

# HESPERIA

THE JOURNAL OF THE AMERICAN SCHOOL  
OF CLASSICAL STUDIES AT ATHENS

VOLUME 84  
2015



Copyright © The American School of Classical Studies at Athens, originally published in *Hesperia* 84 (2015), pp. 207–276. This offprint is supplied for personal, non-commercial use only, and reflects the definitive electronic version of the article, found at <<http://www.jstor.org/stable/10.2972/hesperia.84.2.0207>>.

# HESPERIA

Susan Lupack, EDITOR

## EDITORIAL ADVISORY BOARD

Carla M. Antonaccio, *Duke University*  
Angelos Chaniotis, *Institute for Advanced Study*  
Jack L. Davis, *University of Cincinnati*  
A. A. Donohue, *Bryn Mawr College*  
Jan Driessen, *Université Catholique de Louvain*  
Marian H. Feldman, *University of California, Berkeley*  
Gloria Ferrari Pinney, *Harvard University*  
Thomas W. Gallant, *University of California, San Diego*  
Sharon E. J. Gerstel, *University of California, Los Angeles*  
Guy M. Hedreen, *Williams College*  
Carol C. Mattusch, *George Mason University*  
Alexander Mazarakis Ainian, *University of Thessaly at Volos*  
Lisa C. Nevett, *University of Michigan*  
John H. Oakley, *The College of William and Mary*  
Josiah Ober, *Stanford University*  
John K. Papadopoulos, *University of California, Los Angeles*  
Jeremy B. Rutter, *Dartmouth College*  
Monika Trümper, *Freie Universität Berlin*

*Hesperia* is published quarterly by the American School of Classical Studies at Athens. Founded in 1932 to publish the work of the American School, the journal now welcomes submissions from all scholars working in the fields of Greek archaeology, art, epigraphy, history, materials science, ethnography, and literature, from earliest prehistoric times onward. *Hesperia* is a refereed journal, indexed in *Abstracts in Anthropology*, *L'Année philologique*, *Art Index*, *Arts and Humanities Citation Index*, *Avery Index to Architectural Periodicals*, *Current Contents*, *IBZ: Internationale Bibliographie der geistes- und sozialwissenschaftlichen Zeitschriftenliteratur*, *Numismatic Literature*, *Periodicals Contents Index*, *Russian Academy of Sciences Bibliographies*, and *TOCS-IN*. The journal is also a member of CrossRef.

## HESPERIA SUPPLEMENTS

The *Hesperia* Supplement series (ISSN 1064-1173) presents book-length studies in the fields of Greek archaeology, art, language, and history. Founded in 1937, the series was originally designed to accommodate extended essays too long for inclusion in *Hesperia*. Since that date the Supplements have established a strong identity of their own, featuring single-author monographs, excavation reports, and edited collections on topics of interest to researchers in classics, archaeology, art history, and Hellenic studies.

Back issues of *Hesperia* and *Hesperia* Supplements are electronically archived in JSTOR ([www.jstor.org](http://www.jstor.org)), where all but the most recent titles may be found. For order information and a complete list of titles, see the ASCSA website ([www.ascsa.edu.gr](http://www.ascsa.edu.gr)). The American School of Classical Studies at Athens, established in 1881, is a research and teaching institution dedicated to the advanced study of the archaeology, art, history, philosophy, language, and literature of Greece and the Greek world.

# MT. LYKAION EXCAVATION AND SURVEY PROJECT, PART 2 THE LOWER SANCTUARY

## ABSTRACT

This article is the second report on the excavation and survey project at the Peloponnesian Sanctuary of Zeus on Mt. Lykaion, Arcadia. It focuses on the lower sanctuary, where we investigated the stoa, seats, fountain house, administrative building, corridor, hippodrome, stadium, and bath facility. The earliest remains date to the 7th century B.C. A major building program during the second quarter of the 4th century B.C. was followed by a period of continued activity of various kinds through the 1st century B.C. A large amount of moldmade Hellenistic pottery recovered in the corridor indicates intensive use during the 3rd–1st centuries B.C. Parts of the lower sanctuary were also in use during the Early, Middle, and Late Byzantine periods.

## INTRODUCTION

The Mt. Lykaion Excavation and Survey Project has been under way since 2004.<sup>1</sup> It has built on the work of the limited excavations that were conducted over 100 years ago by Kontopoulos and later by Kourouniotis of the Archaeological Society of Athens (Fig. 1).<sup>2</sup> As a result of these early investigations, various features of the sanctuary were uncovered and identified, including the mound of ash that constitutes an altar on the southern peak of the mountain, at 1,382 masl, and a *temenos* (sacred precinct), 24 m below, both in the upper level of the sanctuary.<sup>3</sup> Kourouniotis also found the hippodrome, stadium, bath facility, two fountains, a stoa, a hemicycle building, and a structure that he identified as a *xenon* (or hostel) in the

