# Fieldwork at Ancient Eleon in Boeotia, 2011–2018

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This article presents the results of the first excavations at the site of ancient Eleon in eastern Boeotia, Greece. Fieldwork focused on the elevated limestone ridge on the western edge of the village of Arma about 14 km east of Thebes. The chronological framework of the excavated remains includes pottery dating from Early Helladic II through early Middle Helladic found in secondary contexts and not associated with any architectural remains. Funerary activity began during the Middle Helladic period, reaching a peak both in terms of the number of graves and monumentality in Late Helladic I. An impressive burial complex, the Blue Stone Structure, is contemporary with other cemeteries of the Shaft Grave period in southern and central Greece. During the Mycenaean Palatial period, contemporary with references to the toponym *e-re-o-ni* (Eleon) in Linear B tablets found at Thebes, activity on the site included significant craft production. Occupation continued directly into Postpalatial periods (Late Helladic IIIC Early and Middle), through several phases of building, destruction, and reconstruction. By the sixth century BCE, the construction of the large polygonal wall along the eastern edge of the plateau and an array of ceramics and figurines, of local, Corinthian, and Attic origins in secondary deposition, indicate renewed occupation.[1]

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[1] The Eastern Boeotia Archaeological Project (EBAP) is currently directed by Alexandra Charami of the Ephorate of Antiquities of Boeotia; Brendan Burke, University of Victoria; and Bryan Burns, Wellesley College. Permission for this *synergasia* excavation between the Greek Ministry of Culture and Sports and the Canadian Institute in Greece (CIG) is gratefully acknowledged. The Ephorate and CIG have facilitated the necessary land purchase for excavation and other yearly permits. The excavation would not have happened without Vasilis Aravantinos, Stavroula Dimitriou, Yannis Fappas, Kiki Kyriaglou, Olga Kyriazi, and Jonathan Tomlinson. We happily acknowledge our funding agencies, the Social Sciences Humanities Research Council of Canada, the Institute for Aegean Prehistory, and the Loeb Classical Library, as well as support from student volunteers and private donors. All the architecture and stratigraphy at Eleon has been recorded, drawn, and prepared for publication by Giuliana Bianco. Our ceramics and other finds have been drawn by Tina Ross. Project conservators are Basiliki Karas and Nefeli Theocharous. Trench supervisors include E. Anderson, S. Bartlett, J. Bellows, H. Bertram, A. Causer-McBurney, M. Condell, J. Engstrom, G. Hill, M. MacDonald, K. Mahoney, U. Maihöfer, J. Morton, D. Nadal, M. Nikolovieni, and M. Pihhoker. M. Bullock, K. Cruz, C. Kocurek, Y. Lam, S. Lupack, A. Nagel, S. Nikoloudis, and J. Sadarananda are sincerely thanked for their significant contributions to the excavation. A volume of preliminary reports by individual collaborators at ancient Eleon is forthcoming. Figures herein are the authors'. Additional figures can be found with this article's abstract on AJA Online (www.ajaonline.org).

## INTRODUCTION: PHYSICAL LANDSCAPE AND MATERIAL CULTURE

Early travelers and more recent scholars conducting extensive surveys have associated archaeological remains in or near villages of eastern Boeotia with ancient sites.[2] Late in 1805, William Leake first described the remains on the elevated plateau on the northwestern edge of the village of modern Arma (formerly known by the Ottoman names Dhritsa or Andritsa) and considered how it best matched Strabo's listing of settlements around Tanagra.[3] Heinrich Ulrichs was the first to make the identification of the acropolis at Arma with the historical site of ancient Eleon, relying on a careful study of the regional topography.[4] After Ulrichs, topographers such as Richard Hope Simpson, Oliver Dickinson, John Fossey, and Henri van Effenterre noted the range of material visible on the surface and slopes of the acropolis. Based on these later travelers' and topographers' descriptions, the identification of the archaeological site just outside of the village of Arma with ancient Eleon is generally accepted.

Eleon lies atop a small oblong limestone plateau 265 m above sea level that is approximately 250 m long and 180 m wide (aligned west-northwest–east-southeast) (fig. 1). The plateau stands more than 30 m above the surrounding farmland, bounded by sheer bedrock edges on the western and southern sides; at the north, the slope is less extreme, and the remains of a probable circuit wall are just visible. The east side slopes gently to the broad upland of the agricultural village of Arma and is defined by the well-preserved polygonal wall built in the Late Archaic period.

The local geology features mildly deformed carbonate layers from the Triassic and Jurassic periods,

FIG. 1. The acropolis of ancient Eleon seen from the south.

overlain by Pliocene and Pleistocene sands and gravel of lacustrine or deltaic origin.[5] A range of rock types with resource value in antiquity can be found within about 10 km of the site, including conglomerate, tabular limestone, and gabbro. Many of these rock types appear as architectural and archaeological materials at the site. The surface of the plateau is not pitted as karst landscapes typically are—perhaps because it was remodeled by human activities—but the weathered bedrock has permitted groundwater and any springs to drop to the level of the surrounding plains, well below access from the hilltop site. Indeed, early travelers report marshy conditions caused by winter rains and the presence of a flowing stream issuing from the spring at the southwest foot of the acropolis.[6]

The Eastern Boeotia Archaeological Project (EBAP), an intensive surface survey of the agricultural areas surrounding the modern villages of Tanagra, Arma, and Eleonas, was conducted from 2007 to 2010 as a *synergasia* project directed by Aravantinos, Burke, Burns, and Lupack (fig. 2).[7] The survey confirmed that the most visible and best-preserved major site in the region is the acropolis of ancient Eleon. The site's location, at the center of the agricultural plain that extends east from Thebes to the Euboean Gulf, is of key importance to its prominence in both the Late Bronze Age and Archaic–Classical periods. From the low acropolis of Eleon, the territories of Chalkis, Aulis, Rhitsona, Tanagra, Lefkandi, and Dilesi (ancient Delion) compose the viewshed. While the view of Thebes is partially blocked by a low hill associated with ancient

[2] The shifting use of modern and ancient place-names to describe individual sites can cause confusion. The modern village of Άρμα (Arma) is located south and east of the acropolis we are exploring and that we identify as ancient Eleon. The modern village of Ελεώνας (Eleonas) is located to the northwest, perhaps in association with the site of ancient Harma. The modern town of Arma was known by its Ottoman name, variously recorded as Andritza (by Leake, Ludwig Ross, Ulrichs), Dritza (Ross, Henri Belle), or Dritsa/Andritsa (James George Frazer), as collated by Roller (1988, 200). Fossey (1988, 89–95) also gives accounts of the changing toponyms including Tanagra (formerly Bratzi/Graimadha) and Eleonas (Spaïdhes). For modern surveys in Boeotia, see Bintliff and Snodgrass 1985; Fossey 1988; Bintliff and Slapzac 2007; Bintliff et al. 2007.

[3] Strabo 9.2.12–14; Leake 1835, 466–69.

[4] Ulrichs 1863, 78–80.

[5] A preliminary geological survey was conducted in 2008 by Ruth Siddall, University College London. Her unpublished report to the project is incorporated here and gratefully acknowledged. See also Higgins and Higgins 1996.

[6] Ulrichs 1863, 78–79.

[7] Aravantinos et al. 2012, 2016.

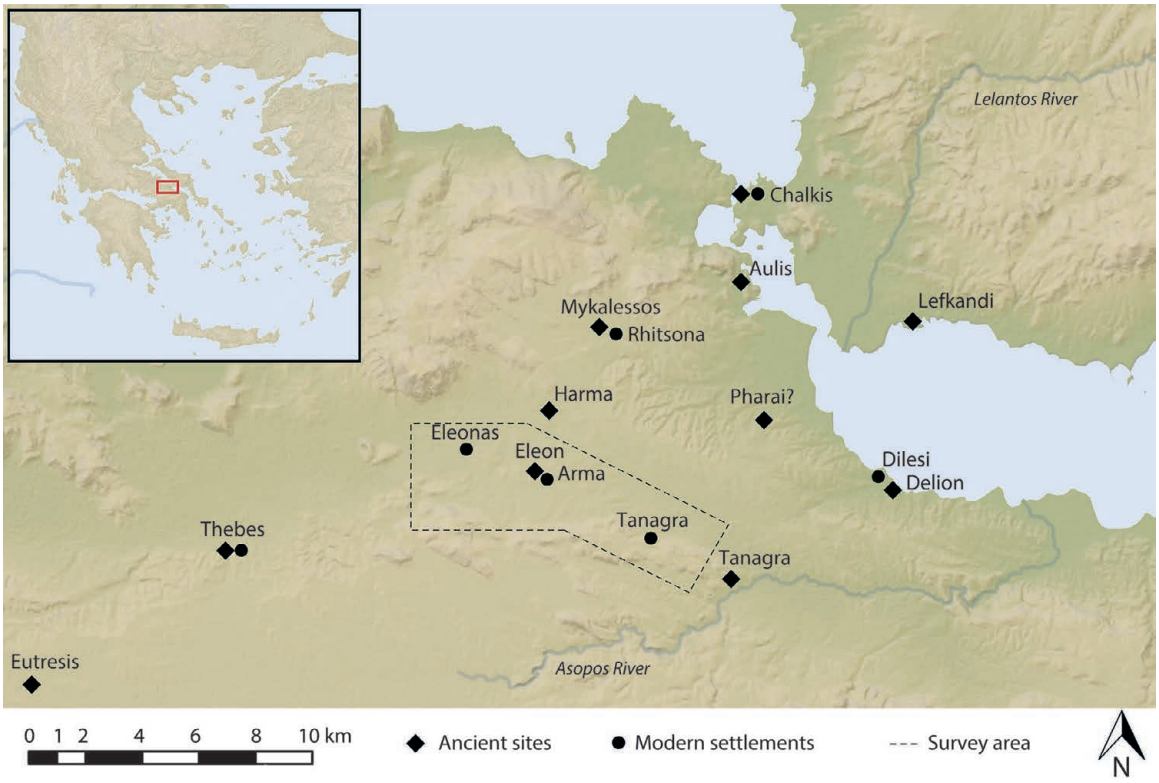


FIG. 2. Map of eastern Boeotia (B. Burns, adaptation of base map provided by American School of Classical Studies at Athens; lic.: CC BY-SA 4.0 Intl.).

Teumessos, the westward route from Eleon to Thebes is fairly direct. The well-watered, fertile fields in this part of eastern Boeotia benefit from modern engineering, but in antiquity, Eleon exploited natural water sources in the area including the upper tributaries of the Asopos River.

The survey area consisted of a 10 x 16 km portion of the plain east of Thebes and was designed to include sites where Palatial-period activity was already documented by earlier fieldwork. Chief among sites of interest was the cemetery located southeast of modern Tanagra and the site of ancient Eleon adjacent to the village of Arma. At Tanagra, some of the tombs that contained the famous painted *larnakes* (ceramic coffins) from cemeteries at Gephyra and Dendron were recorded in our survey, but many are no longer visible, and road construction has obscured the few topographic markers indicated in the preliminary reports.[8] No Mycenaean settlement associated with the chamber tomb burials in the area of Tanagra was identified by our survey.[9] Although it is tempting to connect the large and well-appointed cemetery with the residents at Eleon, which is the only large Mycenaean settlement documented on the plain, the distance between Arma and the cemeteries of Tanagra (about 8 km) seems greater than that between other settlements and cemeteries documented in mainland Greece.[10] Results of three seasons of collection survey yielded a great deal of information about the occupation history of the region. The survey provided a good basis for understanding the local material culture at Eleon revealed

[8] Spyropoulos 1973, 1974, 1976; Immerwahr 1994; Aravantinos et al. 2012, 949.

[9] Spyropoulos (1974, 15–18; 1975, 418–20, figs. 11, 12; 1976) identified evidence for a settlement associated with the Mycenaean cemetery, but we were unsuccessful in verifying his observations. The vast majority of datable ceramics recovered by EBAP in this area date to Classical, Hellenistic, and Roman periods.

[10] Cf. Boyd 2002, 223, tables 21, 22. Note that Boyd (2002, 46) does observe a pattern of Late Helladic cemeteries being placed along "established routes." For the relationship between landscape and burials, see Cavanagh and Mee 1990; Dabney 1999; Borgna and Müller-Celka 2011; Dakouri-Hild and Boyd 2016.

by excavation and investigated a potential model of secondary centers in Boeotia during the Late Bronze Age by assessing relative site sizes and scales within the territorial extent of the Mycenaean palace at Thebes.[11]

## WRITTEN SOURCES FOR ELEON

The archaeology of ancient Eleon is of great interest because the material culture, rather than historical texts, is the primary source of information about the population of this area. Beyond two Linear B references,[12] ancient descriptions of the site and its people are few and nondescript.[13] Early travelers identified only a handful of inscriptions at the site or built into the neighboring churches, and these are all gravestones that record little more than personal names.[14] New inscriptions recovered by the recent excavations are few. Some are only graffiti and potters' marks; others have personal names, but none securely identifies the place-name of the site. The apparent lack of inscribed material from the site is striking in comparison to larger Boeotian sanctuaries and settlements (e.g., Onchestos, Eutresis, Haliartos, Tanagra), although, unlike these sites, Eleon appears to have little Hellenistic or Roman material. Excavation, therefore, is the only means by which we can clarify Eleon's status and position in the economic, political, and cultural landscape of Boeotia.

### *Mycenaean Eleon*

The pottery collected during the survey and identified in our initial study of Eleon indicates a long span of Bronze Age activity, from Early Helladic to Late Helladic (LH) IIIC.[15] The two Theban Linear B tablets, which are associated with the destruction of the Theban administrative center at the end of LH IIIB2, are useful for contextualizing Eleon's role within the economic geography of Mycenaean Boeotia.[16] The tablets, fired accidentally during the destruction of the Kadmeion, refer to Eleon (X 155.1 and Ft 140.5) and suggest that the toponym and site held a significant, though likely secondary, place in the regional hierarchy.[17]

Thebes Tablet X 155
.1 e-re-o-ni , [
.2 ṭọ-[tu]-ṇọ ẓ [
*inf. mut.*
.2 Traces after *ṇọ* are compatible with z.

The extremely fragmentary tablet X 155 from Pelopidou Street preserves only a single complete word, the place-name for Eleon in the dative/locative case (line 1). In line 2, only the first syllable, *to*, can be read with near certainty. In both the published photograph and facsimile, there is a wide gap between *to* and *no* that admits the presence of a third sign. A likely restoration would be the personal name *to-tu-no*. In addition, the trace of a horizontal line after the *no* is compatible with z, a unit of dry measure. The name *to-tu-no* appears seven other times in the Linear B corpus from Thebes, exclusively in the Fq series and in all but one case the personal name is followed by the unit z.[18] The similar findspots of X155 and the Fq series, on Pelopidou Street, and the similar combination of personal names followed by units of measure suggests that X 155 may be related to the Fq series.[19] As recently argued by Bernabé and Pierini,[20] the Fq tablets all appear to record distributions of a single commodity, HORD (**121*), which is either wheat or barley,[21] to participants at specific feasts that presumably took place at Thebes and are often identified by a temporal clause in the heading of the tablet. It is possible, then, that X 155 refers to a feast that took place at the site of Eleon with supplies allocated by the palace at Thebes.

Thebes Tablet Ft 140

| | | | |
|---|---|---|---|
| .1 te-qa-i | GRA + *PE* | 38 | OLIV 44 |
| .2 e-u-te-re-u | GRA | 14 | OLIV 87 |

[11] See Aravantinos et al. 2016.

[12] Thebes Ft 140.5 and X 155.1; the two tablets are transcribed and discussed below.

[13] Hdt. 5.43; Hom., *Il.* 2.501, 10.266; Paus. 1.29.6; Plut., *Quaest. Graec.* 41; Strabo 9.2.12, 9.2.14.

[14] *IG* 7 620, 629, 634, and 672. A longer inscription from between the Frankish tower and the spring was noted by Eduard Schaubert, the German State Architect and Director of Public Works at King Otto's court, in 1848. According to Preuner (1924, 123–24), it is a grave inscription, although the text presents difficulties.

[15] Aravantinos et al. 2016.

[16] Aravantinos et al. 2002, 1–22.

[17] Killen 1999, 217 (erroneously classified as Ft 149); 2006, 79–81; Aravantinos et al. 2001, 343, 370.

[18] Occurrences of *to-tu-no* elsewhere at Thebes: Fq 198.4, 214.10, 229.10, 236.3, 269.[3], 301.3, 311.3. The reference in Fq 269 is the only one not followed by z.

[19] For a detailed analysis of the Fq series, see James 2002–2003.

[20] Bernabé and Pierini 2017.

[21] For **121*, see Palmer (2008) for identification as wheat and Killen (2004) as barley.

| | | | |
|---|---|---|---|
| .3 ku-te-we-so | GRA | 20 | OLIV 43 |
| .4 o-ke-u-ri-jo | GRA | 3 T 5 | |
| .5 e-re-o-ni | GRA | 12 T 7 | OLIV 20 |
| .6 *vacat* | | | |
| .7 *vacat* | | | |
| .8 to-so-pa | GRA | 88 | OLIV 194 |
| .9 *vacat* | | | |

The second tablet, Ft 140, is more detailed. From the Arsenal at Thebes, it offers significant details about agricultural commodities from several locations under the remit of the palace.

The page-shaped tablet preserves five toponyms with varying amounts of olives (OLIV) and wheat (GRA), marked in one case with a notation (*PE*) that is likely the abbreviation of Mycenaean *pe-mo / pe-ma* GRA, meaning seed. Most scholars accept the identification of the toponyms as Thebes in line 1 (*te-qa-i*), Eutresis (*e-u-te-re-u*) in line 2,[22] and Eleon (*e-re-o-ni*) in line 5. Although the intervening two place-names in lines 3 and 4 are unidentified, the tablet seems to indicate the management of agricultural productivity within a day's journey both east and west of Thebes. The tablet refers to the economic value of the land for the palace, recording both the sowing density in seed grain (GRA) and the cultivation of large amounts of olives (OLIV). The amounts are either an estimate of the productive capacity of the land or the record of a harvest from these sites.[23] The administration at Thebes was likely recording the potential of "so much grain and olives at Thebes," "so much at Eleon," and so much at several other key sites. The amounts are totaled in line 8 (*to-so-pa*). Ft 140 shows an ongoing relationship between the palace and various communities within the polity.

