

A Study of three Numerical (!) Tablets and a Stamp Seal from the Early Bronze Age Settlement at Bademağacı Höyük

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There is no doubt that in the communities living in prehistoric times before writing was invented used methods of communication and expression other than speech. Even the most primitive communities would have used non-verbal communication methods such as petroglyphs and pictographs. The well known rock paintings of the Paleolithic and Epipaleolithic Ages and the images and symbols on pebbles and bones from Southwestern Europe¹, also seen in the same period in other parts of the world, appear in Anatolia in a form that is in keeping with the particular geographical characteristics of the region. Latmos², located between the provinces of Aydın and Muğla, and Beldibi Rock shelter³, at a distance of 60 km as the crow flies from Bademağacı, are important centres in Anatolia known for their rock paintings. In relation to developments in the following period, the issue of whether some of the pictures and images seen at Çatal Höyük⁴ on the walls of the houses and the shrine rooms consist of symbols and possibly communicate concepts of some kind has been a subject of discussion.

It is thought that the marks (or symbols) found on some of the objects uncovered in recent years⁵ during the excavation of the Early Bronze Age (EBA) settlements at the Bademağacı Excavations⁶, such as the disc-shaped clay objects and some of the stamp

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¹ P. Graziosi, *Die Kunst der Altsteinzeit* (1956); Leroi-Gourhan, *Prähistorische Kunst. Die Ursprünge der Kunst in Europa* (1971); A. Robinson, *The Story of Writing. Alphabets, Hieroglyphs&Pictograms* (1995).

² A. Peschlow-Bindokat, *Tarihöncesi İnsan Resimleri. Latmos Dağları'ndaki Prehistorik Kaya Resimleri* (2006).

³ E. Bostancı, "A New Palaeolithic Site at Beldibi Near Antalya", *Anatolia IV*, 1959, 129-178; E. Anati, "Anatolia's Earliest Art", *Archaeology* 21, 1968, 22-35; R. Duru, *MÖ. 8000'den MÖ 2000'e Burdur-Antalya Bölgesi'nin Altıbin Yılı/From 8000 BC to 2000 BC. Six Thousand Years of the Burdur-Antalya Region* (2008).

⁴ J. Mellaart, *Çatal Höyük, A Neolithic Town in Anatolia* (1967).

⁵ This project was supported by the Istanbul University Research Fund (Project nos. 2067, BYP 2004), for which I am sincerely grateful.

⁶ Excavations at Bademağacı Höyük, located 50 km North of Antalya (Fig. 1), have been carried out by a team led by Prof. Dr. Refik Duru since 1993. In 16 seasons at Bademağacı, the excavations extended to cover a total area of over 7000 m² and two separate "Deep Trenches" (DT1 and DT2) were opened up in the centre of the höyük, in which virgin soil was reached as a depth of -8.90 m and the stratigraphy was determined as follows:

Age	Level no.
Early Byzantine Period Church	-
Middle Bronze Age	MBA 1-2
Early Bronze Age II-III	EBA II-III/1-3

seals, spindle whorls and loom weights may not have just been decorative elements but could represent a type of ideogram reflecting a common communication system that existed in pre-writing times in Anatolia, consisting of certain elements and even concepts. However, rather than taking time to make predictions about the finds, the small disc-shaped clay tablets and a stamp seal will be described below and then some suggestions concerning their meaning will be put forward.

A. Numerical (!) Tablets

So far three small, disc-shaped objects have been uncovered. These have a series of impression marks on one or both surfaces in a design formed by a fingernail or some kind of tool while the clay was still wet, after which the tablet was baked in an oven of medium temperature⁷.

1) Tablet (Fig. 3)

Inv. No: BH/2002-28; Antalya Archaeology Museum 2002/226 (A)

Location: Deep Trench 2

Dimensions: diameter 3.8 cm; thickness 1.0 cm

On the front surface of the tablet there are seven parallel rows, consisting of ten, sixteen, twenty three, seventeen, ten, nine and seven fingernail impressions in turn.

2) Tablet (Fig. 4)

Location: Southern Area, "Multi-roomed Building"

Dimensions: diameter 2.4-2.8 cm; thickness 1.0 cm

On the impression surface of the disc there a small circular hollow in the centre and three not particularly straight rows of nine, eight and nine marks.

