



AnAr, 31, 31-75

DOI: 10.26650/anar.2024.31.1472831

Research Article

Cylinders in Anatolia: Remarks on Early Bronze Age Seals and Sealings

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Submitted: 24.04.2024 Accepted: 23.12.2024

Citation: Dede, M.G., & Oğuzhanoğlu, U. (2024). Cylinders in anatolia: Remarks on early bronze age seals and sealings. *Anadolu Araştırmaları-Anatolian Research*, 31, 31–75.

https://doi.org/10.26650/anar.2024.31.1472831

ABSTRACT

Cylinder seals began to be used in Anatolia shortly after their emergence in Mesopotamia and Iran during the second half of the 4th millennium BCE. These seals, offering a wide narrative space, were used across Western Asia until the 5th century BCE. Seal impressions, which in their simplest function ensured property protection, appeared within similar timeframes. This study provides a comprehensive evaluation of cylinder seals and impressions from the 3rd millennium BCE in Anatolia, focusing on their significance during the Anatolian Early Bronze Age. Published cylinder seals and impressions are cataloged, categorized by region and period, and analyzed. The findings revealed that cylinder seals and impressions were prevalent at the Southeast Anatolian and Cilician-Amug sites, areas that interacted with the Mesopotamian cultural sphere during early Early Bronze Age. In the later Early Bronze Age, these artifacts spread to Central and Western Anatolia, facilitated by trade routes known as the Anatolian Trade Network or Caravan Roads. The limited number of cylinder seals and the near absence of their impressions on clay bullae in Western Anatolia indicate that cylinder seals did not support the indigenous stamp seal tradition of the region. Moreover, they were not adopted as bureaucratic tools similar to their use in Mesopotamia. Instead, it is posited that as cylinder seals moved farther from their region of origin, they transitioned into prestige items or simple protective amulets rather than organizational instruments.

Keywords: Cylinder Seal, Sealing, Early Bronze Age, Anatolia, Mesopotamia



Introduction

Cylinder seals, introduced simultaneously in Uruk, Southern Mesopotamia, and Susa, Southwestern Iran, during the second half of the 4th millennium BCE, were used throughout Western Asia until the 5th century BCE (Teissier, 1984, xxi; Collon, 1987, 5; Porada, 1993, 563; Pittman, 1995, 1592). As a Sumerian invention (Moorey, 1994, 103), the cylinder seal provided impressions in the form of friezes, capable of depicting complex and narrative scenes (Frangipane, 2002, 222; Teissier, 1984, xxi). These seals coexisted with stamp seals, which remained prevalent in Mesopotamia.

While cylinder seals were used in certain regions of Western Asia for a relatively limited period, stamp seals were used more widely and over a longer period. This disparity contributed to cylinder seals being regarded as more exclusive and privileged objects than multifunctional and more accessible stamp seals. Cylinder seal production relied primarily on stone as the raw material, necessitating more sophisticated craftsmanship.

The status of seal carvers in Mesopotamia during the 3rd millennium BCE is supported by limited epigraphic evidence. Craftsmen known as *burgul* in Sumerian and *purkullu* in Akkadian were among the professionals specializing in stone carving. A similar is *zadim*. The mentioned in Old Babylonian texts, here it is suggested that *burgul* and *zadim* may have been involved in both activities concurrently (Edzard, 1959–1960, 31–33; Loding, 1981, 8). Edith Porada (1977, 12, fn 1–2) suggested that cylindrical pieces drilled from stone blocked during vessel production were also suitable for seal making, implying that stone vessels and cylinder seals may have been produced in the same workshop, possibly by different artisans. In the 2nd millennium BCE, these specialized craftsmen were often members of a high-status social class financed by the palace (Teissier, 1984, xxiv).

The emergence of cylinder seals may be attributed to the need for broader impression surfaces for narrative scenes and the demand for a unique bureaucratic tool to manage increasingly complex economic and administrative systems (Nissen, 1977, 15). During the Jemdet Nasr period, cylinder seal designs were distributed over a wide area, and their patterns diversified in the 3rd millennium BCE, probably due to expanded long–distance interactions, increasing bureaucratic complexity, and related factors (Collon, 1987, 15 ff.; Frangipane 2002, 202 ff.). The continued popularity of mythological scenes on cylinder seals indicates that these artifacts retained symbolic and/or religious significance alongside their functional roles.

A sealing *bulla* or *cretula* refers to a lamp of soft material such as clay, plaster, wax, asphalt, or animal dung bearing one or more seal impressions (Fiandra, 2003, 32). Among these, clay was the most commonly used material for sealing. Initially, *bullae* were used to

secure containers such as sacks, baskets, boxes, jars, and doors (Collon, 1987, 113). Following the invention of writing, seals were also applied to tablets, envelopes, treaties, and letters. By the 3rd millennium BCE, seals had additional uses, including ornamental applications on vessels (Collon, 1987, 113). Mesopotamian Early Bronze Age (hereafter EBA) cylinder seals served mainly administrative and bureaucratic functions, acting as symbols of ownership, status, authority, trust, approval, and legitimacy. Additionally, they were valued as jewelry, protective amulets, votive offerings, and family heirlooms. (Dede, 2014, 11).

Cylinder seals and their impressions first appeared in Anatolia during the Late Chalcolithic Period. Notable settlements with early evidence of cylinder seals include Arslantepe, Norşuntepe, Tepecik, Hassek Höyük, Samsat, Hacınebi, and the Amuq Plain (Braidwood & Braidwood, 1960, 254; N. Özgüç, 1987, 430–432; Pittman, 2003, 35; Dede, 2014, 19–20).

The imagery on cylinder seals became increasingly diverse during the Early Dynastic, Akkadian, Post–Akkadian, and Ur III periods, collectively spanning the EBA. These depictions provide a valuable understanding of the ethnic composition, fashion, construction techniques, decoration, furniture, agriculture, weapons, and military equipment of the era. Additionally, they illustrate daily life, religious activities, ceremonies, hunting, banquets, and worship practices (Roach, 2008, 1). During the 3rd millennium BCE, cylinder seals expanded beyond southern Mesopotamia to regions such as Iran, Syria, Egypt, Anatolia, and the Aegean (Collon, 1987, 20).

The 3rd millennium BCE witnessed significant diversification and intensification of interregional contacts, not only in Anatolia but across the entire Mediterranean region (Şahoğlu, 2005; 2019; Efe, 2007; Massa & Palmisano, 2018). Alongside raw materials and finished goods, technology and ideology were disseminated through EBA communication networks (Rahmstorf, 2016; Oğuzhanoğlu, 2019). Although stamp seals remained the dominant seal type in Anatolia during this period, evidence of impressed *bullae* has emerged, indicating their use on clay for the first time (Massa & Tuna, 2019; Oğuzhanoğlu, 2019, tab. 6; Türkteki, 2023a). Cylinder seals, however, are also found in settlements located along significant trade routes.

Methods

This study aims to compile a comprehensive overview of the cylinder seals and impressions dating from the 3rd millennium BCE in Anatolia and evaluate their significance for the Anatolian EBA. To achieve this objective, published cylinder seals and impressions

were cataloged regionally and chronologically, grouped, and then analyzed.¹ For seals lacking exact stratigraphic information, stylistic features were used for dating. If a publication excluded information about the seal's decoration, these seals were considered only as numerical entries in the graphs.

Early Bronze Age Cylinder Seals in Anatolia

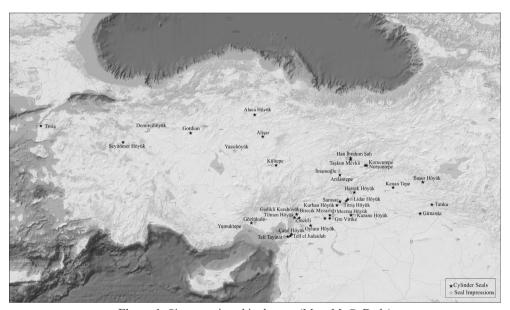
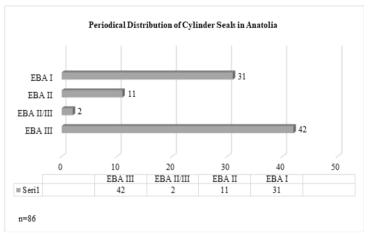


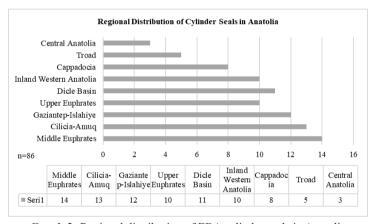
Figure 1: Sites mentioned in the text (Map: M. G. Dede)

Within the scope of this study, 86 cylinder seals were identified (Fig. 1). The EBA I and EBA III groups were predominant, whereas the EBA II assemblage was significantly smaller (Graph 1). These seals were either discovered or purchased from various parts of Anatolia, with a particular concentration in the Euphrates and Tigris basins and the Cilicia–Amuq regions (Graph 2).

¹ The core of the research in this article is based on the catalog and comparison section of the thesis titled "Anadolu'da Bulunmuş Eski Tunç Çağı'na ait Silindir ve Damga Mühürler (Early Bronze Age cylinder and stamp seals in Anatolia)" completed in 2014 at Ankara University, Graduate School of Social Sciences after the permission of its author. Since the aforementioned thesis did not include the sealings, this article included and analyzed them for the first time. Furthermore, the discovery and publication of new glyptic evidence after the completion of the thesis in 2014, made it necessary to revisit this issue. The images, graphics, general evaluations, and discussions used in the article are unique to this article.



Graph 1: Periodical distribution of EBA cylinder seals in Anatolia



Graph 2: Regional distribution of EBA cylinder seals in Anatolia

EBA I: Two main seal shapes were observed among the 31 EBA I seals: one featuring animal—figured handles (Cat. Nos. 1, 8, 28, 30; Fig. 2: 5, 8; Fig. 3: 2, 3) and another with a vertically oriented rope hole (Cat. Nos. 2–7, 9–27, 29–30). The decoration on these cylinder seals can be divided into two main types: geometric (Fig. 2) and figurative patterns. Geometric decorations were widely used in Mesopotamia from the Jemdet Nasr Period (3100–2900 BCE) onward. The geometrically decorated seals originated from sites in the Euphrates (Cat. Nos. 1–12), Tigris (Cat. Nos. 13–15); Islahiye (Cat. Nos. 16–17), Amuq (Cat. Nos. 18–21) and Central Anatolia (Cat. No. 22) (Table 1). Motifs within this group included zigzag patterns, intertwined/diamond patterns, net, dot, line, circle, concentric circle, hatched triangles, drill holes, scallops, fishbones, parallel lines, lozenges, crosses, and parallel or diagonal lines with various filling patterns (Fig. 2).

Several seals from Anatolia exhibit parallels with those found in Southern Mesopotamia, Northern Syria, and Iran (Frankfort, 1955; pl. 3: 7; 17: 167; 20: 209–210; 23: 238; 39: 408; 76: 827; Teissier, 1984, cat. nos. 119: 24–26; 125: 50; Hammade, 1994, 37; fig. 31, 41, No. 318; Roach, 2008, 220, nos. 1383–1401). Scholars have described these stylistically similar seals using various nomenclatures, such as *Jemdet Nasr Style* (Frankfort, 1955), *Syrian Group* (Teissier, 1984), *Peripheral Jemdet Nasr* (Buchanan, 1981), *Northern Syria–Mesopotamia Group* (Hammade, 1987), *Jemdet Nasr Brocade Style* (Hammade, 1987), *and Rough Style* (Matthews, 1997), reflecting the regions of their discovery and distinct depiction features.

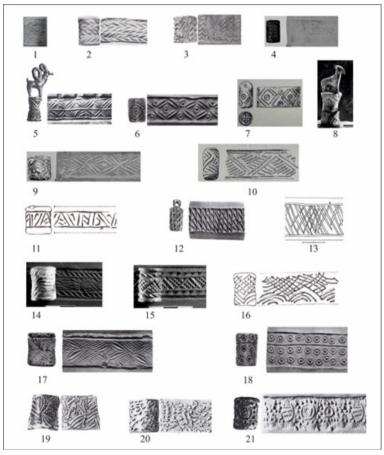


Figure 2: EBA I seals with geometric patterns (Luschan, 1943, taf. 39: d-e; Braidwood & Braidwood, 1960, fig. 254:1-3, 5; Helms, 1973, fig. 10; Hauptmann, 1974, lev. 80:1; 1982, lev. 26:2; Behm-Blancke, 1981, taf: 11:5-6; 1984, taf: 12:3-4; Palmieri, 1981, fig. 10:1; Sertok & Ergeç, 1999, fig. 12; Dusinberre, 2005, fig. 11a-b; Frangipane, 2012, fig. 8a; Sağlamtimur, 2017, res. 15)

The second group of EBA I seals, which feature figurative decorations, originated from the Euphrates (Cat. Nos. 23–26; Fig. 3: 1, 4, 7–8) and Tigris basins (Cat. Nos. 27–30; Fig. 3:

2–3, 5–6). These seals generally depict rows of animals in motion (Cat. Nos. 2–28, 30), such as horned animals or scorpions, occasionally accompanied by human figures. The scenes also include depictions of human activities, such as herding cattle or plowing.

