

# New Insights into the Late Chalcolithic of Coastal Western Anatolia: A View from Bakla Tepe, Izmir

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**Abstract:** The focus of this paper is to define the Late Chalcolithic of coastal western Anatolia based on the new evidence from Bakla Tepe, one of the most extensively excavated Late Chalcolithic sites in that area. The site was inhabited during the Late Chalcolithic and Early Bronze Age I (EB 1) period. The extramural cemetery of the EB 1 period has also been investigated. The site exhibits an open settlement plan during the Late Chalcolithic period with wattle-and daub oval and grill-plan houses built independently with open spaces between them. Infant jar burials under the floors of the houses are a characteristic custom during this period. Pottery reflects a tradition well known throughout the western Anatolian coastline and the eastern Aegean islands. Small finds and ecofacts within the houses indicate the presence of an agricultural village. Slags and other finds related to metallurgical activities at the site are important aspects of the cultural development in this region of Anatolia. Bakla Tepe provides important evidence for changes at the beginning of the EB 1 period. A strong foundation and a ditch surrounded the site while construction materials changed to stone and mud brick. Unlike in the previous period, houses were built within the fortification in a very compact manner sharing walls and leaving very little open space within the fortified settlement. Important cultural, political and economic changes must have taken place during the transition from Late Chalcolithic to EB 1 around the Izmir region and the reasons behind these radical changes at Bakla Tepe must be sought within this framework.

**Keywords:** Turkey, western Anatolia, Bakla Tepe, Chalcolithic, Early Bronze Age, settlement, pottery, burials, social change

The late 4<sup>th</sup> millennium BC is an important turning point for the societies of the Aegean. This period is the eve of social and economic changes which shaped the entire Bronze Age. Important technical developments in metallurgy and metal working, as well as textile and dairy production all seem to have shaped this period. Western Anatolia and the eastern Aegean islands may reflect common cultural elements where there are no direct indications for social stratification as exemplified by uniform architectural elements and the lack of special function buildings.

The ‘Chalcolithic period’ of coastal western Anatolia has long been debated among scholars. Northwestern sites like Beşik-Sivritepe<sup>3</sup> and Kumtepe<sup>4</sup> were among the first ones labelled as pre-Trojan – thus pre-Bronze Age – and these sites, along with the southwestern site of Beycesultan have helped to define a certain Late Chalcolithic of western Anatolia. With the realisation that a considerable hiatus existed between the Kumtepe IA and Kumtepe IB phases in northwestern Anatolia,<sup>5</sup> the chronological terminology for defining these two cultures has been problematic.<sup>6</sup> The Chalcolithic of western Anatolia has been the focus of interest especially in the last 10 years,

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<sup>3</sup> Schliemann 1881, 734–744; Lamb 1932; Seeher 1985; Korfmann 1986; Korfmann 1989.

<sup>4</sup> Koşay – Sperling 1936; Sperling 1976.

<sup>5</sup> Korfmann – Kromer 1993; Özdoğan 1993, 183; Kromer et al. 2003.

<sup>6</sup> Kumtepe IA phase of the Chalcolithic period, extending into the 5<sup>th</sup> millennium BC has been labelled as Middle Chalcolithic by some scholars, whereas it has been called the earlier Late Chalcolithic by others. The Late Chalcolithic proper is roughly dated to the second half of the 4<sup>th</sup> millennium BC.



Fig. 1 Map of the Aegean with sites mentioned in the text (courtesy of IRERP).

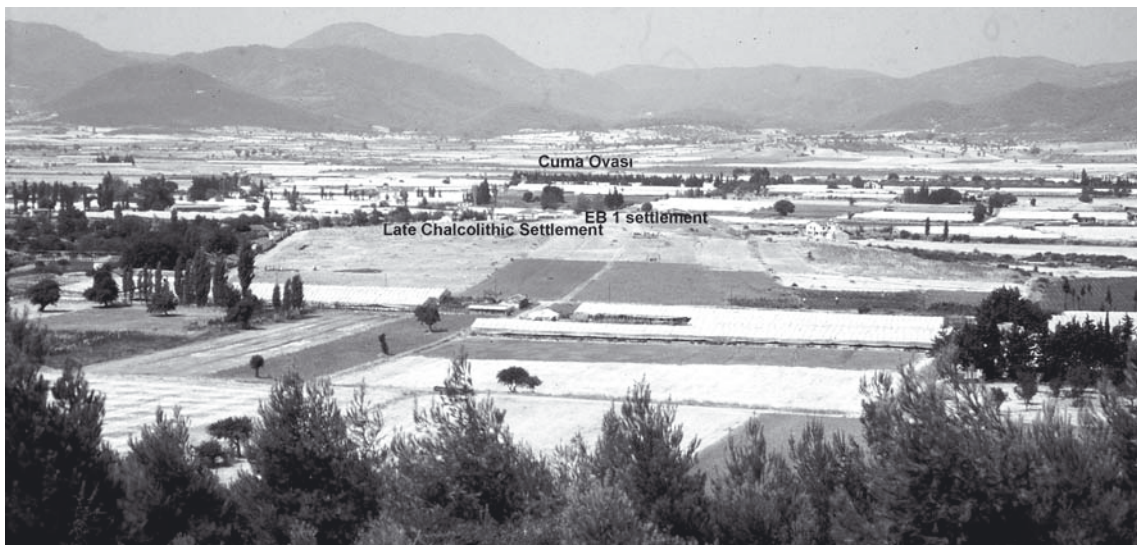


Fig. 2 A view of Bakla Tepe from the east (courtesy of IRERP).

and sites like Liman Tepe,<sup>7</sup> Gülpınar,<sup>8</sup> Çine-Tepecik,<sup>9</sup> Yeşilova<sup>10</sup> and Ulucak<sup>11</sup> have all initiated important new evidence for clarifying the nature of this period which exhibits extensive maritime contacts.

