

Hacımusalar Höyük in the Early Bronze Age

İLKNUR ÖZGEN, ELIZABETH P. BAUGHAN, AND
ELİF ÜNLÜ

Open Access on AJA Online

Supplementary Image Gallery on AJA Online

Excavations at Hacımusalar Höyük in southwestern Turkey have uncovered thousands of years of occupation history, from the Early Bronze Age through the Late Byzantine era. This article offers a general survey of the Bronze Age occupation levels so far explored on the northern and western slopes of the mound, with particular focus on two well-preserved Early Bronze II destruction levels, closely superimposed. We present selected finds and architectural features from each stratigraphic level in sequence and discuss their significance for current theories of cultural interaction and social organization in West Anatolia in the Early Bronze Age. This new evidence indicates that Hacımusalar Höyük and the Elmalı plain were more connected with other parts of Anatolia than recent studies of Early Bronze Age cultural zones suggest but still maintained a distinctive regional character.¹

INTRODUCTION: THE MOUND AND REGION

Hacımusalar Höyük, the largest settlement mound in the Elmalı basin, measures about 200 x 250 m and rises some 13 m above the level of the surrounding plain. It is situated along a natural travel route linking this upland valley of the Taurus Mountains with coastal Lycia (figs. 1, 2). Its location can be spotted from a great distance by its proximity to Çatal Tepe, a distinctive two-humped hill that is visible from each of the four natural entries to

¹ We are deeply grateful to the General Directorate for Cultural Heritage and Museums of Turkey, Bilkent University, and the University of Richmond for supporting the Hacımusalar Project; Ben Claasz Coockson, who contributed expertise in mudbrick architecture and stratigraphy as well as architectural plans, object illustrations, and the highly complex section drawing in online figure 14; Ayşe Haznedar Özkan, who drew most of the pottery and finds; Yasemin İlseven, depot manager; Christine Eslick and Marie-Henriette Gates, who shared insights on Early Bronze Age artifacts; many trench supervisors and assistants, especially Elif Denel, Erkan Akbulut, Su Alara Açırol, Elif Büyükgenceoğlu, Pınar Durgun, Müge Dursu-Tanrıover, Bihter Esener, Colby Ferguson, Deniz Genceolu, Abigail Johnson, Sinan Kılıç, Zeynep Kuşdil, Nils Niemeier, Janelle Sadarananda, Turna Somel, and İrem Yıldız; the editors and anonymous reviewers for the *AJA*; Boğaziçi University for supporting Ünlü's research (Scientific Research Fund nos. 8254 and 13161); and the Fulbright Scholar Program, American Research Institute in Turkey, and National Endowment for the Humanities for supporting Baughan's research (any views, findings, conclusions, or recommendations expressed in this article do not necessarily reflect those of the NEH). Finally, we remember the essential contributions of Sabri Aydal, talented cartographer for the project from its beginning in 1993 until his untimely death in 2016. All images are © Hacımusalar Höyük Excavation Archive, and all objects are held by the excavation collection except as noted. Additional images can be found with this article's abstract on *AJA Online* (www.ajaonline.org).



FIG. 1. View of Hacimusalar Höyük looking north toward Çatal Tepe.

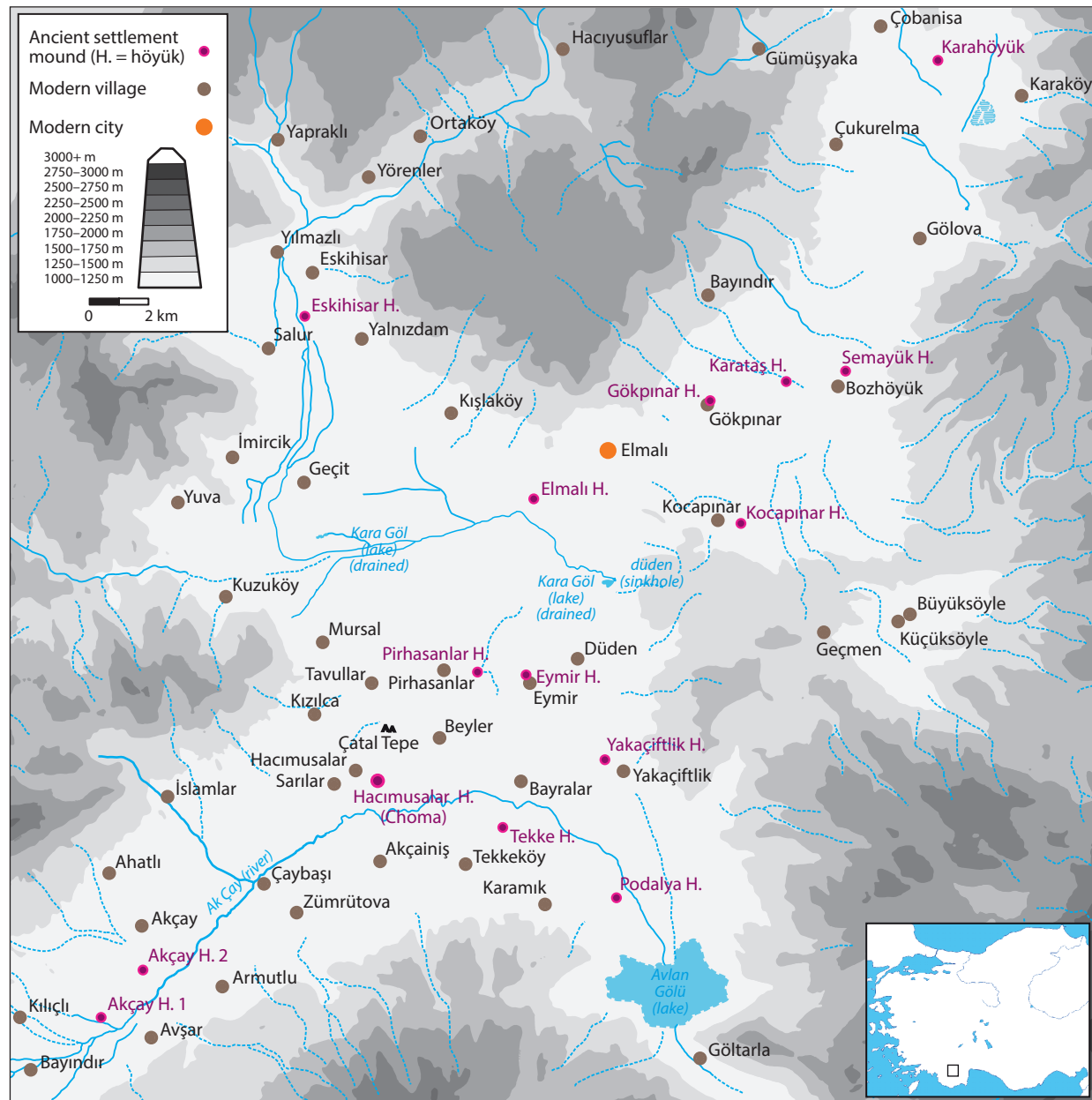


FIG. 2. Topographical map of Elmalı basin showing ancient settlement mounds and modern villages and cities (graphic by S. Aydal).

the Elmalı basin and that probably had strategic significance in antiquity.² Advantages of the settlement location also included a nearby river, the ancient Aedesa (modern Ak Çay),³ and the ancient predecessors of lakes known today as Kara Göl and Avlan Gölü.⁴ Called Beyler or Beylerbey Höyük in early surveys, the mound has been identified by inscriptions as ancient Choma (mound), mentioned in Roman and Byzantine sources.⁵ Its upper levels and slopes show continuous occupation from the Iron Age through the Byzantine period. Surface surveys in the area have, however, yielded very few Middle and Late Bronze Age (MBA and LBA) finds,⁶ and no LBA material has been securely identified among materials collected by the Hacimusalar project, whether during excavation or survey.⁷ Geological study suggests that lakes may have filled much of the basin and made habitation difficult in the MBA and LBA, before the dramatic opening of a karstic sinkhole (*düden*) at the base of the mountains on the east side of the valley, ca. 1000 BCE.⁸

² The four main entries to the plain are near Eskişehir at the northwest, Akçay at the southwest, Avlan Gölü at the southeast, and Karahöyük at the northeast (see fig. 2). Wall remains of uncertain date and function were recorded on the peaks of Çatal Tepe during the Hacimusalar Regional Survey (infra n. 7); some Early Bronze Age pottery was collected on its slopes, along with pottery of later periods (Archaic to Byzantine).

³ Plin., *HN* 5.28.

⁴ Özgen 1998, 603; Harrison and Young 2001, 49–50; Galicki and Doerner 2010, 234–35.

⁵ Mellaart 1954; Bean and Harrison 1967; Özgen 1998; 2006; Reger 2010; 2020; Özgen and Baughan 2016.

⁶ On MBA remains reported near Elmalı and recovered at Karataş and Bağbaşı, very close to Karataş, see Lloyd and Mellaart 1962, maps 3, 6, no. 89; 1965, 77, map 1; Mellink 1967, 257; 1969, 329–30; Eslick 2009, 214. On a single Mycenaean sherd reported in early survey work near “Beyler Höyük,” as Hacimusalar Höyük was once known, see French 1969, 73 n. 17, fig. 23. On LBA evidence recorded near the village of Beyler and at Karahöyük, then called Gilevçi Höyük, see Mellaart and Murray 1995, 101–4, maps 1–4; French 2012, fig. 11.18.

⁷ For a preliminary report of the regional survey conducted between 1993 and 2005, see Foss 2006. An infant burial in a coarse wheelmade jar excavated directly beneath the Iron Age city wall on the north rim (jar HM18631, burial HM18758; Özgen and Baughan 2016, fig. 7) could perhaps be MBA or LBA. The jar’s carinated profile, projecting knobs, and rim are somewhat similar to an LBA pithos from Sardis (Hanfmann 1963, fig. 6), though the scale and proportions differ. (NB: HM numbers, excavation registry numbers, may denote a single object or a group found together.)

⁸ Galicki and Doerner 2010, 248–49.

Since the Bryn Mawr College excavations of the 1960s–1970s, Karataş Höyük in the eastern part of the Elmalı plain has been the type site for Early Bronze Age (EBA) culture in southwest inland Anatolia. Mellink noted, however, that “Karataş is but a simple representative of a ceramic and cultural province which in the Elmalı plain itself is represented by many sites, including the mound of Hacimusalar-Choma, of urban size.”⁹ Hacimusalar Höyük is the largest of 15 prehistoric mounds recorded in surveys of the area (see fig. 2).¹⁰ More than twice as large as the central mound at Karataş,¹¹ Hacimusalar Höyük should be considered the regional center and is therefore critical to current discussions of regionalism and urbanism in this period.¹²

HISTORY OF EXPLORATION

Archaeological investigation of Hacimusalar Höyük began in 1993, with surface survey of the mound and surrounding fields. EBA pottery was found in nearly every sector of this initial survey but was most abundant on the west side of the mound. Trenches were opened on the west slope in 1998, in a staggered arrangement designed to reveal a continuous stratigraphic section (fig. 3).¹³ Two excavation seasons

⁹ Mellink 1986, 147.

¹⁰ Eslick 1992, 58–65, 214. Second largest is Karahöyük, also known as Gilevçi Höyük, near the northeast entry to the basin.

¹¹ The central mound at Karataş measures ca. 100 m in diameter, 3–4 m high (Warner 1994, 5).

¹² See Massa 2014a, 106, fig. 11; Massa et al. 2020, 52, 60, fig. 12. For recent studies, see, e.g., Bachhuber 2013; 2014; 2015; Fidan 2013; Ivanova 2013; Kouka 2013; Sarı 2013; Türkteki 2013; Massa 2014b; Fidan et al. 2015.

¹³ Trench names reflect their location within an overall site grid, with the first letter-number pair indicating a 50 x 50 m grid square (A–H, north to south; 1–8, west to east) and the second pair indicating the 5 x 5 m square within that block (a–j, north to south; 1–10, west to east). It was discovered in 2009 that when the north slope trenches were laid out in 2007, a naming mistake was made, with both the second letter and second number off by one 5 m grid square (i.e., the square called “B4i8” in 2007 is actually square B4h7 in the site grid). Because these trench names had already been used for two years when the mistake was realized, we retained them but assigned an extra letter row (“x”) to the space intervening between B4j8 and the misnamed “B4i9” (really B4h8). Subsequent operations on the north slope follow the 2007 naming, so that relationships among contiguous trenches are clear and duplication of trench names is avoided. We here use quotation marks to indicate erroneous trench names. Some details of the 1998–99 excavations on the west slope are based on an unpublished report by former field supervisor Mark Garrison, held in the Hacimusalar Excavation Archive.

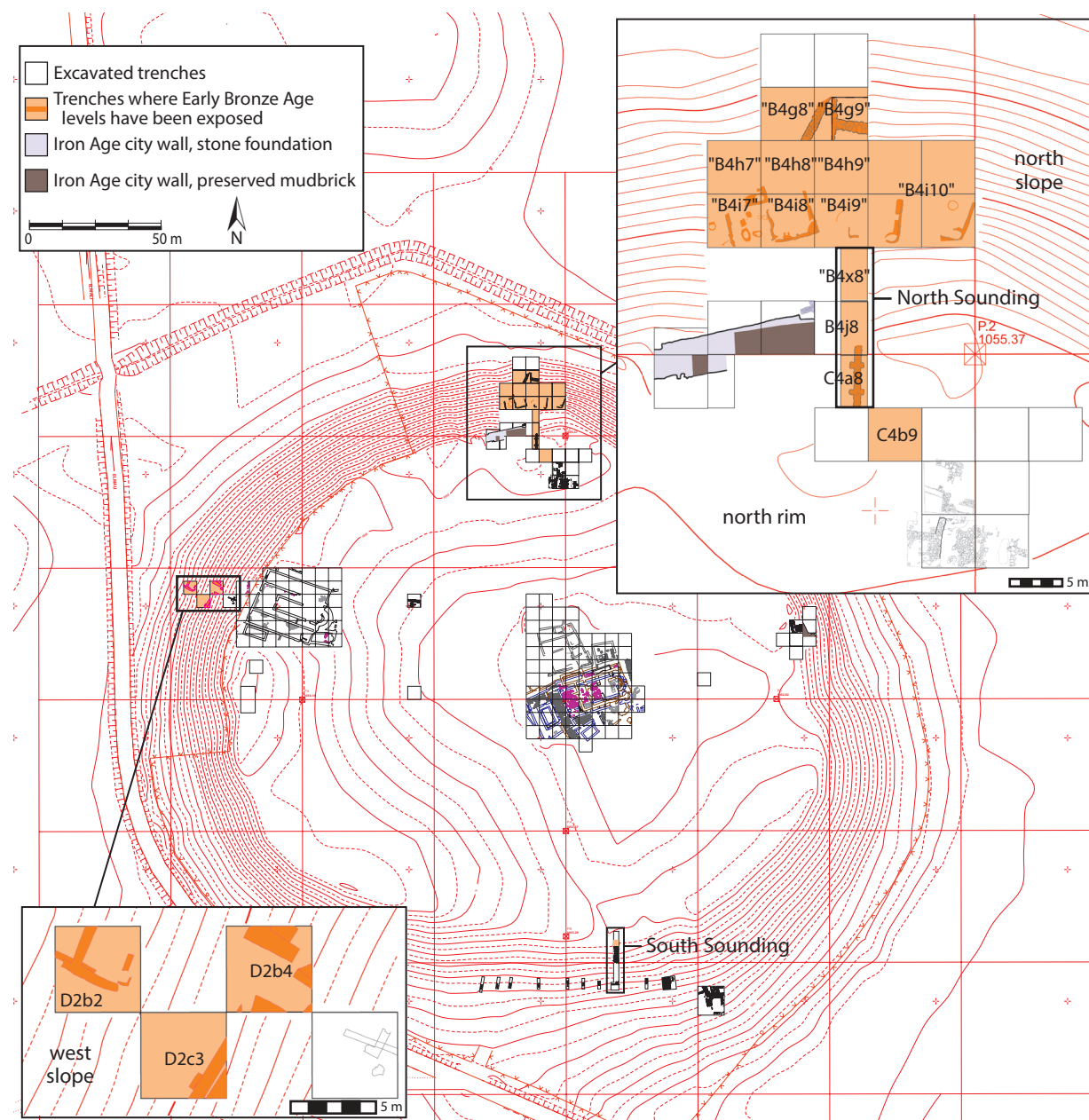


FIG. 3. Topographical plan of Hacimusalar Höyük (2014) with insets showing trenches with EBA levels on the north and west slopes (graphic by S. Aydal). Note that trench names in quotation marks are those originally wrongly assigned but that have been retained as they were in use for several years (see n. 13).

here indicated at least 10 EBA occupation levels.¹⁴ At the time, it was theorized that EBA settlement was concentrated at the west, on a small mound (*höyük*) later subsumed by the present mound. Excavations in later contexts in all parts of the mound, however, regularly yield EBA pottery and other artifacts. In one of

the deepest trenches on the north rim, just inside the city wall (see fig. 3, C4b9), an EBA occupation stratum with pebbled surface was reached beneath Iron Age levels. It was a limited window, however, nearly 5 m below the surface in a 2.5 x 5.0 m probe.

EBA levels were more widely exposed on the steep north slope of the mound, beginning in 2007 with four 10 x 5 m step trenches (fig. 4). These trenches were wider than normal in order to allow greater

¹⁴In D2b2, D2c3, and D2b4.



FIG. 4. View of north slope step trenches, 2007.

horizontal exposure while also revealing continuous vertical stratigraphy. Two well-preserved EBA destruction levels were explored in the top step over five seasons (2007, 2008, 2010–12).¹⁵ Work in the lower step trenches, including a small (2 x 3 m) sondage reaching about 2.5 m below present ground level at the base of the mound, revealed at least seven earlier EBA occupation levels (fig. 5; table 1).¹⁶ The North Sounding, a narrow 2 x 15 m stratigraphic trench cutting through and beneath a collapsed portion of the later city wall (see figs. 3, 5),¹⁷ was excavated in order to link the EBA destruction levels exposed on the north slope with the EBA level reached earlier on the north rim. This sounding yielded evidence for at least seven more EBA occupation levels postdating the conspicuous destruction horizon, for a minimum of 16 EBA occupation levels recorded in all, constituting about 12 m of elevation. An EBA stratum was also reached on the south rim of the mound, in a small sondage (1.5 x 2.0 m) next to the inner face of the Iron Age fortification, about 1.8 m below the bottom of the city wall (see fig. 3, South Sounding).¹⁸ Exposure of the EBA levels has been limited to such windows on the slopes and edges of the mound because work in the center of the mound has focused on later phases of occupation, including two Byzantine churches with mosaic floors.¹⁹ The primary goal of investigating the EBA levels even in these limited exposures has been to gain an overall picture of the occupation and settlement history through vertical

¹⁵ “B4i8–i9,” expanded to “B4i10” and “B4i7,” covering about 25 m east–west.

¹⁶ In “B4h8–h9” and “B4g8–g9.”

¹⁷ C4a8, B4j8, and “B4x8.”

¹⁸ In F5j4.

¹⁹ Özgen and Baughan 2016, 330–34; Sulosky Weaver 2018; Reger 2020.

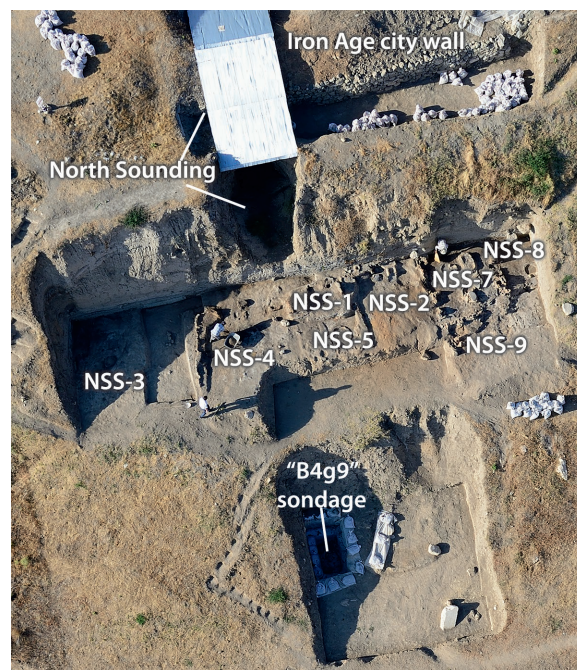


FIG. 5. Aerial view of north slope showing Terraced Building levels and “B4g9” sondage; north at the bottom (NSS = North Slope Structure).

stratigraphy while leaving room for further exploration of these levels in future excavations.

SUMMARY OF EBA LEVELS AND FINDS

The following section presents the EBA remains so far explored at Hacimusalar Höyük in stratigraphic sequence, from earliest to latest. Chronological designations have been suggested on the basis of ceramic and architectural parallels with nearby Karataş (see table 1). For each level and context, the most diagnostic finds and features are here described in preliminary fashion, as a basis for discussion and analysis in the following section.²⁰

EB I

Though some Neolithic and Chalcolithic material has been encountered in surveys of the Elmalı plain,²¹ the earliest material so far encountered in excavations at Hacimusalar Höyük comes from trenches at the base

²⁰ Lithic and faunal remains await specialized study and are not presented here.

²¹ Mellaart 1954, 181, map 2; 184–85, nos. 51, 59, collected 1951–52, British Institute of Archaeology at Ankara survey; Yakar 1985, 108, 158; Eslick 1992, 51–81; French 2012, 7, fig. 11.16, nos. 122, 126, 127, collected 1985–94, Balboursa survey.

TABLE 1. Chronology of Early Bronze Age levels at Hacimusalar Höyük and correlation with Karataş-Semayük.

