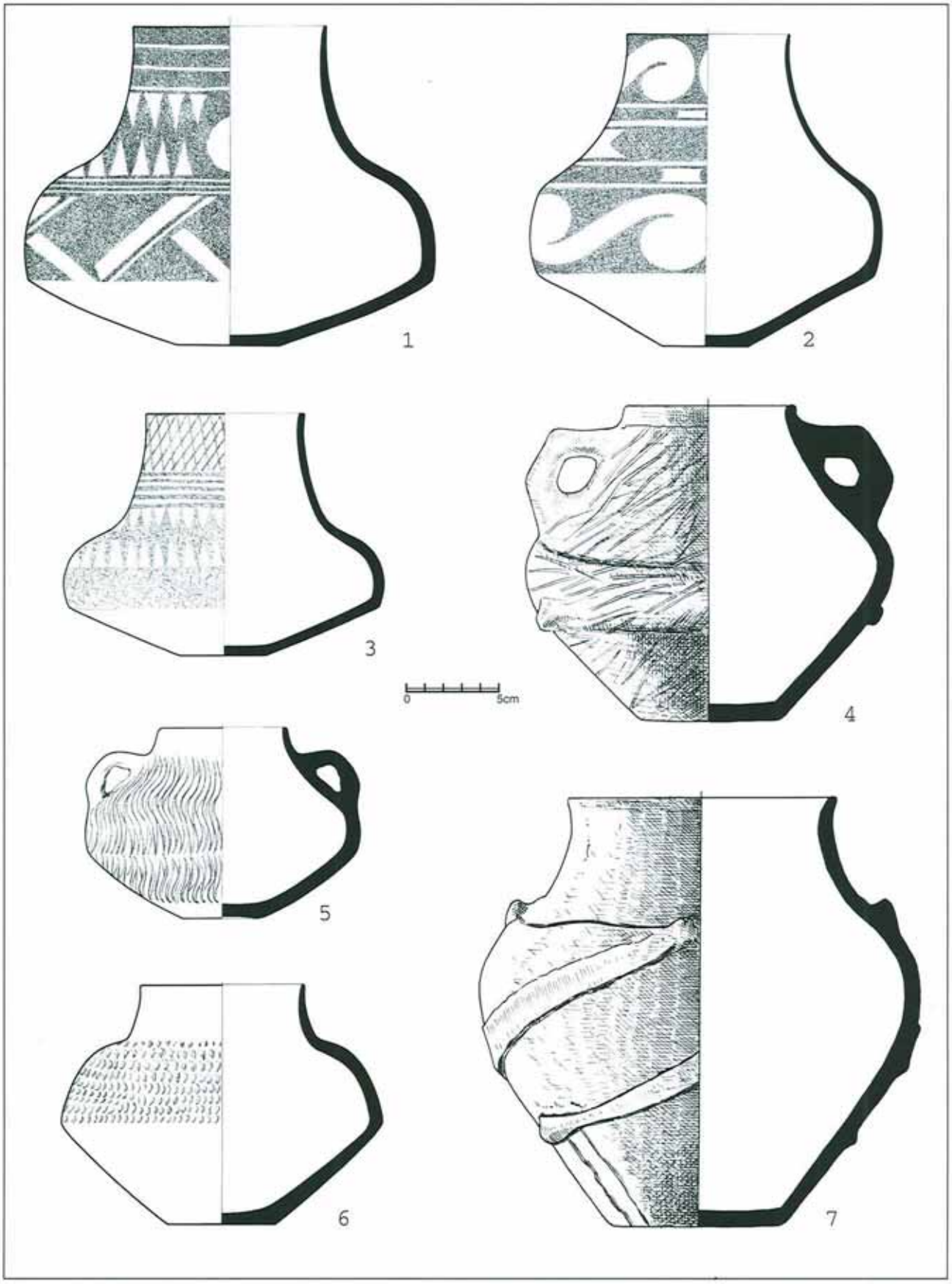

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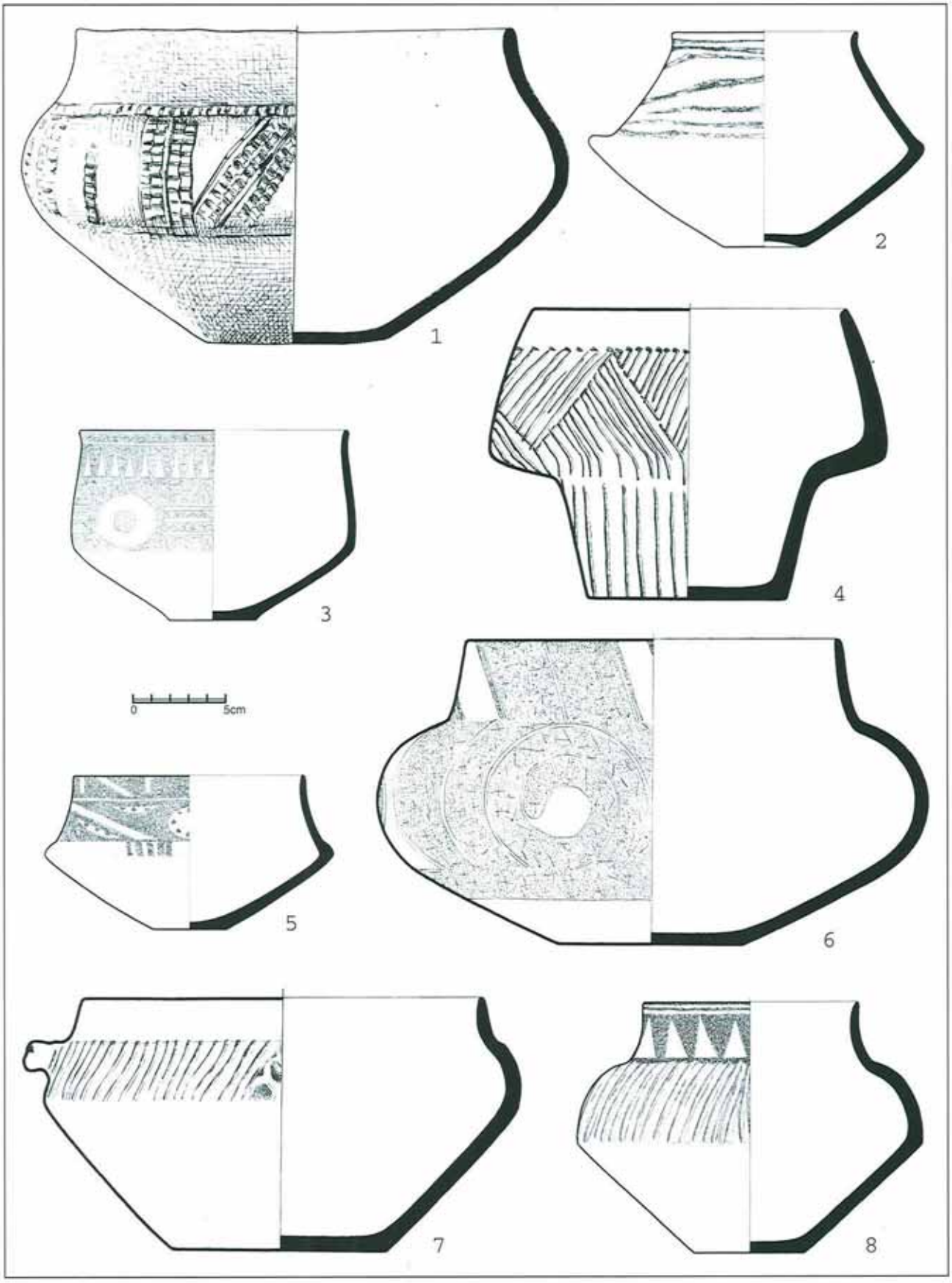

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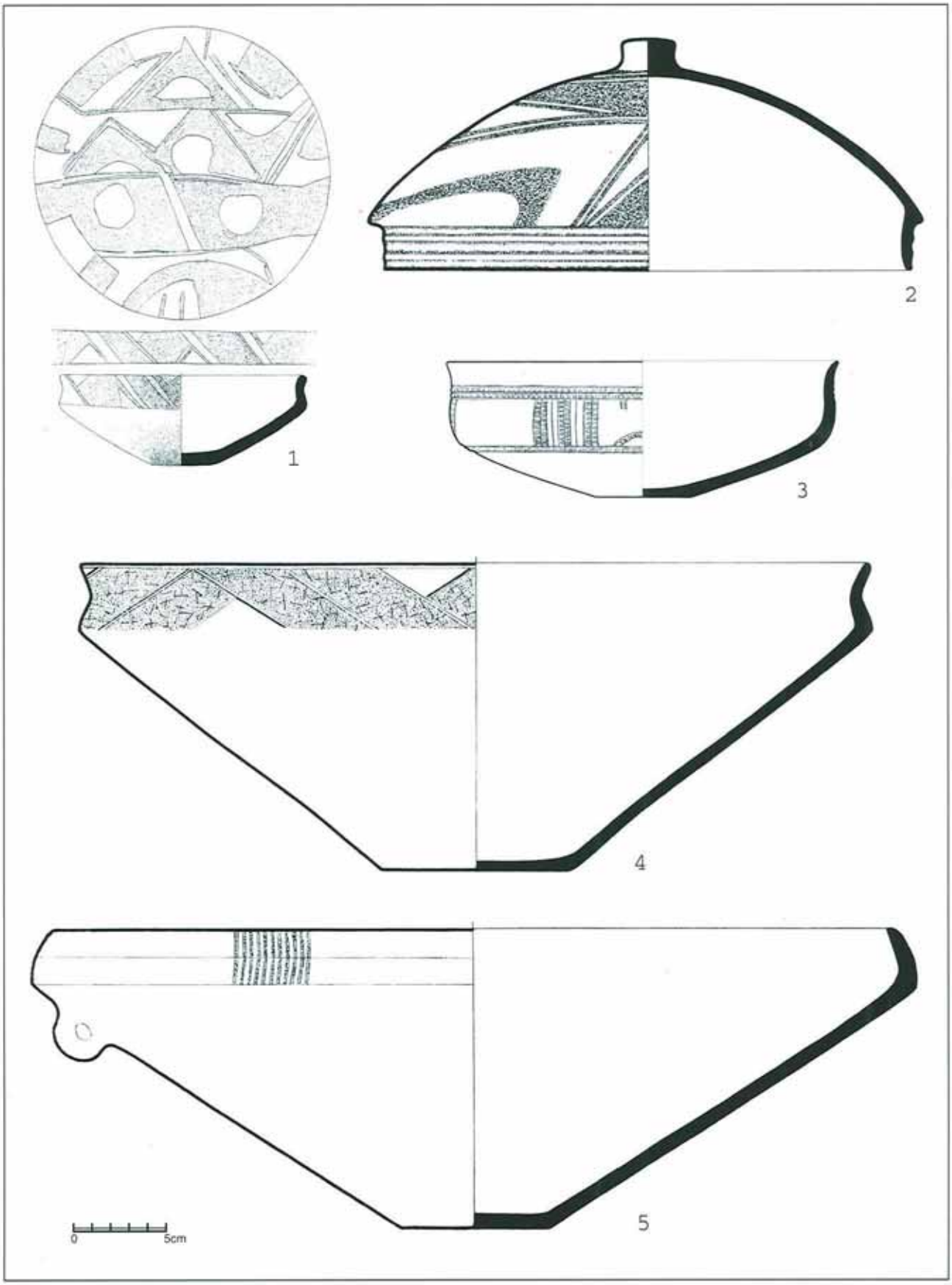

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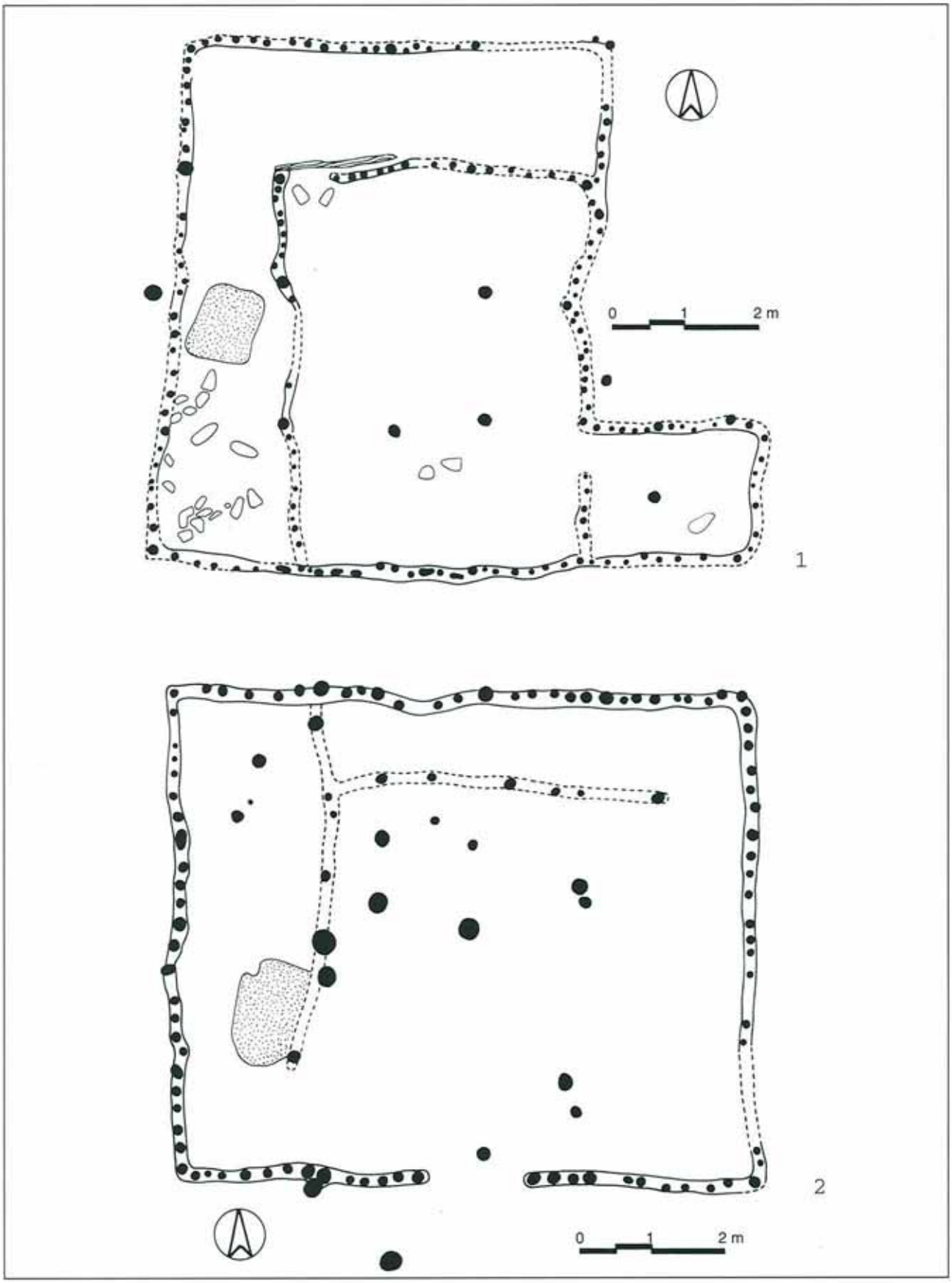


Plate 13. Tell Karanovo, Nova Zagora region. Plans of two houses. Late Neolithic.

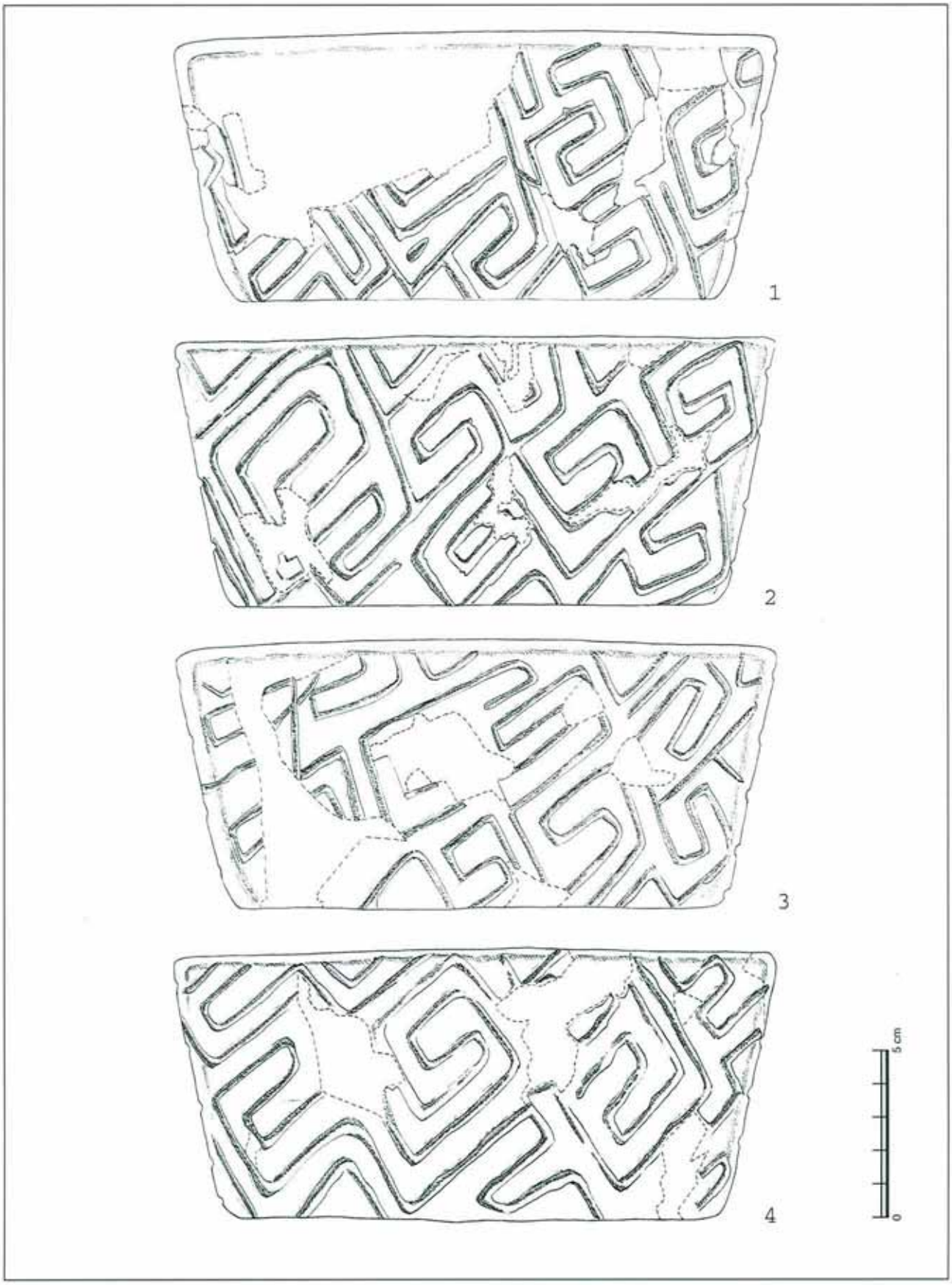


Plate 14. Tell Karanovo, Nova Zagora region. Ornamentation on a square pot. Early Neolithic.

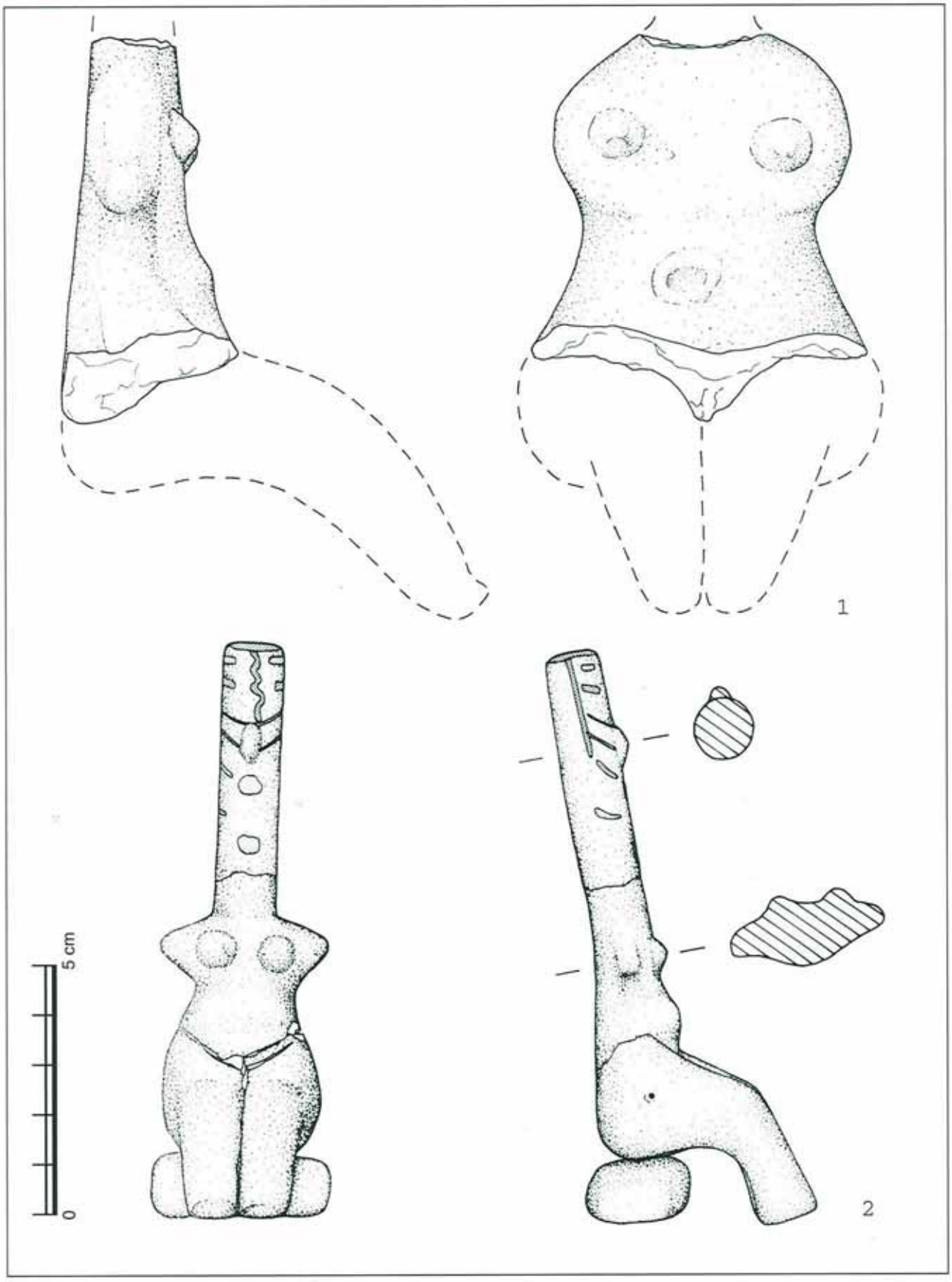


Plate 15. Tell Karanovo, Nova Zagora region. Anthropomorphic clay figurines. Late Neolithic.

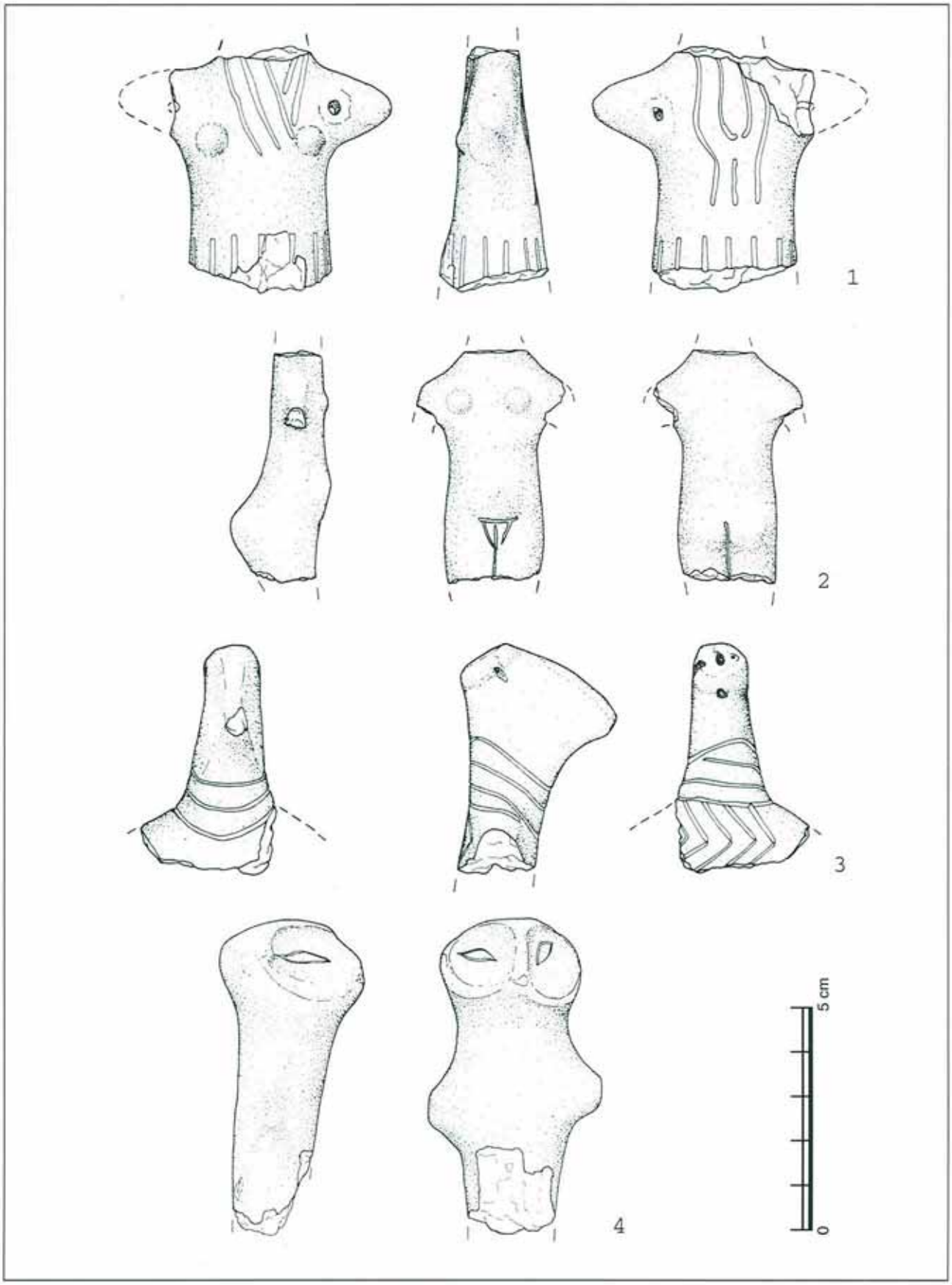


Plate 16. Tell Karanovo, Nova Zagora region. Anthropomorphic clay figurines. Late Neolithic.

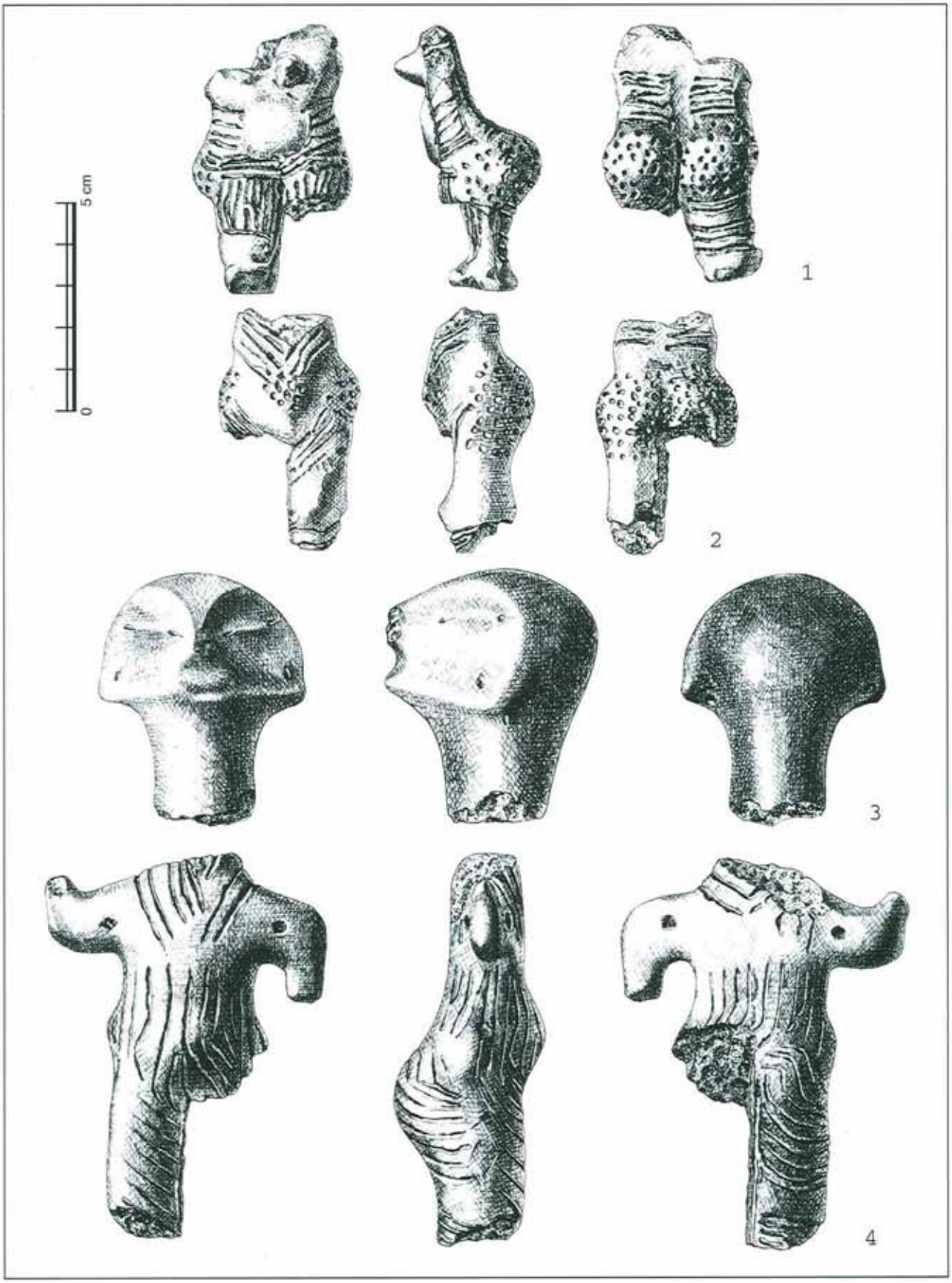


Plate 17. Tell Karanovo, Nova Zagora region. Anthropomorphic clay figurines. Late Neolithic.

