

Early Bronze Age sealing tradition of Küllüoba Höyük in the context of Anatolian sealing practice

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ABSTRACT

Different ideas have been put forward by the researchers for the functions of the seals made of baked clay, stone and metal. The most common view among these is that particularly beginning from the Early Bronze Age, seals were used for expressions of ownership and registration. Another view is that seals could be stamping tools used on the body or in textile printing. The pottery with seal impressions recovered in excavations is important archaeological evidence demonstrating that the find termed a 'seal' was used also for decorative purposes. A total of 11 stamp seals dated to the Early Bronze Age were recovered from Küllüoba Höyük between the years of 1996 and 2019. It could be observed that the stamp seals uncovered in Küllüoba share many common characteristics with those unearthed in other contemporary settlements in Anatolia. Particularly, the close resemblance of the motifs seen on the stamping surfaces of the seals gives rise to the thought that there was a common sealing tradition in Anatolia in the Early Bronze Age. Towards the end of the Early Bronze Age, an organized trade had developed as a result of the close relations with distant regions. This study aims to examine the seals that have been found in the excavations at Küllüoba Höyük, located in Western Central Anatolia, which lay along a significant trade route and which has provided important data on urbanization and trade in the EBA.

KEYWORDS

Anatolia; Early Bronze Age; sealing; *bullae*; Aegean; pintadera.

INTRODUCTION

The period called the Early Bronze Age (EBA) and roughly dated to the 3rd millennium BC in Anatolia is regarded as one of the most significant turning points for the region due to the developments that emerged with the advent of urbanization. Settlement types began to diversify into cities, villages, citadels, and production centers, and the initial increase in their numbers signifies the beginnings of the socio-economic transformation of Anatolia. As the period progressed, settlements began to decrease in number (EFE 2003a, 271) while significantly increasing in size, which demonstrates that centralized settlements – cities – became more prominent. Once monumental structures, defensive systems, and districts (e.g. lower and upper cities) were built, these cities began to exert control over regional production and trade. High status goods that have been recovered from their remains point to the existence of a ruling class, and are further indicators that a hierarchical organization, and consequently a complex social structure, had started to emerge. A trade network, which ran through Western Anatolia and extended to more distant regions, such as Northern Syria and the Balkans, also developed from the middle of the EBA, and grew more widespread and better organized as social complexity increased and urbanization flourished. Further cultural elements that support the above-mentioned trade network could be given as the use of the potter's wheel (TÜRKTEKI 2013; 2015), metal tools of Syrian origin such as toggle pins, lead bottles, new tech-

niques implemented in the Anatolian metalworking (TÜRKTEKİ 2015, 213), ivory and lapis lazuli objects (MASSA – PALMISANO 2018, 66).

T. Efe explains this cultural interaction, which had started in Anatolia in the second half of the third millennium, through an overland trade network that he termed the ‘Great Caravan Route’ extending from Northern Syria-Cilicia to the Northern Aegean over the Konya plain, Northwestern Central Anatolia and consequently the Eskişehir and İznik-İnegöl plains (EFE 1988, 93–99; EFE 2007, 48–49). V. Şahoğlu defines this interregional activity between Mesopotamia, Anatolia, and the Aegean in the EBA as the long-distance interaction period (ŞHOĞLU 2005).

An important assemblage along the aforesaid route is the Syrian bottles that provide information on the extent and intensity of the interregional relations with Anatolia, Mesopotamia and the Levant in the EBA. These bottles were initially produced in the Middle Euphrates Region in the EBA II, and later on had spread over inland Central and Western Anatolia, and also to the Aegean Islands, Eastern Thrace, and Northeastern Anatolia either as imports or as local imitations beginning from the middle of the 3rd millennium BC. Syrian bottles have been found in 64 settlements along the Great Caravan Route, dated to the EBA (MASSA – PALMISANO 2018, 75).

The lapis lazuli finds (e.g., beads, inlays, and cylinder seals) of Mesopotamian origin, as is evident from both the typologies and the motifs they bear, are also regarded as examples demonstrating the interregional relation.

Stamp seals, of which the number of forms and areas of use had also been growing since the Neolithic, can therefore be regarded as a group of finds that might provide information on the character of trade and interrelations across the EBA.

The early cylinder seals influenced by Mesopotamia and Northern Syria have been encountered in the EBA III strata of Tarsus and Kültepe (EFE 2003b, 125). In addition, faience cylinder seals of the Akkadian type recently unearthed in Kütahya Seyitömer (BILGEN 2015, 142, fig. 158, 162–163) are an important assemblage demonstrating the direct relations between Mesopotamia and Northwestern Central Anatolia.

In the Aegean World, the earliest seals have been recovered in Myrina belonging to the EBA I (RAHMSTORF 2016, 227). In Anatolia, the earliest seals of the EBA I are known from Demircihöyük, Karataş-Semayük (RAHMSTORF 2016, 233), Küllüoba¹ and Yassitepe. The early seals found in Cyprus must belong to the EM II (RAHMSTORF 2016, 231).

The earliest seals in Cyprus have been recovered in the settlement of Kissonerga-Mosphilia belonging to the LCA (EM II) (mid-third millennium) (WEBB – WEINGARTEN 2012, 85). Examples of impressions of the above-mentioned seals have also been found. These impressions must have been imprinted not on the vessels but on the clay closing pieces. Besides these, no seals have been recovered from the phase Philia (EBA III) (2400–2300 BC), which is known to have had relations with Anatolia and close regions. Therefore, no seals have been encountered in Cyprus after the LCA until the second millennium (WEBB – WEINGARTEN 2012, 86).

GENERAL INFORMATION ON SEALING

Scholars who study seals generally agree that they represent the owner of the seal, and that their function was associated with personal property (COLLON 1987, 113; ERKANAL 1997, 1314; DARGA 1992, 68; UMURTAĞ 2013, 56). Yet archaeological data demonstrating that Early Bronze Age seals in Anatolia were used within the community’s economic system is missing. The

1 Küllüoba Excavation Project is supported by Bilecik Şeyh Edebali University – Project No:2012-02. BŞEU.04.03).

archaeological data in question are sealings called *bullae*. Therefore, the stamps which have engraved surfaces similar to those of seals might have had other functions, especially in areas where sealings are not encountered (BACHHUBER 2015, 79; COLLON 1997, 11; LICHTER 2011, 38, 79; PRIJATELJ 2007, 232–233). It is thought that some imprinting objects, such as those commonly called ‘pintaderas’, were used on the body, textiles, leather, and other surfaces in the Neolithic period for decorative purposes. R. Duru, for example, defines pintaderas as seal-like imprinting tools that were used for expressions of personal identity, observing that they are much larger in size, and that their imprinting faces are engraved much deeper than those of common seals (DURU 2003, 560; DURU 2008a, 106–107; MELLAART 1970, 164). G. Umurtak argues that the reason no impressions from pintaderas have been found is that they might have been used on foodstuffs that are rapidly consumed, such as bread and cakes, or on lumps of clay to indicate the ownership of a product stored in a common area, and that they have not survived because clay easily disintegrates if it has not been fired (UMURTAĞ 2000, 7). L. Rahmstorf expresses the idea that the imprinting tools he named ‘decorative stamps’ or ‘pintaderas’ are generally termed seals and that yet there is no evidence indicating this assemblage was used as seals (RAHMSTORF 2016, 227).

However, in the Near East considerable numbers of *bullae* have survived. Three hundred were recovered from a space used as a storeroom at Sabi Abyad in Northern Syria, a site that was contemporary with Neolithic settlements in Anatolia (AKKERMANS – DUISTERMAAT 1997, 19), and more than one-hundred seals and six *bullae* dated to the 7th millennium BC have been found in the settlement of Tell El Kerkh in the same region (TSUNEKI 2017, 6). This means that the actual use of seals, and the concept of ownership, goes back some 3000 to 3500 years earlier in Northern Syria than in Anatolia.

