

Hittite Glyptic: A Reassessment in the Light of Recent Discoveries

Suzanne HERBORDT

Abstract

Since the 1987 publication of the monographs both of R.M. Boehmer and H.G. Güterbock (“Glyptik aus dem Stadtgebiet von Ḫattuša”) and C. Mora (“La glittica anatolica del II millennio A.C.”) on the subject of the classification and dating of Hittite glyptic, an immense amount of new seal material has come to light. In particular the ca. 3400 sealed bullae from the Nişantepe archive in Ḫattuša, but also the seal material from the upper city of Ḫattuša, from Kuşaklı and Kaman-Kalehöyük, have been a welcome addition to Hittite glyptic studies. The following paper presents selected results of the author’s long-term work on the non-royal seal material from Nişantepe with respect to the structuring and dating of Hittite glyptic. Of particular significance is a group of early Empire period seal impressions of Hittite officials and the relatively large number of signet impressions that can be dated to the later Empire period. Furthermore, on the basis of sealings from Maşat, the Upper City of Ḫattuša and Kaman-Kalehöyük the sequence of the pre-Empire period seals of the 15th–14th centuries is re-examined.

I. Introduction

The structuring and dating of Hittite glyptic was last undertaken in two independent studies which appeared in monograph form in 1987, almost 20 years ago. The first survey entitled “Glyptik aus dem Stadtgebiet von Boğazköy” was a cooperative effort on the part of the archaeologist R.M. Boehmer and the Hittitologist H.G. Güterbock who used the seal material from the Lower City of Ḫattuša as a basis for their study (Boehmer/Güterbock 1987). The second work “La Glittica Anatolica del II millennio A.C.: Classificazione tipologica” by the hittitologist C. Mora took a different starting point by dealing with seal material from outside the Hittite capital (Mora 1987; see also Mora 1990). Since the mid eighties there have been a number of new discoveries, in particular of sealed bullae from

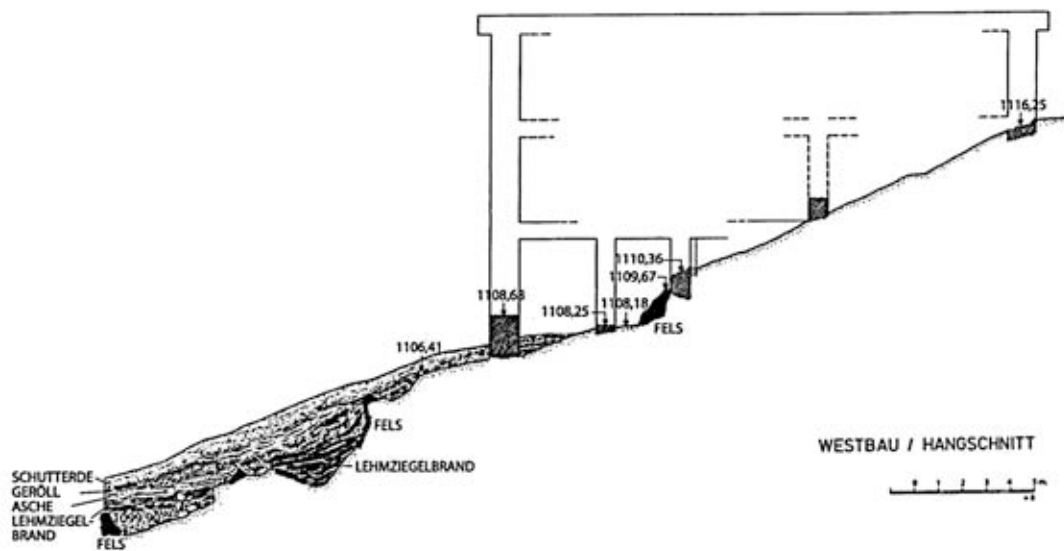


Fig. 1 Section drawing of “Westbau” and slope trench (after Neve 1992, 312 fig. 6).

valuable archaeological contexts. I refer here, for example, to the sealed bullae from the North Terrace Temple and “Building C” in Kuşaklı (Müller-Karpe 1995, 16 p. Abb. 12–13; Müller-Karpe 1997, 108, 110 fig. 8; Müller-Karpe 1998, 102–106 with figs. 7–9; Müller-Karpe 1999, 62 p. fig. 6a–b; Müller-Karpe 2001, 227 p. fig. 3), from Kaman-Kalehöyük (Yoshida 1999), the temples of the Upper City of Hattuša (A. Dinçol 1993; A. Dinçol 2001; B. Dinçol 1998a; B. Dinçol 1998b; B. Dinçol 2001; Dinçol/Dinçol 2003) and the Nişantepe-Archive also in the Hittite capital (Herbordt 1998; Herbordt 2002; Herbordt 2005). An important addition are also the sealed tablets from Emar, the administrative center of the Hittite province Aštata in Northern Syria, recently published by D. Beyer (Beyer 2001). Today I would like to present the results of my examination of the Nişantepe bullae, in particular of the nonroyal seals, and to discuss this material within the broader context of Hittite glyptic in general. In the interest of the theme of this workshop I will be looking at what contributions could be made with respect to the structuring and dating of Hittite glyptic and what problems remain unsolved.

II. Significance of the Seal Material from the Nişantepe Complex for Hittite Glyptic Studies

In the 1990 and 1991 excavation seasons at Boğazköy the remains of a building thoroughly destroyed by fire and located on the steep western slope of Nişantepe was unearthed (see Neve 1991, 322–335; Neve 1992, 307–316; Neve 1996, 52–58 figs. 143–166, 168–169). This building, now known as the “Westbau”, contained in its basement rooms and its mudbrick collapse that was washed downslope ca. 3400 sealed bullae and 28 royal land grant documents (fig. 1–2). The plan of the distribution of the tablets and bullae in the basement rooms 1–3 of the “Westbau” (Herbordt 2005, folding plan), which we will discuss later in the paper, indicates that they were originally kept in an upper storey of the building.