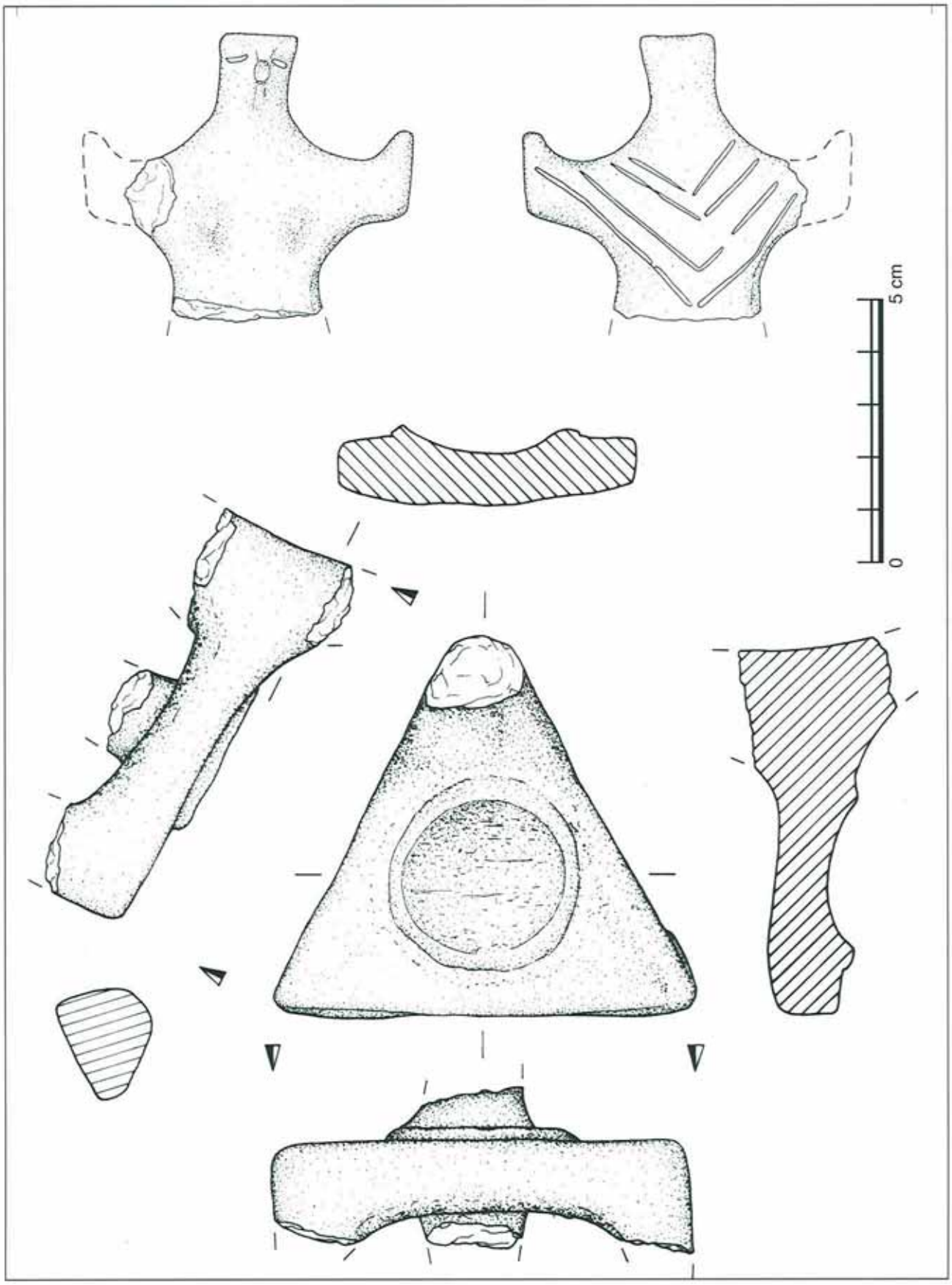


Plate 18. Tell Karanovo, Nova Zagora region. Anthropomorphic clay figurine and clay altar. Early and Late Chalcolithic.

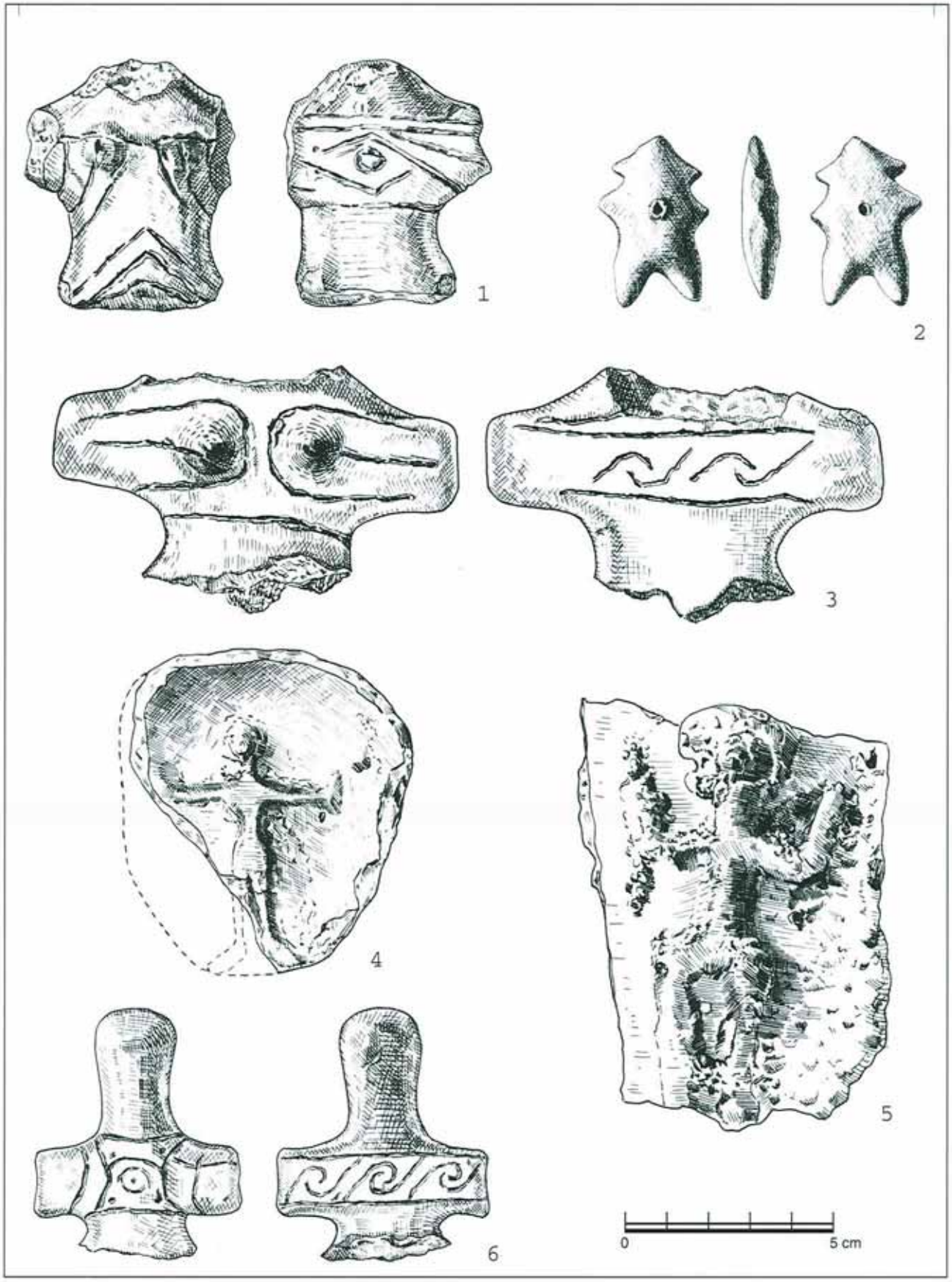


Plate 19. Tell Karanovo, Nova Zagora region. Anthropomorphic clay figurines and anthropo morphic relief images on pottery. Early Chalcolithic.

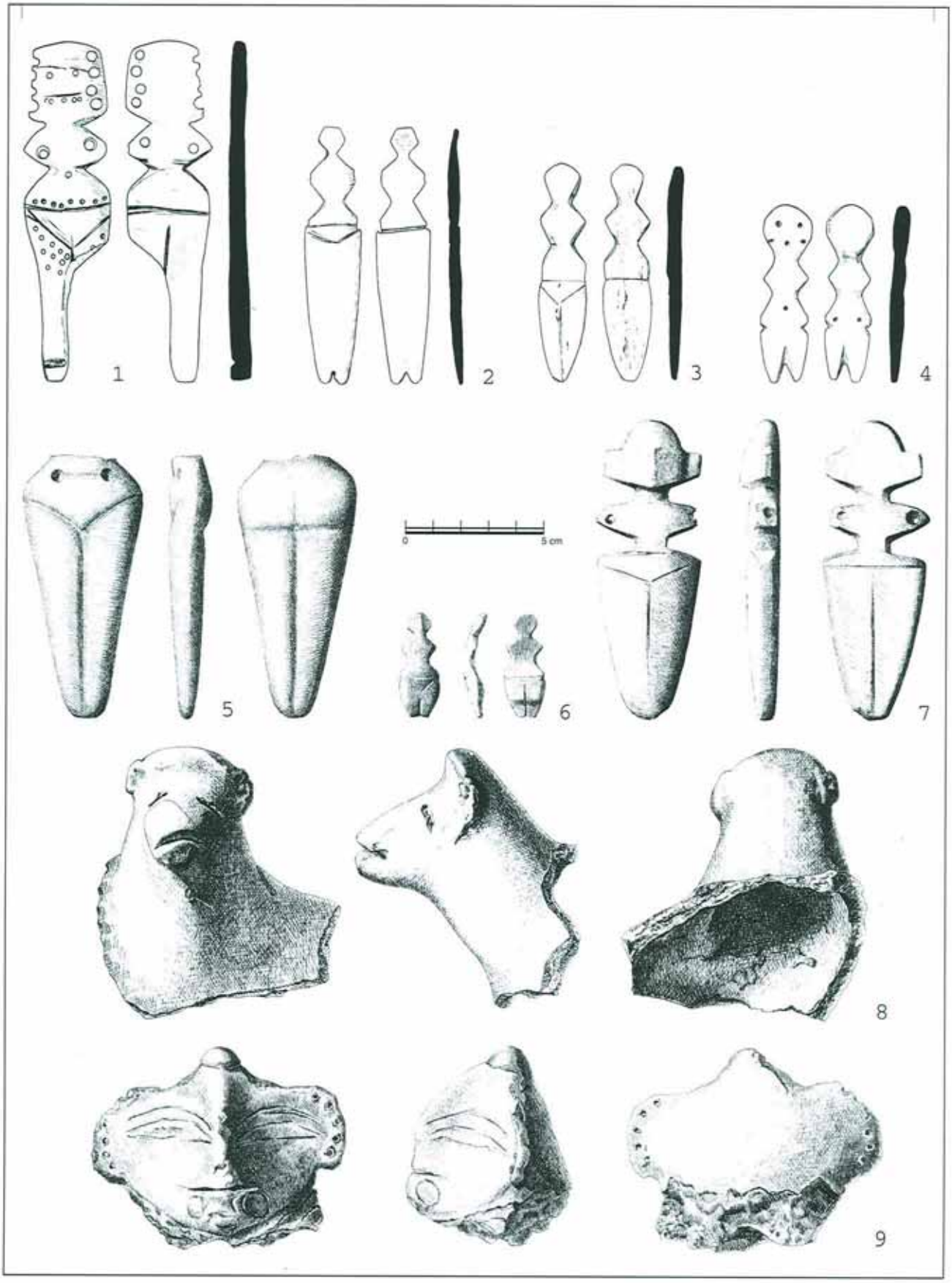


Plate 20. Tell Karanovo, Nova Zagora region. Anthropomorphic and zoomorphic figurines made of marble, bone and clay. Late Chalcolithic.

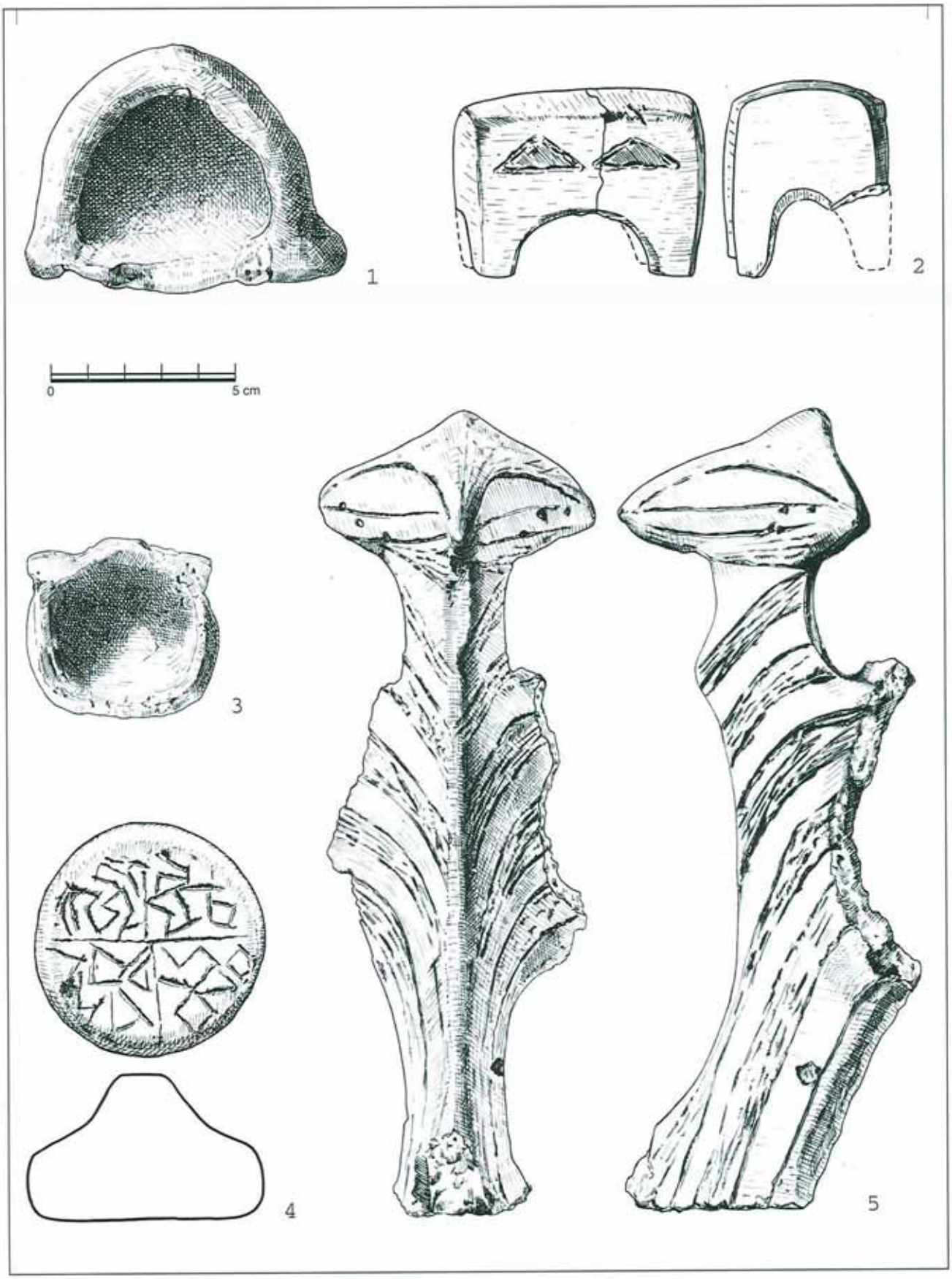


Plate 21. Tell Karanovo, Nova Zagora region. Oven models, a stamp seal with engraved signs, a tripod and part of an altar. Late Chalcolithic.

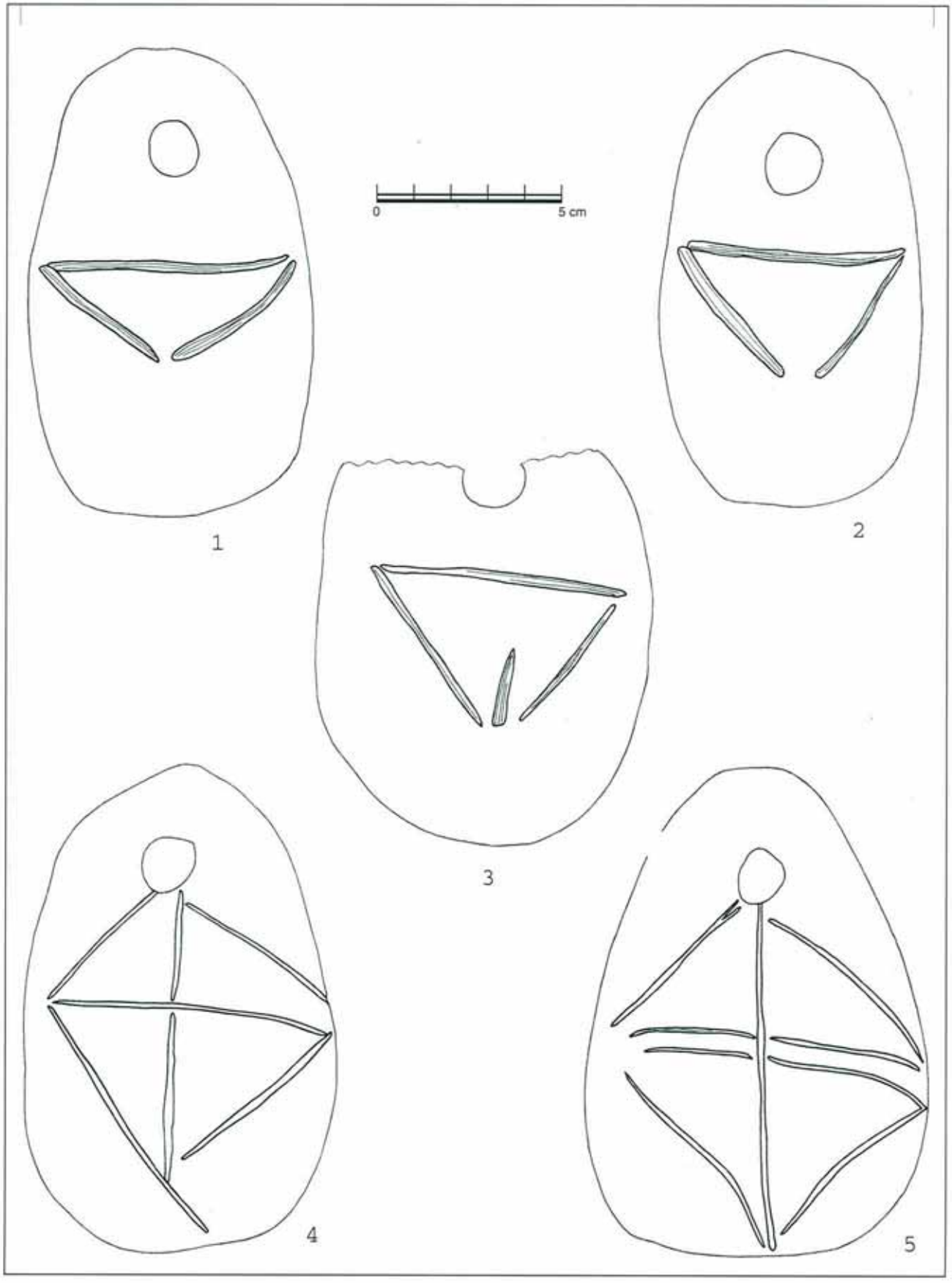


Plate 22. Tell Karanovo, Nova Zagora region. Clay loom weights with anthropomorphic features. Late Chalcolithic.

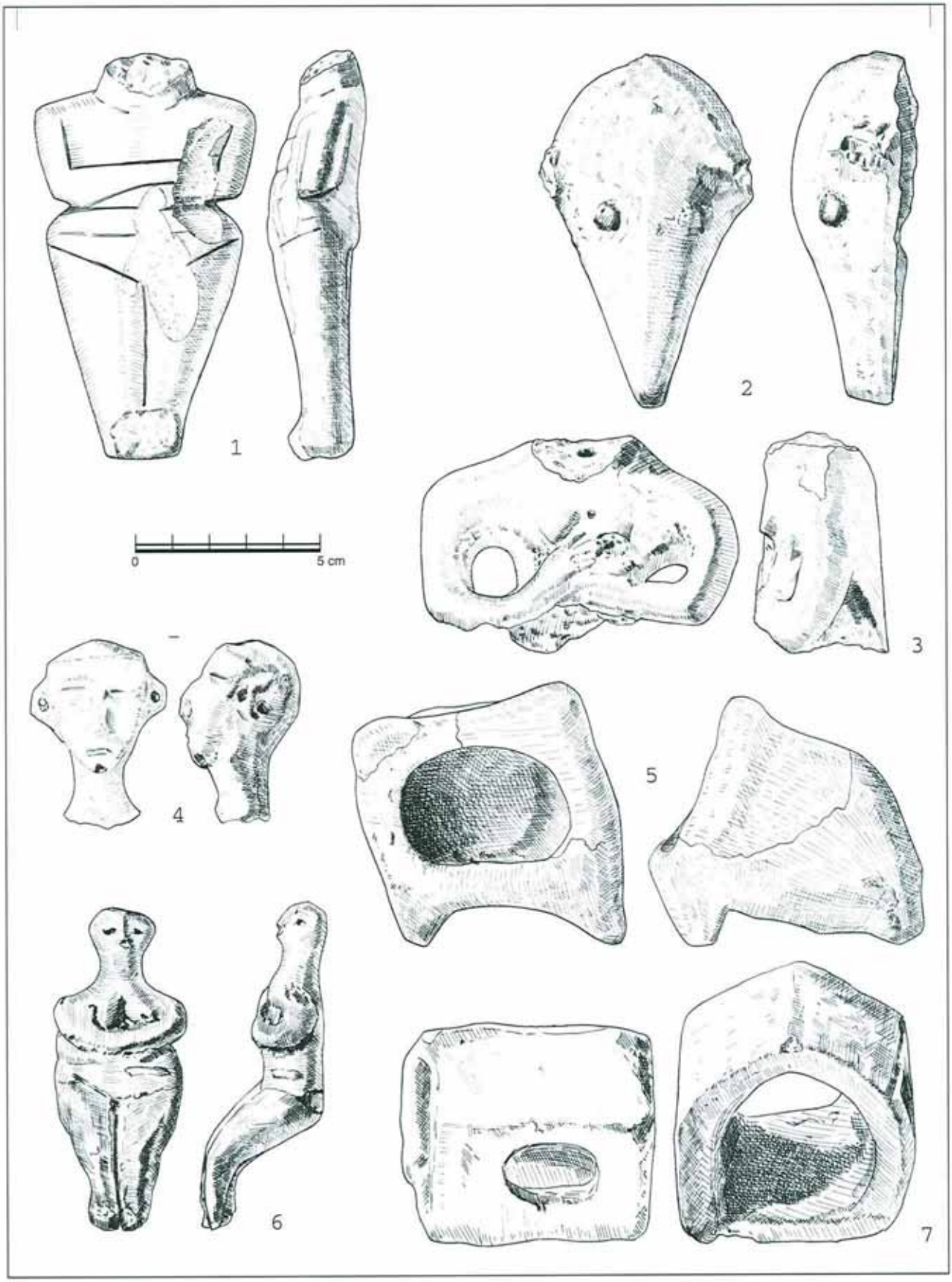


Plate 23. Tell Azmak-Stara Zagora. Anthropomorphic clay figurines, anthropomorphic marble figurine, zoomorphic lid, clay oven models. Late Chalcolithic.

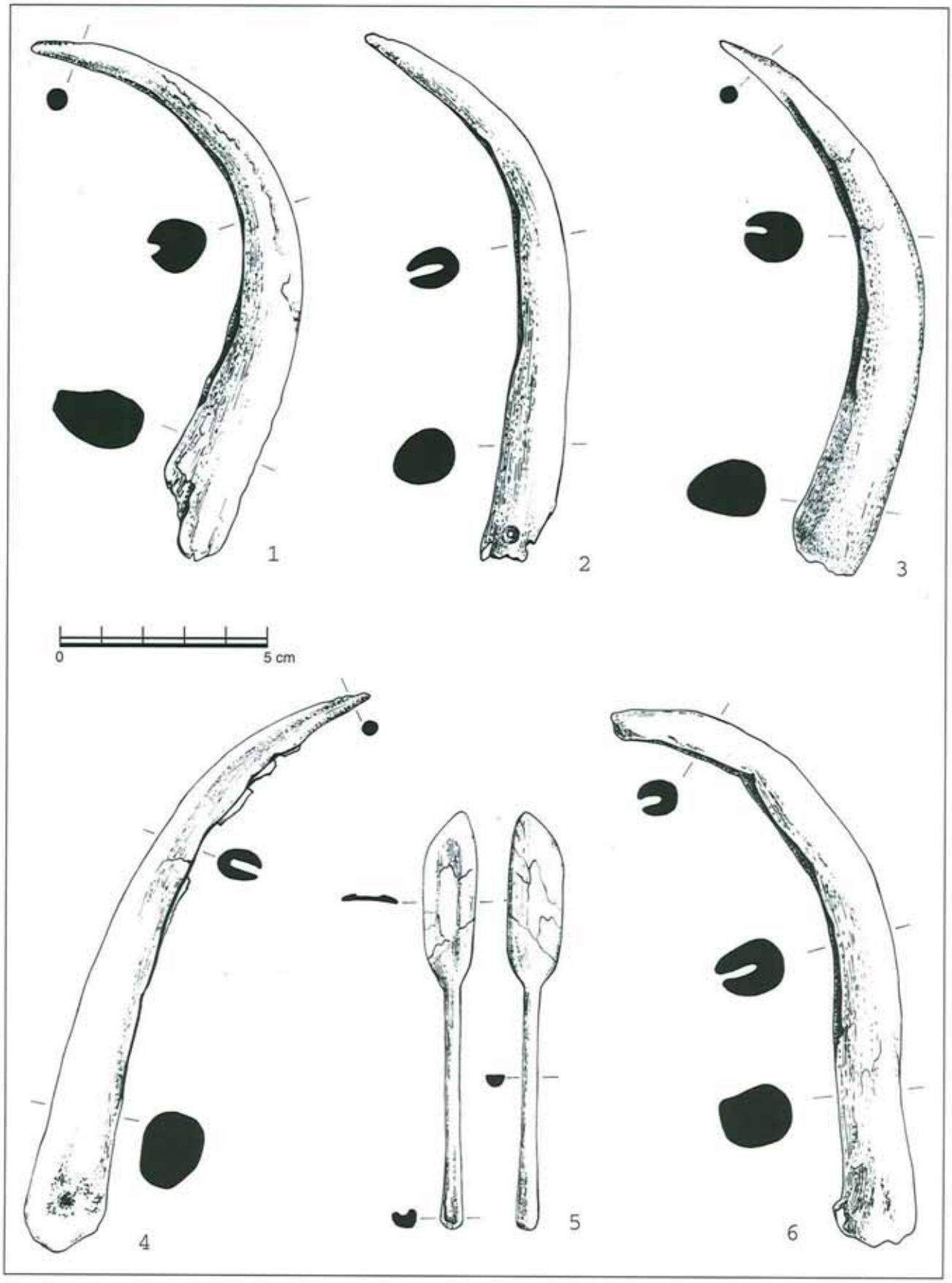
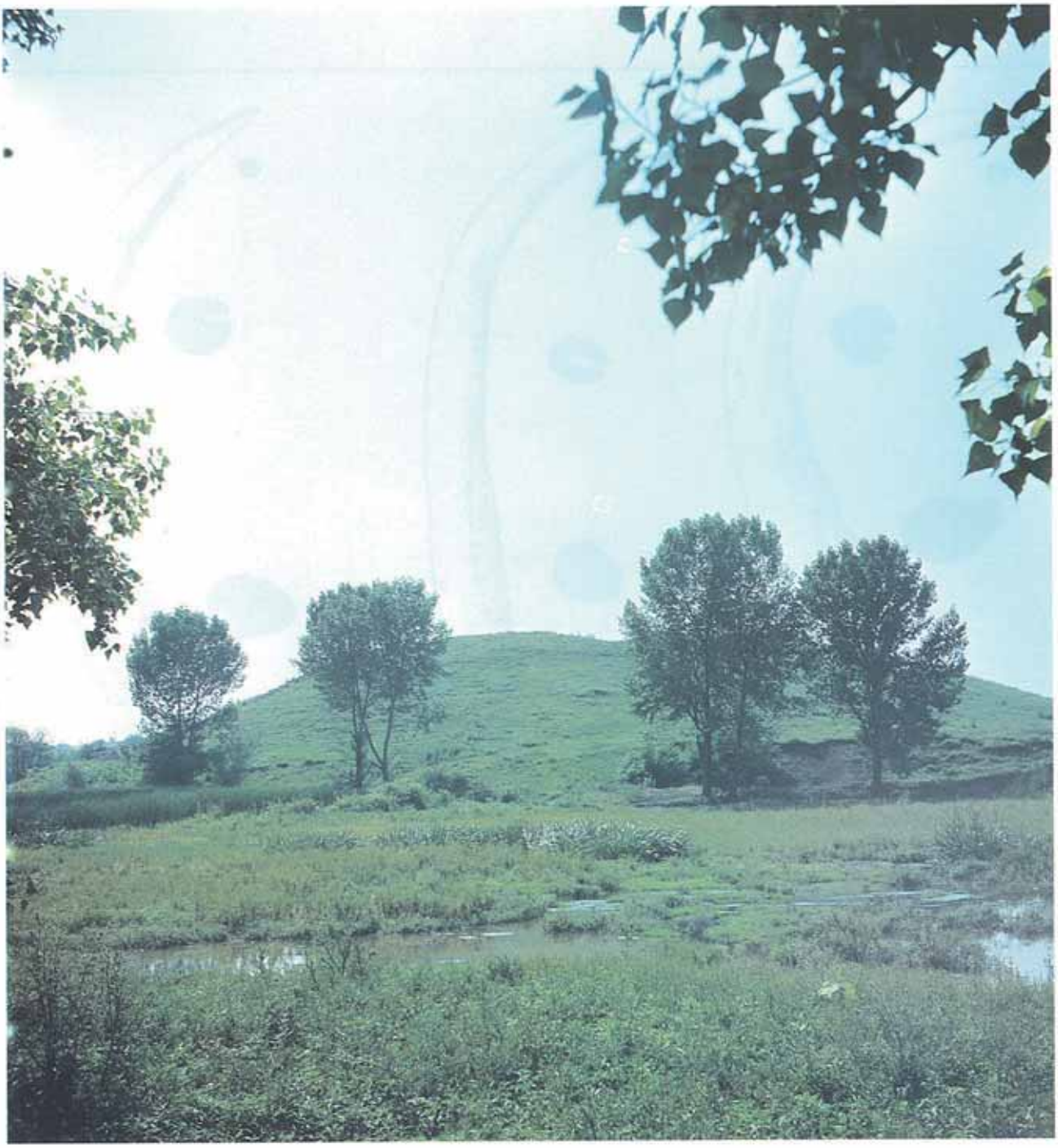


Plate 24. Tell Kazanlık. Sickles made of antler and a bone spoon. Early Neolithic.