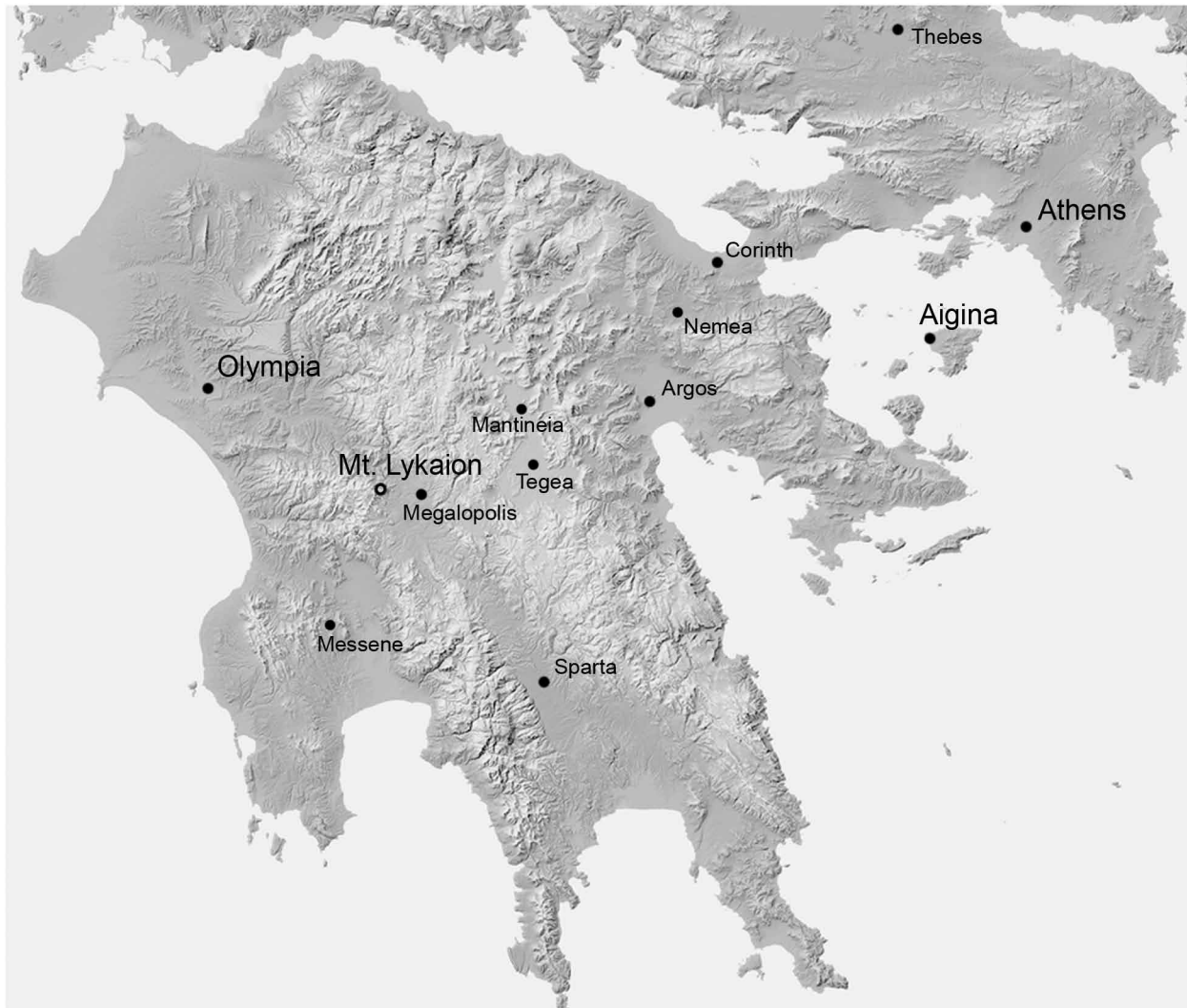
1. The project was carried out with the permission of the Ministry of Culture of Greece and under the auspices of the American School of Classical Studies at Athens (ASCSA). Between 2006 and 2010 the project was

conducted as a *synergasia* between the Greek Archaeological Service, 39th Ephorate in Tripolis, Michalis Petropoulos, ephor, and the ASCSA. Christina L. Kolb drew all the pottery profiles and object drawings. Part 1 of

this article (Romano and Voyatzis 2014) contains full acknowledgments.

2. Kontopoulos 1898; Kourouniotis 1903, 1904a, 1904b, 1905.

3. Romano and Voyatzis 2014.



**Figure 1. Map of the Peloponnese, showing Mt. Lykaion and other key sites.** M. Pihokker and E. Rodriguez-Alvarez

lower part of the sanctuary.<sup>4</sup> In the late 1990s Spyropoulos, then ephor of Laconia and Arcadia, dug trenches inside the *xenon* as well as in the upper sanctuary.<sup>5</sup> In 1996 Romano conducted a computerized architectural and topographical survey at the site.<sup>6</sup> Romano's work has provided an important foundation for our project and has helped guide our objectives and goals.

In the summers of 2004 and 2005, preliminary survey work was carried out at the site. During the 2006–2010 seasons the surveys continued, and archaeological excavations were conducted in both the upper and lower parts of the sanctuary (Fig. 2). The results of the work in the upper sanctuary indicate use in the area around the altar from as early as the Final Neolithic period, with additional activity in the Early and Middle Helladic periods. During the Late Helladic period there are indications that a cult place was established at the altar, which appears to have been in use continuously from the Mycenaean period through the Hellenistic period.<sup>7</sup>

Excavation and survey were undertaken in a number of areas in the lower sanctuary, including the administrative building, the corridor, the fountain house, the stoa, the seats or steps, the hippodrome and stadium

4. Kourouniotis 1909.

5. The trenches of Spyropoulos have not yet been published. See Romano and Voyatzis 2014, pp. 575–578, for a brief mention of his trenches in the *temenos* and altar.