*Post–Bronze Age Eleon*

The identification of the site at modern Arma as Mycenaean *e-re-o-ni* is somewhat dependent on its Classical-period identification, and we recognize that this logic is circular. Excluding the Linear B references from Thebes, the earliest reference to Eleon in historical texts is Homer's Catalogue of Ships (*Il.* 2.500), where it is the 12th of 29 cities from Boeotia that led the contingent of Greeks headed to Troy. Together, the Boeotian cities contribute 50 ships, with 120 men each.

A second Homeric passage from the *Iliad* remembers Eleon as the place of origin for a boar's tusk helmet that belonged to Odysseus after a series of exchanges that began with his thieving grandfather: "Autolykos, breaking into the close-built house, had stolen it from Amyntor, the son of Ormenos, out of Eleon" (10.266–267[24]). A lost play of Euripides, *Phoenix*, refers to the eponymous son of Amyntor and was conceivably set at the "Palace at Eleon" in Boeotia.[25]

References in Herodotus link two men closely connected with prophecy to Eleon. Herodotus describes Antichares as "a man of Eleon" who was an advisor on where to locate the Spartan colony of Heraclea on Sicily (5.43). Additionally, Herodotus relates several oracular prophecies of Bakis (whom later authors and scholiasts link to Eleon[26]), and he endorses Bakis' abilities, based on the foretelling of Greek victory after the Persian sack of Athens (8.77), though others of his prophecies were ignored by the Euboeans (8.20) and misinterpreted by the Persians (9.43).

The Roman traveler Pausanias unfortunately does not record a visit to the site, although he does discuss the neighboring towns of Mykalessos, Harma, and Pharai. This omission cannot be used as proof of the abandonment of the site, however, as Pausanias does mention the site of Eleon as the home of one of three men called Bakis (10.12.11), and elsewhere he references a skirmish between the Athenians and the Boeotian-Spartan forces "on the borders of Eleon and Tanagra," perhaps before the Battle of Tanagra (1.29.6). It should be noted, however, that in both cases Pausanias is relying on earlier sources of information (about oracles and prophecies and a Classical-period inscription). As Fossey notes, the importance of Pausanias' reference to "the borders of Eleon and Tanagra" is to demonstrate that during the

[22] *Eutreus* is connected with the Homeric place-name (*Il.* 2.502) and associated with the Bronze Age site southwest of Thebes excavated by Goldman from 1924 to 1927 (Goldman 1931). For discussion of the place-name and form, see Watkins 2007; Del Freo 2009, 46–47.

[23] Killen 1999, 2006; Aravantinos et al. 2005. Del Freo (2009, 45) specifically compares Ft 140 to the E and F harvest tablets from Knossos.

[24] Trans. Lattimore 1961.

[25] Jocelyn (1967, 389) discusses the lost play of Euripides and suggests that it is set before the palace of Amyntor, Phoenix's father, at Eleon.

[26] Ael., *VH* 12.35; schol. Ar., *Av.* 962; schol. Ar., *Eq.* 123; schol. Ar., *Pax* 1071; Paus. 10.12.11; *Suda,* s.v. "Βάκις."

Classical period Eleon was still important enough to be distinguished from neighboring Tanagra.[27]

Strabo asserts that the name of Eleon is derived from the Greek word for marshes (τὰ ἕλη, 9.2.12) and lists Eleon among the *tetrakomia* or "four villages" that made up the territory of Tanagra: Heleon, Harma, Mycalessus, and Pharai (9.2.14).[28] Leake was familiar with Strabo's *tetrakomia* and was keen to identify these names with ancient sites in the region. Although Leake did not see any marshes in December 1805 and January 1806 when he visited Arma (then known as Andritza), he did identify the archaeological site northwest of the village on the flat-topped hill as the remains of "a small Hellenic polis or fortified κώμη [village]," and he noted that "where the rocks are highest, a copious fountain issues from under them, and discharges itself by two spouts."[29] Following Plutarch, Strabo, and Ulrichs, Fossey has taken the two springs to have a connection to the supposed marshy character of Eleon.[30] García Ramón, in his investigation of toponyms mentioned in the Mycenaean tablets, connects Eleon with the Homeric word ὁ ἐλεός, meaning "table top," most likely in reference to the shape of the flat-topped hill.[31] While the etymology of the name remains in dispute, we prefer García Ramón's suggestion, mainly because a toponym associated with marshes in Linear B from Pylos is rendered in the dative/locative as *e-re-i /Helehi/* not *e-re-o-ni*.[32]

## EXCAVATIONS SINCE 2011

The only archaeological work at Eleon prior to our work was conducted in 1911 by Pappadakis, who excavated one of the cemeteries north of the acropolis in response to illegal digging.[33] Grave goods similar to those at Rhitsona (i.e., late sixth or early fifth century BCE), which was being excavated at about this same time, were found. More recent rescue excavations of a cemetery far to the north of the site are perhaps better associated with the ancient acropolis of Harma.[34]

In 2010, with an eye toward beginning excavations, we conducted a geophysical survey on the acropolis.[35] Electrical resistivity proved more useful than magnetic prospection because of the dispersed nature of ferrous objects in the survey zone. Based on the geophysical survey, it was clear that the site preserved significant architectural remains below the modern surface, with a depth of deposit likely to be more than 2 m. From the geophysical survey, it remained unclear, however, how settlement phases might coordinate with the multiple periods represented by surface ceramics. Therefore, excavations at ancient Eleon in Arma began in 2011 and continued through 2018 (fig. 3), in part to ground-truth the survey results.[36]

The chronological framework of the excavated remains coordinates fairly well with the survey data. Some Early Bronze Age remains consistent with Early Helladic (EH) III domestic pottery assemblages have been found but are not at present associated with any architectural remains. Extensive burial activity that begins in the late Middle Helladic period suggests that emergent elites sought to legitimize claims on the landscape through increasingly monumental tombs and funerary constructions.[37] The complex we have named the Blue Stone Structure is contemporary with other cemeteries of the Shaft Grave period that are located elsewhere in Greece in areas formerly dedicated to settlements, such as at Pefkakia and Mitrou.[38] During the Mycenaean Palatial period, LH IIIA–IIIB, Eleon was almost certainly a secondary center within the administrative network centered at Thebes, as demonstrated by the status accorded to it in the Linear B tablets discussed above. The bulk of the settlement

[27] Fossey 1988, 95.

[28] Wallace 1979, 56–57; Fossey 1988, 89–95; Roller 2018, 520.

[29] Leake 1835, 467–69.

[30] Fossey 1988, 94.

[31] García Ramón 2011, 240–41.

[32] PY Jn 829.19; see also *Docs*², 545; García Ramón 2011, 239. See also Killen (2007), who examines the term *e-re-e-u* at Pylos and connects it with the noun τὸ ἕλος (marsh), following Ruijgh (1967).

[33] Pappadakis 1911, 140.

[34] Aravantinos 2009, 223, fig. 352; 227, figs. 360, 361; 2010, 174–75, 177.

[35] Tsokas and his team from Aristotle University in Thessaloniki did the work in October 2009. Resistance mapping was applied in an area of 7,200 m² on the acropolis. Alignments of high resistances were encountered that form closed geometrical shapes in many cases. They were interpreted as reflecting buried ancient ruins of foundation walls. An urban plan oriented NE–SW was revealed. Also, resistivity tomographies were conducted perpendicular to the N–S course of the polygonal wall at a place where the wall was not visible on the ground surface.

[36] Tsokas et al. 2009; Aravantinos et al. 2016.

[37] Kassimi-Soutou 1980; Aravantinos and Fappas 2009; Aravantinos and Psaraki 2010.

[38] Maran 1995; Van de Moortel 2016.

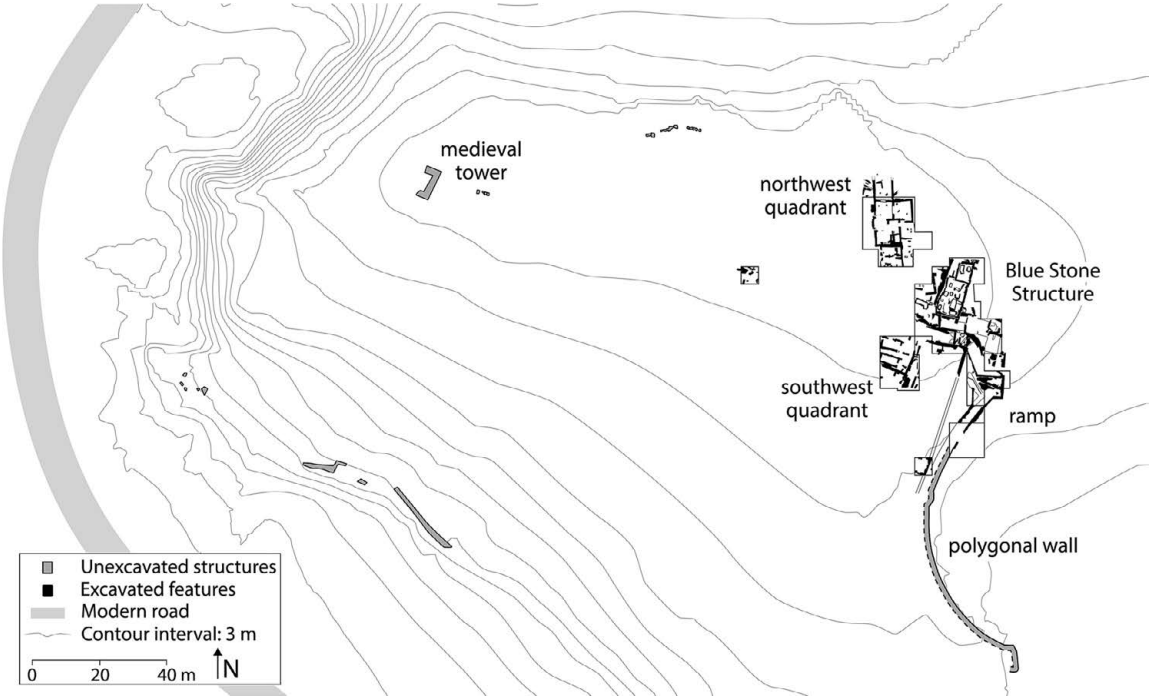


FIG. 3. Topographic plan of Eleon acropolis (drawing by T. Ross, D. Bhatia, and N. Edwards).

excavated thus far, however, shows periods of building, destruction, and reconstruction dating from LH IIIB–IIIC Middle. Evidence for activity at the site is particularly well represented in the Postpalatial period (LH IIIC), with evidence suggesting a shift in network ties from Thebes to sites along the Euboean Gulf and close similarities in material culture with Xeropolis (Lefkandi).[39] Relatively small quantities of Late Geometric and Sub-Geometric pottery, dating to the eighth and seventh centuries BCE, have been found, including possible imports from Euboea and an early SOS amphora fragment. During the sixth century, more substantial material appears at Eleon, including local kantharoi, Boeotian Kylix Ware, Corinthian and Attic imports, and a wide array of votive objects in secondary deposition. Despite the rich quantities of ceramic materials and small finds, however, architectural evidence from the post–Bronze Age phases of the site are all but lacking, with the exception of the large polygonal wall along the acropolis' eastern side and its associated ramped entrance. It is interesting that none of the post–Bronze Age ceramics or small finds is characteristic of a domestic context.

Although we have some sherd evidence that attests to the continued use of the acropolis into the fifth century BCE, we have found no material that could be dated to the Hellenistic or Roman period. After this chronological gap, the acropolis has evidence of occupation from the 14th through 16th centuries CE; most prominent is the large tower at the western edge of the elevated plateau overlooking the Theban plain.[40] Evidence for modern habitation on the acropolis is limited to subsurface scatters of pottery, tiles, and occasionally ovicaprid bones.

Several bell-shaped refuse pits of the Late Byzantine and Early Ottoman periods, some quite large, containing discarded pottery have been excavated, yet there is little associated architecture. The burrowing activity of animals, which has enlarged and connected some of these circular pits, has created significant disturbances to the stratigraphy. The pits have features in common with pits of the same date excavated in Thebes on Pelopidou Street[41] in that each is roughly circular in diameter at the mouth, and some are lined with clay and sealed with a dense accumulation of rocks. The finds inside the Eleon pits consist of discarded ceramics,

[39] Van Damme 2017a.

[40] Lock 1986, 1989.

[41] See Andrikou et al. 2006, 181–233, discussion by Vroom.

including glazed bowls (e.g., P1152; fig. 4), undecorated jugs, and undecorated amphoras. At least two of the pits contained the articulated remains of juvenile ovicaprids lacking butcher marks or burning.

In summary, the excavated remains at Eleon uncovered thus far date to three major periods of activity (fig. 5). The prehistoric phases span the Mycenaean Age, ca. 1700–1050 BCE, during which Eleon had contacts of varying intensities with neighboring communities (discussed further below). The second major phase, during the Archaic and Classical periods (roughly 700–400 BCE), includes the polygonal wall, which dominates the site along its eastern side, and the figurines and ritual vessels found on a long-used ramp. The third major phase, between the 14th and 16th centuries CE, is evidenced by a fortified tower, which our project has not examined, and the numerous pits documented throughout the excavated area.

Excavation so far has been concentrated in the northeastern part of the acropolis, within which three large sectors have been explored following the site grid established by the project in 2011: in the northwest, in the southwest, and in a sector spanning the northeast and southeast quadrants that encompasses both the Blue Stone Structure and the ramped entrance to the site. In the discussion that follows, each of these areas is presented in approximately chronological order, beginning with the Blue Stone Structure, proceeding to the Mycenaean settlement remains in the northwest and southwest sectors, and concluding with the ramped entrance to the site and its stratified Archaic and Early Classical deposits.

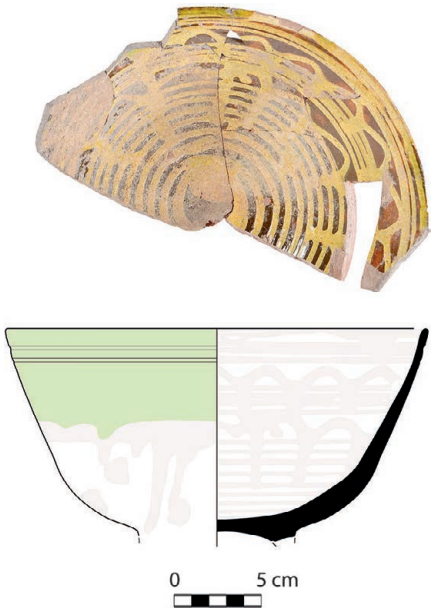


FIG. 4. Slip-painted, glazed bowl (P1152), 15th–16th century CE, from a medieval pit in SEA2a (drawing by T. Ross).

## THE BLUE STONE STRUCTURE AND THE SHAFT GRAVE PERIOD

The chief goal of the most recent excavations, 2015–2018, was the exploration of the LH I funerary construction we call the Blue Stone Structure (BSS; fig. 6), located at the center of our artificial site grid on the eastern edge of the acropolis proper.[42] It consists of stone walls enclosing a select group of Early Mycenaean burials that was covered by a low mound of earth and clay. The low tumulus, which was traced along the eastern side of the acropolis, was made up of earth and unfired clay slabs that had been covering the BSS for at least 3,500 years. Much of this mound was excavated and cleared, revealing the large rectangular construction, measuring 10 x 17 m, the BSS, notable for the slabs of naturally polished blue limestone that cap the walls and that inspired its name.[43] Within its boundaries, numerous tombs were indicated by rings of stone around the grave cuttings; cobbled surfaces were laid at several elevations in fill above the stone marking the tombs; and two stelae, roughly carved markers about 1.3–1.5 m high, stood in situ. The recovery of human remains, directed by Herrmann, followed a protocol to excavate, record, map, and identify individual bones as they were removed regardless of the conditions of the bones.[44] After burials ceased, the subsequent creation

[42] The BSS covers several excavation units and has had many different trench supervisors.

[43] In June 2019, geological fieldwork by Jeremy Beller revealed the slopes west of Tanagra, approximately 5 km from Eleon, to be the most likely source of the eponymous blue stones used in the BSS. The association between this structure, which is a mortuary complex, and the source of its distinctive stones near Tanagra perhaps suggests an ideological link between the two neighbors from an early date.