1. Tell Djadovo, Nova Zagora region (before excavation).

2. Tell Karanovo, Nova Zagora region (Northeast sector).

3. Tell Karanovo, Nova Zagora region. White painted pot. Early Neolithic.

4. Multi-layer site Çavdar, Zlatitsa region. White painted pot. Early Neolithic.

5. Multi-layer site Çavdar, Zlatitsa region. White painted pot. Early Neolithic.

6. Multi-layer site Rakitovo. White painted pot. Early Neolithic.

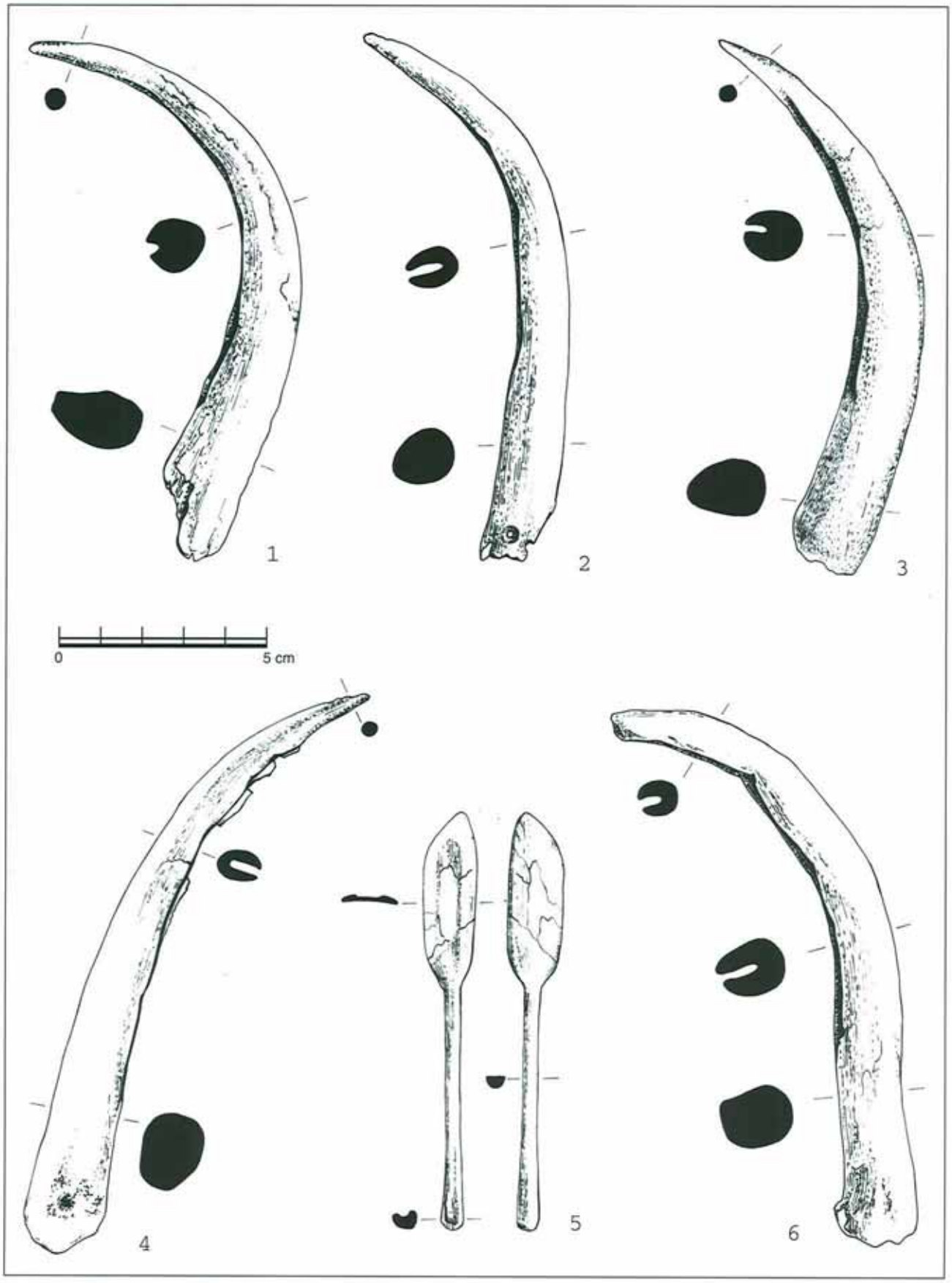
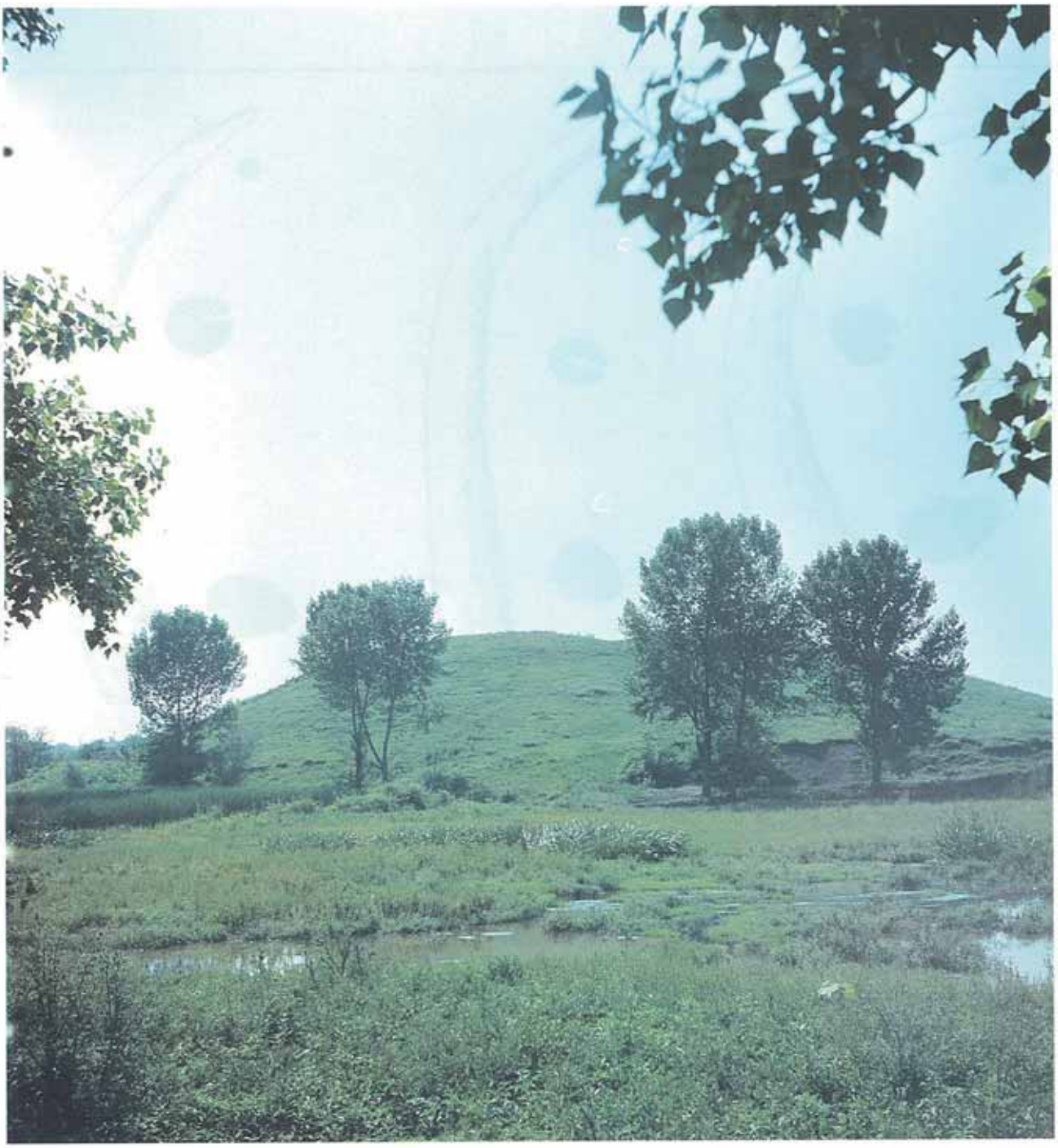


Plate 24. Tell Kazanlık. Sickles made of antler and a bone spoon. Early Neolithic.



1. Tell Djadovo, Nova Zagora region (before excavation).

2. Tell Karanovo, Nova Zagora region (Northeast sector).

3. Tell Karanovo, Nova Zagora region.
White painted pot. Early Neolithic.

4. Multi-layer site Çavdar, Zlatitsa region.
White painted pot. Early Neolithic.

5. Multi-layer site Çavdar, Zlatitsa region. White painted pot. Early Neolithic.

6. Multi-layer site Rakitovo. White painted pot. Early Neolithic.

7. Multi-layer site Rakitovo. White painted pot. Early Neolithic.

8. Multi-layer site Rakitovo. Anthropomorphic white painted pot. Early Neolithic.

9. Tell Kazanlık. Anthropomorphic pot. Early Neolithic.

10. Tell Karanovo, Nova Zagora region. Lid. Early Neolithic.

11. Open-air site Eleshnitsa. Head of a leopard clay figurine. Early Neolithic.

12. Open-air site Eleshnitsa. Clay seed models (the so-called sling "bullets"). Early Neolithic.

13. Tell Karanovo, Nova Zagora region. Sickles made of antler with flint blades. Early Neolithic

14. Tell Karanovo, Nova Zagora region. Pot. Middle Neolithic.

15. Tell Jasatepe-Plovdiv. Pot. Late Neolithic.

16. Tell Jasatepe-Plovdiv.
Anthropomorphic pot. Late Neolithic.

17. Tell Kapitan Dimitrievo-Peshtera.
Pot. Late Neolithic.

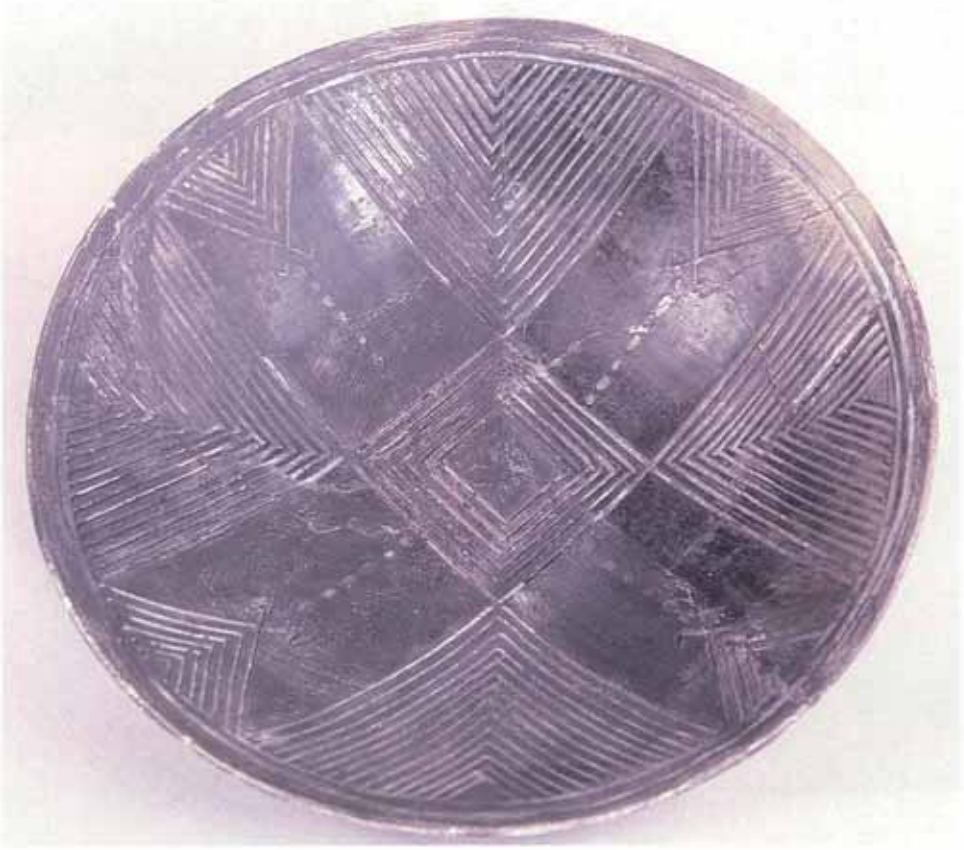
18. Tell Bereketska-Stara Zagora.
Anthropomorphic pot. Late Neolithic.

19. Tell Karanovo, Nova Zagora region. Lid.
Late Neolithic.

20. Tell Kazanlık. Part of a marble anthropomorphic figurine. Late Neolithic.

21. Tell Karanovo, Nova Zagora region. Part of a marble anthropomorphic figurine. Late Neolithic.

22. Open-air site Giok tepe-Haskovo. Head of a clay figurine. Late Neolithic.



23. Tell Karanovo, Nova Zagora region. Pot. Early Chalcolithic.

24. Tell Karanovo, Nova Zagora region. Pot. Early Chalcolithic.

25. Tell Jasatepe-Plovdiv. Pot. Early Chalcolithic.

26. Tell Pazardcik. Clay figurine. Early Chalcolithic.

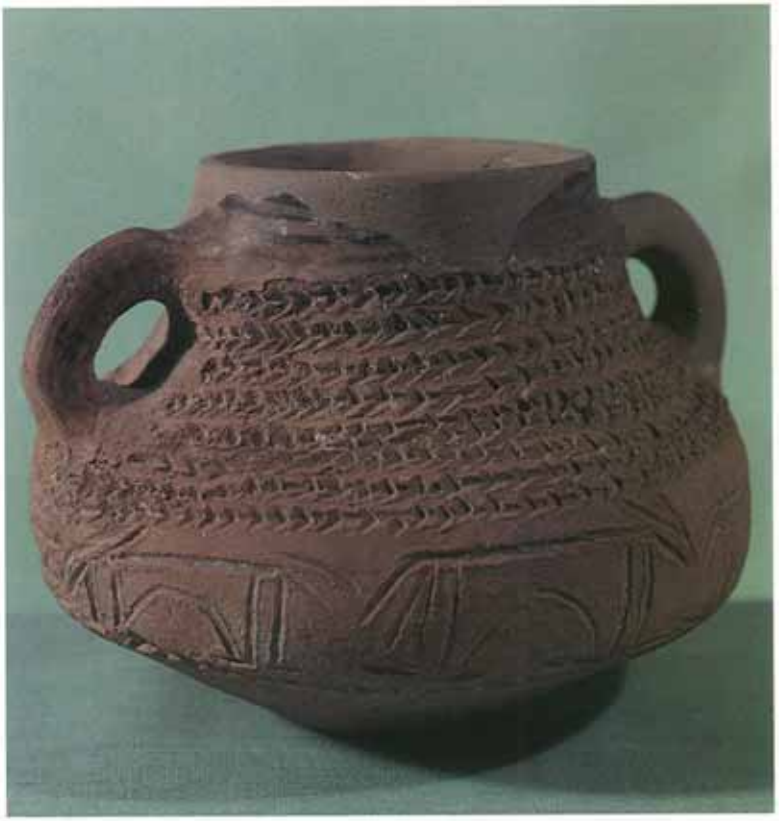
27. Tell Kapitan Dimitrievo-Peshtera. Clay altar. Early Chalcolithic.

28. Tell Jasatepe-Plovdiv. Pot. Early Chalcolithic.

29. Tell Karanovo, Nova Zagora region. Pot. Late Chalcolithic.

30. Tell Karanovo, Nova Zagora region. Pot. Late Chalcolithic.

31. Tell Karanovo, Nova Zagora region. Zoomorphic pot. Late Chalcolithic.



32. Tell Starozagorski bani, Stara Zagora region. Pot. Late Chalcolithic.

33. Tell Starozagorski bani, Stara Zagora region. Anthropomorphic pot. Late Chalcolithic.

34. Tell Karanovo, Nova Zagora region. Head of anthropomorphic clay figurine. Late Chalcolithic.

35. Tell Azmak-Stara Zagora. Clay anthropomorphic figurine. Late Chalcolithic.

36. Tell Dolnoslav, Assenovgrad region. Head of anthropomorphic clay figurine. Late Chalcolithic.

37. Tell Dolnoslav, Assenovgrad region. Anthropomorphic clay figurine. Late Chalcolithic.

38. Tell Starozagorski bani, Stara Zagora region. Marble anthropomorphic figurine. Late Chalcolithic.

39. Tell Kazanlık. Bone anthropomorphic figurine. Late Chalcolithic.

40. Tell Pazardcik. Clay "mask". Late Chalcolithic.

41. Tell Dolnoslav, Assenovgrad region. Zoomorphic clay figurine. Late Chalcolithic.

42. Tell Starozagorski bani, Stara Zagora region. Clay model of a temple. Late Chalcolithic.

43. Tell Karanovo, Nova Zagora region. Clay oven model. Late Chalcolithic.

44. Tell Dolnoslav, Assenovgrad region. Clay phallus. Late Chalcolithic.

Stone Statues and Balbals in Turkic World

Türk Dünyası'nda Taş Heykel ve Balballar

***Oktay BELLİ**

Anahtar Sözcükler: Taş heykel, balbal, kurgan, kült merkezi, Umay Ana.
Keywords: Stone statue, balbal, kurgan, cult center, Mother Umay.

Avrasya Arkeoloji Projesi (Proje No: GP-27) kapsamında Kazakistan, Kırgızistan ve Ukrayna'da yaptığımız araştırmanın temel amacı, bu güne değin sağlıklı ve planlı bir şekilde incelenemeyen Türk dönemine ait arkeolojik kültür varlıklarının belgelenmesi ve envanterlerinin çıkarılmasıdır. Bu amaçla son üç yıldan beri Kazakistan, Kırgızistan ve Ukrayna'da yaptığımız araştırma sırasında 700'den fazla insan biçimli taş heykel ve balbal incelenmiştir.

Karadeniz'in kuzeyindeki bozkırlardan Moğolistan topraklarının sonuna değin uzanan geniş coğrafi bölgede, binlerce insan biçimli taş heykel ve balbal bulunmaktadır. Ancak taş heykel ve balbalların hangi amaçla yapılarak kült merkezlerine ve kurganların üzerine veya çevresine dikildiği ve anlamlarının ne olduğu, 19. yüzyılın sonuna kadar bilinmemekteydi. 1889 yılında ortaya çıkarılan ve 1893 yılında çözülen Orhun Yazıtları sayesinde, insan biçimli taş heykel ve balballar bilinmezlik gizinden kurtulmaya başlamıştır. Orhun Yazıtlarında *"İlk önce Babam Kağan için Baz Kağan dikilmiştir..."* cümlesi, mezar sahibi için heykelin yapılmış olduğunu kanıtlamaktadır. Balbal için ise şu cümle geçmektedir; *"Kırgız Kağanını öldürdüm, balbalını yaptırdım.."*. Öldürülen düşman için yaptırılan basit biçimli, şekilsiz taş heykelin üzerine, bazen düşmanın adı da yazılmaktaydı.

İnsan biçimli taş heykel ve balballar 6. ve 13. yüzyıllar arasında Türk toplulukları tarafından oldukça yaygın olarak kült merkezleri ve kurganların üzerine dikilmişlerdir. Orta Asya Türk toplulukları arasında İslamiyetin yayılması ve köklü bir şekilde bölgeye yerleşmesinden sonra, taş heykel ve balbal yapma geleneği yavaş yavaş ortadan kalkmaya başlamıştır. Ancak taş heykel ve balbalların birden bire ortadan kalktığını düşünmek, iyimserlik olur. Özellikle gelenek ve göreneklerine sıkı sıkıya bağlı olan Orta Asya Türk topluluklarında mezarlarını kurgan biçiminde yapma, ölü şölenleri (yuğ törenleri), insan ve hayvan kurbanları ve ölü armağanları nasıl Ortaçağ'dan sonra varlığını sürdürdüyse, insan biçimli taş heykel ve balbal yapımı da varlığını sürdürmüştür. Taşın yanı sıra ahşaptan yapılmaya başlanan taş heykel ve balbal geleneği, batıya göçen Türkler tarafından Anadolu'ya değin taşınmıştır.

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Balbal öldürülen düşmanın taşa dönüştürülmesi, öteki dünyada kahraman savaşçıya hizmet etmesi, onu koruması ve kollaması için dikilen basit işlenmiş taş yontudur. Kurgan ve kült merkezlerine dikilen özenle işlenmiş taş heykeller ise, "Ata Kültü"nü yansıtmaktadır. Taş heykellerin ilk örneklerine Tunç Çağı'ndan beri rastlanılmaktaysa da, M.Ö. 7.-4. yüzyıllara tarihlenen İskit heykelleri, bozkır toplumlarındaki ilk taş heykelleri oluşturmaktadır. Başında üçgen biçimli üç çıkıntılı taça benzeyen bir başlık taşıyan Umay Ana heykelleri, doğurganlık ve üretgenliğin yanı sıra, koruyucu bir ruh olarak karşımıza çıkmaktadır.

Türk topluluklarında taş balbal ve heykellerle ilgili özgün inanç geleneği günümüze değin varlığını sürdürmüştür. İnsanlar tarafından balbal ve insan biçimli taş heykellere adaklar adanmakta, isteklerinin olumlu yönde sonuçlanması için bezler bağlanmakta, kucaklanmakta ve kutsal bir varlıkmış gibi saygı ile öpülmektedir.

Many balbals and stone statues are to be found in the wide geographic area stretching from the northern Black Sea to the end of the Mongolian lands. The function and meaning of all these stone statues and balbals, erected on or around the cult centers and kurgans, only became known towards the end of the 19th century[1]. After the discovery of the Orhun inscriptions in 1889 and their decipherment in 1893, these problems were gradually solved. An inscription on one statue which reads; *"First, the Baz Khan is erected to honor my Father Khan"*[2], proves that it was carved for the owner of the tomb. **Also, written on the same balbal we read;** *" I killed the Kirghiz Khan and had his balbals erected"*[3]. In addition, the name of the enemy was written on other roughly shaped or unshaped standing stones.

Human-shaped stone statues and balbals were commonly erected at cult centers and kurgans between the 6th and 13th centuries AD by the Turkish peoples. This tradition gradually disappeared with the arrival and spread of Islam among the Turkish tribes of Asia, but it would be incorrect to think that the practice disappeared suddenly. The tradition of carving human shaped statues and balbals must have survived among the Middle Eastern Turkish tribes long after the Middle Ages, alongside other funeral traditions such as burial feasts, human and animal sacrifices or leaving gifts for the dead. For instance, among the Altaic tribes, which still retain the kamlık (shamanist) belief, these traditions survived without losing anything of significant value. There was, however, a slight difference; wood was increasingly used in place of stone. This was because wood is easier to carve than stone, but since wood is not as resistant to decay, few examples remain today. The end of the tradition of making statues and balbals is, therefore, taken to be in the 13th century[4]. However, as discussed in more detail below, many archeological discoveries and written records indicate that the tradition of carving wooden balbals survived for a very considerable time.

As already mentioned, stone statues and balbals are to be found at kurgans and cult centers (Estelik), which are sacred for the Turks (Fig. 1). A. V. Adrianov, V. A. Kallaur and G. N. Potanin, who ma-

**The main reason of the archaeological survey carried out in Kazakhistan, Kirghizistan and Ukraine, under the came of Eurasian Archaeology Project (Project No: GP-27) is to bring Turkic cultural existence into light and to prepare the inventory which was not examined in detail up to now. We have investigaed more than 700 stone statues and balbals in Kazakhistan, Kirghizistan and Ukraine for the last three years. Dr. Orhan Doğan (expert on Kazakhistan history), Dr. Kemal Özcan (expert on Crimean history), Erkan Konyar (M.A.;expert on Iron Age), Can Avcı (M.A.;expert on Iron Age), Anıl Yılmaz (M.A.; expert on pre-Islamic Turkic art), Mehmet Zeren (M.A.; expert on western Göktürk history) and İbrahim Çeşmeli (M.A.; expert on Turkic art) have joined the research team under my scientific counseling. I would like to thank to my colleagues for their work and individual contributions to the group.

[1] Barthold 1947, 515.

[2] Orkun 1936-41, I, 36.

[3] Orkun 1936-41, I, 40.

[4] Belli 2002a, 912-914.

de research in the Altay and in Kirghizistan in the early 19th century, reported that the stone statues in human form were located close to the kurgan areas[5]. It is unfortunate that most of the Kurgans, stone statues and balbals, which decorate the natural setting like pearls, have been destroyed over many centuries (Fig. 2). Doubtless this destruction was not at the hands of the Turks, who hold them sacred, but by European travelers or, more particularly, by the Russians who used many of these monuments as construction materials or re-erected them as decorative features in parks, gardens or pensions (Fig. 3-4). In this way very many of the balbals that were formless or carved in rounded or square shapes were destroyed. Whereas stones sculpted in human form were less frequently used, the big, shapeless or square balbals were often employed as columns in building constructions. As a result, today we have fewer balbals than statues. Further, hundreds of examples lie buried beneath the soil. In order to prevent them being used in new buildings, most have been transferred to museums[6] but, because written records were been properly kept, we do not know exactly where most of the balbals in museums, parks, gardens and pensions were brought from, nor what features were originally associated with them (Fig. 5-6). Due to such irresponsible behavior, we do not have any knowledge about associations between kurgans, cult centers, stone statues and balbals which were made in antiquity and in the Middle Ages by Turkic tribes living in the wide lands lying between the steppes stretching from the northern Black Sea to Mongolia. Further, we do not know exactly where they were made and, hence, their dissemination and full extent. Both the data and the written records mentioned above are, however, very important documents that compliment the very few written records of early Turkic culture.

1- Stone Balbals

We encounter the word for balbal in the Orhun[7] and Uybat IV[8] inscriptions, which means that this word was used by both the Kirghizs and the Gök-Turks. Different suggestions have been put forward concerning the original meaning of the word "balbal"[9]. Almost all researchers and linguists agree, however, that the Russians borrowed it[10]. Radlov defines it as "a stone monument representing a dead person"[11]. Another suggested meaning of interest is; "it is the stone representative of the number of enemies killed by the dead one, erected by his enemies"[12]. W. Barthold, a scholar of the Middle Eastern Turkish History, explains the reason for their existence in connection with the belief that in the next world those killed will work in the service of either their murderers or of the leader they fought for[13].

It has been seen that the Turks decorated a grave chamber in the same way as a house. Even the Moroccan traveler Ibn Batuta drew a comparison with a house that was everywhere covered with carpets[14]. The fact that the grave was decked out to resemble a residence leads researchers to derive different meanings from the balbals erected over these tombs. One such interpretation is that the souls of slain enemies were turned into balbals erected around the tomb and were thereby captured. Also, it was believed that the balbals would protect the owner of the tomb[15]

[5] Barthold 1947, 517- 521.
[6] Belli 2001a, 433.
[7] Orkun 1936-41, 1, 36.
[8] Orkun 1936-41, III, 147.
[9] Roux 1999, 164.
[10] Clausen 1972, 333.
[11] Radlov 1893-1911, IV, 1507.
[12] Kotwicz 1928, 2.
[13] Barthold 1945, 14.
[14] Defremery- Sanguinetti 1853- 58, IV, 301.
[15] Kotwicz 1937, 192-193.

Transformation of a slain enemy into a stone that was carved and then erected by the tomb is indicative of the heroism of the deceased. If the slaughtered enemy killed was a significant personage, his name was written on the balbal. One balbal, erected on a kurgan which belonged to a heroic warrior and located next to the Ongon inscriptions, the *"Ishbara Tarkan's balbal"*[16] has such a text inscribed on it. In conclusion, we may say that a balbal is a carved stone that was put up so as turn the slain killed enemy into a stone, to make him serve the heroic warrior and to protect him in the next world[17] (Fig. 7).

We do not know exactly when such balbals were erected or whether any ceremonies were organized while they were put up. The example given below could provide an explaination for our lack of such knowledge. In 711 Bilge Khan had the following statements written for his uncle Kapagan Khan; *"... First, I have turned the Kirghiz Khan into a balbal..."*[18]. If we consider the fact that the Kirghiz Khan died in 716[19], we easily see that the balbal mentioned is indicative of a request. We thus know that the balbals could be one or more of the following: representations of persons killed while the deceased was alive, those he would kill in his next life, or those who were slaughtered and offered to him as gifts after his death.

As mentioned above, the number of balbals around any one tomb varied according to the number of the people whom the heroic warrior had himself killed while he was alive (Fig. 8-9). For instance, the length of the line of balbals erected towards the east of the stone statue in the Estelik at Tuva, is over 350 m. Just outside the eastern wall of Kül Tegin's monument tomb are no less than 170 balbals that constitute 3 km long sequence and, at a distance of 850 m from the northern part of the monument, the length of the balbal sequence is 1,250 meters. Yet another sequence, this time of 750 balbals, lies 450 m to the north. We also know that the monument of Bilge Khan, elder brother of Kül Tegin, is even bigger and that the length of the balbal sequence erected for him extends for more than 3 km. It was believed that the tomb was protected by the souls of the enemy that had been transformed into balbals and, also, that this army of balbals would also protect the dead hero in his after life[20] (Fig.10-11).

Balbals are of various height; the shortest being 40-50 cm high and the tallest about 1.70-2.00 m (Fig.12). Balbals are hewn from stones brought from local quarries. The basic distinction between a balbal and a statue is that balbals are simple and shapelessly representations[21]. The European travelers also tended to describe balbals as carved roughly in round or square shapes[22].

The Orhun inscriptions, as well as the Chinese chronicles, provide us with valuable information about the way in which balbals and statues were erected. For instance, Bianyi dian, writing around 552-556, says; *"... After the corpse is buried, they carry stones to near the tomb... The number of these stones is directly proportional to the number of people he killed... If he killed one man, only one stone is erected... There are those for whom hundreds or thousands of stones were erected..."*[23].

Actually the numbers given above might seem exaggerated. However the balbals found in the Uybat Region of the

[16] İnan 1972, 231.
[17] Belli 2002[a], 911-913.; Belli 2003,37.
[18] Orkun 1936-41, I, 40.
[19] Divitçioğlu 2000, 95.
[20] Belli 2002a, 911-913.
[21] Belli 2002a, 911-912.
[22] Rochill 1900, 82.
[23] Julien 1877, 10, 28.

Autonomous Republic of Hakas, where they are called Caa taş (stones of war), show that these numbers are not as exaggerated as might be thought (Fig.13). Although most of them are weathered, the hundreds of balbals, spread over a wide geographic area, present a spectacular view. This scene reminds us that the forest which inspired Nizami of Gence, in the 13th century, consisted of stones.

The Chinese chronicle Zhou-shu, in 630, says the following about Turkic burial tradition and balbals; *"... When someone dies, his body is kept in a tent... All his children, grandchildren, male and female relatives sacrifice a sheep and a horse and spread them in front of the tent as offerings. They make seven tours around the tent on horse and hurt their faces with a sword and mourn when they come in front of the tent. Blood and tears drop from their eyes. They later decide on the day when they would burn the dead person's personal belongings and his horse. They gather around the ashes and wait for the best time to bury him. If he died in spring or summer they wait till the green grass and trees turn into yellow and drop their leaves. If he is dead in autumn or winter they wait till flowers and trees bloom. Later they dig a hole and bury the ashes. On the very day of burial the relatives do offerings again, organize horse races and hurt their faces as they did on the first day of death. After the burial ceremony they erect stones on the grave. Number of the stones is equal to the number of the people he killed while he was alive. They hang the heads of the strangled sheep and horses on gravestones..."*[24].

From the information collected in 636 from Sui-shu of the Sui dynasty, we gain an impression of a noble Turkic tomb; *"... The relatives erect posts in circles around the tomb and draw the portrait of that person and views from the wars he fought, on the walls of the circle..."*[25].

The knowledge provided about balbals in the Orhun inscriptions is much more reliable and detailed; *"...I killed their heroic warriors and made balbals of them...I turned the Kirghiz Khan into a balbal for my uncle...many Turks had been killed and...they had made balbals of them...I erected Kuy Sangun as a balbal..."*[26].

The knowledge provided to us by travelers and priests, based on their first-hand observations, verifies the historical sources. The earliest information on this subject is provided by Ibn Fadlan, who was the clerk of the delegation which visited the Bulgarian king Iltebir Almush, who converted to Islam in 920-21. But Ibn Fadlan, mistakenly, describes the balbals as statues. Some researchers think such a description exaggerated[27]. Actually, what Fadlan describes is not a statue but a balbal, which is, therefore, how we should consider it. Ibn Fadlan writes about how the Oghuzs buried their dead and how they erected balbals; *"...When an Oghuz kills someone and becomes a hero, a wooden balbal of the murdered one is carved and erected on his tomb...Number of the balbals erected on his tomb is directly proportional to the number of people he killed...who are his servants from then on. It is believed that they would serve him in heavens..."*[28].

Ibn Fadlan's description of the balbal as being made of wood which, unlike stone, is subject to decay, explains why they have not survived down to the present day[29].

[24] Liu 1958, 9-10.
[25] Liu 1958, 42.
[26] Orkun 1936- 41, I, 36, 40, 68, 70.
[27] Roux 1999, 309.
[28] Togan 1939, 27.
[29] Belli 2002a, 911-913.; Belli 2003, 41.

Nizami of Gence, a wandering minstrel who wrote at the beginning of the 13th century, provides interesting information about the stone statues and balbals of the Kipchak steppes. It is supposed that he gained his knowledge from the Kipchaks living in Azerbaijan. With regard to the wooden balbals, Nizami says; *"...The wooden arrows stuck into the soil in the Kipchak steppes are as many in number as the grass at the seashore..."*[30].

Concerning stone balbals, Guillaume de Rubrouck, who was a member of the delegation sent to the Mongolian army by the French King in 1253, writes; *"...Graves enclosing a certain area are circled with uncarved, rounded or square stones. In addition, on the four sides of the tomb four stones, symbolic of the four sides of the world, are erected perpendicularly..."*[31]. In actual fact, balbals are very simply carved when compared to statues. As already pointed out, the most significant distinction between a balbal and a statue is that a balbal is either completely shapeless or is just simply shaped.

The famous traveler Marco Polo tells us how people were turned into balbals in the 13th century; *"...I will tell you about another big event, when corpses of the great khans are brought up to this mountains to be buried, although it is a way of 40 or more days, all the people encountered on the way were slaughtered by those bringing the corpse. While slaughtering, they were telling them to go and serve their lord in the next world. Because they believed that whoever they slaughtered in his honor had to serve the great lord in his next life...Keep in mind that more than 20,000 people who encountered the carriage were slaughtered while Khan Mangu's corpse was being taken to be buried..."*[32].

As I have already mentioned, balbals, as well as stone statues began to be carved out of wood from the 13th century onwards and, simultaneously, the burial traditions of the Turks started to gradually disappear.

2. Stone statues in human form

Stone statues in human form which were erected beside the kurgans and graves are encountered in the Near East from the Bronze Age[33]. The earliest instances of these statues, which were carved by the people of the steppe culture are found in the steppes of the Northern Black Sea region. They were made between the 7th century BC and the 4th century AD and they belonged to the Scythians[34]. The father of history, Herodotos, who is an authority on all the Scythian traditions and techniques of war, does not, unfortunately, provide us with any knowledge about such stone statues[35]. What differentiates the older Scythian statues from those of Central Asian are their headgear, their horseshoe shaped moustaches and their armor[36] (Fig.14-15). The main feature of the male statues in Central Asia is that they all have heavy moustaches[37].