The focus of this paper will be to define the Late Chalcolithic (i.e. approximately the second half of the 4<sup>th</sup> millennium BC) of coastal western Anatolia based on the new evidence from Bakla Tepe. For many years, this culture was characterised and defined by the finds from Kumtepe – although the excavated area was extremely small in size.<sup>12</sup> During the course of the time, many new discoveries have been made through surveys<sup>13</sup> and finally sites like Liman Tepe, Bakla Tepe, and now Çukuriçi Höyük<sup>14</sup> better define this culture on the western Anatolian littoral.

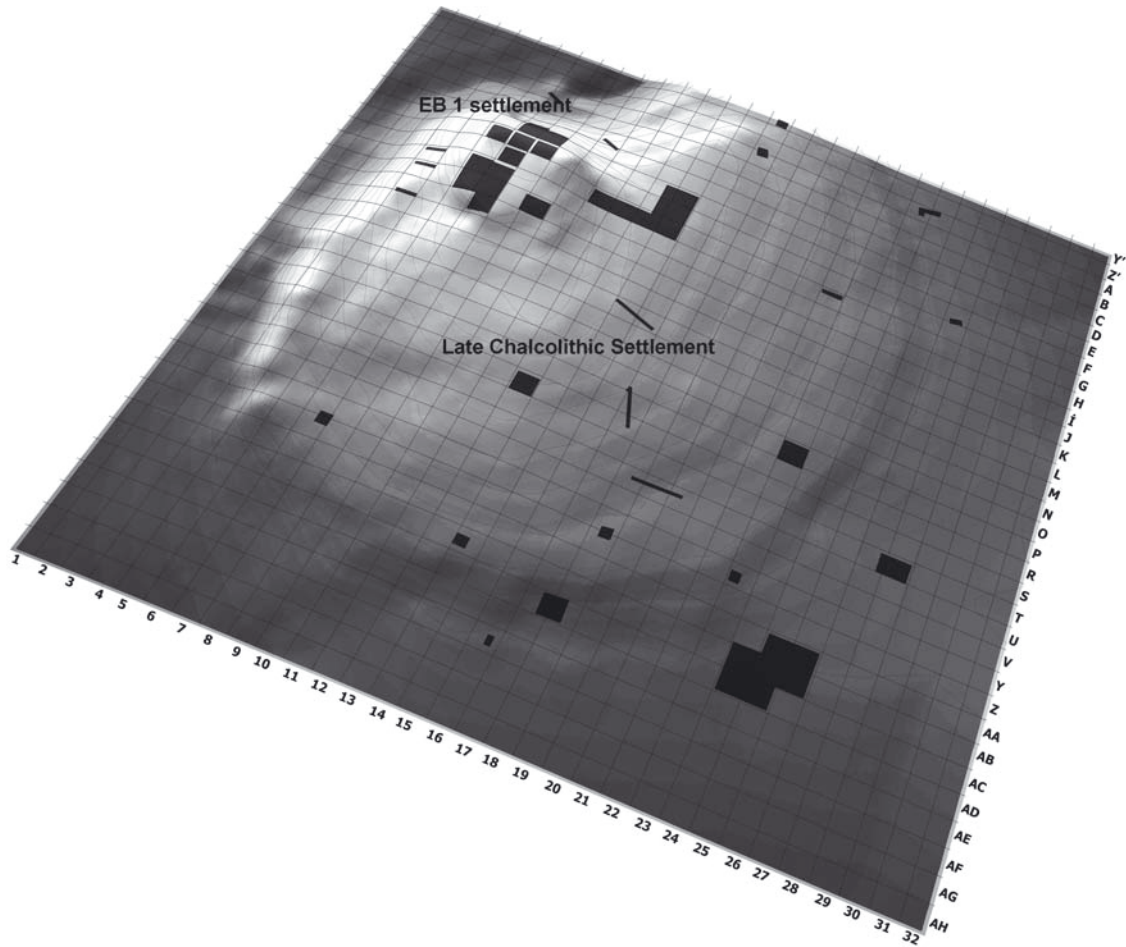


Fig. 3 Topographical map of Bakla Tepe (illustration: M. Massa, courtesy of IRERP).

<sup>7</sup> Erkanal – Şahoğlu 2012b.

<sup>8</sup> Takaoğlu 2006; Takaoğlu 2007; Takaoğlu – Özdemir 2013.

<sup>9</sup> Günel 2006; Günel 2007; Günel 2008.

<sup>10</sup> Derin et al. 2009, 8–9, 16–17, figs. 14–15.

<sup>11</sup> Çilingiroğlu et al. 2004, 18–20.

<sup>12</sup> Koşay – Sperling 1936; Sperling 1976; Korfmann et al. 1995.

<sup>13</sup> Following the surveys by French in 1959–1960 in İznik, Balıkesir and Manisa regions (French 1961; 1967; 1969), more recent surveys included those by Tuna (1986) and Meriç (1987). More recently, survey of the Aydın and Muğla regions has been undertaken by Günel (2003a; 2003b; 2004a; 2004b; 2004c; 2004d; 2005a; 2005b).

<sup>14</sup> Horejs 2012.

Bakla Tepe is situated within the boundaries of the former Bulgurca village, close to the southern end of the fertile Cuma Ovası plain in the Menderes district south of İzmir (Figs. 1–2). It is the most extensively investigated 4<sup>th</sup> millennium BC settlement of coastal western Anatolia to date (Figs. 2–3). The site is positioned at a favourable location which controls the fertile plain of Menderes and the narrow passageway, which grants easy access to the Aegean Sea within a short distance (Fig. 1). The area is extremely rich in terms of metal sources which may explain the evidence for early advanced metallurgical activities at Bakla Tepe. There are important copper, lead, silver and gold resources within easy reach of the site.<sup>15</sup>

Bakla Tepe was already known in archaeological literature from the previous surveys of Numan Tuna<sup>16</sup> and Recep Meriç.<sup>17</sup> Excavations at the site have been carried out within the framework of the İzmir Region Excavations and Research Project (IRERP) under the scientific direction of H. Erkanal from Ankara University as part of the Tahtalı Dam Salvage Project, which was headed by the former Director of the İzmir Archaeological Museum, T. Özkan. Salvage excavations continued for six seasons from 1995–2001.<sup>18</sup> However, investigations were suspended in 1999 due to the high water level caused by the newly constructed dam.