6. Romano 1997, 2005.

7. Romano and Voyatzis 2010a, pp. 13–15; 2014.

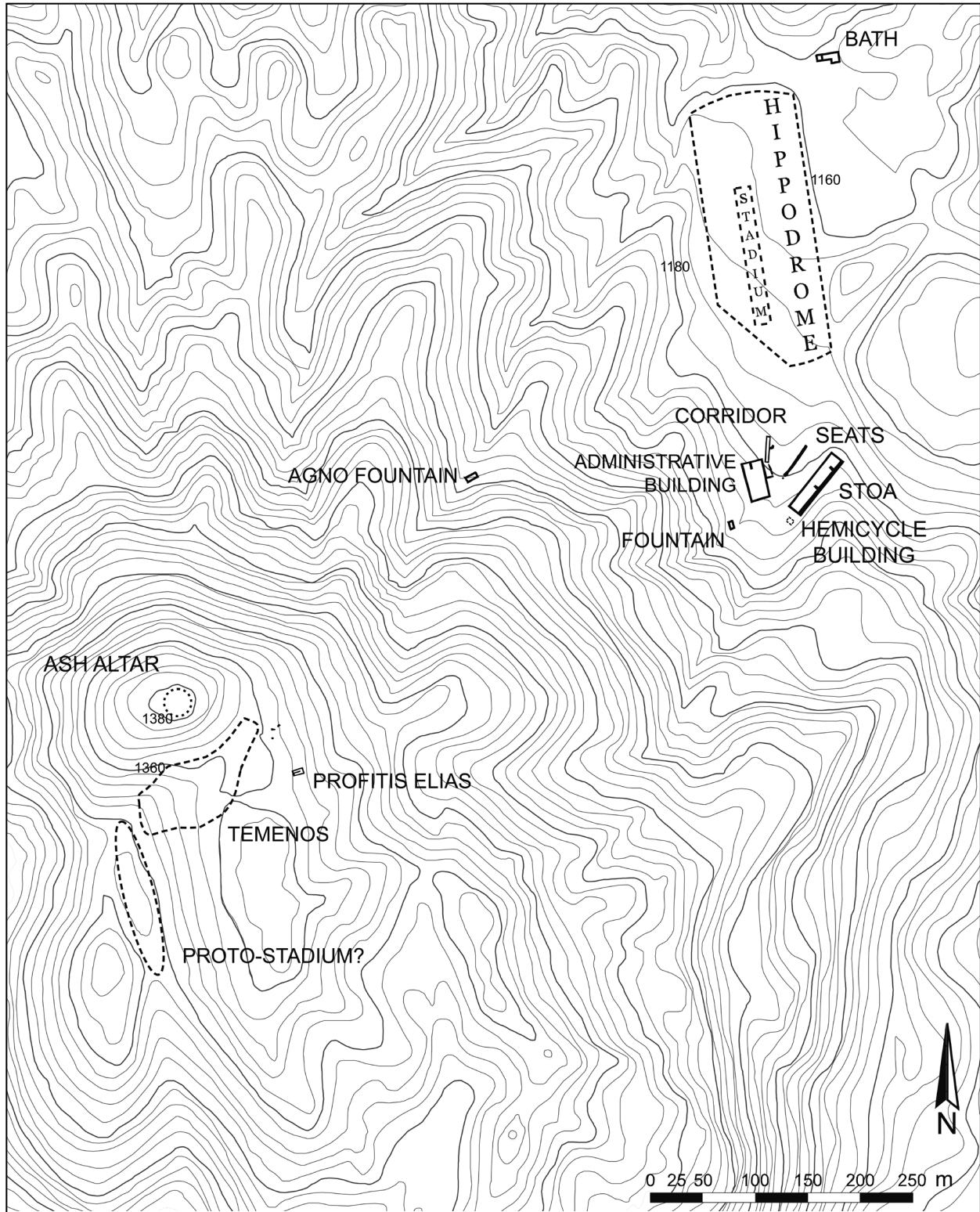
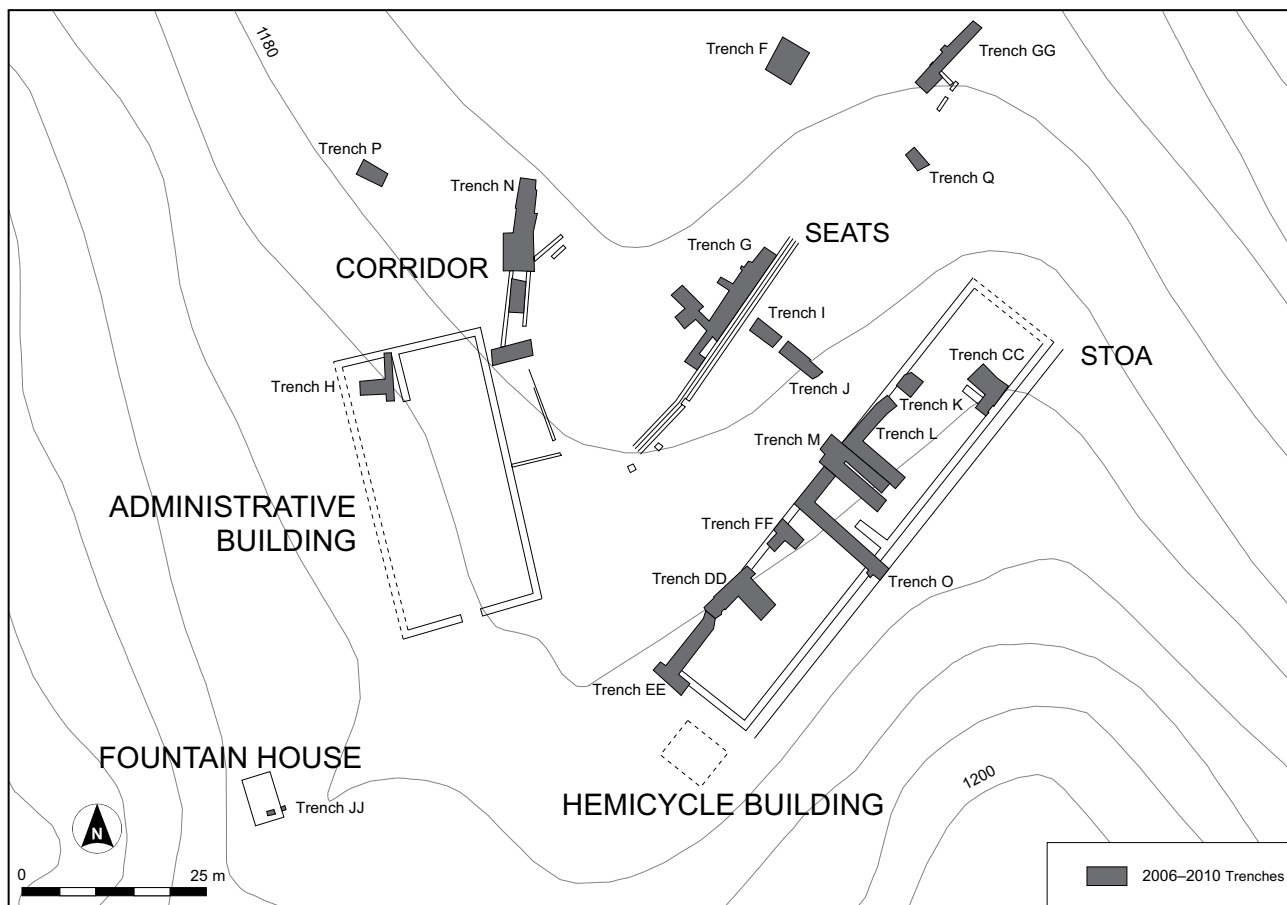