As mentioned before, stone statues in human form, just like balbals, were erected in cult centers and kurgans from the 6th century onwards. Compared to balbals, these stone statues were carved much more painstakingly and realistically. The main reason for this was to continue the existence of the dead person in a more concrete way. Thus stone statues represent the Ancestor Cult of the Turkish past[38]. For

[30] Kotwicz 1928, 5-6.
[31] Rockhill 1900, 82.
[32] Hambis 1955, 81.
[33] Schachner 2001, 137.; Sevin 2001, 81.
[34] Belozor 1996, 41-50.; Kovalev 1998, 248.; Çurilova 1999, 8-9
[35] Belli 2002a, 910-912.
[36] Belozor 1996, 41-50.; Kovalev 1998, 260, fig. 7.; Çurilova 1999, 8-9
[37] Belli 2002a, 911-912.
[38] Belli 2002a, 913-914.; Belli 2002 b, 927.; Belli 2003, 42.

instance, the Kitans had made golden statues of their king and his eight sons and put them in a temple built for the dead[39].

In addition to the Chinese chronicles, the Orhun inscriptions also provide us with very important information. The Chinese historian Tang shu gives us an important kind of information about the Turkish burial traditions and the statues they made; *"...After building the tomb, they erect a statue of the dead which is symbolic of his heroic deeds while he was alive..."*[40].

Inscriptions concerning the importance of the sculpture and the necessity of painstakingly carving the statue of the dead warrior- that represents the Ancestor Cult- gives us a clue about the importance of that tradition. For example, on Kül Tegin's tomb we read; *"...For the sake of the adornment of the infinite stone, I brought sculptors from the Chinese Khan and had the statue made..."*[41]. Pieces of statues which were found during archeological excavations in Kül Tegin's and Bilge Khan's grave sites are most probably the remnants of the statues mentioned above. Today however almost all scientists agree that the head of the statue kept in the History Institute of Ulan Bator, the capital city of Mongolia, is Kül Tegin's[42].

The burial traditions of the Gök Turks were also continued by the Shamanist Oghuzs and the Kipchaks between the 9th and 13th centuries. Another tradition of the Gok Turks was the carving balbals and stone statues in human form (Fig.16).

The most classical and realistic information about the stone statues in human form comes from Guillaume de Rubrouck, a priest who was a part of the delegation sent to the Mongolian army in Karakurum, in Central Asia, by the French king; *"...The Kumans built a huge Protuberance on graves and erect a statue looking towards the east and holding a cup in his hand..."*[43]. From the information given by Rubrouck we learn that the tradition of erecting statues on graves was carried on at least until the middle of the 13th century. Rubrouck also describes how the statue's face is turned to the east. As it is known, while determining the four sides of the world the Orhun Turks were looking towards the east; so their right side was south, and their left side was the north[44].

As I have already mentioned, these stone statues in human form were erected either on or around the kurgans, or in Esteliks which are cult centers surrounded by stones. Usually two statues, one representing the husband and the other the wife, were erected on graves (Fig. 17). Until today, many statues representing the male and the female have been found. On the other hand, the number of the stone statues in human form found in square cult centers surrounded by stones is much higher than those found in kurgans. But none of the written records give any proper knowledge about female and male statues erected either in cult centers or on kurgans.

A. Kh. Margulan, who excavated at cult centers in Kazakhistan, encountered animal rather than human skeletons. That is, the bones found belonged to the animals eaten and offered to the dead person during feasts[45]. V. V Kubarev, who works on statues in the Altay Region that belong to the Turkish dynasty, informs us that there are many cult centers in the re-

[39] Şeşen 1975, 210.
[40] Baibosynov 1996, 50.
[41] Thomsen 1896, 119.
[42] Diyarbekirli 1979,337, fig. 20.; Çoruhlu 1998, 98.; Sertkaya- Alyılmaz-Battulga 2001, 45.
[43] Rochill 1900, 81-82.
[44] Barthold 1947, 534.
[45] Baibosynov 1996, 44.

gion which were built for feasts. Kubarev also relates that one of these cult centers contained human statues and that the center was surrounded by kind of a wall or ditches. He adds that these walls and ditches were built to prevent the progress of enemies[46].

According to the results of research that we have undertaken over three years, the distribution of stone statues of the Turkic Republics and their neighbors is; Ukraine 267[47], Azerbaijan 13, Turkmenistan 61, Tacikhistan 26, Uzbekistan 78, Chinese Turkistan 192[48], Mongolia 562[49] (Fig. 18), Tuva 210[50] (Fig. 19), Hakasia 265[51], Altay 379[52], Kazakhistan 690[53] (Fig. 20), Kirghizistan 366 (Fig. 21). But these numbers are relative and, as the scale of research increases, the number of known stone statues is expected to grow. As a great number of these statues exist in kurgans and cult centers that are located on high plateaus mountainous areas, it is certain that the numbers given above will double when sites on the high plateaus are excavated.

The sizes of the human statues vary; while the shortest are about 40-50 cm (Fig. 22), the tallest are around 250 cm high. According to latest research, the highest statue is that in the garden of the Bishkek Museum, which is 275 cm high (Fig. 23). This particular monumental statue represents a very important ruler named "Karahan". A statue in the Tüp town of Kirghizistan, on the other hand, with a width of 75 cm, is the widest human statue ever found (Fig. 24). It is understood that statues of the rich, the rulers or the commanders were of larger size. Statues are of many different kinds, partly because the types of local stones that were used for making statues differ from region to region. In some places there are no stone quarries, indicating that some statues were carved and brought from distant sites. Many of the statues carved by stone-workers of the day show similarities, so that it might be possible to identify the hand of individual sculptors. It is also understood that the statues represent rulers, commanders, warriors, wandering minstrels, orators, shamans and shepherds.

89 % of the statues that we have studied up to now represent males, and the remaining 11% of depict females or figures of indeterminate sex and Mother Umay. The most important characteristic of all of these statues is simple and realistic that their facial expressions are. It is clear that the artists expended great effort in realistically depicting the owner of the statue. With one exception, the statues provide clear evidence that they were designed and built by local artists. In other words, the facial expressions of the female and male statues are found in Altay, Tuva, Kazakhistan, Kirghizistan, the Chinese Turkistan and Mongolia show great similarities with the people of these regions. Most of the male statues are represented as being beardless but carrying a moustache, although some do have a very sparse beard on the chin. Ibn Fadlan, in a teasing tone, says that the Turks do not have beards; *"...All Turks pull their beards out and grow a moustache. Sometimes among them you can find an old one who pulled all his beard out but left some on his chin and who has a fur on his shoulder..."*[54]. Thus we know that carrying a moustache has been very common amongst the Turks since the ancient times.

While most of the human statues are carved with their legs crossed, the legs of some are not at all clearly depicted. Since such kinds of statues were inserted in so-

[46] Baibosynov 1996, 44-45.; Kubarev 2001, 906.
[47] Pletneva 1974, 17 pp.; Krasilnikov 1999, 14 pp.; Çurilova 1999, 8-9.
[48] Wang 1996, 19 pp.
[49] Bayar 1998, 64.; Hayashi 2001, 221.
[50] Graç 1961, 14 pp.
[51] Sher 1966, 28 pp.
[52] Kubarev 1984, 46 pp.
[53] Sher 1996, 22 vdd.; Charikov 1986, 131-140.; Charikov 1989, 87-102.
[54] Togan 1939, 28.

il, the ends of the lower parts of their bodies, which were about 30-50 cm long, were tapered. According to the knowledge we gained from recent research, we can classify the statues into the following groups;

1- Statues standing or sitting (Fig.25).
2- Armed men holding a cup in their right hands (Fig.26).
3- Unarmed men or sexless statues hol ding a cup in their right hands (Fig.27).
4- Men holding cups or pots in both hands (Fig.28).
5- Statues with only faces depicted (Fig.29).
6- Female statues holding cups each hand (Fig.30).
7- Few statues with birds (Fig.31).
8- Statues representing the Mother "Umay" (Fig.32).
9- Few female statues holding flowers in their hands (Fig.33).
10- Man holding a music instrument in his hand (Fig. 34).

Generally, it can be seen that human figures were carved in considerable detail, but today most statues are worn and eroded due to long exposure to the elements. In particular, belts, quivers and armor were carefully carved. Their armor indicates whether they were warriors or rulers. Their clothing, the cup or pot that they hold, and any birds or arms, help us also to classify and date them. The heads of the statues are large in comparison to their bodies, and bald. This is in accordance with the knowledge provided about Turks by many Muslim geographers.

A general evaluation of the statues leads us to the following conclusions; in almost all the male, female and Mother Umay statues' the front parts of the bodies are stressed, while little attention is paid to the sides or the backs. It is understood that the artists spent much effort in catching the details of the facial expressions and other parts of the heads of the persons they depicted. For instance, in *Hudud al-A'lam*, an anonymous work written in 982, it is mentioned that the Turks have scanty hair[55]. Unlike the other male and female statues, the Mother Umay statues were engraved. The male statues are usually short, plump and beardless with big noses. The cups held by statues of either sex, either in both hands or only in the right, supposedly held sacred water, Bengi- Su.

From the 13th century onwards human statues began to be made from wood, as were the stone balbals. As mentioned before, the number of the wooden statues increased quickly since it is easier to carve. However many wooden statues have been found in archeological excavations conducted at the cult centers of the Kumans, located in the steppes towards the northern part of the Sea of Azov and western part of the River Don[56]. It is significant that the wooden statues look toward the east, just like the stone ones. The stone and the wooden statues both vanished simultaneously with the burial traditions of the Turkic communities. In the future, thanks to the new archeological and ethnographic records that await discovery, we hope to learn the exact date of their disappearance.

It seems that the tradition of carving statues in human form started to disappear after the Turks converted to Islam, because Islam strictly prohibits the construction of human images. However, the Turks, spreading to Anatolia and the Balkans, continued to practice their unique traditions by successfully drawing birds, monsters, swords or human figures on the

[55] Minovsky 1937, 96.
[56] Gurkin 1987, 100-109.

high stones which they erected on graves[57]. What is more important is the continuation of balbal and stone statue traditions in most parts of Anatolia, notably in Alevi cemeteries where ancient Turkish traditions are still observed (Fig. 35). Plaited grave stones at the Teslim Abdal village cemetery in Baskil district of Elazığ, for instance, bear close affinities with the examples in Tuva[58] (Fig. 36).

3. Statues of Mother Umay

Among the male statues found, those having round faces and crown- like headgear with three salients in triangular form, are supposed to be representations of Mother Umay (Fig. 37). The most important characteristic of these statues is that they all have three-sided crowns in the form of a pyramid. Also, these mother goddess statues are smaller than the male statues. Moreover, the Mother Umay reflects the women's fashion of their time and place with her crown, earrings and rich clothing[59]. Except for the lines of the pyramid-like crown with salients, the face is carved in very detailed, soft lines. This indicates that the artist paid much attention to reflecting her compassionate, protective, tender and beautiful moon-like face. Therefore, it would not be wrong to think that such artists came from Turkish communities which believe in the holiness of Mother Umay. However, we do not know where the Mother Umay statues were erected, what their specific positioning was, which sacrifices were offered to them and which specific cult rituals were performed. But in 1997, during the archeological excavations around one of the cult centers in the Çon-Döbö district of Song Köl, in Kirghizistan, a Mother Umay statue was brought to light[60]. We believe that after further evaluation of the Umay statues which were discovered at this cult site, more solid and reliable information will be accessible.

While some researchers interpret Mother Umay as the symbol of prolificacy and fertility, others see her as a goddess[61] or an angel-like, protective soul[62]. Actually, Umay Ana should not be confused with the 8000 year-old Mother Goddess cult that survived in Anatolia and Central Asia into Antiquity and Medieval times[63]. Those who interpret Mother Umay as a goddess are especially affected by the following sentence from the Tonyukuk inscriptions; *"...The God, Umay, the sacred earth and water smashed them for us..."*[64]. As it is clearly seen in the sentence, Mother Umay is counted among the souls helping the Turks.

Mother Umay was so much loved and respected that, not only were her statues erected, but also her picture was drawn on the Kudurga Sapkın Rock in the Altay region[65]. During archeological studies of a kurgan in the Süttü Bulak grave area, a plate was found on which the mother image was depicted[66]. The unchanging characteristic of all is that Mother Umay is always represented with her pyramid-like crown.

Although we do not have any exact kind of knowledge about the origin of the Mother Umay cult in our literary history, we first came across her name in the Orhun inscriptions. For instance in Kül Tegin's monument it says that the elder brother, Bilge Khan, compared her mother to Umay who protects the children; *"...When my father died, my brother Kül Tegin took the name of the brave hero..."*[67].

[57] Karamağaralı 1992, 1-34.; Haseki 1977, 5-56.; Mujezinovic 1974, 12 pp.; Mujezinovic 1977, 7 pp.; Mujezinovic 1982, 22 pp.; Özkan 2002, 614 pp.
[58] Parman 1987, 300, fig. 189/1-3.; Karamağaralı 1992, 25, fig. 104-107.
[59] Bozer 1999, 134, fig. 4.; Çoruhlu 2001, fig. 23.; Takashi 2001, fig. 258.
[60] Bozer 1999, 134, fig.
[61] Bernştam 1946, 99, 105, 163.; Clausen 1972, 164-165, 371.; İnan 1972, 36.; Ögel 1982, 191.; Abramzon 1990, 192-194. ; Roux 1999, 138.; Kafesoglu 2000, 302.; Çoruhlu 2001, 100-101.
[62] Tanyu 1980, 196.; Orkun 1936, I, 44, 113.; Gömeç 1989, 634.; Sinor 1995, 207.; Sertkaya-Alyılmaz-Battulga 2001, 127.; Mülazımoğlu 2002, 58.
[63] Belli 2001b, 4 pp.
[64] Tonyukuk, the northern part .; Orkun 1936, I, 113.; Sertkaya- Alyılmaz-Battulga 2001, 227.
[65] Çoruhlu 2001, fig. 19.
[66] Anke et al. 1977, 535, fig. 19/8 , 20.; Tabaldiev 2002, 30-31, fig. A-B.
[67] Kül Tegin , I, eastern part 31.; İnan 1972, 35.

As a part of the series of the collected works of the famous Turcologists, N. Katanov and W. Radlov about the Sagaian Turks, in their work titled "Proben", we can not fail to note a passage with the following interesting statement; *"...By the time we descended from the Ancestor Ulgen, these two trees of beech descended to the earth with Mother Umay..."*[68]. In another text about the burial ceremony it says, *"Meat is cooked for those who attended the burial. While those coming from the graveyard drink raki, three girls sprinkle the ground with raki for Mother Umay"*[69].

The Mother Goddess represents fertility among the Turkic tribes of Central Asia, as it does also in other cultures. Umay, who is the mother of the Altaic gods, is at the same time accepted as the protector of children and young animals. A statement made by Mahmud of Kasghar, *"she, who gives birth to a baby, worships Umay when she prays"*[70], reflects the main characteristic of the Mother Umay. For example, the second meaning of the word "Umay" in the language of Uighurs is "the soul which protects the children"[71].

Among the Tunghuzs living in South Siberia, Altays and the North-eastern Siberia, there is a common belief about Mother Umay protecting children; "...they believe that the child meets Mother Umay in his dream when he smiles in his sleep and that Mother Umay left him when he cries...". "When the child gets sick, they believe that Mother Umay has been away for too long and call a shaman to summon her back"[72].

Among the Kirghizs, a strong belief about the protective power of Mother Umay still exists. For instance, when treating a child or during a birth, the nurse says; " It is not my hand but Mother Umay's". And when a child is sent to somewhere, the old women say "I entrust him to Mother Umay". And during the fertile period of the animals "they say that milk was pouring from Mother Umay's chest"[73].

4- Holiness of the Statues in Human Form

The Turks erected statues which they carved for their dead ancestors either on the top or at the base of kurgans or, mostly, in the cult centers. Statues or the cult centers were later surrounded by a square or a rectangle of stones. In the cult center, where the statue of the ancestor was erected, feasts were organized in the name of the dead, and some of the food and drink was offered to the dead. As some researchers explain, the cult of the stone statues emerged as a result of such an distinctive religious tradition[74].

The stone statues in human form are held sacred and are highly respected by the Turkic tribes. And such holiness was not restricted only to any one period of time but continued even after their conversion to Islam. Even today some Turkic tribes still hold them sacred and call them "taşnine" (stone grandmother), "taşbaba" (stone father), or "saymalıtaş" (the respected stone) or "kesertaş" (the cutting stone). The Arab historian Abu Zeyd al- Belhi, who wrote his work in the mid 10th century, stresses that the Turks worship effigies and goes on; "...Some of them worship the sky and some the Sun..."[75]. The effigies mentioned here are supposed to be the stone statues that are held sacred and are respected by the Turks.

[68] Katanov 1907, 552.; İnan 1972, 35.
[69] Katanov 1907, 462.; İnan 1972, 35.
[70] Brockelmann 1928 I, 23
[71] Caferoğlu 1968, 265.
[72] Sinor 1995, 207.
[73] Abramzon 1990, 293.
[74] Baibosynov 1996, 44.
[75] Huart 1907 IV, 21-22.

We get the first kind of information about the holiness of these stone- made statues from a wandering minstrel from Gence, Nizami. It is supposed that Nizami got the information that he passed on to us from the Kipchaks, living in Azerbaijan; *"...Stone statues were erected on the steppes of the Kipchaks as talismans. All of these talismans are still standing there. Whenever a Kipchak comes closer to one of them, he worships him and puts an arrow in his quiver. If it is a shepherd who comes close to him, he sacrifices a sheep for him..."*[76].

Ssanang Ssetsen also mentions the instance of putting an arrow in the quiver of the statue in the story about Togan Tayshi. According to this story, Togan Tayshi had insulted Ghengis Khan's tomb and had been killed by an arrow in his quiver. From the story, we conclude that the statue of Ghengis Khan had a quiver[77].

We also find out from another source that the statues of Ghengis Khan and other Khans were erected and revered. As it is known, since the Dynasty Grave of Ghengis Khan was accepted as sacred, it was always protected and preserved. Apart from Ghengis Khan, other Khans such as Tuluy, Mönke and Arık Boğa were buried in this graveyard as well. As it was stated, the guards saving this graveyard served the souls of the dead as well as the living[78]. The Persian historian Rashideddin, at the beginning of the fourteenth century informs the reader about this mysterious subject as follows;"*...Having made their image (statues), they always burnt odorous things before them...*"[79].

The information given by Nizami is verified by the ethnographical researches held in the Turkic tribes of the Central Asia. The studies reveal that the statues are paid high religious respect by the shamanist people. G. N. Potanin, who conducted research in the Altay and Southern Siberia in the last quarter of the 19th century, explains to us how the people around respected a stone statue of a human located in Dain- Gul Valley; *"...The Kazaks named this statue Dain- Batir and the Uranhaians Oldze- Dain. The statue, which is 150 cms tall and 38 cms wide, is very well protected. His forehead and the crooked eyes prove a Mongolian origin. Moreover, he has a moustache. It can be guessed that, ,in comparison to the others, this statue is made in a more recent time. Even today, the people around pay much respect to it. They had built a shelter of wood in order to protect it from the snow, rain and sunlight and stretched a rope inside for tying pieces of clothes as offerings..."*[80].

According to the researches he made in the Ak-Yüs Valley of the Altay on August 18th 1722, Messerschmidt asserts that the people of the region paid much respect to the statues, offered sacrifices to them and rubbed suet on their mouth; *"...The female statue named as "Kurtuyak Tash" (hag stone) is made of gray sandstone and erected crookedly. The pinch of hair dropping from its backhead is hardly seen since it is eroded. Today women of the Kamliks and the Kumans wear the same dresses. It is not clear if there is any writing on it. The by-passing Tatars living in the Is Beltir area pay much respect to it. Everybody turns three tours around it and offer some of their food. When I asked them why they had such a simple belief, if that lifeless stone deserved such respect and if they did not see that the food they offered him was eaten by birds, foxes or other animals, they replied; she had been a noble woman and been turned into stone by the omnipotent Kayra- Khan as far as they heard from their ancestors and that*

[76] İnan 1972, 179.
[77] Barthold 1947, 533-534.
[78] Barthold 1947, 531.
[79] Barthold 1947, 531-532.
[80] Radlov 1956, II, 96.

they actually knew the food which they offered was eaten by animals, but that they had been paying respect to her saintly memory...'[81].

On July 20th 1722, Messerschmidt, in the studies he did around Kara and Ak-Yüs, writes; *"...on the left side of the road, in a spectacular valley ornamented with beech trees, there is statue named " Kozan-Kush-Tash" (Kozan- Bird-Stone). It is carved out of a red stone. He has a tea bowl-like pot of ash in his right hand, holds the skirt of his robe in his left. He has a cloth belt and two small bags hanging on it. His head is covered by a conical hat leaving the ears out. His head was as if cut and later inserted haphazardly again. His moustache reminds the moustache of a Polish warrior. He has a sparse beard around his chin and mouth. As it is understood from the description, the statue is not of a woman but of a man. The Tatars passing by never neglect to pay their deep respect to it by offering some of their food...'*[82].

5. Conclusion

Apparently the peculiar belief in the holiness of stone statues continues in this or that way among the shamanist Turkic communities. For example, the areas where balbals and statues are erected still keep their holiness in the Republic of Hakasia. The shamanist people of the Turkic communities of the area still go on praying to the stone- made statues in human form and to the balbals, doing offerings to them, embracing them and tying pieces of clothes to them for their wishes to come true[83] (Fig. 38).

During the archeological studies in Kazakhistan and Kirghizistan, we observed that the people highly respect the statues which they carried into their gardens from cult centers and regarded them as indispensible members of their family. Furthermore, they do not let any governmental officers to transport the statues to any museum. In Kirghizistan, we also observed that the statues which were exhibited in the garden of the Manas Museum, were highly respected and held sacred by the people of the region. Women who wanted their dreams to come true touch them and rub their hands to their faces, kissing them as sacred beings (Fig.39). Actually, if the Turkic tribes had not held them sacred and protected them carefully, the statues would not have survived until today[84].

[81] Radlov 1956, II, 92-93.
[82] Radlov 1956, II, 93-94.
[83] Mülazımoğlu 2002, 59.
[84] Belli 2003, 50. 2002, 59.

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Fig. 1: A stone statue in cult center (Estelik), Kazakhistan.

Fig. 2: A seriously damaged kurgan and stone statue, Song Köl-Kirghizistan.

Fig. 3: Stone statues gathered in the parks, Karakol-Kirghizistan.

Fig. 4: Stone statues in the gathered in the parks, The Faculty of Fine Arts, Bishkek- Kirghizistan.

Fig. 5: Stone statues in the garden of museum, Balasagun- Kirghizistan.

Fig. 6: Stone statues in the garden of museum, Zhambyl-Kazakhistan.

Fig. 7: Balbals arround the kurgan, Hakasia (Photo S. Anadol-Atlas).

Fig. 8: The Line of balbals in Tonyukuk complex, Mongolia (Photo S.Başaran).

Fig. 9: The line of balbals around the kurgan, Kazakhistan.

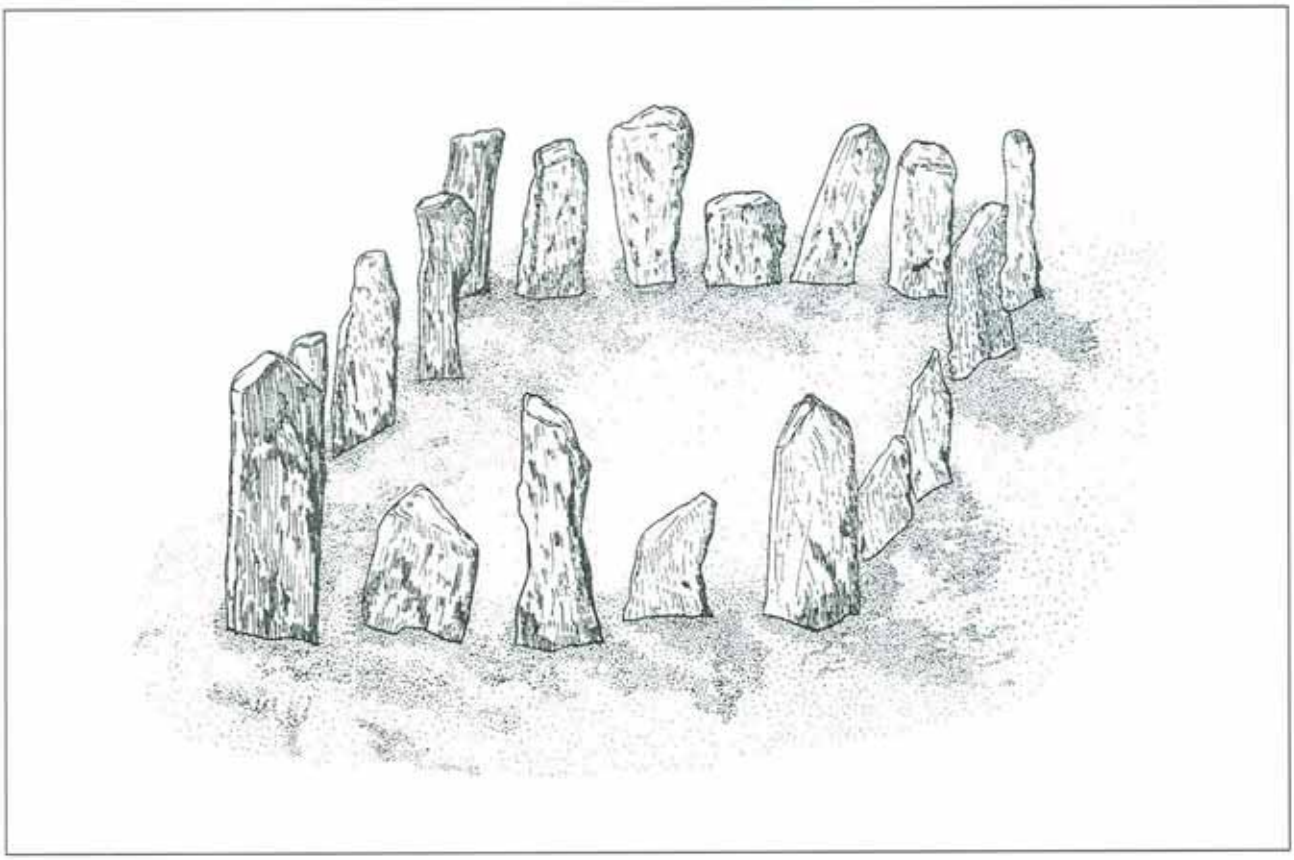

Fig. 10: Balbals around the kurgan, South Siberia, Radlov.

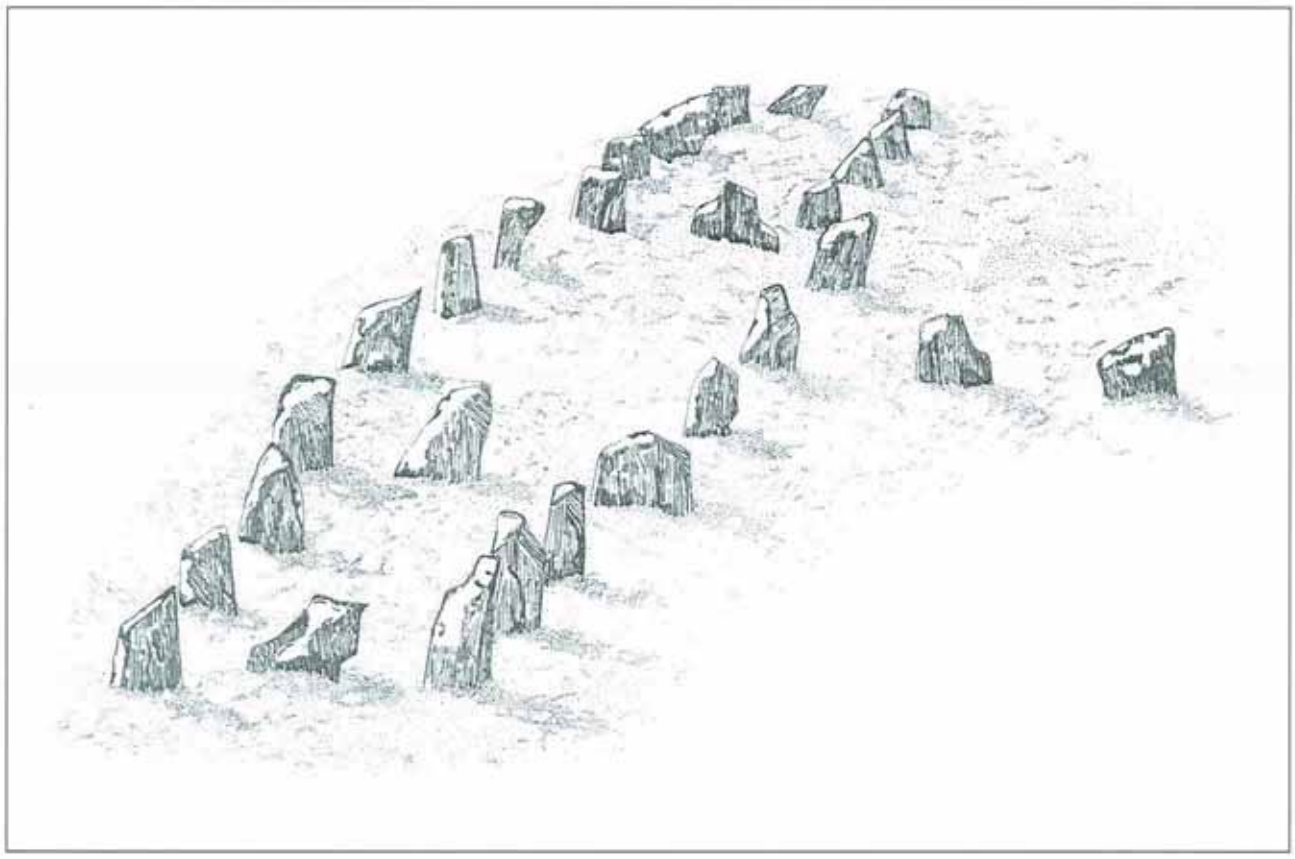

Fig. 11: Balbals around the kurgan, South Siberia, Radlov.

Fig. 12: Balbal, Kiew-Ukraine.

Fig. 13: Caa taş, Uybat Region, Hakasia (Photo S. Anadol-Atlas).

Fig. 14: Scythian stone statue,
Kiew-Ukraine.

Fig. 15: Scythian stone statue, Kiew-Ukraine.

Fig. 16: Kipchak stone statue, Kiew-Ukraine.

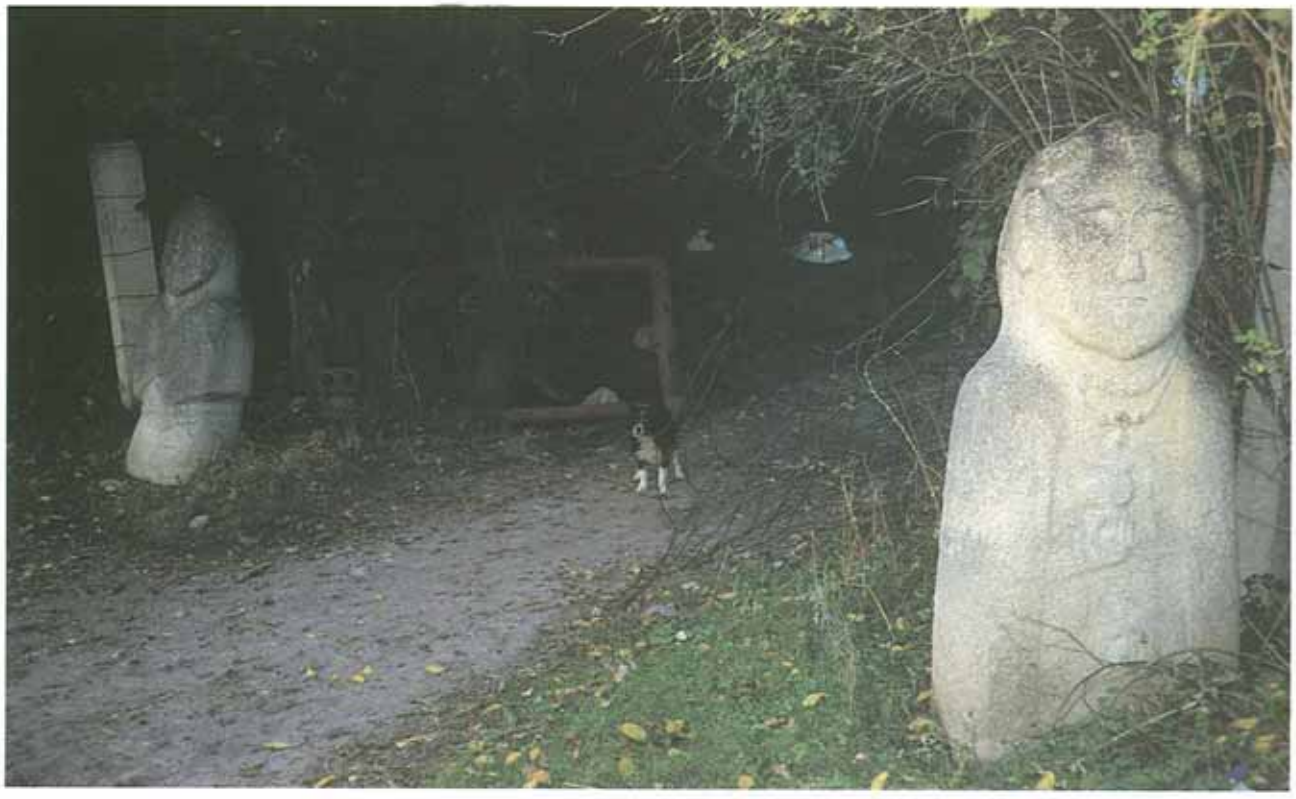

Fig. 17: Male and female statues taken out of the kurgan, Tüp Region- Kirghizistan.