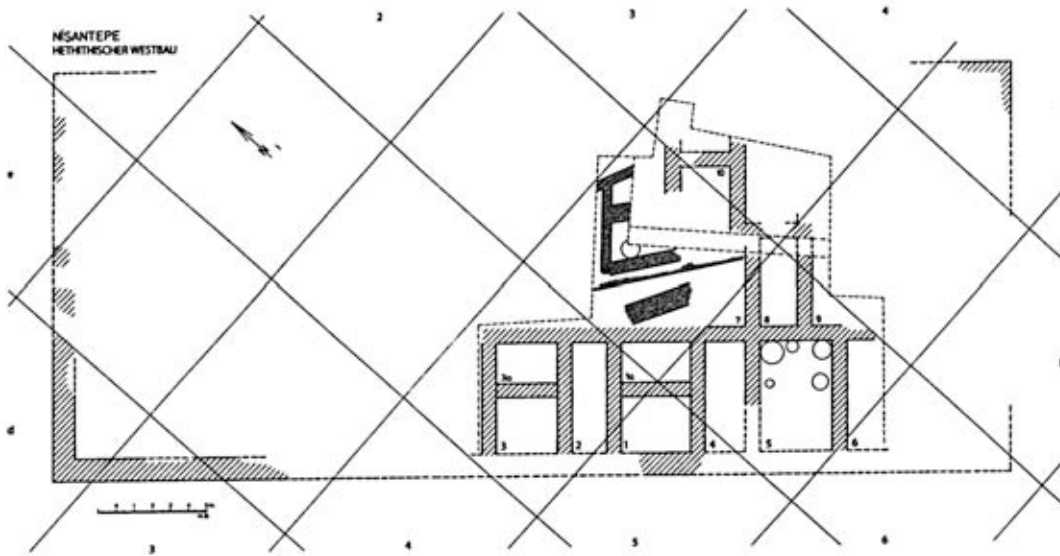
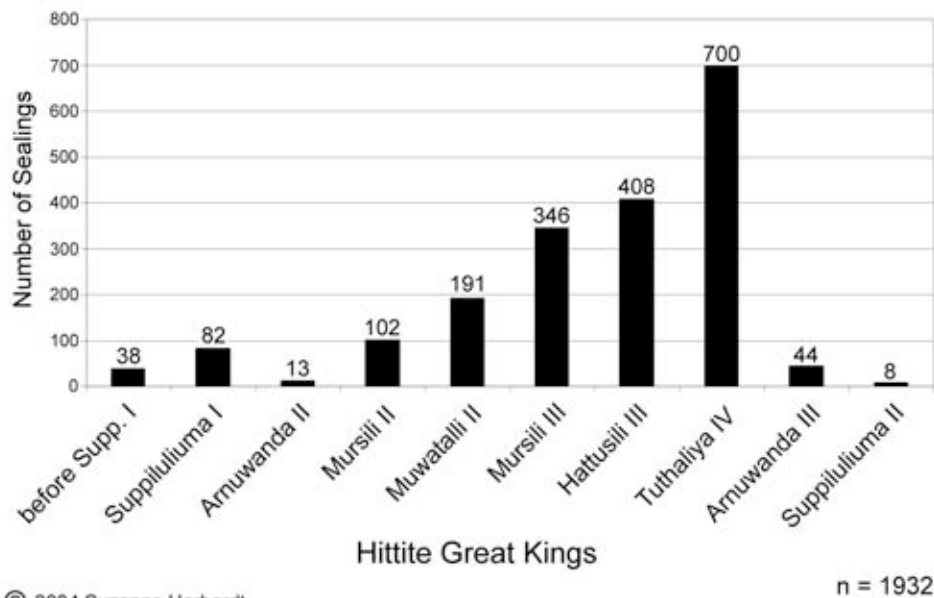


Fig. 2 Schematic plan of the “Westbau” (after Neve 1992, 310 fig. 3).

The significance of the seal material from the Nişantepe complex for Hittite glyptic studies lies first in the large number of sealed bullae retrieved, which exceeds all other find spots thus far, and second in their archaeological context as inventory of one particular building. A comparable but smaller group of bullae and land grants was excavated in the late 1930’s in Building D on Büyükkale and published by H.G. Güterbock in two volumes entitled “Siegel aus Boğazköy I/II” (Güterbock 1940; Güterbock 1942). Smaller collections of bullae, such as those from Tarsus (Gelb 1956, 242–254 pl. 401–408; Goldman 1956, 242–244) and Korucutepe (Güterbock 1973; Güterbock 1980) in the Keban Area of the Upper Euphrates (İşuwa), unfortunately come from poor archaeological contexts. Finally, the sealed tablets of the 14th–13th centuries from Ugarit (Schaeffer 1956, 1–66; Laroche 1956, 97–160) must also be mentioned as an important source of firmly dated material.

A chronological framework for the seal corpus of Nişantepe is provided by the royal inscriptions both on the land grants and the digraphic seals of Hittite kings and queens on the bullae. A look at the distribution of royal seals both in the graph (fig. 3) and table (fig. 4) shows, first of all, that a long period of time is represented: from the royal seal impressions on land grants of the 15th century to those of Šuppiluliuma II at the end of the Hittite Empire. The graph (fig. 3) shows, however, that the peak of administrative activity for the archive is clearly represented by the reign of Tuthaliya IV, whose sealings (Tuthaliya IV + “Labarna”-seals) comprise 33% of the royal seal material¹. What can also be clearly seen in

¹ “Labarna”-seals are an administrative seal type bearing a hieroglyphic inscription that gives only the royal titles “Great King” (MAGNUS.REX = L. 18) and “Labarna” (IUDEX.LA = L. 277) but not the name of the king. For examples see Güterbock 1940, 55 p. no. 93-103; and Beran 1967, 78 no. 234 pp. Because the title “Labarna” (IUDEX.LA) is found only in the seal and stone inscriptions of the last two generations of Hittite kings, Tuthaliya IV to Šuppiluliuma II, we have a firm basis for dating the “Labarna”-seals (see Hawkins 1995, 108ff.; Otten 1967, 229 pp.). In the Nişantepe archive they are well-represented with a total of 248 (fig. 3 and 4). Because the last two Hittite kings, Arnuwanda III and Šuppiluliuma II, are so poorly represented in the archive with just 44 and 8 sealings respectively (fig. 4), and the peak of administrative activity lies in the reign of Tuthaliya IV (452 sealings), I have counted the “Labarna”-sealings together with Tuthaliya IV in the graph (fig. 3).



© 2004 Suzanne Herbordt

n = 1932

Fig. 3 Graph showing the distribution of royal seals from Nişantepe.