Period	Approx. Dates (BCE)	Karataş Period	Hacimusalar Höyük Levels
EB III	2400–2000	VI	Lowest levels reached in South Sounding Latest EB levels on north rim (North Sounding C4b9)
EB II	2700–2400	V:3	North Sounding Phase C
		V:2–3	North Sounding (in order by depth level) buttressed foundation mud/pisé leveling fill mudbrick corner and pebbled surfaces large stone foundations lowest occupation level of North Sounding
		V:2	Green Mudbrick Phase on north and west slopes Terraced Building Phases 1 and 2 on north slope
		III–V:1	Disturbed occupation levels on north and west slopes
EB IB	3000–2700	I–II	Lowest levels in “B4g9” sondage
EB IA	3400–3000	–	–

Note: Adapted from Mellink 1992, 2:173, table 3.

of the mound on the north and west sides (fig. 6). Most diagnostic are bowl rims with white-painted decoration (see fig. 6, a–c)²² and downturned handles with interior knobs (see fig. 6, h and i).²³ While these pieces could be as early as Late Chalcolithic, the contexts are probably not earlier than late EB I on the basis of ceramic parallels with Karataş—most notably, tripod cooking pot legs (see fig. 6, l and m), which do not appear at Karataş until period III.²⁴ Limited exposure makes the architectural layout of the site in this period difficult to determine, but walls recorded in the small sondage at the base of the north slope are made of coursed mudbrick surrounding a wooden post atop stone foundations (online fig. 1).²⁵

²²For interior decoration (see, e.g., fig. 6, a, herein), cf. French 1961, fig. 5.2, collected 1959, Akhisar, British Institute of Archaeology at Ankara survey; Lloyd and Mellaart 1962, figs. P6.1, P6.5, P7.3, excav. 1954–59, Beycesultan, British Institute of Archaeology at Ankara excavations. For exterior decoration (see, e.g., fig. 6, b and c, herein), cf. Lloyd and Mellaart 1962, figs. P9.4, P11.9 (also from Beycesultan); Joukowsky 1986, fig. 320, excav. 1969, Aphrodisias, New York University excavations.

²³Cf. Efe et al. 1995, fig. 20.30 and .31, excav. 1983–90, Kaklık Mevkii, Afyon Archaeological Museum excavations; Eslick 2009, pl. 30:KT114, excav. 1965–69, Karataş, Bryn Mawr excavations.

²⁴Eslick 2009, 229, 242.

²⁵Two mudbrick walls exposed in the lowest trench at the

Early EB II

The majority of the EBA levels excavated so far at Hacimusalar Höyük appear to belong to the EB II period, with the earliest exposed near the bottoms of the north and west slopes, in “B4g8–g9” and D2b2 (see fig. 3). Wall foundations are composed of two parallel lines of stones with smaller stones between.²⁶ Stratigraphy and associated finds comparable with material from Karataş IV suggest a dating in the early EB II period: e.g., a stone stamp seal (fig. 7, b), lid with incised decoration (see fig. 7, d), fragments of jars with impressed²⁷ or mottled²⁸ surface decoration (see fig. 7, j–l) or projecting horn-like knobs (see fig. 7, m and n), and bowl rims with rising tabs (see fig. 7, f–h).²⁹ The relative infrequency of white-painted pottery (see fig. 7, i), compared with later EBA levels, supports this

base of the west slope (D2b2 Loci 25, 26) may be contemporary. (See AJAOnline for additional, online-only figures).

²⁶“B4g9” Locus 46, ca. 0.6–0.8 m thick, running southwest–northeast for ca. 5.1 m, ca. 0.7–1.0 m above the level of the mudbrick walls in the “B4g9” sondage; D2b2 Loci 5 and 16, both ca. 0.6–0.7 m thick, forming a corner and associated with a rectangular hearth or oven that had been disturbed by later pits.

²⁷Cf. Eslick 2009, 56, 111, motif 56.

²⁸Cf. Warner 1994, pl. 163g:KA373; Eslick 2009, pls. 28:KT60, 32:KT155; all three excav. 1964–69 (see n. 23).

²⁹Cf. Eslick 2009, 37, pl. 13, tab type 1.

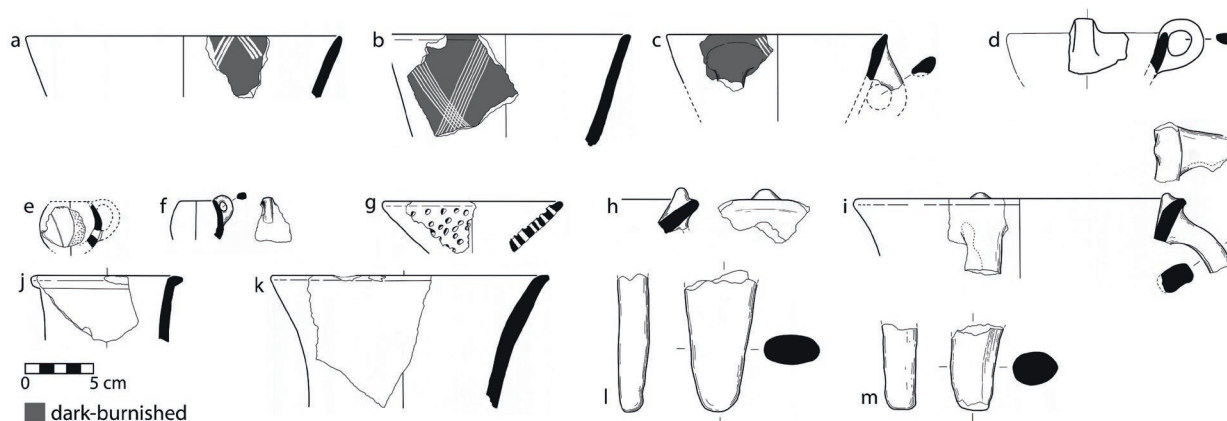


FIG. 6. Selected finds from earliest (EB I) levels in “B4g9” and D2b2: bowl rims (a, HM26687.6; b, HM27077.1; c, HM27077.2; d, HM6985.1; h, HM26687.1; i, HM26690.7); small cup fragments (e, HM26693.3; f, from HM26344); strainer rim (g, HM26697.2); coarse jar rims (j, HM27096.2; k, HM26697.1); tripod legs (l, HM26687.3; m, HM26687.2).

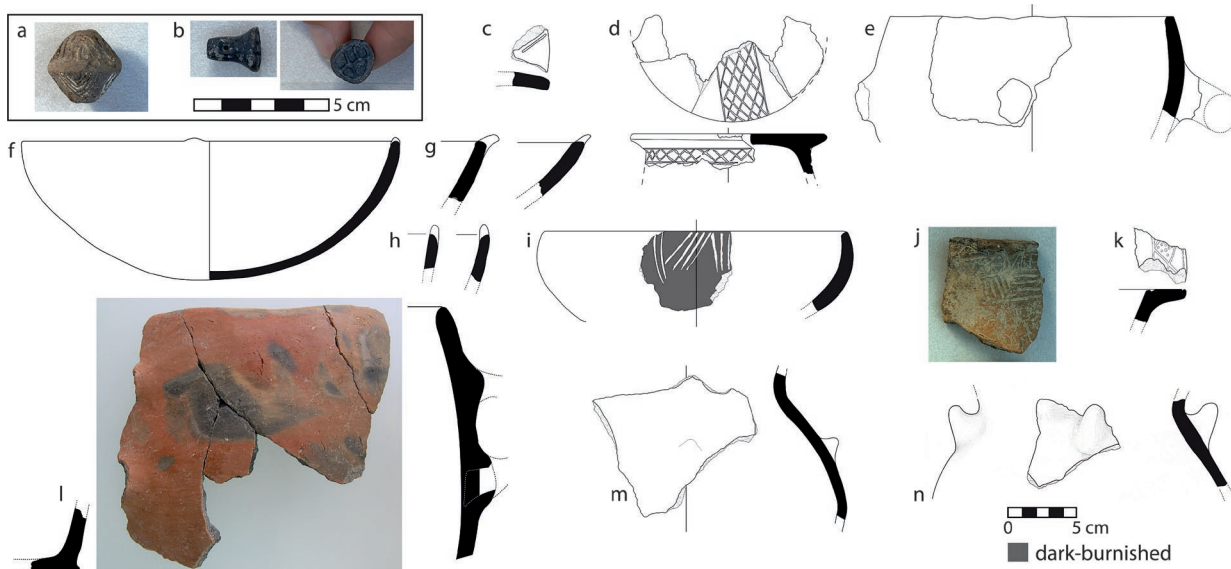


FIG. 7. Selected finds from early EB II levels on north and west slopes, from “B4g8–g9” and D2b2: clay spindlewhorl (a, HMs5714); stone stamp seal (b, HMs5718); lids with incised decoration (c, HMs5701.4; d, HMs5722.1); coarse bowl rim (e, HMs5711.3); bowl rims (f, from HM17582; g, from HM17555; h, from HMs5726; i, HMs5219.3); jar rims with incised or impressed designs (j, HMs5219.2; k, HMs5219.4); straight-sided jar fragments (l, from HM17573); jars with horned knobs (m, HMs5726.12; n, HMs5219.5) (a and b now in the Antalya Museum).

periodization—at Karataş white paint began to appear in period IV, becoming more common in period V.³⁰

The strata between this early EB II architectural level and the well-preserved late EB II destruction levels are less well understood. On the west slope, four occupation levels were attested, but only in small exposures. At the north, seven distinct occupation levels

were discernible, including a mudbrick wall and three different burnt layers noted in “B4g8–g9,” and three plastered floors in “B4h8–h9.” Associated and intervening strata yielded a wide variety of typical EB II artifacts: grinding stones and pounders, polished stone tools and beads, stone and clay stamp seals (fig. 8, a and b),³¹ clay spindlewhorls and beads (see fig. 8, c–g),

³⁰ Eslick 2009, 51–52, 111, 217, 251; Thater 2016, 18.

³¹ For a possible goat or deer motif (see fig. 8, b, herein), cf. Warner 1994, pl. 187b:KA741, excav. 1969 (see n. 23).



FIG. 8. Selected finds from levels between early EB II and Terraced Building phases, from “B4g8–g9,” “B4h8–h9,” and D2b2: stone stamp seal (a, HM17349); clay stamp seal with incised decoration (stylized goat or deer?) (b, HM16617) and impression; clay spherical whorl with incised lines (c, HM17138) and rolled impression; clay spindlewhorl with incised patterns (d, HM17091); clay whorls (e, HM17409; f, HM17426; g, HM15984); clay brush handle (h, HM16937); polished green stone object (whetstone?) (i, HM16957); red-burnished ceramic legs (j, HM15991; k, HM25163); pedestaled lid (l, HM5096.1); red-burnished jar (m, HM17096); dark-burnished jar or jug shoulder with horizontal fluting (n, from HM17347); red-burnished jug (o, HM16985); brown-burnished jug (p, HM25652.2); straight-walled cup (q, HM17802); red-burnished strainer-spouted askos (r, HM5279); red-burnished fragment with strainer spout (s, HM15970.2); burnished bowl rims (t, from HM17435; u, HM5080.13; v, HM5080.26; w, HM5080.9; x, HM5080.17) (a, c–g, n, o, r now in the Antalya Museum; b and q now in the Elmalı Museum).

a clay brush handle (see fig. 8, h), and pyramidal clay loomweights and pot supports (similar to pyramidal loomweights but without suspension holes).³² On a plastered floor in one of the upper levels, two red-burnished ceramic supports were found very close together, each in the shape of a schematic human leg and foot, with minimally articulated toes and knob-like ankle bones (see fig. 8, j and k).

For the most part, pottery from these layers is comparable with material from Karataş IV–V:1, with relatively few white-painted pieces. Particularly notable are fragments of horizontally fluted vessels, in both red- and dark-burnished varieties (see, e.g., fig. 8, n). Horizontal fluting is attested at Karataş and Beycesultan in EB I and EB II levels³³ as well as at Kaklık Mevkii (Late Chalcolithic–EB I).³⁴ Other notable parallels with Karataş V:1 and earlier phases include a fragment of a pedestaled lid with white-filled incisions including a goat motif (see fig. 8, l),³⁵ a jug with cutaway spout (see fig. 8, o),³⁶ and a burnished jug with relief ridges (see fig. 8, p).³⁷ Fragments of red-burnished strainer-spouted vessels were found in these levels on both the north and west slopes (see fig. 8, r and s). The one from the west slope (see fig. 8, r) is a nearly complete askos (narrow-necked pouring vessel), with a wide, squat body, a vertical handle on one side, and part of an additional small loop handle that probably connected the spout to the neck. Strainer spouts appear at Karataş for the first time in period IV and do not occur there after

V:2.³⁸ Unlike examples from Karataş and other EBA sites in West Anatolia, however, on both examples from Hacimusalar the strainer is located on or near the wall of the vessel and surrounded by a projecting spout rim, rather than at the end of the spout.³⁹

EB II Terraced Building Phases

Two phases of terraced row houses were discovered on the north slope, each destroyed by intense fire. These levels have been dubbed Terraced Building Phases 1 and 2; in each level the lowest parts of the walls on the east side were laid against cuts into earlier strata, so that the floor level of each room or structure, with one exception (discussed below), is about 0.2–0.4 m below that of the neighboring one to its east. In other words, the rooms or buildings in both levels appear to step down, in terraced fashion, from east to west (fig. 9). The exposed rooms or structures were named, to ease description and correlation across trenches, North Slope Structure (NSS) 1, 2, and so on, with numbers assigned in order of discovery. There is evidence for standardized interior arrangements and continuity from one phase to the next: the southeast corner of each room or space is usually filled with a rounded corner platform. The walls of both Terraced Building phases so far exposed are shared party walls composed entirely of wattle and daub (or pisé), built directly on the ground, without stone foundations.⁴⁰ Intense burning accidentally fired many pieces of mud walling and roofing, which hardened to preserve impressions of the plant materials used for internal structuring and support, from thin, tubular reeds to wider wooden planks and rounded and squared posts (online fig. 2).⁴¹

Terraced Building Phase 1 includes at least three structures, each with plastered floors and built-in plastered features. NSS-4 is the best preserved, with three

³² Cf. examples from Kusura and Demircihöyük: Lamb 1937, 34, fig. 16 no. 4, excav. 1935–37, British excavations; Baykal-Seeher and Obladen-Kauder 1996, 245–48, pls. 99–102, excav. 1975–78, German Archaeological Institute.

³³ Lloyd and Mellaart 1962, 116–17, 131, figs. P16.3, P16.6, P17.1, P17.3, P19.5, P19.6, P25.16, P28.3, P28.5, P28.6, P28.8, excav. 1954–59 (see n. 22); Eslick 2009, 50–51, 85, pl. 29:KT93, excav. 1964–69 (see n. 23); Efe and Türkteki 2011b, 216; Türkteki 2020, 63–65.

³⁴ Efe et al. 1995, 371, 374–75, figs. 26, 30, nos. 99–103, 105, 106, excav. 1983–90 (see n. 23).

³⁵ Incised goats or stags occur on pottery from Karataş II; see Mellink and Angel 1966, 250, pl. 62.37, excav. 1965 (see n. 23); Eslick 2009, 58, motifs 142, 143. They also occur on a burial pithos from Karataş as well as on an EBA jar from the Burdur region; see Mellink 1964, 274–75, pl. 79.12 and .13, excav. 1963 (see n. 23).

³⁶ Cf. Eslick 2009, 18, pl. 6, jug type 26; pl. 63:KT198, excav. 1964 (see n. 23).

³⁷ Parallels at Karataş are period III or undated; e.g., Eslick 2009, pl. 31:KT251, excav. 1965–69 (see n. 23).

³⁸ Eslick 2009, 217, 236.

³⁹ Cf., for example, Lloyd and Mellaart 1962, fig. P25.9 and .10, 1954–59 (see n. 22); Eslick 2009, pls. 38, 79c:KA744, KT171, excav. 1965–69 (see n. 23).

⁴⁰ Cf. the palisade and fence houses at EB I Karataş, as well as internal partitions in a storage shed there: Mellink and Angel 1968, 248, pl. 79.10; 1973, 295, ill. 2, pl. 41.1 and .2; Warner 1979, 139–40; 1994, 81–82, 144, fig. 6. Party walls at EB II Tarsus, too, were “rarely bedded on stone foundations” (Goldman 1956, 14).

⁴¹ For the leaf impression (see online fig. 2b), cf. Dönmez and Dönmez 2005, 155, 165 fig. 5, excav. 1974–2004, İkiztepe, Istanbul University excavations.

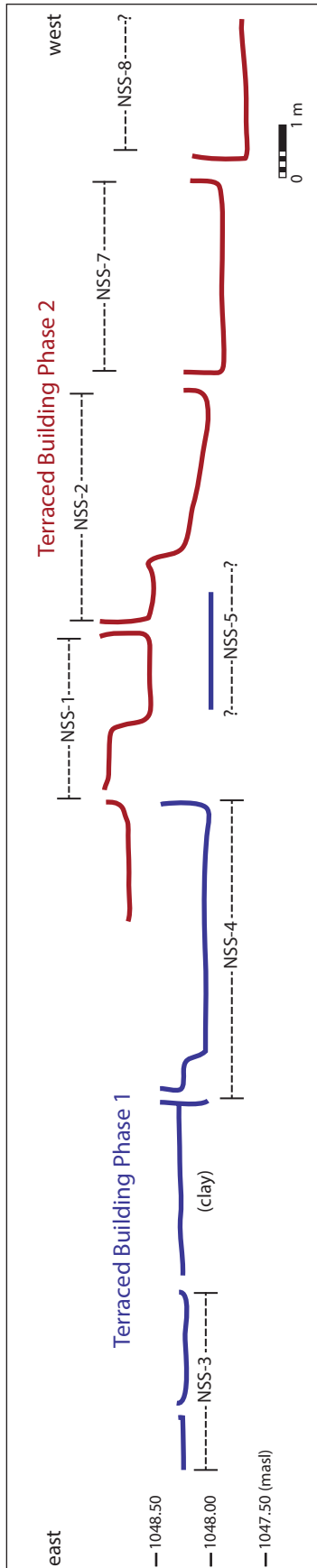


FIG. 9. Schematic east-west section through trenches "B4i10," "B4i9," "B4i8," and "B4i7," showing Terraced Building phases and North Slope Structures (NSS).

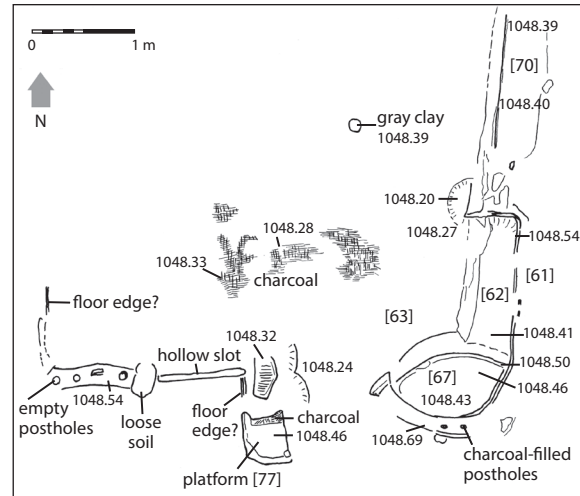


FIG. 10. Plan of NSS-4 (NB: In this and the following site illustrations, numbers in brackets are locus numbers; six-digit numbers are elevations in meters above sea level [masl].)

walls defined, a rounded platform filling the southeast corner (Locus 67), a low ledge running along the eastern wall (Loci 62 and 70, interrupted by an interior buttress), and a freestanding platform (Locus 77) in front of an opening on the south side (fig. 10; table 2).⁴² A shallow slot on the floor of the opening to the west of the platform could mark the location of a wooden threshold for a door or partition, and on the floor was a large, flat concentration of charcoal that could represent a fallen wooden door or shutter.⁴³ Four grinding stones were found in the northeast part of the room, next to the low ledge. Finds from within the burnt debris include a few spindlewhorls and stone objects as well as many fragments of coarse jars, burnished bowls (some white-painted), and white-on-red beak-spouted jugs (including fig. 11, a–c, j, k).

The east side of NSS-4 was laid against a cut through earlier clay strata, on top of which (and thus at a higher level) was a contemporary mud-walled structure, NSS-3, with at least three rooms or partitioned spaces (fig. 12; see table 2). Its walls are preserved only a few centimeters high, but their locations are clearly

⁴² Corner platform is ca. 0.15 m high; ledge is ca. 0.40 m wide. The freestanding platform (ca. 0.42 x 0.44 m, 0.18 m high) has more than one layer of plaster coating and in its final form seems to have included a wooden element (post?), as indicated by a concentration of charcoal and contoured plaster on the north end, similar to "tables" in Ilipinar Phase 6 (Cockson 2008, 155, fig. 23).

⁴³ Ca. 1.60 x 0.60 m, 0.02–0.05 m thick.

TABLE 2. Details of North Slope Structures (NSS) in the Terraced Building phases.