Figure 2. Map of the upper and lower sanctuary at Mt. Lykaion. A. Insua, M. Pihokker, and E. Rodriguez-Alvarez



complex, and the bath facility (see Figs. 3, 4, with the locations of our survey and excavation trenches shown in relation to these buildings and structures). The preliminary results of our excavations are described below. There are also two appendixes at the end of the article: Appendix 1 deals with the early Parrhasian topography of the area, and Appendix 2 provides an analysis of the Hellenistic pottery from the corridor. See Part 1 of this article for the ancient references, the topography of the site, and the overall goals of our project.<sup>8</sup>

### ADMINISTRATIVE BUILDING (FORMERLY THE *XENON*)

Kourouniotis excavated a large rectilinear building to the northeast of the fountain house, and to the west of the stoa and the seats, with the overall dimensions of ca.  $38 \times 20$  m, that he identified as a *xenon*, or hostel building (Figs. 3, 5). The structure has massive outer walls of trapezoidal and polygonal masonry (Figs. 6, 7). The very large doorway (2.65 m wide) is located on the south side of the building, and, according to Kourouniotis, there were several rooms inside as part of a multilevel design.<sup>9</sup> The north, east, and south facades of the building were well preserved when Kourouniotis excavated them, and the masonry of the structure survived to a height of

**Figure 3. Location of trenches in lower sanctuary in relation to buildings and structures.** A. Insua, M. Pihokker, and E. Rodriguez-Alvarez

8. Romano and Voyatzis 2014.

9. Kourouniotis (1909, p. 194) reports that the ground level in the northern part of the building is 1.5 m higher than that in the western portion.