It has been observed that the concept of ownership in Western Anatolia developed alongside the beginnings of urbanization, in the Early Bronze Age I (EFE 2003, 268–270), and that the number and variety of seals and their functions increased during this period. The larger imprinting objects (pintaderas) of earlier periods disappeared and smaller seals made from a variety of raw materials, forms, and decorations, began to be used in settlements. Until recently, only limited evidence for EBA I sealing was available, but new information on seal varieties has been added to our existing data. The excavation of Hacilar Büyük Höyük (UMURTAĞ 2015, 149–150), for example, has demonstrated that Western Anatolian sealing developed substantially and became more varied before the EBA II, when the ruling class truly emerged.

Seals recovered in Western Anatolia from the Neolithic to the end of the EBA are usually made of baked clay, metal, or stone. D. Collon divides the raw material used for seal-making into two phases – before and after the EBA – stating that before the EBA only baked clay and soft stones were used to make seals, and that their hanging-holes and the decorations engraved into their imprinting surfaces were made by flint tools. After the EBA, copper tools were used in seal-making (COLLON 1990, 39–40).

No *bullae* have yet been recovered during excavations at Küllüoba Höyük, however we know that *bullae* were used when securing products placed in containers, such as pottery, baskets or sacks, to keep goods fresh or to secure personal belongings. This was achieved by wrapping clay over the cord that closed the mouth of the container and then stamping it with a seal before it dried (MASSA – TUNA 2019, 61–65; ÖZKAN 2011, 151). Whether this was done for trade or to secure personal property, seals and *bullae* are extremely important because they provide evidence of an economic system. For example, a *bulla* was recovered inside a space that may have been used as a storeroom in building MRS 2 (a multi-roomed structure) at Bademağacı. Umurtak believes that it might have been used to register and control goods entering and leaving the storeroom (UMURTAĞ 2010, 20–22).

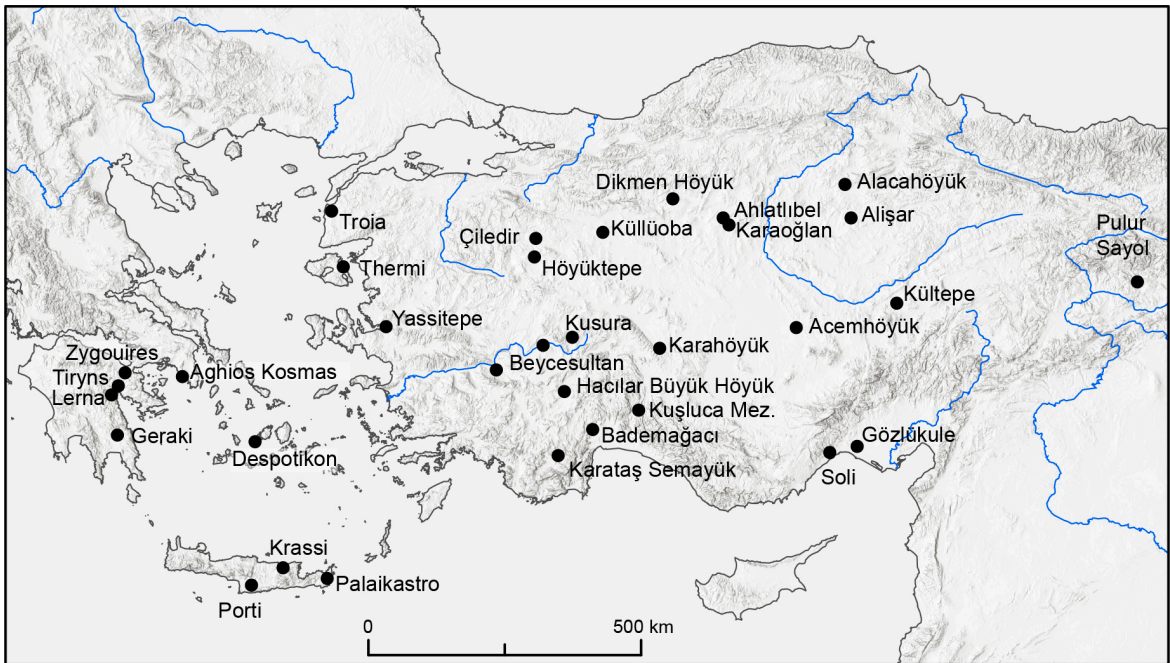


Fig. 1: Sites mentioned in the text.

GENERAL INTRODUCTION TO KÜLLÜOBA

The seals discussed in this article are from Küllüoba Höyük, which is located within the village of Yenikent in the Seyitgazi District of Eskişehir. The mound measures 350 × 150 m and rises 10 m above the plain. It has two apices that are barely visible: the eastern and western. It is situated on a fertile plain west of the Upper Sakarya River Basin, along an important natural transportation route that connects Central Anatolia to the Marmara region, the Northern Aegean, and the Balkans. Excavations at the site, which were started by Prof. Dr. Turan Efe in 1996 and have continued under the direction of Assoc. Prof. Dr. Murat Türkteki since 2019, have shown that the mound was continuously inhabited for at least 1300 years, between around 3200 and 1900 BC (**Tab. 1**).

The earliest architectural remains so far found at Küllüoba date to the EBA Transition Period (EBA IA), and have been uncovered in Layers 5 to 3 of the western apex. In this period the settlement was surrounded by a mud-brick fortification wall that followed a ‘zigzag’ course. The entrances to domestic structures opened onto a courtyard, with their backs adjacent to the fortification wall. This phase is not present at Demircihöyük, and Efe has suggested that this initial Küllüoba settlement plan may represent a precursor phase to the ‘Anatolian Settlement Plan’ (*Anatolisches Siedlungsschema*: KORFMANN 1983, 190, 222) uncovered in Demircihöyük during the EBA I and EBA II (EFE 2003, 268).

By the EBA II, Küllüoba was a city consisting of upper and lower settlements (FIDAN 2011, 50, pl. 13: 86). At least two public buildings, named Complex I and Complex II, have been found in the upper settlement surrounded by a fortification or enclosure wall. These are megaroid structures and can be considered monumental for Western Anatolia in the EBA II. Structures beyond this enclosure wall belong to the lower settlement (cf. **Fig. 12**).

Architectural remains pertaining to the EBA III at Küllüoba are missing. The period is known mainly from a stratified fill on the courtyard of the previous settlement phase, and

Dates	Periods	Eastern Cone	Western Cone
13 th -15 th century AD	Islamic Burials	I A	
1 st century BC - 1 st century AD	Late Hellenistic to Early Roman	I B	
1850 BC 2200 BC	Late EB III (<i>Übergangsperiode</i>)	II A II B II C II D II E	
2450 BC	Early EB III	III A III B III C	
2800 BC	EB II	IV A IV B IV C IV D IV E IV F IV G	1
3000 BC	EB I	V A V B V C	2 3
3200 BC	Transition to the EBA		4 5
3300 BC	Late Chalcolithic		6

Tab. 1: Küllüoba cultural periods.

archaeological materials that come from votive pits. Yet many finds display connections with distant regions, and have been regarded by Efe as evidence for the Great Caravan Route, since they point to relations that extend from Northern Syria to the Balkans (EFE 2007, 49, 60, 61, 62, fig. 17a).

Architectural styles changed in the transition period between the late EBA III and the MBA. The architecture of this period, known only from Küllüoba in this region, is of multi-roomed free-standing structures that parallel those from contemporary Central Anatolian settlements (EFE - TÜRKTEKI 2011, 207).

KÜLLÜOBA SEALS AND THEIR PARALLELS IN ANATOLIA

The excavation strategy at Küllüoba has largely been designed to reveal the footprint of the EBA II city, and its buildings have generally been exposed only to their surface plan. Excavation has not typically extended below these structures. There is no indication of a widespread

fire in the settlement, though a limited number of localized burned areas have been detected. In total, eleven stamp seals have been recovered during excavations, nine of which are made of baked clay, one is of metal, and the other is probably of serpentine. Eight of the stamping surfaces of these seals are circular in form, two are foot-shaped with an oval stamping surface, and the other is in the shape of a five-pointed star.