The site consists of two mounds – a larger, flatter mound of Late Chalcolithic date below and a smaller but higher Early Bronze Age I mound on top (Figs. 2–3). The Late Chalcolithic settlement extends roughly over an area 300m in diameter while the EB 1 settlement is c. 100m in diameter (Figs. 2–3). The former habitation was investigated through the excavation of contiguous trenches H/12–15 and F–G/14–15, as well as various test trenches of differing sizes throughout the site (Fig. 3).

The settlement was inhabited from the second half of the 4<sup>th</sup> millennium BC onwards until the third quarter of the 3<sup>rd</sup> millennium BC with some discontinuity. Two different settlements and burial grounds belonging to the first half and the second half of the 3<sup>rd</sup> millennium BC respectively have been excavated. There is also a built chamber tomb of Late Bronze Age on top of the EB mound along with a *pithos* grave of the same period.<sup>19</sup> The same area also included various Late Roman/Byzantine era burials.<sup>20</sup>

### The Late Chalcolithic Stratigraphy and Architecture of Bakla Tepe

At least four separate architectural levels were exposed during the course of excavations at Late Chalcolithic Bakla Tepe.<sup>21</sup> Although not all levels have been investigated equally intensively, the settlement seems to follow a similar layout throughout its lifetime, consisting of free-standing, independent domestic units with open spaces among them (Fig. 4). The architecture consists mainly of wattle and daub structures although there are also some indications for the use of mud brick. The typical architectural unit is a grill-plan structure, sometimes with an apsidal end (Fig. 4–5). The ‘grills’ consist of a single row of medium-sized stones and were probably used to lift the floor of the building above the ground surface (presumably by placing wooden planks perpendicular to the orientation of the stone ‘grills’), keeping it dry during the wet seasons.

Circular structures whose diameters range between 1–2m are scattered throughout the settlement (Fig. 6). These features were used in relation with the grill-plan structures in almost all

<sup>15</sup> Lengeranlı 2008.

<sup>16</sup> Tuna 1986, 215.

<sup>17</sup> Meriç 1987, 302.

<sup>18</sup> Erkanal – Özkan (1997; 1998; 1999a; 1999b; 2000); Erkanal (2004; 2008); Şahoğlu (2005; 2006; 2008a; 2008b); Erkanal – Şahoğlu 2012a.

<sup>19</sup> Erkanal – Özkan 1997, 401–405, figs. 1–5; Erdal 2002; Erkanal – Şahoğlu 2012a, 96–97, fig. 6.

<sup>20</sup> Cf. Erkanal – Özkan 1999b, 109–110, fig. 7. The anthropological studies of the skeletal material from Bakla Tepe are currently under study by Prof. Yılmaz S. Erdal (Hacettepe University).

<sup>21</sup> Erkanal – Şahoğlu 2012a, 92.