Fig. 18: Stone statue, Mongolia (Photo Y. Dede).

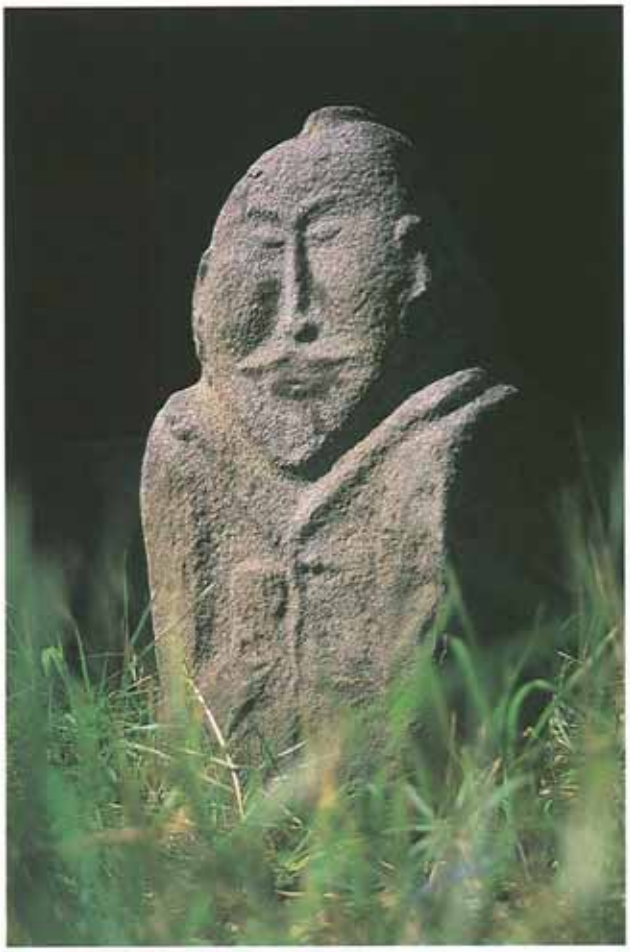

Fig. 19: Stone statue, Tuva (Photo S. Anadol-Atlas).

Fig. 20: Stone statue, Kazakhistan.

Fig. 21: Stone statue, Kirghizistan.

Fig. 22: The shortest statue, Kirghizistan.

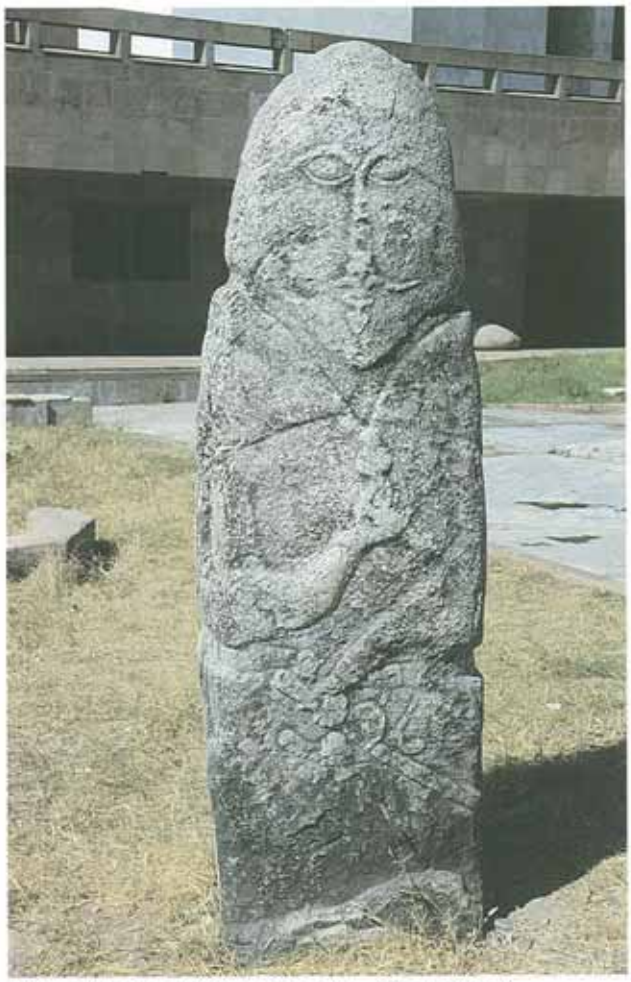

Fig. 23: The highest statue, (Karahan) Bishkek-Kirghizistan.

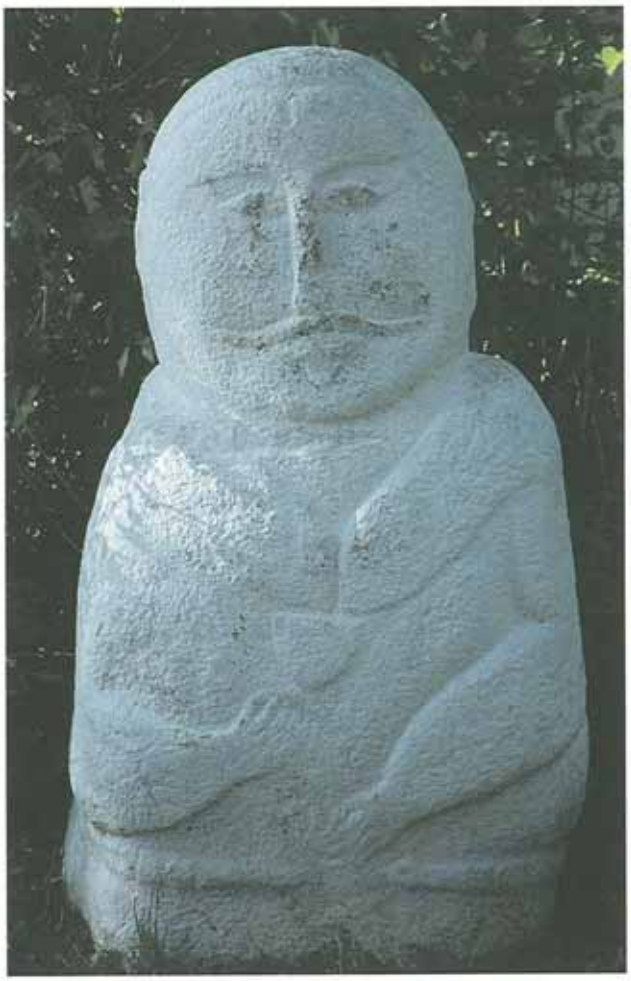

Fig. 24: The widest statue, Tüp Region-Kirghizistan.

Fig. 25: Standing and sitting statues , Mongolia (Photo S. Başaran).

Fig. 26: Armed man holding a cup in his right hand, Kirghizistan.

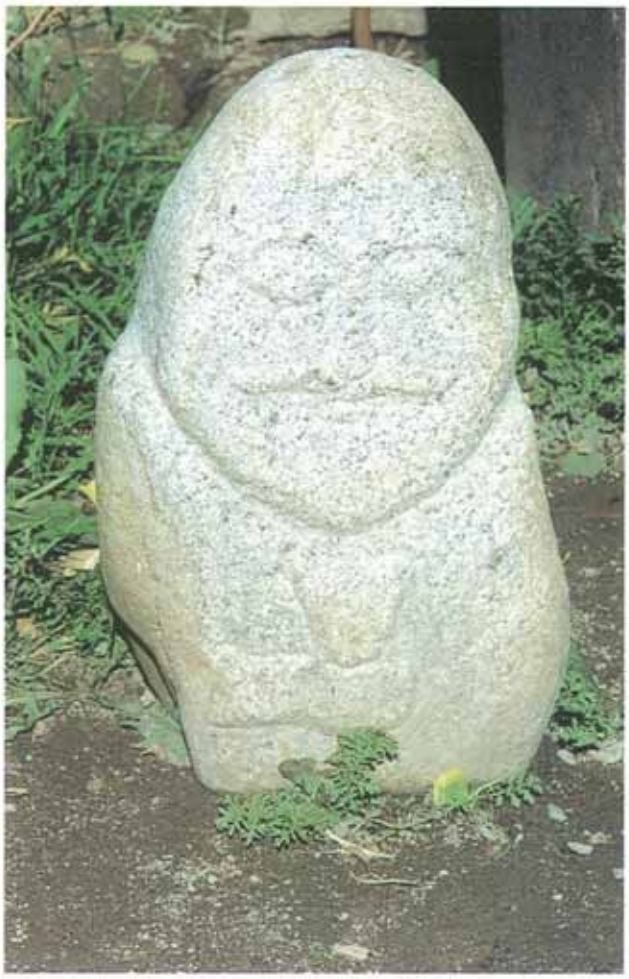

Fig. 27: Unarmed man statue holding a cup in his right hand, Kirghizistan.

Fig. 28: Man holding cup or pots in both hands, Tuva (Photo S. Anadol-Atlas).

Fig. 29: Statue with only faces depicted, Kazakhistan.

Fig. 30: Female statues holding cups each hand, Zhambyl-Kazakhistan.

Fig. 31: Man holding bird in hand, Zhambyl-Kazakhistan.

Fig. 32: Mother Umay.

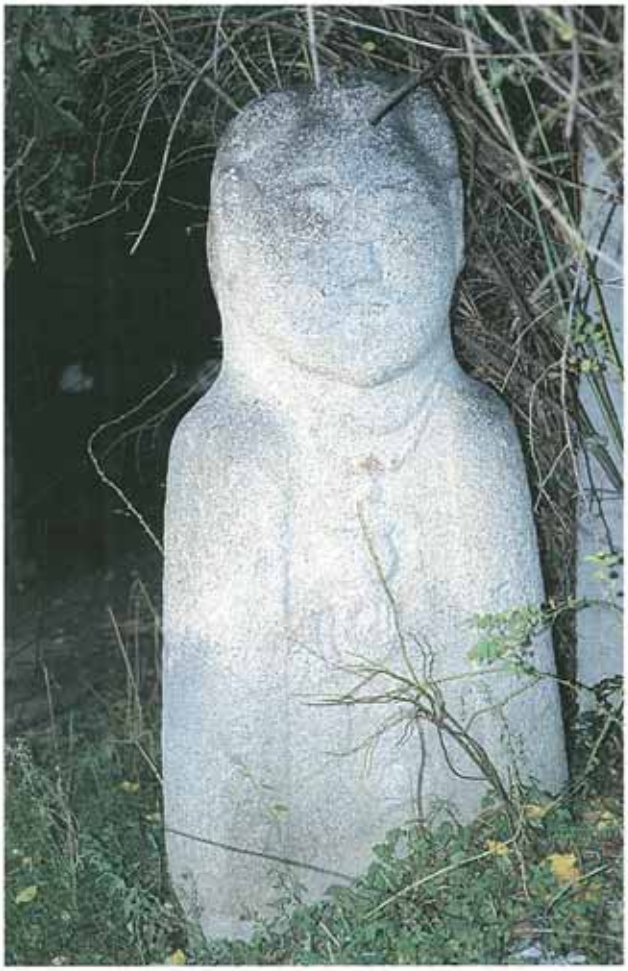

Fig. 33: Female statue holding flower in their hands.

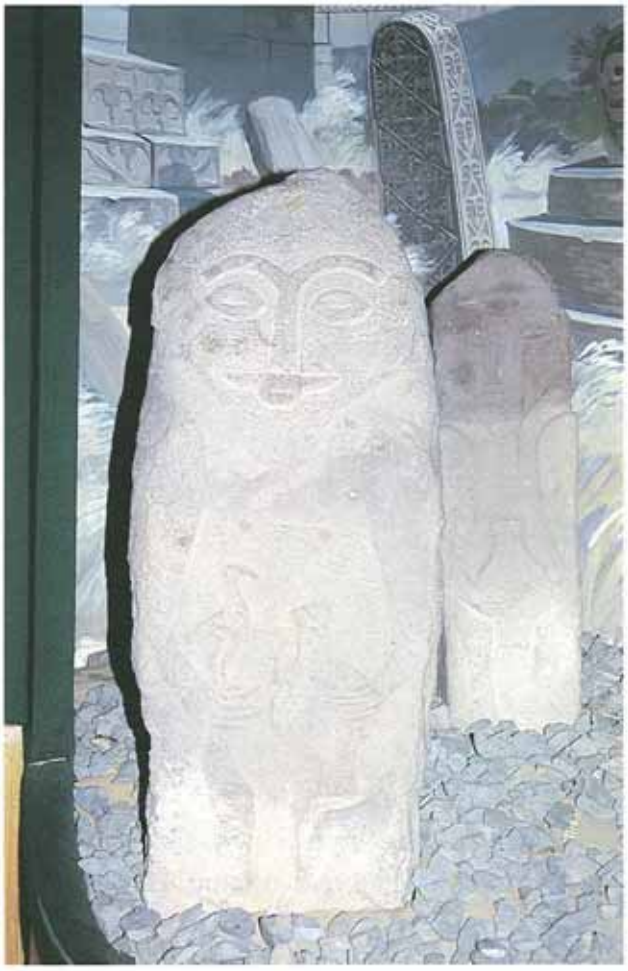

Fig. 34: Man holding a music instrument in his hands, Almatı-Kazakhistan (Photo Y. Çoruhlu).

Fig. 35: A Grave stones in the form of balbal (Tizgi cemetery-Hasankale Turkey).

Fig. 36: A Grave stones with braiding, Teslim Abdal cemetery, Baskil-Elazığ Turkey (Photo E. Parman).

Fig. 37: Mother Umay, Zhambyl -Kazakhistan.

Fig. 38: Clothes tied up to stone statues and balbals, Uybat Region-Hakasia (Photo S.Anadol-Atlas).

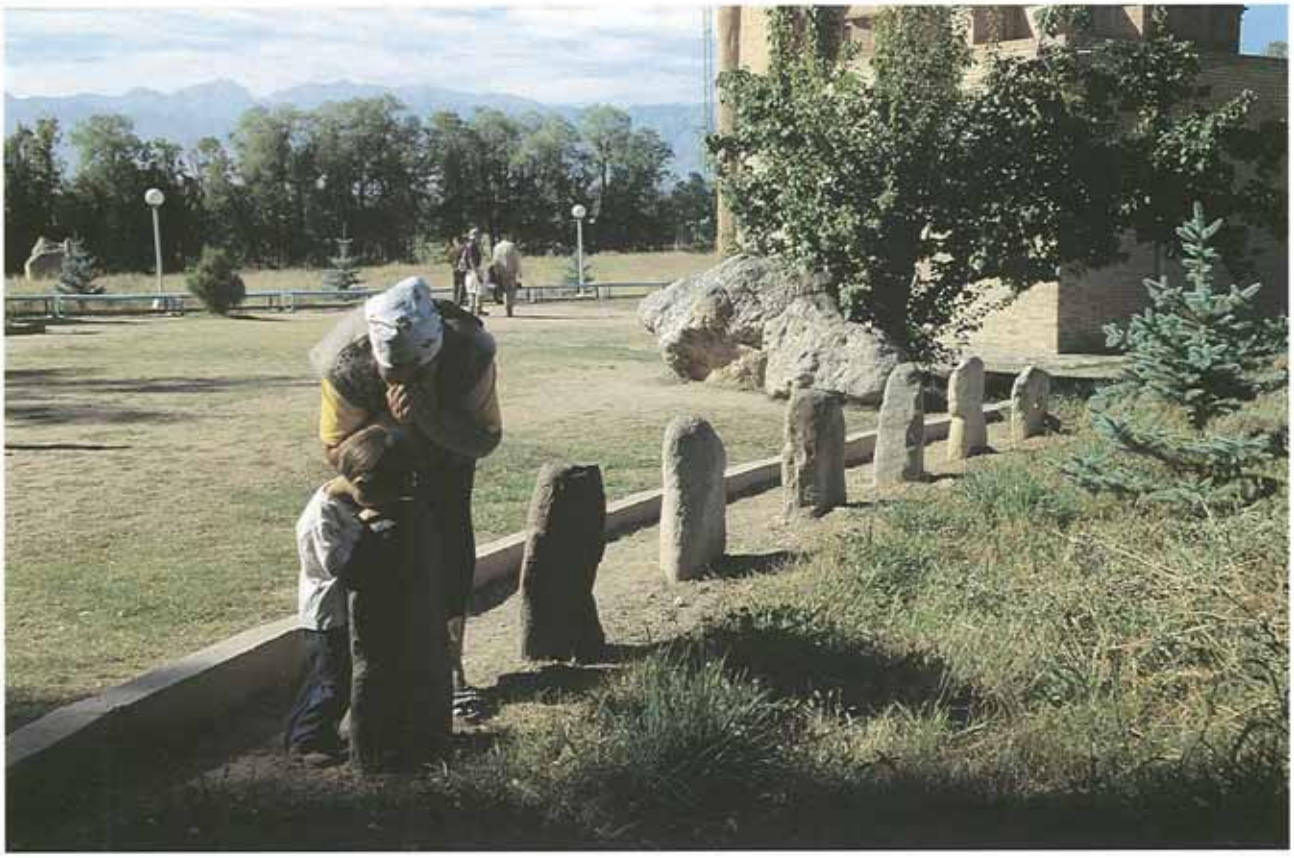

Fig. 39: Ladies Kissing the stone statues in deep respect, Talas-Kirghizistan.

Elazığ-Malatya Yöresi Duvar Resmi Geleneği ve Pirot Höyük Duvar Resmi

The Wall Painting Tradition in Elazığ-Malatya Region and the Pirot Höyük Wall Painting.

***Engin AKDENİZ -**Özgen KARACA**

Anahtar Sözcükler: Doğu Anadolu, Elazığ-Malatya yöresi, Son Kalkolitik Çağ, İlk Tunç Çağı, duvar resmi, Pirot Höyük.
Keywords: Eastern Anatolia, Elazığ-Malatya region, Late Chalcolithic Period, Early Bronze Age, wall painting, Pirot Höyük.

Pirot Höyük is located 33 km east-northeast of Malatya, in the village of Pirot (Kıyıcak) along on the south bank of the Euphrates River. The village was once within the province of Kale Bucağı, before the construction of the Karakaya dam. The excavations revealed fifteen main levels (I-XV), which represent settlements extending from the Mid / Late Chalcolithic period to the Byzantine times.

A wall painting has been defined on the northern wall of the feature 3, in the C 10 trench. It belongs to the XIIth level of Pirot Höyük which dates to the Late Chalcolithic. Links to this wall painting have not been established ,though it can be considered an example to the wall painting tradition of the Elazığ-Malatya region. Such as those from Arslantepe, Değirmentepe and Norşuntepe.

The reason that the wall painting tradition is known at all from Elazığ-Malatya region is that excavations have been limited to the dam salvage project.

Doğu Anadolu'nun önemli höyüklerinden biri olan Pirot Höyük, Malatya'nın yaklaşık 33 km. kuzeybatısında, Karakaya baraj gölü oluşmadan önce Fırat Irmağı'nın hemen sağ kıyısında bulunmaktaydı. Aşağı Fırat Eski Eserleri Kurtarma Projesi'nin bir parçası olarak Özgen Karaca başkanlığında bir ekip tarafından 1978-1985 yılları arasında kazılmıştır (Karakaya Barajı)[1].

Pirot Höyük kazılarının hiç şüphesiz en dikkat çekici buluntusu 1981 kazılarında XII. tabakada saptanan duvar resmidir[2]. C10 plankaresinde 3 nolu mekanın kuzey duvarında, duvarın güney yüzünde saptanan resim tahrip olmasına karşın Elazığ-Malatya yöresi Kalkolitik Çağ duvar resim geleneğine bir örnek teşkil etmesi açısında önem taşımaktadır[3].

Köylülerin toprak alma amacıyla açtıkları yarma, duvar resminin batı kısmının yok olmasına sebep olmuştur. Ayrıca duvarın ikinci kullanım geçirmesi, resmin bulunduğu duvarın sonraki evrede dik bir

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duvarla kesilmesi, tahribatın diğer sebepleridir.

Resmin yapıldığı duvar höyüğün batısında, tepe noktasından yaklaşık -8,5 m. derinliktedir. Kuzeybatı-güneydoğu yönünde uzanan duvar 15-20 derecelik bir açıyla arkaya doğru eğilmiştir. Duvar, düzgün olmayan, farklı büyüklükteki taşlardan örülmüş olup üst kısım kerpiçle devam etmiştir. Resmin kurtarılan bölümü taş temelin iç yüzündedir. Resmin yapıldığı duvarın yüzeyi kum, mika ve bitkisel katkılı ince, beyaz renkli bir sıvayla kaplanmış, sıva yüzeyi dört kez yenilenmiş, her kat sıvadan sonra resim yeniden işlenmiştir. Taş yüzeyin durumuna göre resmin sıvası incelip kalınlaşmaktadır. Sıva kalınlıkları 0,5-1,5 mm. arasında değişmektedir. Bu yüzeyin üzerine kırmızı aşı boyasıyla resim yapılmıştır. Ancak, yangın sebebiyle resim renk değiştirerek kahverengiye dönüşmüştür. Resmin ortaya çıkarılmasından sonra, 1983 kazıları sırasında içinde kırmızı aşı boyası kalıntıları taşıyan bir kase de bulunmuştur (83/11)[4]. Son Kalkolitik Çağa tarihlenebilen bu kasenin içinde duvar resminin yapımında kullanılan kırmızı aşı boyası parçaları saptanmıştır. Resmin korunabilen/kurtarılabilen en yüksek yeri 24 cm., en geniş yeri ise 52 cm.'dir.

Pirot Höyük resminin tabana oldukça yakın bir noktaya yapılmış olması ilginçtir. Genellikle bu tip duvar resimlerinin daha üst kesimlere yapıldığı bilinmektedir. Oysa Pirot Höyük resminin alt kesimlere yapılmış olması resmi yapan kimsenin oturarak ya da eğilerek bu resmi yaptığını düşündürmektedir.

Resimde ana pano, ortada yer alan bir figür ya da motifin etrafında sıralanmaktadır. Bu figür ya da motifin ne olduğu tam olarak anlaşılamamakla birlikte artakalan parçaların birleştirilmesinden bunun bir figür olduğu düşünülebilir. En üst kesimdeki çizim bir şey ifade etmemekte, aşağıdakiler ise bir çift ayağı andırmaktadır. Simetri düşüncesinin hakim olduğu bu resmin en dışta, sağında ve solunda yukarıdan aşağıya doğru inen, ancak düzgün aralıklarla ve hatlarla çizilmeyen 13'er sıra bant, bu bantların oluşturduğu iki ayrı grup arasında toplam 55 adet bağımsız puan vardır. Ayrıca 3 puan sağdaki banttadır. Bantlar ortadaki figür arasında sağda ve solda ikişer kelebek (kum saati) motifi çizilmiştir.

Sağdaki motiflerden birisinin üst kısmı aşınmıştır. Ortadaki figürün ayakları altında (?) birbirine paralel iki çizgi, solunda da pek düzenli olmamakla birlikte yine birbirine paralel iki çizgi vardır. Soldakilerin boyutu küçüktür. Figürün sağ tarafında yine birbirine paralel, ancak araları çok açılmış ve aralarına kelebek (kum saati) motifi girmiş iki çizgi vardır. Ana figürün üst kesiminde ne olduğu tam anlaşılamayan, kanatlarını açmış durumda bir kuşa benzeyen ayrı bir çizim vardır. Bu kuş figürüyle aşağıdaki figür arasındaki kesim ise tahrip olduğu için bilinmemektedir.

Anadolu'da Hakkari, Kars, Adıyaman, Antalya ve Bafa Gölü (Beşparmak Dağları) çevresindeki Paleolitik ve Neolitik mağara-kaya resimleri dışında mekanların duvarlarına uygulanan duvar resmi geleneği Neolitik Çağ'a kadar uzanmaktadır.[5] Çatalhöyük'ün Neolitik Çağ'a tarihlenen meşhur duvar resimlerinin ardından bu resim geleneğinin Konya yöresinde devam ettiği yönünde bilgimiz yoktur. Gerek Orta Anadolu'daki Çatalhöyük, gerekse Anadolu dışında Ortadoğu'daki diğer Neolitik yerleşimlerdeki Neolitik Çağ duvar resimleri av sahneleri, değişik insan ve hayvan figürleri çeşitli geometrik motifler ve bazı manzara sahnelerinden oluşmaktadır.[6] Sonraki dönemlerde bu sahneler, az sayıda insan ve hayvan figürünü saymazsak, yerlerini genellikle geometrik ögelere bırakacaklardır. Orta Anadolu'dan daha doğuda ve sonraki dönemlere ait olmakla birlikte duvar resmi geleneğinin Anadolu'da popüler olduğu bölge, Doğu Anadolu'nun batısı yani günümüzdeki Elazığ-Malatya yöresi gibii gözükmekte-

dir. Bu yörede kazıları yapılan ya da yapılmakta olan merkezlerden Arslantepe, Değirmentepe ve Norşuntepe'den değişik özelliklere sahip duvar resimleri bilinmektedir.[7]

Duvar resmi açısından en zengin yerleşim hiç şüphesiz Arslantepe'dir. Arslantepe kazılarında Son Kalkolitik Çağ'a tarihlenen VII. tabakanın geç evrelerine ait yapı XXIX'un A 900 nolu odasında saptanan ve ne olduğu tam olarak anlaşılamayan resim dışında[8] VI. tabakada da duvar resimlerine rastlanmıştır. Son Kalkolitik-İlk Tunç Çağı I'e tarihlenen VI tabaka büyük bir tapınak-saray külliyesiyle dikkat çeker (yapı IV). Teraslar üzerinde kurulmuş olan külliyenin ortasında 35 m.'yi aşan, sokak görünümlü ve duvarları kırmızı-siyah renkli resimlerle süslü bir koridor bulunmaktadır. Tapınağın bazı odalarının duvarları da stilize insan figürleriyle süslenmiştir. Bunlardan depo odası olarak kullanıldığı düşünülen A 364 no'lu odada saptanan resim Arslantepe'nin olduğu kadar Doğu Anadolu'da ortaya çıkarılan en ilginç duvar resmi olma özelliğine sahiptir[9]. Bu duvar resmi, oda tabanının yaklaşık 90 cm. yukarısından başlayıp 55 cm. yüksekliği ve 60 cm. genişliğe sahiptir. Pembe-fildişi bir fon üzerine kırmızı ve siyah renklerle yapılmış resmin merkezinde üçgen yüzlü bir insan figürü vardır. Figür olasılıkla sunak benzeri bir nesnenin gerisinde ayakta durur vaziyette tasvir edilmiştir. Gözleri abartılmış bu figürün gövdesi hiç de yabancı olmadığımız şekilde kelebek (kum saati) motifi benzeridir. Kolları bükük durumdaki şematik insan figürünün üçgen yüzünde uzun saçları belirten, yukarıya dalgalı bir şekilde uzanan çizgiler dışında sakal olduğu anlaşılan aşağıya ve yanlara doğru uzanan çizgiler de vardır. Elinde ince-uzun sopa benzeri bir alet vardır. Figürün üst kısmında dekoratif spiral ve değişik motiflerden oluşan saçaklık benzeri bir alan bulunmaktadır. Simetrik olduğu anlaşılan bu motiflerin büyük bir kısmı korunmuştur. Yine aynı duvar üzerinde, bu resmin biraz sağında benzer bir figüre daha rastlanmıştır. Ancak bu figürün göğüsten aşağısı tahrip olmuş durumdadır. Buna karşın genel özellikleriyle bir önceki örneğe benzer olduğu rahatlıkla söylenebilir[10].

Arslantepe'nin duvar resimlerinin aynı yüzeye defalarca yeniden yapıldığı anlaşılmaktadır.Değirmentepe'de ise Obeyd tipi kuvvetli bir yerleşimin saptandığı 7. tabakada beyaz sıvalı duvar üzerine kırmızı renkte aşı boyasıyla çizilmiş çok şematik bir duvar resmi ortaya çıkarılmıştır. Bu resim, bir orta avlu ve iki kanattan oluşan üç bölümlü bir yapının orta avlusunun duvarlarına yapılmıştır. Dörtgen çerçevelerle sınırlanan yüzeyde genellikle benekler, bezekler, bitkisel ögeler ve şematik güneş betimlemesi vardır[11]. Yapılan incelemelerde resimlerin belirli bir zaman süresinde yıprandıkça üzerlerine yeni bir sıva çekilerek ve kırmızı boya kullanılarak yenilendiği anlaşılmıştır.

Yine Elazığ-Malatya yöresindeki bir yerleşim olan Norşuntepe'de ise 8. tabakada iki niş arasındaki 1m. genişliğindeki dördüncü beyaz sıva tabakası üzerine yapılmış bir duvar resmi saptanmıştır. Resim, 0,75 m. genişliğinde ve 0,36 m. yüksekliğindedir. Siyah ve kırmızı alev demetlerinden bir arka fon önünde hatları siyahla belirtilerek yüzeye derinlik verilmeden kızıl-kahve boyanmış, sağa dönmüş durumda bir hayvan tasvir edilmiştir. Hauptmann bu hayvanın bir geyik olabileceğini belirtir[12]. Eser Son Kalkolitik Çağ'a tarihlendirilmiştir.

Pirot Höyük duvar resmiyle Elazığ-Malatya yöresindeki diğer duvar resimleri (Arslantepe, Değirmentepe, Norşuntepe) arasında motif veya figürler açısından tam bir benzerlik olduğu söylenemez. Teknik birbirine benzer de olsa tasvirler farklıdır. Duvar resimlerindeki motiflerle özellikle çanak çömlek üzerindeki motiflerde benzerlikten söz edilebilir. Bu motifler arasında en belirgini kelebek ya da kum saati motifidir. Kelebek ya da kum saati motifi, Arslantepe duvar resmindeki figür gövdesi dışında[13] yoğun olarak çanak çömlekde

ve bazen mühürler üzerinde uygulanmıştır. Çavi tarlası çanak çömleğine bakılarak bu motifin ilkin İlk Kalkolitik Çağ'da Halaf kültüründe ortaya çıktığı söylenebilir[14]. Daha sonra oldukça geniş bir coğrafyada ve süreçte kullanılmaya devam edilmiştir. Han İbrahim Şah kazılarında IX. tabakada ele geçen boya bezeli bir çanak parçası üzerindeki bir hayvan gövdesi Pirot Höyük duvar resmindeki kelebek ya da kum saati motifinin daha stilize edilmiş şeklidir[15]. Aynı motif Norşuntepe'nin Son Kalkolitik Çağ çanak çömleğinde[16] ve Arslantepe[17] ile Tepecik[18] İlk Tunç Çağı çanak çömleğinde uygulanmıştır. Pirot Höyük duvar resmindeki kum saati ya da kelebek motifi çanak çömlek dışında mühürlerde de kullanılmıştır. Değirmentepe'nin Obeyd tabakalarında biraz farklı olmakla birlikte bu motif değişerek içi taranmış yaprak haline gelmiştir.[19].

SONUÇ

Pirot Höyük'ün Son Kalkolitik Çağ'a tarihlenen XII. tabakasında saptanan duvar resminin bezeme açısından çok yakın benzerleri bulunamamıştır. Arslantepe, Değirmentepe ve Norşuntepe'den bilinen duvar resimlerinde teknik Pirot höyük resmine benzemesine karşın, Arslantepe'deki figürün gövdesini oluşturan kum saati-kelebek motifi dışında benzer bir motif ya da figür yoktur. Bu motif, çanak çömlekde ilkin İlk Kalkolitik Çağ'da ortaya çıkmış, Son Kalkolitik Çağ boyunca yoğun bir şekilde kullanılmış, hatta İlk Tunç Çağı çanak çömleğine bile uygulanmıştır. Çanak çömlek dışında yine Son Kalkolitik Çağ'a ait bir mühür üzerinde benzer motif vardır.