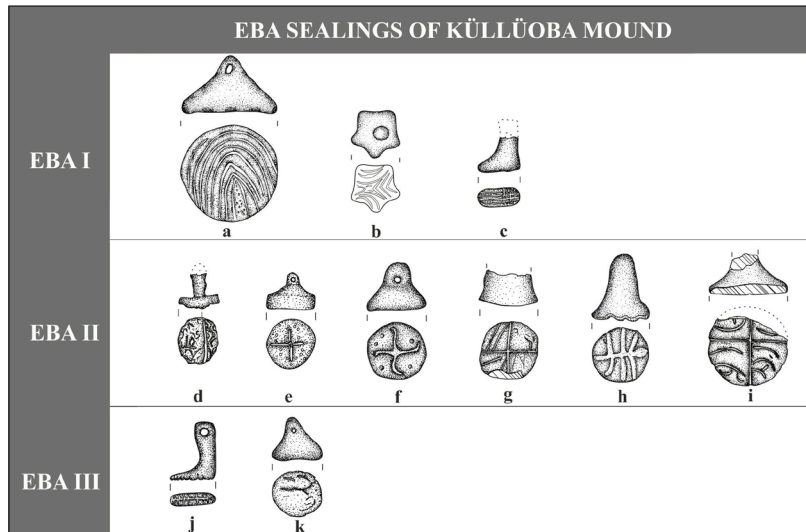


Fig. 2: EBA sealings of Küllüoba mound.

The seal recovered at Küllüoba in grid unit U 10 (U₁₀₋₅₄₀) (**Fig. 2:c**) is of particular importance, both in terms of its form and its find-spot. The foot-shaped baked clay seal was uncovered from within the remains of a mud-brick wall during work undertaken on the western side of the mound. It is dated to Phase 3, that is to the EBA Transition Period stratigraphy on the western apex. The seal's entire stamping surface, an ovoid that was probably intended to represent the sole of a foot, is decorated longitudinally with four grooves, while a further four grooves are vertically engraved on the 'heel' to form square motifs (EFE *et al.* 2001, 52, fig. 7b).

The earliest known example of a baked clay foot-shaped seal is from Layer XIII of the Tepe Gawra settlement in modern-day northwestern Iraq (TOBLER 1935, 121, pl. LVI: 1). This example from Küllüoba is the earliest yet recovered in Anatolia, though another example of such a seal dating to the EBA I was discovered at the Acemhöyük settlement (TEZCAN 1958, 526, fig. 20a-b) (**Fig. 10:e**), and one with similar decoration on the stamping surface appeared in the EBA II levels at Bademağacı (DURU - UMURTAĞ 2011, fig. 7a-b) (**Fig. 10:c**).

Grid unit A1 24 (A1 24-38) - one of the grid units containing megaroid buildings belonging to EBA I - is located in the south of the mound, in an area that was damaged and backfilled in the Hellenistic period. A stamp seal was uncovered in the upper levels of the surviving EBA I phase (**Fig. 2:a, 3:a**), and can therefore be regarded as belonging to late in that phase. It is a circular, baked clay seal, bearing a motif of deeply engraved, nested U-shaped curvilinear patterns on its stamping surface. No exact parallels with this pattern have been encountered in EBA Anatolian contexts, but it has been observed on the surfaces of two Neolithic seals recovered in Ulucak Höyük (ÇILINGIROĞLU 2009, fig. 4:2, 6). The closest Anatolian EBA example to this pattern was found in the MEE trash pit of Layer IV in the Karataş-Semayük settlement (EBA II) (WARNER 1994, pl. 187d) (**Fig. 3:c**), and a seal with a similar motif was unearthed at Bademağacı (DURU 2005, pl. 43; DURU 2008a, fig. 346) (**Fig. 3:b**).

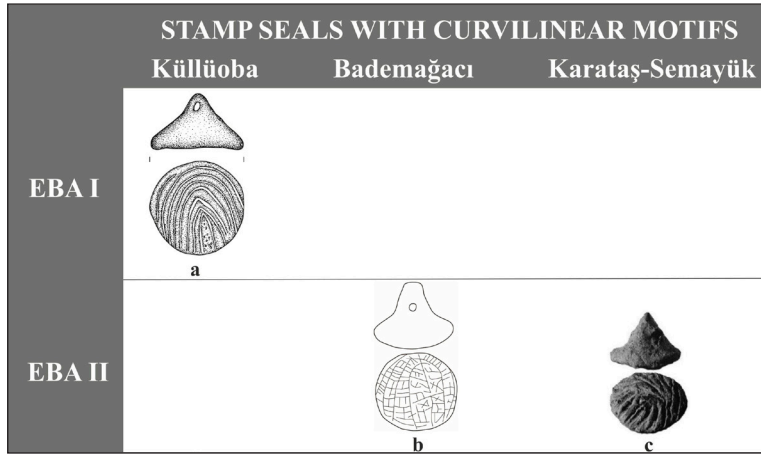


Fig. 3: Stamp seals with curvilinear motifs.

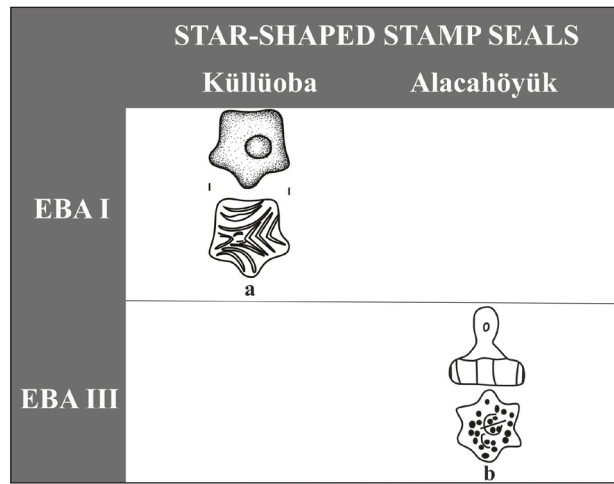


Fig. 4: Star-shaped stamp seals.

The seal with a stamping surface shaped like a five-pointed star is a unique example for Küllüoba (Fig. 2:b, 4:a) and consequently for Western Anatolian sealing, as similar seals are rarely encountered in the peninsula. It was recovered from grid unit Aİ 23 (Aİ 23–52), and bears a decorative composition made up of non-symmetrical grooves and arc-like motifs. It was also found in an area destroyed by the Hellenistic fill containing megaroid structures belonging to the EBA I. The seal can therefore be dated to the EBA I, but its closest parallel was recovered in the EBA III settlement in Alacahöyük (KOŞAY – AKOK 1973, pl. 65, 82) (Fig. 4:b).

The seal recovered from grid unit AD 20 (AD 20–118) (Fig. 2:f, 5:c) was found directly beneath the ground surface. At this depth, dating is uncertain, but it probably dates to the latest phase of the EBA II, which was exposed by agriculture and erosion in some areas on the mound (IVA–IVB?). It is made of baked clay and has a swastika-like motif made up of engraved lines and surrounded by some decorative dots.

This seal has numerous parallels, and most belong to EBA II contexts, having been found at Bademağacı (DURU 2000, pl. 36:7) (Fig. 5:f), Hacılar Büyük Höyük (UMURTAĞ – DURU 2012, fig. 15) (Fig. 5:g), Çiledir (TÜRKTÜZÜN *et al.* 2014, fig. 34) (Fig. 5:h), Karataş-Semayük (Mellik 1965, pl. 64, fig.33 a, b) (Fig. 5:e), Ahlatlıbel (Koşay 1934, 70) (Fig. 5:j), Karaoğlan (TÜTÜNCÜLER

















STAMP SEALS WITH SWASTIKA-LIKE MOTIFS														
	Kılılıoba	Beycesultan	Karatas-Semaylık	Bademağacı	Hacılar-Büyük Höyük	Çiledir	Karaoğlan	Ahlathbel	Kültepe	Polir-Sakyl	Lerna	Geraki	Tiryns	
EBA I														
EBA II														
EBA III														
EH II														

Fig. 5: Stamp seals with swastika-like motifs.

2013, 203) (**Fig. 5:i**), and in Layer XIV in Beycesultan (LLOYD – MELLAART 1962, 272, fig. 4.7) (**Fig. 5:d**). Two similar seals are from EBA I layers though, from Karataş-Semayük (MELLINK 1972, pl. 55, fig. 4a) (**Fig. 5:a**) and Pulur-Sakyol (KOŞAY, 1976, 70) (**Fig. 5:b**). Swastika-like motifs have been encountered on the *bullae* recovered from layer 11 and layer 12 fills of Kültepe belonging to the EBA III (ÖZTÜRK 2019, 57–58, fig. 12:1–2) (**Fig. 5:k-l**).