The rows of animals, either at rest or in motion, is prominent in Mesopotamian cylinder seals across almost every period from Jemdet Nasr onward (Mackay, 1931, pl. LXXX–1; Frankfort, 1939, 24 v.d, 35, pl. VIII: b; Porada, 1948, 6). Notably, the Anatolia seals exhibit strong parallels with examples from various Mesopotamian sites and private museum collections (Frankfort, 1955, pl. 18: 187, 192) and Iran (Roach, 2008, 97, no. 589). These parallels span Jemdet Nasr and Early Dynastic I *Brocade*—style seals (Buchanan, 1966, 18; pl. 7; 1981, 169, 171, 173, 175, 178–181; Strommenger, 1980, 55, abb. 43). Similar scenes have also been documented in Diyala Province, Habuba Kabira (Strommenger, 1980, 55, abb. 43), Susa, and museum collections (Porada, 1948, pl. VI: 31–32; Buchanan, 1966, 128–129; pl. 46: 705–706).

One example from Hassek Höyük (Cat. No. 25; Fig. 3: 7) features a narrative scene that likely depicts a daily chore (Behm–Blancke, 1981, taf. 11–1a, b). This exhibition recalls Jemdet Nasr–era human and animal scenes, such as an example from the Ashmolean Museum Collection (Buchanan, 1966, 47, 721).



Figure 3: EBA I seals with figurative scenes (Helms, 1973, fig. 10; Behm-Blancke, 1981, taf. 11:1a-b; 1984, taf. 12:2; Batihan, 2014, kat. no. 091; Frangipane, 2014, fig. 9; Sağlamtimur, 2017, res. 15)

EBA II: A limited number of seals from this period have been recovered, with examples found in the Euphrates (Cat. Nos. 32–35), Tigris (Cat. Nos. 36–38), Islahiye (Cat. Nos. 39–40), and Amuq (Cat. Nos. 41–42) regions. All these seals feature figurative decorations (Table 1). Four examples depict rows of animals (Cat. Nos. 32–34, 42; Fig. 4: 1–4), similar to the EBA I style. A single seal (Cat. No. 41; Fig. 4: 9) from Tell el–Judaidah portrays a daily chore scene, belonging to the Jemdet Nasr group of *pigtailed figures or squatting women* (Porada, 1948, 4; Collon, 1987, 15–16)². Similar scenes are well–documented in excavation reports and private collections (Mallowan, 1947, 135–136, pl. XXI: 17–18; Porada, 1948, pl. III: 7e–16e; Frankfort, 1955, pl. 29: 206; 31: 312; 45: 480; 52: 542; 74: 808; 82: 871; 88: 829; Buchanan, 1966, pl. 2: 14, 15, 17; 1981, 48–51, fig. 144–152; van Driel, 1983, fig. 2; Teissier, 1984, cat. no. 187: 300–301; Matthews, 1997, pl. IX/XLII: 41; Roach, 2008, 342–43, nos. 759–780).

The contest scenes (Cat. Nos. 35–40; Fig. 4: 5–8) emerged during this period, appearing alongside previously known EBA I motifs (Table 1). The composition and style of these contests align with the Early Dynastic II/*Fara Style* (Heinrich, 1931, taf. 46: f. g; 47: b; 50: a; 55: c; 59: h; 49: i, 59: j; Amiet, 1980, pl. 65: 866, 870, 874–876; 68: 899, 876; 68: 899) Similar examples are known from archeological sites and private museum collections dating to the same period (Heinrich, 1931, taf. 42; Buchanan, 1981, fig. 247–251; Teissier, 1984, 56–57; Hammade, 1987, 35; 1994, 326).

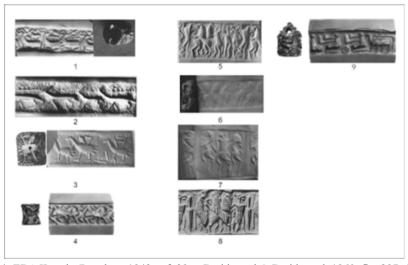


Figure 4: EBA II seals (Luschan, 1943, taf. 39:a; Braidwood & Braidwood, 1960, fig. 297: 5-6; van Loon, 1978, lev. 135:C; Erkanal, 1990, fig. 15; 1991, res.17; 2000, res. 7; N. Özgüç, 2009,s. 84, res. 354-355)

This seal is considered to be produced in EBA I and has been still in use during EBA II (Braidwood & Braidwood, 1960, 388). Sitting or squatting women practising dairy production, wool spinning, and pottery making are considered as the depiction of daily or temple chores (Frankfort, 1939, 37; 1955, 17; Porada, 1948, 4; Collon, 1987, 16).

EBA III: during EBA III, the distribution of cylinder seals in Anatolia expanded significantly, including Central Anatolia, Cappadocia, and Western Anatolia for the first time (Graph 2, Fig. 1, Table 1,). Alongside the prevalent geometric decorations typical of the EBA, the repertoire began to include figurative scenes of warfare, worship, hunting, and banquets.

Cylinder seals featuring geometric patterns from EBA III (Fig. 5) have been discovered in nearly all regions, the Euphrates (Cat. Nos. 43–44), Gaziantep–Islahiye (Cat. Nos. 45–46), Cilicia (Cat. Nos. 47–48), Central Anatolia (Cat. No. 49), Cappadocia (Cat. No. 50), and the Troad (Cat. Nos. 51–54). These examples exhibit parallels with those from sites such as Tell Bi'a (Strommenger & Kohlmeyer, 1998, taf. 76: 16.), Tell Brak (Matthews, 1997, pl. 32; 33: 421, 452. 428; 35: 465–466), and Abu Hureyra (Matthews, 1997, pl. 32; 33: 421, 452. 428; 35: 465–466; 39: 525), which were central to the distribution area since EBA I.

The seal from Alişar seal³ (Cat. No. 49; Fig. 5: 10) represents the Mesopotamian EBA I *Piedmont* style 4, a style documented in Southern Mesopotamia (Frankfort, 1955, 18, pl. 42: 448), Syria (Fukai, 1974, pl. LVIII: 17; Teissier, 1984, no.119–23; Collon, 1987, 23, fig. 41; Matthews, 1997, pl. X: 57), Iran (Roach, 2008, 364–374; 208–209, no. 1319, 1322), and private collections (Porada, 1948, 7, pl. VII:35; Teissier, 1984, cat. nos. 119–23; Collon, 1987, 23, fig. 41). However, the Alişar seal was recovered from Level 8M, which dates to the controversial "Copper Age." This term, which is often debated, generally refers to transition periods including EBA II and EBA III. Thus, Level 8M is dated to the end of EBA III or the beginning of EBA III (Bertram & İlgezdi–Bertram, 2020, 102).

Another seal from the Troad (Cat. No. 54; Fig. 5: 11) belongs to the *Piedmont* style group and features floral decoration (Frankfort, 1939, 230; Collon, 1987, 20–23). The exact stratigraphic context of the Troy seals (Cat. Nos. 51–54, 86) unearthed by Schliemann remains unknown. While the Alişar and Troad seals display earlier Mesopotamia glyptic features, they were likely imported into Anatolia through the active trade networks of the EBA.

³ Henri Frankfort states that the Alişar seal (Fig. 5: 10) was imported from southern Mesopotamia according to a similar seal from the Tell Asmar Early Dynastic I layer. Furthermore, Porada suggests that the Alişar seal and another example in the Pierpont Morgan Library Collection are works of the same craftsman. Frankfort (1955, 12 et al.), Porada (1948, 4 et al.), and Briggs Buchanan (1966, 16) date this type of seal to the Jemdet Nasr Period, while Domique Collon (1987, 20–24) and Holly Pittman (1994, 139) date it to the Late Jemdet Nasr–Early Early Dynastic I.

This same group of seals made of minerals such as fired hardened steatite or chlorite has different names after regions: *Piedmont seals* (along the Zagros foothills and southern Turkey), "Nineveh V" (after the sounding in Nineveh), Early Dynastic I (Diyala Region chronology), Early Bronze Age I (Syrian–Palestinian terminology), Piedmont Jemdet Nasr, Glazed Steatie Style, Fired Steatite. The incised decoration on these narrow, long seals follows two main schemes: Geometric decorations consist of patterns such as rosettes, circles, circles surrounded by horizontal (Matthews, 1997) or vertical lines, and circles with a dot in the center, while the other group consists of figurative patterns (Porada, 1948, pl. VII; Collon, 1987, 20–23; Pittman, 1994, 135 et al.; Matthews, 1997, 77–78.)

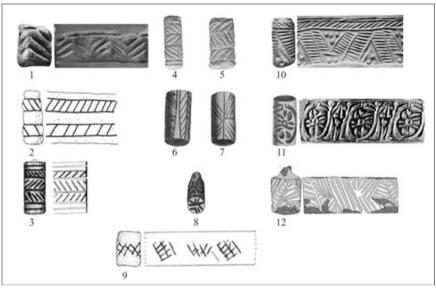


Figure 5: EBA III seals with geometric patterns (Schliemann, 1881, nos. 500, 501, 503; von der Osten, 1937, fig. 186; Goldman, 1956, fig. 393: 20-21; Algaze, 1990, pl.167: B; Duru, 2003, lev. 163:1; Özgen, et al, 1997, abb. 27:1; Ökse, 2006, 554, res. 1; Öztürk, 2019a, fig. 2, seal 1)

Seals with narrative scenes became increasingly prevalent during EBA III. A seal with a mythological scene from the Amuq Plain (Cat. No. 65; Fig 6: 1) was categorized by Pierre Amiet (1980, 65, pl. 85bis: M, P; pl. 64–72) under the *Fara Style*, by Frankfort (1955, 232, 234) under *Peripheral Early Dynastic III*, and by Donald M. Matthews (1997, 112) under *the Provincial Early Dynastic and Big Daggers scenes*. While no exact parallel to the Amuq seal has been identified, certain elements of the scene are common at other sites (Heinrich, 1931, taf. 46: f–g; 47: b; 50: a; 55: c; 59: h–j; 49: i; Koşay, 1951, pl. CLXXXII: 49; Frankfort, 1955, pl. 24: 245; Amiet, 1980, pl. 65: 866, 870, 874–876; 68: 899). Two seals from Zincirli in the Gaziantep–Islahiye Plain (Cat. No. 39; Fig. 4: 8) and Troy (Cat. No. 86; Fig. 6: 2) depict a dagger on the ground. The dagger, featuring a crescent–shaped hilt, is also seen in Mesopotamian and Susa glyptic (Heinrich, 1931, taf. 55: c; 59; Amiet, 1980, pl. 65: 866, 874).

Among seals with hunting scenes, the Titriş (Cat. No. 56; Fig. 6: 6) seal is considered a local replica of the Early Dynastic II *Fara Style* (Algaze et al., 1995, 19). Similar scenes appear in examples from Tilmen Höyük (Cat. No. 58; Fig. 6: 5) and Tell Tayinat (Cat. No. 66; Fig. 6: 3)⁵.

⁵ A very faint figure with a spear (?) recognizable in the photograph of the impression. However, the decoration is unclear.

The stratigraphy of the Alaca Höyük seal (Cat. No. 75; Fig. 6: 4) in a hunting scene is uncertain. Kurt Bittel (1939–1941, 299–300, abb. 3), who first published the seal, dated it to the first half of the EBA. In contrast, Donald Matthews (1997, 100, 146, pl. XXXIX: 525–526) suggested a later date in the second half of the period. The seal's style indicates a prolonged period of use, from the beginning to the end of the EBA (Matthews, 1997, 100). However, considering the intensified long–distance connections of Central Anatolia in EBA III, controlled by elites in affluent royal contexts, as well as the dating of a highlight similar seal from the Tell Tayinat EBA III stratigraphy (Cat. No. 66), it is plausible to date the Alaca Höyük seal to EBA III.

Two examples of contest scenes originated from Kenan Tepe (Cat. No. 57; Fig. 6: 7) and Kültepe (Cat. No. 68; Fig. 6: 8). The Post–Akkadian and Ur III examples depict two figures fighting with a lion. Close counterparts of the Kültepe seal (Fig. 6:8) are found at various sites and in several collections (von der Osten, 1934, pl. X; 1936, pl. V: 40, 44; Frankfort, 1939, pl. XVI: f–g; 1955, pl. 67: 722; 69: 75; Porada, 1948, 33–34; pl. XXVI: 167–170; XLII; Legrain, 1951, pl. 15: 187, 189–196, 199–201, 203,205, 208–210; Parrot, 1952, 198, fig. 9; 1962, pl. XII:1; Boehmer, 1965, taf. XVXXIV: 274; Buchanan, 1981, 194, fig. 505; Collon, 1982, pl. XXXV: 246–249; 1987, 32–33, 36–37, fig. 95–101, 111; Yücel & Parlıtı, 2023, cat. no. 3).