Bezeme açısından birbirine pek benzememesine karşın bu duvar resimlerinin Elazığ-Malatya yöresinde, yani sınırlı bir coğrafyada görülmesi bir duvar resmi geleneğinin varlığını gündeme getirmektedir. Resimlerin saptandığı tabakalar küçük bazı tarihleme farklılıkları olmasına karşın Son Kalkolitik Çağ-İlk Tunç Çağı'na, ya da tamamen Son Kalkolitik Çağ'a aittir. Dolayısıyla Pirot Höyük duvar resmi de dahil olmak üzere bu duvar resimlerinin hepsi bir bütün olarak ele alınıp "Elazığ-Malatya yöresi Son Kalkolitik Çağ duvar resimleri geleneği" şeklinde adlandırılabilir. Bu noktada unutulmaması gereken, resimlerin saptandığı bu sınırlı coğrafyanın belki de yalnızca baraj kurtarma kazılarının burada yapılmış olmasından dolayı bu yöreyle sınırlı kaldığı, kazı yapılan merkezlerin (baraj suları altında kalmayan alanlarda) çoğalmasıyla birlikte yeni resimlerin de bulunabileceği olasılığıdır.

NOTLAR

[1] Metinde de belirtildiği gibi Pirot Höyük, Karakaya Barajı yapılmadan önce, Malatya ilinin yaklaşık 33 km. doğu-kuzeydoğusunda, Fırat Irmağı'nın hemen kenarında merkez Kale Bucağı'na (şimdi ilçe) bağlı Pirot (Kıyıcak) köyünde yer almaktaydı. Çift konili bir höyük görünüşünden dolayı "İkiz Höyük" adıyla da anılan höyüğün batı konisinin aslında bir höyük olmadığı, bu yayvan ve geniş tepenin yüzey bulgularının doğu höyükten köylüler tarafından çekilen toprak ile birlikte geldiği yapılan sondajlar sonucunda saptanmıştır. Modern yerleşim doğu koninin alt terası ile batıdaki doğal tepeyi kaplamıştı. Pirot Höyük'de köylülerin toprak çekmelerinden kaynaklanan önemli bir tahribat mevcuttu. Oldukça dik ve elips biçimli doğu koninin en yüksek yeri 663.34 m., kodunda, höyük yükseltisi ise yaklaşık 25 m. civarındaydı. Höyüğün güney-kuzey doğrultusundaki uzunluğu yaklaşık 145 m., doğu batı doğrultusunda ise 95 m. idi. Pirot Höyük'deki kazılar "Aşağı Fırat Eski Eserleri Kurtarma Projesi" çerçevesinde 1978-1985 yılları arasında Özgen Karaca başkanlığında bir ekip tarafından sürdürülmüştür. Kazılar daha az tahribatın meydana geldiği doğu konide yoğunlaşmış, bunun dışında batı konide de bazı çalışmalar gerçekleştirilmiştir. Kazılarda I'den XV'e kadar uzanan 15 ana tabakanın varlığı saptanmıştır. Böylece Pirot Höyük'de Orta Kalkolitik-Son Kalkolitik Çağ'dan Bizans Dönemi'ne kadar uzanan yerleşimin varlığı gözler önüne serilmiştir. Ü.Serdaroğlu, 1977, 16, tablo 1.2; M.Özdoğan, 1977, 8.; Ö.Karaca, 1981, 109-114; Ö.Karaca, 1983, 69-81; Ö.Karaca, 1984, 103-107; Ö.Karaca, 1985, 37-48.

[2] Pirot Höyük XII tabaka duvar resmi 1981 kazılarında saptanmış, 1982 kazılarında devamı araştırılmış ancak özellikle tahribattan dolayı devamını saptamak mümkün olmamıştır. Ö.Karaca, 1983, 73, Res.6; Ö.Karaca, 1985, 40.

[3] Farklı büyüklükteki taşlardan yapılan temel üstü duvarın sıvası taş yüzeylere göre yer yer incelip kalınlaşmaktadır. Bu bakımdan resmin ve sıvanın kaldırılması çok zahmetli olmuştur. Gerek duvar resminin kaldırılması, gerekse konservasyonu değerli kazı kurulu üyeleri arkeolog Sırrı Özenir ve arkeolog Ahmet Boratav tarafından gerçekleştirilmiştir. An-

cak, temizlenip çizimi yapılan, fotografı çekilen ve gerekli konservasyon önlemleri alınarak Malatya Müzesi'ne teslim edilen resim bir süre sonra tahrip olmuştur. Malatya Müzesi F 81/62.

[4] El yapımı kase; düz ağızlı,basık yuvarlak gövdeli ve yuvarlak dipli. Hamuru açık kırmızımsı kahverengi renkli, kum ,taşcık ve saman katkılı. Kendinden astarlı. Yük. 5.5-6 cm, ağız çapı 10 cm.

[5] K. Schmidt 2000,3

[6] J. Mellaart, U. Hirsch, B.Balpınar 1989, plate II/14

[7] H. Hauptmann 1976, 41-59; U.Esin 2000, 81-86; M. Frangipane 2001, 15,figs.9a,9b

[8] M.Frangipane, 2001, 3, Fig.9a.

[9] M. Frangipane 1991, 209-223; A. Palmieri 1989, 420, Pl. 125/2; A. Palmieri- M. Frangipane 1988, 128; A.Palmieri- F. Frangipane 1990, 195, 196, Fig.5; E.M. Meyers, 1997, Fig.2

[10] M.Frangipane 2001, 3, Fig. 9b

[11] U.Esin 1998, 189, 190, Abb. 12,13,14; U. Esin 2000, 83

[12] H.Hauptmann 11976, 54, Lev.42,3

[13] A.Palmieri 1989, Pl. 125/2

[14] J.Yakar 1991, 71, Fig.32

[15] H.Ertem 1974, Lev.62; H.Ertem 1982, Lev.31/324

[16] H.Hauptmann 1974, Lev.78/5,1,2

[17] A.Palmieri 1973,Fig.44/6

[18] U.Esin 1970,Lev.13,12

[19] U.Esin 1998,Abb.16; U.Esin 2000,Fig.7 alt sol

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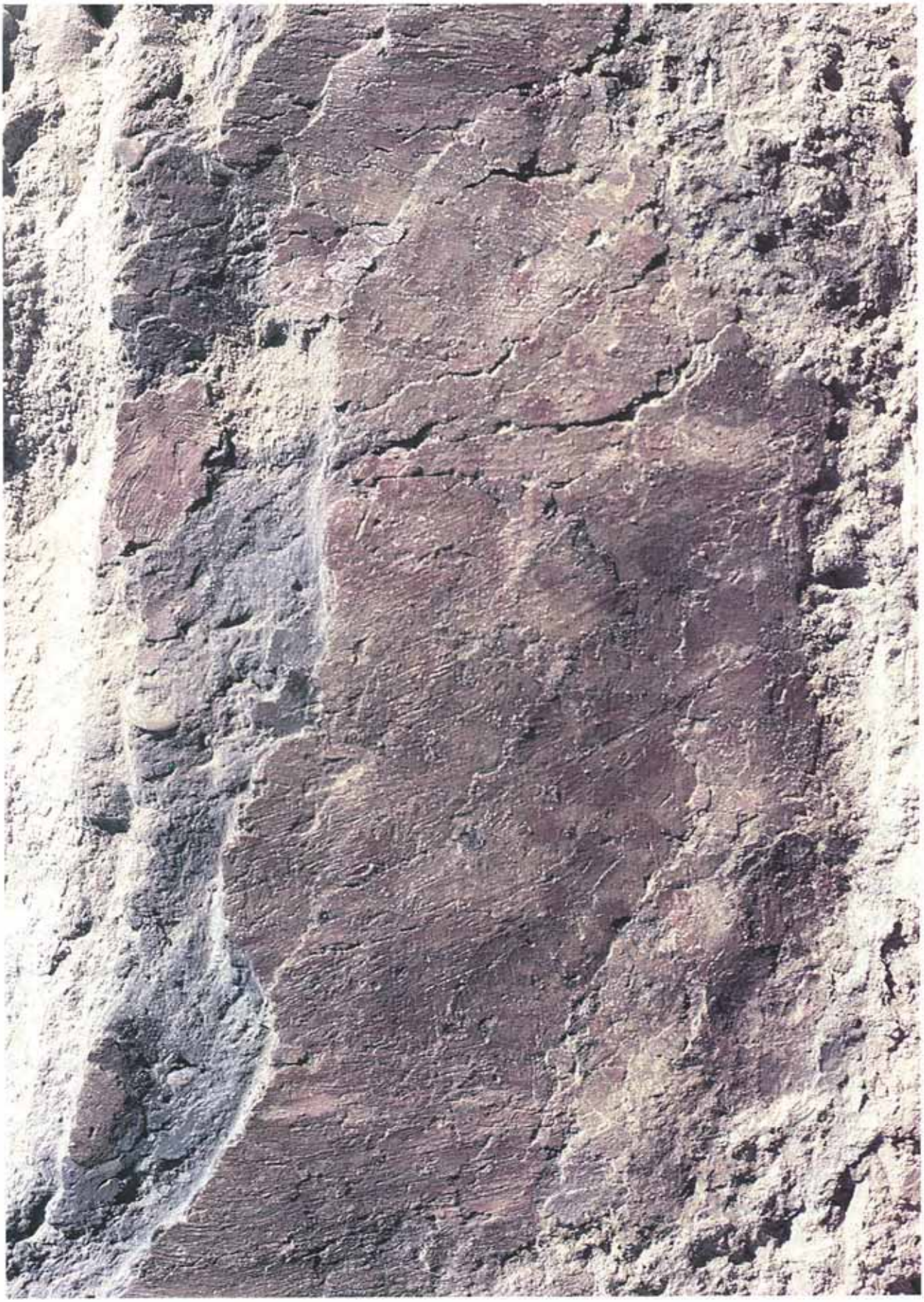
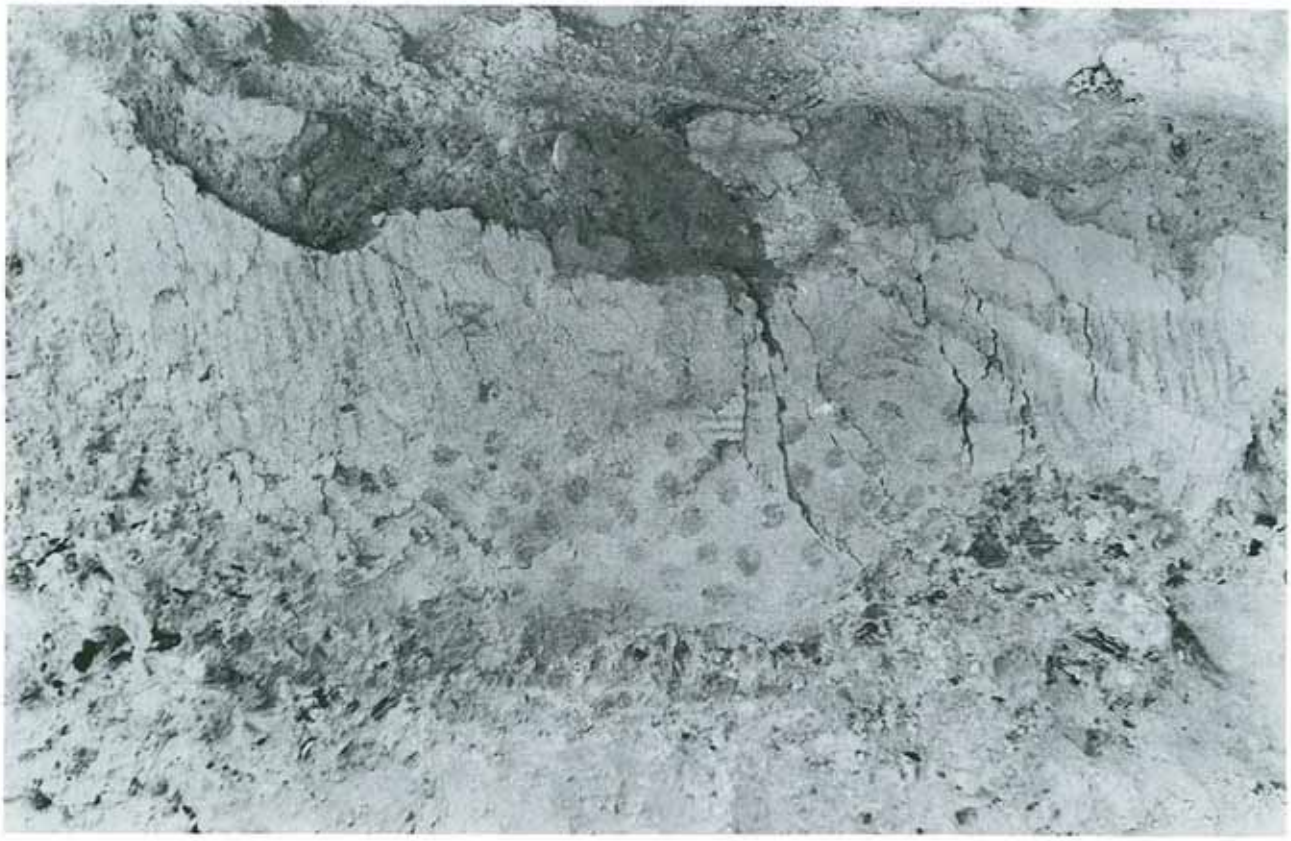
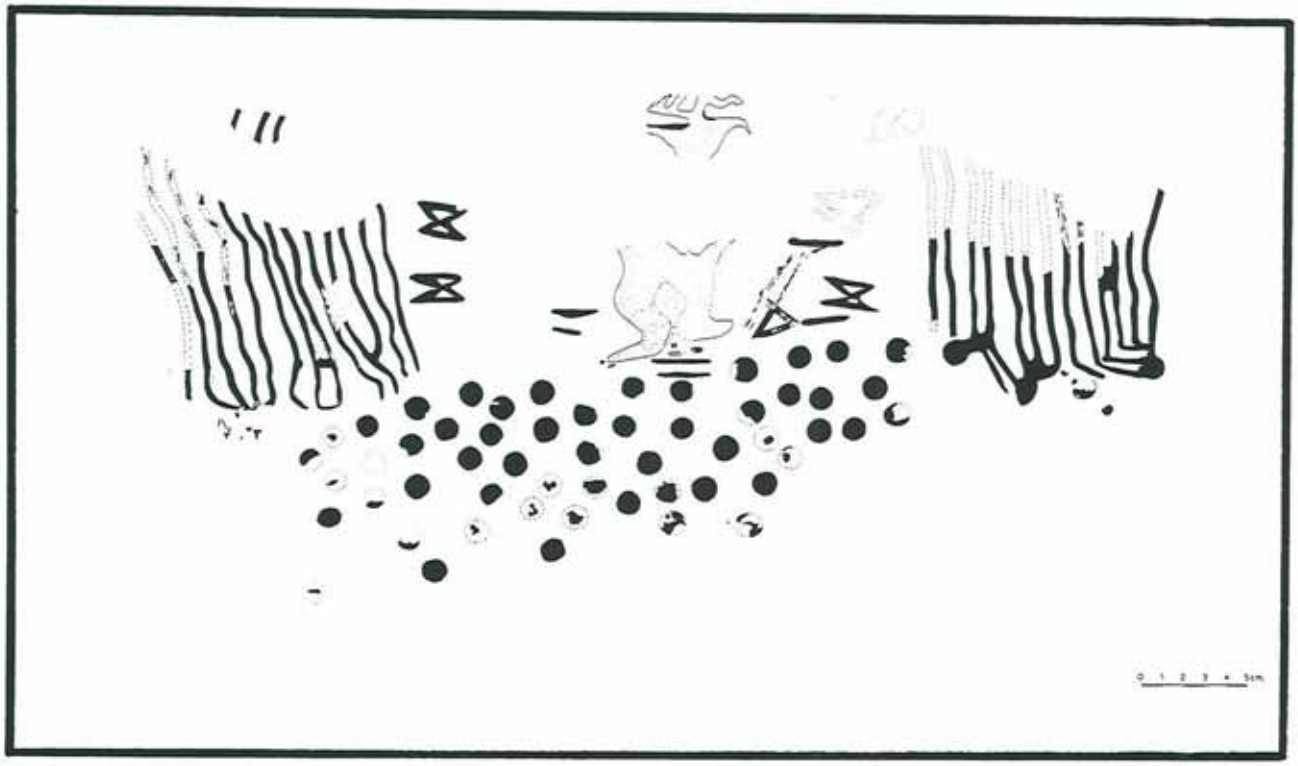


1- Pirot Höyük duvar resmi: renkli resim



2- Pirot Höyük duvar resmi: siyah beyaz resim



3- Aynı resmin çizimi

Archaeology in Turkey: The Stone, Bronze & Iron Ages, 2001

Türkiye'de Arkeoloji: Taş, Tunç & Demir Çağları 2001

***ALAN M. GREAVES - **BARBARA HELWING**

Keywords: Anatolia, excavation reports, archaeological research, Stone Age, Bronze Age, Iron Age
Anahtar sözcükler: Anadolu, kazı raporları, arkeolojik araştırmalar, Taş Çağı, Tunç Çağı, Demir Çağı

2001 yılı, tüm Türkiye'de birkaç arkeolojik projenin sürekli ve bilinçli devamlılığına sahne oldu. Bu yılki kazılarda medyanın ışıklarını üzerine çekecek birkaç şaşırtıcı buluntu vardır. Fakat asıl aynı derecede memnunluk verici olay ise gene medyanın dikkatini çekecek büyük felaket ve tahribatın olmamasıdır.

Türkiye'deki arkeolojinin devam eden rağbetliliği, daha yaygın ve ulaşılabilir boyutlardaki bilginin yaratılmasını gerektirmektedir ve Miken'den Kalkolitik Çağ'lara kadar ilk devirleri içine alan Atlas Dergisinin arkeoloji özel sayısı bu talebe başarılı bir cevap niteliğindedir. Anadolu Tarihöncesi arkeolojisi dersi veren veya bu konuya ilgi duyan herkes bu sayıyı ve kapsadığı büyük miktardaki renkli fotograf görselliğini çok beğeneceklerdir.

Türkiye'nin sınırlı arkeolojik kaynaklarına gitgide artan genel merak Mehmet Özdoğan (2001) tarafından Kültürel Mirasın Korunmasıyla ilgili, ortak bildirilerin toplandığı, kitapçıkta da yansıtılmaktadır. Halkın Türkiye'nin zengin arkeolojik mirasına olan ilgisinin bir merak boyutuna dönüşmesi ve koruma, kayıda geçirme gerekliliğinin yerleşmesi en büyük temennidir.

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Two conferences dealing with the Uruk impact on the Mesopotamian periphery were held in 1999, one in Manchester and the other in Santa Fe. Both conferences included contributions based on excavations in Turkey and are now available in print (Rothman 2001; Frangipane 2001). Also dealing with the Uruk expansion, an analysis and critique of world systems theory, based on the Hacınebi excavations, has appeared (Stein 1999). Finally, another theoretical discussion of the Uruk phenomenon by a Turkey-based author that peripherically touches on Turkey, is (Algaze 2001).

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***Türkiye'de bir yıl önce yapılan arkeolojik araştırmaların özetleri bu sayıdan itibaren, "Türkiye'de Arkeoloji" adı altında TÜBA-AR Dergisinde yayınlanacaktır.

A comprehensive discussion of the context of early metal-working activities in the Bolkardağ - Kestel area has recently been presented by A. Yener (2000) and a new volume of the *Reallexikon der Assyriologie*, with entries on the Turkish site Norşuntepe, was also published (Hauptmann 2001).

Festschrifts:
Volumes of papers were dedicated to Hans Güterbock (Yener 2002), Volkert Haas (Kühne 2001) and Manfred Korfmann (Aslan, *et al.* 2002).

Conferences:
In May 2002 the annual International Symposium of Excavations, Surveys and Archaeometry was held in the National Library in Ankara. The proceedings of the 2001 symposium are now published in the *Kazı Sonuçları Toplantısı* series.

The Second International Congress on Black Sea Antiquities was held at Bilkent University in early September 2001, covering a large area of studies on the Iron Age to Byzantine History of the countries bordering the Black Sea. Abstracts are available on the internet (http://www.bilkent.edu.tr/~arkeo/blacksea/blacksea.htm).

The papers discussed at the round table on the "Neolithic in Central Anatolia", held in the autumn of 2001, have been published with admirable speed (Gérard and Thissen 2002). The conference web site is now also operating as a discussion forum and provides radiocarbon databases and other research facilities(http://www.chez.com/canew/index.htm).

The proceedings of the highly controversial conference on Troy are also now published (Kolb 2002).

EXCAVATIONS AND SURVERY

Paşalar: The 18th season of excavations at the 15 million year old Miocene site of Paşalar in the Değirmendere Formation was conducted by Berna Alpagut and her team from Ankara University. They extended the excavated area to the northeast, where in square T5 54 new fossil specimens were recorded, among them 4 primates. The site is remarkable for its abundance of primate/hominoid remains, mostly teeth, that so far form 7,6% of the total assemblage. The environment where these primates lived can be reconstructed as a mixed tropical - steppe lacustrine habitat surrounded by young forests. One indicator of such an open tropical environment is the analysis of herbivore teeth that provide evidence for a diet based on C3 plants. A rich fauna occupied the area, with 58 species identified to date. A preliminary report on the 2000 season can be found in Alpagut, Çelebi, *et al.* (2002).

Çankırı-Çorakyerler: The Late Miocene fossil bearing layers at Çorakyerler were the subject of further investigations by Ayla Sevim of Ankara University. The site produced the upper mandible of a new hominoid type last year and the matching lower part, with one tooth preserved, being found this year. Together with Paşalar, Çandır, and the Sınap formation Çorakyerler is the fourth find spot in Turkey to have early hominoid fossils.

The fossil bearing layers are about 8 million years old and document the final stage of a period when the tropical climate shifted towards a drier, continental climate, giving way to open forest - savannah, in which a rich fauna of bovidae, equidae, giraffae, suidae, elephants and rhinoceros existed.

For a preliminary report on the 2000 season see Sevim and Kiper (2002).

PALAEOLITHIC

South Anatolia

Karain: Işın Yalçınkaya continued with excavations in Karain hall E, uncove-

ring layers of the Middle Palaeolithic period. At the base of the sequence, in the northern section, a rhinoceros mandibule was found associated with Mousterian points and sidescrapers. The lowermost level, period III5 is identified as Proto-Charentian, III4 represents the developed Charentian, and III3 the Karain Mousterian. The fauna associated with these layers consists mainly of wild sheep and goat.

Chamber B was also subject to further investigation, with excavations in squares C and D again providing a full sequence from Middle Palaeolithic to Epipalaeolithic here numbered P1-P4 from top to bottom. These were followed by traces of Neolithic and Chalcolithic occupation. The cave apparently served as a butchery place during the epipalaeolithic period P1. Complete prey were brought into the cave and divided. Cut marks are visible on the bones, and all parts of the carcass including horns are present. Herbivores appear to have been the preferred hunting prey. Lithic finds associated with these layers comprise endscrapers, blades and prismatic cores from radiolarite. Bone tools, awls, and pins are common. These finds allow a comparison with epipalaeolithic Öküzini. The underlaying layers can be divided into the Upper Palaeolithic (P2, dated c. 28.000 BC), the Karain Middle Palaeolithic (P3, correlated to III3 in chamber E) and the Charentian (P4).

A preliminary report on the 2000 season appeared (Yalçınkaya, Taşkıran, *et al.* 2002).

Central Anatolia

Kömürcü – Kaletepe: Work at the famous obsidian source at Kömürcü-Kaletepe continued with an extension of the step trench in *dere 3.* Here, the Middle Palaeolithic can now be subdivided into three phases, overlain by Neolithic remains. Nur Balkan-Atlı of Istanbul University has reported that the material in the Middle Palaeolithic layers consists largely of core tools that are, despite the abundance of obsidian, produced from rhyolite.

For Neolithic remains, see below.

Southeastern Anatolia

Üçağızlı Mağarası: The excavations at Üçağızlı Mağarası continued in 2001 in two main areas. Erksin Güleç and Steven Kuhn reported that one of the objectives was to excavate the northern part of the main chamber down to the earliest layers, that is the Initial Upper Palaeolithic. A second objective was the investigation of a small chamber, illegally excavated in 1998. However, a small test pit dug here yielded no undisturbed archaeological contexts.

The cultural layers in the main chamber repeat the same sequence described in detail in the previous year's excavations. The bottom layer revealed hearths and ash accumulations associated with an abundance of artifacts and is dated to 41000-35000 bp uncal. Lithic material includes flakes and blades made in a Levallois tradition with more recent techniques such as burins. Again, the numerous beads made from shells were remarkable. More than 400 of these were found; most had a single piercing and some had traces of red ochre. They are found individually or in clusters and are among some of the earliest personal ornaments found in Asia or Europe. Faunal analysis by Mary Stiner proves that no marine resources other than the shells were being used. Instead, the occupants of Upper Palaeolithic Üçağızlı relied largely on the pig, deer and caprids that must have occupied neighboring valleys.

Investigations near the cave proved there had been an ancient beach, located 16 m above current sea level. This attests to the impact of neotectonic activities on the landscape in this region.

Post-excavation analysis is on-going but has already shown some general

trends in the 12-15000 year history of the cave. In terms of lithic technology, the Levallois tradition using flakes and blades as blanks was replaced by flat blades and platform cores. Bone tools, indicators of modern human behavior, occur only in the Upper Palaeolithic layers. A shift in foraging habits brought about an increase in the amount of small game such as tortoise, birds and hares, while caprids, the main prey in the earlier period, were slowly replaced by deer. Marine shellfish provided an addition to the diet in the upper layers. These changes are probably also related to changes in the local environment.

See Güleç, Kuhn, *et al.* (2002) for a report on the 2000 season and Stiner, Pehlevan, *et al.* (2002) for faunal analysis.

Ilısu Palaeolithic Survey: A survey project led by Metin Kartal, aimed at identifying traces of palaeolithic occupation on the northern bank of the Dicle River, revealed no evidence for palaeolithic occupation whatsoever. One reason for this could be the complex erosion processes that appear to have completely remodeled the landscape.

EARLIER NEOLITHIC

Southeastern Anatolia and Cilicia

Göbekli Tepe: On completion of the 2001 excavation season at the amazing pre-pottery Neolithic site of Göbekli Tepe, carried out by Harald Hauptmann and Klaus Schmidt of the German Archaeological Institute, four large circular enclosures (A-D) of the lowermost layer (III) had been uncovered. These represent the earliest occupation phase, dating to c. 9000 BC cal., and are stratigraphically distinguished from the later layer II where the architecture is characterized by smaller, rectangular structures.

Work continued on the southeastern part of the site with excavations in six new trenches, aimed at the complete uncovering of enclosure C. Enclosure C is a large structure of undecorated stone pillars arranged in an oval of c. 20 m diameter that must have centered around two central pillars which are, however, completely destroyed. The sculpture of a predator with fletched teeth has been found in front of one of the surrounding pillars (fig. 1). Next to enclosure C, another oval structure of similar type and dimensions was found. This new structure (enclosure D) yielded two central pillars of hitherto unseen height, exposed until a depth of 3,5 m and still continuing deeper. One of the pillars, of the by now well known Nevali Çori type, roughly T-shaped with human arms indicated in shallow relief, revealed two reliefs on the side: one is a fox and the second is a geometric pattern located on the narrow side below the "head" of the pillar, possibly a pictogram (fig. 2).

For a summary on the first five seasons at Göbekli Tepe, see (Schmidt 2001).

Karkamish Dam Rescue Excavations

Mezraa Teleilat: Mehmet Özdoğan of Istanbul University reported on the ongoing rescue excavations at Mezraa Teleilat (fig. 3). These continued with further extensions of the trenches on the eastern part of the site. Immediately below the Iron Age building levels, three Pottery Neolithic building layers were encountered, overlying earlier Pre-Pottery Neolithic layers.

The uppermost PN layer consists of "corridor houses" with three parallel long rectangular rooms (fig. 4). The two side aisles were paved, while the central room is left unpaved, indicating that it may have been an open air space. Associated material shows that this layer probably ran until the beginning of the Halaf period. The second layer consists of "cell houses" comparable to Umm Dabaghiyah. Plastered hearths were found inside these houses. They contained a rich catalogue of

chaff-faced wares of Hassuna type, with impresso decoration or red slip, and with husking trays as a type fossil. Below this are more corridor houses, associated with chaff tempered pottery, some of which is painted. Finds from this trench are abundant. The lithics include Byblos and Amuq points. Other finds include stone vessels, stone stamps and bracelets, a rich bone tool industry and a collection of schematic figurines made from clay.

Another sounding was sunk in the southeast of the site in order to assess the extent of the Neolithic settlement. Here, below massive stone packing, a sterile layer was encountered which in turn overlay a layer with disturbed human bones, probably the remains of an ancient grave. No artifacts were found associated with the bones.

For a report on the 2000 excavations, see Karul, Ayhan, *et al.* (2002). The lithic industry has been discussed by Coşkunsu (2001).

Akarçay Tepe: Rescue excavations at Akarçay Tepe in the Karkamish Dam area continued with the investigation of a new area in the northern part of the site. Nur Balkan-Atlı of Istanbul University reports that the trench revealed a sequence of building layers documenting the transition from PPNB to PN. The uppermost layer consists of a round stone building with a circular corridor surrounding it. This 50-60 cm wide corridor yielded an abundant amount of pottery of the Akarçay II phase, among it impresso and beige-brown slipped pottery. The second layer is formed by a three aisle-house with two internal partition walls and two courtyards, apparently used as open air workspaces. For the walls, both stone and wood were used as construction material. The building ended in a conflagration. For layer 2, three building phases could be distinguished that fall entirely into the oldest PN period. Most characteristic is monochrome pottery with mineral temper and either untreated or polished surface. A characteristic form are deep bowls that can well be compared to material from Tell Halula. Below, four parallel mudbrick walls of mid-PPNB date were uncovered that must have belonged to a grill plan house such as they are typical in the PPNB.

Among the lithic finds, Byblos points occur alongside individual pieces that show use of the pressure flaking technique. The obsidian used derives from diverse sources, both from Eastern Anatolia and from Cappadocia The amount of Cappadocian obsidian used increases at the beginning of the PN.

Batman/Ilısu Dam Rescue Excavations

Körtik Tepe: Vecihi Özkaya extended the excavations of the Neolithic cemetery of Körtik Tepe across eight 5m by 5m squares. Preservation conditions were poor because a medieval cemetery had cut deeply into the Neolithic layer. Finds consist of numerous ground stone axes, some with incised decoration; incised stone bowls comparable to material from Hallan Cemi and Nemrik; and chlorite and serpentine beads and pendants.

For a preliminary report see Özkaya - San (2002).

Hakemi Use: Halil Tekin of Hacettepe University embarked on rescue excavations at the small settlement mound of Hakemi Use, on the southern bank of the Dıcle River in the Ilısu Dam flooding zone. The site goes back to the PN period, with some later disturbance, representing what is so far the only known Pottery Neolithic site in the area. On top lies a cemetery with stone cist graves. No precise date can be established for the graves because they were looted in antiquity. More disturbance was brought about by neo-Assyrian pits that cut quite deeply into the levels beneath. Iron Age remains are restricted to some pottery finds from the surface, including grooved cooking pots typical of the Early Iron Age.

Although no obvious architectural structures have yet been uncovered, Neolithic find material is abundant. The pottery is chaff-tempered and can be distinguished into several groups: red slipped ware, dark faced burnished ware, and pottery with dark paint on a light ground comparable to Hassuna material, as well as husking trays. Obsidian blades and nose plugs complete the picture.

Central Anatolia

Kömürcü-Kaletepe: Work on the PPNB obsidian atelier in the Kömürcü-Kaletepe area has reached a stage where a three-dimensional map of all artifacts found has been achieved. The material collected from the area consists of naviform cores and bipolar blades. Pressure flaking was used for the production of bladelets. A date of 8300 BC is indicated for the workshop.

The site was declared a protected cultural monument in 2001 and this will hopefully make it easier to further preserve this unique assemblage of early human activities in the future.

For the palaeolithic, see above. A preliminary report on the 2000 season is available, see Balkan-Atlı, Binder, *et al.* (2002).

Musular: Work at Musular has helped to confirm the chronological position of the site as being between 8400 and 7900, and therefore contemporary with the PPN B-C. As Mihriban Özbaşaran from Istanbul University reports on the results of 2001 excavations in the eastern sector, further effort was undertaken to sort out the stratigraphic situation that had previously been a problem because the site was founded on sterile rock and the subsequent layers were badly preserved. It can now be shown that the first occupation consisted of pits dug into bedrock. This was followed by a series of canals. Above, a rectangular one-room building was constructed. Its function is not known yet but according to M. Özbaşaran it might have been used as a water reservoir.

Post excavation analysis has shown that the animal bones consist mainly of wild sheep and goat, and that the obsidian originated mainly from Göllüdağ.

A preliminary report on the 2000 season has appeared (Özbaşaran, Duru, *et al.* 2002).