In the Aegean World, two seals from Lerna dated to the EH II (**Fig. 5:m-n**) (KRZYSZKOWSKA 2005, 43, fig. 64, 67) and seals uncovered in Geraki (KRZYSZKOWSKA 2005, 44, fig. 72) bear similar swastika-like motifs in the center of the stamping surfaces (**Fig. 5:o**). In the seal from Tiryns, the swastika-like motif is placed on the entire stamping surface (**Fig. 5:p**) (KRZYSZKOWSKA 2005, 39, fig. 55a, 55b).

It appears that the swastika-like motif is among the earliest known, being present on a baked clay stamp seal from Çatalhöyük and on the imprinting surface of a pintadera found at Bademağacı in Anatolia, both dating to the middle of the 7th millennium BC. While the hanging-holes on these examples indicate that they were portable, it is considered that they were used as stamps (TÜRKCAN 1999, 46–47), to produce decorations on the body, textiles, leather, or other surfaces (DURU 2008a, 107).

Despite these examples, the swastika-like motif in Anatolia is most commonly seen in EBA II strata, and there is clear evidence that its use on pottery and stampings increased during this period. It also seems that it was more commonly used at Alacahöyük, Bademağacı and Karataş/Semayük than in other Anatolian settlements. At Bademağacı, where the earliest Anatolian examples of the motif have been recovered (UMURTAĞ – DURU 2008, lev. 21:a; TAÇILDIZ 2016, 102, 103), it reappeared and was frequently employed on EBA II pottery, spindle whorls and stampings, after an interruption in the Chalcolithic and EBA I periods. In Karataş/Semayük, the motif appears on grave goods and is common in the pottery tradition (TAÇILDIZ 2016, 98). It appears to have fallen out of use in the EBA III, and is not encountered in the western region of Anatolia other than at Troy.

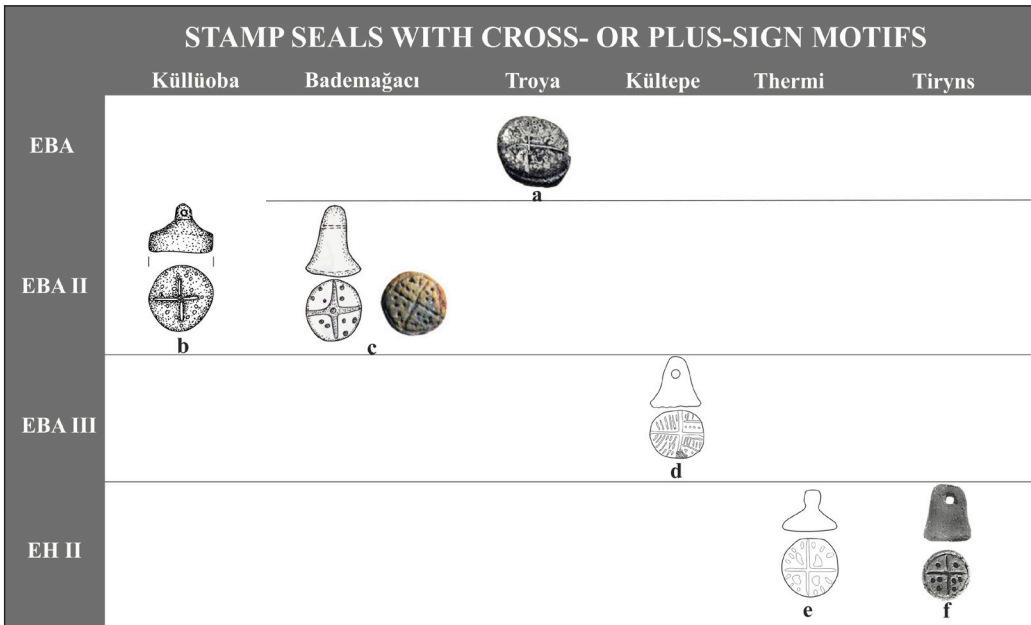


Fig. 6: Stamp seals with cross- or plus-sign motifs.

Another baked clay seal was recovered in a courtyard fill from grid unit AD 20 (AD 20–106), and has been dated to Phase IVD of the EBA II (**Fig. 2:e, 6:b**). The stamping surface contains a cross- or plus-sign motif formed from engraved lines, around which are decorative dots that may have been engraved to fill the stamping area of the seal.

The closest parallels to this motif can be observed on two seals dated to the EBA II settlement at Bademağacı (**Fig. 6:c**). One has an engraved cross- or plus-sign and decorative dots at the center of the stamping surface. The seal is 2 cm in height, 1.4 cm in diameter, and has a conical handle with a hanging-hole (DURU 2005, pl. 48:2). The other has a cross- or plus-sign within a circle, with decorative dots between its arms (DURU 2008a, fig. 345). One further example was found at Troy. It is dated to the EBA and has a cross- or plus-sign motif, but with scattered irregular decorative dots around it (SCHLIEMANN 1881, Nr. 498) (**Fig. 6:a**). The stamping surface of a seal from layer 11b of Kültepe, dated to the EBA III, is divided into four by a plus-sign motif, and the seal area is filled with decorative dots and notches (ÖTÜRK 2019, 52, fig. 5:2) (**Fig. 6:d**). A similar motif can be observed on a copper stamp seal with a conical form, from the Northern Aegean site of Thermi, dated to the Early Helladic II period. (ARUZ 2008, 31, fig. 40) (**Fig. 6:e**). Another similar example is made of baked clay dated to the EH II in Tiryns (**Fig. 6:f**) (KRZYSZKOWSKA 2005, 39, fig. 54a, 54b).

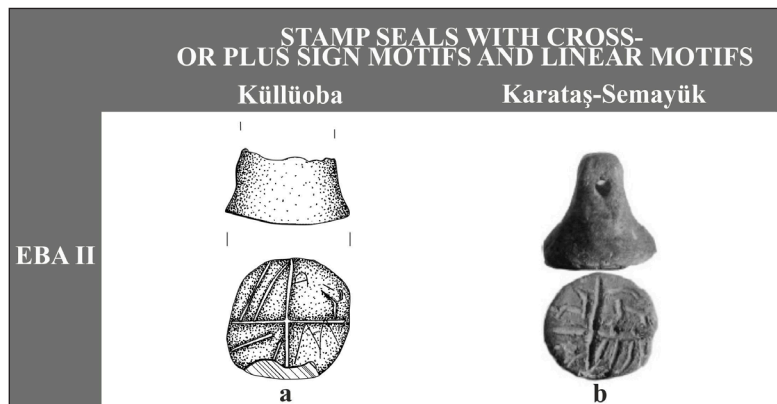


Fig. 7: Stamp seals with cross- or plus-sign motifs and linear motifs.

The baked clay seal (**Fig. 2:g, 7:a**) recovered in grid unit AD 21 (AD 21–192) was found in the floor level of the structure there, which is interpreted as a storage area that was located on the rear axis of the EBA II megaroid building. It has been dated to Phase IVD, and its stamping surface is divided into four by a deeply engraved cross- or plus-sign motif. There are irregular linear marks in between the arms of the sign.

A similar seal was recovered on the wall A-2W, near House MEE in Layer IV of the EBA II settlement at Karataş-Semayük (MELLINK 1970, pl. 58, fig. 23b; WARNER 1994, pl. 187b) (**Fig. 7:b**).

Another Küllüoba seal was recovered in grid unit T 6 (T6-17), located on the northern side of the EBA Transition Period settlement, outside the central area (**Fig. 2:h, 8:a**). On its stamping surface is a motif that consists of a deeply engraved line that separates the seal area into two equal halves, and, connected to it, there are a total of six further lines on each side, forming groups of three. It is possible that the seal was carried to its find-spot by erosion or agricultural activities on the mound, but it has the characteristics of EBA II parallels from Anatolia. The engraved stamping surface is reminiscent of a seal that was recovered from Bademağacı, and has been defined as a ‘stylized conifer-branch’ by R. Duru (2003, pl. 48–13) (**Fig. 8:b**). Similar seals have also been found at the settlements of Karaoğlan (EBA II) (ÖZGÜÇ 1987, fig.