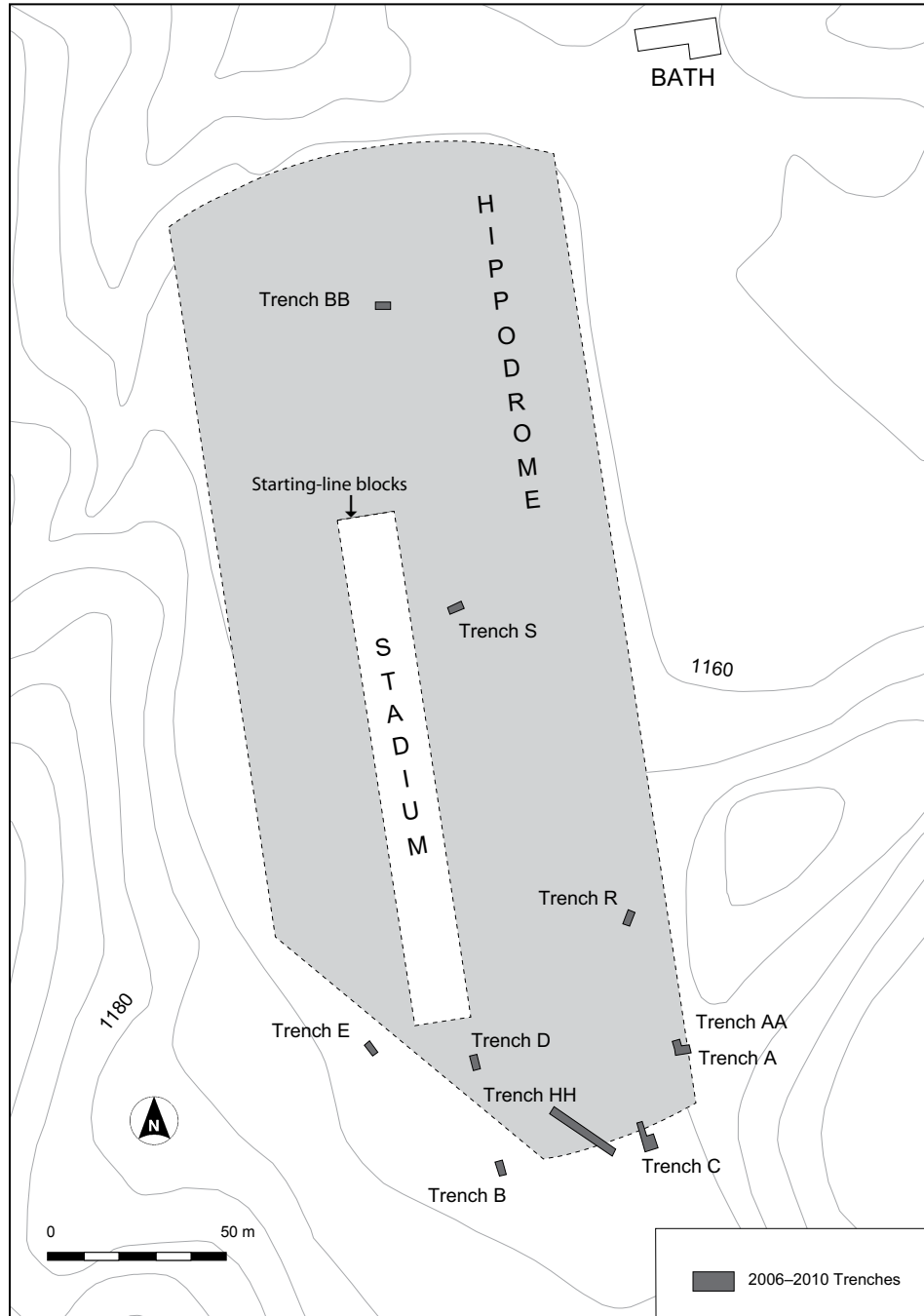


Figure 4. Location of trenches in the area of the hippodrome. A. Insua, M. Pihokker, and E. Rodriguez-Alvarez

between 1.5 and 2.0 m in several places.<sup>10</sup> The visible northeast, southeast, and southwest corners show highlighted drafting (Fig. 8).

Along the exterior on the south side of the building, at ground level, the original excavators found a drain covered by large stone slabs. Kourouniotis

10. Since the time of Kourouniotis, much of the area to the south of the *xenon*, as well as to the east, has been filled in by the natural buildup of soil in

the area, so that little of the southern wall of the *xenon* is currently visible. Nor can the interior rooms be seen.



Figure 5. Actual-state plan of the administrative building, including the southern aspect of the corridor at the northeast. X. Valle and P. Jordan

wrote that the nature of the building's construction suggested a date in the 4th century B.C. He also described some of the material discovered in the trenches, including some 4th-century B.C. and later pottery, as well as Christian tombs and inscriptions.<sup>11</sup> From Kourouniotis's unpublished notebooks we know that the *xenon* also yielded black-gloss phialai of 4th- to 3rd-century B.C. date.<sup>12</sup> Near the northeast corner, Kourouniotis reported finding a piece of bronze sheet with an inscription, silver coins, and iron objects. In deeper levels on the east side he found some roof tiles and an iron spear.<sup>13</sup>

In the late 1990s- a large trench was dug in the southern part of the building by Spyropoulos, who was then ephor of Antiquities of Laconia and Arcadia, revealing what appears to be a Byzantine structure, approximately

11. Kourouniotis 1909, pp. 192–196.

12. We are grateful to the Archaeological Society of Athens for permission to make copies of Kourouniotis's notebooks and to study them.

13. Kourouniotis 1909, pp. 192–196; also his unpublished excavation journal from 1904, pp. 64–65.





Figure 6. Actual-state east elevation of administrative building. X. Valle and P. Jordan

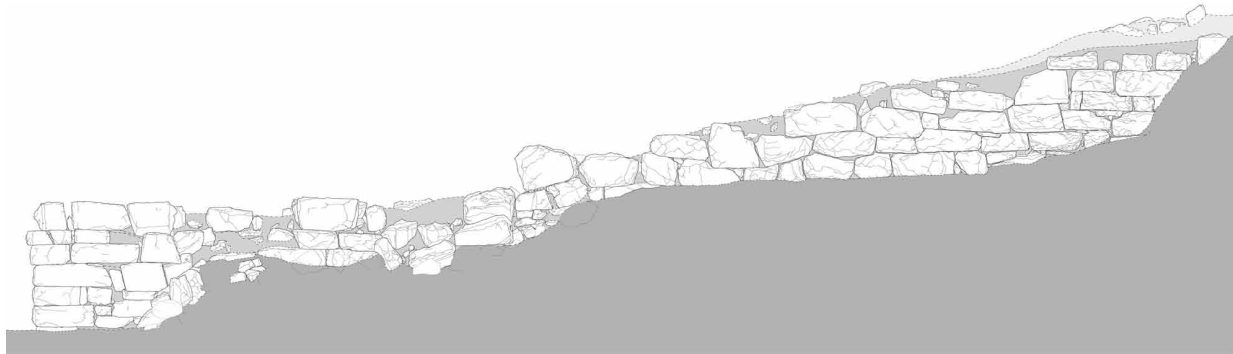


Figure 7. Actual-state north elevation of administrative building. X. Valle and P. Jordan



Figure 8. Northeast corner of the administrative building showing the drafted corner, looking west. Photo D. G. Romano