3) Tablet (Fig. 5)

Location: Southern Area, "Multi-roomed Building"

Dimensions: diameter 2.5-2.8 cm; thickness 1.2 cm

On the first surface of the disc there is a single row of eight impression marks and above and below this there are rows of two, three and four marks side by side; on the

Late Chalcolithic	LCh
Early Chalcolithic	ECh
Late Neolithic	LN 1-2
Early Neolithic II	EN II/4-1
Early Neolithic I	EN I/9-5
Virgin Soil	

The finds described in this article are from the Early Bronze Age settlement at Bademağacı (Fig. 2), a town surrounded by a stone paved slope (glacis) on the outermost edge with megaron-type buildings leaning against it on the northern, eastern and part of the western sides. In the area in the centre of this town, mainly in the section to the south, there is a "Multi-roomed Building", a complex (palace?) with a special function. On the southern side of the town there is another multi-roomed complex that is thought to have been connected to the defence system. The structure of the town shows that it was pre-planned before being built.

⁷ I extend my thanks to Assyriologist Dr. Gianni Marchesi for giving his views on the possible function and names of the items described here.

second surface there is a single row of eight impression marks and, on either side of this, there are rows of single, three, four and five marks next to each other.

B. The Stamp Seal

The number of stamp seals uncovered in the excavation of the Bademağacı EBA settlements from the first year until the present has reached over 70. The seals are usually made of clay and more rarely of stone; they have conical handles, and these handles are usually string-pierced, mainly with a circular, square or oval stamp face. The designs on the stamp face of most of these seals consist of two lines - one vertical and one horizontal - that form a cross shape and four empty areas, which have chevron motifs in them or a variation of this particular design and different uses of a swastika motif and plain, linear decorative designs. Two stamp seals that do not conform to the above description are unique items from the point of view of shape and the unusual designs seen on the stamp faces⁸.

Stamp Seal (Fig. 6)

Inv. No: BH/2008-39; Antalya Archaeology Museum

Location: Southern Area, "Multi-roomed Building"

Dimensions: diameter 4.4 cm; existent height 1.5 cm.

This stamp seal is made from a greyish beige paste, the handle had broken off and is missing and the circular stamp face is divided into four equal parts by one vertical and one horizontal line to form a cross. Three of these sections have groups of motifs consisting of five chevrons placed one inside the other; in one of them there is a circle above one of the chevron lines and in one of the other areas there is a design consisting of a row of three dots and a set of four dots placed above the chevrons. In the fourth area there is a design consisting of a double chevron, two parallel lines and a cross-shaped motif inside a circle.

Concluding Remarks

It can be assumed that numerical (!) tablets were prepared within the context of the Early Bronze Age economy at Bademağacı to keep track of countable items, for example pottery, bales of grain or small and large (flock and herd) animals, even some tools and other similar objects and to communicate the results of this accounting to the necessary people. This must have been a concrete system of counting in that each fingernail impression represents a specific product or unit/group. It may be assumed that, in the period that these objects belonged to, there was no symbol to represent a numerical value; otherwise the appropriate symbol for that numerical value would have been used. In other words, eight units of a product would have been represented by the symbol for the number 8 rather than by eight nail impression marks. The fact that the tablets were oven fired indicates that the items counted were not immediately consumed and the account of them was intended to be preserved for a long period. The find locations of these particular items at Bademağacı do not give many clues about their function. One piece found in Deep Trench 2 was found in a refuse pit belonging to EBA. The other two items were found in the "Multi-roomed Building", in an area near to the storage room which contained a large

⁸ R. Duru, "Bademağacı'nda Bulunmuş İki Mühür", *Muhibbe Darga Armağanı* (2008) 236-242.

number of jars and *pithoi*. There were two storage areas here; in one of them there were large jars and storage vessels, while in the other there were around 25-30 pots of various forms in good condition.