Bullae and Land Grants of Hittite Kings and Queens		
	Number	Percentage
Land Grants	28	1,3%
before Šuppiluliuma I	10	0,5%
Šuppiluliuma I	82	3,9%
Arnuwanda II	13	0,6%
Muršili II	102	4,8%
Muwatali II	191	9,0%
Muršili II or III + Tanuḫepa	79	3,7%
Tanuḫepa	1	0,0%
Muršili III	346	16,3%
Hattušili III	408	19,2%
Tuthaliya IV	452	21,3%
Labarna	248	11,7%
Kuruntiya	2	0,1%
Arnuwanda III	44	2,1%
Šuppiluliuma II	8	0,4%
undetermined	109	5,1%
Total:	2123	100%

Fig. 4 Table showing the distribution of royal seals from Nişantepe.

the graph is that most of the seal material dates to the 13th century with the other large percentages falling into the reigns of Hattušili III (19.2%), Muršili III (16.3%), and Muwatalli II (9%). Surprisingly, the two last kings of the Hittite Empire are poorly represented with only 2.1% for Arnuwanda III and a mere 0.4% for Šuppilulima II. Taken together, then, the sealings of 13th century kings amount to 80% of the royal sealings. (For more on the royal seal impressions see the article of D. Bawanypeck elsewhere in this volume).

The next step is to show how the nonroyal seal impressions figure in the total number of seal impressions in the archive. What is the proportion of nonroyal to royal sealings? The

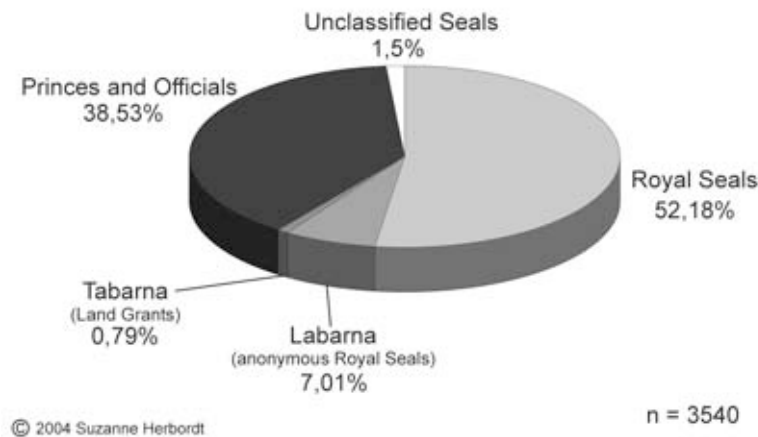


Fig. 5 Pie chart showing the distribution of all seal types included in the Nişantepe corpus (with updated percentages for royal and “labarna” sealings).

pie chart (fig. 5) shows that the 1364 non-royal seal impressions comprise 38.6% of the Nişantepe archive as opposed to 60% royal seal material (i.e., the royal sealings including “Labarna”-sealings and sealed land grants). The resulting ratio of nonroyal sealings to royal sealings is ca. 2:3.

The majority of the clay bullae are of the cone or drop-shaped type which were formed around a knot and hung on a string emerging from the top of the cone. These are the type of sealings that were originally hung on written documents, in this case most likely wooden writing boards to which Hittite written sources make frequent reference (for references and discussion see Symington 1991). It is thus that we speak of an archive in this context.

III. Selected Results with Respect to Structuring and Dating



Fig. 6
“Old Hittite” seal impression
from the Nişantepe archive
(scale 2:1; Bo 90/231 = Herbordt
2005, Kat. 259).

Generally speaking it can be said that the distribution of the nonroyal sealings over time reflects that of the royal sealings, that is, they can be dated to the Empire Period beginning with the reign of Šuppiluliuma I. Not represented among the nonroyal bullae of Nişantepe – with just one exception – is the period of the royal land grants. The impression of the single older seal (fig. 6) can be classified as “Old Hittite” (“althethitisch”) following the terminology used by R.M. Boehmer. A brief summary of Boehmer’s classification of the Hittite glyptic material is useful here (see Boehmer/Güterbock 1987, 33 pp.). On the basis of the stratigraphy of the lower city of Ḫattuša he distinguishes an “Old Hittite” period from about 1650 B.C. (middle chronology) to 1400 B.C. (“Unterstadt 3”) and a “New Kingdom” from the beginning of the 14th century to the fall of the Hittite Empire around 1200 B.C.

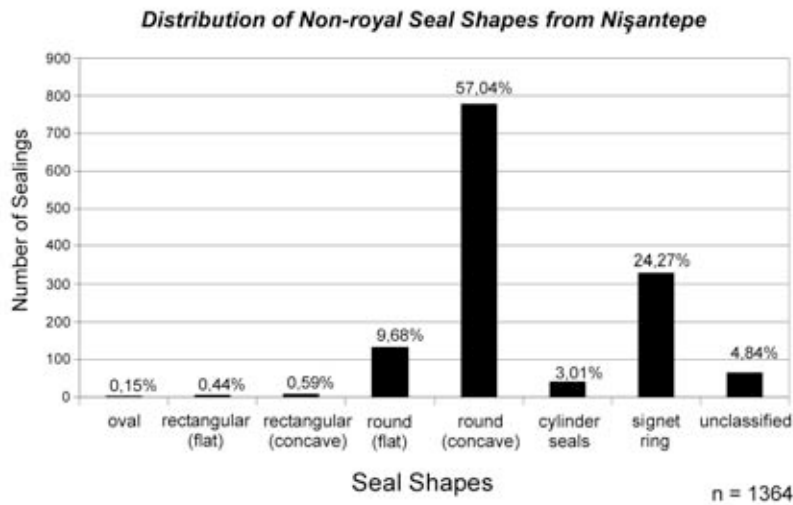


Fig. 7 Graph showing the distribution of different types of nonroyal seal impressions in the Nişantepe corpus (after Herbordt 2005, fig. 19).

Within these two periods he distinguishes earlier and later seal types so that there are roughly four subdivisions into which Hittite glyptic has been classified. Returning now to our seal impression (fig. 6), it is a flat impression and has the guilloche bands characteristic of the older Hittite material encircling a central circular field bearing a hieroglyphic inscription with the name and profession of the seal owner, in this case the scribe “Muwa”. Common to all seals of the “Old Hittite” type is also the inclusion of the Ankh sign (for “life” = L. 369) and the triangle(s) (meaning “good” in hieroglyphic writing = L. 370).

The range of Hittite Empire seal shapes and types is in fact very different. Looking at the graph showing the different types of seal impressions in the Nişantepe corpus (fig. 7), we see that the majority (57.6%) is not round and flat but round and concave. These can generally be attributed to the most common seal type of the Empire Period, the biconvex seal. But, whereas the biconvex seal is a well-known “Leitfossil” of the Empire period, the fact that the signet ring was the second most frequently used seal type in the Nişantepe archive comprising 24% of the nonroyal sealings came as a complete surprise. Other seal types attested are round flat impressions with 9.7% (we will come back to these later) and cylinder seal impressions, not surprisingly, with a mere 3.0%.