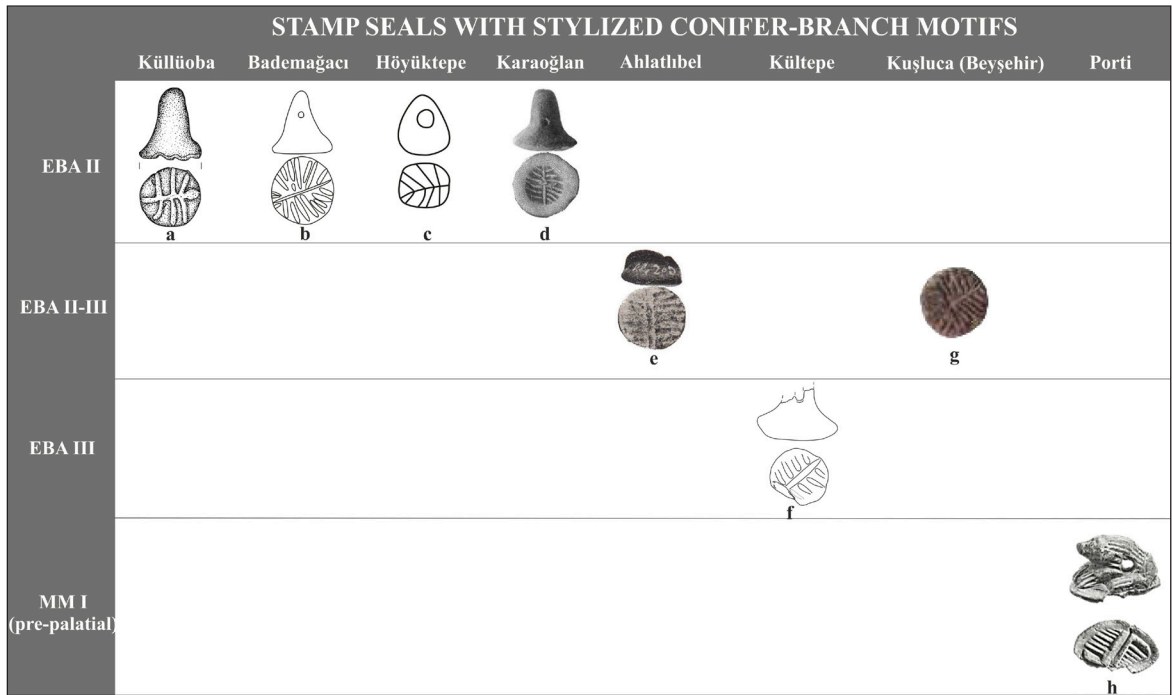


Fig. 8: Stamp seals with stylized conifer-branch motifs.

20 a-b) (**Fig. 8:d**), Ahlatlıbel (EBA II-III) (KOŞAY 1934, 71-72) (**Fig. 8:e**), Kültepe (ÖZTÜRK 2019, 59, fig. 13:1) (**Fig. 8:f**) (EBA II-III) (ÇOKBANKER 1974, fig. 13) (**Fig. 8:g**), and Höyüktepe (EBA II) (TÜRKCAN - BEYOĞLU 2015, 440, tab. 1, fig. h) (**Fig. 8:c**).

In the Aegean World, a seal bearing a very close resemblance to the motif on the stamping surface, though not to the form, has been recovered from the cemetery in the settlement of Porti on Crete. It is dated to the MM I, the Pre-Palatial Period (**Fig. 8:h**) (KRZYSZKOWSKA 2005, 72, fig. 125a, 125b).

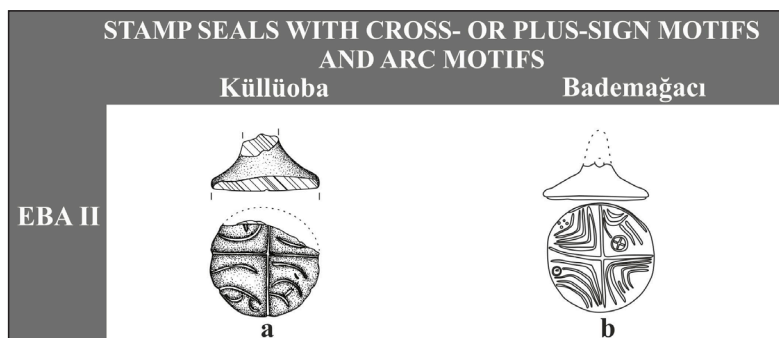


Fig. 9: Stamp seals with cross- or plus-sign motifs and arc motifs.

Another seal with a cross- or plus-sign motif (**Fig. 2:i, 9:a**), which is among the most common motifs that characterize Anatolian sealing and was widely used, was discovered in grid unit AG 22 (AG 22-71). On its stamping surface, in the areas defined by the cross, are decorative grooves that could be arcs made by fingernails. The seal was uncovered from within a burned area inside an EBA II structure in the Lower town.
















FOOT SHAPED SEALS	
	EBA EBA I EBA I-II EBA II EBA III EM I-II EM III EH II EC II
Küllüoba	 a  b
Bademağacı	 c
Yassitepe	 d
Acemhöyük	 e
Alacahöyük	 f
Kültepe	 g
Konya-Karahöyük	 h
Resuloğlu	 i
Tarsus-Gözlükule	 j
Palaikasrtro	 k
Krassi Tholos	 l
Zygouires	 m
Aghios Kosmas	 n
Despotikon	 o

Fig. 10: Foot shaped seals.

A parallel though a more complex example can be found on the stamping surface of a seal found in Bademağacı that loosely resembles the example from Küllüoba. It was found in a multi-roomed structure dated to the EBA II (UMURTAĞ 2009, fig. 6) (**Fig. 9:b**).

It is difficult to provide information about the seal found in grid unit AA 20 (AA 20-32), because the stamping surface has deteriorated (**Fig. 2:k**). This seal was found in a trash pit that falls within the southern profile of the grid unit, along with some pottery that is characteristic of the EBA III. The seal has thus also been dated to the EBA III. From what remains, the stamping surface appears to contain a motif composed of irregular grooves and surrounding decorative dots. While the details are unclear, and it is thus hard to compare it to Anatolian parallels, stamps of its form have been encountered in nearly all of the contemporary settlements in Anatolia.

A foot-shaped seal recovered from the floor of a partially-unearthed structure in grid unit AD 18 (AD 18-28) appears to be made of serpentine (**Fig. 2:j, 10:b**). It has been dated to Phase III B of the Küllüoba EBA III, and on the stamping surface is a motif composed of a straight groove that divides the surface into two, with eight perpendicular grooves at regular intervals in each half (EFE - EFE 2007, 52, fig. 7a).

Parallels to this seal, similar both in form and motif, have been encountered at Yassitepe (EBA I) (**Fig. 10:d**), Alacahöyük (EBA) (**Fig. 10:f**), Konya-Karahöyük (EBA I-II) (**Fig. 10:h**), Resuloğlu (EBA II-III) (**Fig. 10:i**), and Tarsus-Gözlükule (EBA III) (GOLDMAN 1956, fig. 393:19) (**Fig. 10:j**).

The earliest Anatolian example of a stone seal is from Yassitepe (EBA I) (DERIN *et al.* 2015, 465, fig. 6). A seal with a stamping surface that bears a close resemblance to the one from grid unit AD 18 was found at Alacahöyük and dated to Cultural Period III (EBA), but it is made of baked clay (KOŞAY 1938, pl. CVI:7). Another similar example was uncovered in Konya-Karahöyük in Layer XVI, shaped from black stone, and dated to EBA I-II by S. Alp (ALP 1968, 265, pl. 15:35; ALP 1994, 129-131, pl. 15:35). One further foot-shaped seal of this sort was recovered from Layer II at Resuloğlu, dated to the EBA II-III, and is made of baked clay (YILDIRIM - İPEK 2011, fig. 9). Another foot-shaped seal with a similar motif dated to the EBA III period of Kültepe is shaped from stone (ÖZTÜRK 2019, 59, fig. 13:2) (**Fig. 10:g**). Two stamp seals that are not foot-shaped but which bear a similar motif on the stamping surface were discovered at Bademağacı (DURU 2008a, fig. 345; DURU 2008b, pl. 48:c) (**Fig. 10:c**) and Çiledir (TÜRKÜZÜN *et al.* 2014, fig. 35). Both are dated to the EBA II.