In order to evaluate the finds described here in the context of a pre-writing use of a “language” represented by a set of marks, it is necessary to look at the situation in the Sumerian core region in the Near East, where the first writing examples emerged. In the last quarter of the 4th Millennium BC, “impressed tablets” appeared in which tokens were pressed on to the envelopes to produce negative impressions and this is accepted by D. Schmandt-Besserat as “a crucial turning point step towards writing”. The first impression marks produced to account for the type and amount of particular wares were done in the context of a specific system with certain rules in which real tokens were used⁹. In this context, we think that the fingernail impression tablets were used in a different way from the impressed tablets and the tokens, which are accepted as representing certain products as well as communicating information about them¹⁰.

The level in which the numerical (!) tablets were found at Bademağacı has been dated by us to around 2600/2500 BC based on the classical Anatolian EBA chronological system and 14C dating. This means that the Bademağacı finds were used about 800/700 years later than the first examples from Mesopotamia.

Apart from the emergence and development of writing in the Near East, it is known that there were different systems in Europe and the Aegean World. Concerning pre-writing systems in Eastern Europe, some early find groups such as the Vinča symbols and Tărtăria tablets have from time to time attracted the interest of researchers and especially their source and the “Old European Script” has come to the fore as a topic of discussion¹¹. In the Aegean World the discovery of the Phaistos Disc and Linear A script at the beginning of the last century and the deciphering of Linear B script were undoubtedly extremely significant events from the point of the view of understanding the stages involved in the history of writing¹².

There is an identical symbol to the ones on the stamp face of the seal described above (Fig. 6) among the symbols seen on the neck section of a burial pithos¹³ found at Karataş-Semayük (Fig. 7). On the neck section of this particular item¹⁴ there is a series of incised

⁹ D. Schmandt-Besserat, “From Tokens to Tablets: A Re-evaluation of the So-called “Numerical Tablets”, *Visible Language* XV/4 (1981) 321-344; D. Schmandt-Besserat, *When Writing Met Art, from Symbol to Story* (2007).

¹⁰ *ibid.*

¹¹ C. Renfrew, *Before Civilization: The Radiocarbon Revolution and Prehistoric Europe* (1973); M. Gimbutas, *The Goddess and Gods of Old Europe 6500-3500 BC. Myths and Cult Images* (1982); D. G. Zanoliti, “The Position of the Tărtăria Tablets within the Southeast European Copper Age”, *AJA* 87.2, 1983, 209-213; J. Makkay, *Early Stamp Seals in South-East Europe* (1984); M. Budja, “Seals, Contracts and Tokens in the Balkans Early Neolithic: Where in the Puzzle”, *Documenta Praehistorica* XXX, 2003, 115-130.

¹² H. G. Buchholz - V. Karageorghis, *Altägäis und Altkypros* (1971) 119-121; C. Renfrew, *The Emergence of Civilisation. The Cyclades and the Aegean in the Third Millenium B.C.* (1972) 411-414; A. Robinson, *The Story of Writing. Alphabets, Hieroglyphs&Pictograms* (1995) 114-117, 149-150.

¹³ I extend my thanks to my colleagues Selahattin Eyüp Aksu, the Director of Antalya Archaeology Museum, and Archaeologist Mustafa Samur for providing me with information about the inventory no. of the Karataş Semayük pithos and helping me to take a photograph of the item without difficulty.

¹⁴ During our observation of this pithos, we noticed that its rim and neck appeared different from the lower section. The body of the pithos is undoubtedly original but the upper section, including the decorations, seems to be newer and this could mean that it was restored. As it is not clear what original example was followed when the motifs were applied after this possible restoration, it would be difficult to make indisputable comments about the

quadrangular panels (metopes); some of them are left empty and the others have designs of a linear and abstract type, including a cage motif (“chequerboard”) and a cross motif that divides the area into four with chevrons one inside the other in each section¹⁵. M. Mellink emphasized that these designs resemble the filling motifs on some contemporary seals and spindle whorls¹⁶. The designs on the burial pithos from Karataş-Semayük are not the only ones bearing a resemblance to the marks on the Bademağacı seal. Exact parallels to the cross in a circle motif on the stamp face of the seal are seen on stamp seals and spindle whorls from Karataş-Semayük¹⁷. The appearance of the same symbols on two different items found at neighbouring centres –a seal and a burial pithos– points to more than just a resemblance in design and suggests that they could have had a common meaning. Is it possible that the fact that these symbols were found on a burial pithos shows that their meaning is linked to death and the world of the dead?