I would like to take a closer look at the signet ring impressions (fig. 8), because they have been rare at other Hittite sites. One of the few actual examples from Anatolia apart from Boğazköy is the gold signet found in the vicinity of Sivas (see Ökse et al. 1992). Most signet impressions have been found in Northern Syria where the signet ring of this particular type probably also originated (see Boehmer 1982, 41; Herbordt 2005, chapter IV 1.2). The inscriptions and figured scenes run the length of the ring so that it must be rolled slightly to obtain the full representation. Signet impressions are frequent on 13th century tablets from Emar (Beyer 2001, 112 pp.) and are well-attested in Ugarit, as for example those of prince Taki-Šarruma (Schaeffer 1956, 41 fig. 54–55; 42 fig. 56). Notably, Taki-Šarruma is also well-represented in the Nişantepe corpus with a variety of seals other than signets.

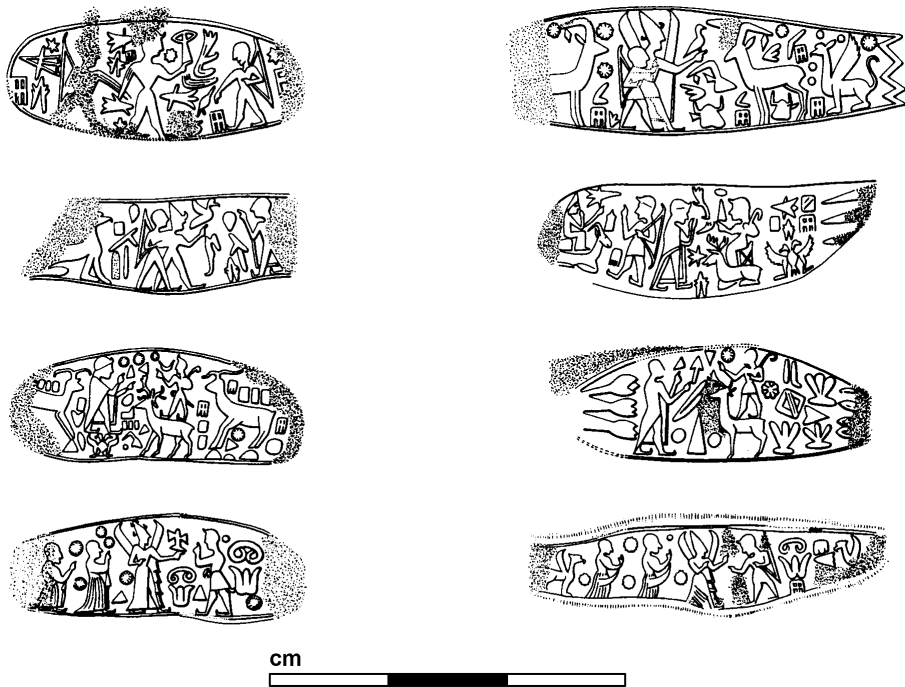


Fig. 8 Signet impressions from Nişantepe (after Herbordt 2005, fig. 42).

Looking at a sample of Nişantepe signet impressions (fig. 8) we are struck by the variety of figured scenes that the stamp seals by comparison lack. All fall into the category of “ritual scenes”, in which a “worshipper” or a lesser tutelary deity is shown in a gesture of adoration before a greater deity. These are the kinds of scenes that also occur on the so-called Syro-Hittite cylinders,² but it is noteworthy that many seals contain elements found only in the art of the Hittite capital such as the “scenes of embrace” most commonly referred to as “Umarmungsszenen” (fig. 8, top row right and 2nd row left) and scenes with the winged deity Šauška followed by Ninatta and Kulitta (fig. 8, fourth row left and right) known from the relief sculpture of Yazılıkaya. It appears that signet rings came into use in the later Empire Period under the influence of the Hittite provinces in North Syria (see Herbordt 2005, chapter IV 1.2). An important result of my study with respect to the professions of seal owners was that the signets were primarily used by scribes.

Perhaps the most significant contribution of the Nişantepe seal material with respect to the structuring and dating of Hittite glyptic lies in the identification of a group of early Empire Period seal impressions dating to the reign of Šuppiluliuma I (see also Herbordt 1998, 312 p.; Herbordt 2005, chapter IV 2.1.1). Until now no real differentiation of nonroyal seals within the Empire Period on the basis of formal criteria had been possible. I was able to isolate this particular group by means of the context in which they were found within the basement rooms of the “Westbau” (see Herbordt 2005, chapter II 2.1).

² On the term “Syro-Hittite” see Beyer 2001, 34.



Fig. 9 Seal impressions of early empire period officials from Nišantepe (after Herbordt 2005, fig. 26).

The plan showing the distribution of the sealed bullae within the fill of the basement rooms 1-3 shows distinct clustering according to particular Hittite great kings and queens (see Herbordt 2005, folding plan). I would like to draw attention here only to the group in question with respect to the early Empire Period. In the southeast corner of room 3 there is a particularly dense concentration of 144 bullae of king Šuppiluliuma I and a group of officials. Unlike the other bullae that were found scattered in the fill, the sealings of this group were found in a densely packed conglomerate that had been sealed under part of the collapsed south wall of room 3. Perhaps they had been part of the contents of a single container such as a box that fell *en bloc* from the upper storey. The contents differ from the other groups found in rooms 1-3 in that only seals of the early Empire Period kings Šuppiluliuma I (63), Arnuwanda II (6), and Muṣṣili II (5) are included. They are accompanied by sealed bullae of certain officials that also do not occur elsewhere in the three rooms (see Herbordt 2005, chapter II 2.1).

The seals of seven of the officials, primarily scribes, are illustrated in fig. 9. They differ from the later Empire Period sealings, examples of which are shown in fig. 10. They can be distinguished by their small size, their flat seal surfaces, and a relatively small central field with hieroglyphic inscription in proportion to the overall seal size. Note on the later Empire Period seals that the central field with hieroglyphic inscription predominates. Another earlier feature is the inclusion of the cuneiform sign “TI” (meaning life) on the inner field of the seal of the scribe Ḫalparuntiya (fig. 9, top left) which otherwise does not occur on the seals of later Empire Period officials. Because the seals of this group can be distinguished from those of the biconvex type predominant elsewhere in the archive, I conclude that the biconvex seal type must have been introduced after Šuppiluliuma I and Muṣṣili II thus confirming Güterbock’s 13th century date for the biconvex seals and correcting Ron Gorny’s date which spans the entire LB II period (i.e., 1400–1200 B.C.) (see Boehmer/Güterbock 1987, 61; Gorny 1993, 187 and 190).