The final example from Küllüoba was found in the courtyard fill of grid unit AA 20 (AA 20-111) (**Fig. 2/d, Fig. 11/j**). This is the single bronze example of a stamp seal from the site. It has been dated to Phase III C of the EBA III, and its stamping surface is divided into two by a perpendicular grooved line. The motif consists of a zigzag pattern on one side of this line, and irregular grooved lines on the other.

No close examples of this motif in bronze have yet been encountered from the EBA III in Anatolia, but its form has parallels from Alişar (SCHMIDT 1932, fig. 64; VON DER OSTEN 1937, fig. 186) (**Fig. 11:f-g**), Kültepe (ÖZTÜRK 2019, 56, fig. 9:2) (**Fig. 11-k**), Dikmen Höyük (ÖZGÜÇ 1945, fig. 2) (**Fig. 11:h**), and Tarsus Gözlükule (GOLDMAN 1956, fig. 393:24, 392:13, 392:14, 392:15) (**Fig. 11:b-d, l**). Several other Anatolian settlement sites have yielded metal (copper, lead, bronze) seals, notably Bademağacı (DURU - UMURTAĞ 2011, fig. 20; DURU 2003, pl. 48:11, 49:11) (**Fig. 11:a**), Viranşehir/Soloi (BITTEL 1940, Taf. VI) (**Fig. 11:m**), Leodikia-Kandilkırı (OĞUZHANOĞLU 2019, 49-50, fig. 7) (**Fig. 11:i**), and Karataş-Semayük (MELLINK 1969, pl. 76, fig. 29:a, b; WARNER 1994, pl. 186:g) (**Fig. 11:e**). Metal seals are sometimes found in the EBA II in Anatolia, but were most widely used in the EBA III. The only EBA I example discovered in Anatolia is from Hassek Höyük (BEHM - BLANCKE *et al.* 1984, Taf. 12:4).

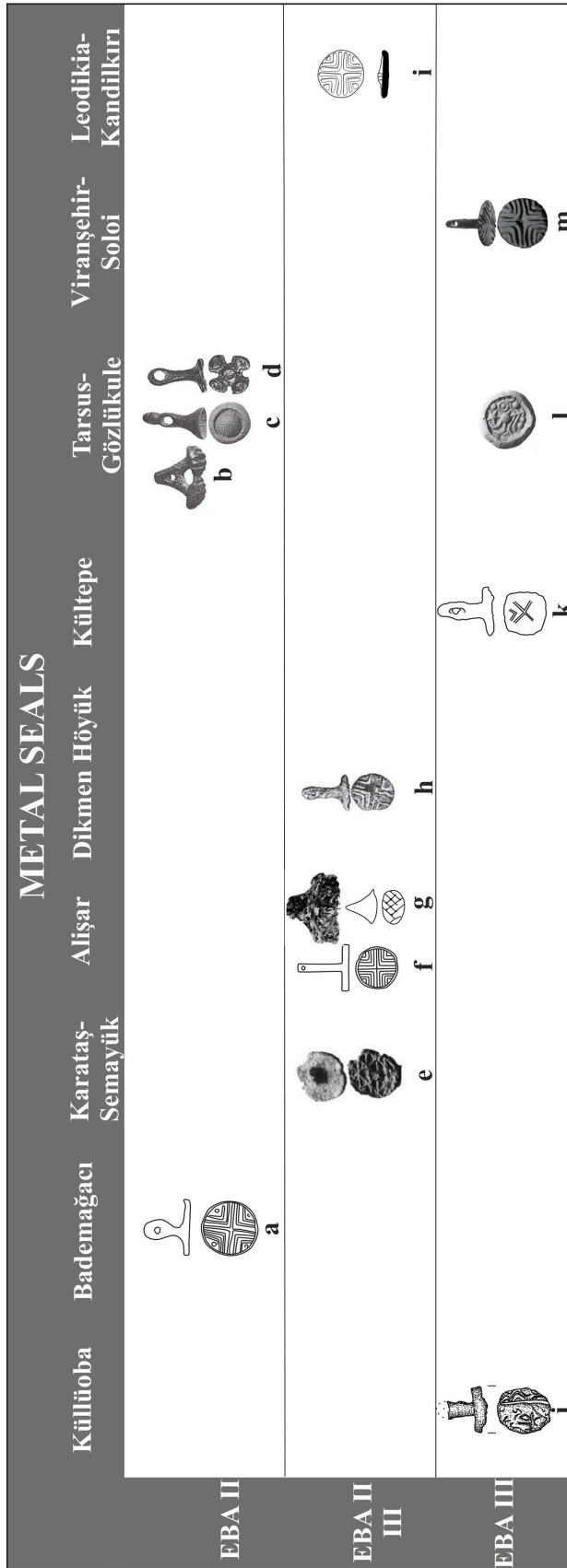


Fig. 11: Metal seals.

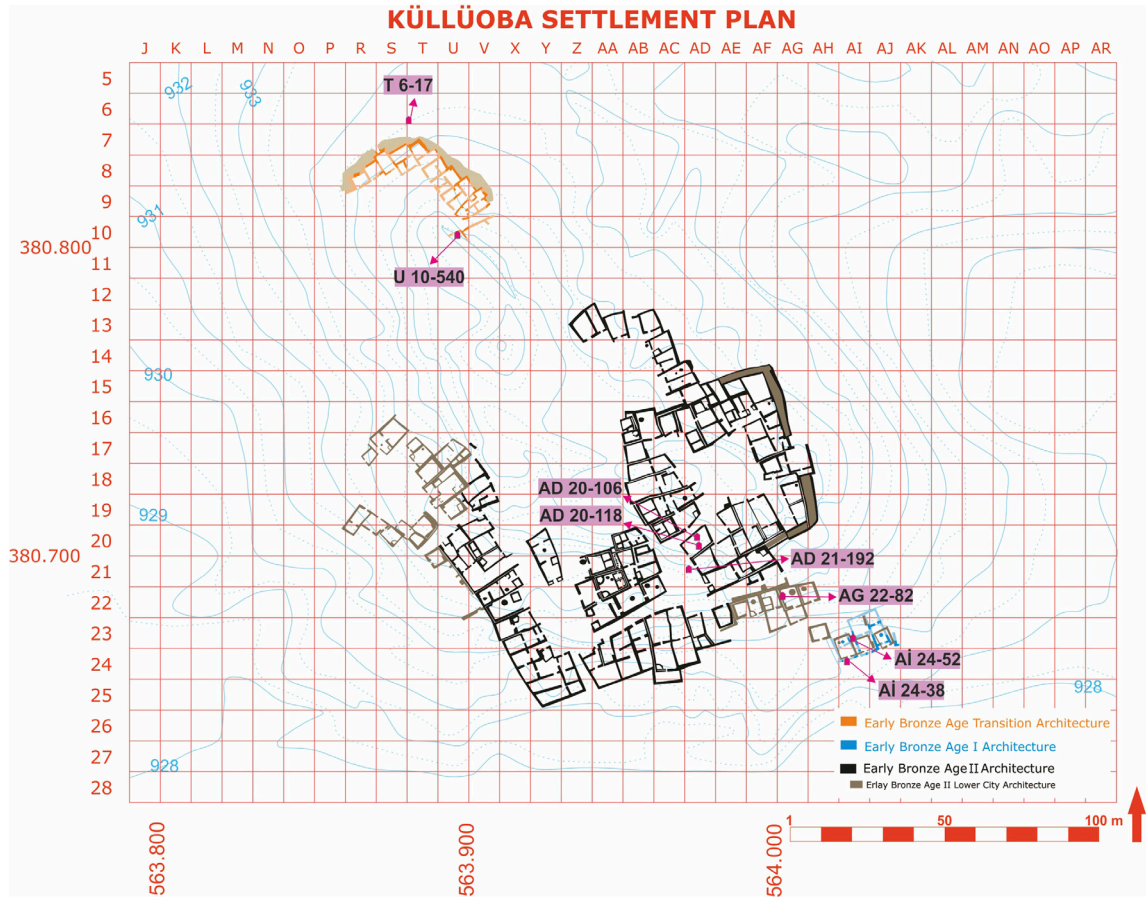


Fig. 12: Architectural plan of Küllüoba, with find-spots indicated.