[44] The protocol requires that all excavated soil is dry-sieved and then water-sieved for total collection. The population of individuals is studied individually and collectively. The aim is to develop individual and tomb-specific osteobiographies for the burial sample. This requires the estimation of age and sex, when possible, of individuals based on several factors including skeletal development, macroscopic observations, and specific calculations for dental development. Assessment of strontium, oxygen, and carbon values from dental remains is planned and will be compared to faunal samples. Significant differences

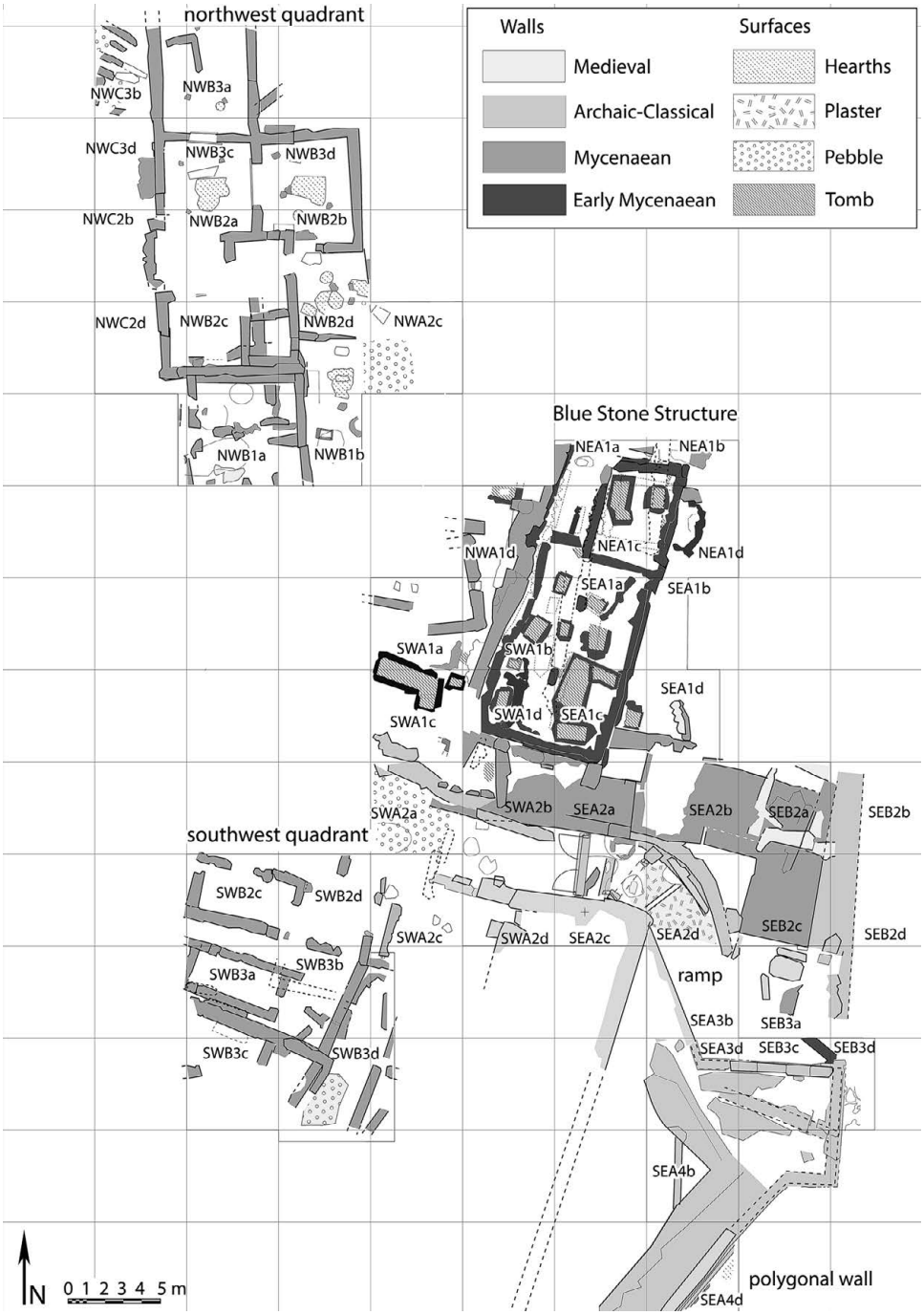


FIG. 5. Schematic plan of excavations at ancient Eleon (drawing by G. Bianco).

between humans and animals can suggest different residential histories, such as immigration. Collagen extraction from bone can yield 14C providing information about chronology and dietary patterns. Any pathologies and unique genetic predispositions for individuals will also be assessed in the final study for information about their lives, deaths, and social relationships.

of a tumulus over the Blue Stone Structure further unified the monumental complex.

The BSS is a significant burial enclosure within what may be a larger Middle Helladic to LH I cemetery occupying the northeast edge of the acropolis. In 2012, before the discovery of the BSS, a clay slab cist tomb


FIG. 6. Aerial view of the Blue Stone Structure (LH I), fully excavated. Numbers indicate individual tombs within and adjacent to the Blue Stone Structure. The ramp construction of the Archaic and Classical periods, with reused Mycenaean remains, is visible in the lower part of the image.

for a child was excavated in the northwest quadrant (NWB1b; online fig. 1).[45] This cist may date to the Middle Helladic period, based on a large Aeginetan barrel jar (P0476) that was found near it. In 2014, a stone-built cist that had been robbed out was identified just below surface levels immediately west of the BSS (in SWA1c). A shallow grave just outside the southwest corner (in SWA2b) contained the flexed remains of an adolescent to young adult (preliminarily identified as a probable male between 14 and 19 years old). The partial skeleton is articulated and so probably is a primary inhumation, but the bones are fragmentary. Pottery fragments (no intact vessels were found) and the poor quality of stone constructions that may have marked the tomb suggest that the burial was disturbed.

[45] See AJA Online for additional, online-only figures.

Two burials (Tomb 12 in SWA1c and Tomb 15 in NWA1d) were located west of the BSS. Both graves appear to be L-shaped tombs and are among the largest of all tombs discovered at the site. Tomb 12 did not have any finds in situ, so there is no direct dating evidence other than parallels for the tomb form, such as at Eleusis.[46] Nonetheless, two well-preserved LH III bowls from the tomb fill may demonstrate continuity of use or later reuse of Tomb 12. Along the exterior eastern wall of the BSS, we found Tomb 11, a stone-lined ossuary containing the remains of at least 30 individuals—the largest number in any tomb—and the greatest number of grave goods, despite it being one of the smallest tombs in size. Taken together, Tombs 11 and 12 suggest the existence of a larger cemetery that likely extended all the way to the clay cist burial recovered in NWB1b, if not farther. The location of the BSS within a lawaqrger, earlier cemetery would follow the example found at Mycenae of Grave Circles A and B near the earlier Middle Helladic cemetery.[47]

The BSS is an enclosure, demarcating a space for the dead apart from the living, rather than a freestanding structure. Three joining walls make the west, south, and east sides of a rectangular enclosure measuring 10 m across its southern end and extending for at least 17 m north–south. The north side is less well defined. The fill of the low tumulus made up of earth and unfired clay slabs is visible in section, sloping up and over the eastern wall of the BSS. We have not fully revealed what would be a typical, circular form to this tumulus, but the stratigraphy indicates multiple layers of clay and earth fill intentionally deposited. Below the fill, roughly hewn walls were exposed (fig. 7). These walls were poorly constructed, without coursed masonry, and it seems that their main function was to support the tumulus fill. After full documentation of the support walls, and the platform between them, they were removed. Within the confines of the BSS walls, we found well-laid cobblestone surfaces at varying levels but not specifically above individual tombs (online fig. 2). These well-built surfaces inhibited access to the tombs and perhaps served as platforms for activity focused on the dead sealed below. In the west half of the BSS, a long, narrow stretch of cobblestone paving was preserved above Tombs 2, 4, 9, and 10; in the east half, similar platforms were built of larger stones mainly above Tombs 5, 8, and 14.

In 2016, during removal of the roughly constructed support wall (see fig. 7, Wall 45), we revealed the southernmost grave stele, which measures 1.35 m high (fig. 8). It seems to have been intentionally obscured, built alongside smaller blocks of the support wall. A second grave stele, of similar shape and size, was found in 2017 approximately 3 m farther to the north, built within a second support wall (see fig. 7, Wall 119) running parallel to the first support wall. To the east of both support walls were uncovered broad rectangular platforms of roughly hewn blocks that are contemporary with the support walls. The stelae are very similar in construction and were both part of the building program above the tombs below. They are made of limestone and have rectangular bases that taper upward, coming to a rounded peak. They are undecorated, but chisel marks are visible on the lower half. Together, the two stelae served as signs for the burial nature of this area. Our excavation of the clay tumulus, the stone support walls, and the platforms revealed how prominent the stelae originally were. The associated material dated to the Early Mycenaean period, demonstrating that the stelae were not exposed for a very long time before they were enclosed within the superstructure and covered by the tumulus.

Taken together, these constructions—including the cobbled surfaces, the stelae, and the spine support walls—probably served to stabilize the artificial clay mound that was built on top of the entire area of the BSS enclosure. After the completion of the low tumulus mound in the Early Mycenaean period, the BSS was no longer used as an active cemetery and became a long-remembered landmark at the edge of the settlement, with no later constructions built above. While the full extent of the earthen clay mound covering the BSS is not yet known, the mound seems to have been a project to preserve the tombs below and ensure the longevity and integrity of this burial complex. In this regard, the builders succeeded, as the Blue Stone Structure and much of the associated tumulus remained undisturbed.[48]

The eastern wall of the BSS is the most clearly articulated and well defined (fig. 9). At the southeast

[46] Mylonas 1975, Grave Hπ15; Cosmopoulos 2015, 93–97.

[47] See Alden 2000; French and Shelton 2005.

[48] The only later construction project detected was a 16th-century CE house, much damaged by modern plowing, along the northern edge of the BSS. Roof tiles, mendable vessels, and fragmentary floor levels were all that remained.

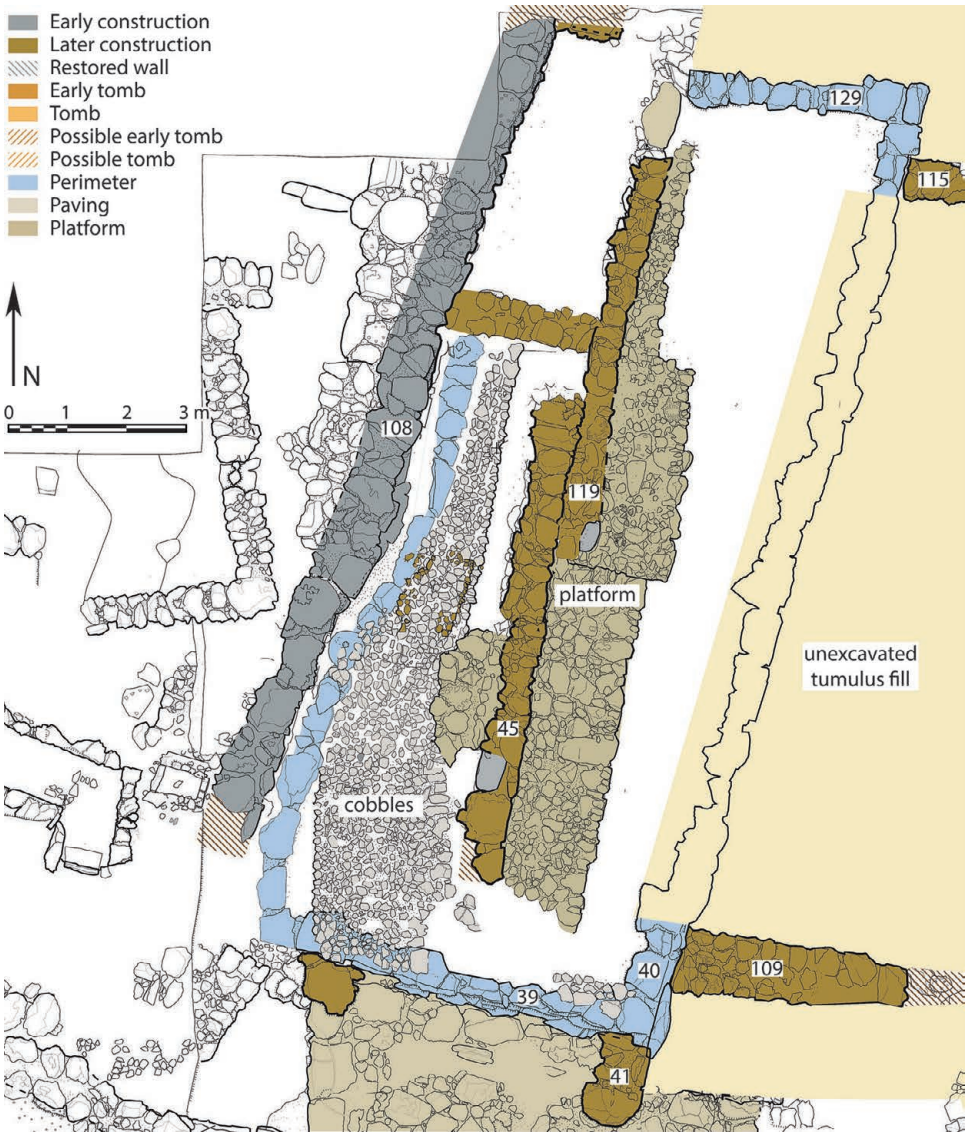


FIG. 7. Plan of the upper layer of the Blue Stone Structure, showing north–south support walls, cobble surfaces, and built platforms (drawing by G. Bianco).

corner is a large blue limestone orthostat measuring at least 1.57 m high; this is mirrored in the northeast corner by an orthostat of 0.98 m. The wall between these two orthostats shows evidence for two construction phases. The lower course has large vertical sandstone orthostats at a smaller scale than those situated at the corners. Above the sandstone orthostats and the tumulus clay packed between them, the wall is capped with slabs of the smooth blue limestone, laid flush with the exterior face of the wall but often extending farther inside the BSS enclosure than the line of orthostats, such that several of the horizontal slabs have slanted inward. In 2017, we exposed the fill above the middle part of the eastern wall of the BSS, and we isolated levels of the tumulus construction that ran over the sandstone orthostats but below the blue limestone capping slabs of the east wall and sloped downward to the east. We believe therefore that the horizontal blue limestone slabs that cap the orthostats came during a later monumentalization of the BSS but still within the LH I period.

Within the BSS, we have excavated 11 built tombs of diverse construction types ranging from a small clay cist (Tomb 2) to a large built chamber tomb (Tomb 5) (fig. 10). Most of the other tombs are a single chamber (cist) formed by drystone walls and covered by

FIG. 8. Grave stelae in situ within the Blue Stone Structure seen from the east.

one or more large cover stones. Our material agrees with Dickinson's observation that "there is far less uniformity in tomb-types over the Mycenaean area than is often suggested; regional variants obstinately persisted, and single sites can have associated tombs of varying types."[49]

The monumentalization of Mycenaean tombs is not unknown. A parallel for the rectangular architectural enclosure of the BSS may be found at nearby Paralimni, on Lake Yliki in Boeotia, where smaller cist graves span the Mycenaean and Geometric periods; another is the grave enclosure at Archanes Phourni on Crete.[50] Tumuli of Middle Helladic date are known at Asine (Tumulus IQ), Argos, Lerna, and Attica (Thorikos), but comparable mounds are relatively rare in Boeotia and Euboea.[51] Buildings D and H at Mitrou, with the associated burials, offer a useful parallel from the LH I period.[52] Very similar enclosures with a mix of cist tombs and built chamber tombs are also attested in the West Cemetery of Eleusis and, indeed, the ceramic parallels from this site suggest that close contacts between these two regions must have existed by the Shaft Grave period.[53] Grave stelae are of course known from Grave Circles A and B at Mycenae, and some Early Mycenaean burials have markers, such as at Lerna, Argos, Eleusis, and Ayia Irini, but none are in situ.[54] The best parallel for the Eleon stelae may be on Delos, at the so-called Theke, identified by Herodotus as the "Tomb of the Hyperborean Maidens." This Mycenaean burial, excavated early in the Delos campaigns, was an L-shaped built chamber tomb similar to our Tombs 5 and 12.[55] The burials at Ayios Vasileios near Sparta also offer interesting comparanda for comingled human remains of the Shaft Grave period, reflecting the common Mycenaean practice of tomb reuse, where older remains are pushed to the side with other remains as new interments occur.[56] The early date, the specific form and sequence of construction of the tombs, the superstructure including the stelae and platforms, and the tumulus of the Blue Stone Structure at Eleon make it remarkable.[57]

A relative date in the Shaft Grave period for all the graves within the BSS is established by ceramics found in association with the construction of the stone platforms and the lowest tumulus levels, as well as by the intact vessels found inside the individual graves. Most of the vessels from the BSS can be safely dated to the LH I period, including the Gray Minyan and matte-painted Vapheio cups, the Gray Minyan cups with everted rims and stemmed feet, bichrome open and closed shapes, and one lustrous decorated askos (P1528). Other vessel types, in particular the ring-handled cups with matte-painted decoration, could belong to the latest stage of the Middle Helladic, but such cups also belong to LH I assemblages elsewhere on the mainland. Several factors prevent a better chronology of the burials based on ceramic observations alone. There were a relatively small number of vessels

[49] Dickinson 1983, 66.

[50] For Paralimni, see Spyropoulos 1973; Galanakis 2018, 94. For Archanes, see Sakellarakis and Sapouna-Sakellaraki 1997. For Early Mycenaean burial monuments generally, see Bennet and Galanakis 2005; Papakonstantinou 2011; Phialon 2011; Boyd 2015.

[51] For Asine, see Dietz (1980, 30), who dates the tumulus to MH II, which is supported by the 14C analysis carried out by the Middle Helladic Argolid Project; see also Papakonstantinou 2011. For Argos, see Protonotariou-Deilaki 1990. For Lerna, see Zerner 1990; Boyd 2002.

[52] Van de Moortel 2016.

[53] Mylonas 1975, Grave Hπ15, pl. 77; Cosmopoulos 2015, 93–94.

[54] Mycenaean stelae are discussed in detail by Younger 1997.

[55] Courby 1920–1927, 63–74.

[56] Moutafi 2015; Moutafi and Voutsaki 2016.

[57] A possible comparandum for the BSS at Eleon, with long-term maintenance of an Early Mycenaean burial monument, is found at the site of Plasi near Marathon. There, a grave of the transitional (MH III/LH I) Shaft Grave period was enclosed by a polygonal wall; above were deposits of figurines and cultic vessels from the Archaic and Classical periods (http://marathonexcavations.arch.uoa.gr/marathon/index.php, Research, History).