The composition of the Kenan Tepe seal (Fig. 6: 7) resembles the Akkadian "two pairs of contestants" scheme (Porada, 1948, 22–23). Although the exact parallel to the seal is unknown; key elements such as the lion (Legrain, 1951, pl. 14: 182; Boehmer, 1965, XVII: 195; Buchanan, 1981, 152, Fig. 413), the deity with a crescent moon (Porada, 1948, pl. LXVIII: 493; LXX: 514; Legrain, 1951, pl. 14: 184; Frankfort, 1955, pl. 71: 778; 66: 713; 67: 717; 68: 740; 70: 771; 86: 905; pl. 88: 935; Boehmer, 1965, XVII: 195; Buchanan, 1981, 156, fig. 422; fig. 586;), and the pole (Braidwood & Braidwood, 1960; Amiet, 1980, pl. 89: 1180; Buchanan, 1981, 127, fig. 338) are familiar motifs.

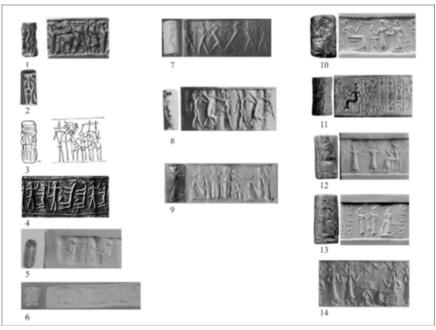


Figure 6: EBA III seals with mythological, hunting, battle and worship scenes (Schliemann, 1881, no. 502; Bittel, 1941, abb. 3; Balkan, 1957, res. 12; Braidwood & Braidwood, 1960, fig. 327; Özgüç, 1986, fig. 3-42, 43; Algaze, et al, 1995, fig. 9; Bradley Parker, et al, 2002, şek. 8-A; Duru, 2003, lev. 12:2; Özyar, et al, 2011, res. 8; Welton, et al, 2011, 160, fig. 13:4; Öztürk, 2019a, fig. 6-7)

The only example of a battle scene comes from Gözlükule (Cat. No. 64; Fig. 6: 9). This seal portrays the battle of the gods, including the Sun God Shamash. Who frequently depicted Akkadian seals in various forms (Dede, 2014, 145–146). While no direct analog of the Gözlükule seal has been found, similar examples have been identified in archeological sites and private collections (Frankfort, 1939, pl. XIX: b–d, XXIII: a; Boehmer, 1965, XLI: 482; Buchanan, 1981, figs. 436–438).

All examples featuring worship scenes (Collon, 1987, 369) originate from Kültepe in Cappadocia (Cat. Nos. 69–73; Fig. 6: 10–14). These seals typically exhibit period–specific characteristics: a worshiper, accompanied by a guardian/protector goddess, is led to the major deity seated on a stool. Similar iconographic features and scenes appear in Post–Akkadian and Ur III seals (von der Osten, 1934, 90; pl. XI: 116; Porada, 1948, 31, pl. XI: 253, XL: 255–259, XL: 255–256; 1966, 243–244; Buchanan, 1981, fig. 543, 545, 555, 557, 560, 567; Collon, 1982, 110; 1987, 112; Teissier, 1984, 92, no. 135).

Banquet scenes appear in two distinct compositional schemes based on Anatolian examples. The Tell el–Judaidah (Cat. No. 67; Fig. 7: 1) and Kültepe (Cat. No. 74; Fig. 7: 2) seals depict deities seated on stools, drinking from a vessel with straw. In contrast, three examples from

Oylum Höyük (Cat. Nos. 59–61; Figs. 3–5) portray banquet scenes with tables laden with food, accompanied by musicians and dancers. The former composition is characteristic of the Early Dynastic I period, while the latter resembles banquet scenes with lyre players found on seals from the Royal Cemetery at Ur and examples from Northern Syria and museum collections (Buchanan, 1966, 153, no. 814; Selz, 1983, 167–168; taf. XIII: 159; Teissier, 1984, 345–346, no. 199; Martin, 1988, 246, no. 225; Özgen, 1994, 471; Matthews, 1997, pl. XX; Parayre, 2003, 277, pl. 1: 11–13). Two additional examples from Seyitömer Höyük in Inland Western Anatolia (Cat. Nos. 76–77; Fig 7: 7–8) probably represent banquet scenes.



Figure 7: EBA III seals with banquet scene (Bittel,1941, abb. 4; Ward,1910, no. 900; Braidwood & Braidwood, 1960, fig. 382: 6; Özgen, 1993, fig. 4a-c; Okatan, 2019, lev. VIII, res.14-15)

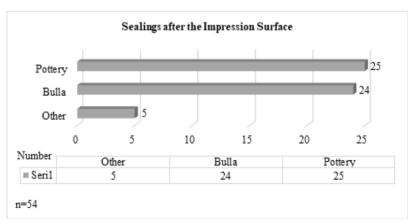
Seals depicting daily (?) scenes originate from the Euphrates (Cat. No. 55; Fig. 8: 1) and the Inland Western Anatolia (Cat. Nos. 78–85; Fig. 8: 2–7). These images seem related to agriculture or animal husbandry. Stylistically, they align with the Late Chalcolithic–Early EBA group from Southeast Anatolian and Northern Syrian (Behm–Blancke, 1993, 253, abb 2: 1; Matthews, 1997, 64–65; Yücel & Parlıtı, 2023, cat. no. 1).

Two seals from Oylum Höyük feature human–animal (Cat. No. 62; Fig. 7: 8) and animal–rosette friezes (Cat. No. 63; Fig. 7: 9). These were crafted in the same style as the banquet scene seals (Cat. Nos. 59–61) from the site, suggesting they may have been produced by the same seal carver or workshop. Classified by Matthews (1997, 120, pl. XXII: 261–263) under the "Brak style," these seals represent the Syrian style, characterized by single friezes.



Figure 8: EBA III seals with daily scenes (Yalçıklı, 2019; Okatan, 2019, lev. VI, res. 8-13, 16-17)

Early Bronze Age Cylinder Seal Impressions

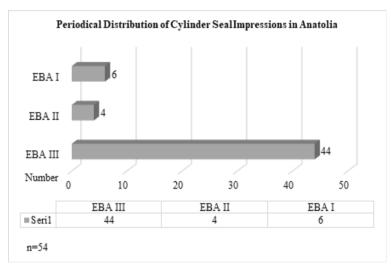


Graph 3: Sealings after the impression surface

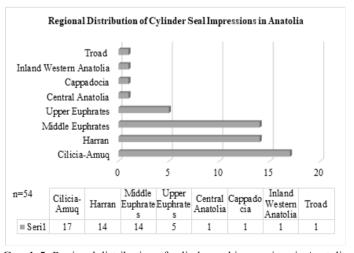
Of a total of 54 EBA sealings analyzed in this study (Cat. Nos. 87–140), 24 were found on clay bullae for doors or vessels, while 25 were identified on the body or handle of pottery.

Some impressed sherds belonged to pithoi (Table 2, Graph 3). Chronologically, six sealings are attributed to EBA I (Cat. Nos. 87–92), 4 to EBA II (Cat. Nos. 93–96), and 44 to EBA III (Cat. Nos. 97–140).

The periodic distribution of cylinder seal impressions demonstrates a significant accumulation in EBA III. The regional distribution of the impressions mirrors that of the cylinder seals (Fig. 5). The depictions of these impressions are categorized into two main groups: geometric and figurative, similar to the seals themselves.



Graph 4: Periodical distribution of cylinder seal impressons in Anatolia



Graph 5: Regional distribution of cylinder seal impressions in Anatolia

EBA I: The six examples from EBA I exhibit either geometric or figurative decorations and were found in the Euphrates Basin and Central Western Anatolia (Cat. Nos. 87–92). Among these, one bulla from Demircihöyük in Inland Western Anatolia stands out, while the remaining impressions are on vessels or terracotta plates.

Geometric decoration, represented by a single example, shows compositional and geographical similarity to scenes on cylinder seals (see above). In the Euphrates Basin, figurative scenes, all from Hassek Höyük (Cat. Nos. 88–92; Fig. 9: 2–6), depict daily chores. Notably, a cylinder seal with a similar scene was recovered from the same site (Cat. No. 25; Fig. 3: 7). Similar patterns have been identified on seals in private collections (Buchanan, 1966, 47, 721). These scenes and their iconographic features suggest a regional style that was ordinated during the Late Chalcolithic and persisted into EBA. Manfred R. Behm–Blancke (1993, 253, abb 2: 1) described this as the "rustical style," while Matthews (1997, 64–65) referred to it as the "Hassek Style" within the Chuera Group.

The exception in the EBAI group is the Demircihöyük bulla (Cat. No. 87; Fig. 9: 1), which features unique decoration. Though reminiscent of ordinary EBAI examples (Cat. No. 1–21; Fig. 2), its simple geometric pattern has no exact no exact parallels among known cylinder seals or sealings (Obladen–Kauder, 1996, 286, fig.136.5; Massa 2015, 138). Considering its early dating for West Anatolia and distinctive decoration, it is plausible that this bulla was impressed not by a seal but by another cylindrical object, possibly made of perishable material and used primarily for other decoration purposes (e.g., pottery).

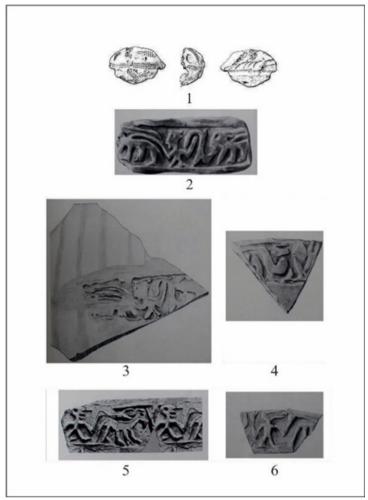


Figure 9: EBA I cylinder seal impressons: Bullae and pottery (Behm-Blancke, et al, 1981, taf. 11: 2-4; 12: 1-2; Obladen-Kauder, 1996, taf. 136: 5)

EBA II: The four seal impressions dated to EBA II originate from the Euphrates Region (Cat. Nos. 93–96; Fig. 10: 1–3). These impressions are found on various vessel types, with one featuring geometric decoration and the others depicting figurative scenes. The geometric example from Han İbrahim Şah (Cat. No. 93; Fig. 10: 1) consists of intertwined diamond-slice patterns similar to contemporary cylinder seals. A. Tuba Ökse (2016, 554) emphasized that the figurative scene from Gre Virike (Cat. Nos. 94–95; Fig. 10: 2–3) bears stylistic similarities to those at Upper Euphrates and Syrian sites throughout the EBA. Additionally, an example from Lidar Höyük (Cat. No. 96) indicates relations with Southern Mesopotamia during the Early Dynastic II period.

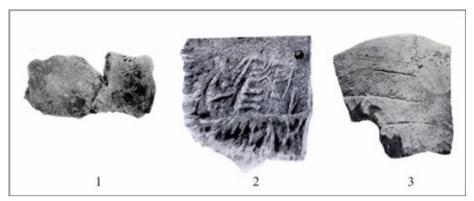


Figure 10: EBA II cylinder seal impressons: Pottery (Ertem, 1982, lev. 29, 31)

EBA III: The distribution of impressions expanded during EBA III (Cat. Nos. 97–140), paralleling the trends observed in cylinder seals. EBA III sites in Harran (Cat. Nos. 100, 121–133), Cilicia (Cat. Nos. 101–111,113,134–136), Amuq (Cat. Nos. 137–138), Cappadocia (Cat. No. 140), Central Anatolia (Cat. No. 139), and the Troad (Cat. No. 112) yielded cylinder impressions on bullae, stoppers, labels, and predominantly on pottery. During this period, impressions became more diverse, featuring complex scenes and styles.

Geometric decoration persisted in EBA III impressions, alongside animal or human processions, banquets (?) scenes, worship scenes, and inscriptions, which were added to existing figurative scenes for the first time. EBA impressions with geometric patterns (Fig. 11–12) were found in the Euphrates (Cat. Nos. 97–99; Fig. 11–12), Harran (Cat. No. 100), Cilicia–Amuq (Cat. Nos.101–111, 113; Fig. 11: 3–5, 7), and the Troad (Cat. No. 112; Fig. 11: 6). These patterns and their distribution closely align with the cylinder seals at the period.