Fig. 10 Seal impressions of later empire period officials from Nişantepe (from top left after Herbordt 2005, Kat. 514; Kat. 192; Kat. 619; Kat. 650; Kat. 253; Kat. 303).

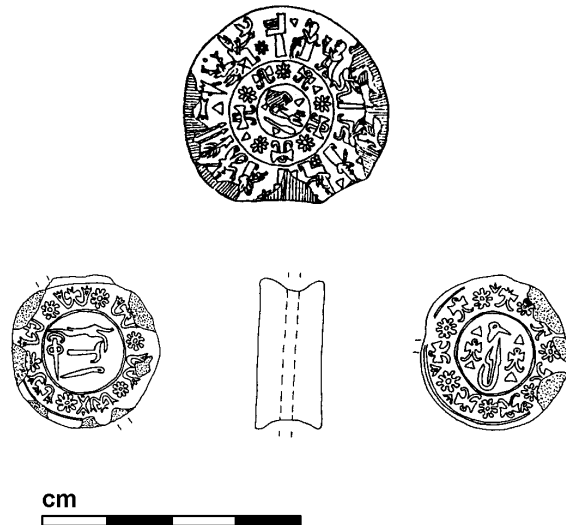


Fig. 11 Disc-seals predating the Empire period (top: after Boehmer/Güterbock 1987, 57 fig. 43; bottom: after Herbordt/Alkan 2000, 95 fig. 1).

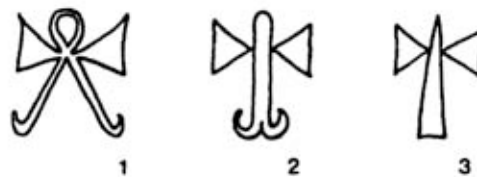


Fig. 12 Different forms of signs for "life/well-being" (no. 1 = L. 369; no. 2 = L. 441; no. 3 = L. 440).

A comparison of the seal group from the time of Šuppiluliuma I with earlier seals is also useful in making a catalogue of distinctions. For it is precisely the earlier period that Boehmer calls “later Old Hittite Period/Early New Kingdom” (“ausgehende althethitische Zeit/beginnendes Neues Reich”), that is, the 15th and early 14th centuries for which we lack published seal material from stratified contexts (see Boehmer/Güterbock 1987, 57–60). One group of seals that certainly falls into this earlier period are the disc-shaped seals³ such as the one with the hieroglyphic inscription of Kantuzzili GAL *MEŠEDI* from the Sivas region (Herbordt/Alkan 2000; Soysal 2003, 41–45) illustrated in the bottom row of fig. 11. I would like to draw your attention to several key differences in elements of the seal decoration when compared to the seal impressions from the time of Šuppiluliuma I (fig. 9). First, the band surrounding the field containing the hieroglyphic inscription consists of alternating rosettes and Ankh-signs. These elements of decoration are characteristic for disc-seals, to be seen also on the Dresden disc-seal at the top of fig. 11, but are not attested on the later seals. Second, the organisation of the hieroglyphic signs in the central field has changed on the seals of the Early Empire. The name of the seal owner appears in the center of the seal and is flanked left and right by the titles. This antithetical arrangement of the hieroglyphic inscription appears to be an innovation in the time of Šuppiluliuma and is indeed paralleled by the introduction of the so-called aedicula seal as the royal seal type during the reign of this king. Third, the signs symbolising “life” on the later seals are no longer the Ankh sign as we know it on earlier seals. Rather, they have changed to the signs you see as no. 2 and 3 in fig. 12 and occur both in the central field of the seal and the border decoration. They are included in the sign list of Laroche as nos. L. 441 and L. 440 (Laroche 1960).

The disc-seals can with certainty, I believe, be dated to the period immediately preceding the reign of Šuppiluliuma I. An example of such a seal found in the debris of the level III palace at Maşat (Özgüç 1982, plate 58.1a-c), whose destruction falls in the reign of Tuḫaliya II/III, the father of Šuppiluliuma I, confirms this assessment. Two further seal impressions from the level III palace at Maşat are of interest in this context. One is a rectangular impression divided into two fields (Özgüç 1982, pl. 57.5), the upper field with the cuneiform sign TI and the lower field with the Ankh sign (L. 369). This again, fits in well with the elements that I have shown to be slightly earlier than Šuppiluliuma I. The other seal impression (Özgüç 1982, pl. 57.6), however, moves us into another group of seals, namely those of the hammer type. Characteristic of the later hammer seals are the spiral and guilloche ornaments placed between figured scenes in the broad band encircling the small circular field with hieroglyphs at the center of the seal. A further hammer seal impression was found in level III contemporary to the palace (Özgüç 1982, 154, pl. 89.1). It shows a small inner circle with hieroglyphic inscription surrounded by a broad outer band with figured decoration (sphinxes arranged antithetically around stylized trees). The stratified sealed bullae from Maşat, when published, will be invaluable for filling in the sequence of seal types and designs for the 15th and early 14th centuries.

³ On disc-shaped seals see also Mora 1987, 106 p., who also dates this seal type to the late 15th and early 14th centuries B.C.