DISCUSSION

A total of eleven stamp seals have been recovered from Küllüoba Höyük over the course of twenty-four excavation seasons (**Fig. 12**). This relatively low number makes it seem that there were relatively few seals in use at the settlement, but the excavation strategy mentioned above – which is aimed at exposing the EBA II architectural footprint – must have had an effect on the number of seals that have been found.

The earliest example of these seals is a baked clay foot-shaped seal dated to the EBA Transition Period (EBA IA). It currently represents the earliest foot-shaped seal found in Anatolia. The five-pointed star-shaped seal is likewise unprecedented and has no contemporary Anatolian EBA I parallel. Its only parallel, in terms of form, was recovered at Alacahöyük, and it is thus of particular importance for showing the relations between Küllüoba and Central Anatolia. It is also notable that the only other star-shaped seals from Anatolia were also found at Küllüoba and Alacahöyük, though from EBA III contexts.

It is known that seals with swastika-like motifs, of which only one example was recovered from EBA II Küllüoba, were commonly used in Anatolia during that period. Outside Anatolia, baked clay seals with that motif have been discovered on mainland Greece at Early Helladic II settlements, notably Geraki (ARUZ 2008, 28, fig. 24, cat. no. 223) and Lerna (Lerna

IIIId) (ARUZ 2008, 28, fig. 23, cat. no. 220). W. N. Brown differentiates the motif between those in which the four arms turn to the right (clockwise), and those in which they turn to the left (counterclockwise) (BROWN 1933, 18). Seals with this motif first appeared in settlements considered to belong to the Samarra culture in the Late Neolithic period (7000–5000 BC) in Asia Minor, but the swastika-like motif in Anatolia is nearly concurrent with its appearance in Mesopotamia, specifically in the Early Neolithic period on a stamp seal in Çatalhöyük and on the stamping surface of a pintadera in Bademağacı. In Anatolia it persisted from the Early Neolithic period to the Iron Age, and probably had a symbolic meaning other than being simply used for decorative purposes. Indeed, M. Frangipane thinks that this was their primary purpose, rather than their impressions simply denoting property (FRANGIPANE 2003, 59). The motif was utilized by prehistoric and protohistoric societies in Anatolia in their art, religion, and economy, and this lends the impression that it could have been used as an identifier, to indicate individuals or groups that belonged to the same family, ethnicity, or culture (TAÇILDIZ 2016, 106). Accordingly, the seal with the swastika-like motif at Küllüoba was probably used for symbolic purposes rather than merely as an indicator of ownership.

Another common seal motif recovered from all EBA phases in Anatolia is the cross- or plus sign, and such a seal was unearthed in an EBA II courtyard fill at Küllüoba. Parallels have been found at Bademağacı and at Troy, and similar seals have been observed at Anatolian settlements such as Karataş-Semayük, Kusura, Alişar, and Taşkun Mevkii.

The foot-shaped serpentine seal is dated to the EBA III. Seals of this shape have been uncovered from a wide geographic area that extends from Cilicia in many directions (Tarsus-Gözlükule): to the north (Alacahöyük, Resuloğlu) and south (Acemhöyük, Konya-Karahöyük); to the west (Küllüoba) and the southwest (Bademağacı); and into the Aegean region (Yaslıhöyük). This spread matches known trade routes, and the seals recovered along them, especially in EBA III contexts, are significant because they demonstrate ancient connections between Anatolia and distant regions (Mesopotamia, Syria). Similar foot-shaped seals have been discovered in other Mediterranean contexts. From Crete there are seals found at Palaiakastro, dated to the EM III (ARUZ 2008, 43, fig. 70, cat. no. 141), and at Krassi Tholos from the EM I–II (ARUZ 2008, 43, fig. 69, cat. no. 140). A foot-shaped seal was discovered in a grave at Despotiko, in the Cyclades, that dates to the EC II (BRANIGAN 1970, 10, 23, fig. 3:34). Seals from settlements in mainland Greece include one from Grave VII of the EH II settlement at Zygouires, which is made of stone (BLEGEN 1928, 197, 218–219, pl. XX:3), and another from Aghios Kosmas that is dated to the late EH II (BRANIGAN 1970, 10, 23, fig. 3:32).

Seals from the Early Bronze Age, during which sealing emerged in Anatolia, were mostly made of baked clay and stone, but a few were made of metal (copper, bronze, and lead). There are several possible reasons for the relative scarcity of metal seals, which must have been regarded as special, in EBA settlements, including:

- That metal artefacts were regarded as valuable and might have been passed on as heirlooms;
- That metal artefacts are more difficult to craft than baked clay ones. As the raw material is durable, they would have been in use for a long time, perhaps generations;
- That raw metal is valuable and out-of-use seals could have been re-melted and used to make other artefacts;
- That the number of metal artefacts recovered in settlements is significantly fewer than those unearthed in cemeteries, which may lead to a false impression of their numbers.

The fact is that metal seals bearing similar motifs on their stamping surfaces are seen across a wide geographical area, extending from Gözlükule to Poliochni and from Bademağacı to Alişar (EMRE 1971, 44). The cross- or plus-sign motif, and the decorations around the motif, was

employed on a baked clay seal from Küllüoba and many other settlements in Anatolia (ARUZ 2008, 31, fig. 40). Metal EBA seals appear to have been considerably rarer in mainland Greece and the Aegean islands than they are in Anatolia, but they are often similar. One example, from Naxos (ARUZ 2008, 31, fig. 44), has a motif like that on the stamping surface of the metal Küllüoba seal. Another is known from Thermi on Lesbos.

It is significant that Küllüoba developed an upper and lower town during the EBA II, because this suggests the presence of a formalized, organized society. The EBA II is also the period in which the urbanization process begins, and concepts of centralized authority and ownership emerged. The fact that Küllüoba is located on the Great Caravan Route is also significant, because many finds (Syrian bottles, wheels, goblets, toggle pins, foot-shaped stamp seals, etc.) recovered in the excavations indicate that relations with distant regions included an organized trade network by the EBA II, and particularly during the EBA III. Given this developing organization, the comparative rarity of seals from Küllüoba is likely to stem from the fact that excavations have focused on a horizontal plane, in which the fill within the interior areas of buildings is generally left untouched. Even though they are few in number, they are of great significance for demonstrating that the Early Bronze Age settlements of Anatolia were conduits that introduced the earliest examples of some seal forms to the ancient world.

Several suggestions could be made concerning the functions of the seals in the Early Bronze Age, which differ from the pintaderas used for decorative imprinting purposes in the Neolithic period in having smaller sizes and less deeply engraved stamping surfaces. Among these, the first and the most plausible one is that seals might have been used for expressions of personal property. The most significant group of finds that clearly indicates this opinion are the *bullae* found particularly in the contexts that also contain storage areas.

Another suggestion is that other than expressing ownership, seals may have been used as imprinting tools in the decoration of textiles, walls, and pottery. It has already been mentioned that the imprinting objects called pintaderas were used in the decoration of textiles or on foodstuffs, such as bread and cakes specifically in the Neolithic Period. In fact, traces of paint have also been detected on some of the examples (TÜRKCAN 2006, 82). By the EBA, there are traces of yellow and white paints on the stamping surfaces of the two seals recovered in Aphrodisias (JOUKOWSKY 1986, 610) and Kusura (LAMB 1938, 268). This demonstrates that some of the imprinting tools were used for decorative purposes. The earliest examples (2700–2600 BC) of the seals impressed on pottery are seen from Poliochni (Phase Green) to Gözlükule (the early EBA II). Similar examples continue to appear in Gözlükule in the EBA III and in Poliochni in Phase Yellow. Furthermore, examples associated with this application have also been determined in the Aegean world (Lerna IIC) (MASSA 2016, 140, 435, 436).

While these motifs produced on pottery by cylinder or stamp seals might have been made for decorative purposes, they could also be evaluated as personal or communal symbols. The owner/owners of the pottery and accordingly its content may have impressed the pottery with their personal or family seal in order to indicate their property.