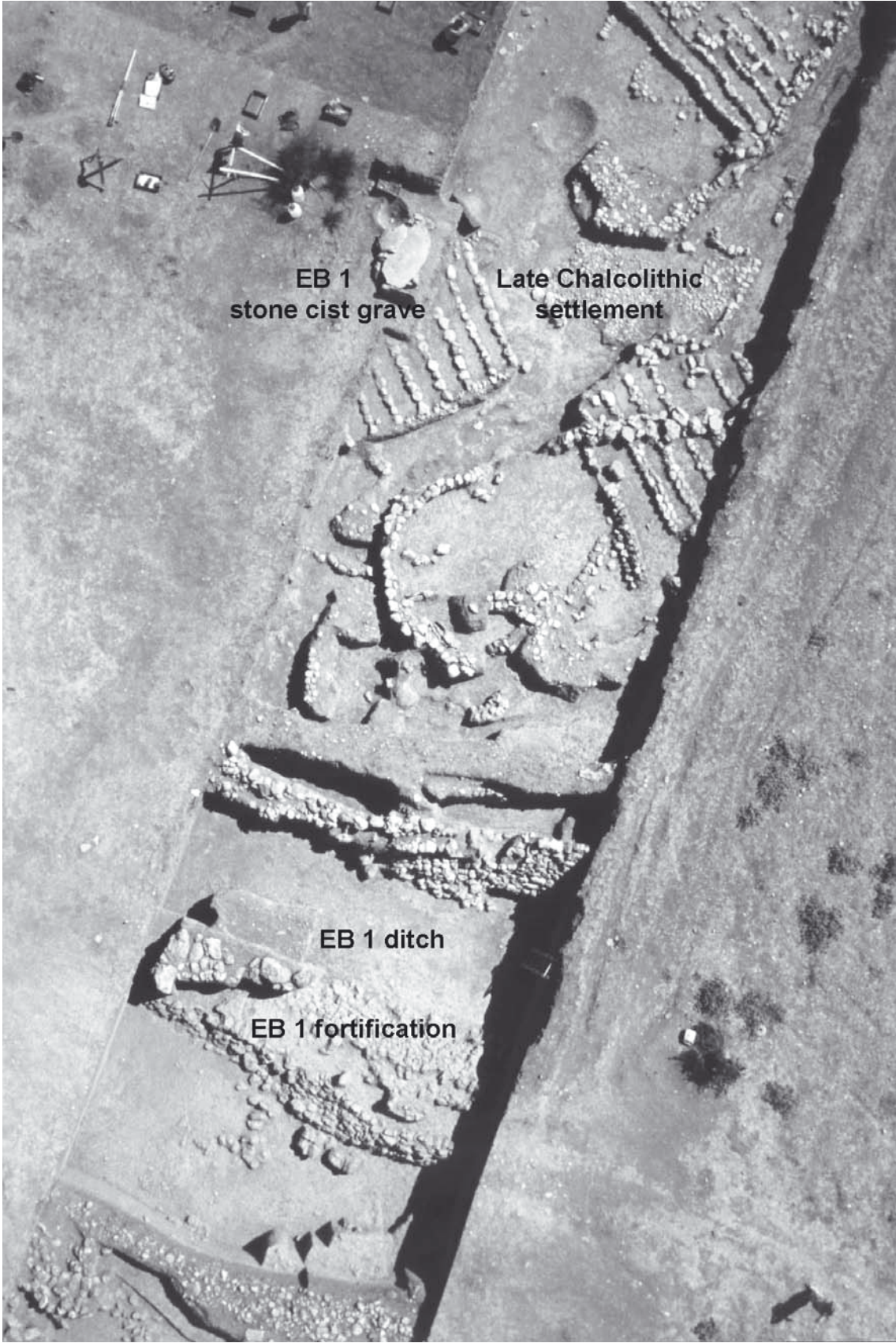


Fig. 4 Late Chalcolithic architecture from Bakla Tepe (photo: J. Driessen).



Fig. 5 Late Chalcolithic 'grill planned structure' from Bakla Tepe (courtesy of IRERP).

cases. Given the small diameter and the firmly paved floors – usually with pebbles or small stones – they must have served as storage areas, probably for foodstuffs. Storage facilities seem to play an important role in Bakla Tepe society as shown by these round structures and the special grill plans. At Bakla Tepe these features may be an important indication for surplus production which required a certain level of organisation with respect to agricultural activities and extra storage

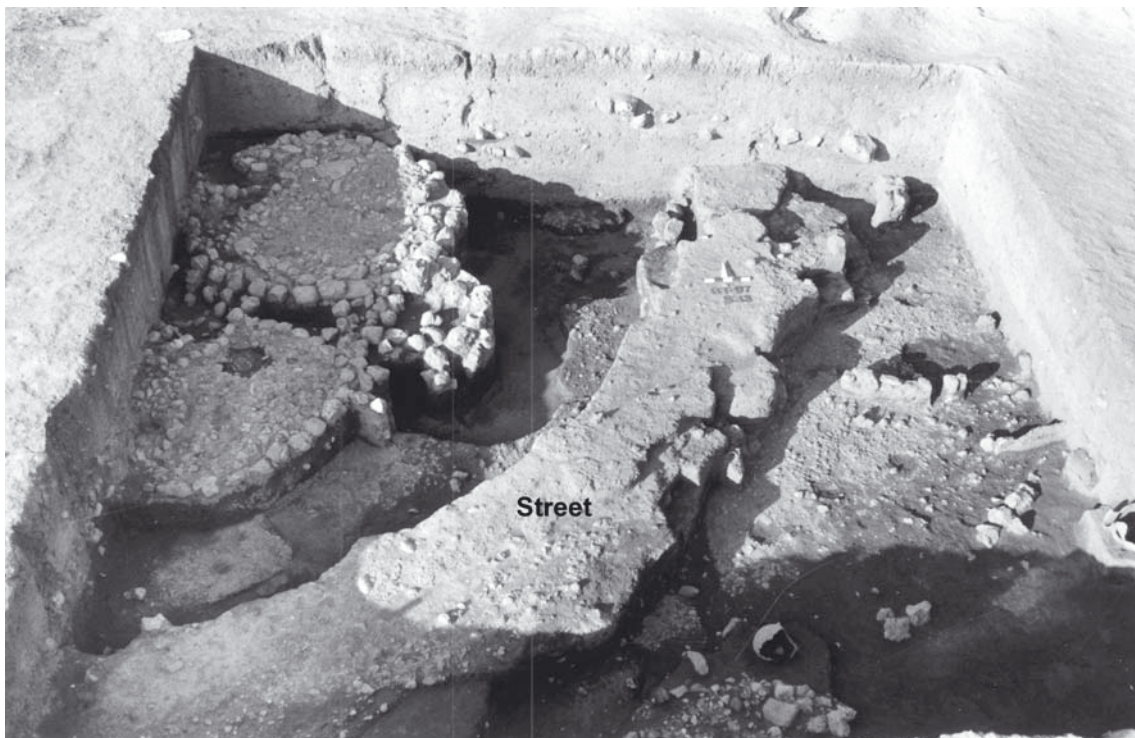


Fig. 6 Late Chalcolithic circular structures and a street from Bakla tepe (courtesy of IRERP).

facilities during the second half of the 4<sup>th</sup> millennium BC. It must nevertheless be emphasised that no communal storage facilities or central buildings were uncovered at the site. In contrast to the more densely occupied and much smaller Early Bronze Age I settlement, Late Chalcolithic Bakla Tepe possesses no fortification walls. There are hearths and fireplaces in and outside the houses indicating that open spaces were equally important, and many domestic activities were undertaken outside. The open spaces around the structures must have also been used as streets (Fig. 6) as indicated by some pebble paved pathways around the settlement.

### Metals and Metallurgical Activities at Late Chalcolithic Bakla Tepe

Various finds indicate specialised activities like textile production and metallurgy at the site during the Late Chalcolithic period. Simple metal tools like borers, and small blades are among the finds related to the early use of metals. Clay *tuyères* have been found along with slag remains throughout the site during this period (Fig. 7).<sup>22</sup> The metals and other finds indicating metallurgical activities at the site are most important since they bear some of the earliest advances in metallurgy in this part of the Near East. Present evidence suggests that these activities were taking place within the settlement, probably in the open areas around the houses since there were no organised workshop areas for specific production activities. Almost all of the metal finds – except for a flat axe – represent small tools for cutting or boring. The environs of Bakla Tepe have rich copper sources which might have already been exploited during this period. This may also be one of the reasons for the early advanced metallurgical activities at this site. Detailed analysis of metallurgical activities at Bakla Tepe will definitely shed important light on the development of metallurgy and metal use at the dawn of the 3<sup>rd</sup> millennium – a crucial period in the history of the region.