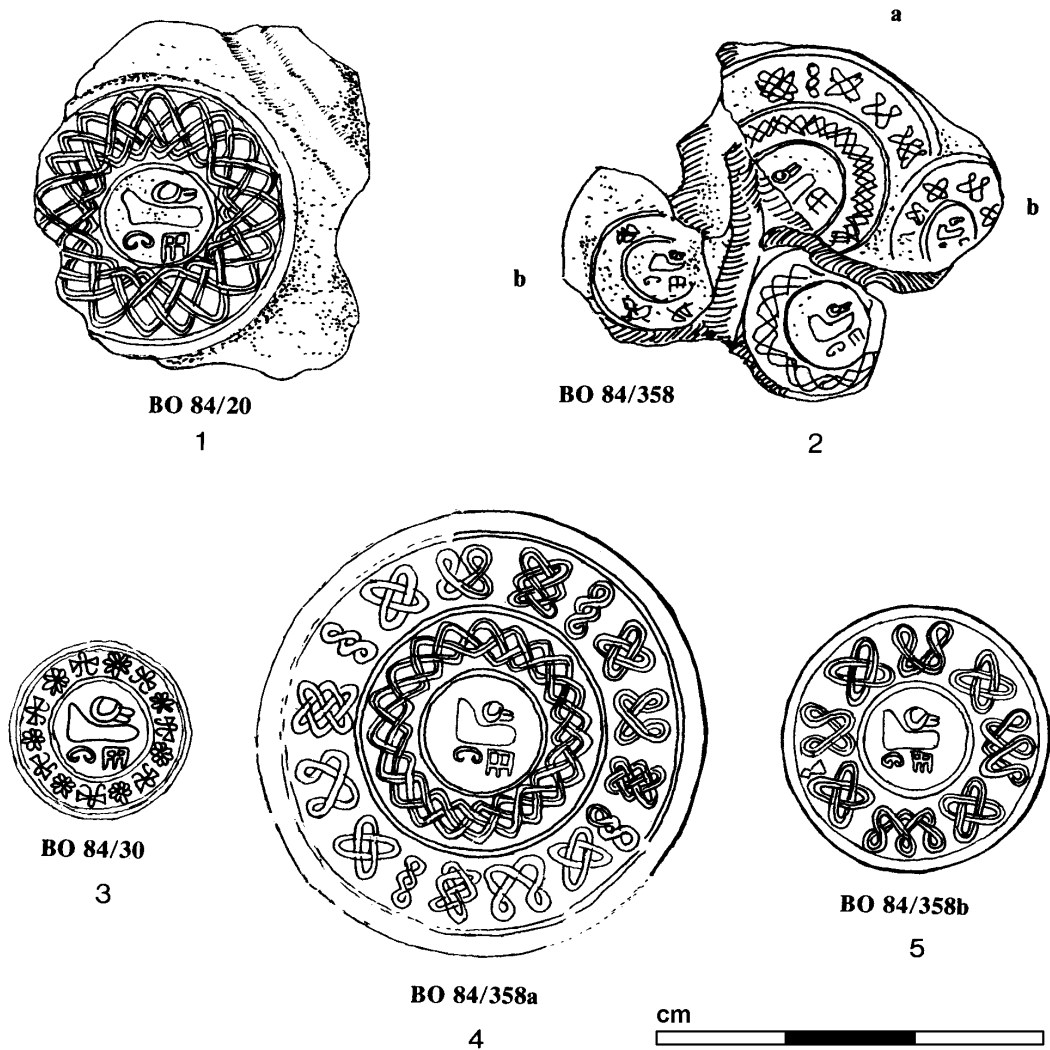


Fig. 13 Seal impressions of the “great scribe” Matu from the upper city of Ḫattuša (after A. Dinçol 1993, plate 24-25).

Also of great importance for determining the sequence of seal types for this time period will be the sealed bullae from the Upper City of Ḫattuša which are being prepared for publication by A. and B. Dinçol. In fig. 13 are two container sealings and one bulla (?) presented by A. Dinçol in the *Festschrift* for Nimet Özgüç (A. Dinçol 1993, 128–130), all bearing seal impressions with hieroglyphic inscriptions naming the “Great Scribe” Matu. What is of particular importance for our discussion is the fact that Matu uses four different seals in the course of his career and that these seals are different types that must be approximately contemporary. The seal impression illustrated in drawing no. 1 of fig. 13 is of the hammer seal type classified as “Old Hittite”. With its broad outer guilloche band it is comparable to the seal impression from Nişantepe discussed earlier in my paper (fig. 6). The two different seals shown in drawings no. 2, 4, and 5 in fig. 13 have on the one hand the continuous guilloche band and on the other hand the interrupted spiral and guilloche ornaments we saw on the Maşat sealing (T. Özgüç 1982, plate 57, 6). And finally, the seal impression illustrated

in no. 3 of fig. 13 derives from a disc-seal which I have classified above as dating to the first half of the 14th century. Thus, it would seem that the “Old Hittite” seal type with an outer guilloche band (e.g., fig. 6 and fig. 13, 1) was in use longer than we have commonly thought.

A similar phenomenon can be observed at Kaman-Kalehöyük (see Yoshida 1999, 183–197). Among the seal impressions from the “Round Structure” we again find a range of different seal types in use by a single seal owner so that they must be approximately contemporary. These are, in one case, impressions of a hammer seal with looped border surrounding the circular field with hieroglyphic inscription, a hammer seal with an outer band depicting animals around the central circular field with hieroglyphic inscription, and a disc-seal of the type discussed above (see Yoshida 1999, 194 figs. 4–7).

The examples I have presented show quite nicely that, in any sequence of material culture there is always an overlap in time in which older and newer styles and conventions coincide. They also illustrate very well the problems with which we are confronted in the absolute dating of earlier Hittite glyptic.

IV. Conclusion

The corpus of sealed bullae from Nişantepe represents the Hittite Empire Period (beginning with Šuppiluliuma I) in its entirety and provides a unique insight into the variety of Hittite Empire period glyptic. Future publications of the important glyptic assemblages predating the Empire Period, which I have mentioned, will provide us with a more secure basis for structuring and dating the earlier Hittite seal material.

Hitit Mühürcülüğü: Yeni Keşifler Işığında Yeniden Değerlendirmeler

Hitit gliptik sanatının klasifikasyonu ve tarihlemesi üzerine R.M. Boehmer ve H.G. Güterbock (Glyptik aus dem Stadtgebiet von Hattuša) ile C. Mora (La glittica anatolica del II millennio A.C.) tarafından 1987 yılında yayınlanan temel eserlerden sonra çok sayıda mühür malzeme gün ışığına çıkmıştır. Özellikle Nişantepe’de 1990 ve 1991 yılları kazılarında yaklaşık 3400 bulla ile Hattuša Yukarı Şehir, Kuşaklı ve Kaman Kalehöyük kazılarında ele geçen mühür malzemeler, Hitit gliptik sanatının yeniden değerlendirilebilmesi için yeni temel oluşturmuştur. Yazar, Nişantepe’de bulunmuş kral mühürleri dışındaki mühür baskılarının yapısı ve tarihlendirilmesi konusundaki çalışmalarından bir derleme yapmaktadır. Büyük İmparatorluk döneminin başlarına ait Hitit memurlarının mühür baskıları ve Geç İmparatorluk dönemine tarihlenen yüzük mühür baskılarının göreceli çokluğu son derece önemlidir. Ayrıca Büyük İmparatorluk öncesi, MÖ 15. ve 14. yüzyıllara ait mühür tipolojisi de, Maşat, Hattuša Yukarı Şehir ve Kaman-Kalehöyük mühürleri değerlendirilerek yeniden incelenmektedir.