Space	Trench Name(s)	Year(s) Excavated	Max. Preserved Area (m)	Max. Preserved Wall Height (m)	Wall Thicknesses (m)	Floor Elevations (masl)
Terraced Building Phase 1						
NSS-3	"B4i10"	2010–11	2.00 x 3.25	0.08	0.10–0.12	1048.42–.55
NSS-4	"B4i9–i10"	2010–11	4.68 x 4.00	0.45	0.12–0.20	1048.20–.43
NSS-5	"B4i9"	2011	1.93 x 1.60	–	–	1048.07–.14
Terraced Building Phase 2						
NSS-1	"B4i8–i9"	2007, 2008, 2011	1.74 x 2.60	0.30	0.10–0.16	1048.55–.61
NSS-2	"B4i7–i8"	2010, 2012	3.60 x 3.90	0.68	0.12	1048.03–.18
NSS-7	"B4i7"	2011, 2012	3.30 x 3.60	0.41	0.08–0.16	1047.86–.92
NSS-8	"B4i7"	2012	3.10 x 2.00	0.41	0.14	1047.69–.77
NSS-9	"B4i7–h7"	2012	2.70 x 1.90	0.21	0.10–0.18	1047.59

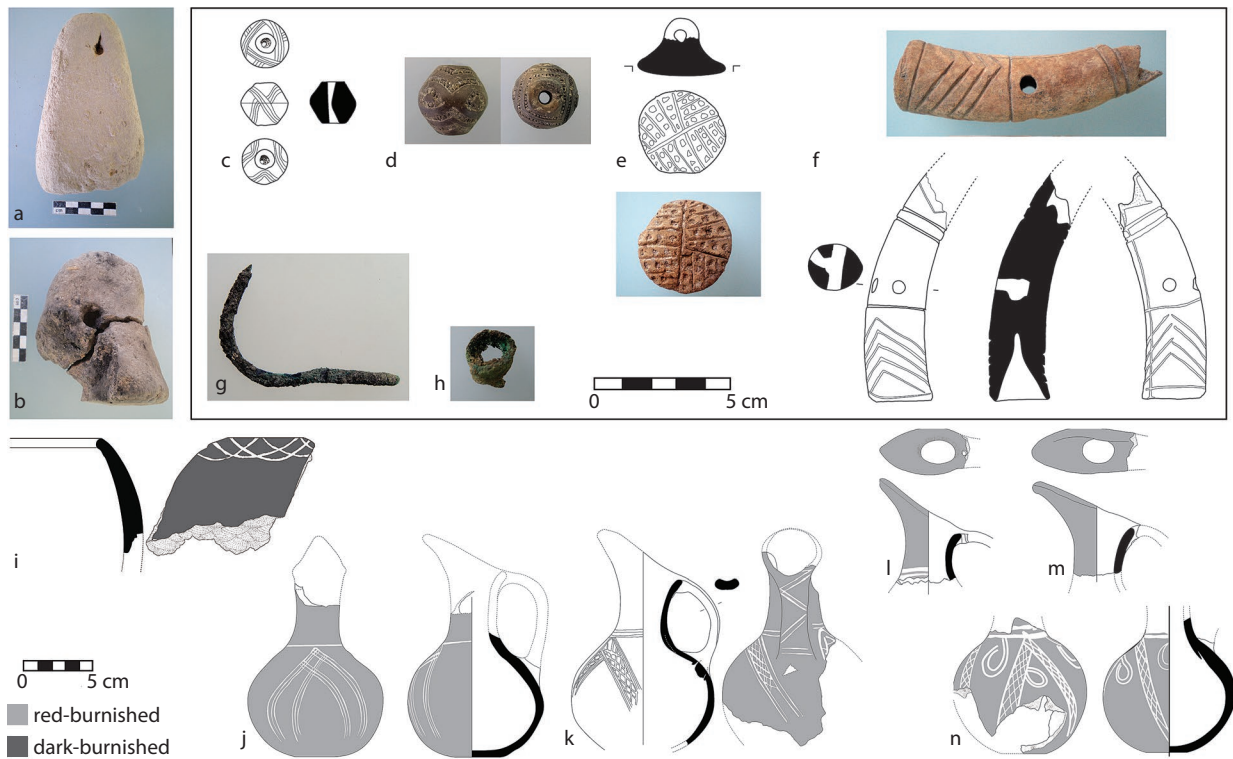


FIG. 11. Selected finds from Terraced Building Phase 1: clay loomweight (*a*, HM23651), spit support (*b*, HM23663), whorls (*c*, HM24025; *d*, HM24574), and stamp seal (*e*, HM24877); carved horn handle (*f*, HM24597); copper-alloy pin (*g*, HM22374) and coil (*h*, HM23140); white-painted bowl rim (*i*, from HM22962) and jugs (*j*, HM23817; *k*, HM24758; *l*, from HM22860; *m*, from HM22867; *n*, from HM22962/23110/23143 [slash indicates joining fragments from three different pottery lots]) (*c* and *d* now in the Elmalı Museum).

discernible in the upturning of the plastered floors and, in some cases, the presence of round postholes. At least some of these holes seem to be connected horizontally beneath the floor level, as if the posts were secured in a horizontal beam at the base of the wall.⁴⁴ In the floor of the largest room is a round, curbed depression (Locus 53) in which three loomweights were found with the bottom of another pyramidal object that could have been a loomweight or a pot or spit support (online fig. 3a).⁴⁵ A neighboring depression or pit just to the southwest (Locus 56) held broken pottery and carbonized botanical remains, including several pistachios,⁴⁶ and another just to the northwest (Locus 54) was full of ash. It is possible that some of the loomweights had been reused as supports for cooking pots⁴⁷ and that the curbed depression functioned as a hearth. Other notable finds from the burnt debris in NSS-3 include a fragment of a copper-alloy earring or hair spiral⁴⁸ and pieces of at least six white-on-red beak-spouted jugs (see fig. 11, h, i, l–n).

Of NSS-5, only part of a plastered floor with curbed hearth was exposed (online fig. 3b; see table 2). This hearth (Locus 147) is larger than the one in NSS-3 and is horseshoe shaped, with an opening on the north side, flanked by extending arms.⁴⁹ Finds from the burnt debris immediately covering this hearth include several pieces of a white-painted one-handled globular jar or cup (online fig. 4). Other finds generally attributable to the burnt debris layer covering Terraced Building Phase 1 but not associated with identified structures include two clay stamp seals, a copper-alloy pin, a per-

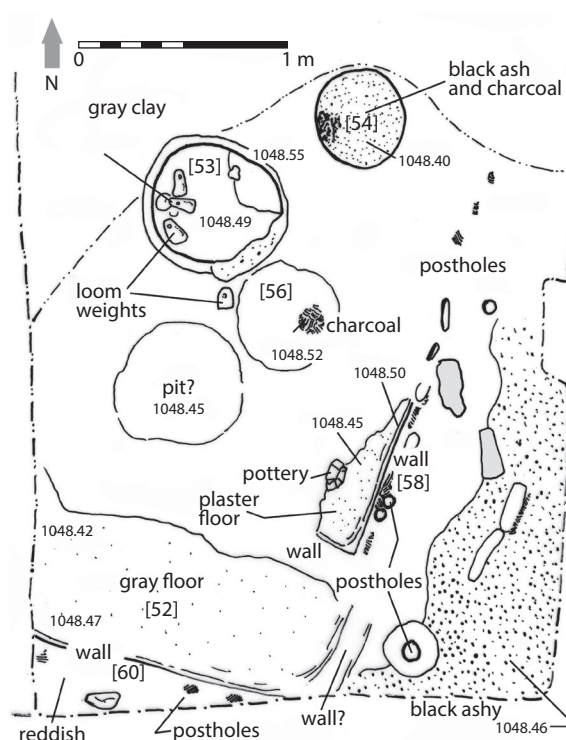


FIG. 12. Plan of NSS-3.

forated horn handle with incised decoration, and other finds comparable with Karataş V:2 (see fig. 11, d–g).

Terraced Building Phase 2 (online fig. 5) followed shortly after the destruction of Phase 1 structures, cutting into them at the west.⁵⁰ Five adjacent rooms or spaces have been uncovered, four with rounded platforms built into their southeast corners (NSS-1, -2, -8, and -9). Of the identifiable structures, NSS-1 is the least well preserved, with only the east and west walls, corner platform (fig. 13, Locus 48), and blackened floor identified (see fig. 13; table 2).⁵¹ On top of the corner platform is a round depression, and next to the platform is a small round bin. On and around the corner platform were pieces of two bowls and a jug (fig. 14, k–m). Finds from the debris layer filling the floor next to the platform include several spindle-whorls (see fig. 14, a–c), a fragmentary pithos (see fig. 13, Pot V), a ridged white-on-red beak-spouted jug

⁴⁴ Cf. Korfmann 1983, 32 fig. 41, 125 figs. 215, 216.

⁴⁵ Ca. 0.70 m wide x 0.17 m deep, bordered by low curb ca. 0.06 m wide. Objects here identified as spit supports are shaped like pyramidal loomweights but lack a suspension hole at the top and are pierced instead at the bottom on one side; cf. examples from Karataş (Warner 1994, 121, 206, pl. 196d:289/U, excav. 1969–71 (see n. 23) and Demircihöyük (Baykal-Seeher and Obladen-Kauder 1996, 245, pl. 99.3, excav. 1975–78 (see n. 32)).

⁴⁶ Pistachios: HM23445, HM23115, HM23142. A carbonized lentil (?; HM23285) was found in the soil just atop one of the loomweights in the curbed depression.

⁴⁷ Cf. a rimmed hearth with nearby ashpit and pot supports at EBI Karataş: Mellink and Angel 1973, 295, ill. 2, pl. 41.1 and .2; Mellink 1974, 351–52; Warner 1994, 139 n. 2.

⁴⁸ Cf. Warner 1994, pl. 187f:B7, excav. 1966 (see n. 23); Oğuzhanoglu and Pazarcı 2020, 207–8, figs. 10, 11, excav. 2020, Çapalıbağ, Muğla Museum excavations.

⁴⁹ Ca. 1.05 m wide; cf. a hearth in Karataş IV (Warner 1994, pls. 62, 145).

⁵⁰ Intervening strata were encountered only at the east: clayey layers with ashy lenses and cobble concentrations dense with ash and animal bones. From among the cobbles came a loomweight (see online fig. 16, a), a murex shell (HM22811), and pithos fragments.

⁵¹ The corner platform is ca. 0.35 m high with raised rim and round depression, ca. 0.26 m wide.

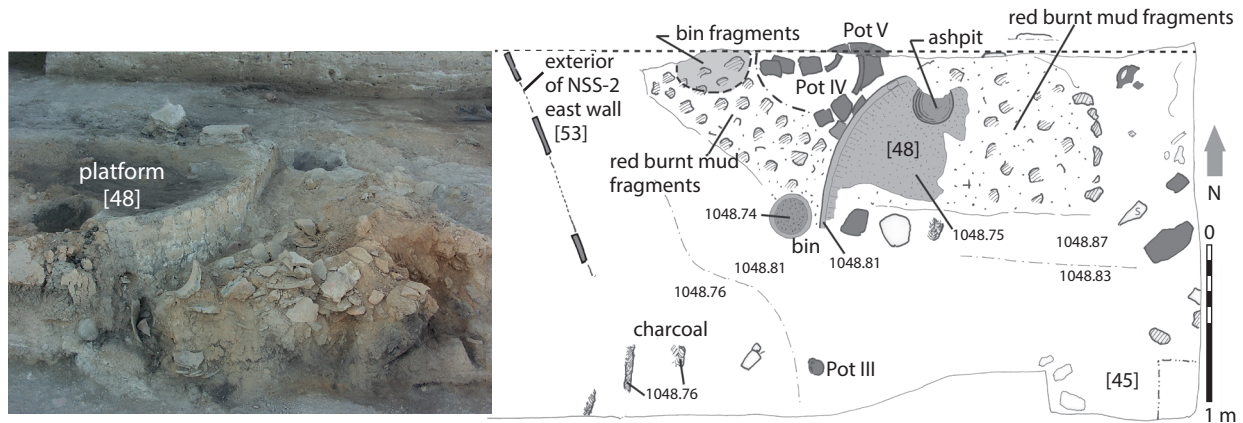


FIG. 13. Area of platform Locus 48 in NSS-1: view toward the southeast and drawing of corner platform and bins.

(see fig. 14, n), and a large white-painted pitcher (see fig. 13, Pot IV; fig. 14, r).

Of NSS-2, adjacent to the west but with the floor level about 0.5 m lower, all but the north wall is preserved, and the full dimensions of the room are suggested by slight turnings in the plaster faces of the east and west walls, where the northern wall must have stood (fig. 15; see table 2). Impressions of wood and plant materials in the fallen chunks of burnt wall that filled the room indicate both the direction of wall collapse (toward the west) and the use of tubular materials (probably reeds) set vertically between posts (see online fig. 2c).⁵² Along the east wall is a low ledge, just as in NSS-4 (fig. 16, Locus 67).⁵³ The corner platform (Locus 65) is similar in shape and size to that in NSS-1, with a raised, curved feature that may have functioned as a pot stand (see fig. 15, Locus 89).⁵⁴ Farther along the south wall, near the southwest corner of the room, is a cooking platform with projecting arms (Locus 79)⁵⁵ surrounding a concentration of ash, with a shallow round ashpit in front. Small inturned projections from the arms probably provided stability for cooking pots. On the corner platform were an intact beak-spouted jug (see fig. 14, j), a broken globular jar or cup (see fig. 14, u), and, directly atop the crushed jar, an intact, plain-burnished bowl (see figs. 14, q; 16), perhaps stacked for storage or used as a lid to cover the

jar. Part of another white-painted bowl (see fig. 14, p) was found on the front edge of the platform, its other half leaning against the platform's side. On the ledge running along the east wall were fragments of two coarse jars, a flat lid (see fig. 14, i), and a stone grinder or pounder. Fragments of a white-painted pedestaled lid were found on and around the northern part of this ledge, evidently broken before being burned (see fig. 14, h). On the floor just next to the east ledge were a plain globular cup or jar (see fig. 14, t) and a pyramidal spit holder (see fig. 14, g). Other finds from the floor include a small beak-spouted jug and many joining pieces of a large white-painted, red-burnished jar within a wide floor depression in the southwestern corner of the room, near the cooking platform (see figs. 15, 16, Locus 87).⁵⁶ Pieces of a red-burnished jar or jug lay shattered on a narrow, low ledge (Locus 82) in the southwest corner, beneath broken pieces of a coarse jar that were coated with charred wheat grains.⁵⁷ Based on the distribution of its pieces, the jar full of grain may have been suspended on a wall. Other finds from within the NSS-2 debris include spindlewhorls (see fig. 14, d and e); a clay animal figurine, possibly a sheep (see fig. 14, f);⁵⁸ and a fragmentary wide-bodied jug with a second small handle beneath the spout, similar to the one found in NSS-1 (see fig. 14, s).

⁵² Two postholes are aligned on the center axis of the room 2 m apart: one square (ca. 0.18 x 0.18 m), just north of the south wall; the other in the center of the room and round (Locus 84, diam. ca. 0.25 m).

⁵³ Ca. 0.15 m high.

⁵⁴ The platform is ca. 0.30 m high, with a slightly raised edge.

⁵⁵ Ca. 0.60 x 0.30 m, 0.15 m high.

⁵⁶ Ca. 0.90 m wide, with a smaller, deeper depression inside (ca. 0.20 m wide).

⁵⁷ Jar fragments: HM26356, HM26358. Grain samples: HM25630, HM25631, HM26011, HM26012, HM21471.

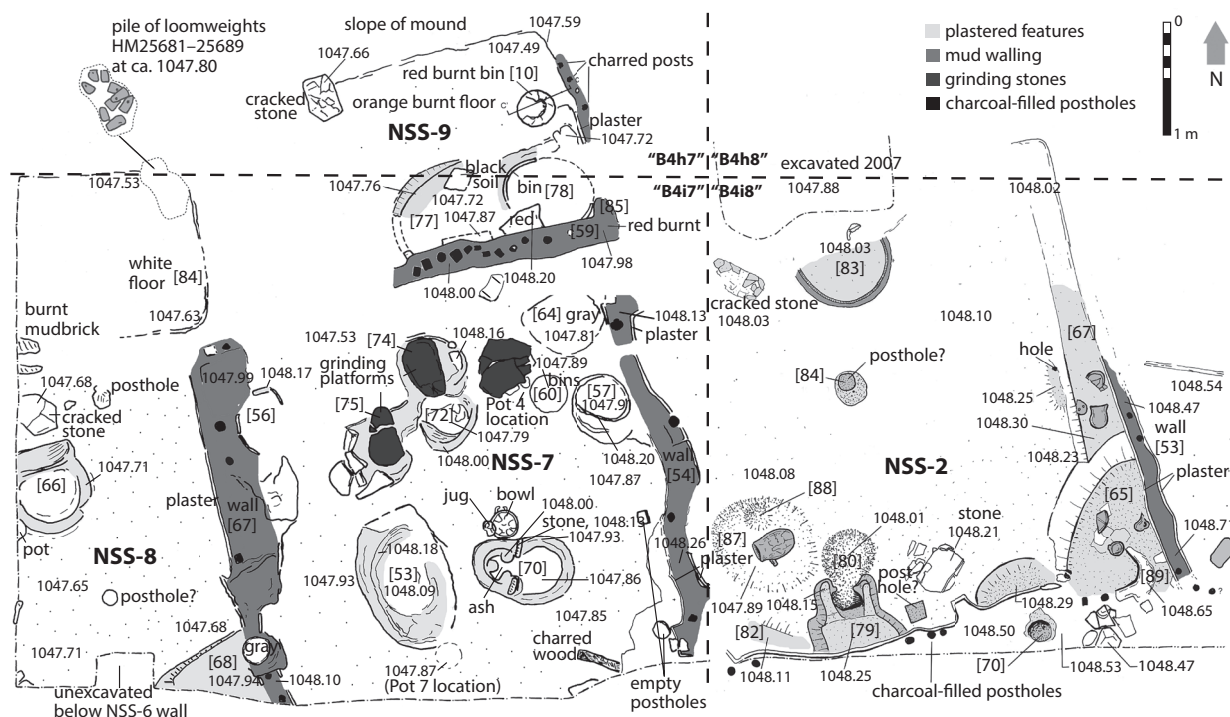
⁵⁸ Cf. Warner 1994, pl. 197e:KA365, excav. 1966 (see n. 23); Baykal-Seeher and Obladen-Kauder 1996, pls. 129–34, excav. 1975–78 (see n. 32); Türkütüzün et al. 2014, figs. 25, 26, excav. 2009, Çiledir Höyük, Kütahya Museum excavations.



FIG. 14. Selected finds from NSS-1 and NSS-2: clay spindlewhorls (a, HM17476; b, HM17477; c, HM17479; d, HM17098; e, HM22546), animal figurine (f, HM25654), and spit support (g, HM16920); pottery lids (h, from HM17117/21763; i, from HM22815); jugs (j, HM21760; m, HM17452.3; n, HM17583); bowls (k, HM17452.1; l, 17452.2; o, from HM22506/22509; p, HM21742; q, HM21762); ovoid pitchers (r, HM17581; s, HM17100); globular jars or cups (t, HM16918; u, HM21761) (a–c, k–n, s now in the Antalya Museum; d–f, h, j, p–r, t, u now in the Elmalı Museum).

Adjacent to NSS-2 at the west, NSS-7 differs from the other exposed rooms of this phase in not having a corner platform and being on the same level as its neighboring space to the east (see further discussion

below). The next room to the west, NSS-8, is 0.2–0.3 m lower, thus resuming the stepped pattern. Of NSS-8, only the eastern part has been exposed (see fig. 15; online fig. 5; table 2). In addition to the rounded



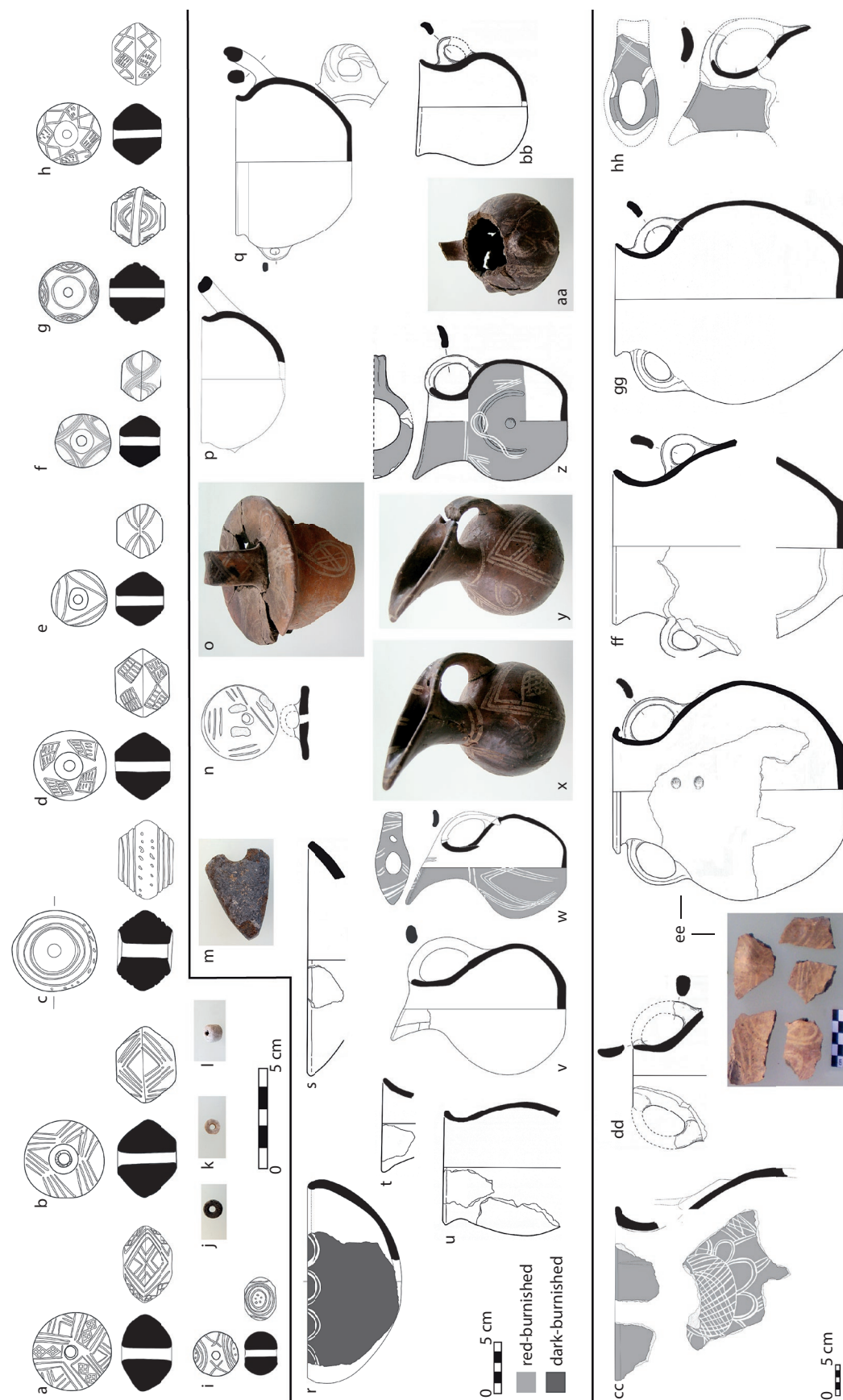


FIG. 17. Selected finds from NSS-7 and NSS-8: clay whorls (a, HM25664; b, HM26615; c, HM26386; d, HM26033; e, HM26000; f, HM26396; g, HM26001; h, HM26002; i, HM26006); stone beads (j, HM25342; k, HM25614; l, HM26395); fragmentary stone axe-head from bin, Locus 57 (m, HM27141); pottery lids (n, HM26616; o, HM25197); cups (p, HM25175, and q, HM25177, red-burnished; bb, from HM26374, coarse gray); bowls (r, from HM26036; s, from HM26393); small jars (t, HM26378.1; u, from HM26043); jugs (v, HM26037, Pot 7 in fig. 15; w, HM25128, x, HM26371, and y, HM26372, from hearth, Locus 70; z, HM24944; aa, HM25196; hh, from HM25306 and HM25604); coarse jars (cc, HM26042; dd, from HM26374; ee, HM26365; ff, from HM26354; gg, from HM26603/26015/26312/26617/26624, Pot 4 in fig. 15) (a–i, q, v–y now in the Elmalı Museum).