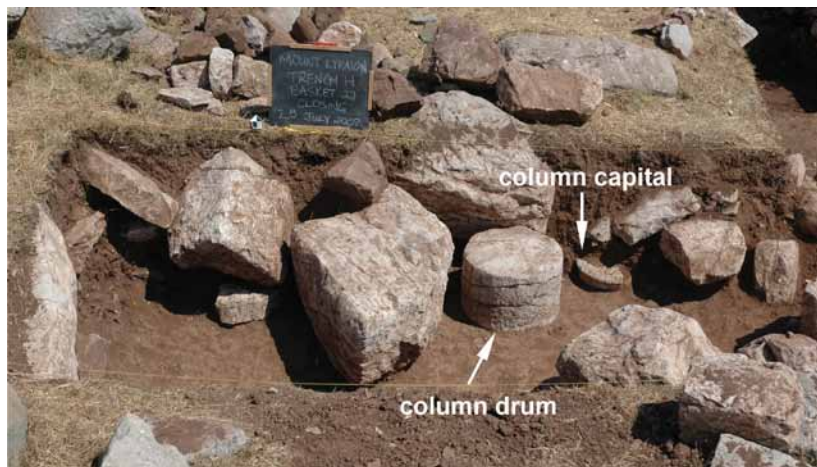


Figure 9. Trench H with column capital and column drum, looking north. Photo C. Gieske

7.5 × 4.0 m.<sup>14</sup> A number of the walls that Kourouniotis discovered in his excavation are no longer visible today, but may be partially covered by the spolia of this 1990s trench.

In 2006 we opened trench H (1.0 × 6.6 m) inside the northwest area of the building (Figs. 3, 9). The objective of the trench was to explore the northern interior wall of the building and to attempt to dig to the foundations to determine the date of construction. Large limestone blocks from the outer walls of the building impeded progress in several areas of the trench, and in order to reach the floor surface of the building, an extension 3.5 × 2.0 m was dug to the west. The floor of the building was found to be composed of reddish brown clay and purple schist bedrock. An unfluted column drum and an unfinished, broken, Doric column capital were recovered from the surface of the floor (Fig. 9). The interior surface of the northern wall of the building was exposed, and was found to be composed of short, small, horizontal stones, some of which were faced with white plaster (Fig. 10). Many tiles were recovered, suggesting a roof collapse. Some Classical and Hellenistic pottery (e.g., 1), and fragments of charcoal were also found. Other finds include a stamped roof tile (2) and a bronze coin, possibly an issue of Mantinea.

1 Moldmade relief bowl

Fig. 11

C-H-26-01. Trench H; basket 26.

P.H. 0.056; p.W. 0.069 m.

Half of medallion and part of wall. Fabric: 7.5YR 6/6 reddish yellow. Dull black slip inside and out. Irregular medallion; contiguous long petals, bordered by single ridge above.

150–100 B.C.

2 Terracotta stamped tile

Fig. 11

MTL 67. Trench H; basket 19.

P.W. 0.17; p.L. 0.32; Th. 0.025 m.

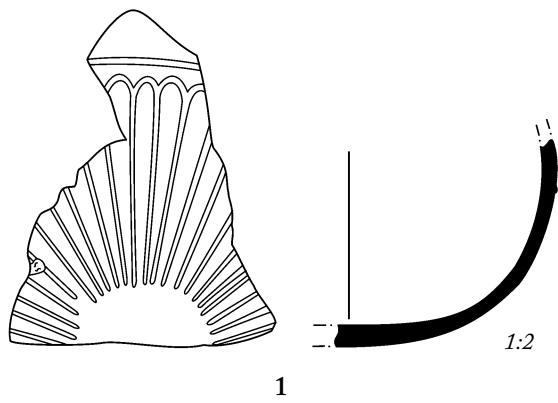
Good condition: five fragments, three with preserved edges, two broken on all sides. Large, thick tile in five pieces, which fit together, with a stamped E visible on surface. Fabric: 7.5YR 7/6 reddish yellow. Exterior surface has brown paint visible.

Late Classical–Hellenistic

14. This excavation remains unpublished.



Figure 10. Trench H, looking north at preserved interior wall. Photo C. Gieske



2

1:5

Figure 11. Moldmade bowl 1 and stamped tile 2 from trench H. Scale as indicated. Photo E. Rodriguez-Alvarez

## INTERPRETATION

Kourouniotis identified the building as a *xenon* because of its size and different levels in the interior; its courtyard and several rooms; and the types of pottery indicative of a dining function.<sup>15</sup> Sinn has recently made the suggestion that the building served as a *pompeion* for the sanctuary, and proposed that it was from this building that a procession led up the east slope of the mountain to the area of the two columns to the east of the *temenos*.<sup>16</sup>

Based on our research at the site, we propose that it is more likely that the structure was an administrative building for the sanctuary and its religious festivals. We know very little about the administration of the Lykaion Games, or who was responsible for the organization of the sanctuary, and as a result we hesitate to give the structure a more specific name. However, *IG V ii 550* (discussed on p. 258, below) does mention *damiourgoi*, apparently a group related to the organization of the Lykaion festival. One wonders if this building could have been used for the work of the *damiourgoi* in the sanctuary.<sup>17</sup> It is known that the building had numerous interior rooms and a courtyard, features commonly found in *prytaneia*, for example.<sup>18</sup> A great deal of pottery from a dining context has recently been recovered, in the adjacent area of the “corridor” (see p. 220, below), suggesting that a dining function should also be assigned to part of this building or an area nearby. Some remains of moldmade bowls have also been found inside the administrative building, as mentioned above. Two victor inscriptions from the Lykaion Games were uncovered by Kourouniotis in one of the western rooms of this building. These two important inscriptions (*IG V ii 549* and *550*) provide the only information relating to the organization of the religious festivals, naming priests of the gods, and victorious athletes and their events, as well as their hometowns.<sup>19</sup> Taken together, the evidence supports the identification of this building as a kind of administrative center, as well as a dining facility for the festival and games. There may be a physical connection between the eastern side of the administrative building, the adjacent corridor, and the site of the contests, that is, the hippodrome and stadium to the north. Furthermore, the curved west end of the seats, immediately to the east of the administrative building (discussed on p. 238, below), may indicate an important focus of activity for the cult located in this vicinity. All of the evidence suggests that this structure, which occupies a prominent

15. Kourouniotis 1909, pp. 192–196.

16. Sinn 2007, pp. 178–183, fig. 6. There are some difficulties with his interpretations, and especially his drawing. The route from the lower sanctuary to the upper sanctuary is not clear, and there are several alternatives to the one that is illustrated. Furthermore, the Agno fountain to the northwest of the lower sanctuary is not indicated.