References

- Beran 1967 T. Beran, *Die hethitische Glyptik von Boğazköy*. Boğazköy-Hattuša V (Berlin 1967).
- Beyer 2001 D. Beyer, *Emar IV. Les Sceaux*. Orbis Biblicus et Orientalis. Series Archaeologica 20 (Fribourg 2001).
- Boehmer 1982 R.M. Boehmer, Ringe aus kassitischen Gräbern. *Baghdader Mitteilungen* 13, 1982, 31–49.
- Boehmer/Güterbock 1987 R.M. Boehmer, H.G. Güterbock, *Glyptik aus dem Stadtgebiet von Boğazköy*. Boğazköy-Hattuša XIV (Berlin 1987).
- A. Dinçol 1993 A.M. Dinçol, Interessante Beispiele von Schreibersiegeln aus Boğazköy. In: M.J. Mellink, E. Porada, T. Özgüç (eds.), *Aspects of Art and Iconography: Anatolia and its Neighbors. Studies in Honor of Nimet Özgüç* (Ankara 1993) 127–130.
- A. Dinçol 2001 A.M. Dinçol, Ein interessanter Siegelabdruck aus Boğazköy und die damit verknüpften historischen Fragen. In: G. Wilhelm (ed.), *Akten des IV. Internationalen Kongresses für Hethitologie*. Studien zu den Boğazköy-Texten 45 (Wiesbaden 2001) 89–97.
- B. Dinçol 1998a B. Dinçol, Der Titel GAL.GEŠTIN auf den hethitischen Hieroglyphensiegeln. *Altorientalische Forschungen* 25, 1998, 163–167.
- B. Dinçol 1998b B. Dinçol, Tönerne Siegelkopien aus Boğazköy. In: S. Alp, A. Süel (eds.), *Acts of the IIIrd International Congress of Hittitology* (Ankara 1998) 167–175.
- B. Dinçol 2001 B. Dinçol, Bemerkungen über die hethitischen Siegelinhaber mit mehreren Titeln. In: G. Wilhelm (ed.), *Akten des IV. Internationalen Kongresses für Hethitologie*. Studien zu den Boğazköy-Texten 45 (Wiesbaden 2001) 98–105.
- Dinçol/Dinçol 2003 A. Dinçol, B. Dinçol, Enkel des Königs, aber kein Prinz! In: G. Beckman, R. Beal, G. McMahon (eds.), *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday* (Winona Lake 2003) 93–100.
- Gelb 1956 I.J. Gelb, Hittite Hieroglyphic Seals and Seal Impressions. In: H. Goldmann, *Excavations at Gözlü Kule, Tarsus II* (Princeton 1956) 242–254.
- Goldman 1956 H. Goldman, *Excavations at Gözlü Kule, Tarsus II* (Princeton 1956)
- Gorny 1993 R. Gorny, The Biconvex Seals of Alishar Höyük. *Anatolian Studies* 43, 1993, 163–191.
- Güterbock 1940 H.G. Güterbock, *Siegel aus Boğazköy I*. Archiv für Orientforschung, Beiheft 5 (Berlin 1940).
- Güterbock 1942 H.G. Güterbock, *Siegel aus Boğazköy II*. Archiv für Orientforschung, Beiheft 7 (Selbstverlag des Herausgebers 1942).
- Güterbock 1973 H.G. Güterbock, Hittite Hieroglyphic Seal Impressions from Korucutepe. *Journal of Near Eastern Studies* 32, 1973, 135–147.
- Güterbock 1980 H.G. Güterbock, Hittite Hieroglyphic Seal Impressions. In: M.N. van Loon (ed.), *Korucutepe III* (Amsterdam 1980) 127–132.
- Hawkins 1995 J.D. Hawkins, *The Hieroglyphic Inscription of the Sacred Pool Complex at Hattuša (Südburg)*. Studien zu den Boğazköy-Texten, Beiheft 2 (Wiesbaden 1995).
- Herbordt 1998 S. Herbordt, Seals and Sealings of Hittite Officials from the Nişantepe Archive, Boğazköy. In: S. Alp, A. Süel (eds.), *Acts of the IIIrd International Congress of Hittitology* (Ankara 1998) 306–318.
- Herbordt 2002 S. Herbordt, Hittite Seals and Sealings from the Nişantepe Archive, Boğazköy: A Prosopographical Study. In: K.A. Yener, H.A. Hoffner Jr. (eds.), *Recent Developments in Hittite Archaeology and History. Papers in Memory of H.G. Güterbock* (Winona Lake 2002) 53–60.
- Herbordt 2005 S. Herbordt, *Prinzen- und Beamtensiegel der hethitischen Großreichszeit auf Tonbulln aus dem Nişantepe-Archiv in Hattuša*. Boğazköy-Hattuša XIX (Mainz 2005).
- Herbordt/Alkan 2000 S. Herbordt, M. Alkan, Ein scheibenförmiges Hieroglyphensiegel im Sivas-Museum. *Archivum Anatolicum* 4, 2000, 89–98.
- Laroche 1956 E. Laroche, Documents hiéroglyphiques hittites provenant du palais d'Ugarit. In: C.F.A. Schaeffer, *Ugaritica III* (Paris 1956) 97–160.