an enclosed room or open courtyard (see fig. 15).⁶⁴ The positions of the burnt wall chunks and the orientations of reed and wood impressions within them indicate that much of the debris filling the east side of the space represented the collapsed west wall of NSS-2 (online fig. 9, Locus 54). Installations within NSS-7 are primarily concerned with grain processing and storage (fig. 18; see table 2): two grinding platforms (grinding stones surrounded by plastered earth and stones, Loci 74 and 75) with an adjacent floor bin (Locus 72), presumably for collecting ground grain as it fell from the platform;⁶⁵ an oval platform (Locus 53) covered and surrounded with a scatter of charred wheat grains and broken pottery;⁶⁶ and two storage bins (Loci 57 and 60) made of plastered mud and chaff, built directly up from the floor, one caked with carbonized grain at the bottom (see online fig. 8b).⁶⁷ Similar clay bins may have been used in the disturbed NSS-1⁶⁸ and are attested at EBA Aphrodisias, where they were also used to hold grains in a storage area that was “not necessarily enclosed.”⁶⁹ Parallels for grinding stones embedded in plastered installations are found from Neolithic Ilıpınar⁷⁰ to EB II Arslantepe.⁷¹ Near the middle of NSS-7 is a small horseshoe-shaped hearth (Locus 70) with three knobs projecting inward (to form a tripod pot support), an upright stone slab at the end of each projecting arm, and a larger, shallow rimmed basin in front (see fig. 18).⁷² Sitting on top of the horseshoe-shaped hearth was the base of a large red-burnished, white-painted jar with relief knobs and grooved handles, the upper parts of which were found in debris strewn

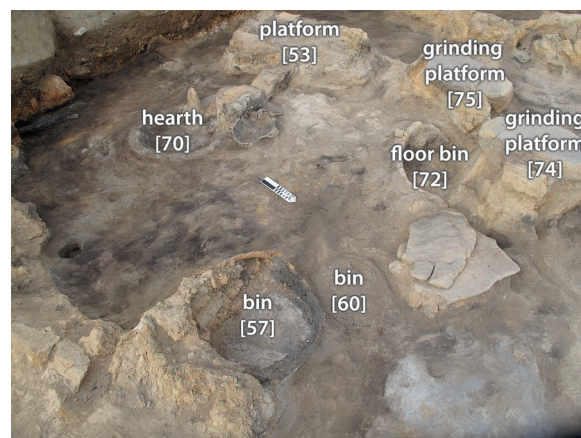


FIG. 18. View of NSS-7 after removal of destruction debris.

toward the south (see fig. 17, ee; online fig. 10a).⁷³ In the ash filling the small space below that base and between the projecting arms were three matching beak-spouted jugs with white-painted decoration (see fig. 17, w–y; online fig. 10b). In the shallow curbed basin were pieces of a large red-burnished, white-painted jug (see online fig. 10c), and sitting upright on the floor just north of the hearth were a shattered one-handed bowl with white-painted decoration and a small red-burnished juglet (see online fig. 10d). The concentration of decorated non-cookware pottery on and inside this hearth is notable, as is the assortment of different shapes used for pouring and consuming liquids. Its orientation is also notable: in contrast to all the other horseshoe-shaped hearths in neighboring rooms, its opening faces east rather than north. In the debris covering this hearth and between it, the oval platform to the west, and the grinding platforms to the south, was a swath of broken pots, including several coarse jars, one full of charred grains (see figs. 15, Pot 4; 17, gg),⁷⁴ a brown-burnished jug (see figs. 15, Pot 7; 17, v),⁷⁵ and a small, globular red-burnished bowl or cup (see fig. 17, p). Many more pieces of coarse decorated jars and burnished jugs and bowls were found in the general debris, along with 13 spindlewhorls or beads (see fig. 17, a–i), two loomweights, and three stone beads (see fig. 17, j–l). A fragmentary stone axe head and pounding stone were

⁶⁴ Two large round postholes (ca. 0.13 and 0.20 m wide) located just in front of the east wall (0.02 and 0.12 m, respectively, to the west) and a carbonized squared timber post (0.07 x 0.04 x 0.42 m) lying on the floor toward the southeast corner suggest at least partial coverage on the east side.

⁶⁵ The floor bin measures 0.38 x 0.54 m, 0.18 m deep, with rim ca. 0.02 m high and exit spout 0.13 m long.

⁶⁶ Ca. 0.98 x 0.60 m, 0.27 m high.

⁶⁷ Locus 57, ca. 0.51 m wide at base, preserved to 0.31 m above floor; Locus 60, ca. 0.37 m wide at base, preserved only up to 0.05 m above floor. A smaller, squared bin (Locus 56, ca. 0.31 x 0.29 m, ca. 0.26 m high) was built against the east face of the west wall.

⁶⁸ Ben Claasz Coockson, field notes, 14 August 2008.

⁶⁹ Kadish 1971, 132, 136.

⁷⁰ Coockson 2008, figs. 18, 26, 82.

⁷¹ Sadori et al. 2006, 210–11, fig. 6.

⁷² The raised, horseshoe-shaped part of the hearth measures 0.36 x 0.49 m, 0.11–0.17 m high, with plastered upright stones (0.22–0.25 m high); the rimmed basin is ca. 0.65 m wide.

⁷³ For the shape, cf. Eslick 2009, pl. 8, jar type 32; pl. 9, jar type 47; pl. 46:KT394, excav. 1965 (see n. 23).

⁷⁴ Sample HM25693.

⁷⁵ Cf. Eslick 2009, pl. 6, jug type 6.

found in the bottom of the bin containing charred wheat (Locus 57, figs. 17, m; 18; online fig. 8b).

Other notable finds attributable to this level but found in strata that were disturbed or could not be associated with a particular room or structure include a flat copper-based strip or bracelet (online fig. 11, m);⁷⁶ a copper-based toggle pin with a spherical head (see online fig. 11, n); a jar with earlike solid lug handles (online fig. 12, n);⁷⁷ a blackened beak-spouted jug with pierced earlike lugs on the neck (see online fig. 12, x);⁷⁸ and a carbonized grape pip.⁷⁹ From the burnt debris at the northern edge of “B4i7” (see fig. 15, upper left) came a pile of nine loomweights (see online fig. 11, w–y), with a tenth one found nearby, and a spindle-whorl and oblong polished stone object just below. The pile probably results from storage of the loomweights together, rather than hung on a loom, because their holes were oriented in different directions.⁸⁰ The stone object (see online fig. 11, o) is comparable with one from “B4g8” (see fig. 8, i), possibly a whetstone pendant.⁸¹ A clay brush handle (online fig. 11, l) and six more spindlewhorls were also found in this disturbed area.

Overall, the finds from both Terraced Building levels suggest a variety of different domestic activities, from food preparation and consumption to spinning thread and weaving cloth.⁸² While it is difficult to compare artifact assemblages by room because most of the spaces were not completely preserved or exposed, all contained coarse as well as decorated pottery, storage as well as serving vessels, and some artifacts related to textile production. The corner platforms were probably multipurpose, as they could be used as tables or working surfaces as well as supplementary fireplaces.

⁷⁶ Cf. Blegen et al. 1950, pl. 358 nos. 36-245 and 36-32, excav. 1932–38, Troy, University of Cincinnati excavations.

⁷⁷ Cf. Lamb 1936, pls. IX.388, X.336, X.481, excav. 1929–33, Thermi, British excavations.

⁷⁸ See Mellaart 1954, 212.

⁷⁹ HM23603.

⁸⁰ Cf. the “line of loomweights” found with suspension holes aligned in Complex II at Aphrodisias (Kadish 1971, 136).

⁸¹ Cf. examples from Thermi: Lamb 1936, 192–93, pl. 26, excav. 1929–33 (see n. 77); from Kusura: Lamb 1937, 50–51, fig. 12.28 and .29; 1938, 268, fig. 26.8, .9, .11, excav. 1935–37 (see n. 32); from Tarsus: Goldman 1956, 273–75, pl. 418.97 and .102, excav. 1935–39, Bryn Mawr excavations; and from Karataş: Mellink and Angel 1966, pl. 62.39:KA167, excav. 1965 (see n. 23).

⁸² For similar activities at Demircihöyük, see Bachhuber 2016, 355.

Questions raised include: What was the purpose or benefit of the stepped arrangement of buildings? Did the terracing create greater stability for the rooms or structures sharing party walls? Or did staggered rooflines allow for more light or ventilation in the upper parts of the side walls while maintaining a party-wall system? No clear indications have yet been identified among the chunks of burnt mud walling and roofing to answer the question of whether the ceilings of the terraced buildings were flat or pitched,⁸³ though contiguous structures with party walls (as at EB I Demircihöyük) are usually thought to have had flat roofs.⁸⁴ The social implications of this standardized planning is further explored below.

Comparisons with material from Karataş suggest a late EB II date. Painted jugs from both Terraced Building phases are especially comparable with the Mound South Hook Group from mixed deposits at Karataş, assigned to period V:2.⁸⁵ Another strong indicator of contemporaneity with Karataş V:2 is the prevalence of incurved bowls (see, e.g., figs. 11, i; 14, p; 17, r), with or without painted decoration. While such handmade bowls were popular at Karataş during V:2–VI:1, from V:3 they coexisted with shallow plates, tankards, and wheelmade forms, all of which are completely lacking in the Terraced Building levels.⁸⁶ Radiocarbon analysis of charred wheat grains from the destruction debris in NSS-2 carried out by the Sarayköy Nükleer Araştırma ve Eğitim Merkezi, Ankara, yielded a date range of 2617–2349 cal BCE (1 sigma).⁸⁷ This range fits well with the chronology for the EB II period laid out by Mellink and followed here (see table 1).

The So-called Green Mudbrick Phase of EB II

On the north slope, the destruction debris of Terraced Building Phase 2 was followed directly by another building level characterized by the use of greenish mudbrick or pisé over stone foundations,

⁸³ At Karataş, impressions at different angles allow the reconstruction of gabled structures; see Warner 1979, 141–43, ill. 4, 5; 1994, 151–54, figs. 11–13.

⁸⁴ Korfmann 1983, 200–4; Werner 1993, 9; Warner 1994, 151; Erkanal 2011, 134; Bachhuber 2015, 56–57. Pitched ceilings have, however, been proposed for side-by-side buildings at Thermi and Ilipinar; see Baldwin Smith 1942, 105–7, fig. 13; Dinsmoor 1942, 371; Coockson 2008, 154, 158, figs. 34, 35, 57.

⁸⁵ Mellink and Angel 1966, 252; Eslick 2009, 188. See “Discussion” *infra*.

⁸⁶ Eslick 2009, 12–13, 251, pl. 5, bowl types 27–29.

⁸⁷ Sample HM21471; SANAEM S150397001: 3983 ± 70 uncalibrated radiocarbon date, Reimer et al. 2013.

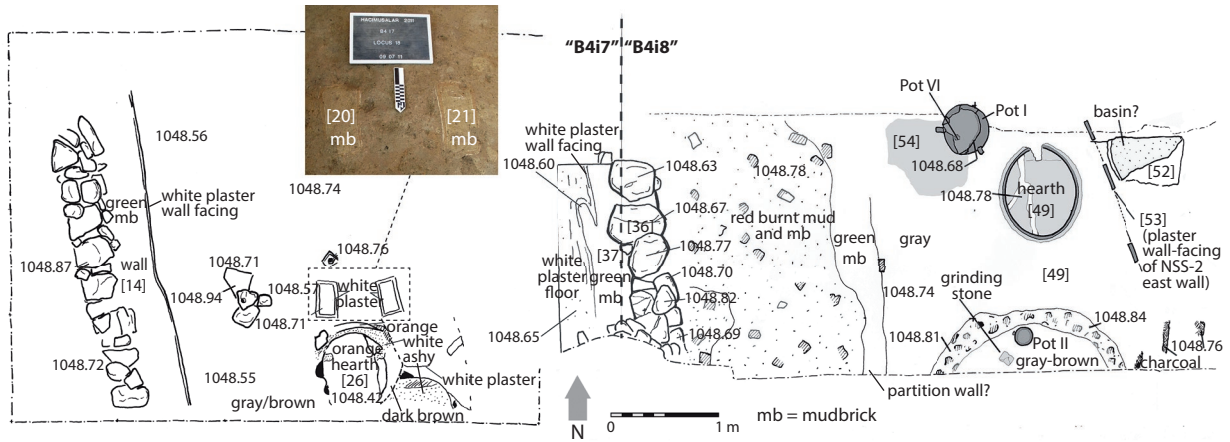


FIG. 19. NSS-6 and associated level, with photograph detail of mudbrick features Loci 20 and 21.

with rubble stone facing on the lowest parts of some wall exteriors. In NSS-6 (fig. 19), the interior wall faces (Loci 14 and 37) were covered with white plaster that merged with the plastered floor, with at least five replasterings.⁸⁸ Two rectangular mudbrick pedestals in the middle of the room (Loci 20 and 21),⁸⁹ near a circular hearth (Locus 26), had been replastered at least three times. The finds from strata filling NSS-6 were not as numerous as from the burnt levels below but include a bone awl, an idol figurine made of soft sandstone or clay, and a globular red-burnished jug (online fig. 13, e, g, l). The continuation of this level toward the east is represented by a rough line of green mudbricks placed end to end (see fig. 19), an oval hearth (Locus 49), and lenses of green mud alternating with black ashy layers,⁹⁰ with finds including another possible copper-alloy toggle pin (see online fig. 13, h).⁹¹ Strata on the west slope that probably correspond to this occupation phase are not well understood but include two mudbrick walls with white plaster facing and a pebbled surface.⁹² As with the previous phase (the burnt layer that seems to correspond to the destruction of Terraced Building Phase 2), these levels

are generally 1.0–1.5 m higher on the west than on the north slope.

Late EB II

A later EB II horizon is represented by several walls and associated floors at the bottom of the North Sounding (see figs. 3, 5) and isolated features at the same level in trenches on the slope, with wall types ranging from mudbrick on stone⁹³ to simple mudbrick⁹⁴ to a combination of mudbrick and pisé.⁹⁵ Red- or dark-burnished and white-painted wares continue, though not as frequently as in the Terraced Building levels.

Subsequent EBA levels were encountered with certainty only in the narrow North Sounding, where they had not been eroded or cut back in later antiquity in part because they were overlain by the Iron Age city wall (online fig. 14). In the southernmost part of the sounding, two successive pebbled surfaces (Loci 212 and 187/195) ran under and up to the exterior of a mudbrick corner (Locus 189, one wall of which extended into the east balk),⁹⁶ covered by a layer of dense burnt mudbrick debris). The mudbrick corner and soil layers immediately beneath were dramatically cut at the north, and the cut, nearly 1 m deep, was filled

⁸⁸ The room was about 4 m wide and at least 3.2 m long, with preserved walls 0.7–0.8 m thick.

⁸⁹ Each about 0.35 x 0.22 m and at least 0.20 m high, located ca. 0.40 m apart (see fig. 19, inset).

⁹⁰ The narrow line of green mudbrick (0.16–0.20 m wide, preserved up to 0.24 m high) was ca. 1.60 m to the east of NSS-6 and running roughly parallel to it. To the east of this, the oval hearth was partly above the east wall and corner platform of NSS-2.

⁹¹ Cf. Warner 1994, pl. 187h:KA450, excav. 1966 (see n. 23).

⁹² D2b4 Locus 9 (= D2c3 Locus 2), D2c3 Locus 6 (= D2b4 Locus 17), D2b4 Locus 16.

⁹³ North Sounding Loci 227, 232, 239; “B4i10” Locus 17.

⁹⁴ “B4i10” Locus 22 (= “B4i8–i9” Locus 36; the same feature was assigned a different locus number in each trench).

⁹⁵ North Sounding Locus 200/205 (slash indicates the feature was assigned two locus numbers before it became apparent the two formed one entity).

⁹⁶ The corner was at least 0.26 m high, 0.85 m long, and 0.72 m wide, with four preserved courses of mudbrick of varying color. One wall was oriented northwest–southeast; the other was perpendicular to it, oriented southwest–northeast.

with a series of dense, sloping layers of clean mud or pisé, within which an upright mudbrick wall may have served as a filling partition or retaining wall.⁹⁷ This deposit may have been a leveling fill⁹⁸ to aid construction of the subsequent building, represented by a stone foundation (Locus 156/158) exposed for a length of 9.1 m, composed of parallel rows of fieldstones with smaller stones and cobbles between them (fig. 20).⁹⁹ It was buttressed on both sides, with buttresses about 0.5 m wide placed 2.0–2.4 m apart. The lack of a crosswall and the presence of buttresses suggest that this wall was part of a rather large building, comparable to buttressed buildings in the EB III levels of Karataş, which had standard megaron plans (with long hall and porch).¹⁰⁰ But unlike buttressed foundations at Karataş, which supported walls of pisé or timber-reinforced mud, here, up to two courses of large, square mudbricks of various colors were preserved.¹⁰¹ Although the overall plan of the building is uncertain, it is not impossible that it was a building of megaron or megaroid type.¹⁰²

At some point, the northern end of the buttressed wall was disturbed and superimposed by yet another EBA occupation level, North Sounding Phase C. In the southern part of the North Sounding, this occupation phase overlies an intervening sediment layer that may have been another leveling fill. Joining fragments of a remarkable globular spouted jug were found dispersed throughout this soil over a wide area.¹⁰³ This jug (fig. 21, x) is distinctive in fabric (chalky buff with light bluish-gray interior) and surface decoration (crossing diagonal and curving bands painted in reddish-brown slip) as well as shape, with an unusually tall neck and nearly vertical spout.¹⁰⁴ Horn-shaped knobs project

from the shoulder and are paired along the sides of the neck. Only a few red-painted sherds have otherwise been found in EBA levels at Hacımusalar Höyük and elsewhere in West Anatolia, where they are sometimes identified as imports.¹⁰⁵ The fabric and general decoration of this jug are comparable with Cypriot White Painted or Philia Ware,¹⁰⁶ while horn-shaped lugs are paralleled on Middle Cypriot pottery.¹⁰⁷ Otherwise the pottery from these intervening strata includes mostly dark- and red-burnished as well as coarse wares, with only a few white-painted bowl rims (see fig. 21, a–d, f). Several shallow red-burnished bowl or plate rims (see, e.g., fig. 21, i, j, u)¹⁰⁸ and two red-burnished tankard rims (see fig. 21, e and l) mark the earliest occurrence of these shapes on the mound. These distinctive shapes appear at Karataş in period V:3 and thus suggest a date in the late EB II period for this deposit.¹⁰⁹ Still lacking from deposits directly beneath North Sounding Phase C, however, are any traces of wheelmade pottery, which appeared at Karataş and elsewhere in West Anatolia by early EB III.¹¹⁰ Other notable finds from these intervening strata include spindlewhorls decorated with white-filled incisions, one lentoid in shape (see fig. 21, y).¹¹¹

vessels” from Seyitömer Höyük, Bilgen 2015, figs. 152, 153, excav. 2006–2013, Dumlupınar University excavations.

¹⁰⁵ Beycesultan: Lloyd and Mellaart 1962, 217, fig. P56.3, excav. 1954–59 (see n. 22); Aphrodisias: Joukowsky 1986, 388–89, fig. 321.18, excav. 1967 (see n. 22); Karataş: Mellink 1991, 170; Eslick 2009, 52.

¹⁰⁶ Swiny 1991, 41; Webb and Frankel 1999, 24–25. Many thanks to David Frankel and Jennifer Webb for assistance with this comparison.

¹⁰⁷ E.g., Frankel 1983, nos. 40, 1244 (Ashmolean Museum AN1888.667, AN1896-1908.C.24). Horn-shaped knobs also occur on jug shoulders from earlier strata at Hacımusalar (e.g., fig. 7, m and n, herein).

¹⁰⁸ Cf. Eslick 2009, 14, pl. 5, bowl type 43.

¹⁰⁹ Mellink 1986, 145; Eslick 2009, 219–25, 236. For these shapes at other sites in the late EB II and early EB III periods, see Yakar 1985, 118; Joukowsky 1986, 392, 451; Şahoğlu 2008, 156–62; 2011, 139; Ünlü 2009, 45–46; Düring 2011, 270–72; Kouka 2013, 577.