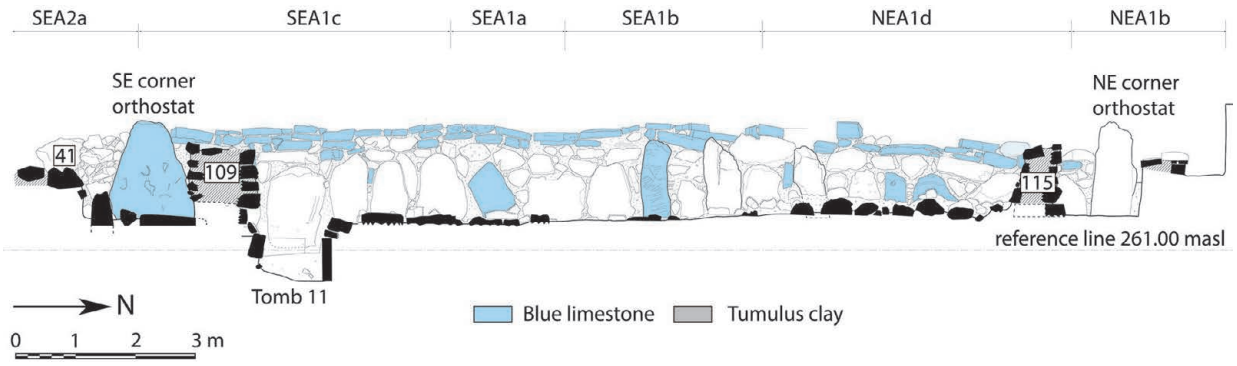


FIG. 9. Exterior elevation of the east wall of the Blue Stone Structure (drawing by G. Bianco).


FIG. 10. Top plan of the lower level of the Blue Stone Structure showing locations of excavated graves in orange (drawing by G. Bianco).

per tomb, and the classes of these vessels cannot be ascribed to a particular stage of the LH I period because of a lack of stratified settlement material covering late Middle Helladic and LH I periods. The presence of secondary burials (comingled and others) hinders the seriation of the tombs by grave goods alone. Nonetheless, not a single tomb produced an assemblage that could be placed securely and solely in late Middle Helladic or, on the other hand, in more advanced LH I or even in LH II. This suggests that both the burials in the enclosure and the construction of the clay mound took place within the phase that is traditionally defined as LH I.

Despite the difficulties with establishing a more precise chronology, there is limited evidence that the vessels deposited in tombs of the BSS could fall into an early stage of LH I, while the undisturbed layers of the tumulus contained material that may represent a more advanced stage of that period. This division is argued at present by the overall quantity of bichrome pottery from the tumulus, especially well-burnished bichrome, a class of pottery that, among all the tombs of the BSS, is represented only by a cup from Tomb 5 (see below). Despite this evidence for some chronological development, however, the fill of the tumulus does not contain any pottery fragments that would strongly point toward the LH IIA period.

The fill within and between the tombs contains a large amount of highly fragmented and usually quite worn pottery dating from EH II to LH I. It is likely that the fill represents debris from a settlement into which the entire structure was dug.

An interesting insight into activities connected with the burials is provided by a small deposit of mendable vessels recovered within the BSS but outside of the tombs (predominantly in trench SEA1a). Most of these vessels are open shapes, chiefly in Gray Minyan, accompanied by two larger decorated bichrome shapes (a krater and a closed vessel). Some of the pottery (such as pyxides and Vapheio cups) is closely paralleled by the BSS tomb assemblages. While more study is needed to clarify the association of this deposit with the tombs and the circumstances of its deposition, it appears likely that it represents the remains of a special event involving drinking, perhaps associated with a specific burial.

*Tombs 1 (SEA1c), 2 (SWA1b), 3, and 4 (SWA1d)*

During the 2015 and 2016 seasons, inside the BSS, we fully excavated three tombs (Tombs 1, 2, and 4) containing human remains and one ("Tomb 3") that we initially believed to have been robbed. Tomb 1 is a large cist tomb measuring 1.75 x 0.85 m. Its built stone walls supported a red brecciated limestone cover slab that had broken in two. The comingled remains of numerous burials were found in the tomb fill. Three individuals have been identified in preliminary analysis of the osteological remains: a juvenile, an adult, and another adult of more advanced age (as indicated by degenerative joint disease). On the tomb floor in the northwest corner was a small unpainted kantharos with unburnished surface (P1130). The east wall of the tomb structure was displaced, perhaps by the same disturbance that broke the cover stone.

Tomb 2 was a small clay cist (0.60 x 0.40 m) that contained the intact skeleton of only one individual: a child, aged 2–4, in a contracted position lying on its side. No artifacts or other finds were recovered.

What was mistakenly identified as the robbed "Tomb 3" turned out to be an entry chamber, or dromos, for Tomb 5. This horizontal entry chamber is well built and was topped by a cover slab of large dimensions (1.40 x 0.90 m, 0.26 m thick). Evidence for the entrance is obscured by the fill supporting the east wall of the BSS, but indications are that it was constructed before the BSS. By sieving the excavated soil, we recovered only meager human remains, including two teeth and a few carpals and tarsals.

Tomb 4 was another stone-built cist tomb, topped with a large capstone of friable sandstone (0.25 m thick). The degraded bones found within were preserved enough to reveal a skeleton in a contracted, dorsal position. This individual may have been female (based on the scale of the bones); the only possible grave good recovered with this burial was two joining fragments of a coarsely made terracotta spindlewhorl. From the preliminary analysis of the skeletal material, the identification of an extra metatarsal bone indicates the inclusion of a second individual's remains within the closed tomb.

*Tomb 5 (SEA1c)*

In 2016, work concentrated on Tomb 5, the largest tomb excavated within the BSS (online fig. 3). Typologically, Tomb 5 falls under Papadimitriou's definition of a Built Chamber Tomb (BCT); a short dromos was perpendicular to the axis of the burial chamber, which

measures 2.78 x 1.33 m. The walls of the main chamber and dromos of Tomb 5 were built of vertically placed cut stones.[58] The wall that forms both the north side of the dromos and the north end of the burial chamber of the tomb is a single construction, and a vertical stone that acted as a door remains standing between the two spaces. Wear marks can be observed on this access block, showing that the block was opened and closed with successive interments. The deposition of bones showed multiple reuses of the tomb, with earlier remains concentrated and stacked in the southwestern end of the tomb chamber. The preliminary assessment of these remains suggests that a minimum of eight individuals are represented. The parallel placement of long bones from several individuals shows that these bones were gathered together, perhaps by the handful, and intentionally placed in the corner, likely during a subsequent interment. In the center of the tomb floor, the articulated remains of three additional individuals were found, representing the latest use of Tomb 5. Individual 1, the northwest burial, is an adolescent (12–18 years old), and the remaining two individuals are adults.

Several interesting grave goods were found associated with the articulated burials and the comingled remains. The latest ceramic vessels date to the LH I period (some illustrated in online fig. 4). They constitute a mix of various classes typical of the BSS funerary assemblages and include two undecorated kantharoi (P1513, P1525), a Gray Minyan cup (P1503) with everted and slightly hollowed rim, and three matte-painted vertical ring-handled cups (P1502, P1504, P1518). More notable are a bichrome cup with stylized dolphins (P1505) that is paralleled by nearly identical cups from Kastri on Kythera, at Argos, and at Kirrha, and a lustrous decorated askos (P1528) that is perhaps Cretan and is similar to an example from Grave M of Grave Circle B at Mycenae, which also contained a good parallel for the Gray Minyan cup.[59] Also recovered from Tomb 5 were an ivory sword pommel (SF0569), spindlewhorls, and several copper alloy artifacts: rivets, rings, and a dagger with three rivets (SF0575; fig. 11).[60]

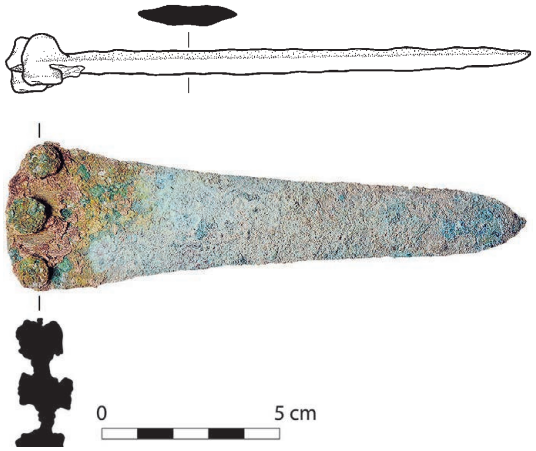


FIG. 11. Copper alloy dagger (SF0575) from Tomb 5 in the Blue Stone Structure (drawing by T. Ross).

*Tomb 6 (SEA1a)*

Excavations in 2017 revealed Tomb 6 (fig. 12), a small stone cist that contained the articulated remains of a single child with an estimated age of 9.5 years, though the individual's small dimensions could suggest malnutrition. The body was positioned with the skull in the northeast corner, where three copper alloy ringlets were found: two were along the cranial base (the northern margin of the cranium) and appeared to be positioned near the mastoid processes, roughly behind the ears, and one was found below the maxilla.

[58] Papadimitriou (2001, 2–3; 2015) stresses the lateral entrance as a defining characteristic of a Mycenaean BCT, rather than access from above.

[59] For the bichrome cup with stylized dolphins, parallels are found at Argos, see Papadimitriou 2010, fig. 10; Kirrha, see Dor et al. 1960, figs. 48.59, 51.60; and Kythera, see Coldstream and Huxley 1972, fig. 54.19; pl. 51.19. For parallels to the askos, see Dietz 1991, fig. 76 NE-1(1), NE-1(2), NE-2, NE-3 from Tomb M of Grave Circle B at Mycenae.

[60] In total, seven copper (Cu) alloy objects were analyzed by means of portable X-ray fluorescence (pXRF) in July 2016 by Vanessa Muros (UCLA/Getty Conservation Institute). This study included the LH I bronze dagger SF0575 from Tomb 5. The spectra were processed using the software S1PXRF (v. 8.3) by Bruker AXS. The analysis of each object was conducted using 40kV/11μA and a 1 mil Ti/1 mil Al filter for 120 seconds to focus on heavier elements associated with the metal alloy. Because the surfaces could not be cleaned down to the unaltered metal, an area was chosen on each object that was clear of obvious burial deposits and thick corrosion, and a spot about 8 mm across was analyzed. The rivets of the dagger were also analyzed (K, Ca, Ti, Cr, Mn, Fe, Ni, Cu, As, Pb, Ag) and compared to the blade (K, Ca, Ti, Cr, Mn, Fe, Cu, As, Pb, Ag, Sn). Though the rivet had many elements in common with the dagger blade, the rivet had no Sn. Ni was present in the rivet but not in the blade. Muros cautions that the role corrosion played in the differences observed should also be considered.

FIG. 12. The articulated remains of a child and grave offerings in situ. Tomb 6 in the Blue Stone Structure.


FIG. 13. LH I ceramic assemblage from Tomb 7 in the Blue Stone Structure; *left to right:* from the main chamber, a monochrome squat jug (P1690); from a pit in the southern chamber, a small gray Minyan wide-mouthed jug (P1729), a bichrome jug with convex base (P1732), a tripod stand (P1733; one fragment of the tripod stand was found outside the tomb), and a matte-painted vertical ring-handled cup (P1730).

Also included in the grave were two Gray Minyan vessels, a pyxis with two sets of two holes under the rim (P1565), and a Vapheio cup (P1566), both very small in size. All ceramics dated to LH I.

*Tomb 7 (NEA1c)*

Tomb 7 is a large built tomb with a complicated form, measuring approximately 2.26 m north–south x 0.90 m east–west. The tomb had collapsed, probably in the earliest phase of the construction of the support walls and platforms that enclosed the grave stelae. We assume these constructions were meant to hide and protect the tomb but may have caused its collapse. The primary chamber measures about 1.20 m north–south x 0.90 m east–west, but it was extended at the south by a smaller chamber (0.80 m east–west x 0.60 m north–south) slightly offset to the east. Human remains were found in both areas, including articulated burials and comingled remains. The minimum number of individuals in Tomb 7 is currently estimated at eight adults and subadults; a semi-flexed adult burial in the northern area represents the final interment surrounded by fragmentary comingled remains. In the southern chamber, below the tightly flexed articulated remains of an individual, a deep pit contained the remains of a minimum of four more individuals. In the same pit were four vessels of LH I date, consistent with all of the BSS burials (fig. 13): a small Gray Minyan wide-mouthed jug (P1729), a matte-painted vertical ring-handled cup (P1730), a bichrome jug with a slightly convex base (P1732), and two-thirds of its undecorated tripod stand (P1733). The third fragment of the tripod stand was excavated just outside the tomb. Inside the northern chamber, a monochrome red miniature squat jug with everted rim (P1690) was found along the north wall associated with comingled and friable remains.

*Tomb 8 (SEA1a)*

As indicated by the fragmentary condition of the north wall, this large tomb seems to have been disturbed by later activity. Three significant stone walls preserved a chamber, and the southernmost covering slab was still in place. A single child burial was located in the southwest corner of the tomb. This individual was placed on the compact clay of the tomb floor and positioned on its right side with the head to the south, facing east. The tomb also contained an unpainted ring-handled cup (P1718) and three copper alloy coils found surrounding the child's cranium, placed similarly to the coils found with the child from Tomb 6. Overall, the burial is moderately well preserved. Both humeri have been displaced or damaged suggesting a limited postmortem intrusion, consistent with the partial disturbance of the overall tomb. A preliminary assessment of the dentition indicates that the individual in Tomb 8 was roughly 7 years old (age range of 6–9 years). Like the child recovered from Tomb 6, this individual would have been very short for the age indicated by dentition.

While trying to understand further the relationship of the second grave stele with the burials in this area, we discovered a secondary pit burial in SEA1a in the BSS. The remains were those of a child, again about 7 years old based on dental development. The preservation and presence of various epiphyses with this

burial, including phalange, metacarpal, and metatarsal epiphyses, suggest that the bones of this individual were carefully collected and redeposited as a secondary burial. The comingled remains, including an inverted cranium, mixed long bones to the north, and others placed standing on end vertically were redeposited in a small featureless pit.

*Tomb 9 (SEA1a)*

Excavation in SEA1a began with the opening of Tomb 9, which had become visible at the end of the 2017 season. With the removal of two blue covering stones that slightly overlapped each other, initial excavation revealed a single young adult with the head oriented to the northwest and the body turned toward the west. The single grave good was a murex seashell placed northeast of the individual. With removal of the fill below, a second burial was discovered in a small pit measuring 30 x 25 cm (the extent of the skeletal material). It was located below the flexed legs of the upper individual. These disarticulated remains appear to belong to an adult; no artifacts were recovered in this lower pit.

*Tomb 10 (SWA1b)*

This large built tomb (fig. 14), 1.22 m north–south x 0.85 m east–west, was lined with stone slabs and was covered by a single, massive covering stone, which preserved organic contents within the tomb. The remains of three individuals were evident. The last interment, a child estimated to be 9–12 years old, was positioned west of two adult burials. With this child were three necklaces, a beaded bracelet, and a Gray Minyan pyxis. The two adults, who appear to be male and in their mid 20s, were positioned against the eastern side of the chamber. All three individuals were placed in the tomb with their heads at the south and their feet at the north. The appendicular skeletons (elements of the arms and legs) of the two adult individuals had been collected and stacked along the eastern wall on top of the torsos to accommodate the child burial.

The remains of the child were partially covered or draped by a textile, of which about 40 fragments have been recovered, along with what may be a sea sponge. Although the textile is fragmentary and heavily mineralized, the fragments likely belong to a single textile made in plain or tabby weave (fig. 15). This is a simple weave structure, in which every horizontal (weft) thread goes alternately over and under single vertical (warp) threads. The weft threads are packed more tightly in comparison to the warp threads, so that they hide the warp threads. This makes it a weft-faced tabby. Visible in some fragments are holes intentionally woven in the fabric that might have been meant for the insertion of decorative elements, such as appliqués, embroidery, or supplementary decorative weft yarn. In addition to the remarkable structure of the textile, a preliminary analysis identifies the threads as Z-spun wool.[61] The textile from Eleon is among the earliest known examples of preserved wool in the Aegean.[62]

Another exceptional find from the tomb are two handmade but unfired pots (P1811, P1812; online fig. 5) that were placed in the northwest corner of the tomb, one of which was pierced through the base. The

FIG. 14. Photogrammetric model of Tomb 10 in the Blue Stone Structure (by N. Herrmann).

[61] Z-spun means that, when spun on a drop spindle, the fibers twist in the direction of the downward stroke on the letter Z. This is opposed to fibers that can alternatively be spun in the S direction. Z-spun threads are most often associated with animal fiber in the Aegean.

[62] The earliest published textile identified as wool comes from Akrotiri. Another fragment, slightly later, comes from Kasteli, Chania. See Moulherat and Spantidaki 2008, 2009; Spantidaki and Moulherat 2012, 189.

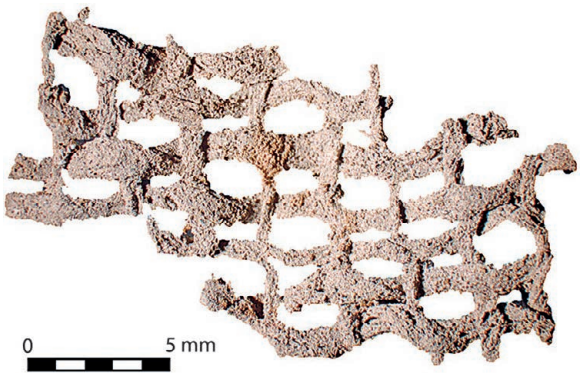


FIG. 15. Mineralized textile fragment, likely wool, found in Tomb 10 in the Blue Stone Structure. Photograph taken with stereomicroscope (B. Dimova).

function of these vessels is somewhat of a mystery, as they could not have contained liquids, and no traces of organic contents were preserved, despite the high degree of preservation elsewhere in the tomb.[63] At least one of them appears to be similar to a pyxis, a common funerary offering in the BSS and also present in Tomb 10 in Gray Minyan Ware (P1810). To our knowledge, these pots are unique in the mortuary record of Bronze Age Greece.