Despite the fact that no seals have been recovered yet as *bullae* or as impressions on pottery in any excavation conducted in Küllüoba to date, they can still be considered symbols of property in comparison with the other examples found in Western Anatolia. Limited data have been obtained from the context in which the seals were discovered, however, the seals unearthed in Küllüoba mostly belong to the Early Bronze Age II. The structures of Complex I and II are prominent in the settlement as buildings of centralized-scale storage. However, the fact that these areas have almost been completely emptied and abandoned do not admit of the recovery of sufficient archaeological evidence. Additionally, it could be said that the uncovered seals were mostly found in the structures of the upper town. Regarding EB II, which

is represented architecturally as the most substantial period in the settlement, it is understood that the settlement might have been at least a regional center and that, within this context, beginning from the middle of the period it was interacting with its immediate surrounding and towards the end of the period with distant regions. For this reason, the seals from Küllüoba point to a period during which these relations had started. The EBA III period, which has not been well determined in the settlement regarding context, contains significant findings that indicate an interregional trade. Based on the outcome that this period is poorly represented in the settlement due to various reasons, only a few seals have been recovered, and no evidence of an impression has been detected either. Lastly, the unearched stone mold (Fig. 13) dated to the late EBA III (the transition period to the MBA) has a rendered imprinting surface to produce lead seals (EFE 2006, 302, 304). This shows that similar seal examples had also continued at least in the beginning of the 2nd millennium BC.

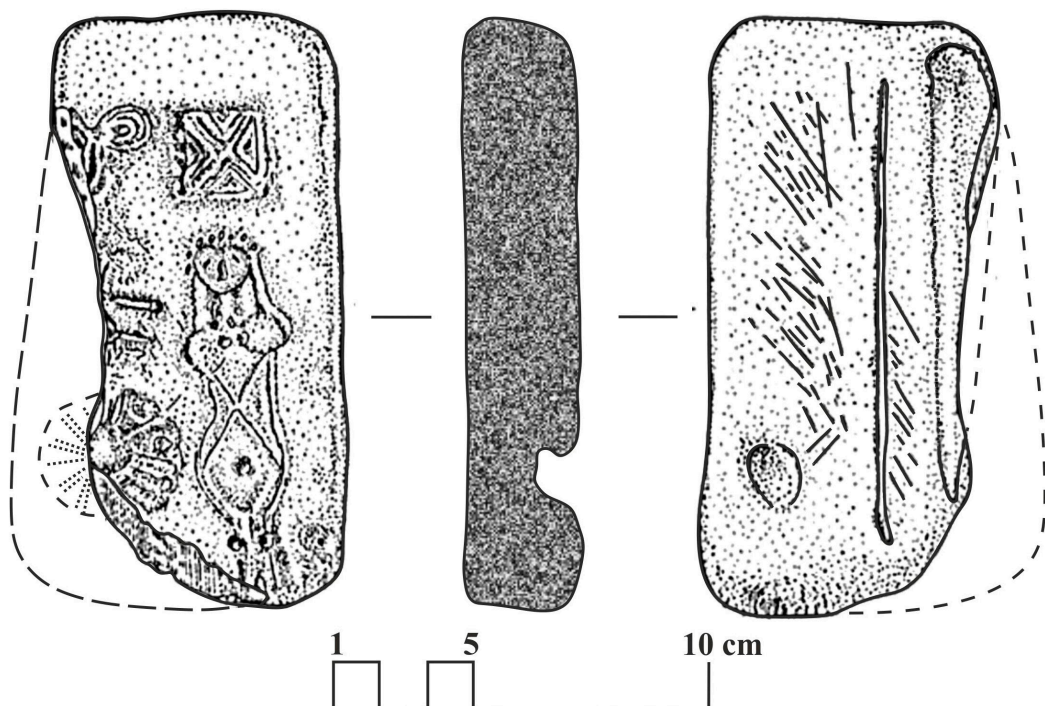


Fig. 13: Küllüoba Late EBA III stone mold.

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Catalogue

- 1.** Location: U10 Trench; Find Number: U10-540 (**Fig. 2:c**)
 Dimensions: Height 2 cm, Diameter 2.3 cm; Period: Transitional Period (EBA IA); Substance: Clay.
 The light brown paste has mica inclusions and the surface is slipped. Wrist bone shaped lug has string hole. The foot shaped sealing surface is decorated longitudinally with four grooves. The intersecting four grooves in the toe part of the foot form a square decoration.
- 2.** Location: Aİ 24 Trench; Find Number: Aİ 24-38 (**Fig. 2:a**)
 Dimensions: Height 5.4 cm, Diameter 2 cm; Period: EBA I; Substance: Clay.
 The seal has light brown paste. The sealing surface has an oval form with a deep grooving of an entwined V form and has a conical lug with a string-hole which is broken.
- 3.** Location: Aİ 23 Trench; Find Number: Aİ 23-52 (**Fig. 2:b**)
 Dimensions: Height 3.1 cm, Diameter 2.8 cm; Period: EBA I; Substance: Clay.
 The brown-gray paste has mica and grit inclusions. Light gray slipped and burnished. The seal surface in the shape of a five-pointed star is covered with assymetrical groovings and decorated with arch like motifs. The lug has a string-hole.
- 4.** Location: AD 20 Trench; Find Number: AD 20-118 (**Fig. 2:f**)
 Dimensions: Height 2.2 cm, Diameter 2.8 cm; Period: EBA II (IVA-IVB?); Substance: Clay.
 The cream-colored pasted seal has a string-hole lug. The sealing surface has a swastika motif decorated with groovings. The swastika has spots around it.
- 5.** Location: AD 20 Trench; Find Number: AD 20-106 (**Fig. 2:e**)
 Dimensions: Height 1.3 cm, Diameter 2.3 cm; Period: EBA II (IVD); Substance: Clay.
 The cream-colored paste has small grit and mica inclusions. The sealing surface has a cross sign engraved with groovings. And dots engraved around this cross sign as a decoration for filling the sealing surface. The lug has a string-hole.
- 6.** Location: AD 21 Trench; Find Number: AD 21-192 (**Fig. 2:g**)
 Dimensions: Height 2 cm, Diameter 3.6 cm; Period: EBA II (IVD); Substance: Clay.
 The dark brown paste has small grit inclusions. The sealing surface was divided into four parts with a deep engraved cross motif. Irregular line motifs are placed between the arms of the cross. The lug is broken.
- 7.** Location: T6 Trench; Find Number: T6-17 (**Fig. 2:h**)
 Dimensions: Height 3.5 cm, Diameter 1.6 cm; Period: EBA II; Substance: Clay.
 The gray colored surface of the seal has no slip or burnish. The sealing surface was divided into two parts with a deep incised line with three pairs of lines perpendicuar to it. The conical lug has no hole.
- 8.** Location: AG 22 Trench; Find Number: AG 22-82 (**Fig. 2:i**)
 Dimensions: Height 3 cm, Diameter 3 cm; Period: EBA II; Substance: Clay.
 The brown paste has mica inclusions. The sealing surface was divided into four parts with a cross motif. In each part, an arch made with grooves or nail impressions has been placed. The lug is broken.
- 9.** Location: AA 20 Trench; Find Number: AA 20-32 (**Fig. 2:k**)
 Dimensions: Height 2 cm, Diameter: 2.5 cm; Period: EBA III.
 The gray paste has small grit and mica inclusions. Since the sealing surface had worn off, it is not possible to understand the motifs and the composition but there are irregular grooves and spots around which can be seen. The lug has a string-hole.
- 10.** Location: AD 18 Trench; Find Number: AD 18-28 (**Fig. 2:j**)
 Dimensions: Height 2 cm, Diameter 2.5 cm; Period: EBA III (IIIB); Substance: Serpentine.
 Light green colored. The foot shaped lug has a string-hole. There is a line grooved in the center of the sealing surface with eight short lines touching it at an acute angle.
- 11.** Location: AA 20 Trench; Find Number: AA 20-111 (**Fig. 2:d**)
 Dimensions: Height 1.4 cm, Diameter 2 cm; Period: EBA III (IIIC); Substance: Bronze.
 The sealing surface was divided into two with a vertical line. There is a zigzag decoration on one side while the other side has irregular grooved lines. The lug is broken from its string-hole.

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