Fig. 7 A clay *tuyère* from Late Chalcolithic Bakla Tepe (photo: Ch. Papanikolopoulos [INSTAP-SCEC], courtesy of IRERP).

### Textile Production at Late Chalcolithic Bakla Tepe

There is evidence for the production of textiles through both artefacts associated with textile production as well as textile prints preserved on the bases of some vessels. An interesting category of finds believed to be linked to textile production are perforated clay cylinders. These are usually poorly fired and crumble easily. They are often found in groups and are sometimes associated with cutting implements made of obsidian or flint (Fig. 8). Their wide distribution across the settlement suggests that during the Late Chalcolithic textile production was household based just like metal production and not industrial.

<sup>22</sup> A selection of samples from these important slags were submitted to Prof Noel Gale, Isotrace Lab (Oxford), in the past for analysis but no results have been acquired so far.



Fig. 8 Clay cylinders and associated lithics from Late Chalcolithic Bakla Tepe (courtesy of IRERP).



Fig. 9 A stone axe from Late Chalcolithic Bakla Tepe (photo: Ch. Papanikolopoulos [INSTAP-SCEC], courtesy of IRERP).

### Ground and Chipped Stone Industries at Late Chalcolithic Bakla Tepe

Stone implements are another characteristic find group which further stresses the intensive agricultural activities at the site. Groundstone is widely distributed across the settlement, which points to food preparation. Stone axes of various sizes and produced from various types of stones are also abundant (Fig. 9). Many of these were probably used for woodworking which must have been a major activity especially when we consider the material necessary for wattle and daub architecture and the extensive use of wood at the site.

Flints from local sources form the main body of raw material for the lithic industry, but there is also an abundant number of obsidian tools, presumably from Melos, used at the same time. The presence of cores among the obsidian finds is important for demonstrating the import of raw

obsidian into the settlement. These cores, as well as debitage from tool production point to onsite obsidian working during this period. Their distribution across the site, again points to household level stone tool production. A small obsidian workshop is known at Bakla Tepe in the following EB 1 period.<sup>23</sup>

<sup>23</sup> Kolankaya Bostancı 2006.



### Late Chalcolithic Pottery from Bakla Tepe

The Late Chalcolithic pottery of Bakla Tepe reflects a mixture of the northwestern and southwestern pottery traditions as represented by the well-known contemporaneous assemblages of Beycesultan<sup>24</sup> and Kumtepe IB.<sup>25</sup> Bakla Tepe material constitutes the best pottery collection so far excavated and dates to the second half of the 4<sup>th</sup> millennium BC. The pottery of Bakla Tepe is handmade (Figs. 10–12). Mottling on most surfaces, frequent dark cores, and the relatively friable

fabric suggest firing in open air. The most common fabric is a medium-coarse reddish buff ware which is mainly used for jars, cooking vessels and miniature juglets, although some examples of bowls are also known to have been produced in this fabric. The next largest group is the medium coarse black-burnished ware (although the actual colour ranges from brown to dark grey/black), commonly used for jugs and bowls. A quite distinctive fabric is the reddish buff chaff ware, characterised by a brick-red surface, and a very thick black core sharply delineated close to the surfaces, used only for jars. The fine black burnished ware constitutes another distinctive fabric characterised by tiny and infrequent specks of mica and calcareous inclusions, used for bowls and jugs and much more common in the later phases (Late Chalcolithic 1–2) of the settlement.

Late Chalcolithic pottery development is best reflected on bowls. Rolled rim bowls, a type that defines the Kumtepe IB phase in the



Fig. 10 A cylindrical necked jar from Late Chalcolithic Bakla Tepe (photo: Ch. Papanikolopoulos [INSTAP-SCEC], courtesy of IRERP).



Fig. 11 A 'saucer' from Late Chalcolithic Bakla Tepe (photo: Ch. Papanikolopoulos [INSTAP-SCEC], courtesy of IRERP).

<sup>24</sup> Lloyd – Mellaart 1962, 71–115.

<sup>25</sup> Sperling 1976.

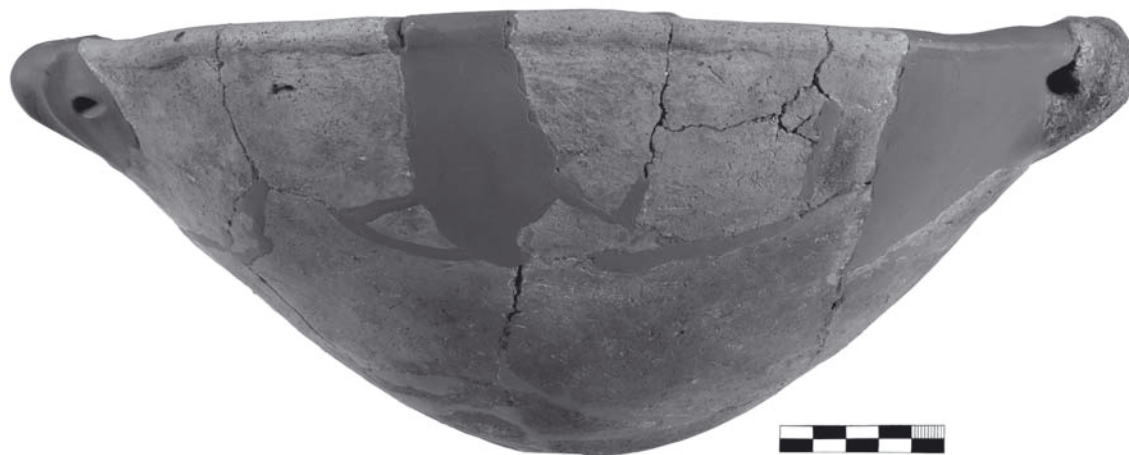


Fig. 12 A large conical bowl from Late Chalcolithic Bakla Tepe (photo: Ch. Papanikolopoulos [INSTAP-SCEC], courtesy of IRERP).

northwestern part of Anatolia<sup>26</sup> (Fig. 12) is common throughout all phases of the Late Chalcolithic of Bakla Tepe, however, with some variations. One distinctive characteristic of the rolled rim bowls of Bakla Tepe is that interior-thickened rims are thicker, more elongated and more frequently decorated with white paint, especially in the earlier levels, whereas in the later levels they tend to be shorter, more rounded and undecorated. Earlier bowls also possess a carination below the rim while the later examples have a more conical shape. The most common decoration, reserved only for the interior of the rim on bowls consists of inverted triangles which are filled with oblique lines.