*Tomb 11 (SEA1c)*

Tomb 11 (fig. 16) is located approximately 2.50 m northeast of the BSS's southeastern corner. The burial chamber measures about 1.00 x 1.00 m and is about 1.15 m in depth.[64] A vertical slab forms the tomb's east wall, smaller stones form the north wall, and two rough orthostats—set atop packed earth and stone rubble—form the south wall. The west wall is the uniform fill packed against the exterior of the east wall of the BSS. Tomb 11 cuts into this fill and so postdates the construction of the BSS. The initial discovery of skeletal material came in conjunction with the excavation of a Late Byzantine pit, but it soon became clear that the human remains were associated with the Mycenaean structures; these include a cranium and numerous other bones in a niche within the buttress wall (Wall 109) that supports the southeast corner of the BSS (see figs. 9, 10).

Numerous isolated human remains were found above the cover slabs for Tomb 11, and extensive comingled skeletal elements were contained within the tomb. As no bones were found in an articulated position and many were heavily degraded, it is possible that Tomb 11 was primarily an ossuary.[65] A preliminary estimate of the minimum number of individuals is 27, including at least three infants and several adolescents. The recovery of multiple hyoids and other small or fragile bones could indicate that the remains of the individuals who were reinterred in Tomb 11 represent relatively complete skeletons from other tomb contexts.

The deposit contained more grave goods than any other tomb thus far excavated at Eleon (see fig. 16). This includes eight complete vessels (online fig. 6): two matte-painted ring-handled cups (P1851, P1908), a bichrome wide-mouthed jug (P1915), a small Gray Minyan pyxis with single piercings on opposite sides (P1916), a Gray Minyan squat juglet (P1921), two matte-painted Vapheio cups (P1917, P1922), and an amphoriskos in medium coarse fabric (P1920). The finds include 30 rock crystal beads, 15 carnelian beads, and 14 other stone beads. There is a rock crystal lentoid sealstone incised with a flying fish motif (SF0641; fig. 17). Nine beads may be glass coated with copper alloy or wholly copper alloy. Other metal finds were three copper alloy pins (online fig. 7), two with heads in the shape of pomegranates (SF0669, SF0670) and the third without (SF0671), five copper alloy hair coils (SF0603, SF0609, SF0610, SF0667, SF0668), and two possibly silver coils (SF0664, SF0665). Finally, the tomb held six clay spindlewhorls (one incised, SF0643). The presence of the sealstone and bichrome jug place the ossuary among the latest graves found at Eleon and suggest a date of LH I for the assemblage.

*Tomb 12 (SWA1a)*

The cover slabs of Tomb 12 were originally revealed by excavations west of the BSS (SWA1a) in 2015 (see fig. 10). At that point, the blocks were designated as the "disturbed capstones" of a tomb that, like others near the surface, no longer contained ancient remains. When we lifted the stones in 2018, we found that the tomb was disturbed but was far larger than we had estimated. It is a built chamber tomb with a small

[63] The unfired pots were sampled for residue analysis by Vernon Stafford at the University of Tennessee, Knoxville.

[64] For a detailed study of this tomb, see Engstrom 2019.

[65] Schoep and Tomkins 2016, 236.

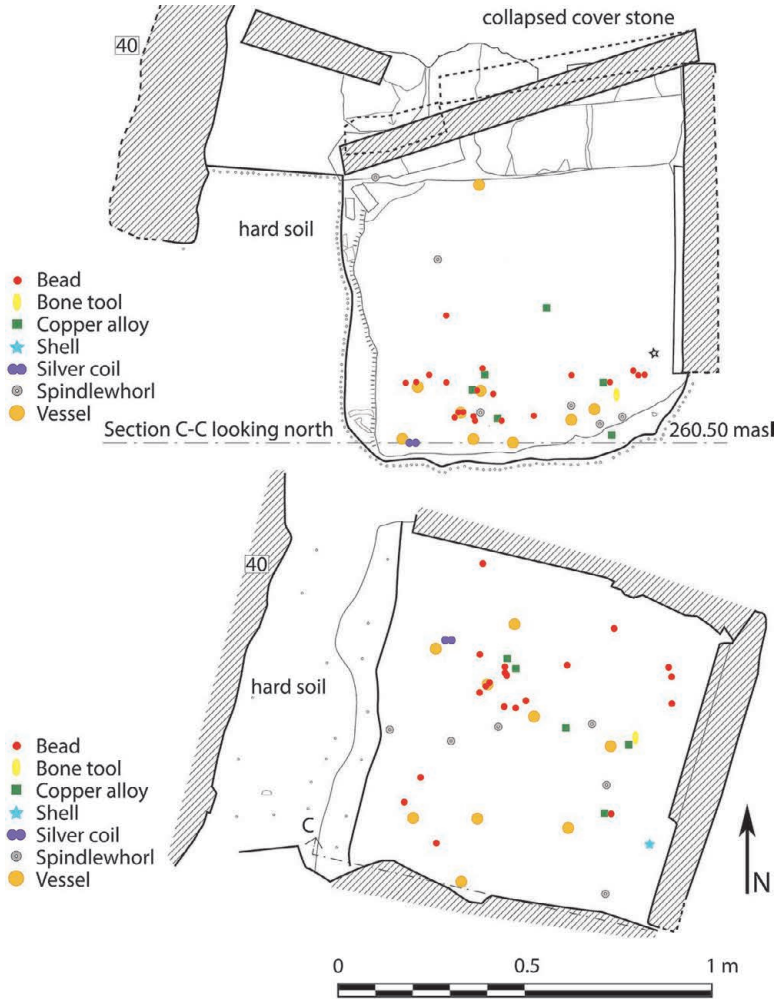


FIG. 16. Tomb 11, illustrating the distribution of grave goods: *top*, section; *bottom*, plan (drawing by G. Bianco).

dromos opening to the south. The north wall is 3.8 m east–west, the west wall measures 1.5 m north–south, and the east wall, extended to form the dromos, is 1.7 m north–south. Excavation of the dromos revealed a nearly intact, shallow, angular bowl (P1878; online fig. 8) that dates to LH IIIA2/B and suggests that this tomb was in use considerably longer than those within the BSS. Other mendable pottery of similar date found in and around this tomb seems to provide corroborative evidence. The eastern end of the tomb contained a large accumulation of stones mixed with pottery. The fragments of pottery include LH IIIC vessels, confirmation that the tomb was disturbed in the period when the site's Postpalatial-period settlement encroached on the limits of the BSS. At a lower level, concentrated on the west side, degraded and fragmentary human remains suggest that the tomb held multiple individuals.

*Tomb 13 (NEA1c)*

Tomb 13 measures 1.4 m north–south x 1.3 m east–west and is the lowest structure within the northern BSS, with its cover stones located below the rubble packing for the perimeter wall immediately to its east. This indicates that the tomb predated the east perimeter wall and suggests that it was included within the BSS intentionally. Three individuals found during the initial exposure were positioned with their heads to the south and—at least the easternmost individual—facing east. The two other individuals were partially disturbed, and it appears that skeletal elements had been collected and placed along the western wall toward the southwest corner. The easternmost burial, an adult male, was articulated and most closely associated with a ceramic pyxis with a corroded surface. In addition to the articulated and comingled remains on the final

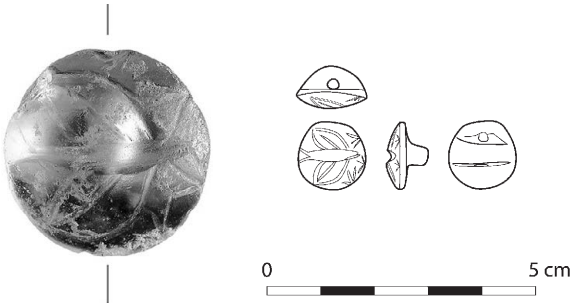


FIG. 17. Rock crystal sealstone with intaglio carving of a flying fish (SF0641) from Tomb 11 (drawing by T. Ross).

floor of the tomb, two pits, one located in the northern third of the chamber and the other in the southeastern corner, contained comingled bones. Initial analysis of the skeletal material from the tomb indicated the remains of approximately six individuals, three individuals on the floor of the tomb and three individuals in the two subfloor pits. Two mandibles found in the southeast pit articulate with two crania found in the northern pit. In addition, loose teeth recovered from the floor of the tomb reassociate with the mandibles and maxillae of these individuals. Apparently, the individuals interred in the pits were initially placed on the tomb floor and were subsequently relocated to the subfloor pits.

*Tomb 14 (SEA1a)*

Far below the northern grave stele (Stele 2), we found the cover stones of a tomb in 2017. Its location, partially under Stele 2, made it clear that there was no safe way to excavate the tomb without removing the marker above. Given the significance of our two stelae, still in situ for more than 3,000 years, we were content to leave the tomb unexplored. Near the end of the 2018 season, however, we observed that the cover stones had shifted, presumably because of heat, moisture, and nearby activity, and small stones had begun to fall inside. Because of the danger of further collapse, we moved forward with expedited recovery of the contents from the accessible portion. The remains of two comingled infants were piled in the southeast corner of the tomb. A third infant, a primary burial, was more centrally located, with the lower limbs in the northeast corner. This articulated individual was oriented with the head to the west, placed on its left side, and facing north. No artifacts were found in the tomb.

*Tomb 15 (NWA1d)*

Tomb 15 is another significant burial deposit to the west of the BSS. It is only partially exposed and had no cover stone in place, but it does have solid east and south walls. The remains of at least three individuals have been identified, and they are in a remarkably good state of preservation considering the exposed context. While most of the remains appear comingled, the pelvis and leg of one individual is fully articulated and probably indicates a mix of primary and secondary interments in this tomb.

## MYCENAEAN PALATIAL PERIOD

Although we can infer from the Linear B texts discussed above that Mycenaean Eleon was integrated into the Theban polity by LH IIIB2, the Palatial-period levels of the site have so far been minimally explored because of the substantial and well-preserved Postpalatial constructions and the time and resources diverted to the investigation of the BSS. Thus, we have yet to form a clear narrative of the circumstances through which Mycenaean Eleon fell under Theban hegemony and whether this took place early on or was a late phenomenon (as was the case with Pylian hegemony over Iklaina[66]). In the northwest quadrant (see fig. 5), Palatial-period pottery has been found in the construction fills of the structure we have named the Northwest Complex. This complex may in part be a Palatial building that was heavily modified during the Postpalatial period. In some areas of the Northwest Complex, soundings beneath the floor of the structure have produced earlier floor surfaces with mendable pottery of the Palatial period (LH IIIA2–IIIB1). The material incorporates a range of open and closed shapes, as well as cookwares, and seems to suggest that domestic occupation in the area preceded a Postpalatial house. Despite the largely domestic character of the finds, however, the earlier floor levels have also produced evidence for craft activities such as cloth production and jewelry making.[67]

The evidence for jewelry making takes the form of a rare stone mold (SF0324; fig. 18) that was found in an LH IIIB context below Room 3 of the Northwest Complex.[68] It is a flat fragment of red steatite,

[66] Most recently, see Cosmopoulos 2018, 2019.

[67] For cloth production, see MacDonald 2017; Van Damme 2017b.

[68] Burke and Burns 2016.


FIG. 18. Steatite jewelry mold (SF0324) from below the floor of the Northwest Complex (drawing by T. Ross).

measuring 7.3 x 4.8 cm x 2.2 cm thick. The deeply cut matrices are preserved on both faces, with a total of seven designs. One face preserves a large *waz* lily, papyrus, cockle shell, and pendant spiral, while the second face offers variations on three of these: a smaller *waz* lily, a larger papyrus, and a cockle shell with more detailed grooves. Four of the matrices feature shallow channels that would position wires to make string holes so that the ornaments could be worn as a necklace or attached to garments.

The Eleon designs are all familiar motifs, appropriate for flat-back ornaments that are most commonly made of glass and often produced in conjunction with gold versions. None of the Mycenaean glass ornaments found thus far at Eleon match the designs preserved on the mold. Various close parallels have been found among the glass and gold jewelry in numerous tombs and workshops at Thebes, as well as in the chamber tombs of Tanagra, east of Eleon.[69]

In the southwest trenches, one room of an LH IIIB2 structure (Structure A) was excavated in SWB3a. The center of the room preserved a dense scatter of ceramics, bone, and tile fragments in a layer containing much carbon and ash attesting to an intense fire. Although this destruction deposit was partially leveled in LH IIIC Early, in preparation for a succeeding structure, a fair number of mendable vessels were recovered from the deposit including a stirrup jar with a dot rosette on the shoulder (P0304), a deep bowl decorated with vertical whorl shells (P0327), a linear cup (P0303), and an angular kylix (P0325). Other notable finds from this collapse level include a copper alloy violin bow fibula (SF0049) of a type that does not appear in Greece until LH IIIB.[70]

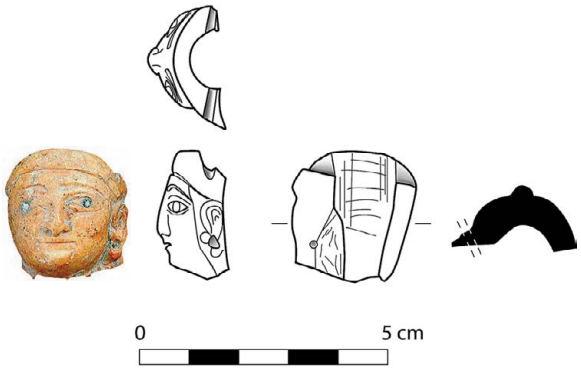


FIG. 19. Carved bone head (SF0055) from Structure A (drawing by T. Ross).

Another notable find from the same destruction deposit is a small human head carved from animal bone (SF0055; fig. 19). This relief carving, about 2.5 cm across, is cut flat across the back like most Mycenaean bone and ivory ornaments, but the style of carving does not have strong parallels in the Aegean Bronze Age. Its eyes, with small inlays of glass or faience, suggest an origin in the east Mediterranean. Indeed, a bronze Hittite cult statue found by a shepherd in 1990 in Ahurhisar, 45 km west of Afyonhisar in central Turkey, though of larger scale, bears strikingly similar features,[71] but no similar bone or ivory work from Anatolia has emerged at Eleon. In ivory, two imported

[69] Demakopoulou 1974; Dakouri-Hild 2005; Aravantinos 2010, 75–81.

[70] For a list of LH IIIB examples from mainland Greece, see Pabst 2018, 162 n. 46.

[71] İlasli 1993.

Syro-Palestinian or Cypriot anthropomorphic carvings in the round from the Mycenae cult center are perhaps the closest parallels from a Late Bronze Age Aegean context,[72] but the Eleon example is different enough to encourage us to look for other comparanda.

### POSTPALATIAL MYCENAEAN PERIOD

During the Postpalatial period, the acropolis of Eleon was occupied by a thriving settlement, the remains of which appear just below topsoil in our excavations. The most extensive remains of this period exposed so far make up a single large complex of rooms, most of which (with the exception of southernmost Room 2 that in the latest phase belongs to another house) form a single domestic residence, the so-called Northwest Complex (see figs. 5, 20). This structure measures approximately 11 m east–west x 14 m north–south, although it clearly continues farther to the north on its western side where the northern wall of Room 8 must lie in the unexcavated balk. Although the date of the earliest phase of this structure is not entirely clear, we have documented two important Postpalatial phases, each ending with a destruction, one dating to an early stage of LH IIIC Early and the second dating to a late stage of LH IIIC Early. While the earlier, nonburning destruction resulted in significant architectural modifications and expansion of the complex, the later, burnt destruction brought about its abandonment.

The architecture of the building is, with the exception of part of the western and southeastern facades, remarkably well preserved considering that the tops of the walls were visible on the surface prior to excavation in some places. Entrances were generally supplied with wooden thresholds, which, during the unburnt destruction phase, were wedged in place with small stones that preserve the characteristic outlines of the wood. A second story is documented by a vast scatter of joining ceramic fragments and collapsed debris. On present analysis, the second story seems to have been limited to the area above Rooms 3, 3N, 4, and 5. Room 3N appears to have been a stairwell, and some flat stone slabs recovered from the collapsed debris here may have served as treads. The main hall of the structure is a megaron-type unit made up of Rooms 6 and 7. Until the first, unburnt destruction, this was approached from a shallow porch on the eastern side. In the latest phase, the porch was enclosed to create Room 6 as visible today, and a new entrance was created with the addition of a ramp in the western wall of Room 7 (online fig. 9). In the initial plan, Room 7 featured four column bases around a central hearth, recalling the canonical Palatial megara from Tiryns, Pylos, and Mycenae. In the later phase, this hearth went out of use and only the hearth in the newly enclosed Room 6 continued to function.

The violent destruction of the Northwest Complex by fire at the close of LH IIIC Early is attested across the Northwest Complex but appears to have been particularly intense in the vicinity of Rooms 3, 3N, 4, and 5. This is best exemplified by a large collapsed mass of wall stones, possible stair slabs, mudbricks, and roofing material accumulated over the rooms. The excavations yielded 225 kg of burnt clay. This included mudbricks (typically measuring 29 x 10 cm x 8.5 cm thick); thin slabs that may be dislodged mud wall plaster; and mudbricks with reed impressions on one side demonstrating that they formed the floor of the second story, which can be documented also in the ceramic joins from the debris. Perhaps no piece better illustrates this point than a deep bowl (P0380) that originated from the upper story and broke into large mendable fragments of two distinct types: burnt and unburnt. Half of the pieces fell into Room 3 and were protected from exposure to flames, while the other pieces fell into Room 1 and were blackened by fire (fig. 21).

The Northwest Complex featured pitched roofs in both phases. The remains of many fragmentary pan tiles, as well as corresponding cover tiles, have enabled the reconstruction of the full dimensions and morphologies of both cover and pan tile types.[73] The morphology of the Eleon roof tile is demonstrably consistent with earlier tiles found at Thebes, Gla, and Mitrou.[74] The variety of forms in Eleon's tiles indicates that there was not complete standardization at the site and could point to multiple makers despite the labor and quantity of wood involved in firing large clay tiles.