- Laroche 1960 E. Laroche, *Les hiéroglyphes hittites* (Paris 1960).
- Mora 1987 C. Mora, *La Glittica Anatolica del II millennio A.C.: Classificazione tipologica. I. I sigilli a iscrizione geroglifica*. *Studia Mediterranea* 6 (Pavia 1987).
- Mora 1990 C. Mora, *La Glittica Anatolica del II millennio A.C.: Classificazione tipologica. I. I sigilli a iscrizione geroglifica, primo supplemento* (Pavia 1990).
- Müller-Karpe 1995 A. Müller-Karpe, Untersuchungen in Kuşaklı 1992-94. *Mitteilungen der Deutschen Orient-Gesellschaft* 127, 1995, 5–27.
- Müller-Karpe 1997 A. Müller-Karpe, Untersuchungen in Kuşaklı 1996. *Mitteilungen der Deutschen Orient-Gesellschaft* 129, 1997, 103–120.
- Müller-Karpe 1998 A. Müller-Karpe, Untersuchungen in Kuşaklı 1997. *Mitteilungen der Deutschen Orient-Gesellschaft* 130, 1998, 93–112.
- Müller-Karpe 1999 A. Müller-Karpe, Untersuchungen in Kuşaklı 1998. *Mitteilungen der Deutschen Orient-Gesellschaft* 131, 1999, 57–66.
- Müller-Karpe 2001 A. Müller-Karpe, Untersuchungen in Kuşaklı 2000. *Mitteilungen der Deutschen Orient-Gesellschaft* 133, 2001, 225–237.
- Neve 1991 P. Neve, Die Ausgrabungen in Boğazköy-Hattuša 1990. *Archäologischer Anzeiger* 1991, 299–335.
- Neve 1992 P. Neve, Die Ausgrabungen in Boğazköy-Hattuša 1991. *Archäologischer Anzeiger* 1992, 307–338.
- Neve 1996 P. Neve, *Hattuša – Stadt der Götter und Tempel*. *Antike Welt Sonderheft* (Mainz 1996²).
- Ökse et al. 1992 T. Ökse, I.M. Akyurt, M. Törnük, Sivas yöresinde bulunan bir altın yüzük mühür. *Türk Arkeoloji Dergisi* 30, 1992, 217–225.
- Özgüç 1982 T. Özgüç, *Maşat Höyük II* (Ankara 1982).
- Otten 1967 H. Otten, Zur Datierung und Bedeutung des Felsheiligtums von Yazılıkaya. *Zeitschrift für Assyriologie* 58, 1967, 222–240.
- Schaeffer 1956 C.F.A. Schaeffer, *Ugaritica III* (Paris 1956).
- Soysal 2003 O. Soysal, Kantuzzili in Siegelinschriften. *Bibliotheca Orientalis* 60, 2003, 41–55.
- Symington 1991 D. Symington, Late Bronze Age Writing-Boards and their Uses: Textual Evidence from Anatolia and Syria. *Anatolian Studies* 41, 1991, 111–123.
- Yoshida 1999 D. Yoshida, Hethitische Hieroglyphensiegel aus Kaman-Kalehöyük. In: H.I.H. Prince Takahito Mikasa (ed.), *Essays on Ancient Anatolia*. *Bulletin of the Middle Eastern Culture Center in Japan* XI (Wiesbaden 1999) 183–197.



BYZAS 4

STRUKTURIERUNG UND DATIERUNG IN DER HETHITISCHEN ARCHÄOLOGIE

STRUCTURING AND DATING IN HITTITE ARCHAEOLOGY

VORAUSSETZUNGEN – PROBLEME – NEUE ANSÄTZE

REQUIREMENTS – PROBLEMS – NEW APPROACHES

Internationaler Workshop, Istanbul, 26–27. November 2004

Herausgegeben von / edited by

Dirk Paul Mielke – Ulf-Dietrich Schoop – Jürgen Seeher

Inhalt

Vorwort

Adolf HOFFMANN VII

Zu diesem Workshop

Dirk Paul Mielke – Ulf-Dietrich Schoop – Jürgen Seeher 1

Der Beitrag der Textfunde zur Archäologieggeschichte der hethitischen Hauptstadt

Jörg KLINGER 5

Über die Probleme der absoluten Datierung der Herrschaftsperioden der hethitischen Könige nach den philologischen und glyptischen Belegen

Belkis DİNÇOL 19

Dating the Sequence of the Final Destruction/Abandonment of LBA Settlements: Towards a Better Understanding of Events that led to the Collapse of the Hittite Kingdom

Jak YAKAR 33

Absolute Chronologie in Boğazköy-Ḫattuša: Das Potential der Radiokarbonaten

Ulf-Dietrich SCHOOP und Jürgen SEEHER 53

Dendrochronologie und hethitische Archäologie – einige kritische Anmerkungen

Dirk Paul MIELKE 77

Hittite Glyptic: A Reassessment in the Light of Recent Discoveries

Suzanne HERBORDT 95

Die hethitischen Königssiegel vom Westbau des Nişantepe in Boğazköy-Ḫattuša

Daliah BAWANYPECK 109

A Prospectus of Hittite Art Based on the State of our Knowledge at the Beginning of the 3rd Millennium AD

Ash ÖZYAR 125

Auf welchen Fundamenten? Überlegungen zum Stand der Erforschung der hethitischen Architektur

Andreas SCHACHNER 149

Hethiterforschung anhand von Geländebegehungen: Darstellung der Probleme und Möglichkeiten der Auswertung	
A. Tuba ÖKSE	167
Imports and their Methodological Implications for Dating Hittite Material Culture	
Hermann GENZ	185
Chronology in Hattuša: New Approaches to an Old Problem	
Jürgen SEEHER	197
Dating the Hittites with Statistics: Ten Pottery Assemblages from Boğazköy-Hattuša	
Ulf-Dietrich SCHOOP	215
Tempelinventare in Kuşaklı und Boğazköy im Vergleich: Ein Beitrag zur hethitischen Chronologie	
Vuslat MÜLLER-KARPE	241
İnandıktepe und Sarissa. Ein Beitrag zur Datierung althethitischer Fundkomplexe	
Dirk Paul MIELKE	251
Zur Keramik des 2. Jahrtausends v. Chr. von Kaman-Kalehöyük. Ein Beitrag zur Kenntnis der Keramikentwicklung von der „Übergangsperiode“ zwischen der Frühen und Mittleren Bronzezeit bis in die Spätbronzezeit	
Tadashi KATSUNO	277
Dating the Hittite Levels at Kinet Höyük: a Revised Chronology	
Marie-Henriette GATES	293
The Hittites at Mersin-Yumuktepe: Old Problems and New Directions	
Éric JEAN	311
Old Hittite Presence in the East of the Euphrates in the Light of the Stratigraphical Data from İmikuşağı (Elazığ)	
Erkan KONYAR	333
Issues in Hittite Ceramic Production: A View from the Western Frontier	
Ann C. GUNTER	349
Abbildungsnachweis	365
Anschriften der Autoren	367

Produktion und Vertrieb

Zero Prod. Ltd.

Arslan Yatağı Sok. Sedef Palas, 35/2 Cihangir 34433 Istanbul-Turkey

Tel: +90 (212) 244 75 21 - 249 05 20 Fax: +90 (212) 244 32 09

info@egeyayinlari.com

info@zerobooksonline.com

www.zerobooksonline.com