The main symbol seen on the seal is a cross motif. Although this symbol appears to be very simple, it was used widely throughout several time periods and seen over a very extensive geographical region, from Mesopotamia¹⁸ to the Balkans¹⁹. In Anatolia, the first examples of the use of this symbol that come to mind are the Paleolithic rock paintings²⁰, the Hacilar VI, I and Kuruçay 7 pottery tradition, where it is seen as a painted motif on the red on beige group²¹, and especially the glyptic art of the 3rd and 2nd millennia BC where it appears in a plain form as the main composition element²². The cross motif is usually seen together with chevrons, especially on the seals. The seal being introduced here has an interesting characteristic, the later addition of a small “Cross inside a Circle” and “Groups of Dots” to the stamp face. These symbols, the “Cross inside a Circle” and “Set of Four Dots”, are not part of the original seal composition. Could this mean that these symbols possess an ideographic and phonetic value? For the time being, we choose not to discuss whether or not the first of these symbols resembles any symbols from a writing system.

It can be assumed that at a settlement where there was agricultural produce, animal domestication and a trading system there would have been a system of recording property

close similarity of these decorations to those of the Bademağacı seal. This should be taken into account when reading the comparisons given here.

- ¹⁵ Inv. No: Antalya Archaeology Museum 3714. The pithos is light orange in colour, handmade, everted at the mouth, has a neck, a wide body section that narrows towards the base and three cylindrical handles. Dimensions: diameter of mouth 50 cm; diameter of body section 84 cm; height 145 cm.
- ¹⁶ M. J. Mellink, “Excavations at Karataş-Semayük in Lycia, 1968”, *AJA* 73, 1969, 321 Pl. 72 Fig. 8.
- ¹⁷ M. J. Mellink, “Excavations at Karataş-Semayük in Lycia, 1966”, *AJA* 71, 1967 Fig. 52, 57; “Excavations at Karataş-Semayük and Elmalı, Lycia, 1971”, *AJA* 76, 1972 Fig. 4a.
- ¹⁸ A. von Wickede, *Prähistorische Stempelglyptik in Vorderasien* (1990) Fig. 3, 180-181, 198, 206, 262, 511, 517, 522-525, 532-210.
- ¹⁹ J. Makkay, *Early Stamp Seals in South-East Europe* (1984) Fig. I/8 (118), XV/1 (198), XXIII/ 1 (195), 2 (194), 4 (210), 6 (121), XXVII/5(52), 7 (282), XXX/2 (299), XXXI/2 (292), 4 (305).
- ²⁰ E. Bostancı, “A New Palaeolithic Site at Beldibi Near Antalya”, *Anatolia* IV, 1959, 129-178; E. Anati, “Anatolia’s Earliest Art”, *Achaeology* 21, 1968, 22-35; R. Duru, *MÖ. 8000’dan MÖ 2000’e Burdur-Antalya Bölgesi’nin Altıbin Yılı/From 8000 BC to 2000 BC. Six Thousand Years of the Burdur-Antalya Region* (2008).
- ²¹ J. Mellaart, *Excavations at Hacilar I-II* (1970); R. Duru, *Kuruçay Höyük I. 1978-1988 Kazılarının Sonuçları. Neolitik ve Erken Kalkolitik Yerleşmeleri/Results of the Excavations 1978-1988. The Neolithic and Early Chalcolithic Periods*, (1994).
- ²² G. Umurtak, “Some Observations on a Lead Stamp Seal from the Bademağacı Excavations”, *Anatolica* XXVIII (2002) 159-169.

and possessions. So far around 70 stamp seals and a bulla with a stamp seal impression on it, have been found in the Multi-roomed Building and the 43 megarons of the Bademağacı EBA settlements, which were in the process of urbanisation in this period. Could the fact that numerical (!) tablets have now been found along with these in the same period/settlement suggest that perhaps some form of tablets related to the economy existed but did not survive until the present day due to being made with such non-durable materials as chalk or wood?