White-painted decoration is likewise employed on jugs with globular bodies, usually consisting of antithetically placed groups of oblique lines pendent from a group of horizontal lines placed at the intersection of the neck and body. This motif is also frequently found on jugs from Late Chalcolithic Beycesultan<sup>27</sup> and Liman Tepe. The popularity of the white-painted decoration parallels what is already known from Beycesultan, where this technique is much more popular in the earlier levels of the site.<sup>28</sup> At Bakla Tepe, it is most commonly found in Late Chalcolithic levels 2–3, and less numerous in earliest Late Chalcolithic 4, but is absent in the latest Late Chalcolithic level 1. Other forms of decoration like pellets applied onto the body or the rim of bowls and incised decorations are much less common.

The material studied so far (belonging to a single 10 × 10m trench) has not produced pattern burnished decoration. Therefore, it is safe to assume that the situation again closely parallels that of Liman Tepe and that of Beycesultan, where the pattern burnished decoration occurs in very small amounts in the earliest Late Chalcolithic levels<sup>29</sup> and is absent in later levels. In the southwest, as exemplified by the Beycesultan assemblage, bowls are usually adorned with vertical handles in the latest Late Chalcolithic levels, and the interior of the rims, as in Liman Tepe, are decorated with white paint. Bakla Tepe displays a close parity in terms of appendages on bowls, which do not feature handles but instead employ string-hole lugs, placed on the exterior surface below the rim, sometimes with horn-like projections on either end. On the other hand, white-

<sup>26</sup> Sperling 1976, 327–344, figs. 13.405–407; 14.514–517; 15.535–545.

<sup>27</sup> Lloyd – Mellaart 1962, e.g. figs. P.1.21, 25, 26; P.4.27–30.

<sup>28</sup> Lloyd – Mellaart 1962, 77.

<sup>29</sup> Lloyd – Mellaart 1962, 91, fig. P.6.6, 10.

painted decoration is part of the southwestern Anatolian tradition that is absent in Kumtepe and other northwestern sites.

Jars are made in coarser fabric and usually have either slightly everted or straight rims with short necks. Globular bodied jugs having short necks and slightly everted beak-spouts are quite common in black burnished ware and its fine variant.

Baking pans, or cheese pots as they are more commonly called in Aegean terminology, are also quite common. Some of the Bakla Tepe examples bear matt impressions on their bases. Although this form is more characteristic of the Late Chalcolithic period, at Bakla Tepe it continues into the Early Bronze Age I period.

### Figurines

Clay figurines have been found at various parts of the settlement. However, they were not necessarily associated with certain architectural features or ‘special contexts’. One of the figurines is 6.7cm in height and possesses anthropomorphic features.<sup>30</sup> It depicts an individual with open arms (Fig. 13). The eyes are marked as two small depressions, the nose is rendered in vertical relief and a small incision forms the mouth. There seems to be a kind of conical headdress. The body is roughly rectangular and squat. The hands at the end of relatively short arms are incised and the base of the legs is flattened in order for the figure to stand.



Fig. 13 A clay human figurine from Late Chalcolithic Bakla Tepe (photo: C. Papanikolaou [INSTAP-SCEC], courtesy of IRERP).

### Late Chalcolithic Burial Customs at Bakla Tepe

Our knowledge of the Late Chalcolithic burial customs at Bakla Tepe is quite limited. Nevertheless, there are good indications for extramural deposition of the dead since no adult grave has been found within the limits of the settlement. However, a large number of infants were buried in jars under the house floors – the largest number discovered in Anatolia to date (Fig. 14). Anthropological studies carried out by Y. S. Erdal revealed that these jar burials mostly consisted of infants who had died before reaching the age of 6 months. Most of them suffered perinatal death. Infant jar burials yielded none or very few grave goods, mainly beads.

The child burials are not only important for illustrating burial customs but equally important for giving us an insight into the kind of transport or storage jars in use during the second half of the 4<sup>th</sup> millennium BC. One of the most interesting examples is one which possesses a spout close to the bottom of the jar. Its use as burial urn is clearly a secondary function and its original use may have been for the extraction of olive oil or for processing dairy products.

<sup>30</sup> Erkanal – Şahoğlu 2012a, fig. 2.