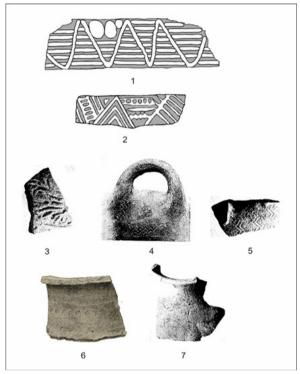


Figure 11: EBA III sealings with geometric patterns: Pottery (Schliemann, 1881, nos. 482–483; Goldman, 1956, fig. 397: 5-8, 10-11; Ökse, 2006, 556, res.2-3)

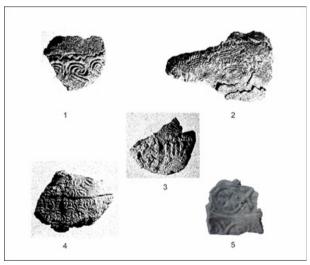


Figure 12: EBA III sealings with geometric and floral patterns: Stopper and bullae (Goldman, 1956, fig. 398: 1, 3, 4, 6; Yalçıklı, 2019, res. 3)

Two seal impressions with floral decoration, one from Mezraa Höyük (Cat. No. 99; Fig. 12: 5) and the other from Tarsus—Gözlükule (Cat. No.113; Fig. 12: 4), feature various types of rosette and linear tree patterns. These motifs bear similarities to decoration found on seals and seal impressions from Anatolia (Schliemann, 1881, nos. 500, 503; Schmidt, 1902, 303–8868; Bittel, 1939–1941, abb.1; Frankfort, 1939, 230), Mesopotamia (Tobler, 1950, CLXI: 48; Frankfort, 1955, 20, pl. 3: 9–10; 8: 51; 12: 96), Northern Syria (Weiss, 1990, 392, 406, pl. 139a–b; Parayre, 2003, pl. 4), and Iran (Roach, 2008, 187, no. 1179; 189, nos. 1189–1191).

Figurative scenes mainly consist of contests, human or animal processions, worship, and banquets. An example from Gre Virike (Cat. No. 119; Fig. 13: 1) depicts humans and animals facing an architectural structure, possibly an *altar*. Another impression from the same site (Cat. No.120; Fig. 13: 2) presents a similar scene, although the architectural feature is absent (Ökse, 2006, 555, res. 4–5). The style of these Gre Virike seals has parallels in Northern Syria and Anatolia, dating back to the Late Chalcolithic period and beyond (Courtois, 1962, fig. 21; Ertem, 1974, pl. 62: 1–2; van Loon, 1983, 3, fig. 5; Collon, 1987, 14, fig. 11, 678; Parayre, 1990, 556–558, fig. 28–4; Matthews, 1991, 148–52, fig. 2: 13–14; 1997, pl. 38: 502–503; Frangipane, 1993, 194, fig. 2:2; Schwartz et al., 2003, 329, fig. 4; Batıhan, 2014, no. 091; Sağlamtimur, 2017, 16, res. 15).

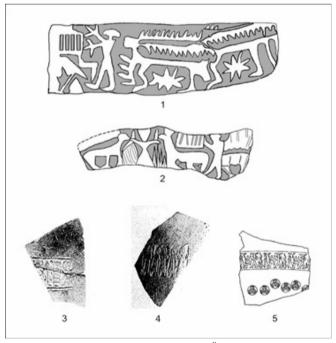


Figure 13: EBA III sealings with figurative scene: Pottery (Ökse, 2006, 556, res. 4-5; Garstang, 1953, fig. 150.17; Goldman, 1956, fig. 397: 9, 12)

The four examples depicting contest scenes originated from Lidar and Kazane. The Lidar examples (Cat. Nos. 116–118) are described in the literature as "an animal contest scene and male figures making pithos in the style of the Early Dynastic Period." The Kazane example (Cat. No. 121) can similarly be interpreted as a possible contest scene. All these examples date to the Early Dynastic III period.

Human and animal processes were found in the Harran and Cilicia regions (Fig. 13: 4). The example from Kazane (No. 127) features double friezes with a row of lions (Creekmore, 2008, fig. 7.20: 388)⁷. The Gözlükule example (Cat. No. 134) depicts a human and animal procession (Goldman, 1956, 241, fig. 398:5), which suggests an Akkadian or Post–Akkadian dating (Porada, 1948, pl. XXXIX:250E, 251). In the Cilician example, while the scene itself may differ, stylistic details such as the figures' hairstyles and clothing types resemble those found on Kültepe EBA III seals (Özgüç, 1986, fig. 3–42, 43).

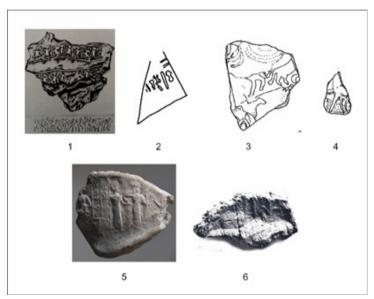


Figure 14: EBA III sealings with figurative scene: Bullae (1-4, 6) and label (5) (Uzunoğlu, 198, res. 18-19; Welton, et al, 2011, fig. 13:5-6; Omura, 2016, fig. 25; Öztürk, 2019b, cat. o. 028)

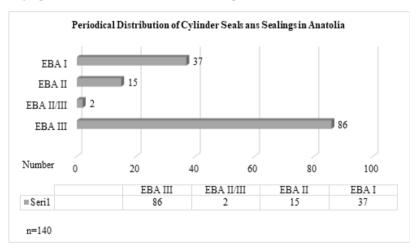
⁶ No further detail is provided in the publication. For other examples of contest scenes in this period, see: Buchanan, 1981, 105–145; Frankfort, 1955, 28–31; Porada, 1948, 11–2; pl. XII–XV.

This description is based on an unclear photo in the publication where the sealings from the Harran Plain with double friezes are compared with the Early Dynastic III examples (Creekmore, 2008, 273). For similar Early Dynastic III examples, see: Porada, 1948, pl. XVII: 105E, 108E; XVIIII: 109, 111–116; XIX: 118E; XX: 125, 12–128; Frankfort, 1955, pl. 33: 334; 35: 362; Buchanan 1981, fig. 326–327; 331–338.

All examples described as banquet or presentation scenes are from Kazane (Cat. Nos. 129–131). These impressions display multiple occurrences of the same seals with double friezes. The only example of a worship scene is from a label found in Cappadocia⁸ (Cat. No. 140; Fig. 14: 5). This seal's stylistic characteristics align with the Ur III period. Similar scenes and stylistic features are well–documented in the Mesopotamian repertoire (Buchanan, 1981, fig. 538; Collon, 1982, pl. XLVI: 396–397; XLIV: 366–378; XLV: 379–390; XLVI: 391, 393–401; XLVII: 403–415). However, this is the first and only known example of an inscribed seal impression from Anatolia during the EBA⁹ (Table 2).

Overall Assessment and Conclusions

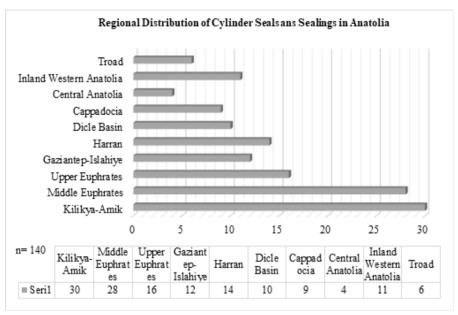
The cylinder seals are a distinctive artifact originating from Mesopotamia, characterized by their specialized craftsmanship. Its creation required not only access to rare materials (e.g., semiprecious stones, faience, ivory) but also advanced manufacturing techniques, such as drill usage and literacy for inscriptions. This combination of material scarcity and technical expertise renders cylinder seals rare and prestigious objects, maintaining their popularity among Mesopotamian elites and bureaucrats for an extended period. The larger surface area of cylinder seals compared to stamp seals also contributed to their appeal. Notably, regional differences in style indicate that these seals were produced in various workshops, some of which likely operated under the influence of local political authorities.



Graph 6: Periodical distribution of cylinder seals and sealings in Anatolia

There is also a bulla bearing the impression of a figurative scene, considered as an EBA example by some scholars Sabahattin Ezer (2014, fig. 14), Fikri Kulakoğlu and Güzel Öztürk (2015, fig. 4) and Michele Massa (2015, fig. 5.14, sg104). While the bulla in question (Öztürk, 2019a, cat. no. 097, Lev. 42:2) was later dated to the Assyrian Trade Colonies Period by Öztürk (2019a). According to stylistic details, the latter dating has been accepted by the authors and this bulla.

⁹ Urdun, son of Namhani mentioned in the inscription, was a scribe working for the Nippur palace in Southern Mesopotamia (Öztürk, 2019a, 89).



Graph 7: Regional distribution of cylinder seals ans sealings in Anatolia

Cylinder seals first appeared in Anatolian during the Chalcolithic period, and their distribution extended from the Middle to the Upper Euphrates. This widespread adoption is attributed to the interconnectedness between the "Uruk culture" and Anatolian sites, as well as the trade and communication networks along the Euphrates Valley. For instance, chemical analyses of a cylinder seal–impressed pot discovered at Hacinebi indicate its origin in Susa (Wengrow, 2008, 19). In addition to the seals themselves, sealed vessels and objects were also part of these cultural and material exchanges. During the Chalcolithic period, the Euphrates region fell within the cultural sphere of Syro–Mesopotamian influence rather than that of mainland Anatolian, which explains why cylinder seals, a foreign technological and intellectual innovation, were first introduced in this area of Anatolia.

Unlike stamp seals¹⁰, cylindrical seals were primarily used to impress on clay from their earliest applications, serving as tools for bureaucratic functions. These included the production of *bullae*, labels, containers (used for trade or gift exchanges), and door closures.

During EBA I, the cylinder seals found in Anatolia exhibit a strong connection to the Syro–Mesopotamian tradition regarding material, decorative scenes, and style. While geometric patterns are dominant, figurative decorations are also present (Graph 6). Geometrical motifs,

Stamps were used throughout the long period of use from the Neolithic onwards for several purposes s such as body, fabric, food, ceramic decoration, or carried as amulets (Çilingiroğlu, 2009, Atakuman, 2015; Üstün Türkteki, 2021, Türkteki, 2023b), as well as being for stamping clay in certain regions, especially after the Chalcolithic.

which appear in various forms on cylinder seals, have been observed in Mesopotamia since the Jemdet Nasr period (Collon, 1987, 20–23, 113).

In Southeastern Anatolia, the most extensive EBA 1 cylinder seal assemblages have been recovered from Hassek Höyük, Başur Höyük, and Arslantepe. All known figurative scenes are from these three settlements (Graph 7). Considering their stylistic similarities, it is plausible that they were produced in the same workshop or region. Interestingly, comparable figurative examples from the Euphrates Basin during EBA I continued to be used until the end of the EBA. Based on similar seal impressions, Ökse (2006, 555) stated that this style emerged in the Upper and Middle Euphrates Basin during the Late Chalcolithic and remained in use in Northern Syria until the end of the Early Bronze Age. Collon (1987, 20–23, 113) interpreted cylinder seal vessels, prevalent in Northern Mesopotamia, Syria, Palestine, and the Anatolian, as decorative elements or symbols of local dynasties.

As noted above, cylinder seals in Chalcolithic Anatolia were concentrated along the Euphrates. However, by EBA I, the Tigris Basin had also become part of this mobility network. This shift may reflect trade dynamics (Wengrow, 2008, 19) that gradually shifted toward the Tigris Basin during the early 3rd millennium BCE. Among the key actors in this trade were elite groups, such as those buried in Başur Höyük EBA I. These groups were interred in exceptionally rich tombs, accompanied by privileged goods and artifacts.

EBA II marks the period with the lowest number of cylinder seals and impressions in Anatolia, which might be attributed to insufficient research (Graph 6). However, a similar decline in settlement numbers was noted in the Upper Euphrates region, which was previously rich in seals during EBA I. During this period, the Syro–Mesopotamian influence, as observed at Norşuntepe, significantly diminished (Sagona & Zimansky, 2015, 164; Dede, 2025a). This transformation was likely driven by the Early Transcaucasian movements. However, the altered pattern of seal usage in Anatolia cannot be fully explained by internal Anatolia turmoil alone; it also reflects the broader political and economic dynamics in Mesopotamia. For instance, the Middle Euphrates and Gaziantep–Islahiye sites, which were relatively less affected by Early Transcaucasian mobility, also experienced a decline in seal usage during EBA II.

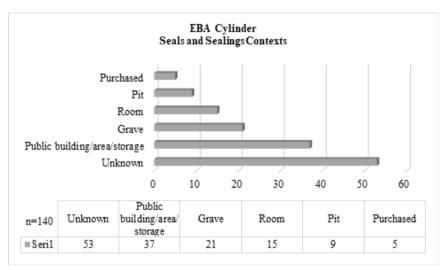
The end of EBA II witnessed the emergence of the so-called "Anatolian Trade Network/ Caravan Roads." During EBA III, Anatolian chiefdoms such as Kültepe, Acemhöyük, Alaca Höyük, Küllüoba, Beycesultan, Liman Tepe, and Troy, played crucial roles, establishing significant overseas connections with the Aegean. After the foundation of the Akkadian Empire, the expansionist policies of Akkadian kings likely brought much of Southeastern Anatolia under the Akkadian influence, explaining the resurgence in cylinder seal use during EBA III. In addition to Southeastern Anatolia, the Akkadian Kingdom also conducted

political and commercial activities in Central Anatolia (Westenholz, 1997, 102–104, 246–251; 1998, 8–9, 15; van de Mieroop, 2000, 138–139) later copies of Sargon and Naram–Sin texts. The vibrant economic activity likely made Anatolia a center of attraction. As part of this interconnected system, cylinder seals began to appear as imports in Central and Western Anatolia and parts of the Aegean for the first time (Bernabò Brea, 1976, 298–300, pl. 25; Collon, 1997, 20ff).