¹¹⁰ Yakar 1985, 109–10; Joukowsky 1986, 389, 446; Mellink 1986, 141, 145, 149; Çevik 2007, 136; Efe 2007, 55; Dedeoğlu 2008, 592; Eslick 2009, 5, 220, 225, 233; Ünlü 2009, 52, 66–67; Efe and Türkteki 2011b, 220; Şahoğlu 2011, 141; Sarı 2013, 307–8; Türkteki 2013, 193–95; Fidan et al. 2015, 78–79. For late EB II dating of wheelmade pottery at Samos, see Kouka and Menelaou 2018, 130–36.

¹¹¹ Cf. Warner 1994, pl. 183g:KA545, Karataş VI, excav. 1966–67 (see n. 23).

⁹⁷ These dense mud layers contained very few finds, except at the lowest level, which included some animal bone and flat lenses of ash and organic remains.

⁹⁸ Cf. a mudbrick fill for an EB II building at Liman Tepe (Erkanal 1996, 77).

⁹⁹ The foundation measured 0.50–0.60 m thick and 0.10–0.26 m high. Cf. the “triple line” construction found in Karataş III–V:3 (Warner 1994, 142).

¹⁰⁰ Warner 1979, ill. 2; 1994, pls. 13, 40, 55, 133b–c, 134a.

¹⁰¹ Bricks 0.40–0.44 m wide, ca. 0.40–0.60 m long.

¹⁰² For the use of the term “megaron,” which some scholars avoid because it implies Aegean connections for a West Anatolian building type, see Mellink 1986, 140; Werner 1993; Düring 2011, 269; Perello 2011, 119; Ivanova 2013, 18.

¹⁰³ North Sounding Loci 145, 152, 153, 154, and 168; strata constituting a total depth of 0.54 m and covering most of C4a8 and B4j8.

¹⁰⁴ Cf. Eslick 2009, 18, pl. 6, jug type 21; also, EB III “libation

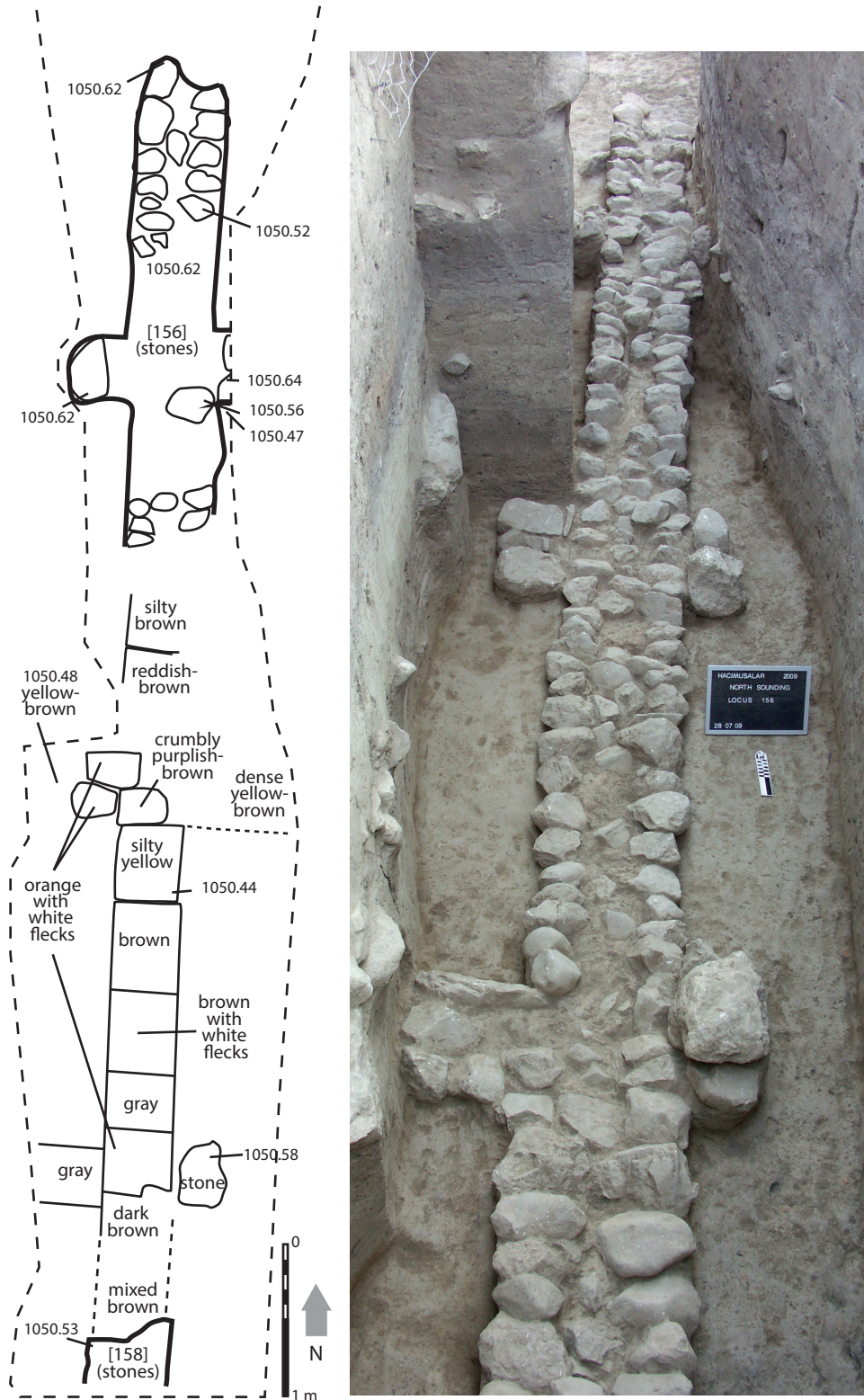


FIG. 20. Butressed wall in North Sounding: *left*, drawing before mudbricks removed, with mudbrick characteristics noted; *right*, stone foundation completely exposed.

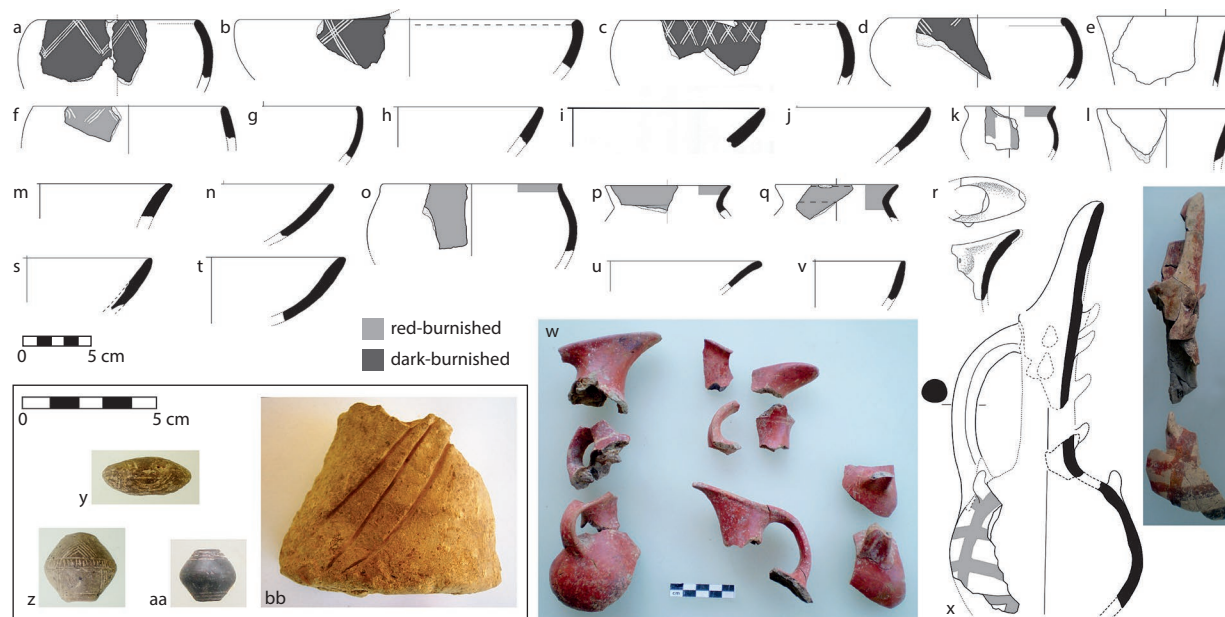


FIG. 21. Selected finds from late EB II levels in North Sounding: red-burnished bowl rims (*a* and *b*, from HM20163; *c* and *d*, from HM20178; *f*–*h*, from HM20169; *i*, from HM19810; *j*, HM19846; *m* and *n*, from HM19821; *s* and *t*, from HM20172; *u* and *v*, from HM19248); red-burnished tankard rims (*e*, from HM20178; *l*, from HM19846); rim of small jar or cup (*k*, from HM19846); jar rims (*o*, from HM19821; *p* and *q*, from HM20172); fragmentary jugs (*r*, from HM20172; *w*, from HM22016 and HM22028; *x*, HM20141); clay spindlewhorls (*y*, HM19801; *z*, HM19820; *aa*, HM21790); bottom of conical clay pot support or loomweight (*bb*, HM22532) (*aa* now in the Antalya Museum).

North Sounding Phase C consisted of two mud-brick walls forming the northwest corner of a room, both made of silty yellow mudbrick with barely discernible courses, one with an irregular stone socle (online fig. 15).¹¹² In and around a pit hearth on the adjacent surface to the north (see online fig. 14, Locus 150) were found several red-burnished bowl rims of light pinkish-red color as well as fragments of a small red-burnished, white-painted jar or cup (fig. 22). The bowls are shallow types that were popular at Karataş in periods V:3–VI:1.¹¹³ Nearby were the fragments of a nearly complete jar (see fig. 22, *a*), at least two other large coarse ware vessels, and an unbaked clay die (see fig. 22, *h*) with impressed dots on each side: 1 opposite 3, 2 opposite 5, and 4 opposite 6. Cubic dice are known from EBA contexts in the Near East and Indus Valley, but these usually have opposite sides paired as 1/2,

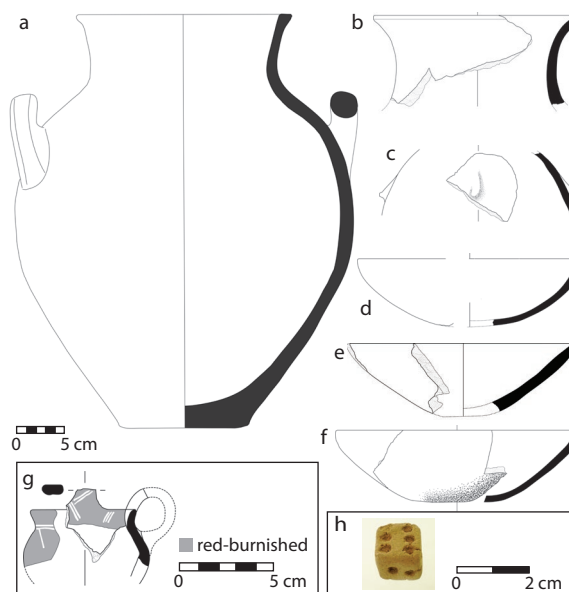


FIG. 22. Selected finds from in and around North Sounding Phase C pit hearth, Locus 150: coarse jars (*a*, from HM19236; *b*, HM19842); black-burnished jar (*c*, HM19842); red-burnished bowl rims (*d* and *e*, from HM19842; *f*, from HM19834); globular jar (*g*, HM20162); clay die (*h*, HM19211) (*h* now in the Antalya Museum).

¹¹² North Sounding Locus 101, at least 0.60 m thick and 0.56 m high, with stone socle 0.34–0.11 m high. The other wall (Locus 114) was ca. 0.35 m thick, with a thin white plaster layer on its north face.

¹¹³ Cf. esp. Eslick 2009, 11, 14, pls. 4, bowl type 12; 5, bowl type 40.

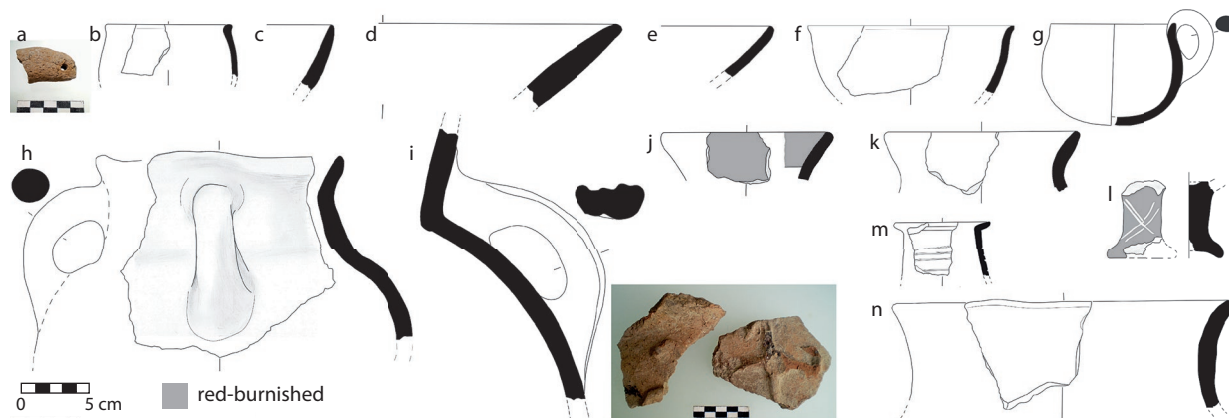


FIG. 23. Selected finds from latest EBA levels beneath the city wall in the North Sounding: loomweight fragment (a, HM19073); red-burnished bowl rims (b–d, from HM19065; e, from HM19077; f, from HM19081); coarse jar or cup (g, from HM19081); coarse jar fragments (h, from HM19084; i, from HM19077; m, HM19082.2; n, from HM19082); jar or tankard rim (j, from HM19084); jar rim (k, from HM19084); stemmed foot (l, from HM19084).

3/6, and 4/5.¹¹⁴ The closest parallel known for our arrangement of numbers, except that the face opposite 4 is blank, occurs on a stone die from Mohenjodaro.¹¹⁵

EB III

Two subsequent EBA burnt layers were attested in the North Sounding in the space just beneath the later city wall and toward the mound edge at the north (see online fig. 14).¹¹⁶ Finds from these loci and the intervening strata between them and Phase C offer more examples of tankard and plate rims, including a type found at Karataş only in period VI:1 (fig. 23, d),¹¹⁷ and S-profile bowls (see fig. 23, b and f), also found in EB III in this region.¹¹⁸ A narrow-mouthed jar rim with incised horizontal grooves on the neck (see fig. 23, m) is comparable to EB III examples from Troy, Tarsus, and Aphrodisias.¹¹⁹ Also notable are fragments of one

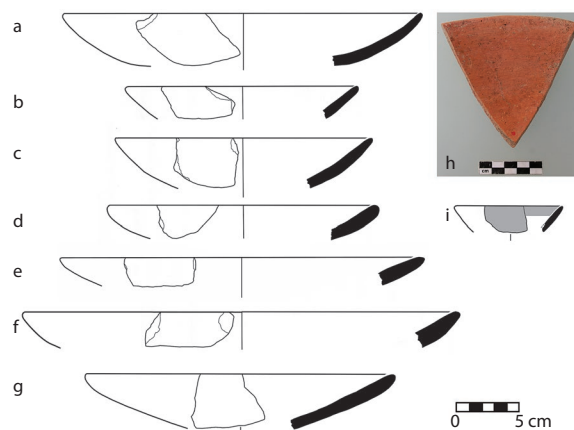


FIG. 24. Pottery from the latest EB levels on the North Rim, trench C4b9: shallow red-burnished bowl or plate rims (a, HM11699.1; b, HM11699.2; c, HM11648.2; d, HM11648.4; e, HM11648.5; f, HM11555.1; g, HM11553.1; h, HM11667, with wheel marks); tankard rim (i, HM11491.1).

¹¹⁴ Dales 1968, 18–19; Tosi 1983, 145, 174 fig. 10, excav. 1967–78, Shahr-i Sokhta, Italian Institute for Africa and the Orient excavations.

¹¹⁵ Mackay 1938, 559–60, pl. 142, no. 85.

¹¹⁶ One ca. 0.6 m above the surface of Phase C, traceable for about 7.8 m (North Sounding Loci 75, 85, 89, 92, 97, 104); another 0.5–0.6 m above that but preserved only directly beneath the city wall (North Sounding Loci 60, 61).

¹¹⁷ Cf. Eslick 2009, 14, pl. 5, bowl type 42.

¹¹⁸ Troy: Blegen et al., 1950, shape A21, which first occurs in IIB; Karataş: Eslick 2009, 13, pl. 5, bowl types 33–35, periods V–VI:1; Külliöba: Türkteki 2012, 72, fig. 14.1c–d, pl. 5.2, excav. 1996–2012, Istanbul University excavations, and see also Efe 2014, 116.

¹¹⁹ Blegen et al. 1951, 137, 199, fig. 181.15, excav. 1932–38 (see n. 76); Goldman 1956, fig. 275.596, excav. 1935–39 (see n. 81) (see also Ünlü 2009, 150–51, pl. 48); Joukowsky 1986,

or more coarse jars with hooked swastika designs in relief (see fig. 23, i).¹²⁰

From the deepest levels reached in C4b9 on the north rim come further tankard rims and numerous red-burnished shallow plate and platter rims (fig. 24).¹²¹ It is in this context that the first clear traces of wheel-thrown pottery appear (see fig. 24, h), though

fig. 426.18, excav. 1967–69 (see n. 22).

¹²⁰ Cf. examples from Karataş: Mellink 1964, 274–75, pl. 79.12 and .13; Mellink 1969, 321–22, pl. 73.13; Eslick 2009, 41, pls. 27:KT53, 56:KA177; all excav. 1963–68 (see n. 23).

¹²¹ Cf. Eslick 2009, 14, 25, pls. 5, bowl types 39–43; 9, jar type 52.

handmade wares still predominate.¹²² From an uncontaminated EB III stratum on the south rim come more shallow bowl or plate rims as well as a possible example of black-topped ware, not otherwise attested at Hacimusalar.¹²³

DISCUSSION: EBA HACIMUSALAR HÖYÜK IN CONTEXT

The EBA remains at Hacimusalar Höyük are important for understanding the history of the Elmalı region, the cultural affinities of its inhabitants, and settlement connectivity and development in EBA West Anatolia as a whole (fig. 25). The density of EB II remains is remarkable, with key cultural elements persisting through successive building levels. Most of the present height of the Hacimusalar mound accumulated through this process of rebuilding. Its material evidence is readily comparable with neighboring Karataş but presents some key differences that may shed light on the relationship between neighboring settlements of different sizes in a time of developing urbanism. Evidence for extra-regional connections and cultural affinities suggests broader cultural interactions and trade. The mountain-defined borders of the Elmalı plain help to explain its regionalism while making all the more significant any external connections that are found. Hacimusalar Höyük also contributes new perspectives to discussions of cultural changes, trade, and connectivity in EB II–III West Anatolia.

Pottery

Overall, the EBA material culture of the Elmalı basin is regionally distinct. Since the surveys by Mellaart, Elmalı EBA pottery has been recognized for its abundance of white-on-red decoration.¹²⁴ As Eslick has noted, the “strong local character” of the Elmalı plain is not surprising given its location “away from major routes.”¹²⁵ Its pottery is distinct even from that of the neighboring Seki and Çaltılar plains, just 25 km northwest but on the other side of a mountain



FIG. 25. Map of Anatolia, with sites mentioned in the text.

range reaching more than 2,500 masl.¹²⁶ Regionalism within broader trends can also be explained by pottery manufacturing methods, at least for the EB I–II periods, when pottery was produced at the household level and probably did not travel far,¹²⁷ though petrographic analysis for the few white-painted sherds from Çaltılar suggests that they may have been produced in the Elmalı region.¹²⁸

Both Hacimusalar and Karataş have yielded a wealth of EB II red- and dark-burnished pottery with white-painted decoration, especially incurved bowls and beak-spouted jugs. Some of the painted motifs—overlapping, crossing, or zigzag parallel diagonal lines or chevrons—belong to a widespread decorative vocabulary that appears in both incised and painted form across West Anatolia in the EBA. Multiple chevrons, or groups of parallel diagonal lines in a zigzag arrangement with ends sometimes overlapping in a grid pattern (see figs. 11, j; 14, m and r; 17, w–y; 21, a–c), are a hallmark of Yortan-style painted pottery, particularly on beak-spouted jugs, and also occur on pottery from Kusura, period A.¹²⁹ Curvilinear motifs, on the other hand, seem to have been more at home in the Elmalı

¹²² One earlier example of possible wheel marks, on a bowl rim from North Sounding Phase C (pottery lot HM19215), is less certain.

¹²³ HM27958, South Sounding Locus 48.

¹²⁴ Mellaart 1954, 179, 190, 206, 210; Yakar 1985, 123–24, 158; Efe 2003, 91; Eslick 2009, 52, 214–17; Efe and Türkteki 2011b, 218–19; French 2012, 8; Fidan et al. 2015, 62, 72; Thater 2016, 16.

¹²⁵ Eslick 2009, 215.

¹²⁶ Momigliano et al. 2011, 77; French and Coulton 2012, 45; French 2012, 8.

¹²⁷ Mellink 1986, 141; Eslick 2009, 4, 230; Ünlü 2009, 52; Thater 2016, 20.

¹²⁸ Momigliano et al. 2011, 80–81, 105.

¹²⁹ Kusura: Lamb 1937, fig. 16, no. 13, excav. 1935–37 (see n. 32); Yortan: Kâmil 1982, figs. 41, 42, 46, 47, 52, 58, 59, 61, excav. 1900–01, French excavations; Karataş: Eslick 2009, pls. 14, 15, motifs 11–13; on the motif in general, Thater 2016, 14.

basin than elsewhere in West Anatolia.¹³⁰ The double-swag (concentric semicircles) was especially popular on the rims of incurved bowls (see, e.g., figs. 14, l and p; 17, r; online figs. 12, p; 13, z), while overlapping swags (intersecting arcs) are found also around the shoulders and mouth interiors of jugs, jars, and cups (see figs. 11, i; 14, m and r). These motifs find no parallels in contemporary incised pottery, as they are more suited to the movement of the paintbrush.