Two unusual stamp seals uncovered in previous years at the Bademağacı Excavations were published by Refik Duru, who says that seals containing the same kind of compositions or other similar archaeological finds may well be found in future excavation seasons and these could result in a more realistic assessment of these two seals. R. Duru is of the opinion that it would be better to leave discussions concerning whether or not the marks and symbols on the Bademağacı seal impressions, which are dated to around 2700 BC, could be fore-runners of writing systems that would emerge in this part of Anatolia and the Eastern Mediterranean Region about a thousand years later, to the experts in this field who are more authorised to accomplish this task²³. According to David Hawkins, while the Cuneiform script that was widely used in Central and Eastern Anatolia at the beginning of the 2nd millennium BC, the Anatolian Hieroglyphic script originates primarily in Western Anatolia and is likely to be Luwian in origin as Western Anatolia was Luwian territory in this period. He suggests the fact that this people group had assimilated Mediterranean and Aegean cultural influences, including a knowledge of writing, would have played an important role in the formation of their own writing systems and expresses a hope that one day the protected Luwian Hieroglyphic documents will come to light through an archaeological discovery in their own original homeland²⁴.

Our knowledge about EBA III, and the MBA and LBA in Southwestern Anatolia, the region that Bademağacı is located in, is extremely limited. After more settlements belonging to these periods have been excavated and new evidence has come to light, it should be possible to discuss the subjects of this article in a more meaningful way, and perhaps progress will also be made towards the solving of the Luwian mystery in our region²⁵.

²³ R. Duru, "Bademağacı'nda Bulunmuş İki Mühür", *Muhibbe Darga Armağanı* (2008) 241.

²⁴ D. Hawkins, "Writing in Anatolia: Imported and Indigenous Systems", *World Archaeology* 17/3, 1986, 374.

²⁵ I extend my thanks to my colleague Miss Angela Bell (MA İstanbul University) for translating this article into English. I would also like to thank Burhan Gülkan (MA İstanbul University), who produced the drawings in this article.

Öz

Bademağacı Höyüğü İlk Tunç Çağı Yerleşmesi'nden Üç Sayı (!) Tableti ve Bir Damga Mühür

Yazı öncesi dönemlerde yaşamış toplumlarda, konuşma dili dışında, başka iletişim ve anlatım tekniklerinden yararlanıldığına kuşku yoktur. En ilkel toplumlarda bile sözlü olmayan iletişimin petroglifler ve piktograflar yoluyla sağlanmış olduğu düşünülmelidir. Güneybatı Avrupa'dan iyi bilinen Paleolitik ve Epipaleolitik çağlara özgü kaya resimleri ile çakıtaşları ve kemikler üzerindeki şekiller ve semboller, aynı dönemlerde dünyanın başka bölgelerinde olduğu gibi, Anadolu'da da bu coğrafyaya özgü biçimlerde karşımıza çıkmaktadır. Bademağacı'na kuşucumu yak. 60 km uzaklıktaki Beldibi kaya sığınağı ve Latmos'daki kaya resimleri Anadolu'da, önemi vurgulanan merkezler arasındadır. İzleyen dönemde ise Çatal Höyük'te ev ve tapınak duvarlarında görülen resim ve şekillerin bir kısmının sembollerden oluştuğu ya da bazı kavramları ifade ettiği daha önceleri de tartışılmıştır.

Bademağacı kazılarında son yıllarda İTÇ yerleşmelerinde sürdürülen kazılar sırasında ele geçen disk biçimli kilden nesneler ile bazı damga mühürler ve ağırşak, tezgah ağırlığı gibi buluntular üzerinde görülen işaretlerin (veya sembollerin) hiç değilse bir kısmının sıradan süsleme amacıyla yapılmadığı, Anadolu'da henüz yazının bilinip kullanılmadığı bir dönemde bunların toplumda ortak anlatım sistemini oluşturan öğeler, hatta bazı ortak kavramları ifade eden ideogramlar olabileceğini düşünmek mümkündür.