The Cilicia—Amuq region, located within the Syro—Mesopotamian cultural sphere, established maritime connections with Mediterranean communities even before the EBA (Sherratt, 2000, map 7). Non—Anatolian seals were also discovered in this region during and before the EBA (Braidwood & Braidwood, 1960; Dede, 2025b). Gözlükule, situated at a key inland and coastal road junction in Cilicia, served as a link with Western Anatolia during the EBA (Mellink, 1989b; 1993), and yielded a rich glyptic assemblage. Most EBA III cylinder seals and impressions in Anatolia originate from the Southeast Anatolian or Cilician—Amuq regions. Notably, the relatively rich *bullae* collections from Gözlükule and Kazane indicate that these regions, particularly their major sites, adopted a Mesopotamian—type sealing system.

In Central Anatolia, Kültepe yielded evidence suggesting familiarity with Mesopotamian seal and sealing practices, as indicated by the coexistence of cylinder seals and impressions (Kulakoğlu & Öztürk, 2015; Kulakoğlu, 2015, 10, tab. 1; 2018, 59)¹¹. In contrast, apart from the debated EBA I bulla from Demircihöyük, the glyptic assemblages of West Anatolian, including those from the EBA III layers of Seyitömer and Troy, align with the "Great Caravan Road" identified by Efe (2007). Their active roles in the EBA III trade networks were corroborated by numerous archeological findings. Seyitömer seals, which display traces of paint and were found clustered with beads, contrast with the absence of *bulla* in the heavily burned Troy II deposits. These findings indicate that by the time they reached Western Anatolia, seals had lost their original functional purposes and acquired the status of prestige objects or exotic goods likely used as ornaments or amulets. The preference for prestigious and nonindigenous materials and technologies in Anatolia, such as faience and lapis lazuli, evident in the Seyitömer and Kültepe seal groups, further supports this interpretation.

In a preliminary report published by Kulakoğlu and Öztürk in 2015, it is stated that thousands of bullae were found in the EBA strata. However, no further publication is available for a stylistic evaluation of this group. Of the six Kültepe cylinder seals published by Öztürk (2019a) in her PhD dissertation, two were excavation materials, and the other four were purchased, all dated to the Post–Akkadian and Ur III periods. The only seal impression dating to the EBA levels is on a label from Level 11b (Kulakoğlu, 2018, 59; Öztürk, 2019a, 2019b).



Graph 8: EBA Cylinder Seals and Sealings Contexts

The context to which most EBA cylinder seals and sealings belong remains unclear. The largest group, whose findspots have been documented, was found in public or storage areas (Graph 8). While this group is small in EBA I, its representation increases significantly after the second half of the EBA. During this later period, the rise in the number of communal buildings alongside the glyptic assemblage found related to these buildings must be understood as a consequence of the interactions among the elite (Dede, 2024). The purpose of seals and sealings in administrative areas would have been to protect valuable goods and objects. The second largest group of seals originated from burial contexts (Graph 8). These examples may indicate that the person buried was privileged, or alternatively, the seal in the grave could have lost its administrative significance, evolving into a simple amulet. The unspecified areas, sometimes defined as "rooms" in some publications, may have actually been storage spaces (Graph 8). Some examples recovered from pits may also suggest their use in public ceremonies (Türkteki et al, 2023).

In conclusion, the Southeastern Anatolia and Amuq-Cilicia plains were first introduced to cylinder seals in the Chalcolithic period, primarily through their connections with Syro-Mesopotamia. Meanwhile, Central and Western Anatolia became familiar with these objects during the EBA III, probably following the establishment of the Akkadian Kingdom. These intensified inter-regional relations facilitated the selective exchange of technologies and ideas between regions, such as metallurgy, metalworking techniques, the potter's wheel, seal impressions, customs related to eating and drinking, grave types, and burial practices. Within this process, geographically and economically regions closer to the Akkadian Kingdom adopted cylindrical seals and impressed them onto clay. In contrast, settlements in

Western Anatolia, which had more distant and indirect relations with Mesopotamia, probably never fully adopted the practice of using cylinder seals, neither during the EBA nor in later periods. However, settlements in Central Anatolia, whose relations with Syro–Mesopotamian counterparts started during the EBA and gradually intensified during the Assyrian Trade Colonies Period, integrated cylinder seals and sealings into their administrative and bureaucratic systems. This practice, though diminished significantly during the Hittite Kingdom, did not entirely disappear.

Peer-review: Externally peer-reviewed.

Author Contributions: Conception/Design of Study- M.G.D., U.O.; Data Acquisition- M.G.D., U.O.; Data Analysis/ Interpretation- M.G.D., U.O.; Drafting Manuscript- M.G.D., U.O.; Critical Revision of Manuscript- M.G.D., U.O.; Final Approval and Accountability- M.G.D., U.O.

Grant Support: The authors declared that this study has received no financial support

Conflict of Interest: The authors has no conflict of interest to declare.

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2. 14 Arxilamiepe Elife Area Stone Geometric I Upper Emplarnies Five parallel rows of zigzag with a star morif on one side 2. 3 Mospaulepe Pi 27 2,10 Cliy Geometric I Upper Emplarnies Five parallel rows of zigzag with a star morif on one side 2. 1 Mospaulepe Pi 27 2,10 Cliy Geometric I Upper Emplarnies Five parallel rows of zigzag with a star morif on one side 2. 1 Mackin Ash prideposat 2,30 2,10 Clay Geometric I Upper Emplarnies The handle in the simp of a bex, and zigzag with a star morif on one side 2. 1 Mackin Ash prideposat 2,30 2,10 Clay Geometric I Middle Emplarnies Date and in the simp of a bex, and zigzag unotif in the simp of a bex, and zigzag morifs in the simp of a bex, and zigzag morifs in the simp of a bex, and zigzag morifs in the simp of a bex, and zigzag morifs in the simp of a bex, and zigzag morifs in the simp of a bex, and zigzag morif in the simp of a bex, and zigzag morifs in the centre, increaper and zigzag morifs in the centre, increaper and zigzag morifs in the centre, increaper and zigzag morifs in the centre, increaper and zigzag morifs in the centre, increaper and zigzag morifs in the centre, increaper and zigzag morifs in the centre, i	3	2: 15	Arslantepe	Elite Area			Stone	Geometric	I	Upper Euphrates	Scalloped triangle motifs and beveled lines within the scene bordered by two long lines	Frangipane, 2012, 250, Fig.8a
2.3 Noryamiepe Pi 27 210 Clay Geometric 1 Upper Eughtrntes Five parallel rows of zigzag with a stur morif on one side 2.2 Noryamiepe 3.90 2.20 Shell Geometric 1 Upper Eughtrntes Hermigbone morif 2.1 Mackkii 2.0 2.10 Clay Geometric 1 Upper Eughtrntes Hermigbone morif 2.2 Hassek Hoyak Ash pit/deposit 2.30 2.10 Clay Geometric 1 Upper Eughtrntes The handle in the slape of a bex, and zigzag morifs in the slape of	4	2: 14	Arslantepe	Elite Area			Stone	Geometric	I	Upper Euphrates	Net motif	Frangipane, 2012, 250, Fig. 8a
2.1 Taskan 3.90 2.20 Shell Geometric 1 Upper Emphrates Herringbone motif 2.1 Taskan 2.30 2.10 Clay Geometric 1 Upper Emphrates Zagzag motif and short lines 2.2 Hassek Höynk Pithos Grave G7 2.20 1,35 Broze Geometric 1 Middle Emphrates The handle in the shape of a bex, and zigzag motifs in the shape of zigzag. 2.1 Talka 2.0 1,40 Clay Geometric (2)Perkmont 1 Tigzis Middle Emphrates Instrumental motif the shape of a bex, and zigzag motif and shape in the centre, location and	5	2:3	Norsuntepe	Pit 27	2,10		Clay	Geometric	I	Upper Euphrates	Five parallel rows of zigzag with a star motif on one side	Hauptmann, 1982, Lev. 26:2; Schmidt, 2002, Taf. 86:1355
2.1 Taskun 2.0 2.10 Clay Geometric I Upper Emphrates Zigzag motif and short lines 2.5 Hassek Hoyuk Ash pii/deposit 2.20 1,35 Bronze Geometric I Middle Emphrates Dots and lines 2.19 Hassek Hoyuk Ash pii/deposit 2.60 2,17 Clay Geometric I Middle Emphrates Dots and lines 2.19 Hassek Hoyuk Ash pii/deposit 2.60 2,17 Clay Geometric I Middle Emphrates Dots and lines 2.19 Hassek Hoyuk Ash pii/deposit 2.60 1,40 Clay Geometric I Middle Emphrates Dots and lines 2.1 Hassek Hoyuk Ash pii/deposit 2.00 1,40 Clay Geometric I Middle Emphrates Dots and lines 2.1 Hassek Hoyuk Grave 4,20 Limestone Geometric I Middle Emphrates Intervined lozange motif 2.1 Basyur Hoyuk Grave 1,60 <td< td=""><td>9</td><td>2:2</td><td>Norsuntepe</td><td></td><td>3,90</td><td>2,20</td><td>Shell</td><td>Geometric</td><td>I</td><td>Upper Euphrates</td><td>Herringbone motif</td><td>Hauptmann, 1974, Lev. 80:1; Schmidt, 2002, Taf. 86:1354</td></td<>	9	2:2	Norsuntepe		3,90	2,20	Shell	Geometric	I	Upper Euphrates	Herringbone motif	Hauptmann, 1974, Lev. 80:1; Schmidt, 2002, Taf. 86:1354
2.5 Hassek Höytik Ash pit/deposit 2.50 1,35 Bronze Geometric I Middle Euphrales The handle in the shape of a thex, and zigzag motifs in the shape of a zigzag motifs in the shape of a zigzag motif and short lines of a separative of a separative content circle and the shape of a zigzag motif and short lines and zigzag motifs and zigzag motifs in the seal face divided in two contents and the shape of a zigzag motif and short lines and zigzag motifs and not motifs in the seal face divided in two contents and the shape of a zigzag motifs and the shape of a zigzag motifs and the shape of a zigzag motifs and short lines and zigzag motifs and zigzag motifs and not zigzag motifs and zigzag motifs and zigzag motifs and zigzag motifs and	7	2: 11	Taşkun Mevkii		2,30	2,10	Clay	Geometric	I	Upper Euphrates	Zigzag motif and short lines	Helms, 1973, Fig. 10; Sagona, 2004, Fig. 69:6
2. 10 Hassek Hoyatk Ash pit/deposit 2.00 Clay Geometric I Middle Enphrates Dots and lines Concentric circles surrounded by drill holes, single circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge and "comble" circle with a hole in the centre, lozenge motif and short lines 2.10 1.20 1.20 1.20 Green Stone Geometric Circle Annage Geometric and floral circle and lozenge motif. Concentric circle and lozenge motif. 2.11 1.21 1.21 1.22 Green Stone Geometric and floral circle and lozenge motif circle and noted motifs in the seal floral circle and noted motifs in the seal floral circle and lozenge motif in two circle and noted motifs	00	2:5	Hassek Höyük	Pithos Grave G70		1,35	Bronze	Geometric	I	Middle Euphrates	The handle in the shape of a ibex, and zigzag motifs in the seal face divided in two	Behm-Blancke, 1984, Taf. 12:4
2.19 Hassek Hoyttk Ash pit/deposit 2,60 2,17 Clay Geometric I Middle Enphrates Dots and lines 2.1 Hassek Hoyttk Grave 2,00 1,40 Clay Geometric I Middle Enphrates mittis mittis<	6	2: 20	Hassek Höyük	Ash pit/deposit	2,30	2,00	Clay	Geometric	I	Middle Euphrates	Dots	Behm-Blancke, 1981, Taf. 11:5
2.21 Hassek Höytik Allones, Englanes Concentric circles surrounded by drill holes, single Concentric circles surrounded by drill holes, single Concentric circles surrounded by drill holes, single Concentric circles with a hole in the centre, locange and "combination of the control of the con	10	2: 19	Hassek Höyük	Ash pit/deposit	2,60	2,17	Clay	Geometric	1	Middle Euphrates	Dots and lines	Behm-Blancke, 1981, Taf: 11:6
2.1 Bayur Hoyuk Grave 4.20 Limestone Geometric I Middle Enphrates Herringbone motif between horizontal lines 2.9 Bayur Hoyuk Grave 1.30 Limestone Geometric I Tigris Intertwined lozange motif 2.4 Basyur Hoyuk Grave 1.60 0.80 Serpantine Geometric (")Piedmont I Tigris Intertwined lozange motif 2.1 Tankla Grave 3.50 Grapatine Geometric (")Piedmont I Tigris No uridental motif and short lines 2.1 Zincriti 4.30 Green Green Geometric (")Piedmont I Gaziantep-Islahive Double row of harded argange 2.1 Tall el Green Green Geometric Chedmont I Cincia-Amuq Goazantep-Islahive Concentric circle and lozange motifs 2.1 Tall el Green Geometric and floor I Cilicia-Amuq Goazantep-Islahive Concentric circle and notific 2.1 Tall el Geometric and f	11	2: 21	Hassek Höyük		2,00	1,40	Clay	Geometric	I	Middle Euphrates	Concentric circles surrounded by drill holes, single circle with a hole in the centre, lozenge and "comb" motifs	Behm-Blancke, 1984, Taf. 12:3
2.4 Bayar Hoyak Grave 1 1,60 1,30 Limestone Geometric Infigure Intertwined lozange motif Intertwined lozange motif 2.4 Bayar Hoyak Grave 2 1,60 880 Serpantine Geometric (?)/Piednont I Tignis Double row of hard bed rigizage. 2.10 Zincriti Grave Grave 3 Geometric (?)/Piednont I? Gaziantep-Islahiye Double row of hard bed rigizage. 2.17 Tell el 4,30 Stone Geometric (?)/Piednont I? Gaziantep-Islahiye Orderstone motifs cross miscle and lozange motif. 2.17 Tell el 4,30 Stone Geometric (?)/Piednont I? Gaziantep-Islahiye Orderstone motifs cross miscle and lozange motifs of the stand lozange motifs and lozange motifs. 2.17 Tell el 4,30 Stone Geometric and floral I Cilicia-Amunq Four-leaf rosete and net motif 2.26 Individable 2,10 Green Stone Geometric I Cilicia-Amunq Concentric circle and lozenge motif 2.10	12	2:1	Birecik Grave	Grave	4,20		Limestone	Geometric	I	Middle Euphrates	Herringbone motif between horizontal lines	Sertok & Ergeç, 1999, Fig. 12
2.4 Bayur Hoyatk Grave 2 1,60 0,80 Separatine Geometric 1 Tigaris No information about the seal decoration. 2.10 Zincriti 2,50 Grey Stone Geometric (?)/Piedmont 1? Gaziantep-Islahiye Double row of lanched ziggags 2.7 Zincriti 2,50 Green Geometric (?)/Piedmont 1? Gaziantep-Islahiye Double row of lanched ziggags 2.7 Zincriti 2,50 Green Geometric 1? Gaziantep-Islahiye Cargeon on the stamp face 2.17 Tell 4,30 Stone Geometric and floral 1 Cilicia-Aumq Four-laf rosete and net motif 2.6 Indiadah 2,10 Green Stone Geometric I Cilicia-Aumq Concentric cricle and lozenge motif 2.18 Indiadah 2,10 Green Stone Geometric I Cilicia-Aumq Concentric cricle and lozenge motif	13	2:9	Başur Höyük	Grave 1	1,60	1,30	Limestone	Geometric	I	Tigns	Intertwined lozange motif	Sağlamtimur, 2017, Res. 15
2.10 Zincirii Gazimete Sione Geometric (?)/Piedmont 1 Tigris No information about the seal decoration. 2.10 Zincirii 2,50 Geometric Geometric Geometric and floral 1? Gazimtep-Islahiye Double cover of harden dazgags. 2.7 Zincirii 2,50 Sepantine Geometric Geometric and floral 1? Gazimtep-Islahiye Cortecentric circle and lozange motifs. Cross inside an other stamp face. 2.17 Judaidah 4,30 Stone Geometric and floral 1 Cilicia-Amuq Four-leaf rosette and net motif 2.6 Judaidah 2,10 Green Stone Geometric 1 Cilicia-Amuq Concentric circle and lozenge motif 2.18 Judaidah 2,10 Green Stone Geometric 1 Cilicia-Amuq Concentric circle and lozenge motif	14	2: 4	Başur Höyük	Grave 2	1,60	0,80	Serpantine	Geometric	I	Tigris	Zigzag motif and short lines	Sağlamtimur, 2017, Res. 15
2.10 Zincirli 2,50 Grey Stone Geometric Pledmont 1? Gaziantep-Islahiye Double row of hardhed zigags 2.7 Zincirli 2,50 Green Geometric 1? Gaziantep-Islahiye Concentric cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle and lozzing cricle and lozzing motifs. Cross miside and lozzing cricle motifs in the seal face divided in two 2.10 Green Stone Geometric I Cilicia-Amaq Concentric cricle and lozzinge motif 2.18 Judaidah 2,50 Green Stone Geometric I Cilicia-Amaq Concentric cricle and lozzing motifs in the seal face divided in two	15		Tatıka	Grave				Geometric (?)/Piedmont	I	Tigns	No information about the seal decoration.	Ökse, 2014, 9
2: 7 Zincirit Careantic Green Geometric Geometric I ? Gaziantep-Islahive Concentric circle and lozzage motifs. Cross inside an analysis of concentric circle and lozzage motifs. Cross inside an analysis of careanter circle and lozzage motifs. Cross inside an analysis of careanter circle and lozzage motifs. Cross inside and lozzage motifs. 2: 17 Tellin ell consentric circle and lozzage motifs. Cross inside and loz	16	2: 10	Zincirli		2,50		Gray Stone	Geometric/Piedmont	12	Gaziantep-Islahiye	Double row of hatched zigzags.	Luschan, 1943, Taf. 39:d
2.17 Inductable 1 Inductable 4,30 Stone Geometric and floral I Cilicia-Annag Four-leaf rosette and net motif 2.6 Inductable 2,10 Green Stone Geometric I Cilicia-Annag Concentric circle and lozenge motif 2.18 Judaidah 2,80 Green Stone Geometric I Cilicia-Annag Concentric circle and lozenge motif	17	2:7	Zincirli		2,50		Green Serpantine	Geometric	179	Gaziantep-Islahiye	Concentric circle and lozenge motifs. Cross inside an octagon on the stamp face	Luschan, 1943, Taf. 39:e
Tell buildards Let buildards Concentric circle and lozenge motif Concentric circle and lozenge motif 2.6 Dudaidah 2.10 Circia-Amuq Concentric circle and lozenge motif 2.18 Dudaidah 2.80 Geometric Geometric I Cilicia-Amuq Concentric circle and lozenge motif	18	2: 17			4,30		Stone	Geometric and floral	I	Cilicia-Amuq	Four-leaf rosette and net motif	Braidwood & Braidwood, 1960, Fig. 254:5
Tell el Concentric circle motifs in the seal face divided in two	19	2: 6			2,10		Green Stone	Geometric	I	Cilicia-Amuq	Concentric circle and lozenge motif	Braidwood & Braidwood, 1960, 332-332, Fig. 254:3
	20	2: 18			2,80		Green Stone	Geometric	I	Cilicia-Amuq	Concentric circle motifs in the seal face divided in two	Braidwood & Braidwood, 1960, 332-332, Fig. 254:2