[72] Krzyszkowska 2007, 16–20, 18 pl. 1, 25–26, 28 pl. 5. Both of these derive from Phase 7 deposits dated to LH IIIB.

[73] One near-complete pan tile from the Northwest Complex was 53.5 x 44.5 cm. The tile is under study by Kyle Jazwa.

[74] For Mycenaean roof tiles at Thebes, see Keramopoullos 1917, 76, fig. 58; Aravantinos 2015, 33–34, fig. 13. For overviews of Mycenaean roof tiles, see Iakovidis 1990; Galanakis 2016.


FIG. 20. Phase plans of the Postpalatial-period Northwest Complex: *left*, LH IIIC Early 1 (unburnt); *right*, LH IIIC Early 2 (burnt); h = hearth (drawing by G. Bianco).

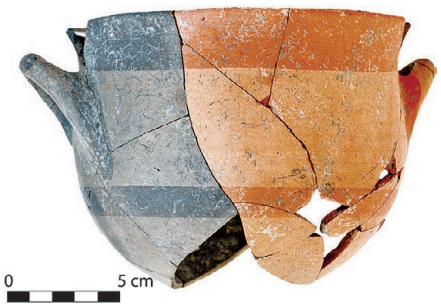


FIG. 21. Deep bowl with differential burning (P0380) from the upper story of the Northwest Complex; burnt fragments found in Room 1; unburnt fragments found in Room 3.

Of particular note is one large fragment from a pan tile recovered from the collapse debris over Room 6 that features an incised sign made prior to firing (online fig. 10); the sign was perhaps meant to label a batch of tiles or denote the tile's future recipient.

In Rooms 1, 3, 3N, and 4, dozens of mendable vessels have been recovered from the burnt destruction deposits, either found in situ where they were left at the outbreak of the fire or fallen into these rooms from the collapse of the upper story. In Room 1 (online fig. 11), currently interpreted as an enclosed courtyard, an *asaminthos* (bathtub) was set partially into the floor in the north of the room and a large rectangular tile hearth (1.25 x 0.88 m) was found nearby. A broad range of serving and drinking vessels were found surrounding these features, including a small pithos (P0523) plus two cooking pots (P0024, P0028). A series of complete vessels placed in a row along the north wall include a jug with branch motif on the shoulder (P0015) and two deep bowls with antithetic spirals (P0001) and linear decoration (P0380), while a dipper jug (P0027) lay immediately west of the *asaminthos*. Among the pots fallen from shelves or upper levels are a kalathos (P0254), a hydria (P0255), and three kylikes (P0009, P0010, P0243) found in the bathtub, all with banded decoration.

In the upper fill of Room 3 and neighboring Room 3N, a second story is richly attested by numerous badly burnt and fragmentary vessels including several large closed shapes, such as an LH IIIC transport stirrup

jar of mainland manufacture (P0894; online fig. 12) that finds its best parallel in Lefkandi Phase 1b.[75] There were also a linear decorated globular stirrup jar (P0018), an amphora (P0360), and two patterned kraters, one with side triglyphs (P0583) and the other a pictorial krater with a bird (P0744). The presence of three unfired clay bins (*kotselles*) in the northeastern corner of the room, partially preserved by fire in the destruction, attest to the storage function of the room. Textile equipment attests to the production of cloth in the same upstairs space, which might have been an open area with large windows to allow light and ventilation. At least two looms are documented in the destruction debris; large ceramic ring weights (SF0247, SF0248, SF0249) weighing in excess of 1.5 kg each were used with one loom, and handmade clay spool weights between 0.050 and 0.100 kg were used with the second. A large bronze needle (SF0015) fallen in the same area is surely of related function. The last find fallen from above that deserves mention are the remains of two wheelmade bull figures (P0353, fig. 22; P0904), finds often considered cultic in nature. While their exact use on the upper story cannot be verified; perhaps they were in storage at the time of destruction. They might also be related to domestic cult activities.[76]

A second room of the upper story is documented by vessels fallen into Rooms 1, 3N, 4, and 5. These include two large undecorated vats of a type well known from Lefkandi, frequently used for short-term storage,[77] and a medium-sized pithos (P0970). Perhaps fallen from the same space was a collection of bronze artifacts consisting of an intact knife (SF0288); two sickles, one intact (SF0252; online fig. 13) and one folded and broken (SF0253); a spear butt or *sauroter* (SF0254); and a few badly deformed bronze fragments, which might have formed a spear point.

Room 5 featured several superimposed small hearths with substructures made of flat sherds and tile fragments. The final phase had two such hearths. The ceramic assemblage does not confirm their use for food preparation, as the number of cooking pots is relatively low. Instead, there were drinking vessels, including a monochrome carinated cup (P0584); a semiglobular cup (P0739); a krater (P0759); and a handmade jar with incurving rim (P0738), one of the few examples of Handmade Burnished Ware found at Eleon.

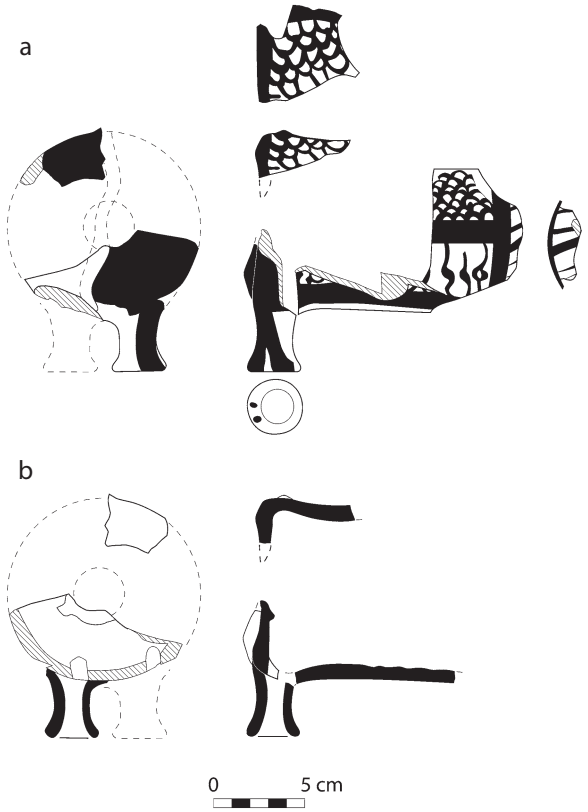


FIG. 22. Wheelmade ceramic bull figure (P0353) from the upper floor of the Northwest Complex: *a*, painted version; *b*, sections and view of interior (drawing by T. Ross).

Room 6, equipped with a small circular hearth in the final phase that ended with a burnt destruction, yielded a substantial number of cooking pots of both tripod and flat-based types. This room may have been the main food preparation area of the entire structure. In addition, cups and deep bowls, including pattern-decorated examples, were found.

The destruction deposits found on the floors and among the destruction debris from the Northwest Complex find their closest parallels with Lefkandi Phase 1b. Indeed, the two sites share motifs and vase syntax that suggest a fairly close relationship after the Palatial period, from either exchange or shared production.[78] Based on preliminary fabric analysis, some

[75] Evely 2006, 29, P16 [66/P154], pl. 22.4.

[76] These find a close parallel in the recently published bull figures from the settlement at Alimos; see Kardamaki 2012–2013.

[77] Evely 2006, fig. 1.13.

[78] Van Damme 2017a, 2017b.

of the vessels from the burnt destruction deposits could have been imported from Lefkandi and might attest not only to contact but also to the movement of goods and possibly the exchange of ideas. To what extent material from Boeotia made its way to Lefkandi remains to be determined.

Thirty meters south of the northwest quadrant, exploration was made of a southwest quadrant (see fig. 5). Excavation in these trenches since 2011 has produced a series of superimposed structures ranging in date from LH IIIB2 to LH IIIC Middle (fig. 23). Here the current ground level slopes down from north to south; the deeper fill in the north preserves the latest Mycenaean architecture documented on the acropolis. Unlike in the northwest quadrant, the southwest quadrant has revealed no evidence for medieval pits, but shallow Archaic- and Classical-period pits have been found and are discussed below.

During the Postpalatial period, a new structure was erected above the burnt remains of a Palatial-period room (earlier Structure A; see fig. 23, left, in blue). Destruction debris was cut back and used as leveling fill. The new building, Structure B (see fig. 23, left, in orange), is an impressive construction of the LH IIIC Early period, featuring the thickest wall socles, ranging from 0.65 to 0.85 m, of any Mycenaean structure on the site. These walls enclose a very large interior space of 7.50 x 5.25 m with no evidence for any form of interior supports. Within this room, there is a thick fill containing large animal bones, antler fragments, and near-complete ceramic vessels. Many of the vessels are shattered into small fragments strewn throughout the room, while others have been found crushed more or less in one place but not associated with any clear floor level. It is possible that the room contains a mixture of destruction material and trash that accumulated after its abandonment, but this is only a working hypothesis.

Among the finds from Structure B are a large number of deep bowls, including linear, monochrome, Group A, Group A with monochrome interiors, and patterned medium band deep bowls with monochrome interiors. Two transport stirrup jars, one a mainland product (P1149) and one a probable Cretan import (P0284), have also been documented. Other closed shapes include medium-sized linear jugs and hydriai, of which there is a mixture of linear and undecorated vessels. Other service vessels include undecorated dippers, a linear basin, and semiglobular cups. The interior fills have also produced a notable concentration of figurine fragments and the face of a wheelmade anthropomorphic figure (SF0447). Based on the pottery recovered from within, Structure B appears to have gone out of use at the same time as the unburnt destruction event in the northwest quadrant and contemporary with Lefkandi Phase 1a.

Structure B seems to have been filled and used as a terrace for the subsequent structure, Structure C (see fig. 23, right). While the architectural development of this structure is not fully understood, since excavation has not yet proceeded below the final floor levels across much of the structure, it is nonetheless clear from the architecture that it had an earlier and a later phase. In its final phase, the structure consisted of a series of small rectangular rooms linked by a narrow corridor between Walls 70 and 48. The floor deposits were heavily disturbed but contained, among the open shapes, many vessels in situ including cups, elaborately patterned deep bowls, and a very large medium-coarse spouted basin (P0718). Notable for its base with intentional piercings is a large krater with plastic band below the rim (P0720). Closed shapes found above the final floor level include a hydria and stirrup jars. The pottery suggests an abandonment date in advanced LH IIIC Middle, contemporary with Lefkandi Phase 2a or b.

In the open courtyard to the south and east of Structure C, as well as below the floor levels of its eastern rooms, large quantities of fragmented but mendable vessels and wheelmade bull figures (P0006, P0039) have been recovered. These deposits contain an unusually high proportion of kraters, including a nearly complete pictorial example with a school of fish (P0055; fig. 24), kalathoi (including several pictorial examples), deep bowls, and semiglobular cups, as well as closed shapes such as globular stirrup jars, jugs, and hydriai. The same deposits include large quantities of faunal remains. It is possible that this debris documents activities that took place in the courtyard or, perhaps, represents trash discarded from use in Structure C. The presence of pictorial pottery in some quantity suggests that this debris is already LH IIIC Middle in date, although some of the other shapes are indistinguishable from the burnt destruction deposits in the Northwest Complex.

To summarize, the Mycenaean occupation uncovered at Eleon features architectural units with large rooms and tiled roofs. Substantial stone walls are


FIG. 23. Phased plan of the southwest quadrant at Eleon, trenches SWB2c and d and SWB3a–d: *left*, Structures A (blue) and B (orange), LH IIIB–IIIC Early; *right*, Structure C, LH IIIC Middle (drawings by G. Bianco).

reused in several architectural phases, with associated deposits dated to the LH IIIB2, LH IIIC Early, and LH IIIC Middle periods. The stone jewelry mold suggests access to imported resources, such as gold and blue glass, during the IIIB period, and the Linear B documents from Thebes show that Eleon was integrated within a larger polity. However, it is clear that, long after the destruction of the palace at Thebes, the population of Eleon continued to be active in agricultural, pastoral, and industrial activities as evidenced by grindstones, storage vessels, and textile tools documented in our excavations. The broad array of ceramic fine wares and figurines could indicate a concentration of ceremonial and ritual practices in the LH IIIC Middle period. Given the proximity and conscious preservation of earlier remains in the Blue Stone Structure, we suggest that cult activity and memorialization of the past were of key importance to the people at Eleon throughout their history.


FIG. 24. Pictorial krater with school of fish (P0055) from LH IIIC Middle deposit in the southwest quadrant.

## POST–BRONZE AGE REMAINS: THE ARCHAIC AND CLASSICAL PERIODS

Although scattered eighth- and seventh-century material has been documented on the acropolis of Eleon, these remains consist of widely scattered fragments that attest to renewed activities at the site long after the end of the LH IIIC Middle settlement but offer little information about what these activities were.

The use of Eleon during the Archaic and Classical periods is best documented by the large polygonal wall that defined the eastern limit of the acropolis during the Late Archaic period (ca. 500–480 BCE). The wall was likely preceded by an early sixth-century BCE terrace, although this has only been partially exposed and is not fully understood. The undertaking of these two large-scale building projects in short succession demonstrates renewed interest in Eleon, part of a wider pattern of economic growth in east Boeotia perhaps best documented in the rich graves of neighboring Rhitsona and Tanagra.[79] Despite these investments of labor and capital, and the repeated modifications of a ramped entranceway leading onto the acropolis, architectural remains postdating the Late Bronze Age are, so far, minimally attested on the acropolis proper. Instead, the Archaic and Classical phases of the site are documented by discarded materials in secondary deposition. The materials derive from a series of stratified ramp fills that are disturbed in places by refuse pits of the 15th or 16th century CE and a series of votive deposits of the sixth and fifth centuries BCE in the southwest trenches.

Despite the large quantity of discarded materials, which include many mendable and even complete vessels, we have yet to excavate primary evidence of the historical settlement. The acropolis has yielded no domestic architecture, no storage vessels, and minimal numbers of cooking pots or undecorated fine wares in the historical deposits, and it seems unlikely that we will find a substantial residential area here. Rather, we have excavated several deposits that are best understood as redeposited votive materials that originated from a cult area yet to be located on the acropolis that was in use during the sixth and fifth centuries BCE. These deposits consist of large quantities of anthropomorphic and animal figurines, miniature vessels, and Boeotian Kylix Ware. In addition, but in far lower quantities, there are scattered black gloss and black figure vessels (including rare imports from Athens) and regular-sized Corinthian imports that help to link the locally produced materials from Eleon with interregional chronologies. After the ceramic and terracotta finds, mostly fragmentary bronze objects and glass beads make up the most important categories of small finds, including bronze phialae, two with visible nail holes that likely attest to their previous placement on the columns or rafters of a small temple.[80] So far, the only architectural elements include two ridge palmettes and fragments of pan tiles from a Corinthian or central Greek roofing system.[81]

*The Polygonal Wall*

Around 500 BCE, a large-scale construction, still visible today, transformed the topography of Eleon. The monumental polygonal wall, the site's most prominent feature, follows a north–south path on the eastern side of the low acropolis (fig. 25).[82] The wall begins at a southern bastion or tower. With varied degrees of preservation, the wall is visible for 85 m traversing nearly one-third of a circle as it gradually ascends the sloping topography.[83]

The wall is made up of flat blocks of highly uniform, local gray brecciated dolomite and limestone and is preserved to a height of more than 2 m from the ground in some parts.[84] The wall architecture can be grouped into six types of constructions: (1) rough-hewn foundation blocks; (2) a leveling course with a trimmed upper face; (3) polygonal face slabs; (4) rectilinear capping stones; (5) a backing wall of

[79] For Rhitsona, see Burrows and Ure 1909; Ure 1927, 1934. For Tanagra, see Andreiomenou 2007.

[80] Hamilton 2000, 51.

[81] For the defining features of both systems, see Winter 1993, 19–94.

[82] Scranton (1941, 25–27, fig. 3) illustrates the wall and describes it in cat. 160, Type A2, no. 11. See also Winter 1971, 80–86, 171 n. 59. Lawrence (1979, 349) suggests a Hellenistic date. Spencer (1995, 33) and Fredericksen (2011, 65–68) each discuss this type of masonry. Well-dated examples of the polygonal blocks of Lesbian style masonry—characterized by their straight, noncurving sides—are almost exclusively limited to the Archaic period and mostly to the island of Lesbos.

[83] Marsh and Jones of Bucknell University surveyed the geoarchaeology of the Eleon site, focusing on the construction of the polygonal wall. The summary here is based on Marsh and Jones (forthcoming). Marsh reports that the best-fit circle aligned to the curving part of the wall has a radius of 41 m. The southern portion of the wall deviates from a perfect circle by only centimeters, while the northern section shows a significant excursion from circular. The wall diverges from the ideal line sharply in the northern portion over a section of 10 m length, ending up 2 m outside the circle. The builders appear to have widened the curve to reach a bastion position a couple meters north of where the circle would have otherwise ended.

[84] In 2019, a likely quarry source for the wall blocks was located in the southern foothills of Mount Ypatos approximately 4 km to the north.

FIG. 25. Late Archaic polygonal wall at Eleon seen from the north. The southern bastion is visible in the distance at the left.

rough ashlars; and (6) angular rubble fill in the space between the facing slabs and the backing wall.

The wall has not been fully excavated, but a sounding was dug down to bedrock in 2014 and 2015 along the eastern face of the wall (online fig. 14). Here, four courses of rough foundation blocks, reaching more than 2 m in depth, were exposed. The foundations rest on a compact layer of small stones. Above the foundation level is the well-cut leveling course of single blocks 0.5 m high. The construction is quite sophisticated, since the builder had to account for the wall following a natural rising slope from south to north, increasing by about 5.4 m from the southern tower leveling course to the north tower leveling course. To do this, the builders constructed the leveling course in segments. The first segment runs for about 20 m before the course of blocks is stepped up to a level 0.5 m higher. We can see other segments of the leveling course where it steps up, sometimes higher than 0.5 m. We reconstruct six or seven leveling course segments at 20 m intervals and each elevated by 0.5–1.0 m, to account for the total rise in elevation.