17. It would appear that the same *damiourgoi* were the officials in charge

of the Arcadian League; see *IG V ii 1*. This inscription lists 50 confederate *damiourgoi* with their community of origin. Tegea has 5, Mainalia has 3, Lepreon has 2, Megalopolis has 10, Mantinea has 5, Kynouria has 5, Orchomenos has 5, Kleitor has 5, Heraia has 5, and Thelpousa has 5. In the synoecism, Megalopolis acquired the Sanctuary of Zeus on Mt. Lykaion, which was of pan-Arcadian importance starting in the 5th century B.C.

See Jost 1985, pp. 179–185, 221–222, 267–268.

18. Miller 1978, pp. 36–37.

19. This kind of epigraphical evidence gives us a good idea about the organization of the festival in honor of Zeus, the nature of the religious aspects of the festival, and information about who was coming to the sanctuary, not only from Arcadia and Laconia, but also from regions all over the Greek world.

position in the lower sanctuary, is likely to have been a building of more significance than a “hostel.”<sup>20</sup>

At Olympia, Pausanias (5.15.8–9) located the prytaneion at the northwest corner of the Sanctuary of Zeus.<sup>21</sup> The dimensions of the building, dated to the middle of the 4th century B.C., are 19.80 × 32.80 m.<sup>22</sup> The building includes a hearth to Hestia, a courtyard, and several rooms, including a dining room. The size and date of the building at Olympia are similar to the structure at Mt. Lykaion, although we currently lack a clear picture of the interior space of the latter.

The overall architectural style and details of the building exterior, including the drafting, suggest general similarities with fortification walls and other constructions at Messene, Mantinea, and Megalopolis.<sup>23</sup> There is conflicting information about exactly when these Arcadian cities were constructed, and by whom. While Pausanias (followed by Plutarch and Nepos) attributes the foundation of Megalopolis to the Theban general Epaminondas, after the battle of Leuctra in 370 B.C., Diodoros names Lykomedes as its founder, dating the foundation to 368/7 B.C.<sup>24</sup>

## CORRIDOR

A stone corridor with its sidewalls built largely below ground level appears to link the area of the administrative building to the athletic areas of the hippodrome and stadium (and possibly the neighboring lower terrace) to the north; this corridor was excavated between 2007 and 2010 as trench N (Figs. 3, 12).<sup>25</sup> The corridor consists of two roughly parallel polygonal stone walls, with the interior passage tapering slightly toward the north but generally 1.82–1.64 m wide from the inside edges of the walls. The overall width of the corridor measured between the outside edges varies from 2.60 to 2.38 m. The total length of the excavated corridor is ca. 25 m. It slopes at an angle of approximately 5 degrees down toward the north. The walls were at least partially covered by earth on the outside on both the east and the west sides.

20. It should be noted that Pausanias (8.30.6) mentions government offices being located inside one of the stoas in the agora at Megalopolis, so it is also possible that the stoa at Mt. Lykaion could have been used for administrative purposes as well.

21. Pausanias notes a statue of Artemis Agrotera in front of the doors of the prytaneion at Olympia. Inside the building, in the room with the hearth (to the right of the entrance), is the altar of Pan, which provides ash to the altar of Olympian Zeus.

22. Mallwitz 1972, pp. 126–128; Miller 1978, pp. 86–91.

23. Cooper (2000, pp. 173–191)

has argued that the Boiotian general Epaminondas was responsible for new fortification systems in Boiotia, Arcadia, and Messenia—characterized by large blocks of ashlar masonry—ca. 370–338 B.C. They are particularly visible today at the new foundation of Messene. According to Cooper, the occasional stretch of polygonal masonry was characteristic of the same period. Drafting is known primarily from fortification systems, customary in the 4th century B.C. and earlier. See Lawrence 1979, pp. 241–243.

24. Paus. 8.27.1–8; Diod. Sic. 15.72.4. See the new study of the topography and city plan of Messene

by Müth and Stümpel (2007, pp. 235–289, pl. 1). For a good summary of the debate, see Demand 1990, pp. 111–119. For considerations having to do with the planning of Messene, Megalopolis, and Mantinea, see Winter 1971, pp. 59, 111–114. For the planning of Megalopolis, see Roy 2007.

Of course, not all buildings at Messene date to its foundation in 369 B.C. See the new study of the Asklepios temple in Sioumpara 2011, including the dating summary on pp. 211–216.

25. Kourouniotis (1909, p. 194) identified the corridor as leading from the hippodrome to the northern section of the building.



Figure 12. Actual-state plan of corridor, including the northeast corner of the administrative building. X. Valle, G. Burkett, and M. Jankowsky

Each of the walls of the corridor is composed of five courses of polygonal masonry (Figs. 13, 14). Foundation trenches were found at the bottom of the interior of the corridor for the two parallel walls, which must have been dug at the same time. Stratigraphic unit (hereafter, SU) 5 includes numerous fragments of 4th-century B.C. black-gloss pottery.<sup>26</sup> The construction debris consists of compacted chipped limestone and very little associated soil. There was no diagnostic pottery in SU 4, which represents the primary use of the corridor.