Braidwood & Braidwood, 1960, 331-332, Fig. 254:1	Dusinberre 2005, 33, Fig. 11a-b	Frangipane, 2012, s. 250, Fig.8b, 2014, s. 176, 179, Fig.9	Helms, 1973, Fig. 10, Sagona, 2004, Fig. 69:8	Behm-Blancke, 1981, Taf. 11:1a-b	Behm-Blancke, 1984, Taf. 12:2	Batıhan, 2014, Kat.No.091	Sağlamtımur, 2017, s. 16, Res. 15	Sağlamtimur, 2017, s. 16, Res. 15	Sağlamtimur, 2017, s. 16,	Res. 15	Res. 15 Braidwood & Braidwood, 1960, 331, 333, Fig. 254:4	Res. 15 Braidwood & Braidwood, 1960, 331, 333, Fig. 254:4 van Loon, 1978, Lev. 135:C	Res. 13 Braidwood, 8 Braidwood, 1960, 331, 333, Fig. 2544 van Loon, 1978, Lev. 135:C	Res. 15. 1960, 331, 333, Fig. 2544, 1960, 331, 333, Fig. 2544, 135.C. 135.C. N. Ozgur, 2009, S. 64, Res. 555 N. Ozgur, 2009, S. 64, Res. N. Ozgur, 2009, S. 84, Res. N. Ozgur, 2009, S. 84, Res.	Res. 13. 1960, 331, 333, Fig. 254.4 1960, 331, 333, Fig. 254.4 135.C. 135.C. N. Ozgür, 2009.s. 84, Res. 355 N. Ozgür, 2009.s. 84, Res. N. Ozgür, 2009.s. 84, Res. Hauptman, 1981, 198
Net motif	Decorated with a net motif	Two homed animals in motion. Drill used for the feet of the animal	Three scorpion figures in motion	A human figure walking to the right holds two cows with his left hand. One of the cows is fully depicted, while the head and neck of the other cow are missing	walking to the top and are thought	A horned animal figure is depicted with horns, tail and genitalia in a rather large size in the centre. There are an hourglass-shaped base (7) and a trangle as filling motifs.	Handle in the form of a homed animal (goat?). Homed animals running in succession; stylised human (?) figures in between	The scene depicts a mixed creature/human (?) with hands shaped like tree branches and a prominent phallus. Around this main scene there are decorations with various beings and motifs that probably complement the main story.	The handle in a combination of four animals. Homed animals in motion with interwined angles as filling motifs on the seal surface		The seal is damaged, the decoration is not recognisable				ft. The bird in the he two birds is a he in two birds is a heir heads turned al staircase with a rizontal staircase ed
Cilicia-Amuq	Central Anatolia	Upper Euphrates		Middle Euphrates		Tigris	Tigris	Tigns					les ates		
I	I		I	I	ı	I	1	I			I	ı	1 1 1	п п п	П П П П П/ЕНDП
Geometric	Geometric/Jemdet Nasr	Figurative/Jemdet Nasr	Figurative/Animal row	Figurative	Figurative	Figurative	Figurative/Animal row	Figurative/Mythologica 1(?)	Figurative/Animal Row		Figurative	Figurative Figurative/Animal Row	Figurative Figurative/Animal Row Figurative/Animal Row	Figurative/Animal Row Figurative/Animal Row Figurative/Animal Row	Figurative/Animal Row Figurative/Animal Row Figurative/Animal Row Figurative/Contest
Stone		Clay	Clay	Clay		Serpantine	Bronze	Bronze	Bronze	Green stone		Pink Limestone	Pink Limestone Steatite	Pink Limestone Steatite Black Stone	Pink Limestone Steatite Black Stone
	1,10		2,60	3,15	2,00	1,10						1,70			
3,90	2,20		2,90	3,20	2,55	1,80				2,20		2,00	2,00	2,00	2,00
	MBA_LBA deposit	Elite Area (near the chief hut)		Ash pit/deposit		Grave 3	Grave	Grave	Grave						
Tell el Judaidah	Gordion	Arslantepe	Taşkun Mevkii	Hassek Höyük	Hassek Höyük	Başur Höyük	Başur Hövük	Başur Höyük	Başur Höyük	Tell el Judaidah		Korucutepe	Korucutepe	Korucutepe Samsat Samsat	Korucutepe Samsat Lidar Höyük
2: 12	2: 13	3:1	3: 4	3:7	3:8	3:6	3:2	3:5	3:3			4:3	£ 4:1	4:3	4.1
21	22	23	24	25	26	27	28	29	30	31	32		33	33	33 34 35