Çatal Höyük: Ian Hodder of Stanford University reported on the ongoing excavations at Çatal Höyük, conducted by several teams on different parts of the mound, in the BACH area and the TP area, accompanied by detailed post-excavation analysis.

In the western part of the BACH area, the Berkeley team continued with excavations of Building 3. As before, a functional distinction for the different parts of the building was possible. Three child burials were found in an area restricted to the northern part of the central floor area. Detailed observation of these burials revealed traces of cinnabar and a rope around the waist of one child that had been used to bind the body together.

Excavations on the highest part of the east mound in the TP (Team Poznan) area aimed to clarify a large building structure of Late Roman/Byzantine date that had been detected using remote sensing and had been further investigated by surface scraping. A burial with a grave pit lined with tiles dates from the same period.

Among the different post-excavation analyses, the chemical analysis of residues found inside pottery vessels proved that animal fat, excluding pig fat and milk, had been stored in them. From these results a prehistoric diet that relied on both C3 and C4 elements can be reconstructed. AMS radiocarbon dates now date the earliest occupation of Çatal Höyük

East to 8300-8150 BC cal., and establish the average life span of a building at between 50 and 80 years, with a trend towards quicker rebuilding during the more recent periods.

For the dating of the earliest layers see Cessford (2001).

LATER NEOLITHIC TO CHALCOLITHIC

Southeastern Anatolia and Cilicia

Arslantepe: Despite the short duration of the season due to Marcella Frangipane and her team having other obligations in the Karkamish rescue area, the four week season in 2001 at Arslantepe brought exciting new insights into the development of early complex societies in Eastern Anatolia. Most importantly, it is now evident that Anatolian-Transcaucasian interaction must have already begun in the early 4th millennium BC, as indicated by numerous examples of characteristic transcaucasian features, such as RBBW pottery and architectural details that occur in Period VII contexts.

The excavations concentrated on an area between the two large Period VII building structures on the western part of the mound, east of Building XXIX. A huge mudbrick wall, dating to Period VIB2, with one row of rectangular rooms attached was uncovered and is apparently part of a fortification. It stood on top of a massive stone structure of the 4th mill. BC. The wall is set on a steep slope, and next to it, postholes and wattle- and daub structures were found that were covered by a burnt floor.

Two domestic rooms of period VIA were uncovered below the wall. They were built side-by-side in an agglutinative way and form the continuation of the elite residences quarter uncovered earlier on the north of the mound. Below, a surface with postholes and RBBW apparently represents the remains of an earlier settlement predating the building phase with monumental architecture in VIA.

Excavations in a side room of structure XXIX proved that that building was of tripartite layout, whereas previously it had been thought to represent a typical two-part structure familiar to Chalcolithic Arslantepe. Building XXIX stands on top of a platform made from mudbrick and stones and must have risen above the surrounding buildings. The side room yielded numerous examples of mass produced conical bowls with string cut bases, some of them with potter's marks, turned upside down. Numerous sealings were associated with them. Judging from the find position of the bowls that reach close to the walls a second floor above this room is highly likely. M. Frangipane interprets this assemblage as residues of a redistribution event, most probably in a ritualized form.

Fıstıklı Höyük: A preliminary report on the final excavation season in 2000 has been published (Bernbeck, Pollock, *et al.* 2002).

Tell Kurdu: Following trial trenching and magnetometric mapping in 1998/99, a new phase of research began at Tell Kurdu, part of the larger Amuq Valley Regional Project, with Rana Özbal and Fokke Gerritsen resuming excavation in 2001.

Most exciting were the results from the northern area, opened in order to confirm the existence of a large building structure of late Amuq C date. The magnetic anomalies thought to be large walls instead turned out to be alleys separating numerous small buildings forming a densely packed village neighborhood (fig. 5). Altogether 800 sq.m. of small, rectangular houses with one or more rooms were uncovered. A functional distinction between domestic units and houses with interior buttresses and architectural furnis-

hing is possible, suggesting that some of these buildings may have served different purposes. Find material includes Dark Faced Burnished Ware and painted Halaf related material, among them the characteristic lids. The lithic assemblage includes 30% obsidian. Among the small finds, finely carved stamp seals are noteworthy (fig. 6), one of which shows the rather extraordinary design of a fish-catching bird.

A smaller second excavation area was opened on the southeastern slope of the mound. This served to establish the stratigraphic relationship between trenches 1/6/9 and 2 with the Amuq E levels, excavated in 1998 and 1999. Interesting results can be expected from the ongoing micro-archaeological analysis of room contents that should allow to further proof of the functional distinction of the houses.

North of Tell Kurdu, the Maraş plain around Domuztepe has been subject to palaeoclimatic investigations (Woldring, Cappers, *et al.* 2001).

Batman/Ilısu rescue area

Kenan Tepe: Since 2000, the large multi-period mound Kenan Tepe located on the left bank of the Upper Tigris within the Ilısu rescue area has become the main focus of research for the Upper Tigris Archaeological Research Project (UTARP) directed by Bradley Parker of Utah University. Soundings sunk into the high mound (areas A-D) and the slopes of the larger lower mound (areas E-H) revealed evidence for occupation from the 4th millennium BC to the Roman period. Apparently, the site reached its largest extent of 5-6 ha during the 4th to early 3rd millennia, i.e. the LCH-EBA periods. Pottery associated with mid-4th mill. structures uncovered in areas G and H, and with a large oven found in area F, consists of typical Syro-Anatolian LCH forms. Occupation in this part of the site appears to have come to an end at the beginning of the 3rd mill. (LCH 5 according to the new Santa Fe chronology).

Layers of the early 2nd mill. BC, radiocarbon-dated to 1800 BC cal. and characterized by red-brown wash ware, extend over a much smaller area to a maximum of 1.1 ha on the high mound. At this time, the area appears to have been an industrial workspace, as pits filled with slag and metal processing facilities were encountered.

See Parker, Creekmore, *et al.* (2002) for a report on the 2000 season.

Aşağı Salat Tepe: Rescue excavations at Aşağı Salat Tepe in the Ilısu dam zone continued under the direction of Yücel Şenyurt of Gazi University with further clearing of the south-western section cut by the river and an additional sounding. Here, it is now possible to distinguish 9 layers. Layers 4-6 produced EBA Ninevite 5 and layers 7-9 produced Chalcolithic to Late Neolithic material. Geoarchaeological work carried out by Uğur Doğan confirmed that there had been periods of abandonment in between. West of the main mound lies an EBA cemetery with heavily disturbed tombs due to medieval occupation and deep ploughing. Two tomb types are present: stone cist/chamber tombs, and simple inhumations in a stone lined pit with a pebble paved floor. 25 examples of this second type have been documented to date. One undisturbed stone cist tomb was opened, revealing a hocker burial on a pebble paved floor, accompanied by a bone figurine, a pin and a necklace made from black and white stones. In between the EBA graves, some Iron Age burials were found. The grave of an animal, probably an equid, appears to be of much later date, probably Achaemenid.

See Şenyurt (2002) for a report on the 2000 season.

Eastern and Northern Anatolia

Sos Höyük: A report on the 2000 se-

ason has been published (Sagona and Sagona 2002).

İkiztepe: For a report on the 2000 season see Bilgi (2002).

Central Anatolia

Tepecik Çiftlik: Erhan Bıçakcı of Istanbul University continued with excavations at Tepecik Çiftlik where, with three new trenches, a total of six squares are now under investigation. In trench 16J, another single roomed house constructed from small volcanic tuff stones was uncovered. Trenches 17-18J revealed a 2m by 2m square structure constructed of stone. Judging by the material, a comparison with Köşk Höyük V, i.e. a date of around 6000 BC, is probable from this structure. Most noteworthy is the relief-decorated pottery that shows bucrania and other motives, including figures in motion. Pottery of the Gelveri-Güzelyurt type occurs together with this material. The most remarkable find of the 2001 season is a male figurine, 17cm high. The lithic industry consists largely of obsidian, with leaf points and tanged points that reflect traditions otherwise observed on the Konya Plain. A rich bone tool industry can be noted, and initial results of the animal bone analysis indicate that wild horse and wild donkeys were part of the assemblage.

For a report on the first season, see Bıcakcı (2001) and Bıçakçı and Faydalı (2002).

Köşk Höyük: There were no excavations in 2000, but a preliminary report on the 2000 season appeared (Özkan, Faydalı, *et al.* 2002).

Güvercinkayası: See Gülçur, Endoğru, *et al.* (2002) for a preliminary report on the 2000 season.

Çadır Höyük: Excavations at Çadır Höyük, directed by Ronald Gorny, continued into their sixth season with investigations in four different parts of the mound. In Area 1 on the eastern mound, the oldest level of the Old Hittite occupation was reached. A new trench in the northeast unveiled a large, probably public, building of Byzantine date. Area 3 on the south slope revealed LCH remains below Hittite cobble accumulations. The material is characterized by pottery with *omphalos* bases, dating to around 3600 BC. Finally, the step trench below the Byzantine settlement and citadel revealed three building layers of the LBA-Hittite period. The lowermost of those is dated to 1360 BC.

Western and Coastal Anatolia including Thrace

Ilıpınar: Work on the site directed by Jacob Roodenberg this year concentrated on the remains of Period VI, located at the eastern edge of the site. Here, a row of mudbrick buildings forming a semicircular radial alignment had been excavated in previous years. The structure extends over at least 90 m and seemed to form a boundary construction. This year's excavations aimed at filling a 20 m gap between the previously excavated areas. Four more buildings (H31-H34), forming part of the larger structure, were unearthed. For the first time, complete ground plans were obtained, providing valuable information about access to the houses and construction details.

The houses were constructed of mudbrick and had two storeys and a crawl space at the very bottom. Floors were constructed from crossed beams covered by planks, with the whole construction anchored in the walls. Two pillars must have stood on the interior of the rooms as roof supports, as can be seen from small round brick-platforms with wooden pillar imprints on one side. Access to the buildings was from the outside via a threshold in the outer wall, while smaller wall apertures allowed traffic between the rooms. Due to this easy accessibility, the

structure is unlikely to have been defensive in nature. According to Roodenberg, a desire to protect livestock may have been the reason for this unusual construction. A functional interpretation of the rooms and their upper storeys is possible based on their find inventory: The upper floor contained numerous grinding slabs, andirons, and occasionally an oven and some pottery. The lower floor held a large oven, and domestic installations such as bins. Assorted plaster-lined baskets and pottery was found along the walls of what is apparently a storage room. Occasionally, stone and bone tools occur. The crawl space appears to have served not as a room but as insulation from humidity from below.

The second volume of the final publication series has appeared (Roodenberg and Thissen 2001).

Menteşe: A report on the 2000 Menteşe Höyüğü excavations has appeared (Roodenberg 2002).

Bademağacı: Refik Duru continued with excavations at Bademağacı in areas A and D. A deep sounding was sunk in area A to a depth of 8.9 m, where Building Layer 9 represents the earliest occupation of the site. It consists of a hard, terrazzo-like floor and dates to the early PN period, around 7000 BC. The fourth building layer revealed rectangular houses of a type previously seen at Bademağacı, single room houses with a hearth opposite the entrance. They are associated with material comparable to Hacılar VI. Layer 3 belongs to the EBA, where 3 further buildings were uncovered. EBA houses were also encountered in area D, below the Byzantine church. Until this point in time, 12 EBA houses of *megaron* type and an EBA glacis have been exposed on the mound. Preparations for their *in situ* conservation are underway.

Investigations in the outskirts of the Neolithic settlement revealed parallel stone rows, apparently part of an early fortification system.

For a report on the 2000 activities, see Duru and Umurtak (2002).

Kırklareli: In 2001, a study season was held due to the team's other commitments in the Karkamish rescue area. A preliminary report on the 2000 season appeared (Özdoğan, Karul, *et al.* 2002).

Menekşe Çatağı: For a report on the 2000 season, see Erim-Özdoğan and Işın (2002).

Herakleia Latmos: Documentation of the enigmatic prehistoric rock paintings from Mount Latmos continued in 2001 with several more paintings being located. A preliminary report has appeared (Peschlow 2002), and the findings will be subject of an exhibition in the winter of 2002 (Peschlow-Bindokat 2002).

Ulucak Höyük: Excavations conducted by a team from Ege University İzmir at Ulucak Höyük revealed, under three layers of EBA to Late Roman date, an extensive Late Neolithic occupation, thereby providing a long-desired insight into the Aegean Neolithic.

To date, 19 houses of the Neolithic village constructed in different techniques have been uncovered. Wattle-and-daub, pisé and mudbrick are used, often in combination. Houses consist of one to two rooms, and each contained an oven, grinding stones and storage pits. Besides, stone celts, stone and bone beads, sling bullets, weights and animal figurines were also found. Pottery was produced on the site, as is evident from large clay lumps found in one area, apparently ready prepared for further processing. Shapes include hemisperical bowls and biconical jars. Surfaces are decorated with red slip and fingernail impressions and black on red painting. The best comparisons for this material are found in the Burdur area.

For a summary on the 1999-2000 season see Derin, Abay, *et al.* (2002).

BRONZE AGE

Southeastern Anatolia and Cilicia

Batman/Ilısu rescue area

Ziyaret Tepe: Rescue excavations at Ziyaret Tepe in the Ilısu Dam area continued under the direction of Timothy Matney. While the mid-late Assyrian urbanization process and its impact on the environment remain the focus of the project, the earlier layers of the settlement have also been encountered.

A stratigraphic sounding on the eastern slope of the high mound (Operation E) yielded nine building layers covering a sequence from the end of the 3rd millennium BC to the Late Assyrian period. A burnt building dated to 2000-1800 BC with finds displaying good comparisons to contemporary Tell Brak.

The Late Assyrian period (8th to 7th cent. BC) saw the massive extension of the site to 29 hectares. Subsurface radiometry on the southern part of the lower town (operation G) detected systematically planned private residences, separated from one another by cobbled streets. A courtyard paved with a checkerboard pattern made from black and white cobbles was excavated here in 2000. This pavement was removed, and a box with animal bones was found underneath.

Operation A, on the high mound, yielded remains of a public building dating to the Late Assyrian period. The building consists of a large courtyard surrounded by a row of rooms, its walls are up to 2.5 m wide. Two ovens of rectangular outline, each of them 2 m long, and with rounded appendages, had been cut into a platform in the courtyard. These ovens must have been for processing metal. Complete and fragmentary copper and iron vessels, 13 in total, were found in a green slag matrix close to the ovens, apparently representing scrap metal intended for reuse. A deposit of 2 stone vessels, 2 pottery goblets and an ivory, all with traces of burning, were found close to the platform and are thought to represent a ritual deposit.

Müslümantepe: Eyyüp Ay of Kırıkkale University continued excavations at Müsülmantepe in the Ilısu rescue area. The Late Chalcolithic architecture of the site's earliest occupation could still not be excavated, because it is cut by an early EB cemetery of stone cists and chamber tombs. A stone cist with a pebble floor contained Ninevite 5 pottery and examples of metallic ware. This metallic ware appears to be characteristic for the Diyarbakır region, where it has been documented at Üçtepe. In addition to excavation, survey work continued in the Gırgıp valley. See (Ay 2002) for a preliminary report.

Birecik and Karkamish rescue areas and environs

Tilbeşir: The geoarchaeology of Tilbeşir has been published (Kepinski-Lecomte 2002).

Şavi Höyük: The cluster of settlement mounds called Şavi Höyük is located on the left bank of the Euphrates, within the Karkamish Dam flood zone. Rescue excavations were carried out by Reinhard Dittmann from the University of Münster during 2000-2001. Two mounds were subject to test excavations: Şavi 2 yielded remains of a Halaf *tholos* built on virgin soil, overlain by a building that the excavator interpreted as a tripartite house. The step trench at Şavi 1 revealed a long sequence of 20 occupation phases from late EBA to the Iron Age (phases 20-17 are EBA IV; 16-14 EB-MB transitional; 13-9 MB II; - gap-; 8-7 Middle Iron Age; 6-4 Later Iron Age; 4-1 medieval to recent). In the lowermost level, remains of a massive wall indicate that the EBA settlement was most probably fortified. Monumental

architecture is also present in levels 11B-9, in the Old Assyrian-Old Hittite levels.

Surface investigation at the remaining mounds indicated EBA occupation at Şavi 2-4 and 7, and a Late Hellenistic/Roman occupation at Şavi 5.

Zeytinli Bahçe Höyük: Continuing rescue excavations at Zeytinli Bahçe Höyük by Marcella Frangipane and her team helped to further clarify the occupation history of this complex site. On the slope, further investigations in the EBA I layers revealed a rectangular fireplace with long annex of a type known widely in the Middle Euphrates, albeit mainly from Uruk related sites.

A second operation aimed to clarify the history of the mound's acropolis, where Roman structures had been uncovered. A huge mudbrick wall of MB date was uncovered, standing on top of a massive EB III fortification wall. Apparently, the MB occupation ended in a conflagration, followed by the complete abandonement of the site.

Şaraga Höyük: Rescue excavations continued at Şaraga Höyük in the Karkamish Dam zone with several new trenches. Kemal Sertok of Gaziantep Museum reported that a sounding on the northeastern part of the site revealed the original surface below the mound, covered by alluvial sediments. Above these, mixed Late Uruk and EBA remains were found. A second new trench on the west of the mound revealed a sequence from the MBA to the Hellenistic/Roman period. Here, a fully equipped kitchen was unearthed in the Early Iron Age layers.

For an overview on the 1999-2000 seasons, see (Sertok and Fikri 2002, Sertok and Kulakoğlu 2001).

Gre Virike: Rescue excavations, conducted by Tuba Ökse of Hacettepe University, at the amazing site of Gre Virike in the Karkamish Dam flood zone were completed in 2001.

Great attention was paid to the documentation of the surroundings of the graves on the summit of the mound. Two large pits were located next to the graves, and a clay plastered platform was located north of these pits. Narrow holes were dug next to the tombs and their interiors were plastered. As Tuba Ökse points out, this can probably be interpreted as remains of complex funeral and commemorative rites. The pits may have served as offering pits and the narrow channels for libations. Vessel bases with secondary holes in them could also be related to libation rites.

A funeral complex consisting of two disturbed chamber tombs, excavated last year in square K9, was further investigated. It has now become evident that small rooms had been deliberately annexed onto the main tomb chamber. Those rooms held cooking facilities, pot stands and one room had a floor with small concave depressions, possibly intended for burning things. An oval offering pit contained animal bones. It appears that the use of these rooms relates to commemorative rites at the tomb.

A bulldozer trench at the bottom of the mound offered the opportunity to investigate a wall and staircase leading to an underground well. Again, an offering place is associated with the staircase.

The importance of water to these funeral rites also led to the reinterpretation of a rectangular building structure, excavated previously on the eastern summit, as a water reservoir supplying a system of water channels that distributed water to different parts of the summit.

To summarize the results from the Gre Virike rescue excavations, the site has proven to be a highly complex funerary site in the EBA and may have served as

the central monument for several neighboring settlements. Located on top of a gravel hill, the surface has been shaped into several superimposed terraces. Graves of differing construction types were arranged on the terraces, often as part of larger complexes of rooms. Between the graves, installations such as small platforms of stone or mudbrick may have been used for libations and offerings. Cooking facilities, places to burn incense, and offering pits all seem to be related to funerary cult. On the summit, a water reservoir supplied the different installations. Finally, a staircase led to an underground well. With all these detailed observations, the site will greatly further our understanding of EBA funeral traditions, complimenting observations from Tell Ahmar-Til Barsip, Umm al Mara, Tell Banat, Karkamish, the Birecik, Lidar and Titriş cemeteries and many more.

For a report on the 2000 season, see Ökse and Bucak (2002).

Mezraa Höyük: The settlement mound of Mezraa Höyük, immediately south of the Neolithic site of Mezraa Teleilat in the Karkamish dam zone, has undergone a second season of rescue excavation conducted by Derya Yalçıklı of Hacettepe University. The main occupation of the mound dates from the Late Chalcolithic to EBA II period, as demonstrated by surface finds of canaanean blades, moulds and beveled rim bowls. An overlaying medieval layer extends over the eastern and western slopes. Excavations revealed Late Chalcolithic layers in the southeastern part of the site, cut by *pithos* and stone cist tombs of EBA I-II date.

Surtepe: A preliminary report on the 2000 season has appeared (Fuensanta, Charvat, *et al.* 2002); as has a report on metallurgical analysis of samples from the site (Özbal and Turan 2002).

Tilbes Höyük: Preliminary report see Fuensanta, Rothman, *et al.* (2002)

Tilvez Höyük: Metallurgical analysis see Özbal and Turan (2002).

Kilis-Hatay-Cilicia

Oylum Höyük: The seventh season of joint Turkish-German excavations at Oylum Höyük continued with further investigation of the Late Chalcolithic layers on the western terrace and on the lower step of the eastern step trench.

On the western terrace in trench I31b, the northern excavations aimed to find the extension of a massive basalt terrace wall that had been found in a sounding in J31c to the south. Against all expectations, this wall did not continue to the north. Instead, further evidence of occupation layers of the later 5th millennium BC were uncovered, indicating the existence of more settlement layers at this level. The neighboring trench I32, excavated since 2000, yielded a Late Chalcolithic cemetery below two layers of domestic occupation. Nine burials, of both infants and adults, were documented. Bodies were laid in vessels or in organic containers such as wooden coffins. The burial chamber was usually dug into the side of a vertical shaft that was then sealed by a thin mudbrick wall. Even though most of the burials are without goods, the burial vessels allow us to date them to the LCH 2 period. The Oylum Höyük tombs represent the only site in Southeastern Turkey and Northern Syria with such regular burial patterns. They are best compared with a group of tombs at Gawra.

Continuing excavations on the lowermost step of the trench on the eastern slope revealed a second building layer of LCH 3/Late Uruk date. The outline and orientation of the buildings is similar to that of the upper building phase uncovered the year before. The full contents of a house were represented here, with complete vessels - some with their contents - and tools lying on the floor. The pottery technology indicates a clear Syro-Anato-

lian tradition while the forms reflect close relations to the contemporary Euphrates Uruk culture.

In addition to excavation, a second season of survey work in the Kilis province continued with the investigation of the mountainous areas to the west and north of the Kilis plain. To date, 101 sites of different periods have been registered, and systematic surface collection was carried out at the middle palaeolithic site of Katırtepe on a basalt plateau above the Kilis Plain, where palaeolithic artifacts were found scattered over an area of more than one square kilometer.

Besides the annual excavation report (Özgen, Helwing, Engin 2002a), a second extensive report on the excavations of 1997-2000 has appeared (Özgen, Helwing, *et al.* 2002), as well as the first report on the survey (Özgen, Helwing and Engin 2002b).

Tell Atçana-Alalakh/Amuq Valley Regional Project: Aslıhan Yener from the Oriental Institute Chicago continued with preparations to excavate at Tell Atçana-Alalakh. The environement of Tell Atçana and Tell Tayinat was briefly surveyed, and with the use of Corona satellite images, three small previously unknown settlement sites of Hellenistic to Islamic date were found in the immediate vicinity. A second result of these investigations was the detection of another branch of the Orontes River running east and north of the modern river's course, dating to the Islamic period.

A new topographic map of Tell Atçana was drawn, on which the location of the old trenches could be established and corrections added. The deep sounding was cleared and datable material, pottery and radiocarbon samples, were taken, providing a date of 1530-1490 cal. BC for the layer V/IV palace. Material stored in the old excavation house was moved to the museum's depot, thereby providing an opportunity to catalogue and photograph numerous objects. This catalogue of objects will be available on the internet soon.

The survey project in the Amuq plain continued under Tony Wilkinson's direction, recording 287 archaeological sites so far. A major focus of the 2001 season was the uplands bordering the plain to the southwest in the vicinity of Narlıca, and the foothills of the Amanus mountains. It can be shown that these uplands, which appear to have been occupied by small dispersed settlements in the Roman-Byzantine period, did not form an isolated enclave but were part of a complex and coherent system reaching from the plains up into the mountains.

Analysis of Corona satellite images helped to further trace an ancient water canal system stretching throughout the central plain. The canals had been known before, but their early dating to the Late Iron Age could only now be established, comparing the ancient course of the Afrin river from which the canals were fed, with their course.

There are several new publications on the Atçana - Amuq project: Yener, Harrison, *et al.* (2002); Yener (2001); Wilkinson, Friedman, *et al.* (2001).

Kinet Höyük: See Gates (2001, 2002).

Tarsus/Gözlükule: H. Özbal and E. Kuruçayırlı from Boğaziçi University sampled 260 metal objects of the 3rd and 2nd millennia BC from the old Tarsus/Gözlükule excavations stored in Adana museum. Results show a trend from the early use of copper and arsenic copper toward tin bronze in the Later Bronze to Iron Age. Of note is a seal of EBA II date (Goldman) that contains 10,32% antimony.

Porsuk Höyük: Renewed investigation of the important site of Porsuk Höyük

were carried out by Oliver Pelon in 2001. The site is now identified with the city TUNA or ATTUNA. The Assyrian campaign annals mention the destruction of the city in 836 BC. The site is known for its Hittite hieroglyphic inscription naming the god Sharma, studied by La Roche and Hawkins.

The Porsuk Höyük is now a mound on highly strategic high pass of the Cilician Gates, backed by the Taurus Mountains. It measures 400m by 180m, with a surface area of 40,000m^2 and, reaching to a height of 20-30 meters, it dominates the valley in which it stands. In antiquity, it served as a fortified Hittite stronghold, protecting both access to Inner Anatolia, and the silver mines at Bolkar Maden. That the site was indeed involved in metal processing is proven by finds of moulds and lead ingots.

Investigations of the fortification system revealed superimposed walls, with a mudbrick wall standing on Hittite foundations, followed by a stone wall in the Early Iron Age. In the Hittite levels, lead ingot moulds were found and evidence of Hittite occupation was found in the west and east of the site. Dendrochronology samples were analyzed by Peter Kuniholm and dated to the seventeenth century BC - the period of the Hittite Old Kingdom. The Hittites had clearly attached considerable importance to the site at an early date.

From the Iron Age, a wealth of decorated pottery was found from the Middle Iron Age but there is no evidence of a Phrygian power here, despite finds in the surrounding area.

Other Sites

Giricano. See below, under Iron Age.

Sos Höyük-Erzurum. A number of publications have appeared including the preliminary report on the 1998-2000 seasons (Sagona and Sagona 2000), the physical anthropology of the skeletons found (Parr et al. 1999), and a preliminary ethnoarchaeology report (Hopkins 1999).

Kuşaklı Höyük - Sarissa. Work at Kuşaklı Höyük, identified with the Hittite city and administrative center Sarissa, directed by Andreas Müller-Karpe from Marburg University, brought new insights into the internal chronology of the Hittite city. Besides extensive restoration work in Buildings A, B and C, the focus of the 2001 excavation was Building D, a temple built by Kutsili or Hantili. Dendrochronological analysis by Ian Kuniholm now allows a date for the foundation of the temple of the weathergod, Building C, to be given as 1529 BC. The foundation of the Upper Town had therefore occurred at an unexpectedly early date. The most exciting find of the season was a large cuneiform tablet found near Building D that provides a detailed description of rituals to be carried out in the honor of Ishtar and Tannili. A 2 m high stone stele showing Kurunta on a deer was recovered from the old cemetery.

On the top of the acropolis is a circular defensive wall and small Iron Age houses, both inside and outside the walls, dating from the sixth century BC. Some poorly fired fragments of cuneiform tablets were found. The architecture and chronology of the temple is now linked to that of Boğazköy. The site was hit by an earthquake in the 14th century BC.

Eastern, Northern and Central Anatolia

Hüseyindede Tepesi. Tunç Sipahi and Tayfun Yıldırım from Ankara University proceeded with work at the Hittite settlement Hüseyindede by further clearing rooms of buildings I, IV and V. Excavation of Building IV recovered pottery from Rooms 8 and 9. The as yet largely unexplored Building 6 was also excavated. Here the most northerly part of the building

was cut into the bedrock and because the buildings are erected on uneven bedrock, differences of elevation of up to one metre occur within a single building. Terraces and steps were constructed to connect the different levels. On the summit of the hill was a rectangular building but this had been disturbed by the construction of a roman tomb.

In the pottery, parallels could be made with Old Hittite forms from Boğazköy, Inandık, Alaca Höyük and Osmankaya. A new fragment of relief vase was also found Building IV, similar to that from Inandık. It shows a cult scene with a human figure bending over a pot and can now be added to the other two cult vases from Hüseyindede.

For publication of the 1999 and 2000 seasons, see (Yıldırım 2001) and Sipahi and Yıldırım (2002), respectively. The first Old Hittite relief vase found at the site has also now been published (Sipahi 2000).

Küllüoba. The site of Küllüoba, 35 kilometres south of Eskişehir, is excavated by Turan Efe. In 2001, operations here resumed in the main east and west trenches.

The western trench is a deep sondage that has revealed a long stratified sequence stretching back from the Early Bronze Age to the Late Chalcolithic, and resting on natural. The architecture here consists of a bastion on the North-west corner and evidence of contiguous buildings. In places, mudbrick walls survive to a height of over two metres and the remains of doorways could be seen. The black and red pottery was found in typical EB forms such as one- and two-handled jugs and cups and has parallels at Beycesultan.

In the eastern trench, excavation of the East gate area, zig-zag defensive wall and associated buildings continued. A multi-roomed building complex around a courtyard has been identified here. From the gate, one would cross the court to the building. This arrangement parallels that at Troy 2c, and may be a feature of western Anatolian sites. The shallow bowls and depas cups found here also have parallels at Troy. In the North-east corner an oven with numerous *in situ* pots was found. Other finds included large and small pyramidal loom weights, toggle pins and needles. A foot-shaped stamp seal has parallels at Konya-Kara Höyük and Tarsus. With contacts ranging from the Troad to Cilicia, Küllüoba was a very well-connected site in the Early Bronze Age.

See Efe and Ay (2000) and Efe (2002).

Acemhöyük. To follow on from geophysical survey and excavations at, work under the direction of Aliye Öztan continued in 2001 with excavations in the centre of the mound.

From the first level of the site rectangular houses built of mudbrick were found. One of the buildings had a doorway with a socket for the hinge in the floor. In a corner of one room were found 21 pyramidal terracotta loom weights. Also found were sections of terracotta pipe from a drainage system. These pipes have parallels from the Hittite Imperial period at Boğazköy but this was the first time they had been found at Acemhöyük. Other finds included pottery and bone tools.

In the second level of the site the architecture again consisted of rectangular mudbrick buildings. Finds included pottery (cups, plates and two-handled cups), spindle whorls, bronze pins and a lead ring. In the remains of a broad burnt building, in room 9, a bulla with seal impressions was found and, in room 12, handled pithos jars and three bronze pins. Other finds include a rock crystal fragment and a 2.5m platform in the cent-

re of a room. From the timbers of the roof of this room dendrochronology samples were recovered.

For a report on the 2000 season see Öztan (2002). A report has also been published on a project to remove and conserve a wooden door found during excavations in 1999 (Kökten Ersoy 2002).

İkiztepe. The focus of research for Önder Bilgi and his team in 2000 was the social anthropology of the numerous burials discovered across the 200m by 200m excavation area. Burials of male and female adults and children have included grave goods such as beads and rings made of bronze and lead. For the most part, the grave goods were modest, with one male grave accompanied by a bronze spear being an exceptional find. Other finds included spindle whorls, loom weights, fragments of figurines and bone and stone tools. The pottery included bowls and jugs and can be dated to the Early Bronze Age (c. 2700 BC). In general there were plentiful bronze artefacts across the site and research is being carried out into the use of arsenic in bronze-making. There is evidence of wooden architecture and no use of mudbrick at the site.

For a report on the 2000 season see Bilgi (2002).

Kültepe-Kanish. In 2001, excavations into the rich and ancient culture of the trade centre of Kültepe-Kanesh (Neša) continued under the direction of T. Özgüç. Here excavations centred on the first and second levels of the *karum*, the trading centre below the mound and a road with water channel. In the first level, a house was found with complete *in situ* pots and an oven. Beneath this in the second (older) level burnt wood, a hearth and two tablets were found. The tablets were in a good state of preservation, in envelopes with rolled sealings. Other finds include 4 cylinder seals and one stamp seal; faience figurines of a head and a lion; five bronze pins; a bronze bowl; and an axe head.

The most interesting development of the 2000 season comes from the pottery. A number of complete bowls, jugs and cups were found, including local forms and, for the first time, Hittite types. The type site for third millennium pottery is Alaca Höyük, typified by the gagara form of spouted jug, numerous examples of which were found here. A painted krater, fruit-stand and typical Hittite animal head rhyton were also found.

Recent publications include a number of pottery studies including Syrian bottles from the Karum (Emre 1999), animal representations on the Kültepe pottery (Kulakoğlu 1999), kantharoi (Emre 1998) and ring-shaped vases (Kulakoğlu 1998).