Particularly common are hooks, whether pendant from a horizontal band around the neck of a vessel or hanging from the legs of chevrons or triangles formed by crossing diagonals (see figs. 11, n; 17, o and x; 14, n; online fig. 12, a, b, e, s). At Karataş, this motif was found primarily in a group of jugs from mixed contexts dubbed the Mound South Hook Group, thought to belong to Karataş V:2 (EB II), and on a few graves of the same period.¹³¹ The decoration was so distinctive at Karataş and the group so “cohesive” that Eslick suggested the vases were “made within the same household” and that there may have been “some connection between the producing household, presumably in Mound South, and those burials.”¹³² The discovery of five jugs with similar decorative schemes combining diagonal and hook motifs in contexts associated with both Terraced Building levels at Hacimusalar not only helps secure an EB II dating for these levels but suggests a broader decorative trend in the region, possibly originating at Hacimusalar, where the hook motif is also found on globular one-handled cups as well as on larger jugs and jars and a pedestaled lid. In fact, there is a greater variety of painted shapes in general at Hacimusalar, including globular one-handled cups, large jugs and jars, and pedestaled lids (see, e.g., figs. 14, h, s, u; 17, o, aa, cc; online figs. 12, a–e, h; 13, r). The pedestaled lids are particularly interesting because at other EBA sites in West Anatolia these are normally not decorated.¹³³ Pedestaled lids at Karataş also usually

have vent holes,¹³⁴ which are lacking in the decorated examples from Hacimusalar; the decorated, nonperforated types may have been used more for storage (covering jars) than for cooking.

The recurrence of specific decorative motifs is particularly notable for pottery that was probably produced at the household level by nonspecialists.¹³⁵ Were potters at Karataş emulating designs more commonly found at the larger, regional center? While the similarities are striking, there is still enough variability to support a local, household-based production model; these are not mass-produced items. The beak-spouted jugs from Karataş, for instance, do not have suspension holes at the tops of the handles like many from Hacimusalar. And there is a great deal of variety in the combination and execution of these decorative motifs. For instance, the designs painted around the mouths of jugs in the Mound South Hook Group at Karataş—parallel angled dashes or a chain of intersecting swags—are found on cups as well as jugs at Hacimusalar, with various other motifs as body decoration. It seems that painters freely mixed and matched motifs. Hooks with crosshatched filling and crosshatch-filled ovals (see figs. 14, h; 17, o and x; online fig. 12, a) are found at Hacimusalar but are not represented among the published pottery from Karataş.

Also rare at Karataş but frequent at Hacimusalar is the combination of painted and relief decoration. At Karataş, this combination is found in only a few cases, and the painted decoration usually bears no relation to the relief elements; for instance, a small knob on the shoulder of a red-burnished, white-painted jug or vertical ridges that seem to interrupt a painted design on a bowl rim.¹³⁶ At Hacimusalar, painted and relief designs are integrated: painted hatches emphasize relief bands (see fig. 14, n) or relief knobs are outlined by white-painted circles or hooks (see fig. 17, aa; online

¹³⁰ Examples from Elmalı basin survey: Mellaart 1954, 206, 238, nos. 440–49, collected 1951–52 (see n. 21); from Karataş: Eslick 2009, 52, pls. 14, 15, motifs 61–63, 115–17; pls. 43:KA595, 48:KT445, KT447, 57:KT193, excav. 1967–68 (see n. 23); see also, Kâmil 1982, 39; Thater 2016, 14: “exclusively linear geometric patterns” found at Troy.

¹³¹ Mellink and Angel 1966, 252; Eslick 2009, 188–89, 230, pl. 15, motif 134; pls. 62, 90–92, excav. 1964–69 (see n. 23).

¹³² Eslick 2009, 230.

¹³³ Troy: Schliemann 1976 [1881], 374–75, 538, figs. 328–32, 1093, excav. 1870–79; Blegen et al. 1950, fig. 370b, Types

D3, 5, 7, 8; Blegen et al. 1951, fig. 154b, Types D1, D5, D7, D8, excav. 1932–38 (see n. 76); Thermi: Lamb 1936, 77, 115, no. 290; 122, no. 382; 134, nos. 592–94; pls. XXXVI, XL, excav. 1929–33 (see n. 77); Aphrodisias: Kadish 1971, 138, pls. 29.29, 30.41, excav. 1968–69 (see n. 22); Seyitömer and Küllioba: Efe 2007, fig. 10 (see nn. 104, 118); Karataş: Eslick 2009, 27, pl. 11, lid type 1; see also Thater 2016, 19.

¹³⁴ Eslick 2009, 27.

¹³⁵ Eslick 2009, 230; see also Bachhuber 2015, 61.

¹³⁶ Eslick 2009, 54, e.g., pls. 46:KA759, 67:KT525, 43:KT396, 48:KT431, excav. 1966–68 (see n. 23).

fig. 12, a).¹³⁷ A relief medallion covered with painted crosshatching and surrounded by double swags radiating from it produces an almost floral effect (see fig. 17, cc). A radiating pattern is found on a shape not paralleled at Karataş or anywhere else to the authors' knowledge: a large, wide-mouthed jug with saggy body, vertical loop handle opposite the pouring spout, and an additional, smaller vertical loop handle on the shoulder just beneath the spout (see fig. 14, s; for the shape, fig. 14, r). The small vertical handle beneath the spout is formally reminiscent of metallic ware jugs from central Anatolia and Cilicia,¹³⁸ though here it is larger in relation to the overall vessel size and seems more functional, perhaps to facilitate closure by a soft cloth or leather covering.

Another shape well represented at Hacimusalar and worth discussing in some detail is the small, one-handled globular jar or cup, found in both Terraced Building phases as well as sporadically in later EB levels (see, e.g., fig. 14, t and u; online fig. 12, a–e). It has already been noted that this shape bears painted decoration more often here than at Karataş (where there are in fact only two examples; one from VI:1¹³⁹ and another from the cemetery¹⁴⁰). Examples of this general shape elsewhere in EBA central and western Anatolia, variously called mugs, cups, or small jars, are also usually plain or burnished.¹⁴¹ These vessels probably functioned as drinking cups and have been seen as predecessors of EB III tankards.¹⁴² Their find contexts at Hacimusalar support this function, as they often occur together with beak-spouted jugs and one-

handled bowls. In NSS-2, a fine decorated example of this shape was found atop the corner platform, crushed beneath an intact bowl that must have been sitting on top of it at the time of the destruction (see figs. 14, u; 16).

Pottery from Hacimusalar also demonstrates the interacting networks of the Elmalı plain during EB II and III. Fluted decoration so common in the Beycesultan region was previously thought rare in the Elmalı basin but is now attested in both dark- and red-burnished varieties in some of the earliest levels of Hacimusalar (see, e.g., fig. 8, n). The foot-shaped vessel supports from the north slope (see fig. 8, j and k) also demonstrate the remarkable connectivity of the Elmalı region with other parts of West Anatolia, as they are closely paralleled by footed vessels from Yortan (EB II) and Beycesultan (EB III).¹⁴³ The leg-shaped tripod supports of a miniature table from EB II Bademağacı are also comparable, though they are smaller and lack articulation of ankles and toes.¹⁴⁴ The horned jug from a late EB II level (see fig. 21, x), on the other hand, signals a possible connection with Cyprus, though not necessarily evidence for direct contact via the Lycian coast. Rather, it may be seen, along with the use of the fast wheel and the occurrence of shallow plates and tankards, as evidence for the participation of Hacimusalar (and the Elmalı plain) in an interior Anatolian trade route linked with the Cilician coast (discussed further below).

Small Finds

Like the pottery, the small finds from EBA Hacimusalar demonstrate strong similarities with material from Karataş while also fitting into broader West Anatolian traditions. A few also provide evidence for contacts outside Anatolia, probably along an inland Anatolian trade route. It is important to note that ties with inland West Anatolia seem to have been stronger than connections with coastal areas.

Metal finds from Hacimusalar's EBA levels are few, but these are generally comparable with those from Karataş. The toggle pin (see online fig. 11, n) is

¹³⁷ One example is known from Karataş: Mellink 1965, 243, pl. 60:7b, excav. 1964 (see n. 23).

¹³⁸ E.g., Öztan 1989, figs. 5, 6, 21, excav. 1975–83, Açe-m-höyük, University of Ankara excavations.

¹³⁹ Eslick 2009, 170, pls. 52, 86a:KA454, excav. 1966 (see n. 23).

¹⁴⁰ Mellink 1965, 243, pl. 60.8, excav. 1964 (see n. 23).

¹⁴¹ E.g., examples from Thermi: Lamb 1936, 87, 100–3, fig. 26, cup types 1 and 2, pl. 8:24, :25, :73, pl. 35:58, excav. 1929–33 (see n. 77); Tarsus: Goldman 1956, fig. 274.455, excav. 1935–39 (see n. 81); Beycesultan: Lloyd and Mellaart 1962, 123, figs. P16.13, P46.3, P46.4, excav. 1954–59 (see n. 22); Aphrodisias: Kadish 1971, 138, pl. 30.37, excav. 1968–1969 (see n. 21); Kaklık Mevkii: Efe et al. 1995, 367, fig. 12, form 8, excav. 1983–90 (see n. 23); Karataş: Eslick 2009, pl. 7, jar types 5, 8, 9, 11, 12; pls. 52:KT504, 64:KA329, KT 574, excav. 1964–69 (see n. 23); Çiledir Höyük: Türktüzün et al. 2014, fig. 9, excav. 2009 (see n. 58).

¹⁴² Şahoglu 2008, 160; 2011, 139.

¹⁴³ Yortan: Forsdyke 1925, 10, fig. 16, London, British Museum 132447; Beycesultan: Lloyd and Mellaart 1962, 217, fig. P56.7, excav. 1954–59 (see n. 22). The legs from Hacimusalar are somewhat taller than these.

¹⁴⁴ Duru 2008, fig. 349, excav. 1993–2008, Istanbul University excavations.

especially important because it is a Syro-Cilician type that does not appear on the Aegean coast until the LBA; its presence in an EB II–III context in inland West Anatolia has been used to support the theory of an overland trade route linking Syria to West Anatolia in the EBA.¹⁴⁵ This example from Hacimusalar provides further evidence that the Elmalı plain was connected with that inland communication route as early as the EB II period.

Hacimusalar's clay, stone, and bone objects, too, are easily paralleled at Karataş, though many are types found widely throughout EBA Anatolia (e.g., truncated biconical spindlewhorls, pyramidal loomweights, animal figurines, axe-heads) and speak less to regional distinction than to broader cultural connectivity across West Anatolia. As Goldman noted, similarities in the shape and design of spindlewhorls were probably "due to a common background rather than to the influence of one site upon another."¹⁴⁶ Loomweights with incised lines or cross patterns on the top (online fig. 16) are paralleled both nearby at Karataş and in interior West Anatolia at Demircihöyük.¹⁴⁷ Similarly, most of the stamp seals from Hacimusalar Höyük are of a general type known throughout western and central Anatolia from the Chalcolithic period through the Bronze Age, with roughly conical shape, suspension hole, and round face (see figs. 7, b; 8, b; 11, e; online fig. 11, j). One (see fig. 11, e) has a distinctive design of alternating lines and dots, recently discussed as a possible recording system.¹⁴⁸ At the same time, the division of the stamp face into four quadrants is comparable to the so-called angle-filled cross motif widely documented across Anatolia and the Aegean and also attested at Hacimusalar (see online fig. 11, j).¹⁴⁹ The clay die discussed above (see fig. 22, h) was probably

made locally, but it places Hacimusalar (and the Elmalı plain) within the remarkably wide context of a shared leisure pastime stretching from Mesopotamia west to Anatolia and east to the Indus Valley. The carved horn handle (see fig. 11, f) is rare among the small finds from Hacimusalar in having no parallel from Karataş. While its form is comparable to examples from inland West Anatolia,¹⁵⁰ its decoration resembles the carved patterns on Aegean EB II bone tubes.¹⁵¹

Most of the idol figurines discovered at Hacimusalar Höyük are the schematic, figure-eight type common across West Anatolia in the EBA (see online figs. 13, g; 17). Like similar examples from Karataş,¹⁵² they occur in marble as well as other types of stone or clay. Rounded dark lines on the face of one (see online fig. 17b) may be remnants of facial details, like those on the so-called owl-faced idols from Troy.¹⁵³ The functions and meanings of such figurines are uncertain and probably multivalent, as they are found in domestic contexts as well as in graves.¹⁵⁴ The occurrence of this figurine type in the Elmalı region shows the area's connectedness with other parts of West Anatolia and calls into question assumed cultural group boundaries. Maps purporting to show the distribution of idol figurine types according to supposed cultural regions of West Anatolia in the EBA misleadingly present the so-called violin type with long, thin neck as typical for the Lycian-Pisidian region.¹⁵⁵ While several violin-shaped figures have been found at Karataş,¹⁵⁶ none have yet been found at Hacimusalar, and the simpler figure-eight type is attested not only at Hacimusalar but also at Karataş and Aphrodisias and elsewhere in

¹⁴⁵ Efe 2003, 93; 2007, 49; Şahoğlu 2005; Fidan 2012; Türkteki 2013, 193; Fidan et al. 2015, 73–74. Examples from Tarsus: Goldman 1956, fig. 431, nos. 210, 211, 222–27, 231, excav. 1935–39 (see n. 81); from Karataş: Mellink 1967, 253, 255, pl. 77.22 right, excav. 1966 (see n. 23).

¹⁴⁶ Goldman 1956, 330; see also Lamb 1938, 237; Rahmsdorf 2015, 154–55. For notable close parallels in spindlewhorl designs, cf. figs. 14, a, and 17, h, herein, with Warner 1994, pls. 189h:KA503, 185b:KA697, excav. 1967–68 (see n. 23).

¹⁴⁷ Cf. Karataş: Warner 1994, pl. 196a, excav. 1967–68 (see n. 23); Demircihöyük: Baykal-Seeher and Obladen-Kauder 1996, 237–45.

¹⁴⁸ Umurtak 2013, 51–53; Oğuzhanoglu 2019, 54–55.

¹⁴⁹ Also, HM27071 found in mixed context in "B4h7."

¹⁵⁰ Cf. examples from Thermi: Lamb 1936, 200, pl. 27.48, excav. 1929–33 (see n. 77); from Seyitömer Höyük: Bilgen 2015, fig. 194, excav. 2006–2013 (see n. 104).

¹⁵¹ Saliari and Draganits 2013; for an example from Thermi, see Lamb 1936, pl. 27.30, excav. 1929–33 (see n. 77).

¹⁵² Mellink 1967, pl. 77.15, excav. 1966 (see n. 23); Warner 1994, 214, pl. 197a, b:KA461, KA623, excav. 1966–67 (see n. 23).

¹⁵³ Schliemann 1976 [1881], 334, figs. 204–9, excav. 1870–79 (see n. 133); see also Bilgi 1972, 48–49; Takaoğlu 2011, 160; Yılmaz 2016.

¹⁵⁴ Bilgi 1972, 26; Yılmaz 2016, 375–76; Atakuman 2017, 88, 101–3.

¹⁵⁵ Höckmann 1977, 553, fig. 189; Sarı 2013, fig. 5; Fidan et al. 2015, fig. 9.

¹⁵⁶ Mellink 1964, pl. 82, figs. 24, 25; 1967, figs. 13, 14, excav. 1963–66 (see n. 23).

West Anatolia and the eastern Aegean.¹⁵⁷ Both types were widely dispersed throughout West Anatolia, not confined to one region or another; rather than showing cultural distinction, the idol types of EBA West Anatolia indicate significant connectivity.

The clay brush handles from Hacimusalar Höyük likewise find parallels both within the Elmalı basin and in inland West Anatolia. Both pieces from Hacimusalar have an elongated oval body with narrow rows of closely set bristle holes. One (see online fig. 11, l) has a conical grip, with a round suspension hole in the center near the transition from body to handle. The other (see fig. 8, h) is more fragmentary but appears to be of similar shape. Unbaked clay brushes such as these have been found throughout West Anatolia and the eastern Aegean from the EBA, but this particular type—with oval body, neat rows of bristle holes, conical handle, and suspension hole—is closely paralleled in EBA levels at Troy, Tarsus, Beycesultan, Karataş, Demircihöyük, and Çiledir Höyük.¹⁵⁸ It is difficult to say what materials may have served as bristles in such brushes; traces of plant material were reportedly found within some of the holes on brush handles from Troy, but animal-hair bristles are also likely.¹⁵⁹ The uses of these brushes are also difficult to determine and may have been quite varied.¹⁶⁰ At Demircihöyük alone, several different possible use-contexts have been identified on the basis of in situ find circumstances: cleaning hearth areas, combing wool, applying cosmetics, and

dyeing textiles.¹⁶¹ The first two uses accord well with the context of the brush handle from Terraced Building Phase 2 (see online fig. 11, l), found near a hearth and a collection of loomweights.

Architecture

The terraced buildings at Hacimusalar Höyük are comparable with the row houses or “parallel rows of long-room units” found in Troy I and at other West Anatolian EBA sites, though somewhat smaller.¹⁶² Whether parallel or radially arranged, as in Korfmann’s “Anatolian Settlement Plan,”¹⁶³ standardized buildings sharing “common walls represent the most efficient plan with which to build in a restricted area” and were also economical, because party walls, not exposed to outdoor elements, would need less maintenance than exterior walls.¹⁶⁴ Offering “a horizontal solution for privacy in a densely populated settlement,”¹⁶⁵ they also carry social implications: party walls imply some level of communal cooperation and planning, and a continuous band of structures (whether radial or rectangular) creates a sort of enclosure, both an efficient sort of fortification and a windbreak, while marking off communal space in the interior.¹⁶⁶ At Demircihöyük, the storage of grain in this open interior space underlines the idea of communal identity.¹⁶⁷ And, in row houses of any kind, there is limited spatial hierarchy and an “interdependence of households” that suggests some amount of “social equality.”¹⁶⁸ The radial

¹⁵⁷ Troy: Schliemann 1976 [1881], 232, fig. 73, excav. 1870–79 (see n. 133); Blegen et al. 1950, figs. 127, Types 2, 3; 216, excav. 1932–38 (see n. 76); Aphrodisias: Kadish 1969, pl. 23.5; 1971, 135, pl. 29.33, excav. 1968–69 (see n. 22); Yortan: Kâmil 1982, fig. 84.290 and .291, excav. 1900–01 (see n. 129); on the type in general, Bilgi 1972, 14, 17, 191; Höckmann 1977, 553, nos. 475–85.

¹⁵⁸ Troy: Blegen et al. 1951, 108, 140, fig. 150, nos. 37.210–13, 37.163, excav. 1932–38 (see n. 76); Tarsus: Goldman 1956, 325, fig. 443.32–36, excav. 1935–39 (see n. 81); Beycesultan: Lloyd and Mellaart 1962, pl. XXXIIIa, excav. 1954–59 (see n. 22); Karataş: Mellink 1965, 250, pl. 65, fig. 39, excav. 1964 (see n. 23); Warner 1994, pl. 197c, 197d, KA419 and 243/U, excav. 1966–67 (see n. 23); Demircihöyük: Baykal-Seeher and Obladen-Kauder 1996, 252–54, pls. 104–6, excav. 1975–78 (see n. 32); Çiledir Höyük: Türkütüzün et al. 2014, figs. 32, 33, excav. 2009 (see n. 58).

¹⁵⁹ Schliemann 1976 [1881], 414; Baykal-Seeher and Obladen-Kauder 1996, 253.

¹⁶⁰ Bachhuber 2016, 342.

¹⁶¹ Korfmann 1983, 29; Baykal-Seeher and Obladen-Kauder 1996, 253–54; Bachhuber 2015, 59–60; 2016, 341–42. Bilgen (2015, 175) suggests “coating pottery” as another possible function.

¹⁶² Ivanova 2013, 28; see also Harrison and Bilgen 2019, 193–94.

¹⁶³ Korfmann 1979, 46; 1983, 222–41; Werner 1993, 9, 30; Çevik 2007, 135; Düring 2011, 269; Erkanal 2011, 134; Fidan 2013; Harrison and Bilgen 2019, 191–93; Oğuzhanoglu-Akay 2020, 244–45, 248.

¹⁶⁴ Ivanova 2013, 29; see also Duru 2008, 146–57; Efe and Türkteki 2011a, 198–99; Fidan 2013, 117; Bachhuber 2015, 58; Fidan et al. 2015, 64.

¹⁶⁵ Harrison and Bilgen 2019, 206.

¹⁶⁶ Korfmann 1983, 243; Ivanova 2013, 29; Massa 2014b, 89; Fidan 2018, 70; Harrison and Bilgen 2019, 194; Umurtak 2020.

¹⁶⁷ Düring 2011, 268; Bachhuber 2014, 149; 2015, 57–58.

¹⁶⁸ Ivanova 2013, 30. Finds from the cemetery associated with Demircihöyük do, however, suggest some degree of “vertical variability” in social status (Massa 2014b, 89–91).

arrangement of rooms around a larger, central building at EB I Karataş may represent a step toward further social complexity.¹⁶⁹ Not enough of the row houses at Hacimusalar Höyük has been exposed to determine whether their overall arrangement was parallel or radial, but the different orientations of the walls so far exposed on the west and north slopes (see fig. 3, insets) do allow the possibility of a radial plan.