37	4:6	Girnavaz	Grave			Bone	Figurative/Contest	п	Tigns	The seal face depicts the animal combat.	Erkanal, 1991, Res.17
38	4:7	Gimavaz	Grave	1,80		Stone	Figurative/Contest	п	Tignis	The struggle between upright lion and human figures is depicted	Erkanal, 2000, Res. 7
39	 80	Zincirli		5,90	2,80	Gray Stone	Figurative/Contest		Gaziantep-Islahiye	The scene shows a naked here with hands raised, wearing a bull mask (?), and two lions crossed on their limid legs, with another lion in the background. A dagger is a depirted behind the maked hero. The details of the figures are emphasized with striped hatches.	Luschan, 1943, Taf. 39:a; Amiet, 1980, 85bis: P; Moortgat,1988, No. 776
40		Yenice					Figurative/Contest	II/Er Hanedanlar II	Gaziantep-Islahiye	Early Dynastic II style-No other information	Demir & Ekici, 2019, 504
41	4:9	Tell el Judaidah		2,40		Green Stone	Figurative/Daily(?)	п	Cilicia-Amuq	Two people squatting or seated with another person facing them and an animal figure, with a one-centred circle motif in the centre	Braidwood & Braidwood, 1960, 387-388, Fig. 297:5
42	4:4	Tell el Judaidah		1,40		Stone	Figurative/Animal row	п	Cilicia-Amuq	Two homed and short tailed animals walking in the same direction. An angle motif separates the two animals	Braidwood & Braidwood, 1960, 387-388, Fig. 297:6
43	5: 12	Gre Virike		4,3-3,25	2,6-2,7	Limestone	Geometric	Ш	Middle Euphrates	A motif resembling elongated leaves emerging from an oblique stem on the left, intertwined angles, four of which overlap the upper set of leaves on the right	Ökse, 2006, 554, Res. 1
4	5:9	Kurban Höyük	Sector E			Black Serpantine	Geometric	ш	Middle Euphrates	Irregular lines	Algaze, 1990, Pl.167:B
45	5:2	Gedikli- Karahöyük		2,30	06'0	Stone	Geometric (?)	Ш	Gaziantep-Islahiye	The scene is horizontally divided into three horizontal areas and decorated with horizontal and vertical parallel lines	Dura, 2003, Lev. 163:1
46	5:3	Oylum Höyük	Grave FS. 26	2,20		Frit	Geometric	Ш	Gaziantep-Islahiye	Vertical parallel hatching between three horizontal lines	Özgen,et al, 1997, Abb. 27:1
47	5:4	Gözlükule	Room 79	2,50	1,30	Blue Faience	Geometric	Ш	Cilicia-Amuq	Diagonal dashes between three horizontal lines	Goldman, 1956, Fig. 393:20
48	5:5	Gözlükule		3,20	1,10	Blue Faience	Geometric	Ш	Cilicia-Amuq	Diagonal dashes between three horizontal lines	Goldman, 1956, Fig. 393:21
49	5: 10	Alişar		4,00		Dionite	Geometric /Piedmont	ш-п	Central Anatolia	In the main frieze at the triangles between hatched diagonal bands are filled with dots, while a hatched band borders the secene at the bottom.	von der Osten,1937, Fig. 186
20	5.1	Kültepe	Storeroom of Level 13 Palace			Steatite	Geometric	Ш	Cappadocia	Three rows of intertwined angle motifs	Öztürk, 2019a, s. 48, 65, Fig.2, Seal 1
51	5:6	Troy				Clay	Geometric	ш	Troad	No information	Schliemann, 1881, Nr. 500
52	5:7	Troy				Clay	Geometric	Ш	Troad	No information	Schliemann, 1881, Nr. 501
53	5:8	Troy					Geometric	ш	Troad	No information	Schliemann, 1881, Nr. 500
54	5: 11	Troy		3,70	1,80	Blue Feldspat	Floral/Piedmon	ш	Troad	Piedmont style. The seal face is decorated with ten-leaf rosettes surrounded by circles	Schliemann, 1881, Nr. 503; Schmidt,1902, 303- 8868; Bittel, 1941, Abb.1
55	8: 1	Mezra Höyük	Central Building	1,80	2,00	Bone	Figurative/Agriculture (Daily)	Ш	Middle Euphrates	A ploughing scene with a person seated on a plough drawn by two bulls and another person pulling the bulls, followed by a scopion and a dog (?)	Yalçıklı, 2019.
99	9:9	Titriş Höyük	Late EBA floor	2,80		Clay	Figurative/Animal Hunt (?)	ш-ш	Middle Euphrates	A human (?) figure thrusting a spear into an eagle (Imdigut?)	Algaze, et al, 1995, Fig. 9

57	6:7	Kenan Tepe		2,50	2,3-1,3	Hematite	Figurative/Contest	н	Tigris	Two fighting scenes: one between a short-haired and bearded naked hero with a forehead band holding a pointed is in a combat and an upright lion; the other one between a bearded human wearing a pointed cap and another lion	Bradley Parker, et al, 2002, Şek. 8-A
58	6:5	Tilmen Höyük		2,00		Stone	Figurative/Animal Hunting (?)	Ħ	Gaziantep-Islahiye	Although not very distinct on the seal face, it shows a figure trying to thrust a spear-like object into an animal	Duru, 2003, Lev. 12:2
59	7:3	Oylum Höyük	Grave no. 25	1,80		Ivory (?)	Figurative/Banquet	Ш	Gaziantep-Islahiye	A table covered with food flanked by two people, one of whom plays the lyrelhany; behind, on the left is a tall rectangular pedestal with a spouted vase, a row of birds and a rosette of seven leaves in the lower frieze	Özgen, 1993, Fig. 4c
09	7:4	Oylum Höyük	Grave no. 25	1,80		Ivory (?)	Figurative/Banquet	Ш	Gaziantep-Islahiye	A table covered with food is flanked by two people, one of whom plays the fyre/harp, a bird figure on the table, and a standing figure (dancer?) with arms raised upwards	Özgen, 1993, Fig. 4b
61	7:5	Oylum Höyük	Grave no. 25	1,50		Ivory (?)	Figurative/Banquet	目	Gaziantep-Islahiye	A table covered with food is flanked by two people, one of whom plays the lyresharp, a bird figure on the table, and a standing figure (dancer?) with arms raised upwards	Özgen, 1993, Fig. 4a
62	7:8	Oylum Höyük	Grave no. 25	1,60		Ivory (?)	Figurative/Human and Animal frieze	Ш	Gaziantep-Islahiye	A human figure between two animals on the upper frieze figures; two lons (?) and a scorpion on the lower	Özgen, 1993, Fig. 4d
63	7:9	Oylum Höyük	Grave no. 25	1,7		Ivory (?)	Figurative/Animal and Rosette frieze	Ш	Gaziantep-Islahiye	The scene bordered by a fishbone and a ladder motif depicts an eight-petalled rosette motif in the foreground, followed by a goat and a bird	Özgen, 1993, Fig. 4d
49	6:9	Gözlükule		2.90		Steatite	Figurative/Battle	Ħ	Cilicia-Amuo	The Sim God Shamssh on the right, with his foot resting on mountain, holding a mace and overpowering the enemy god kneeling in front of him. The enemy is being restrained by another god from behind, pulling him back by his hom.	Özvar. et al. 2011. Res. 8
65	6:1	Çatal Höyük	Inside a red-black burnished pithos	3,7		Stone	Figurative/Mythologica	Ш	Cilicia-Amuq	The scene with a iton and a bearded human figure and a bull's head is separated by a tree from a short-skirted, bold figure	Braidwood & Braidwood, 1960, Fig. 327; Frankfort, 1965, Pl. XXXXIXb
99	6:3	Tell Tayinat	Probably storage room			Stone	Figurative/Animal Hunting (?)	Ш	Cilicia-Amuq	In the centre of the scene is the sun between the antiers of a sing, to the left of the stag is a man with a sword (?), and there are three figures next to the stag. The figures are schematic	Welton,et al, 2011,160, Fig. 13:4
67	7:1	Tell el Judaidah		1,90		Stone	Figurative/Banquet	Ħ	Cilicia-Amuq	Two figures wearing homed caps, seated on opposite stools, drink from a large vessel in front of them with staws. There is a standard with a crescent moon near the staws, a tree behind the figure, a bird in front of the deity on the left, and a star above the scene	Braidwood & Braidwood, 1960, Fig. 382:6; Frankfort, 1965, Pl. XXXIXf

	1									
von der Osten, et al, 1933, Kt-126, Bittel, 1941, Abb. 5; Öztürk, 2019b, Kat. No.025	Fig. 6;	2019a, Fig.7; 2019b, Kat.No.	3-43	. 3-42	12	. 4,		. VIII,	VIII	. VI,
1, et al 1, 1941 2019b	9a, F 10.26	2019a, :019b, K	36, Fig	36, Fig	Res.	Abb. Vo. 900	Abb. 3	, Lev	, Lev	Lev
r Oster Bitte türk,	, 2019a, Kat. No.20		üç, 198	uç, 198	, 1957	941, 910, N	1941,	, 2019	, 2019	,2019,
von der Osten, et al, 1933, Kt-126, Bittel, 1941, Abb. 5; Öztürk, 2019b, Kat. No.025	Öztürk, 2019a, 1 2019b, Kat. No.26	Öztürk, Öztürk, 027	T. Özgüç, 1986, Fig. 3-43	T. Özgüç, 1986, Fig. 3-42	Balkan, 1957, Res. 12	Bittel, 1941, Abb. Ward, 1910, No. 900	Bittel, 1941, Abb. 3	Okatan, 2019, Lev. VIII, Res.14	Okatan, 2019, Lev. VIII, Res.15	Okatan,2019, Lev. Res. 8
Two naked figures fighting with an upside-down lion	Utu/Shamash seated on a stool and a worshipper brought before him accompanied by the guading deity	Utu/Shamssh standing on a mountain and a worshipper accompanied by a guiding defity, a potton wessel between the worshipper and the guiding deity, and a two-line inscription at the end of the scene	The guarding deity holding a plant in one hand leading the worshipper holding an object to the chief god sitting on a stool. A crescent moon motif on the offering table	The derty is seated on his throne and the guading derty brings the workinger. The derty's left hand is raised and the offering thole in front of hum has a star motif on it	The seated, homed derity on his througe, wearing a long robe, a bottle on the offering table, an eight-amed star above the scene. A five-line inscription: "Abu-ahi, God Adads his god. He is the priest of the Assyrian city god Adads."	Two figures sitting on opposite stools drukking liquid with straws from a spherical vessel. On the other side, a human spears a four-legged reptile. Various filling motifs on the rest of the scene	Two figures holding short swords and axes; the one on the left holds a spoured pricher in his right hand. Of the three aminals, only the gost can be identified. The figures are schematic	Two figures in the centre near the table. The object on the table is interpreted as a ziggurat, the table as an altar, and the figure behind the figures as a door	A person sitting on a stool to the right of a tablein the centre, an animal to the left, an altar in the centre, and the objects under and above the table interpreted as potter's wheel	Two animals -one is horned- on both side of a human. A reascent with the tips pointing upwards is on the right side of the human. Traces of burgundy paint on the surface
							E	Western	Western	Western
cia	cia	cia	cia	cia	cia	cia	Anatoli			W
Cappadocia	Cappadocia	Cappadocia	Cappadocia	Cappadocia	Cappadocia	Cappadocia	Central Anatolia	Inland Anatolia	Inland Anatolia	Inland Anatolia
Ü	ů ř	Ur Co	Ű	ర	Ö	ర	ŏ	II.	P P	P II
ost			ost d	ost d	ost d					
III/Post Akkad	III/III. Dönemi	III/III. Dönemi	III/Post Akkad	III/Post Akkad	III/Post Akkad	Ħ	ш-п	Ħ	目	目
Figurative/Contest	Figurative/Worship	Figurative/Worship	Figurative/Worship	Figurative/Worship	Figurative/Worship	Figurative/Banquet	Figurative/Animal Hunt	Figurative/Banquet (?)	Figurative/Banquet (?)	Figurative/Daily (?)
azuli	azuli	azuli	azuli	azuli	azuli	tine		0		40
Lapis lazuli	Lapis lazuli	Lapis lazuli	Lapis lazuli	Lapis lazuli	Lapis lazuli	Serpantine		Faience	Faience	Faience
0,85	6,0	1	1,2	1,1	1,3	1,9		06'0	1,00	1,2
2,50	1,7	2,1	1,9	1,9	2,4	3,8		1,80	1,90	2,4
							98			
pest	01	pass	pesi	pesi		pest	Central building	Central building	l building	Central building
Purchased	Grave 01	Purchased	Purchased	Purchased		Purchased	Centra	Centra	Central	Centra
Kültepe	Kültepe	Kültepe	Kültepe	Kültepe	Kültepe	Kültepe	Alaca Höyük	Seyitômer	Seyitômer	Seyitômer
60 60	6: 12	6: 13	6: 10	6: 14	6:11	7: 2	6: 4	7:6	7:7	8: 2
								76		

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ev. V.	w. VI	w. VI	w. VI	v. VI	v. VII	v. VII	Nr. 50
19, L	19, Le	19, Le	19, Le	19, Le	19, Le	19, Le	1881,
m, 20	in, 20.	Okatan, 2019, Lev. VII, Res.11	in, 20.	in, 200	Okatan, 2019, Lev. VIII, Res.16	m, 20i 7	Schliemann, 1881, Nr. 502
Okatan Res. 9	Okatan Res.10	Okatan Res.11	Okatan Res.12	Okatan, Res.13	Okatan Res.16	Okatan Res.17	Schlie
Western Homed animal on both sides of a human. Remains of Okatan. 2019, Lev. VI, green and red pant are visible on the surface Res. 9	Homed animals on both side of a human, and a crescent on the upper left. Remains of burgandy paint on the Okatan, 2019, Lev. VII, surface upper left. Res. 10	in figure in the centre with homed animals on es. Remains of green and burgundy paint on the	Western A human flanked by horned animals. Remains of red Okatan, 2019, Lev. VII. pant on the surface	A human flanked by horned animals and two crescents Okatan, 2019, Lev. VII, above the head. Remanus of red pant on the surface Res. 13	A human figure in the centre with homed animals on both sides. Remains of burgundy paint on the surface	A human figure in the centre with homed animals on Okatan, 2019, Lev. VIII, both sides	The seal depicts a human figure and a dagger stuck in the ground. Schliemann states that this seal has an inscription bearing the name of the owner
Нот			A hu paint	A hu			The s the g inscri
Western	Western	Western	Western	Western	Western	Western	
Inland Anatolia	Inland Anatolia	Inland Anatolia	Inland Anatolia	Inland Anatolia	Inland Anatolia	Inland Anatolia	Troad
Ħ	Ш	Ш	Ш	目	Ħ	Ħ	Ħ
Figurative/Daily (?)	Figurative/Daily (?)	Figurative/Daily (?)	Figurative/Daily (?)	Figurative/Daily (?)	Figurative/Daily (?)	Figurative/Daily (?)	Figurative
Faience	Faience	Faience	Faience	Faience	Faience	Faience	Blue Feldspat Figurative
1,3	1,15	1,35	1,3	1,3	1,40	1,30	
2,45	2,2	2,3	2,65	2,3	2,35	2,25	
Central building	Central building	Central building	Central building	Central building	Central building	Central building	
Seyitömer	Seyitömer	Seyitömer	Seyitömer	Seyitömer	Seyitömer	Seyitömer	Troy
8:3	8: 4	8: 5	9:8	8:7	8:8	8:9	6:2
62	80	81	82	83	84	85	98