Kaman-Kalehöyük. The objectives of the 2001 excavations, under the direction of Sachihro Omura, continued to be the stratigraphy of the north trench, the architecture of the south trench and the investigation of the west trench.

On the north side, four levels have been identified. In Iron Age (Levels 2 a-d), excavation of the well preserved Building 14 uncovered pottery, fibulae, and a bronze arrowhead. In the Middle Bronze Age (levels 3 a-c), small finds typical of the period included burnt pottery, a seal, bullae, gold ornaments and Hittite Imperial pottery. From the Early Bronze Age (level 4) pottery and gold earrings were found. Resistivity survey was conducted around the base of the mound. Excavations here have so far shown this to be a typical Anatolian settlement.

The most significant find of the 2001 season was the first written text from the site. The tablet, found in level 3c, measures 5cm by 4cm by 1.5cm. It is covered completely with writing on one side, with only two lines on the reverse; 14 lines in

total. It is comparable with Old Assyrian texts of the 18th and 19th centuries BC. This significant find shows that the site at Kamen-Kalehöyük was a part of the Assyrian trade network in Anatolia and promises to tell us a great deal more about the site.

Reports on the 2000 season excavations and on geo-archaeological research at the site have now appeared (Omura 2002; Omura and Kashima 2002).

Boğazköy. Excavations at the Hittite capital continued in 2001 under the directorship of Jürgen Seeher.

Excavations continued to focus on the pools, where resistivity survey and trial trenches had identified a fifth pool, north of pool number one. Geophysics in this area is impeded by the volcanic stone which interferes with geomagnetic survey, although resistivity works well, albeit at a slower pace. Sondages here revealed a rich very clayey soil. Computer visualisations of the pools demonstrate what an impressive arrangement they would have made with two pools (nos. 3 and 4) measuring 70 metres in length; another two pools (nos.1 and 5) measuring 40 metres in length; the a final pool (no. 2) being round in plan. In the centre of these was a rectangular silo, which parallels those found recently on Büyükkaya and could be seen to have had a stone floor and walls made of organic material.

In 2001, analysis of the pottery recovered from the pools began. A huge number of broken pots had been recovered from the bottom of the pools, yet no single complete vessel was found. A number of "libation arm" rhytons were found and a total of 60 spindle bottles. The pottery dates from the 14th to 15th century BC and has parallels at Kuşaklı. This part of the site must have been enclosed by the city walls and geophysical survey was conducted to locate them.

Preliminary reports on the 2000 season have been published in Turkish and German (Seeher 2002 and 2001, respectively) and final publications on the architecture of the Upper City are also now published (Neve 1999, 2001).

Alaca Höyük. In 2001, excavations again focussed on the area to the east of the site behind the Mavi Saray (Blue Palace). Here was a long wall, of which 65 metres have so far been found, built of casemate masonry. Beside this wall was a range of rooms and understanding the stratigraphic relationship between these and the Mavi Saray was one of the key objectives for this year. In the smaller of the three rooms so far investigated, signs of timbers which once sat between the stone foundations and the mudbrick upper section could be seen, a typical feature of Hittite architecture. In the large room, a post setting was found in the floor. The rooms had layers of fill containing painted Hittite pottery, including part of an animal rhyton, and a burnt layer. The latest pottery was typical late Phrygian. Other finds included an animal head figurine fragment, crescentic loom weights, decorated bone, two silver pins and bronze nails.

On the 2000 season see Çınaroğlu and Genç (2002).

Ortaköy-Šapinuva. Excavations, directed by A. and M. Süel, continued across a number of areas in 2001.

In the western trench, architectural evidence in the form of walls and burnt mudbrick was found, as well as hearths and pottery, possibly suggesting the existence of a monumental building here. In the northern area, an oven was found with a burnt clay floor and high stone walls, possibly a pottery oven. In the eastern trench, a wide area was cleared and an extensive stone flagged road was found. Pottery included pithoi, cups, plates, two-handled pots and a double pot

with goat's head protome, similar to one found in 2000. Other finds included spindle whorls, bronze pins and a bronze bracelet.

In the south-east of the site, geophysics and sondages had identified a monumental building, now one of several found at Ortaköy. A stone relief of a male figure armed with bow and quiver and facing left was found. Unfortunately, the head is missing but it appears to have been a monumental door jamb. A hieroglyphic stamp seal impression was also found. It is known from letters that the Hittite Great King had a residence at Šapinuva and these new discoveries would appear to confirm this.

See Süel and Süel 2002.

Paphlagonia Survey: Roger Matthews from the University of London presented an overview on the results of the Paphlagonia survey, carried out between 1997 and 2001 in the Ilgaz, Merkez and Çergaz provinces of Northern Central Turkey. After completion of a general reconnaissance (extensive survey), ten areas were selected for intensive field walking survey using sample transects. Among the visible monuments recorded were hilltop sites, tumuli and flat settlements. To these can be added flint and pottery scatters that appear to be residue from temporary settlements.

To summarize, there is an almost complete lack of prehistoric sites, with only scattered Middle Palaeolithic finds recorded. Any evidence of Upper or Epi-Palaeolithic and Neolithic occupation is completely lacking. The Chalcolithic is sparse, and it is only in the EB period that extensive occupation begins in locations close to natural resources, such as salt or flint. The later Bronze Age occupation is represented by medium to large settlement mounds sited at strategic locations. Tumuli are constructed on the ridges of natural hills, in order to be visible from a distance. This also indicates that a high degree of deforestation had already taken place in the Iron Age. Intensive occupation during the Roman period appears to relate to the establishment of the *pax Romana*. Large flat Roman and Byzantine settlements are established close to Bronze Age mounds that were then used as cemeteries. Many Byzantine settlements continue into the Early Turkish period.

A report on the 2000 season has appeared (Matthews 2002).

Külhöyük: The Museum of Anatolian Civilizations in Ankara concentrated on cleaning and protection work at this fortified Hittite site in 2000 (Demirdelen 2002). Results of the 2001 season will be presented in the next newsletter.

Bulamaç Höyük: Investigations at Bulamaç Höyük, a site in Erzurum province that had formerly been excavated by H. Z. Koşay, were resumed in 2001 by Semih Güneri. So far, the pottery collected is red and black polished ware, typical for the Bronze Age in Northeastern Anatolia.

Black Sea Project: A report on the 2000 season has appeared (Ballard et al. 2001).

Western and Coastal Anatolia

Aydın and Muğla Survey: Sevinç Günel of Hacettepe University, Ankara, very kindly provided the following report on her new project:

"Research was carried out within the 'Aydın and Muğla Provinces Archaeological Survey' project area. This area is bordered by the Küçük Menderes (ancient Cayster River) and Aydın Mountains to the north, and includes the Büyük Menderes (ancient Maeander) plain and the Menteşe mountains range to the south. In the south and southeast the research area is confined to the limits of Muğla province. The two Meander rivers, surro-

unded by high plateaus to the north and south, and the geographical structure that they create represent a crucial natural passage connecting the Aegean to its west and Central Anatolia to its east."

"At present, information about the Prehistoric period in this region is very scarce because of the large number of Classical and later settlements, whose remains govern the appearance of the current land surface and have been the main focus of academic research in the region. Therefore, the main goal of the current survey project is to bring to light the preclassical cultures of the area and thereby fill in this cultural gap."

"Archaeological reconnaissance in 2001 started from the centre of Aydın Province, including Sultanhisar to the east, çine and its surroundings to the south and Incirliova, Germencik and Kuşadası to the west."

"The mound of *Dedekuyusu Höyüğü*, is west of Aydin and now, due to the rapid expansion of the city, forms part of its suburbs. The prehistoric settlement here extended north-south. From the site surface pottery sherds of Middle Bronze, Early Bronze and Late Chalcolithic date have been collected."

"To the east of Aydin, in the Sultanhisar region, 4 km south of Salavatlı lies the mound of *Bahçetepe Höyüğü*. This displays the features of an important Early Bronze Age settlement site. The surface treatment, decoration and forms of an important ceramic group composed of potsherds from the mound is representative of developments in the EB pottery of western Anatolia. Ceramic finds of the 2nd Millennium B C were also encountered in the olive groves to the north of the mound."

"35 km southeast of Aydın province, around çine an important settlement of prehistoric date has been discovered. *Tepecik*, which lies 3 km west of «ine near Karakollar village, has a höyük (mound) extending north-south. The ceramic and obsidian blades collected from Tepecik Höyüğü and especially from the flat plain to the south, display a clear settlement continuity from the Late Neolithic Period, through Chalcolithic to the Bronze Age. Pottery shows that this continuity of settlement extended to the Archaic and Classical periods."

"Research in the western Aydın province discovered new prehistoric centres. The first site of these centres is situated west of Aydin, beside the Incirliova-Tire road in *Köprüova* village. Besides pottery, great numbers of long narrow obsidian blades, unworked or partially worked obsidian pieces and rock crystal were found. Hand-axes made of different stone materials were also encountered. Undoubtedly, these finds denote the presence of a well developed and sophisticated chipped stone industry at Köprüova."

"Another site which provided prehistoric materials was Akçaavlu near Kırazlı village, 11 km east of Kuşadası in western Aydın. *Çatalkaya*, which takes its name from the fork-like steep rocks facing each other, has an acropolis-like character. On the acropolis, pottery sherds of the 2nd and 3rd millennium BC and obsidian blades were encountered. Classical painted sherds represent the latest material from the acropolis."

"*Kırkayak Merdiven Tepe*, which lies northeast of Çatalkaya, is another findspot. The site is remarkable for the long time span it demonstrates from the Hellenistic, through the Roman period and probably into the Byzantine. The steep natural rock with its north-south extension forms an even surface on its western side. The rock face has rock-cut niches and a staircase leading to the rock summit. In front of the rock, a Hellenic wall structure is also observable."

"The Bronze Age chronological development of the areas surveyed through the 3rd and 2nd millennia BC as well as the Chalcolithic and Late Neolithic periods has been rebuilt."

Gökçeada (Yenibademli Höyük). For a report on the 2000 season see Hüryılmaz (2002). A study of the terracotta hooks from the site, in Turkish with German summary, has also been published (Hüryılmaz 2001).

Troy (Troia). The fifteen year long Troia-Projekt is now approaching its end, and its director, Manfred Korfmann, can surely look back on those years with much satisfaction as final publications of those excavations begin and their impact begins to be absorbed by the academic community.

Fieldwork in 2001 included restoration and conservation work as well as some excavation. Excavations included investigation of the 'Troia Maritime Culture' (Troy 4/5 levels). In quadrant a 5/6 *in situ* pottery was found. On the mound a 13th century BC entrance, the oldest yet found, was investigated and a stone stele found. In the lower town geophysical surveys were conducted to trace the street plan of Troy 6. Examination and analysis continued in the water caverns, now dated by sinter analysis to the third millennium BC.

The results of the 2000 season are now published in Turkish (Korfmann 2002) and in English and German (Korfmann 2001). Most importantly, the results of the excavation of "Pinnacle" E4/5 is now published, providing important stratigraphic insights into phases Troy II to Troy V, and which largely confirms the original stratigraphy established by Schliemann and Blegen (Mansfeld 2001). An exhibition catalogue has also been published (Behr, Biegel, *et al.* 2002).

Panaztepe. Excavations continued at the cemetery of the important second millennium BC site of Panaztepe, on the north side of the Bay of Izmir, under the direction of Armağan Erkanal. The objectives for the 2001 season were to continue the investigation of the boundary wall and to further examine a stone platform found during the 2000 season.

The excavations uncovered four pithos burials and a stone cist grave, the first example of this type of burial at the site. Grave goods included pottery, in the form of two jugs, beads and a very corroded bronze pendant.

The most significant find of 2001 was a second *tholos* tomb, partially overlain by the stone platform. The *tholos* was oriented northeast-southwest and contained pottery, beads and a decorated spindle whorl. This tomb's discovery emphasises the unique importance that this site holds and its stratigraphic position under the stone platform points to there possibly being two phases to the Panaztepe cemetery.

For a report on the 2000 season see Erkanal, A. (2002).

Liman Tepe. Excavations at this multi-period site, which has levels from the Neolithic to the Late Bronze Age, were continued in 2001 under the directorship of Hayat Erkanal. Archaeological research was conducted in three areas: underwater survey of the submerged defensive wall, and north and south of the modern road that divides the site in two.

The underwater survey (directed by Michal Artzy of Haifa University) continued the topographic survey of the seabed below Liman Tepe and excavated a 1.5m deep sondage.

North of the road, Early Bronze Age walls were uncovered, including a series of three long houses and a road, reflec-

ting an area of dense house. Finds included a bronze pin, bowls and a small quantity of gold.

South of the road, exciting finds were made in the area east of the EB3 ramp and gate construction found in the previous year's work. From a well in this area came a Mycenaean *psi* figurine and pottery. Here a corridor-like construction snaked along between walls with stone foundations and mudbrick upper sections and then down five steps to a well. In the corridor were found tripod bowls and cups and worked bone.

For published results of the 2000 season, see Erkanal and Artzy (2002).

Miletos. In 2001 work on the Bronze Age excavations continued with a study season. A report on the 1998, 1999 and 2000 seasons has been published in Turkish (von Graeve and Niemeier 2002). A general history of Miletos, which includes a chapter on the prehistoric and protohistoric settlement has also recently been published (Greaves 2001).

Latmos. A preliminary report on the Hittite inscription fund in 2000 has now been published (Peschlow-Bindokat 2001).

Torbalı–Bademgediği Höyüğü:
Excavations at Bademgediği Tepesi including finds of Mycenaean pottery, gold-wash pottery and Middle Bronze Age pottery are reported in Meriç et al. (2002). Three LH IIIC Mycenaen vases supposedly found near Torbalı have also been published (Meriç and Mountjoy 2001).

Yassıkaya. For a report on the 2000 rescue excavations see Efe and Mercan (2002).

Çavlum Köyü Mezarlık: In 2001, eight new trenches were opened by excavator A. Nejat Bilgen. Sixteen new graves were found, bringing the total up to almost 60. Burial rites included *pithos* burials, which form the majority, as well as earth graves and cist graves. Finds include beads, earrings, knuckle bones, shells and bronze pins. Exceptional finds include: a stamp seal in grave M50; seven astragali bones and five bone rings in grave M58; and two bronze pins with small ram/goat terminals in grave M62.

Smaller pots were used for the burials of infants, whereas large *pithoi* were used for adults. *Pithoi* burials were sealed with stone slabs and the cist graves were made of large slabs, with smaller stones being used to cover them. Restoration work was also carried out on some of the *pithoi*.

For a report on the 2000 season see Bilgen (2002).

Isparta-Harmanören Mezarlık:
Mehmet Özsait continued excavation of the EBA cemetery of Harmanören on the slopes of Tavuşantepe, bringing the total number of *pithos* graves uncovered to 48. Usually, the opening of the *pithoi* face east and are covered with a stone or vessel. For the first time, bowls were also found being used as lids. One of the tombs unearthed in 2001, C3, contained 3 skeletons and was covered by a large stone slab. Among the material collected are EB II-III pottery forms typical of the area. These include bowls with a painted red cross inside, and jugs of the "Atatepe type".

A summary on the 1999-2000 seasons has appeared (Özsait 2002).

Iasos. The Middle Bronze Age sequence at Iasos is no longer thought to date from the Middle Bronze Age, but dates instead from the Late Bronze Age (LM1B) period. Potters' mark on one pot fragment shows character L81 (81b) of the Minoan Linear A script, and is comparable to one from Keos. A 20 cm thick layer of tephra from the eruption of the Santorini volcano was also found (Berti 2002).

IRON AGE

Eastern Anatolia

Anzaf Kalesi. Situated 11 kilometres north west of Van, the upper and lower towns of Anzaf have been the subject of research by Oktay Belli and Alpaslan Ceylan.

In the Lower Town, there was a large military complex. It is of early date and was built without bastions. It has a rectangular plan with walls four metres thick, built of mudbrick and supported on low foundations. In 2001 the first skeleton was found here.

The Upper Town was the more important of the two. Here, there were three city gates, a situation similar to Boğazköy. In 2000 and 2001, excavation focussed on the pithos magazines containing storage jars inscribed in cuneiform with their contents: oil, wine and sesame oil. Very little iron survives at the site but analysis has begun of the bronze items, and is being conducted by the German Minin, Museum Bochum.

At Karmir Blur the complete contents of the magazines were listed. Such list did not exist at Anzaf, although inscriptions on pottery and metal had been found. A lucky find in 2001 was a clay letter found in good condition, inscribed on the front and back. Its interpretation will be important for understanding the history of the site.

See Belli and Ceylan (2002) for a report on the 2000 season.

Ayanis. This high, defensible site, surmounted by a temple, has been excavated by Altan Çilingiroğlu, whose excavations in 2000 centred on the south side of the temple courtyard.

In the courtyard, the *cella* of the Temple of Haldi was surrounded by a roofed colonnade supported by piers of basalt and andesite blocks, topped by mudbrick and wood. The rooms leading off from the courtyard were of a standard 4m by 3.5m size, built of mudbrick and timber. A canal, the second to be found so far, beside the temple building may have been for rainwater. The building was destroyed in a massive conflagration, preserving the timbers of the building very well. This allowed for detailed study of the mortise-and-tenon joins used by the ancient carpenters. 98.6% of the timber used was pine, with a small minority of elm. These carbonised timbers were dated by dendrochronology to 673 BC. The dates from the whole of the site were remarkably consistent and show that there was no phasing to the construction of the site (see Dendrochronology, below).

In one room, 14 bronze shields were found on the floor, one of which was decorated with a central rosette flanked by lions. Urartian shields represent a new metal-working techniques. One shield bore an inscription naming king Rusa II. Other finds included a bronze quiver containing arrows, spearheads and possible carpentry tools.

Geophysical survey and trial trenching on the hill beside the acropolis showed evidence of terraces and buildings. For a report on the 2000 season see Çilingiroğlu et al. (2002).

Van Yoncatepe. Excavations at the Urartian castle and necropolis of Yoncatepe, continued in 2001, under the direction of Oktay Belli.

On the acropolis, the walls were up to nine metres thick in parts. Around the central courtyard were storage depots, containing sesame oil and wine, that were destroyed in a massive conflagration.

In the necropolis, analysis has continued to reconstruct the society and economy of the site. The pottery in the necro-

polis is different to that of the acropolis in that it contains only local red pottery and none from North-western Iran. There were remarkably few bronze artefacts found in the necropolis. Metal artefacts found here include: iron needles, knives, bronze rings, silver items. A lead ring, and the first example of gold earrings.

The 2000 season is published by Belli (2002).

Altıntepe (Van): Analysis has been carried out on a bronze sword, bent into a U-shape, which came from Altıntepe and which showed traces of organic remains on it (Tuğrul and Başaran 2002).

Elazığ/Bahçecik: Here, a new Urartian inscription has been found and published (Payne and Sevin 2001).

Tavium survey: The fifth season of survey work in Tavium concentrated on closer investigation of the Tavium - Büyükkale area. Christoph Gerber reports that the slope of Büyükkale revealed evidence for occasional landslides, despite successive terracing, attested by geomagnetic mapping. The oldest occupation of Büyükkale appears to date back to Chalcolithic times, with Chalcolithic and EB pottery being collected there. The material belongs to the Çınarderi and Mercimek groups and therefore represent a local variety of the Alishar intermediate painted ware.

A report on the 2000 season is available (Strobel and Gerber 2002).

Giricano. Excavations at the site of Giricano, in the Ilısu Dam area are directed by Andreas Schachner. In 2001, excavation of the Middle Assyrian levels continued, following the discovery here of 15 tablets in the Iron Age layer in 2000. Assyrian seals were found but no more tablets. From the Early Bronze Age, no in situ EB1 finds had been made up until 2001, but in this year the excavators had more luck and two complete pots and a stone setting were uncovered.

Hakkari. See Özfırat (2002).

Central and Western Anatolia

Kerkenes Dağ: Geoffrey Summers writes that the 2001 season at Kerkenes focused on geophysical prospection, recording and finds restoration and conservation.

The Cappadocia (SE) Gate, the front of which had been cleared in 1999-2000, was digitally photographed and surveyed to produce a new architectural reconstruction. The group of hand-made burnished vessels, which had been found crushed and burnt in Structure C at the eastern end of the Palace Complex, was found to comprise a big conical bowl with a pair of drop handles and a small pithos, each provided with a large flat lid, and a fine trefoil juglet. A group of red slipped jugs found nearby were found to have a range of incised marks "reminiscent of alphabetic letters", suggesting the possible use of writing at Iron Age Kerkenes.

Very substantial progress was made with the geomagnetic survey of this 2.5 km^2 site, permitting completion in 2002. Experimentation with resistivity survey in the centre of the site, which is level and relatively stone free, proved that very detailed imagery can be obtained before the soil dries out in early summer. New plans reveal rows of cell-like rooms as well as two-roomed and tripartite buildings. Two large buildings, apparently with open porches and possible central hearths, are reminiscent of megarons.

Hydrological and geomorphological studies suggest that the reservoirs at the site were designed to be filled by underground seepage rather than by surface runoff. This may also have been the case at Boğazköy and such reservoirs might perhaps have been an Anatolian tradition which continued into the Iron Age.

In addition to the bibliography of recent publications (Summers et al. 2002; Aydın et al. 2002; Baturayoğlu 2002; and Baturayoğlu et al. 2002) unpublished reports, including a report on the 2002 season, together with issues of *Kerkenes News*, can be found at:
http://www.metu.edu.tr/home/wwwkerk/index.html.

Boğazköy. There is a new publication on the Iron Age Phrygian pottery of the site (Bossert 2000). For recent developments in the Bronze Age, see above.

Gordion. Important new developments were made in the chronology of Gordion (Director, Kenneth Sams) in 2001, following a reassessment of the site by Mary Voig0t, conducted since 1993.

Carbonised seeds from the Early Phrygian destruction level were dated by radiocarbon analysis to 830-800 BC. This date is a full one hundred years earlier than had previously been thought and this destruction can now no longer be associated with King Midas and the Kimmerians.

Furthermore, timbers from the 'Tomb of Midas' mound at Gordion were dated to c. 740 BC. This is too early for this tomb to be the tomb of Midas himself, who was mentioned in Assyrian texts in 709 BC, and it may now be considered to be the tomb of his father Gordios.

Porsuk Höyük: See above, under Bronze Age.

DENDROCHRONOLOGY

Many important new developments were made in the field of dating in Anatolian archaeology in 2001, largely thanks to the work of the indefatigable Peter Kuniholm of Cornell University. Under his direction, the Eastern Mediterranean Dendrochronology project continued a large scale comparison of tree ring sequences from Italy, Georgia and Lybia, and compared them to German and Turkish oak sequences.

A total of 136 tree-ring sequences from timbers of *pinus silvestris/nigra* from Van-Ayanis were used to create a 347 dendrochronology sequence for the site. The date of 673 BC for the temple building coincides with the reign of Rusa II, named in inscriptions from the site, given in Assyrian texts (685-642 BC). This shows that the temple at Van-Aynis was built early in Rusa II's reign. Analysis of the timbers also showed that the building of the site all took place in a single phase. For details on the excavations at the site, see above. The Ayanis chronology has now been linked into the Aegean Dendrochronology Project's wiggle-matched Bronze Age-Iron Age master chronology.

Other important dendrochronology dates were also given for Ortaköy-Šapinuva (see above), where a date in the early 14th century BC was provided by carbonised timbers, and at Acemhöyük (see above) a date of 1772 BC was assigned.

Very importantly, such detailed dendrochronological studies have been used to recalibrate radiocarbon dates across Anatolia, both up and downwards, with sometimes surprising results (see Gordion, above) (Kromer, Manning, *et al.* 2001; Reimer 2001).

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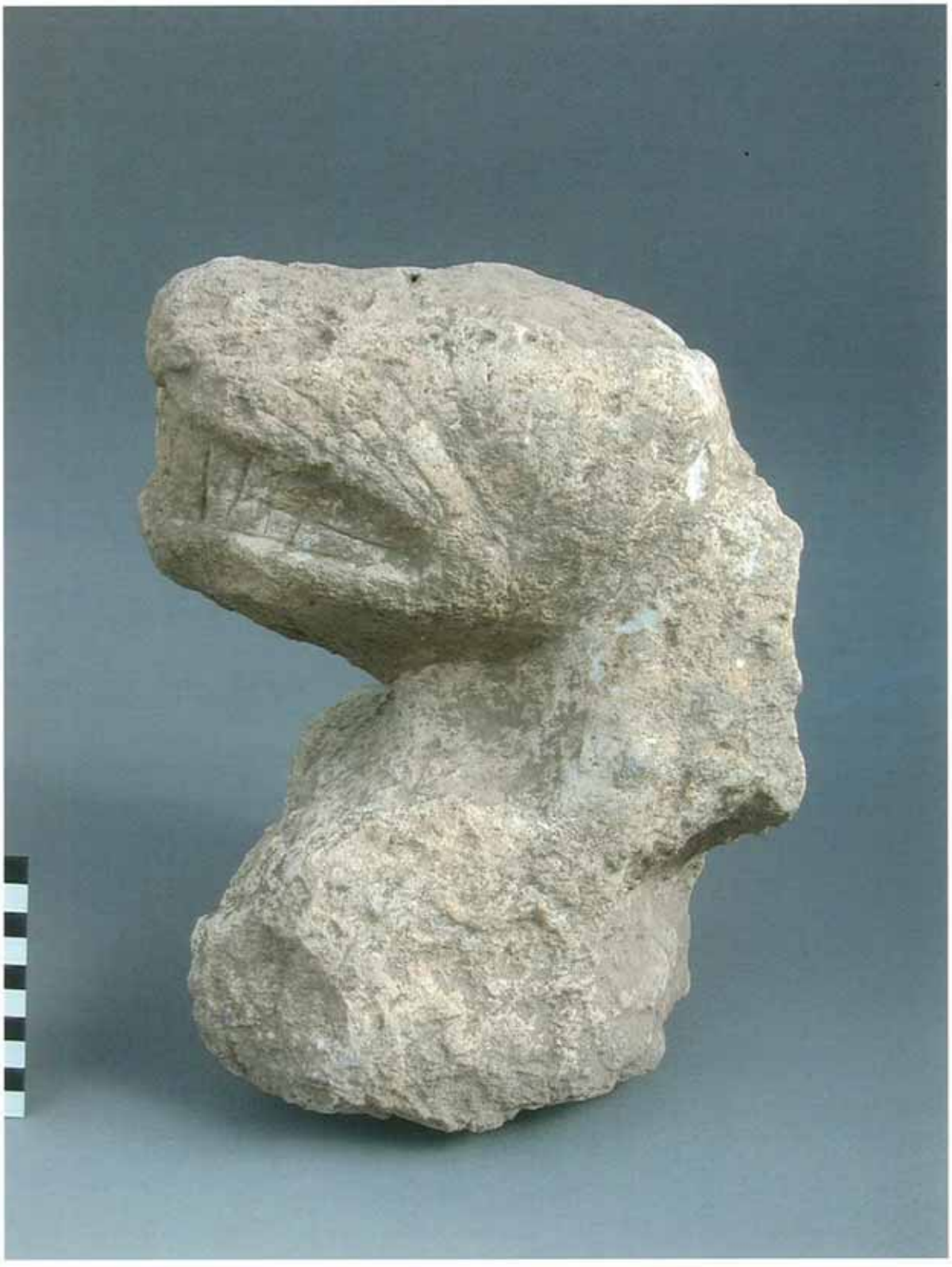

Fig. 1: Göbekli Tepe, layer III. Sculpture found in enclosure C (photograph courtesy Klaus Schmidt).

Fig. 2: Göbekli Tepe, layer III. Pictogram on the narrow side of one central pillar of enclo sure D (photograph courtesy of Klaus Schmidt).

Fig. 3: Mezraa Teleilat. General plan of the mound (plan courtesy of Mehmet Özdoğan).

Fig. 4: Mezraa Teleilat. Corridor houses (photograph courtesy of Mehmet Özdoğan).

Fig. 5: Tell Kurdu. Northern area. Densly packed village houses (photograph courtesy of Rana Özbal and Fokke Gerritsen).

Fig. 6: Tell Kurdu. Stamp seals, Halaf period (photograph courtesy of Rana Özbal and Fokke Gerritsen).

TÜBA-AR, ARKEOLOJİ DERGİSİ TÜRKİYE BİLİMLER AKADEMİSİ (TÜBA) YAYINI

KONU

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YAYIN İLKELERİ

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Danışma Kurulunu oluşturan hakemlerin adları ve onların getirecekleri her türlü öneri ve görüşler gizli tutulur.

YAZARLAR İÇİN YAZIM İLKELERİ

Türkiye Bilimler Akademisi Arkeoloji Dergisi (TÜBA-AR) yılda bir kere yayınlanır. Makaleler, yayın kurulu sekreteryasına "Sema Baykan, Uzman Arkeolog, Prehistorya Anabilim Dalı, Edebiyat Fakültesi, İstanbul Üniversitesi, Beyazıt, 34459 İstanbul, Türkiye" adresine, her yılın **Mayıs ayının sonuna kadar** bir bilgisayar disketi , iki basılmış kopya ve dergideki başvuru formu eşliğinde ulaştırılmalıdır.

Makaleler Türkçe, İngilizce, Almanca veya Fransızca dillerinde kaleme alınabilirler. Türkçe olarak gönderilen makalelere diğer dillerden birinde bir sayfayı geçmeyen bir özet eklenmelidir. Yabancı dillerde yazılan makaleler için ise özet Türkçe olarak yazılmalıdır. Ayrıca anahtar sözcükler her iki dilde verilmelidir. Makaleler hakem denetiminden geçer ve gerekli görüldüğünde gözden geçirilmek üzere yazara geri gönderilir. Yazarlar dergiye makale gönderirken söz konusu çalışmalarının daha önce başka bir yerde yayınlanmadığını veya yayınlanmak üzere başka bir kuruluşa daha gönderilmediğini önceden belirtmiş sayılırlar.

MAKALELERİN HAZIRLANIŞI

Makaleler: Özgün makale kâğıdın bir yüzüne , çift aralıklı olarak yazılmalıdır. Makalenin ilk sayfası, başlık, yazar adı(ları), anahtar sözcükleri, makalenin özeti ve dipnot olarak yazarın adres bilgilerini içerir. İki kademeye kadar başlık kullanılabilir. İkinci satıra yazılan başlık 'Alt Başlık' olarak değerlendirilir. Metin yeni bir sayfada başlamalı ve tüm sayfalar numaralandırılmalıdır. Makalelerin uzunluğu için belirlenmiş bir sınırlama bulunmasa da, makalelerin, ortalama, çift aralıkla yazılmış 15-20 daktilo sayfasını geçmemesi gerekir. Makaleler iki kopya kâğıt çıktısı yanısıra bir de diskete kayıtlı kopya olarak teslim edilmelidir. Bilgisayar kopyasının PC veya Macintosh ortamlarında, "Microsoft Word" kelime işlem programında yazılması ve bir sorun yaratmadan açılması ve işlenebilecek bir formatta kaydedilmiş olması gerekir. Bilgisayar kopyaları gereksiz metin biçimlemeleri (kalın, altı çizgili, yatık v.b. metin açısından gerekli biçimlemeler hariç) ve sayfa düzeni yapılmamış olarak teslim edilmelidir.

Resimler: Dergi resimleri çoğunlukla renkli olarak yayınlanır. Siyah- beyaz fotoğraflar yüksek kalitede olmalı ve makul bir sayıyla sınırlanmalıdır. 20 sayfalık düz metin için 7-10 resim sayfası üst sınır olarak kabul edilir.

Göndermeler: Göndermeler ayrı bir dipnot sayfasında numaralanarak aşağıdaki örnekte belirtildiği gibi verilir. Eğer gönderme makale sonunda liste olarak verilecek ise yazar adı, yazının yayınlandığı tarih ve sayfası metindeki gönderme numarasına göre sıralanarak yazılır.

Örnek:
1. R.J. BRAIDWOOD, 1967, 103
2. O.R. GURNEY, 1993, 15

Eğer metin içinde verilecek ise gene yazar adı, yayın tarihi ve sayfası konmalıdır:

(E. AKURGAL, 1997, 27)

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TÜBA-AR (The Turkish Academy of Sciences, Journal of Archaeology) is an international journal on archaeology, annually published by The Turkish Academy of Sciences (TÜBA). It covers Old and New World Archaeology, Archaeometry and related sciences. The regional emphasis of the journal is on Anatolia, the Near East and the Aegean a.o., as well. The aim of this journal is to serve as a forum for scientific studies with critical analysis, interpretation and synthesis, rather than descriptive presentation of material such as preliminary excavation reports.

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FISHER, G., 1988
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