Locations and forms of hearth installations in the Terraced Building phases also have social implications. While corner hearths are known from prehistoric Anatolia as early as the Neolithic period, with their location probably meant to facilitate smoke ventilation along walls,¹⁷⁰ centrally placed hearths (as in NSS-7 and -8) could facilitate “more communal preparation and presentation of food,” and communal drinking and dining activities are also suggested by the many tablewares found close together, as at Demircihöyük.¹⁷¹ The raised ends of these central hearths are paralleled in EB II–III levels at Tarsus,¹⁷² Seyitömer Höyük,¹⁷³ and Beycesultan.¹⁷⁴ Though first interpreted at Beycesultan as horned altars, these are now recognized as functional or decorative hearth elements.¹⁷⁵ The upright stones and eastward orientation of the central hearth in NSS-7 could suggest a possible symbolic or cultic significance, though, in the EBA, ritual activity was probably not segregated or easily distinguished from other daily or domestic tasks.¹⁷⁶

A notable difference between EBA architectural styles at Hacimusalar and at Karataş comes in the use of mudbricks. While regular mudbricks were rarely found at Karataş outside the central building

complex,¹⁷⁷ they are attested at Hacimusalar from the earliest EBA occupation level (in the “B4g9” sondage at the base of the north slope) through the latest (North Sounding Phase C), though not in the Terraced Building levels. Even the buttressed foundation in the North Sounding supported mudbricks (see fig. 20), while buttresses at Karataş appear only on the exteriors of pisé walls.

Synthesis

Although the full layout of Hacimusalar Höyük’s EBA settlement remains unknown, important conclusions concerning social complexity can be drawn from the existing evidence. The repetition of features within neighboring domestic units as well as the occurrence of similar artifact types in each space suggest that the exposed part of the settlement, at least, was relatively egalitarian.¹⁷⁸ The integration of structures into a single unit, with shared walls, suggests some degree of communal cooperation and identity. Vertical continuity of building layout from one level to the next could suggest stability of households through time; similar continuity is found in Anatolian settlements as early as the Neolithic period.¹⁷⁹ Standardization of plan on a horizontal level from one space to the next, on the other hand, conveys a sense of group identity¹⁸⁰ and reflects steps toward urbanism.¹⁸¹

The absence of some features that characterize developed EB III urban centers—centralized architecture and administration, elite cemeteries, rich metal finds, fortification¹⁸²—may be explained by limited preservation and exposure. Because EBA levels are not preserved fully to the edge of the mound, it is uncertain whether the EBA settlement at Hacimusalar was fortified. The center of the EBA settlement has not been revealed, and no EBA cemetery has been located. The small number of metal objects from Hacimusalar

¹⁶⁹ Eslick 1988; see also Çevik 2007, 135–36; Efe and Türktenki 2011a, 200; Fidan 2018, 70–71; cf. Bademağacı (Duru 2008, 146–51, figs. 292, 304) and Seyitömer Höyük (Harrison and Bilgen 2019, 203–9).

¹⁷⁰ Werner 1993, 26; Düring 2011, 62–64, 227, 266.

¹⁷¹ Bachhuber 2016, 355.

¹⁷² Goldman 1956, 26, fig. 84.

¹⁷³ Ünan 2014; Bilgen 2015, figs. 154–56, 166–67.

¹⁷⁴ Lloyd and Mellaart 1962, 29–31, figs. 13–16; Eslick 1988, 21.

¹⁷⁵ Diamant and Rutter 1969, 148–54; Werner 1993, 25; Düring 2011, 282; Fidan et al. 2015, 68, 71. At Seyitömer Höyük, Harrison (2016, 173) distinguishes “utilitarian” hearths, with simple horn-shaped elements, from “formal hearths,” with “added decorative elements, such as larger horn-shaped protrusions.”

¹⁷⁶ Perello 2011, 79.

¹⁷⁷ Mellink 1965, 245; Mellink and Angel 1966, 247, 249, 251; Warner 1979, 145; 1994, 148, 178–79, pls. 73b, 141, 142; Bachhuber 2015, 71.

¹⁷⁸ Cf. the “nonelite” row house neighborhood identified in Seyitömer Höyük Phase B (Harrison and Bilgen 2019, 207, 209).

¹⁷⁹ Düring 2011, 62–66, 112–14, 189; Bachhuber 2015, 29.

¹⁸⁰ Harrison and Bilgen 2019, 209.

¹⁸¹ Düring 2011, 192. For problems of defining urbanism, see Düring 2011, 281, 297–98; Perello 2011, 49–56.

¹⁸² Kouka 2013, 577.

is consistent with other inland West Anatolian EBA sites where cemeteries have not been excavated, such as Küllüoba.¹⁸³ Thirteen stamp seals have so far been discovered at Hacimusalar (including one from a later context and five possible or uncertain examples), but no seal impressions or other evidence for centralized administration have been found, in striking contrast to nearby Karataş, with its large central building and seal impressions on pithoi.¹⁸⁴ Relative scarcity could be explained by the limited preservation (and exposure) of levels belonging to the EB III period, when seal use increased elsewhere in Anatolia, as well as the lack of exposure of the center of the EBA settlement, which presumably lies beneath Iron Age–Byzantine occupation levels at the center of the mound.

It is also possible that the relatively egalitarian structure suggested by the EBA finds so far at Hacimusalar Höyük applied to what was essentially an elite class. Bachhuber has recently argued that most EBA villages in Anatolia were “vertically” egalitarian, with one group of higher status at the “top of a decision-making hierarchy.”¹⁸⁵ The preponderance of shapes associated with the serving and consumption of liquids among the painted pottery assemblages of the Terraced Building levels suggests that communal drinking was a focus of activity there. The presence of a grape pip among the charred botanical remains as well as comparative evidence from contemporary sites¹⁸⁶ make it likely that the liquid being served and consumed was wine and that these pottery assemblages reflect elite wine consumption. This social fashion seems to have emerged in West Anatolia in the EB I–II periods, when domestic contexts show an “unprecedented concern for the presentation and pouring of liquids,” with serving and drinking vessels often found “together with a remarkable density and diversity of vessels related to the storage, preparation and consumption of food,

normally associated with hearths.”¹⁸⁷ With the technological advance of the fast wheel in late EB II and EB III, standardized drinking and eating sets, with tankards, shallow plates, and depas cups, became popular.¹⁸⁸ Such specialized sets were found in nearly every household at Karataş and seem to reflect communal activity, with two-handled cups for passing from one person to another and large shallow dishes for sharing food.¹⁸⁹ Though Eslick linked the disappearance of strainer spouts with the emergence of the tankard shape at Karataş in the beginning of period V:3 as evidence for a shift in beverage preference from beer to wine,¹⁹⁰ the evidence for wine consumption in the Terraced Building levels at Hacimusalar is contemporary with Karataş V:2, and the traditional globular cup with rising handle (see fig. 14, t and u; online fig. 12, a–d) was the predecessor of the tankard. Thus it seems that communal wine drinking was already an important part of the community at Hacimusalar in EB II, when strong communal aspects are also observed in architecture. But it is important to note that communal drinking was essentially an elite practice that served “to consolidate and convert agricultural resources into a kind of social capital in contexts of hospitality and conviviality.”¹⁹¹ Wine consumption in EBA Anatolia likely encouraged “communal solidarity” while also reinforcing “elite status.”¹⁹²

The diffusion of wheelmade pottery technology and the West Anatolian drinking set has been an important topic of discussion and debate in studies of the Anatolian EBA. Mellink proposed a southwest Anatolian origin for the shapes and argued for the diffusion of wheel technology along a coastal route from Syria and Cilicia to the Aegean.¹⁹³ Efe and Şahoğlu, on the other hand, have proposed a central Anatolian origin for the shapes and an inland route connecting Syria and Cilicia to

¹⁸³ Bachhuber 2015, 63; Fidan et al. 2015, 67, 69, 81–82.

¹⁸⁴ Mellink 1964, pl. 82.26, excav. 1963 (see n. 23); 1972, 259; Eslick 1988; Bachhuber 2015, 78. Eslick (1988, 13) cautions that seals “should only be used as evidence of the marking of property if sealings have also been recovered” since they could have been “used for other purposes, such as stamping skin or textiles.” For seal uses, see also Goldman 1938, 38; von Wickede 1990, 53–54, with n. 73; Çevik 2007, 136.

¹⁸⁵ Bachhuber 2015, 53, 71.

¹⁸⁶ Lloyd and Mellaart 1962, 45; Fairbairn 2002, 205; Bachhuber 2014, 141; 2015, 31.

¹⁸⁷ Bachhuber 2014, 141; see also 2015, 63.

¹⁸⁸ Supra n. 110; see also Mellink 1993, 503; Şahoğlu 2005, 346; Eslick 2009, 149, 219, 222–25, 233; Ünlü 2009, 45–46, 182–83 n. 386; 2016, 2019, 251–52; Düring 2011, 270–72; Bachhuber 2014, 141–42.

¹⁸⁹ Eslick 2009, 233–34; see also Düring 2011, 273; Bachhuber 2014, 141–42.

¹⁹⁰ Eslick 2009, 236.

¹⁹¹ Bachhuber 2014, 141.

¹⁹² Ünlü 2016, 355.

¹⁹³ Mellink 1986, 146; 1992, 1:215; 1993, 504; Eslick 2009, 225.

Troy through central Anatolia—the “Great Caravan Route” or “Anatolian Trade Network”—that is supported by recent finds in the Eskişehir region.¹⁹⁴ The evidence from Hacimusalar Höyük contributes a few important points to the debate. First, the existence of essential shapes of the drinking set (shallow bowls and tankards) in handmade form, before any wheelmade wares are found at Hacimusalar Höyük, is consistent with the emergence of these shapes first in handmade versions (as at Karataş and Küllüoba) and suggests that the social practice preceded the adoption of the new technology.¹⁹⁵ The application of this new technology to specific local shapes associated with drinking may further imply a shared social significance for these tablewares and specialized manufacturing. Second, the finds from Hacimusalar offer support for an interior West Anatolian trade route already existing in the EB II period, preceding the spread of wheel technology in the late EB II to early EB III period.¹⁹⁶ The many features of pottery, small finds, and architecture at Hacimusalar Höyük with links to inland West Anatolia, as noted above, show that the Elmalı plain, though culturally distinct, had strong connections with that area in the EB II period. The few hints at more long-distance connections (such as the toggle pin) could be explained by access, through these inland connections, to a wider network of interaction and exchange. The Cypriot jug, however, reminds us that objects probably also reached the Elmalı basin via the Lycian coast.

Another point of debate in the study of EBA West Anatolia has been the question of what caused the wave of destructions documented at the end of the EB II period.¹⁹⁷ Mellaart’s theory of a Luwian inva-

sion¹⁹⁸ has largely been abandoned because the pottery of the EB III period seems to evolve from earlier forms, the new forms seem to have been distributed along an existing inland West Anatolian trade route, and Luwian peoples may already have been present in the EB II period.¹⁹⁹ The question hinges partly on whether the conflagrations at the end of the EB II period were intentionally caused by hostile activities. At Hacimusalar, the fire that engulfed Terraced Building Phase 2 marked neither the end of the EB II period nor a significant break in occupation and seems more likely to have been caused by accident than warfare. As many vessels were evidently broken before they were burned (see, e.g., fig. 14, h and r), the collapse of the buildings appears to have preceded the fire. The stratification of the burnt debris within the collapsed buildings also supports this sequence: the upper levels of debris were more oxidized (red and orange), while the lower levels, just above the floor, were usually darker (dark brown, gray, or black) because less oxygen could circulate there amid pieces of fallen walls and roofs.²⁰⁰ The top-down burning also suggests that fire spread from roof to roof, as in an accidental situation, rather than being intentionally set within buildings.²⁰¹ Although the scarcity of metal finds in the collapsed buildings could be taken as evidence for intentional ransacking before destruction,²⁰² it could also be explained by a quick departure with valuables during an earthquake and is therefore inconclusive. Massa has argued that the frequency and “clustering of fire destructions in two distinct horizons (2550–2450 BCE and 2250–1950 BCE) suggests that they might not be accidental episodes,”²⁰³ but it is also possible that a clustering of such destructions could have been caused by an era of increased seismic activity.²⁰⁴

¹⁹⁴ Efe 1988, 114–15; 2003, 93; 2007; Şahoğlu 2005; Bachhuber 2013, 287; Kouka 2013, 577; Fidan et al. 2015, 78–79; Massa and Palmisano 2018, 79; Harrison and Bilgen 2019, 195; Oğuzhanoglu-Akay 2020. Wheelmade wares on Samos in the late EB II period (Kouka and Menelaou 2018, 130–36) suggest that this inland route was not singular but involved movement through various inland valleys to the central western Anatolian coast. For alternative routes of pottery technology transfer in the Aegean, see Choleva 2020.

¹⁹⁵ Mellink 1986, 145; Eslick 2009, 231–33. Eslick (2009, 5) cautions, however, that the amount of wheelmade pottery may be underestimated because wheel marks were sometimes smoothed over; see also Türkteki 2013, 194–95.

¹⁹⁶ *Supra* n. 110.

¹⁹⁷ Mellaart 1958; Joukowsky 1986, 446; Mellink 1993, 502–3; Efe 2003, 93; Ünlü 2009, 43, 51–55; Sarı 2013, 311;

Bachhuber 2014, 139, 142, 150–51; Massa et al. 2020, 62.

¹⁹⁸ Mellaart 1958; 1963, 210; Dedeoğlu 2008; Bachhuber 2015, 19–20.

¹⁹⁹ Düring 2011, 296; Bachhuber 2013; Sarı 2013, 308, 310.

²⁰⁰ Ben Claasz Coockson, field notes, 15 August 2008.

²⁰¹ Massa 2014a, 108.

²⁰² As Mellink (1965, 247–50) assumed for the destruction of the central building at Karataş.

²⁰³ Massa 2014a, 111.

²⁰⁴ Ünlü (2009, 55 n. 175) notes “constant repairing and rebuilding activities” in EB III Tarsus.

CONCLUSION

Recent excavations at Hacimusalar Höyük have shed important new light on the largest EBA settlement of the Elmalı region. In at least two successive building phases, structures were built side by side like terraced row houses. Built-in features like corner platforms suggest both standardization of plan and continuity from one phase to the next. This site thus provides a new example of an “Anatolian Settlement Plan”²⁰⁵ and demonstrates the connectivity of the Elmalı basin with inland West Anatolia and inland trade routes connecting Syria and Cilicia to the Aegean coast. While maintaining a distinct regional character, the material from EBA Hacimusalar Höyük shows more affinities with interior West Anatolian sites, like Demircihöyük and Beycesultan, than with sites on the Mediterranean and Aegean coasts and thus challenges recent definitions of cultural zones in EBA West Anatolia.²⁰⁶ The existence of regional cultural groups is not surprising given the natural boundaries presented by the landscape;²⁰⁷ more remarkable is the interconnectivity of these regional groups in spite of these natural boundaries. Mountainous regions were more connected in antiquity than is often assumed today.²⁰⁸ While we cannot assume that geographically determined cultural groups corresponded to emerging political entities,²⁰⁹ shared architectural and artifactual types and styles may indicate a shared sense of identity that was both locally and regionally specific while also signaling participation in a wider network of cultural interaction spanning the western part of Anatolia. Of course, wider exposure is necessary for drawing firmer conclusions about spatial and social organization, but we now have a clear sense of the range and sequence of EBA occupation of Hacimusalar Höyük, and future study of these levels may further illuminate its role as a settlement center in its immediate region as well as in broader cultural interactions of West Anatolia in the Early Bronze Age.

²⁰⁵ Supra n. 163.

²⁰⁶ Efe 2003; Efe and Türkteki 2011b, 214; Sarı 2013; Fidan et al. 2015; Harrison 2016, fig. 2.10; Türkteki 2020.

²⁰⁷ Çevik 2007, 131; Türkteki 2020, 59, 73.

²⁰⁸ Horden and Purcell 2000, 130–31.

²⁰⁹ Efe 2003; Fidan et al. 2015, 62.

İlknur Özgen
Department of Archaeology (retired)
Bilkent University
Ankara, Turkey
iozgen@bilkent.edu.tr

Elizabeth P. Baughan
Department of Classical Studies
University of Richmond
Richmond, Virginia
ebaughan@richmond.edu

Elif Ünlü
Department of History
Boğaziçi University
Istanbul, Turkey
elif.unlu@boun.edu.tr

Works Cited

- Atakuman, Ç. 2017. “Figurines of the Anatolian Early Bronze Age: The Assemblages from Koçumbeli-Ankara.” *AnatSt* 67:85–108.
- Bachhuber, C. 2013. “James Mellaart and the Luwians: A Culture (Pre-)History.” In *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean*, edited by A. Mouton, I. Rutherford, and I. Yakubovich, 279–304. Leiden: Brill.
- . 2014. “The Anatolian Context of Philia Material Culture in Cyprus.” In *The Cambridge Prehistory of the Bronze and Iron Age Mediterranean*, edited by A.B. Knapp and P. van Dommelen, 139–56. Cambridge: Cambridge University Press.
- . 2015. *Citadel and Cemetery in Early Bronze Age Anatolia*. Sheffield: Equinox.
- . 2016. “The Industry and Display of Textiles in Early Bronze Age Western Anatolia.” In *Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts*, edited by E. Pernicka, S. Ünlüsoy, and S.W.E. Blum, 339–63. Bonn: Dr. Rudolf Habelt.
- Baldwin Smith, E. 1942. “The Megaron and Its Roof.” *AJA* 46(1):99–118.
- Baykal-Seeher, A., and J. Obladen-Kauder. 1996. *Demircihöyük: Die Ergebnisse der Ausgrabungen 1975–1978*. Vol. 4, *Die Kleinfunde*. Mainz: Philipp von Zabern.
- Bean, G.E., and R.M. Harrison. 1967. “Choma in Lycia.” *JRS* 57(1/2):40–44.
- Bilgen, A.N., ed. 2015. *Seyitömer Höyük I*. Istanbul: Arkeoloji ve Sanat Yayınları.
- Bilgi, Ö. 1972. “Development and Distribution of Anthropomorphic Figures in Anatolia from the Neolithic to the End of the Early Bronze Age.” Ph.D. diss., University of London.
- Blegen, C.W., J.L. Caskey, M. Rawson, and J. Sperling. 1950. *Troy 1: General Introduction. The First and Second Settlements*. Princeton: Princeton University Press.

- Blegen, C.W., J.L. Caskey, and M. Rawson. 1951. *Troy 2: The Third, Fourth, and Fifth Settlements*. Princeton: Princeton University Press.
- Çevik, Ö. 2007. "The Emergence of Different Social Systems in Early Bronze Age Anatolia: Urbanisation Versus Centralisation." *AnatSt* 57:131–40.
- Choleva, M. 2020. "Travelling with the Potter's Wheel in the Early Bronze Age Aegean." *BSA* 115:59–104.
- Cookson, B.C. 2008. "The Houses from Ilipinar Phase X and VI Compared." In *Life and Death in a Prehistoric Settlement in Northwest Anatolia: The Ilipinar Excavations 3*, edited by J. Roodenberg and S.A. Roodenberg, 149–203. Istanbul: Nederlands Instituut voor het Nabije Oosten.
- Dales, G.F. 1968. "Of Dice and Men." *JAOS* 88(1):14–23.
- Dedeoğlu, F. 2008. "Cultural Transformation and Settlement System of Southwestern Anatolia from Neolithic to LBA: A Case Study from Denizli / Çivril Plain." In *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East, Madrid, April 3–8, 2006*, edited by J.M. Córdoba, 587–601. Madrid: Ediciones Universidad Autónoma de Madrid.
- Diamant, S., and J. Rutter. 1969. "Horned Objects in Anatolia and the Near East and Possible Connections with the Minoan 'Horns of Consecration.'" *AnatSt* 19:147–77.
- Dinsmoor, W.B. 1942. "Notes on Megaron Roofs." *AJA* 46(3):370–72.
- Dönmez, Ş., and E.N. Dönmez. 2005. "Aspects of Traditional Village Architecture in the Central Black Sea Region." In *Ethnoarchaeological Investigations in Rural Anatolia*. Vol. 2, edited by T. Takaoğlu, 153–67. Istanbul: Ege Yayınları.
- Düring, B.S. 2011. *The Prehistory of Asia Minor*. New York: Cambridge University Press.
- Duru, R. 2008. *From 8000 BC to 2000 BC: Six Thousand Years of the Burdur, Antalya Region*. Antalya: Suna ve Inan Kiraç Akdeniz Medeniyetleri Arastırma Enstitüsü.
- Efe, T. 1988. *Demircihüyük: Die Ergebnisse der Ausgrabungen 1975–1978*. Vol. 3, pt. 2, *Die Keramik 2 C: Die früh-bronzezeitliche Keramik der jüngeren Phasen*. Mainz: Philipp von Zabern.
- . 2003. "Pottery Distribution Within the Bronze Age of Western Anatolia and Its Implications upon Cultural, Political (and Ethnic?) Entities." In *Archaeological Essays in Honour of Homo amatus: Güven Arsebük*, edited by G. Arsebük, M. Özbaşaran, O. Tanındı, and A. Boratav, 87–103. Istanbul: Ege Yayınları.
- . 2007. "The Theories of the 'Great Caravan Route' Between Cilicia and Troy: The Early Bronze Age III Period in Inland Western Anatolia." *AnatSt* 57:47–64.
- . 2014. "Selected EB II Pottery Recovered in the Two Burnt Rooms at Külliüba Near Eskişehir." In *Armizzi: Engin Özgen'e Armağan/Studies in Honor of Engin Özgen*, edited by A. Engin, B. Helwing, and B. Uysal, 115–28. Ankara: Atatürk Kültür Merkezi Başkanlığı Yayınları.
- Efe, T., and M. Türkteki. 2011a. "Early Bronze Age Architecture in the Inland Western Anatolian Region." In *Across: The Cyclades and Western Anatolia During the 3rd Millennium BC*, edited by V. Şahoğlu and P. Sotirakopoulou, 198–206. Istanbul: Sakıp Sabancı Müzesi.
- . 2011b. "Early Bronze Age Pottery in the Inland Western Anatolian Region." In *Across: The Cyclades and Western Anatolia During the 3rd Millennium BC*, edited by V. Şahoğlu and P. Sotirakopoulou, 214–22. Istanbul: Sakıp Sabancı Müzesi.
- Efe, T., A. İlaslı, and A. Topbaş. 1995. "Salvage Excavations of the Afyon Archaeological Museum, Part 1: Kaklık Mevkii, a Site Transitional to the Early Bronze Age." *Studia Troica* 5:357–99.
- Erkanal, H. 1996. "Early Bronze Age Urbanization in the Coastal Region of Western Anatolia." In *Housing and Settlement in Anatolia: A Historical Perspective*, edited by Y. Sey, 70–82. Istanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı.
- . 2011. "Early Bronze Age Settlement Models and Domestic Architecture in the Coastal Region of Western Anatolia." In *Across: The Cyclades and Western Anatolia During the 3rd Millennium BC*, edited by V. Şahoğlu and P. Sotirakopoulou, 129–35. Istanbul: Sakıp Sabancı Müzesi.
- Eslick, C. 1988. "Hacılar to Karataş: Social Organization in South-western Anatolia." *MeditArch* 1:1–40.
- . 1992. *Elmalı-Karataş 1: The Neolithic and Chalcolithic Periods. Bağbaşı and Other Sites*. Bryn Mawr: Bryn Mawr College.
- . 2009. *Elmalı-Karataş 5: The Early Bronze Age Pottery of Karataş. Habitation Deposits*. Bryn Mawr: Bryn Mawr College.
- Fairbairn, A. 2002. "Archaeobotany at Kaman-Kalehöyük 2001." *Anatolian Archaeological Studies* 11:201–12.
- Fidan, E. 2012. "İç Kuzeybatı Anadolu İlk Tunç Çağı Gözlü Süs İğneleri (Toggle Pin)." *Colloquium Anatolicum* 11:179–204.
- . 2013. "Anadolu Yerleşim Planı Üzerine Yeni Bir Değerlendirme." *Arkeoloji Dergisi* 18:113–21.
- . 2018. "Early Buildings for the Elites in Western Anatolia." In *Anatolian Metal VIII: Eliten – Handwerk – Prestigegüter*, edited by Ü. Yalçın, 69–76. Bochum: Deutsches Bergbau-Museum.
- Fidan, E., D. Sarı, and M. Türkteki. 2015. "An Overview of the Western Anatolian Early Bronze Age." *EJA* 18(1):60–89.
- Forsdyke, E.J. 1925. *Catalogue of the Greek and Etruscan Vases in the British Museum*. Vol. 1, pt. 1, *Prehistoric Aegean Pottery*. London: British Museum.
- Foss, P.W. 2006. "The Hacimusalar Project Regional Survey: Landscape and Settlement Investigations in the Elmalı Basin." Paper presented at the Third International Symposium on Lycia, 7–10 November 2005, Antalya. https://quemdixerechaos.files.wordpress.com/2012/11/3lykiatext_foss.pdf.
- Frankel, D. 1983. *Corpus of Cypriote Antiquities 7: Early and Middle Bronze Age Material in the Ashmolean Museum, Oxford*. Gothenburg: Paul Åströms Förlag.
- French, D.H. 1961. "Late Chalcolithic Pottery in North-West Turkey and the Aegean." *AnatSt* 11:99–141.
- . 1969. "Prehistoric Sites in Northwest Anatolia II: The Balıkesir and Akhisar/Manisa Areas." *AnatSt* 19:41–98.
- . 2012. "Pre-Hellenistic Pottery of the Seki-Çaltılar