Kilden, disk biçiminde şekillendirilmiş ufak boyda nesnelerden Bademağacı'nda şimdiye kadar üç tane ele geçmiştir. Bunların bir ya da her iki yüzlerinde, kil henüz yaşken tırnak ya da bir alet ile basılarak belirli bir sıra düzen içinde işaretler oluşturulmuş ve bunlar daha sonra orta derecede pişirilmişlerdir. Bademağacı İTÇ yerleşmelerinde kazıların ilk yılından bugüne kadar ele geçen damga mühürlerin sayısı 70'e ulaşmıştır. Mühürler genellikle pişmiş toprak, ender olarak taştan yapılmış, konik tutamaklı, tutamağı yatay ip delikli, birçoğunun baskı alanı dairesel, dörtgen ya da oval olan eserlerdir. Bu mühürlerin çoğunluğunun baskı alanındaki desenler, birbirini dik kesen, haç şeklindeki iki çizgi ve dört yanda oluşan boşluklardaki şevron motifleri ya da bu temel şemanın çeşitlemeleri ile svastika motifinin farklı kullanımlarından ve yalın, çizgisel, dekoratif desenlerden oluşur.

Sayı (!) tabletlerinin Bademağacı'ndaki İlk Tunç Çağı ekonomisinin koşulları içinde, sayılabilir malların, örneğin çanak çömlek, ekin balyası ya da küçükbaş, büyükbaş hayvanların hatta bazı alet ve gereçlerin hesabını tutmak ve bu hesabı karşı tarafa iletmek üzere hazırlandığı düşünülebilir. Burada somut bir sistemin sözkonusu olduğu, her tırnak baskısının belirli bir ürün ya da mal birimini/grubunu temsil ettiği de söylenebilir. Aynı

zamanda bu nesnelerin ait olduėu dnemde sayı iřaretlerinin olmadıėı, eėer olsa idi, szgelimi 8 birim mal iin, 8 kez trnak baskısı yapmak yerine, 8'i temsil eden sayı iřaretinin kullanılacaėı dřnlebilir. Paraların fırınlanmış olmaları, bunların hemen tketilmediėi, kalıcı olmalarının arzu edildiėi anlamına gelmelidir. Bademaėacı'nda sz konusu eserlerin buluntu yerleri, bunların iřlevleri konusunda fazla ipucu vermekten uzaktır. Bir para Derin Ama 2'de İT'ye ait bir p ukuru iinde ele gemiřtir. Buluntulardan diėer iki tanesi ok Odalı Yapı'da, ok sayıda mlek ve kplerin bulunduėu depoya yakın konumda bulunmuřtur.

Burada tanıtılan buluntuları, yazı ncesi iřaret dilinin kullanım ve geliřim sreci aısından deėerlendirebilmek iin, Yakındoėu'da ilk yazı rneklerinin ortaya ıktıėı Smer ekirdek blgesindeki durumu irdelemek gerekmektedir. Bademaėacı'nda sayı (!) tabletlerinin bulunduğu tabakayı klasik Anadolu İT kronoloji sistemine ve C14 lmlerine dayanarak İ.. 2600/2500 dolaylarına tarihleyebiliriz. Bu durumda Bademaėacı buluntuları, Mezopotamya'daki ilk rneklerden yaklaşık olarak 800/700 yıl kadar sonra kullanılmıřtır.

Yazının Yakındoėu'daki ortaya ıkıřı ve geliřimi dıřında, Avrupa'da ve Ege Dnyası'nda da farklı sistemler olduėunu anlařılmaktadır. Doėu Avrupa'da yazı ncesi iřaret sistemleri konusunda Vina sembolleri ve Trtri tabletleri gibi bazı erken buluntu grupları, zaman zaman bilim dnyasının ilgisini ekmiř ve zellikle bunların kkeni ile "Eski Avrupa Yazısı" zerine eřitli tartıřmalar gndeme gelmiřtir. Ege Dnyası'nda ise geen yzyılın bařlarında Phaistos Diski'nin ve Linear A yazısının keřfi; Linear B yazısının deřifre edilmesi, hi kuřkusuz yazı tarihinin ařamaları aısından son derece nemlidir.