Table	e 2: Cats	Table 2: Catalogue of Seal Impressions	CHOICE							
Cat. No.	Fig. No	Site	Context	Dimensions	Decoration/Style	EBA Period	Region	Imp. On	Description	Citation
87	9: 1	Demircihöyük	Central courtyard storage pit		Geometric	I	Inland Western Anatolia	Bulla	Three parallel rows of small squares forming a band	Obladen-Kauder, 1996, Taf. 136: 5
88	9:2	Hassek Höyük	Large ash pit	3.6x8.3x0.9 cm. h. of imp. 2.7 cm	Figurative	I	Middle Euphrates	Clay plaque	Agricultural/daily scene. A stylised human holding a cattle	Behm-Blancke, et al, 1981, Taf. 11: 2
68	9:3	Hassek Höyük	Large ash pit	H. of imp.2.8 cm	Figurative	ы	Middle Euphrates	Impression on reserve-slipped pot sherd	Similar scene to the one above	Behm-Blancke, et al, 1981, Taf. 11: 3
06	9:4	Hassek Höyük	Large ash pit	H. of imp. 2.8 cm	Figurative	I	Middle Euphrates	Impression on pot sherd	Similar scene to the one above	Behm-Blancke, et al, 1981, Taf. 11: 4a-b
91	9:5	Hassek Höyük	Mound	H. of imp. 2.9 cm	Figurative/Agricultural/daily	1	Middle Euphrates	Impression on reserve-slipped pot sherd	A stylised human flanked by homed animals	Behm-Blancke, et al, 1981, Taf. 12: 1
92	9: 6	Hassek Höyük	Large ash pit	H. of imp. 2.8 cm		I	Middle Euphrates		A similar scene to the one above	Behm-Blancke, et al, 1981, Taf. 11: 4a-b
93	10:	Han Ibrahim Sah	From the room			п	Upper Euphrates	On a pithos sherd	Lozenge	Ertem, 1982, Cat.No. 344, Lev. 31
94	10:	Han İbrahim Şah	From the room		Figurative	п	Upper Euphrates	On a pithos sherd	Probably an eagle and mixed creatures	Ertem, 1982, Cat.No. 294, Lev. 29
95	33	Han Ibrahim Şah	From the room		Figurative	п	Upper Euphrates	On a pithos sherd	Stylised deers (?)	Ertem, 1982, Cat.No. 344, Lev. 31
96		Lidar Höyük			No information	目	Middle Euphrates	On the neck of a	Defined only as ED II Mesillim style	Hauptman, 1981,198
97	11:	Gre Virike		2.1x7.5	Geometric	Ħ	Middle Euphrates	On jar body fragment	Simple geometric pattern with a wide zigzag line and small horizontal lines or circles within the triangular areas formed by it	Ökse, 2006, 556, Res.2
86	11:	Gre Virike		1.4x4.7	Geometric	Ħ	Middle Euphrates	On jar body fragment	Geometric design with chevrons, vertical and horizontal lines, arcs, triangles and curves	Ökse, 2006, 556, Res. 3
66	12: 5	Mezraa Höyük		Height 6.1 cm, lenght 4.6 cm, thickness 1.8 cm.	Geometric and Floral	Ħ	Middle Euphrates	Bulla	Two impressions of the same seal. Rosette with 6 leaves and horizontal lines framed by row of trangles	Yalçıklı, 2019, Res. 3.
100		Kazane Höyük	Storage room		Geometric	Ħ	Harran Plain	Door sealing	Wavy lines	Creekmore, 2008, Fig.17.20: 386
101	121	Gözlükule	Room 30		Geometric	Ħ	Cilicia-Amuq	Stopper	S-shaped intertwined spirals within a zigzag-shaped border	Goldman, 1956, Fig. 398:3
102	12: 2	Gözlükule	Room 30		Geometric	Ħ	Cilicia-Amuq	Stopper	Three parallel lines	Goldman, 1956, Fig. 398:4
	12: 3	Gözlükule	Room 30		Geometric	н	Cilicia-Amuq	Stopper	Parallel lines	Goldman, 1956, Fig. 398:6

103	Gözlükule	Room 30	Geometric	Ħ	Cilicia-Amuq	Stopper	Impressions from three different seals. One consists of a panel of concentric circles and vertical lines	Goldman, 1956, Fig. 398:7
104	Gözlükule	Room 39	Geometric	Ħ	Cilicia-Amuq	Stopper	Five cylinder seal impressions. S-shaped motifs, spirals and zigzags.	Goldman, 1956, Fig. 398:2
105	11: Gözlükule		Geometric	Ħ	Cilicia-Amuq	On jar fragment	Schematic and angular carving of a human being and two homed animals, facing the altar. Filling motifs between the legs of the animals. The animal on the left has hom-like projections on one leg	Goldman, 1956, Fig. 397:5
106	Gözlükule		Geometric	Ħ	Cilicia-Amuq	On pithos fragment	Partly presevred. Triangles and lines.	Goldman, 1956, Fig. 397:10
107	11: 7 Gözlükule		Geometric	目	Cilicia-Amuq	On jar neck	The bevelled lines forming tree branches	Goldman, 1956, Fig. 397:11
108	11: 5 Gözlükule	Room 36	Geometric	目	Cilicia-Amuq	On bowl fragment	Two impressions of the same seal. Symmetrical zigzags and lozenge.	Goldman, 1956, Fig. 397:7-8
109	11: Gözlüküle	Room 45	Geometric	Ħ	Cilicia-Amuq	On bowl fragment	Two impressions of the same cylinder and one impression of stamp seal. Rowns of zigzags on cylinder seal impression; cross on stamp seal impression.	Goldman, 1956, Fig. 397:6
110	13: Yumuktepe		Figurative	田	Cilicia-Amuq	On the pot sherd	Impression of stamp and cylinder seal. Two creatures facing each other with filling motifs in between on cylinder seal impression; utertwined angles on stamp seal impression.	Garstang, 1953, Fig. 150.17
=	11: 6 Trov		Geometric	Ħ	Troad	Pottery	Stamp and cylinder seal impressions. The impression of the cylinder seal consists of two separate bands of linear decoration; the impression of the stamp seal consists of a cross moif with an intertwined angle between the arms.	Schliemam, 1881, Nr. 482-483
112		Room 30	Floral	Ħ	Cilicia-Amuq	Stopper	Flowers with four petals	Goldman, 1956, Fig. 398:1
113	14: imamoğlu 1 Höyük	Storage room	Figurative	Ħ	Upper Euphrates	Bulla	A figure raising its three fingered hands with an engagerated planlin; a human figure moving towards him and a snake between them. A bull-man, and another human figure with hands in praying gesture moving to the right with a fish between them. One more snake at the end of the scene.	Uzmogiu, 198, Res. 18- 19
114	Îmamoğlu Höyük	Storage room	Figurative	ш	Upper Euphrates	Bulla	The same depiction with the former	Uzunoğlu, 198, Res. 18- 19
115	Lidar Höyük		Figurative/Contest	Ħ	Middle Euphrates	On pithos fragment	Animal contest scene and male figures making a pithos. Early Dynastic style.	Mellink, 1985, s. 115

116	Lidar Höyük			Figurative/Contest	Ш	Middle Euphrates	On pithos fragment	Animal contest scene and male figures making a pithos. Early Dynastic style.	Mellink, 1985, s. 115
117	Lidar Höyük			Figurative/Contest	H	Middle Euphrates	On pithos fragment	Contest scene of upright lions	Mellink, 1985, s. 115
1 118 11	13: Gre Virike	Grave	2.4x8.1	Figurative	Ш	Middle Euphrates	On the shoulder of burial pithos	A schematic human and two homed animals, probably facing the altar. Filling motif between the legs of the animal figures. The animal on the left has a homlike projections on one leg.	Ökse, 2006, 556. Res. 4
119 2	13: Gre Virike		1.6x8.1	Figurative	Щ	Middle Euphrates	On a vertical handle	A schematic human with raised arms, holding a bundle of grass or a branch throug the animals on either side. On the right, a second human	Ökse, 2006, 556, Res. 5
120	Kazane Hövük	k Storage room		Figurative/Contest	Ħ	Harran Plain	Bulla	Contest scene of upright lions	Creekmore, 2008, Fig. 6.19: 574
121	Kazane Höyük			Figurative and geometric	目	Harran Plain		No information	Creekmore, 2008 Fig.7.20: 384
122	Kazane Höyük	k Storage room		Figurative and geometric	Ш	Harran Plain	Bulla	No information	Creekmore, 2008, Fig.17.20: 381
123	Kazane Höyük	k Storage room		Figurative and geometric	Ш	Harran Plain	Door sealing	No information	Creekmore, 2008, Fig.17.20: 396
124	Kazane Höyük	k Storage room		Figurative and geometric	Ħ	Harran Plain	Door sealing	No information	Creekmore, 2008, Fig.17.20: 395
125	Kazane Höyük	k Storage room		Figurative and geometric	Ш	Harran Plain	Label	No information	Creekmore, 2008, Fig.17.20: 385
126	Kazane Höyük	k Storage room		Figurative	ш	Harran Plain	Label	Procession of upright lions moving in the same direction in two friezes	Creekmore, 2008, Fig.7.20: 388
127	Kazane Höyük	k Storage room		Figurative	ш	Harran Plain	Bulla	Humans, a tree and two upright lions	Creekmore, 2008, Fig.7.20: 387
128	Kazane Höyük			Figurative/Banquet or presentation scene (?)	Ш	Harran Plain		Row of dots (humans?) on the upper frieze; humans sitting beside or standing standing on either side of a vessel	Creekmore, 2008, Fig.7.20: 382
129	Kazane Höyük			Figurative/Banquet or presentation scene (?)	Ш	Harran Plain		Row of dots (humans?) on the upper frieze; humans sitting beside or standing standing on either side of a vessel	Creekmore, 2008, Fig.17.20: 397
130	Kazane Höyük	k Storage room		Figurative/Banquet or presentation scene (?)	Ħ	Harran Plain	Bulla	Row of dots (humans?) on the upper frieze; humans sitting beside or standing standing on either side of a vessel	Creekmore, 2008, Fig.17.20: 394
131	Kazane Höyük			Figurative	H	Harran Plain		Two friezes. Angle-filled crosses separate the friezes.	Creekmore, 2008, 272
132	Kazane Höyük	k Storage room		Figurative	H	Harran Plain		No information	Creekmore, 2008, 272
133	Gözlükule	Room 30		Figurative	Ħ	Cilicia-Amuq	Stopper	A procession of humans holding animals and a ladder on the right of the scene	Goldman, 1956, Fig. 398:5
134 4	13: 4 Gözlükule	Room 25		Figurative	目	Cilicia-Amuq	On jar	A procession of three or more men moving left	Goldman, 1956, Fig. 397:12

									Fantastic animals (?) on the right and	
	13:								scattered motifs on the left separated by a Goldman, 1956, Fig.	Goldman, 1956, Fig.
135	3	Gözlükule	Room 56		Figurative	Ħ	Cilicia-Amuq	On jar fragment	ladder	397:9
	14:		Probably storage						Partly preserved. Two animals standing Welton, et al, 2011, Fig.	Welton, et al, 2011, Fig.
136	33	Tell Tayinat	room		Figurative	H	Cilicia-Amuq Door sealing	Door sealing	back to back	13:5
	14:		Probably storage						Partly preserved. The forelegs of an	Welton, et al, 2011, Fig.
137	4	Tell Tayinat	room		Figurative	Ħ	Cilicia-Amuq Door sealing	Door sealing	animal	13:6
	14:									
138	9	Yassıhöyük	Palace		Figurative	Ħ	Central Anatolia Door sealing	Door sealing	No information	M. Omura, 2016, Fig. 25
									Impressions by the same cylinder seal	
	_								impressed on all four sides. A seated	
	_								deity and a worshipper accompanied by a	
	_								guading deity. Inscription: Ur-dun	
	14:								DUB.SAR DUMU Nam-ha-ni Su/Ba-x	Öztürk, 2019b, Cat. No.
139	139 5	Kültepe	Pit	3x2.6x0.8 cm	3x2.6x0.8 cm Figurative/worship	ш	Cappadocia	Label		028

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