- Area." In *The Balboursa Survey and Settlement in Highland Southwest Anatolia*. Vol. 2, *The Balboursa Survey: Detailed Studies and Catalogues*, edited by J.J. Coulton, 1–30. London: British Institute at Ankara.
- French, D.H., and J.J. Coulton. 2012. "The Kabalian Highlands Before Balboursa." In *The Balboursa Survey and Settlement in Highland Southwest Anatolia*. Vol. 1, *Balboursa and the History of Highland Settlement*, edited by J.J. Coulton, 43–60. London: British Institute at Ankara.
- Galicki, S.J., and J.P. Doerner. 2010. "Holocene Lake Evolution in the Elmalı Basin, Southwest Turkey." *Physical Geography* 31(3):234–53.
- Goldman, H. 1938. "Excavations at Gözlü Kule, Tarsus, 1937." *AJA* 42(1):30–54.
- . 1956. *Excavations at Gözlü Kale, Tarsus*. Vol. 2, *From the Neolithic Through the Bronze Age*. Princeton: Princeton University Press.
- Hanfmann, G.M.A. 1963. "The Fifth Campaign at Sardis (1962)." *BASOR* 170:1–65.
- Harrison, L.K. 2016. "Living Spaces: Urbanism as Social Process at Seyitömer Höyük in Early Bronze Age Western Anatolia." Ph.D. diss., University of Buffalo.
- Harrison, L.K., and A.N. Bilgen. 2019. "Emergent Urbanism: Trade, Settlement, and Society at Seyitömer Höyük in Early Bronze Age Western Anatolia." In *Coming Together: Comparative Approaches to Population Aggregation and Early Urbanization*, edited by A. Gyucha, 189–214. Albany: State University of New York Press.
- Harrison, R.M., and W. Young. 2001. *Mountain and Plain: From the Lycian Coast to the Phrygian Plateau in the Late Roman and Early Byzantine Period*. Ann Arbor: University of Michigan Press.
- Höckmann, O. 1977. "Abstract-Schematic Idols of Early Bronze Age Anatolia." In *Art and Culture of the Cyclades in the Third Millennium B.C.*, edited by J. Thimme, 553–68. Chicago: University of Chicago Press.
- Horden, P., and N. Purcell. 2000. *The Corrupting Sea: A Study of Mediterranean History*. Malden: Blackwell.
- Ivanova, M. 2013. "Domestic Architecture in the Early Bronze Age of Western Anatolia: The Row-Houses of Troy I." *AnatSt* 63:17–33.
- Joukowsky, M.S. 1986. *Prehistoric Aphrodisias*. Providence: Brown University Center for Old World Archaeology and Art.
- Kadish, B. 1969. "Excavations of Prehistoric Remains at Aphrodisias, 1967." *AJA* 73(1):49–65.
- . 1971. "Excavations of Prehistoric Remains at Aphrodisias, 1968 and 1969." *AJA* 75(2):121–40.
- Kâmil, T. 1982. *Yortan Cemetery in the Early Bronze Age of Western Anatolia*. Oxford: British Archaeological Reports.
- Korfmann, M. 1979. "Demircihüyük: Vorbericht über Ergebnisse der Grabungen von 1976 und 1977." *IstMitt* 29(1):9–64.
- . 1983. *Demircihüyük: Die Ergebnisse der Ausgrabungen 1975–1978*. Vol. 1, *Architektur, Stratigraphie und Befunde*. Mainz: Philipp von Zabern.
- Kouka, O. 2013. "'Minding the Gap': Against the Gaps. The Early Bronze Age and the Transition to the Middle Bronze Age in the Northern and Eastern Aegean/Western Anatolia." *AJA* 117(4):569–80.
- Kouka, O., and S. Menelaou. 2018. "Settlement and Society in the Early Bronze Age Heraion: Exploring Stratigraphy, Architecture and Ceramic Innovation After Mid-3rd Millennium BC." In *Pottery Technologies and Sociocultural Connections Between the Aegean and Anatolia During the 3rd Millennium BC*, edited by E. Alram-Stern and B. Horejs, 119–42. Vienna: Austrian Academy of Sciences Press.
- Lamb, W. 1936. *Excavations at Thermi in Lesbos*. Cambridge: Cambridge University Press.
- . 1937. "Excavations at Kusura near Afyon Karahisar." *Archaeologia* 86:1–64.
- . 1938. "Excavations at Kusura near Karahisar 2." *Archaeologia* 87:217–74.
- Lloyd, S., and J. Mellaart. 1962. *Beycesultan*. Vol. 1, *The Chalcolithic and Early Bronze Age Levels*. Ankara: British Institute of Archaeology.
- . 1965. *Beycesultan*. Vol. 2, *Middle Bronze Age Architecture and Pottery*. Ankara: British Institute of Archaeology.
- Mackay, E.J.H. 1938. *Further Excavations at Mohenjo-daro*. Delhi: Manager of Publications.
- Massa, M. 2014a. "Destructions, Abandonments, Social Reorganisation and Climatic Change in West and Central Anatolia at the End of the Third Millennium BC." *Arkeoloji'de Bölgesel Çalışmalar Sempozyum Bildirileri*, YAS 4:89–123.
- . 2014b. "Early Bronze Age Burial Customs on the Central Anatolian Plateau: A View from Demircihüyük-Sarıket." *AnatSt* 64:73–93.
- Massa, M., and A. Palmisano. 2018. "Change and Continuity in the Long-Distance Exchange Networks Between Western/Central Anatolia, Northern Levant and Northern Mesopotamia, c. 3200–1600 BCE." *JAnthArch* 49:65–87.
- Massa, M., C. Bachhuber, F. Şahin, H. Erpehlivan, J. Osborne, and A.J. Lauricella. 2020. "A Landscape-Oriented Approach to Urbanization and Early State Formation on the Konya and Karaman Plains, Turkey." *AnatSt* 70:45–75.
- Mellaart, J. 1954. "Preliminary Report on a Survey of Pre-Classical Remains in Southern Turkey." *AnatSt* 4:175–240.
- . 1958. "The End of the Early Bronze Age in Anatolia and the Aegean." *AJA* 62(1):9–53.
- . 1963. "Early Cultures of the South Anatolian Plateau, II: The Late Chalcolithic and Early Bronze Ages in the Konya Plain." *AnatSt* 13:199–236.
- Mellaart, J., and A. Murray. 1995. *Beycesultan*. Vol. 3, pt. 2, *Late Bronze Age and Phrygian Pottery and Middle and Late Bronze Age Small Objects*. Ankara: British Institute of Archaeology.
- Mellink, M.J. 1964. "Excavations at Karataş-Semayük in Lycia, 1963." *AJA* 68(3):269–78.
- . 1965. "Excavations at Karataş-Semayük in Lycia, 1964." *AJA* 69(3):241–51.
- . 1967. "Excavations at Karataş-Semayük in Lycia, 1966." *AJA* 71(3):251–67.
- . 1969. "Excavations at Karataş-Semayük in Lycia, 1968." *AJA* 73(3):319–31.
- . 1972. "Excavations at Karataş-Semayük and Elmalı,

- Lycia, 1971." *AJA* 76(3):257–69.
- . 1974. "Excavations at Karataş-Semayük and Elmalı, Lycia, 1973." *AJA* 78(4):351–59.
- . 1986. "The Early Bronze Age in West Anatolia." In *The End of the Early Bronze Age in the Aegean*, edited by G. Cadogan, 139–52. Leiden: E.J. Brill.
- . 1991. "Anatolian Contacts with Chalcolithic Cyprus." *BASOR* 282/283:167–75.
- . 1992. "Anatolian Chronology." In *Chronologies in Old World Archaeology*. 3rd ed., 2 vols., edited by R.W. Ehrich, 1:207–20 and 2:171–84. Chicago: University of Chicago Press.
- . 1993. "The Anatolian South Coast in the Early Bronze Age: The Cilician Perspective." In *Between the Rivers and Over the Mountains: Archaeologica Anatolica et Mesopotamica Alba Palmieri Dedicata*, edited by M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink, 495–508. Rome: Università di Roma La Sapienza.
- Mellink, M.J., and J. Lawrence Angel. 1966. "Excavations at Karataş-Semayük in Lycia, 1965." *AJA* 70(3):245–57.
- . 1968. "Excavations at Karataş-Semayük in Lycia, 1967." *AJA* 72(3): 243–63.
- . 1973. "Excavations at Karataş-Semayük and Elmalı, Lycia, 1972." *AJA* 77(3):293–307.
- Momigliano, N., A. Greaves, T. Hodos, B. Aksoy, A. Brown, M. Kibaroglu, and T. Carter. 2011. "Settlement History and Material Culture in Southwest Turkey: Report on the 2008–2010 Survey at Çaltılar Höyük (Northern Lycia)." *AnatSt* 61:61–121.
- Oğuzhanoglu, U. 2019. "A Lead Seal from the Laodikeia-Kandilkırı Excavations and an Overall Assessment of Seal Use in South-Western Anatolia During the Early Bronze Age." *OJA* 38(1):39–64.
- Oğuzhanoglu, U., and S. Pazarci. 2020. "Karia Bölgesi'nde Yeni Bir Erken Tunç Çağı Merkezi Çapalıbağ." *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi* 37(1):195–219.
- Oğuzhanoglu-Akay, U. 2020. "Batı Anadolu Erken Tunç Çağı Yerleşim Modeline Dair Yeni Gözlemler: Laodikeia-Kandilkırı 2. Tabaka." In *15: Yılında Laodikeia (2003–2018)*, edited by Ç. Şimşek, 239–52. Izmir: Ege Yayınları.
- Özgen, İ. 1998. "Survey and Preliminary Excavations at Hacimusalar (Ancient Choma) near Elmalı in Northern Lycia." In *Light on the Top of the Black Hill: Studies Presented to Halet Çambel*, edited by G. Arsebük, M. Mellink, and W. Schirmer, 603–9. Istanbul: Ege Yayınları.
- . 2006. "Elmalı Ovası ve Hacimusalar." In *III: Uluslararası Likya Sempozyumu, 07–10 Kasım 2005, Antalya*, edited by M. Alparslan and K. Dörtlük, 537–56. Antalya: Suna ve Inan Kiraç Akdeniz Medeniyetleri Araştırma Enstitüsü.
- Özgen, İ., and E.P. Baughan. 2016. "Hacimusalar Höyük / Choma: A Regional Center in Northern Lycia, from the Early Bronze Age to the Byzantine Era." In *Lukka'dan Likya'ya / From Lukka to Lycia*, edited by H. Işık and E. Dundar, 318–35. Istanbul: Yapı Kredi Yayınları.
- Öztan, A. [as Özten] 1989. "A Group of Early Bronze Age Pottery from the Konya and Niğde Region." In *Anatolia and the Ancient Near East: Studies in Honor of Tahsin Özgüç*, edited by K. Emre, B. Hrouda, M. Mellink, and N. Özgüç, 407–18. Ankara: Türk Tarih Kurumu Basımevi.
- Perello, B. 2011. *L'architecture domestique de l'Anatolie au IIIe millénaire av. J.-C.* Paris: De Boccard.
- Rahmstorf, L. 2015. "The Aegean Before and After c. 2200 BC Between Europe and Asia: Trade as a Prime Mover of Cultural Change." In *2200 BC: A Climatic Breakdown as a Cause for the Collapse of the Old World?*, edited by H. Meller, H.W. Arz, R. Jung, and R. Risch, 149–80. Halle: Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt / Landesmuseum für Vorgeschichte.
- Reger, G. 2010. "New Inscriptions from Choma in Northern Lykia, I: Statue Base for an Unknown Honorand." In *Studies in Greek Epigraphy and History in Honor of Stephen V. Tracy*, edited by G. Reger, F.X. Ryan, and T. Winters, 87–94. Bordeaux: Ausonius.
- . 2020. "A Letter of Septimius Severus to the Lykian League on the Misbehavior of Soldiers: A New Inscription from Choma (Hacimusalar Höyük), Northern Lykia." *Chiron* 50:253–85.
- Reimer, P.J. et al. 2013. "IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP." *Radiocarbon* 55(4):1869–87.
- Sadori, L., F. Susanna, and C. Persiani. 2006. "Archaeobotanical Data and Crop Storage Evidence from an Early Bronze Age 2 Burnt House at Arslantepe, Malatya, Turkey." *Vegetarian History and Archaeobotany* 15(3):205–15.
- Şahoğlu, V. 2005. "The Anatolian Trade Network and the Izmir Region During the Early Bronze Age." *OJA* 24(4):339–61.
- . 2008. "Crossing Borders: The Izmir Region as a Bridge Between the East and the West During the Early Bronze Age." In *Crossing Borders: Trade and Production in Premonetary Greece*, edited by C. Gillis and B. Sjöberg, 153–73. Sävedalen: Paul Åströms Forlag.
- . 2011. "Early Bronze Age Pottery in Coastal Western Anatolia." In *Across: The Cyclades and Western Anatolia During the 3rd Millennium BC*, edited by V. Şahoğlu and P. Sotirakopoulou, 136–43. Istanbul: Sakıp Sabancı Müzesi.
- Saliari, K., and E. Draganits. 2013. "Early Bronze Age Bone Tubes from the Aegean: Archaeological Context, Use and Distribution." *Archeometriai Műhely* 10(3):179–92.
- Sarı, D. 2013. "The Cultural Development of Western Anatolia in the Third and Second Millennia BC and Its Relationship with Migration Theories." In *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean*, edited by A. Mouton, I. Rutherford, and I. Yakubovich, 305–27. Leiden: Brill.
- Schliemann, H. 1976. Reprint. *Ilios: The City and Country of the Trojans*. New York: Arno Press. Original edition 1881, New York: Harper.
- Sulosky Weaver, C.L. 2018. "An Analysis of Byzantine Burials from Hacimusalar Höyük (Turkey)." *AnatSt* 68:151–75.
- Swiny, S. 1991. "Reading the Prehistoric Record: A View from the South in the Late Third Millennium B.C." In *Cypriot Ceramics: Reading the Prehistoric Record*, edited by J.A. Barlow, D.L. Bolger, and B. Kling, 37–44. Philadelphia: University of Pennsylvania Museum.

- Takaoğlu, T. 2011. "Stone Artefacts and Idols in Western Anatolia." In *Across: The Cyclades and Western Anatolia During the 3rd Millennium BC*, edited by V. Şahoğlu and P. Sotirakopoulou, 158–63. Istanbul: Sakıp Sabancı Müzesi.
- Thater, M. 2016. "White Painted Pottery in Early Bronze Age Troy." In *Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts*, edited by E. Pernicka, S. Ünlüsoy, and S.W.E. Blum, 13–37. Bonn: R. Habelt.
- Tosi, M. 1983. "Development, Continuity and Cultural Change in the Stratigraphic Sequence of Shahr-i Sokhta." In *Prehistoric Sistan I*, edited by M. Tosi, 127–80. Rome: Istituto Italiano per il Medio ed Estremo Oriente.
- Türkteki, M. 2012. "Batı ve Orta Anadolu'da Çark Yapımı Çanak Çömleğin Ortaya Çıkışı ve Yayılımı." *Mimarlar Arkeologlar Sanat Tarihçiler ve Restoratörler Ortak Platformu E-Dergisi* 7:45–111.
- . 2013. "The First Use of Wheel-Made Pottery and Its Distribution in Western and Central Anatolia." In *SOMA 2012: Identity and Connectivity. Proceedings of the 16th Symposium on Mediterranean Archaeology, Florence, Italy, 1–3 March 2012*. Vol. 1, edited by L. Bombardieri, A. D'Agostino, G. Guarducci, V. Orsi, and S. Valentini, 193–200. Oxford: Archaeopress.
- . 2020. "Beycesultan Early Bronze Age I Pottery Group in the Light of New Data." *Mediterranean Archaeology and Archaeometry* 20(1):59–75.
- Türktüzün, M., S. Ünan, and S. Ünal. 2014. "Çiledir Höyük Erken Tunç Çağı II Bulguları." *Turkish Academy of Sciences Journal of Archaeology* 17:49–72.
- Umurtak, G. 2013. "Some Comments on a Few Intriguing Seals Found in the EBA Settlements at Hacılar Büyük Höyük and a Seal from Burdur Museum." *Adalya* 16:49–59.
- . 2020. "Some Remarks on the Early Bronze Age I Defence System at Hacılar Büyük Höyük (Burdur, Turkey)." *Bulgarian e-Journal of Archaeology* 10(1):33–54.
- <https://be-ja.org/index.php/journal/article/view/be-ja-10-1-2020-33-54/be-ja-10-1-2020-33-54>.
- Ünan, N. 2014. "Seyitömer Höyük Erken Tunç Çağı III Ocakları." *Turkish Academy of Sciences Journal of Archaeology* 17:73–82.
- Ünlü, E. 2009. "Technological and Stylistic Evaluation of the Early Bronze Age Pottery at Tarsus-Gözlükule, Turkey." Ph.D. diss., University of Pennsylvania.
- . 2016. "The Handle Wagging the Cup: Formal Aspects of Alcohol Consumption in the Transfer of Ideology. Anatolia and the Aegean Towards the End of the Third Millennium BC." *OJA* 35(4):345–58.
- . 2019. "Adding Value to Agriculture: The Increasing Importance of Value-Added Agricultural Products Within Eastern Mediterranean Trade Networks During the Third Millennium BCE." In *Coming Together: Comparative Approaches to Population Aggregation and Early Urbanization*, edited by A. Gyucha, 243–56. Albany: State University of New York Press.
- von Wickede, A. 1990. *Prähistorische Stempelglyptik in Vorderasien*. Munich: Profil Verlag.
- Warner, J.L. 1979. "The Megaron and Apsidal House in Early Bronze Age Western Anatolia: New Evidence from Karataş." *AJA* 83(2):133–47.
- . 1994. *Elmalı-Karataş 2: The Early Bronze Age Village of Karataş*. Bryn Mawr: Bryn Mawr College.
- Webb, J., and D. Frankel. 1999. "Characterizing the Philia Facies: Material Culture, Chronology, and the Origin of the Bronze Age in Cyprus." *AJA* 103(1):3–43.
- Werner, K. 1993. *The Megaron During the Aegean and Anatolian Bronze Age*. Jonsered: Paul Åströms Förlag.
- Yakar, J. 1985. *The Later Prehistory of Anatolia: The Late Chalcolithic and Early Bronze Age*. BAR-IS 268. Oxford: British Archaeological Reports.
- Yılmaz, D. 2016. "Some Thoughts on the Troy Type Owl-Headed Idols of Western Anatolia." *PZ* 91(2):369–78.