Atop the leveling course rest the polygonal facing slabs of dark limestone; these vary in size, though some exceed two meters in length. This massive, curving form is not segmented like the leveling course but rather built in a uniform fashion, creating a very impressive facade of interlinked blocks in the style of masonry sometimes called "lesbian polygonal."[85] The polygonal face slabs supported flat rectilinear capping stones. No capping stones are preserved in situ, but a collapsed section of wall near the northern bastion, which includes displaced polygonal facing slabs and

[85] The Lesbian masonry style is named for its many examples on the island of Lesbos and on Aristotle's description of the builders' technique of bending a lead strip to measure the curvature of one stone to create a model for how to cut its adjacent block: "For what is itself indefinite can only be measured by an indefinite standard, like the leaden rule used by Lesbian builders; just as that rule is not rigid but can be bent to the shape of the stone, so a special ordinance is made to fit the circumstances of the case." (Arist., *Eth. Nic.* 1137b, 30; trans. Rackham 1926).

rectangular capping blocks, shows that both formed part of the same construction.

Along the east side of the northern bastion foundation, a second sounding was opened in SEB3d. This revealed the complete outline of the bastion and provided important ceramic evidence for the date of its erection. In a narrow locus, identified as the foundation cutting, there were numerous fragments of Late Archaic kylikes that provide a terminus post quem of ca. 510–500 BCE for the wall construction.

The polygonal block form is visually impressive and calls to mind the Late Archaic terrace wall of the Temple of Apollo at Delphi.[86] The construction of the Eleon wall on its precisely stepped leveling course and curving path further underscores its complex design and fully embodies Spencer's characterization of Lesbian masonry as "an expensive, prestige style designed to impress."[87] This effort to monumentalize Eleon's eastern approach emphasizes the renewed interest in the acropolis during the Archaic period.


FIG. 26. Aerial view of the ramped entrance to the acropolis of Eleon, showing successive ramp levels, thresholds, doorjambs, and pits.

*Ramp and Ritual Material*

The richest concentration of votive materials excavated thus far comes from the entrance system to the elevated plateau of the site. This is a multiphase ramp in which layers of fill alternate with compacted surfaces of white lime plaster, pebbles, and clay. This entrance appears to have been remodeled frequently throughout the Late Bronze Age and the Archaic through Classical periods of the site (see figs. 5, 26). Although excavations have not yet reached bedrock, the earliest identified ramp phase was a well-preserved surface of compacted pebbles and clay that dates to LH IIIC and can be traced as a road that continues to the west of the later entrance. The exact configuration of any Mycenaean gate in the area has been heavily obscured by later remodeling of the area that began in the second quarter of the sixth century BCE with a deep ramp fill layer. This fill can in turn be linked with the construction of the first monumental terrace because stoneworking chips were recovered in the fill and were embedded in a compact surface in which the remains of a wheel rut could be partially traced. A date in the second quarter of the sixth century BCE for the votive material is supplied by lekanides in the manner of the Polos Painter, Boeotian Kylix Ware kylikes, phialae, kantharoi, and lekanides of Ure's Class I, rare early examples of Corinthian miniature kotylai, and a bronze phiale (SF0200; online fig. 15).

After this construction project, there appears to have been a gradual accumulation of surface levels until sometime between 500 and 480 BCE when a second large fill was deposited over the ramp, comprising hundreds of nearly complete Boeotian Kylix Ware vessels (online fig. 16) and miniature vessels, some partially burnt. This was capped by a thick, well-laid lime plaster surface that is well preserved where not disturbed by later pits. This filling event and resurfacing appear to be associated with the same construction project as the polygonal wall and are also associated with the installation of the most substantial threshold, consisting of two large rectangular blocks (see fig. 26, upper left) reaching a total length of about 3.25 m and a width of 0.47 m. The threshold exhibits a high level of symmetry: the rectangular cutting and metal pivot at the north end is complemented by a second set at the

[86] Courby 1920–1927, 156–70; Hansen and Amandry 2010.
[87] Spencer 1995, 56.

south end, and any cuttings or wear marks evident on one block are echoed on the other. There is significant wear on only the western side of the block; the eastern face still retains a sharp, roughly 90° angle. The entrance must have held two large doors, effectively prohibiting any wheeled traffic from entering the site when closed. The date of the ramp level associated with the threshold is supplied by an Attic black figure palmette cup (P1992) popular in Persian War cleanup debris, a Type C cup of developed form (P0525), and a Late Corinthian exaleiptron (P1966), all dated 500–480 BCE. At least one later ramp phase can be distinguished above the lime plaster ramp. This layer was, however, close to the surface everywhere and partially disturbed by Late Byzantine to Early Ottoman intrusions.

Similar to the redeposited material from the ramps, a large quantity of fragmentary pottery, ceramic lamps, terracotta figurines, and bronze phialae have been excavated in the southwestern area. These finds are thought to have been votive offerings redeposited in shallow pits, but they are often so close to the surface that they rarely form closed deposits.[88] They are important, however, as they document cult activity from the first half of the sixth century BCE until well into the fifth. Three discrete pits have been identified.

The first pit is the largest, approximately 5 m north–south x 4 m east–west, and the deepest. We have removed a mixed deposit of fill and small- to large-sized rocks to a depth of about 1 m, but the pit is currently only partially excavated since it extends outside the excavated area both to the north and east and no bottom has yet been reached. In contrast to all other Archaic- and Classical-period deposits from the site, this pit is characterized by a nearly complete absence of Boeotian Kylix Ware (there is only a single bird bowl, P0825, and a small kantharos, P1520, from the pit) and a complete lack of figurine fragments. Instead, the stone rubble of the deposit is packed densely with mendable ceramic fragments that permit a dating in the second quarter of the sixth century. Most of the decorated fine ware consists of kantharoi with added red and white or incised decoration and monochrome skyphoi of Corinthian type made in Boeotian fabrics.[89] The same pit contained the nearly complete profile of an incised decorated spouted krater with added red details (P0688). Because of this krater and the drinking cups, the deposit has been designated the Archaic Drinking Deposit. How this deposit fits with the other votive materials is somewhat unclear, yet no cookware vessels have been identified in it, and the deposit cannot be considered domestic in character.

A second Archaic pit in the southwest quadrant is notable for the small amount of material it contained, apparently consisting only of a kantharos with a prefiring *dipinto* (P0016; online fig. 17) and two bronze phialae (SF0050, SF0051). The kantharos, of which a nearly complete restored drawing can be made, bears the following text: [- - -]σιάδαο. This is thought to represent a personal name in the genitive, for example [- - - Καφι]σιάδαο [- - -]. We suggest that the text functions as an owner's label or, perhaps more likely given its context within a pit with two bronze phialae, to mark a votive dedication. The form of the kantharos suggests a date in the first half of the sixth century BCE.[90]

A third pit, ill-defined because of its closeness to the surface, yielded finds dating to the third quarter of the fifth century BCE. These include many hydriai (made in multiple wares and at multiple scales), numerous lamps (almost entirely miniature handmade examples), and lesser quantities of figurines, miniature kotylai, and black figure open shapes such as cups or cup-skyphoi (e.g., P0174; fig. 27) and kalathos-pyxides (e.g., P0149; online fig. 18). The presence of the hydriai and lamps marks a sharp contrast with the Archaic deposits and may indicate changing votive practices between the sixth and fifth centuries BCE or perhaps that the material derives from a different cult. Of particular note for regional chronologies is the presence of dozens of mendable Boeotian Kylix Ware vessels of Ure's powdery-surfaced Class II, which apparently continued in use well into the fifth century.[91]

[88] Similar shallow votive deposits were excavated by Hetty Goldman at Eutresis (Goldman 1931, 237–64).

[89] This material and the question of local production of the Boeotian Kylix Ware and Archaic ceramics is the focus of a University of Pennsylvania dissertation in progress by Janelle Sadarananda.

[90] On the relative dating of the deep-bottomed and shallow-bottomed kantharoi, see Ure 1913, 5.

[91] Ure originally thought the early limits of Boeotian Kylix Ware were around 480 BCE, but later deposits are now known.


FIG. 27. Classical-period black figure cup-skyphos (P0174) from SWB3c votive pit.

Terracotta figurines dating to the Archaic and Classical periods have been found across the site but are concentrated in the area of the ramp where some were found in clustered deposits with intact miniature kotylai (online fig. 19). In total, our excavations have recovered more than 56 kg of figurines, ranging from handmade plank types of the sixth century to mold-made figures that span the fifth century (fig. 28).[92] There are various animal figurines, but the large majority are female human figures, including seated and standing types plus *protomai* (masks of the head and neck). Based on a preliminary study of intact figures and head fragments, the assemblage represents a minimum of 550 figurines. Most of these date to the mid fifth century, at least 25 years after the construction of the polygonal wall, and have strong parallels within Boeotia, especially with figurines from graves at Rhitsona and classical Tanagra.[93]

As is the case with the other votive material from the ramp, the original location of the figurines is unknown, but their consistent character suggests a common origin. The predominance of female figures in the assemblage points to a cult focused on a female deity, but the generic style precludes a secure identification of the deity. Aside from one Archaic handmade figurine with pomegranates painted across her garment and two Classical *hydriaphoros* figures, there is little iconographic detail. A significantly smaller number of figurines are datable to the last quarter of the fifth century, but three fragments with elaborately braided hair represent dedications made in a final phase of the cult activity.


FIG. 28. A selection of Archaic- and Classical-period figurines from the acropolis of Eleon (*left to right*: SF0003, SF0312, SF0308, SF0355).

Among the sources Ulrichs used to identify the site as ancient Eleon during his 19th-century travels was Plutarch's etiological story for the place-names Eleon and the River Scamander nearby (*Mor.* 301, *Quaest. Graec.* 41). Plutarch tells the tale of Glaucia, who bore the child Scamander fathered by Deimachus. Glaucia entreated Herakles for protection, and Herakles established mother and child at Eleon in Boeotia. Scamander became king of the area, named the local river (later known as the Inachos) after himself, and called one stream branching off the river Glaucia for his mother. We are told by Plutarch that the same branch stream was named Acidusa after Scamander's wife with whom he had three maiden daughters, who were still being honored in Plutarch's time. Although we have no material evidence for any activity at the site dating to Plutarch's era (Roman Imperial period), we wonder if it is possible that the cult to the river god (Inachos, formerly Scamander) and his maiden daughters could have had its origins in the cult that is evidenced by the material we have found.[94] This important aspect of our site will become clearer in future years as we work toward a better understanding of ancient Eleon from the end of the Middle Helladic period until the Late Classical age.

[92] For a preliminary analysis of the figurines and *protomai* from the ramp, see Bertram 2015.

[93] Ure 1934; Andreiomenou 2007.

[94] As the archaeological material is at least 500 years older than the earliest textual references, we recognize the difficulties in this suggestion.

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## Works Cited

Alden, M.J. 2000. *Well Built Mycenae* 7: *The Prehistoric Cemetery. Pre-Mycenaean and Early Mycenaean Graves*. Oxford: Oxbow.

Andreiomenou, A. 2007. *Τανάγρα, η ανασκαφή του νεκροταφείου (1976–1977, 1989)*. Athens: Archaeological Society of Athens.

Andrikou, E., V.L. Aravantinos, L. Godart, A. Sacconi, and J. Vroom. 2006. *Thèbes: Fouilles de la Cadmée*. Vol. 2, *Les tablettes en Linéaire B de la Odos Pelopidou: Le context archéologique, la céramique de la Odos Pelopidou, et la chronologie du Linéaire B*. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali.

Aravantinos, V. 2009. "Boeotia: Historical and Archaeological Background." In *Archaeology: Euboea and Central Greece*, edited by A. Vlachopoulos, 214–27. Athens: Melissa Publishing House.

———. 2010. *The Archaeological Museum of Thebes*. Athens: John S. Latsis Public Benefit Foundation and EFG Eurobank Ergasias.

———. 2015. "The Palatial Administration of Thebes Updated." In *Tradition and Innovation in the Mycenaean Palatial Polities*, edited by J. Weilhartner and F. Ruppenstein, 19–50. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Aravantinos, V., and I. Fappas. 2009. "Τα μυκηναϊκά νεκροταφεία της Θήβας: Προκαταρκτικο σχέδιο μελέτης." In *Ubi dubium ibi libertas: Τιμητικός Τόμος για τον Καθηγητής Νικόλα Φαράκλα*, edited by C. Loukos, N. Xifaras, and K. Pateraki, 87–123. Rethymnon: University of Crete.

Aravantinos, V., and K. Psaraki. 2010. "The Middle Helladic Cemeteries of Thebes: General Review and Remarks in the Light of New Investigations and Finds." In *Mesohelladika: La Grèce continentale au Bronze Moyen*, edited by A. Philippa-Touchais, G. Touchais, S. Voutsaki, and J. Wright, 376–95. *BCH* Suppl. 52. Paris and Athens: De Boccard.

Aravantinos, V., L. Godart, and A. Sacconi. 2001. *Thèbes: Fouilles de la Cadmée*. Vol. 1, *Les tablettes en Linéaire B de la Odos Pelopidou: Édition et commentaire*. Pasiphae 1. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali.

———. 2002. *Thèbes: Fouilles de la Cadmée*. Vol. 3, *Corpus des documents d'archives en Linéaire B de Thèbes (1–433)*. Pasiphae 3. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali.

Aravantinos, V., M. Del Freo, L. Godart, and A. Sacconi. 2005. *Thèbes: Fouilles de la Cadmée*. Vol. 4, *Les Textes de Thèbes (1–433)*. Pasiphae 4. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali.

Aravantinos, V., B. Burke, B. Burns, Y. Fappas, and S. Lupack. 2012. "The Eastern Boeotia Archaeological Project, 2007–2008." In *Γ΄Αρχαιολογικό Εργο Θεσσαλίας και Στερέας Ηλλάδας*, edited by A. Mazarakis-Ainian, 945–53. Volos, Greece: Archaeology Laboratory of the University of Thessaly.

Aravantinos, V., B. Burke, B. Burns, Y. Fappas, S. Lupack, and C.M. MacKay. 2016. "Eastern Boeotia Archaeological Project 2007–2010: The Intensive Surface Survey—Eleon." *Mouseion: Journal of the Classical Association of Canada* 13(2):293–357.

Bennet, J., and Y. Galanakis. 2005. "Parallels and Contrasts: Early Mycenaean Mortuary Traditions in Messenia and Laconia." In *Autochthon: Papers Presented to O.T.P.K. Dickinson on the Occasion of His Retirement*, edited by A. Dakouri-Hild and S. Sherratt, 144–55. *BAR-IS* 1432. Oxford: Archaeopress.

Bernabé, A., and R. Pierini. 2017. "What, When, Why: Tablet Functions and *o-te* Expressions in Context." In *Aegean Scripts: Proceedings of the 14th International Colloquium on Mycenaean Studies, Copenhagen, 2–5 September 2015*, edited by M.-L. Nosch and H. Landenius Enegren, 523–36. Rome: Edizioni Consiglio nazionale delle ricerche, Istituto di studi sul Mediterraneo antico.

Bertram, H. 2015. "The Eleon Terracottas: A Typology, Chronology, and Discussion of Eleon's Figurines Within a Cultural Framework." M.A. thesis, University of British Columbia.

Bintliff, J., and B. Slapzac. 2007. "The Leiden–Ljubljana Ancient Cities of Boeotia Project: Season 2006." *Pharos: Journal of the Netherlands Institute at Athens* 14:15–27.

Bintliff, J., and A.M. Snodgrass. 1985. "The Cambridge/Bradford Boeotian Expedition: The First Four Years." *JFA* 12:123–61.

Bintliff, J., P. Howard, and A.M. Snodgrass. 2007. *Testing the Hinterland: The Work of the Boeotia Survey (1989–1991) in the Southern Approaches to the City of Thespiai*. Cambridge: McDonald Institute for Archeological Research.

Borgna, E., and S. Müller-Celka, eds. 2011. *Ancestral Landscapes: Burial Mounds in the Copper and Bronze Ages*. Lyon: Maison de l'Orient et de la Méditerranée.

Boyd, M.J. 2002. *Middle Helladic and Early Mycenaean Mortuary Practices in the Southern and Western Peloponnese. BAR-IS* 1009. Oxford: Archaeopress.

———. 2015. "Explaining the Mortuary Sequence at Mycenae." In *Mycenaeans Up to Date: The Archaeology of the Northeastern Peloponnese. Current Concepts and New Directions*, edited by A.-L. Schallin and I. Tournavitou, 433–47. Stockholm: Swedish Institute at Athens.

Burke, B., and B. Burns. 2016. "Crafting Before and After the Collapse: Mycenaean Eleon in Boeotia." In *RA-PI-NE-U Studies on the Mycenaean World Offered to Robert Laffineur for His 70th Birthday*, edited by J. Driessen, 85–95. Aegis 10. Louvain-la-Neuve, Belgium: University of Louvain.

Burrows, R.M., and P.N. Ure. 1909. "Excavations at Rhitsona in Boeotia." *JHS* 29:308–53.

Cavanagh, W.G., and C. Mee. 1990. "The Location of Mycenaean Chamber Tombs in the Argolid." In *Celebrations of Death and Divinity in the Bronze Age Argolid: Proceedings of the Sixth International Symposium at the Swedish Institute at Athens, 11–13 June 1988*, edited by R. Hägg and G.C. Nordquist, 55–64. Stockholm: Swedish Institute at Athens.

Coldstream, N., and G. Huxley. 1972. *Kythera: Excavations and Studies Conducted by the University of Pennsylvania Museum and the British School at Athens*. London: Faber.