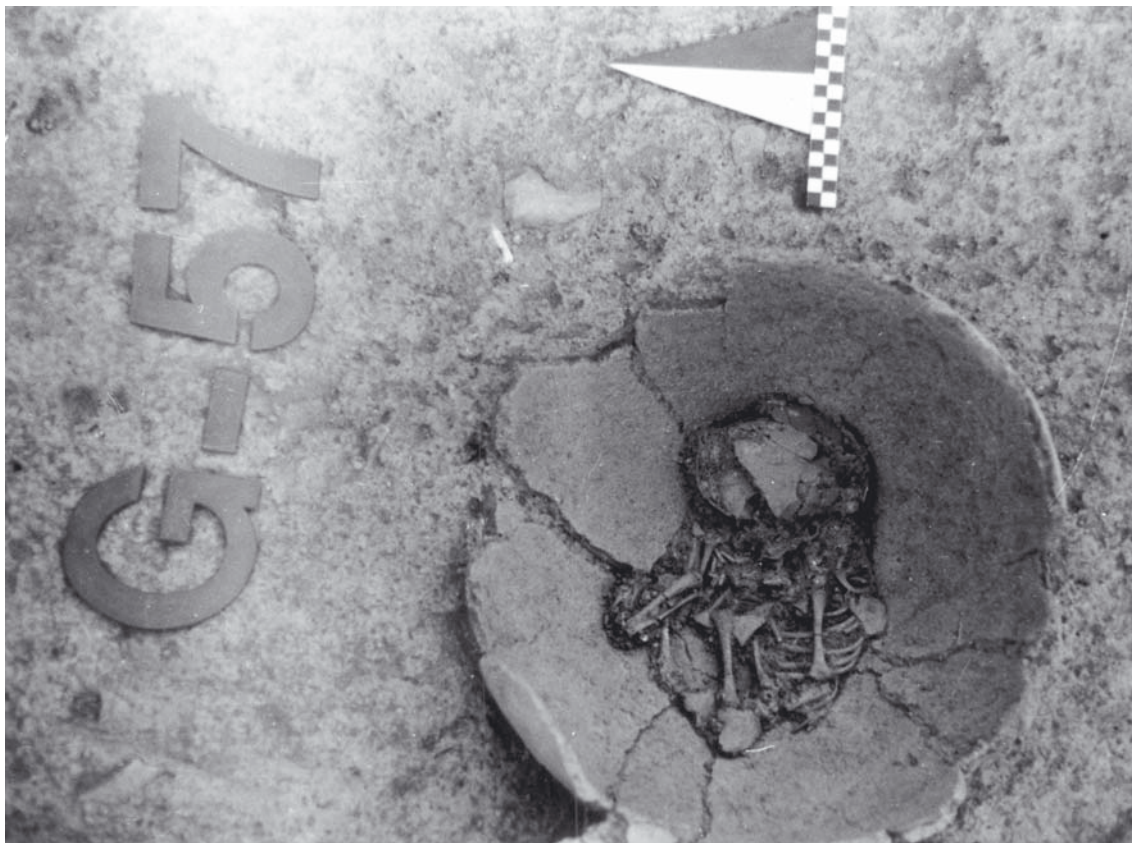


Fig. 14 An infant jar burial from Late Chalcolithic Bakla Tepe (courtesy of IRERP).

### Dating

IRERP has been cooperating with Oxford Labs and B. Weninger (University of Cologne) on radiocarbon dating of samples from the project. Due to the nature of the calibration curve for the period in question, more precise calendar dates could not be obtained from the three samples so far submitted for analysis (Fig 15).<sup>31</sup> All samples are carbonised grain. We are aware that the number of dates is not sufficient for a more detailed analysis of the chronology of the site as a whole. Nevertheless, as we await more results from B. Weninger and the ORAU, the three available Oxford dates concord very well with similar results from Liman Tepe and all fit into the time period of the second half of the 4<sup>th</sup> millennium BC (Tab. 1).

Sample No.	Material	Bakla Tepe Level	BP	BC 2 $\sigma$
Ox-A 22873	Carbonised grain	Late Chalcolithic 2	4575 $\pm$ 28	3496–3117
Ox-A 23011	Carbonised grain	Late Chalcolithic 4	4446 $\pm$ 29	3333–2941
Ox-A 23014	Carbonised grain	Late Chalcolithic 3	4546 $\pm$ 28	3367–3104

Tab. 1 Radiocarbon results from Bakla Tepe.

<sup>31</sup> All samples are calibrated with the Oxford Radiocarbon Accelerator Unit (ORAU)'s online OxCal calibration program, v.4.2 using INTCAL13 radiocarbon calibration curve (<https://c14.arch.ox.ac.uk/oxcal/OxCal.html>). For the INTCAL13 calibration curve see the INTCAL13 special issue in the journal Radiocarbon 55(4), 2013.

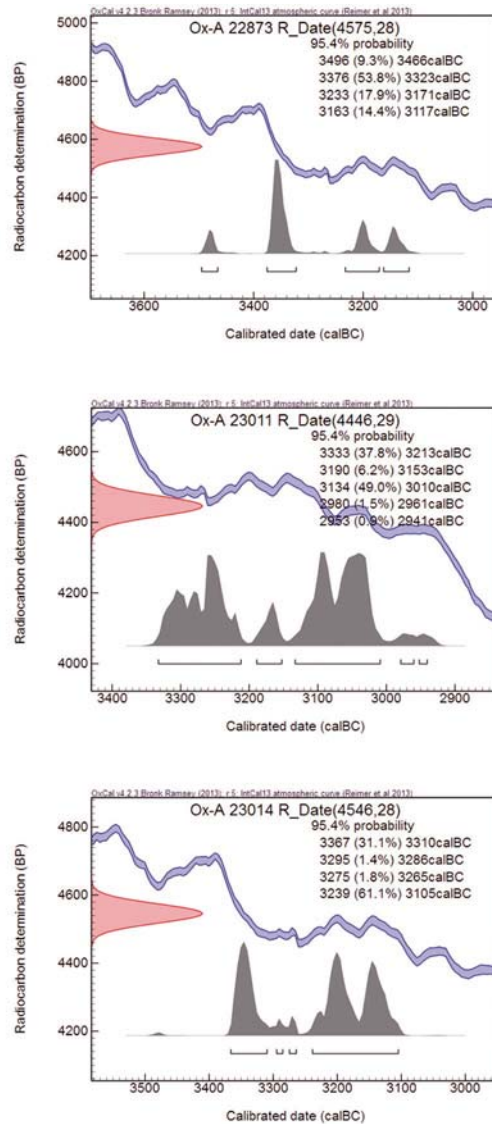


Fig. 15  $^{14}\text{C}$  results of three samples from Late Chalcolithic Bakla Tepe (courtesy of IRERP).