Tarım retiminin, hayvancılıėın olduėu ve ticaret sisteminin kurulduėu bir yerleřmede mal varlıkları iin bir tr kayıt sisteminin tutulduėu kesinlikle dřnlmelidir. Kentleřme srecindeki Bademaėacı İT yerleřmesinde bugne kadar ortaya ıkartılan ok Odalı Yapı ile sayıları 43'e ulařan megaronlardan ok sayıda mhr ve damga mhr baskılı bir bulla ele gemiřtir. Bunun yanı sıra sayı (!) tabletleri'nin de bulunması, aynı dnemde/yerleřmede acaba tebeřir ya da ahřap gibi dayanıksız malzemeden yapılmıř ve gnmze kadar ulařmamıř bazı ekonomik tabletler olduėunu gsterebilir mi?

Bademaėacı'nın iinde yer aldıėı Gneybatı Anadolu'da İlk Tun aėı III evresi ile Orta ve Son Tun aėları konusundaki bilgilerimiz ok sınırlıdır. Blgemizde, sz edilen aėlara ait yerleřmelerin kazılması ve yeni belgelerin elde edilmesi durumunda, bu yazıda sylediklerimiz daha anlamlı tartıřılabileceėini ve bu baėlamdaki geliřmelerin belki Luvi gizeminin zmne de katkılar yapabileceėini dřnyoruz.



Fig. 1

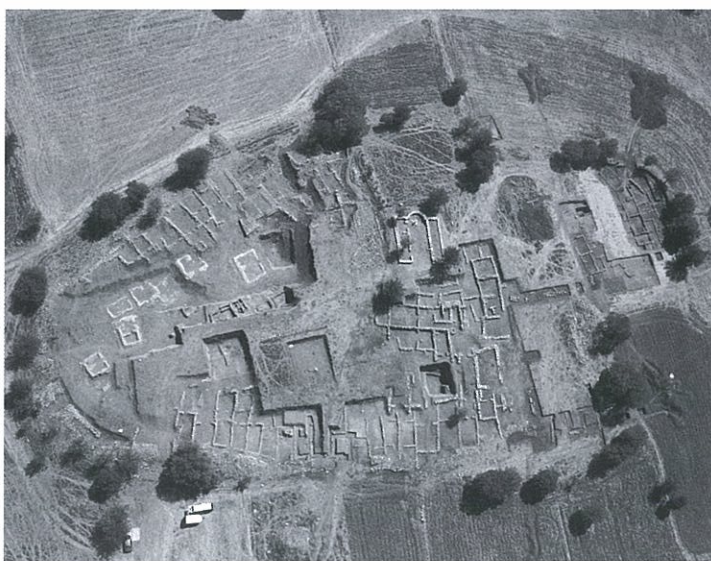


Fig. 2

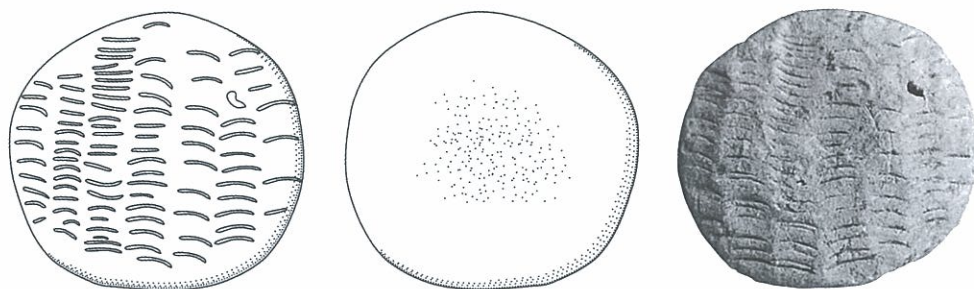


Fig. 3

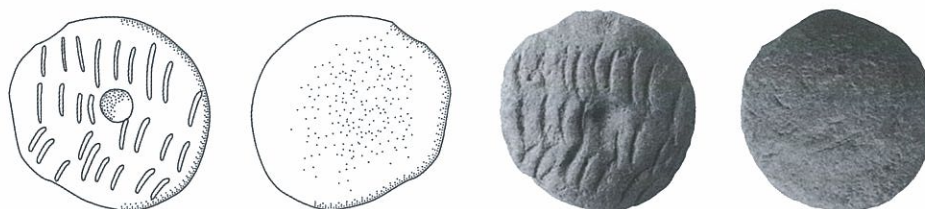


Fig. 4



Fig. 5

0 2 cm