Cosmopoulos, M.B. 2015. *Bronze Age Eleusis and the Origins of the Eleusinian Mysteries*. Cambridge: Cambridge University Press.

———. 2018. *Iklaina: The Monumental Buildings*, with contributions by Cynthia Shelmerdine, Patrick Thomas, Joann Gulizio, and Hariclia Brecoulaki. Athens: Archaeological Society at Athens Library.

———. 2019. "State Formation in Greece: Iklaina and the Unification of Mycenaean Pylos." *AJA* 123(3):349–80.

Courby, F. 1920–1927. *Fouilles de Delphes*. Vol. 2.A.2, *Topographie et architecture: Le sanctuaire d'Apollon. La terrasse du temple*. Paris: De Boccard.

Dabney, M.K. 1999. "Locating Mycenaean Cemeteries." In *Meletemata: Studies in Aegean Archaeology Presented to Malcolm H. Wiener as He Enters His 65th Year*, edited by P.P. Betancourt, V. Karageorghis, R. Laffineur, and W.-D. Niemeier, 171–75. *Aegaeum* 20. Liège: Université de Liège.

Dakouri-Hild, A. 2005. "Breaking the Mould? Production and Economy in the Theban State." In *Autochthon: Papers Presented to O.T.P.K. Dickinson on the Occasion of His Retirement*, edited by A. Dakouri-Hild and S. Sherratt, 207–24. *BAR-IS* 1432. Oxford: Archaeopress.

Dakouri-Hild, A., and M.J. Boyd, eds. 2016. *Staging Death: Funerary Performance, Architecture and Landscape in the Aegean*. Berlin: De Gruyter.

Del Freo, M. 2009. "The Geographical Names in the Linear B Texts from Thebes." *Pasiphae: Rivista di Filologia e Antichità Egee* 3:41–67.

Demakopoulou, K. 1974. "Mycenaean Jewellery Workshop in Thebes." *AAA* 7:162–73.

Dickinson, O.T.P.K. 1983. "Cist Graves and Chamber Tombs." *BSA* 78:55–67.

Dietz, S. 1980. *Asine*. Vol. 2, *Results of the Excavations East of the Acropolis, 1970–1974*. Fasc. 2, *The Middle Helladic Cemetery, the Middle Helladic and Early Mycenaean Deposits*. *ActaAth* 4° 24.6.2. Stockholm: Paul Åströms Förlag.

———. 1991. *The Argolid at the Transition to the Mycenaean Age: Studies in the Chronology and Cultural Development in the Shaft Grave Period*. Copenhagen: National Museum of Denmark.

Dor, L., J. Jannoray, H. van Effenterre, and M. van Effenterre. 1960. *Kirrha: Étude de préhistoire phocidienne*. Paris: De Boccard.

Engstrom, J. 2019. "Tomb 11 at Ancient Eleon in Context." B.A. honors thesis, University of Victoria.

Evely, D., ed. 2006. *Lefkandi*. Vol. 4, *The Bronze Age: The Late Helladic IIIC Settlement at Xeropolis. BSA* Suppl. 39. Athens: British School at Athens.

Fossey, J.M. 1988. *Topography and Population of Ancient Boiotia*. Chicago: Ares.

Fredericksen, R. 2011. *Greek City Walls of the Archaic Period, 900–480 BC*. Oxford: Oxford University Press.

French, E., and K. Shelton. 2005. "Early Palatial Mycenae." In *Autochthon: Papers Presented to O.T.P.K. Dickinson on the Occasion of His Retirement*, edited by A. Dakouri-Hild and S. Sherratt, 175–84. *BAR-IS* 1432. Oxford: Archaeopress.

Galanakis, Y. 2016. "A Roof for the Dead: Tomb Design and the 'Domestication of Death' in Mycenaean Funerary Architecture." In *Staging Death: Funerary Performance, Architecture and Landscape in the Aegean*, edited by A. Dakouri-Hild and M. Boyd, 155–180. Berlin: De Gruyter.

———. 2018. "A Survey of Late Bronze Age Funerary Archaeology over the Last 25 Years in the Central and Southern Aegean." *AR* 64:85–101.

García Ramón, J.L. 2011. "Mycenaean Onomastics." In *A Companion to Linear B: Mycenaean Greek Texts and Their World*. Vol. 2, edited by Y. Duhoux and A. Morpurgo Davies, 214–51. Bibliothèque des Cahiers de l'Institut de linguistique de Louvain 127. Leuven: Peeters.

Goldman, H. 1931. *Excavations at Eutresis in Boeotia*. Cambridge, Mass.: Harvard University Press.

Hamilton, R. 2000. *Treasure Map: A Guide to the Delian Inventories*. Ann Arbor: University of Michigan Press.

Hansen, E., and P. Amandry. 2010. *Le temple d'Apollon du IVe siècle*. Athens: École française d'Athènes.

Higgins, M.D., and R. Higgins. 1996. *A Geological Companion to Greece and the Aegean*. Ithaca, N.Y.: Cornell University Press.

Iakovidis, S. 1990. "Mycenaean Roofs: Form and Construction." In *L'habitat égéen préhistorique*, edited by P. Darcque and R. Treuil, 147–60. Athens: École française d'Athènes.

İlasli, A. 1993. "A Hittite Statue Found in the Area of Ahurhisar." In *Aspects of Art and Iconography: Anatolia and Its Neighbors. Studies in Honor of Nimet Özgüç*, edited by M. Mellink, E. Porada, and T. Özgüç, 301–8. Ankara: Türk Tarih Kurumu Basımevi.

Immerwahr, S. 1994. "Death and the Tanagra Larnakes." In *The Ages of Homer: A Tribute to Emily Townsend Vermeule*, edited by J.B. Carter and S.P. Morris, 109–21. Austin: University of Texas Press.

James, S. 2002–2003. "The Thebes Tablets and the Fq Series: A Contextual Analysis." *Minos* 37–38:397–418.

Jocelyn, H.D. 1967. *The Tragedies of Ennius: Fragments*. Cambridge: Cambridge University Press.

Kardamaki, E. 2012–2013. "A New Group of Figures and Rare Figurines from a Mycenaean Workshop Installation at Kontopigado, Alimos (Athens)." *AM* 127–28:47–90.

Kassimi-Soutou, M. 1980. "Μεσοελλαδικός τάφος πολεμιστή από τη Θήβα." *ArchDelt* 35A:88–101.

Keramopoullos, A. 1917. "Θηβαϊκά." *ArchDelt* 3:1–503.

Killen, J. 1999. "Some Observations on the New Thebes Tablets." *BICS* 43:217–19.

———. 2004. "Wheat, Barley, Flour, Olives and Figs on Linear B Tablets." In *Sheffield Studies in Aegean Archaeology*. Vol. 5, *Food, Cuisine and Society in Prehistoric Greece*, edited by P. Halstead and J. Barrett, 155–73. Oxford: Oxbow.

———. 2006. "Thoughts on the Functions of the New Thebes Tablets." In *Die neuen Linear B-Texte aus Theben: Ihr Aufschlußwert für die mykenische Sprache und Kultur. Akten des internationalen Forschungskolloquiums an der Österreichischen Akademie der Wissenschaften, 5–6 Dezember 2002*, edited by S. Deger-Jalkotzy and O. Panagl, 79–110. Mykenische Studien 19. Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

———. 2007. "Mycenaean *e-re-e-u*." In *Στέφανος Αρίστειος: Archäologische Forschungen zwischen Nil und Istros. Festschrift für Stefan Hiller zum 65. Geburtstag*, edited by F. Lang, C. Reinholdt, and J. Weilhartner, 159–68. Vienna: Phoibos.

Krzyszkowska, O. 2007. *Well Built Mycenae* 24: *The Ivories and Objects of Bone, Antler and Boar's Tusk*. Oxford: Oxbow.

Lattimore, R., ed. and trans. 1961. *The Iliad of Homer*. Chicago: University of Chicago Press.

Lawrence, A. 1979. *Greek Aims in Fortifications*. Oxford and New York: Oxford University Press and Clarendon Press.

Leake, W. 1835. *Travels in Northern Greece*. Vol. 2, *Attica, Boeotia, Phocis, Locris and Euboea*. London: J. Rodwell.

Lock, P. 1986. "The Frankish Towers of Central Greece." *BSA* 81:101–23.

———. 1989. "The Medieval Towers of Greece: A Problem in Chronology and Function." *Mediterranean Historical Review* 4(1):129–45.

MacDonald, M. 2017. "Textile Tools and Production at a Mycenaean Secondary Centre." M.A. thesis, University of Victoria.

Maran, J. 1995. "Structural Changes in the Pattern of Settlement During the Shaft Grave Period on the Greek Mainland." In *Politeia: Society and State in the Aegean Bronze Age. Proceedings of the 5th International Aegean Conference at the University of Heidelberg, Archäologisches Institut, 10–13 April 1994*, edited by R. Laffineur and W.-D. Niemeier, 67–72. *Aegaeum* 12. Liège: Université de Liège.

Marsh, B., and J. Jones. Forthcoming. "The Arcuate Polygonal-Block Wall at Eleon." In *Preliminary Reports on Excavations at Ancient Eleon: 2011–2018*, edited by B. Burke and B. Burns. *Mouseion*. Toronto: University of Toronto Press.

Moulherat, C., and Y. Spantidaki. 2008. "Première attestation de laine sur le site protohistorique d'Akrotiri à Théra." *Purpureae Vestes II: Vestidos, textiles y tintes. Estudios sobre la producción de bienes de consumo en la Antigüedad*, edited by C. Alfaro and L. Karali, 37–41. Valencia: Universidad de Valencia.

———. 2009. "Cloth from Kastelli, Khania." *Arachne* 3:8–15.

Moutafi, I. 2015. "Towards a Social Bioarchaeology of the Mycenaean Period: A Multi-Disciplinary Analysis of Funerary Remains from the Late Helladic Chamber Tomb Cemetery of Voudeni, Achaea, Greece." Ph.D. diss., University of Sheffield.

Moutafi, I., and S. Voutsaki. 2016. "Commingled Burials and Shifting Notions of the Self at the Onset of the Mycenaean Era (1700–1500 BCE): The Case of the Ayios Vasilios." *JAS* Reports 10:780–90.

Mylonas, G. 1975. *Το Δυτικόν Νεκροταφείον της Ελευσίνος*. Athens: Athens Archaeological Society.

Pabst, S. 2018. "Spätbronzezeitliche Violinbogenfibeln zwischen Donau, mittlerer Adria und Ägäis." *ArhVest* 69:135–78.

Palmer, R. 2008. "Wheat and Barley in Mycenaean Society 15 Years Later." In *Colloquium Romanum: Atti del XII Colloquio internazionale di micenologia, Roma, 20–25 febbraio 2006*. Vol. 2, edited by A. Sacconi, M. Del Freo, L. Godart, and M. Negri, 621–40. Pasiphae 2. Pisa and Rome: Istituti Editoriali e Poligrafici Internazionali.

Papadimitriou, A. 2010. "Οι ανασκαφές στο Νοσοκομείο του Άργους." In *Mesohelladika: La Grèce Continentale au Bronze Moyen*, edited by A. Philippa-Touchais, G. Touchais, S. Voutsaki, and J. Wright, 45–55. *BCH* Suppl. 52. Paris and Athens: De Boccard.

Papadimitriou, N. 2001. *Built Chamber Tombs of Middle and Late Bronze Age Date in Mainland Greece and the Islands. BAR-IS* 925. Oxford: Archaeopress.

———. 2015. "The Formation and Use of Dromoi in Early Mycenaean Tombs." *BSA* 110:71–120.

Papakonstantinou, M.-P. 2011. "Bronze Age Tumuli and Grave Circles in Central Greece: The Current State of Research." In *Ancestral Landscapes: Burial Mounds in the Copper and Bronze Ages*, edited by E. Borgna and S. Müller-Celka, 391–99. Lyon: Maison de l'Orient et de la Méditerranée.

Pappadakis, N. 1911. "Ανασκαφαί τάφων εν Βοιωτία." *Prakt* 1911:132–42.

Phialon, L. 2011. *L'émergence de la civilisation mycénienne en Grèce centrale. Aegaeum* 32. Liège: University of Liège.

Preuner, E. 1924. "Aus alten Papieren II." *AM* 49:102–52.

Protonotariou-Deilaki, E. 1990. "Burial Customs and Funerary Rites in the Prehistoric Argolid." In *Celebrations of Death and Divinity in the Bronze Age Argolid: Proceedings of the Sixth International Symposium at the Swedish Institute at Athens, 11–13 June 1988*, edited by R. Hägg and G.C. Nordquist, 69–83. Stockholm: Swedish Institute at Athens.

Rackham, H., ed. and trans. 1926. *Aristotle: The Nicomachean Ethics*. Loeb Classical Library 73. Cambridge, Mass.: Harvard University Press.

Roller, D.W. 1988. *Early Travellers in Eastern Boeotia*. Amsterdam: J.C. Gieben.

———. 2018. *A Historical and Topographical Guide to the Geography of Strabo*. Cambridge: Cambridge University Press.

Ruijgh, C.J. 1967. *Études sur la grammaire et le vocabulaire du grec mycénien*. Amsterdam: Adolf M. Hakkert.

Sakellarakis, J., and E. Sapouna-Sakellaraki. 1997. *Archanes: Minoan Crete in a New Light*. Vol. 1. Ammos, Greece: Eleni Nakou Foundation.

Schoep, I., and P. Tomkins. 2016. "'Death Is Not the End': Tracing the Manipulation of Bodies and Other Materials in the Early and Middle Minoan Cemetery at Sissi." In *Staging Death: Funerary Performance, Architecture and Landscape in the Aegean*, edited by A. Dakouri-Hild and M. Boyd, 227–50. Berlin: De Gruyter.

Scranton, R. 1941. *Greek Walls*. Cambridge, Mass.: Harvard University Press.

Spantidaki, Y., and C. Moulherat. 2012. "Greece." In *Textiles and Textile Production in Europe from Prehistory to AD 400*, edited by M. Gleba and U. Mannering, 185–200. Oxford: Oxbow.

Spencer, N. 1995. *A Gazetteer of Archaeological Sites in Lesbos*. Oxford: Tempus Reparatum.

Spyropoulos, T. 1973. "Παραλίμνη." *ArchDelt* 28B1:265–66.

———. 1974. "Ανασκαφή Μυκηναϊκής Τανάγρας." *Prakt* 1974:9–33.

———. 1975. "Ανασκαφή Μυκηναϊκής Τανάγρας." *Prakt* 1975B:415–27.

———. 1976. "Ανασκαφή Μυκηναϊκής Τανάγρας." *Prakt* 1976A:61–68.

Tsokas, G., G. Vargemezis, P. Tsourlos, A. Stambolidis, I. Fikos, G. Tassis, and S. Daskalakis. 2009. "Geophysical Investigations at the Acropolis of Ancient Eleon (Modern Arma) in Eastern Boeotia." Unpublished report. Thessaloniki: Laboratory of Exploration Geophysics, Aristotle University of Thessaloniki.

Ulrichs, H. 1863. *Reisen und Forschungen in Griechenland*. Berlin: Weidmannsche Buchhandlung.

Ure, P.N. 1913. *Black Glaze Pottery from Rhitsona in Boeotia*. Oxford: Oxford University Press.

———. 1927. *Sixth and Fifth Century Pottery from Rhitsona*. London: Milford.

———. 1934. *Aryballoi and Figurines from Rhitsona in Boeotia*. Cambridge: Cambridge University Press.

Van Damme, T. 2017a. "Euboean Connections with Eastern Boeotia: Ceramics and Synchronisms Between Lefkandi and Ancient Eleon." In *An Island Between Two Worlds: The Archaeology of Euboea from Prehistoric to Byzantine Times*, edited by Ž. Tankosić, F. Mavridis, and M. Kosma, 171–82. Athens: Norwegian Institute at Athens.

———. 2017b. "Life After the Palaces: A Household Archaeology Approach to Mainland Greece During Late Helladic IIIC." Ph.D. diss., University of California, Los Angeles.

Van de Moortel, A. 2016. "Politics of Death at Mitrou: Two Prepalatial Elite Tombs in a Landscape of Power." In *Staging Death: Funerary Performance, Architecture and Landscape in the Aegean*, edited by A. Dakouri-Hild and M. Boyd, 89–116. Berlin: De Gruyter.

Wallace, P.W. 1979. *Strabo's Description of Boiotia: A Commentary*. Heidelberg: Winter.

Watkins, C. 2007. "Mycenaean *e-u-te-re-u* TH Ft 140.2 and the Suffixless Locative." In *Verba Docenti: Studies in Historical and Indo-European Linguistics Presented to Jay H. Jasanoff by Students, Colleagues and Friends*, edited by A. Nussbaum, 359–64. Ann Arbor, Mich.: Beech Stave Press.

Winter, F.E. 1971. *Greek Fortifications*. London: Routledge.

Winter, N. 1993. *Greek Architectural Terracottas: From the Prehistoric to the End of the Archaic Period*. Oxford and New York: Oxford University Press.

Younger, J.G. 1997. "The Stelai of Mycenae Grave Circles A and B." In *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age. Proceedings of the 6th International Aegean Conference, Philadelphia, Temple University, 18–21 April 1996*, edited by R. Laffineur and P. Betancourt, 229–39. *Aegaeum* 16. Liège and Austin: Université de Liège and the University of Texas Program in Aegean Scripts and Prehistory.

Zerner, C. 1990. "Ceramics and Ceremony: Pottery and Burials from Lerna in the Middle and Late Bronze Ages." In *Celebrations of Death and Divinity in the Bronze Age Argolid: Proceedings of the Sixth International Symposium at the Swedish Institute at Athens, 11–13 June 1988*, edited by R. Hägg and G.C. Nordquist, 23–34. Stockholm: Swedish Institute at Athens.