### Changes and Transformations at the Beginning of the 3<sup>rd</sup> Millennium BC

Bakla Tepe represents a relatively large agricultural village society with evidence for metallurgical activities and textile production. Vast amounts of obsidian are a good indicator of the maritime contacts of the settlement, possibly through intermediaries, during the second half of the 4<sup>th</sup> millennium BC.

Radical changes occur at Bakla Tepe by the beginning of the 3<sup>rd</sup> millennium BC. The size of the settlement decreases enormously from 300m to almost 100m in diameter. The settlement is now surrounded by a robust fortification wall with an additional ditch dug into the eastern slope of the mound which is more gently inclined than the steeper west slope.

The architecture reflects drastic changes in the organisation of the settlement, as well as new, much sturdier construction methods involving thicker stone foundations with a mudbrick superstructure. The free-standing buildings of the Late Chalcolithic period give way to long-houses sharing common walls, indicating changes in the organisation of both the household as well as the community itself. There seems to be a much more compact settlement structure than before,

probably due to the limitations of space within the fortified area. Organised storage areas continue to be part of the settlement's structural layout.<sup>32</sup>

Bakla Tepe is one of the very few Early Bronze Age I sites where both the settlement, as well as its extramural cemetery have been investigated. The cemetery itself was situated on the eastern slope of the mound, outside the ditch. Three different types of burials, consisting of pit graves, *pithos* graves and stone cist graves have been excavated.<sup>33</sup> Variation in burial types may reflect the presence of different cultural traditions within the settlement since grave types do not correspond either to sex, age or apparent richness of the burials. Bakla Tepe's economy continued to depend on agriculture and animal husbandry during this period, but the extramural cemetery with rich finds, such as metal burial goods reflects the advanced level of metallurgy and wealth at the site during this period.

The rich metal finds from the cemetery, in addition to moulds,<sup>34</sup> slags and crucibles found at the settlement all point to a society involved in metallurgical activities and probably trade. Melian obsidian continues to be in use along with local flint.<sup>35</sup> The pottery repertoire displays no great break in ceramic traditions, but new forms are introduced while older ones, like the well-known rolled rim bowls of the Late Chalcolithic, transform and disappear. Black burnished jugs with flaring spouts from graves seem to be specially produced as grave goods as this specific form is not found in settlement contexts. Some of these were so badly fired that it was impossible to remove them from the graves. They clearly were not meant to be used in daily life but were an important part of the burial rites.

The use of stronger building materials, fortification walls and the construction of a ditch outside the fortification wall all point out to a higher level of organised communal effort. Common use of walls within the fortification is another indication of shared responsibilities within the society. All these radical changes in settlement organisation and layout at Bakla Tepe can be interpreted as a local reflection of a more general social transformation evidenced in coastal western Anatolia at the beginning of the 3<sup>rd</sup> millennium BC. Important changes observed in architectural traditions and settlement layout may be an indication of rising inter-communal conflict at the beginning of the 3<sup>rd</sup> millennium.

The reasons behind these unsafe times at the dawn of a new millennium remains unknown, but the wider use and distribution of metals may be one of the motives which triggered further need for taking more safety precautions. The access to metals must have had an important impact on the social stratification process.

### General Remarks

There is no direct evidence for a proto-urban society at Bakla Tepe towards the end of the 4<sup>th</sup> millennium BC. Nevertheless, the abundant data for trade in exotic materials, intensive metallurgical activities and the presence of external storage facilities during the Late Chalcolithic period strongly suggest that the seeds of 'centralisation' (as defined by Ö. Çevik for the Early Bronze Age of western and central Anatolia)<sup>36</sup> were already planted during this period.

The overseas contacts that existed throughout the eastern Aegean must have been further intensified during the second half of the 4<sup>th</sup> millennium BC (as evidenced by the high number of Melian obsidian found in the settlements of the western Anatolian coastline) which resulted in the creation of an eastern Aegean *koine*, including the western Anatolian littoral.

<sup>32</sup> Erkanal – Özkan 1997, 2, figs. 3–4.

<sup>33</sup> Erkanal – Şahoğlu 2012a, 93–94.

<sup>34</sup> Erkanal – Özkan 1997, 3.

<sup>35</sup> Kolankaya Bostancı 2008, 155.

<sup>36</sup> Çevik 2007.

The presence of metalliferous deposits in the region and its exchange must have played an important role in the creation of this cultural *koine*, as well as the emergence of differences in wealth. Although the evidence from Bakla Tepe concerning metallurgical activities points to a uniform spread throughout the settlement and an even intra-site distribution of metals, we cannot rule out the possibility that such activities may have been loosely controlled. Without additional data from graves – something which is sadly lacking for the Late Chalcolithic of western Anatolia, we cannot pinpoint differences in status.

Nevertheless, the creation of this eastern Aegean cultural *koine* paved the way for even more intensive interregional exchange in the first half of the 3<sup>rd</sup> millennium BC, resulting in the formation of regional centres like Liman Tepe. A monumental fortification wall was first built during the EB I period at this site. Although not well-preserved, a fortification wall was similarly constructed at Bakla Tepe during the same period. The impetus towards a more organised settlement and society further accelerated during the EB II. Although evidence for the settlement of this period is scant at Bakla Tepe, the construction of a central building at Liman Tepe, and the expansion of the settlement attest to increasing social complexity in this region. The creation of an ‘Anatolian Trade Network’ during the second half of the 3<sup>rd</sup> millennium BC running across Anatolia was most probably concomitant with trade in metals, and scarce metals, such as tin, must have necessitated tighter control of its circulation and acquisition.

Late Chalcolithic Bakla Tepe thus represents a small scale village where access to copper ores and the development of more intensive metallurgical activity coupled with surplus production of agricultural products (necessitating the construction of extra-domestic storage units) form the first step towards the more centralised polities of the EB II period.

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