Above the corridor's level of use in SU 3, there is a level of brown-maroon soil. It is sandy with a clayey consistency and has inclusions of green sandy stone, charcoal, terracotta, and some limestone chips. This is one of the two stratigraphic units that represent the disuse of the corridor

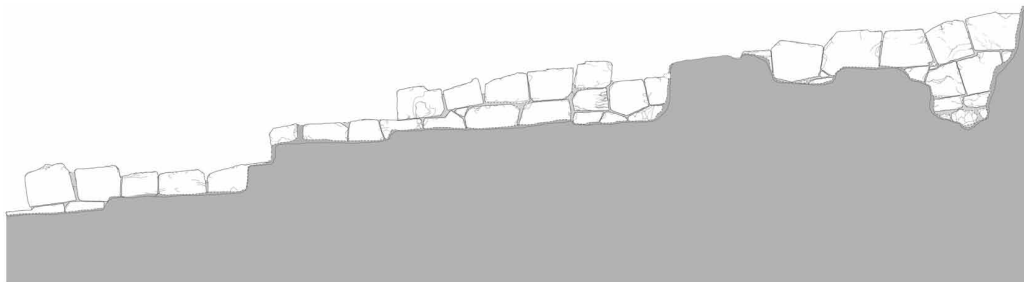
26. See Appendix 2. Susan Rotroff has catalogued an example here (3). Ann Steiner is now working on cataloguing the Archaic and Classical pottery from this trench, as well as from

others in the lower and upper levels of the sanctuary. We thank her for providing preliminary catalogue entries for 39, 41, and 48.



**Figure 13. Corridor looking south.**

Photo D. G. Romano



**Figure 14. Actual-state elevation of the interior east wall of the corridor.**

X. Valle, G. Burkett, and M. Jankowsky

for processions and its new function as a dumping ground. The pottery from SU 3 dates from ca. 275–200 B.C. to the third quarter of the 1st century B.C. (4–8).

Above this layer is another level of disuse of the corridor, SU 2, which is composed of a significant dumped fill. The soil here is hard, silty, and brown, with gravel and inclusions of charcoal, terracotta, limestone, bone, tile, and grayish green clay. This is the level of the highest concentration of finds, with at least 20,000 sherds, mostly Hellenistic in date, with some that continue to the end of the 1st century B.C. (9–26). From the same stratigraphic unit were recovered more than 7,000 fragments of animal bones.

The majority of the pottery from the dumped fill may be characterized as banqueting-type vessels, with many examples of moldmade pieces. Numerous fragments of terracotta lamps were also found in this level. Rotroff assigns a date of the 3rd through the 1st centuries B.C. for this deposit, and suggests that the fill was the result of several episodes of dumping within the corridor.<sup>27</sup>

Also found were several metal objects and tools, including four bronze coins of Late Classical date (27–29), a bronze fragment of a finger (under life-size) (30), a bone gaming piece (31), fragments of iron spits and iron nails, an iron tool, bronze sheet fragments, bronze and iron slag, lead clamps for architectural use, and fragments of lead. Both burned and unburned faunal remains were also discovered within the corridor, including a fully preserved pig's skull, 10 cattle mandibles, and a preserved bovine cranium. Other examples of faunal mandibles, teeth, and limb bones were also discovered, which most likely represent sheep, goat, boar, birds, and cattle.<sup>28</sup>

Thousands of roof tiles were uncovered in the fill of trench N, both burned and unburned, of various sizes and quality (with respect to paint and fabric).<sup>29</sup> Despite their large number, there is no evidence of a destruction layer or of a roof collapse in this location. Rather, it would appear that the tiles were deliberately deposited into the corridor in a series of single events between the 3rd and the 1st centuries B.C., especially on the west side, closest to the adjacent administrative building. These broken vessels, bones, roof tiles, and related debris then settled in the corridor, eventually sloping downward toward the north, following the inclination and orientation of the corridor.

- |   |   |         |
|---|---|---------|
| 3 | One-handler<br>C-N-21/22-01. Trench N; basket 21/22 (SU 5).<br>P.H. 0.020; est. Diam. 0.070 m.<br>Small rim sherd. Fabric: tan. Black gloss inside and out.<br>4th century B.C.   | Fig. 15 |
| 4 | Corinthian articulated kantharos<br>C-N-17-01. Trench N; basket 17 (SU 3).<br>Est. Diam. rim 0.10 m.<br>Four rim and four body sherds, part of one handle. Fabric: very pale yellow. Black gloss with crackled surface inside and out. Incised tendrils on upper wall, with glossed groove above and below.<br>Ca. 275–200 B.C. | Fig. 15 |
| 5 | Kantharos with convex rim<br>C-N-15/16-01. Trench N; basket 15/16 (SU 3).<br>Est. Diam. rim 0.11 m.<br>Part of rim and shoulder. Fabric: 2.5YR 6/8 light red. Matte brown gloss outside and on rim area inside.<br>Hellenistic  | Fig. 15 |
| 6 | Kantharos?<br>C-N-15/16-10. Trench N; basket 15/16 (SU 3).<br>Diam. base 0.046 m.   | Fig. 15 |

27. See Rotroff in Appendix 2 for a more detailed description of the Hellenistic ceramic remains from the dumped fill of the corridor and her catalogue entries 3–26. Rotroff also provided entries for Hellenistic pottery from other parts of the lower sanctuary: 1 and 46.

28. The faunal remains from trench N are being studied by Victoria Moses.

29. Philip Sapirstein is currently studying all the roof tiles from the lower and upper levels of the sanctuary at Mt. Lykaion.



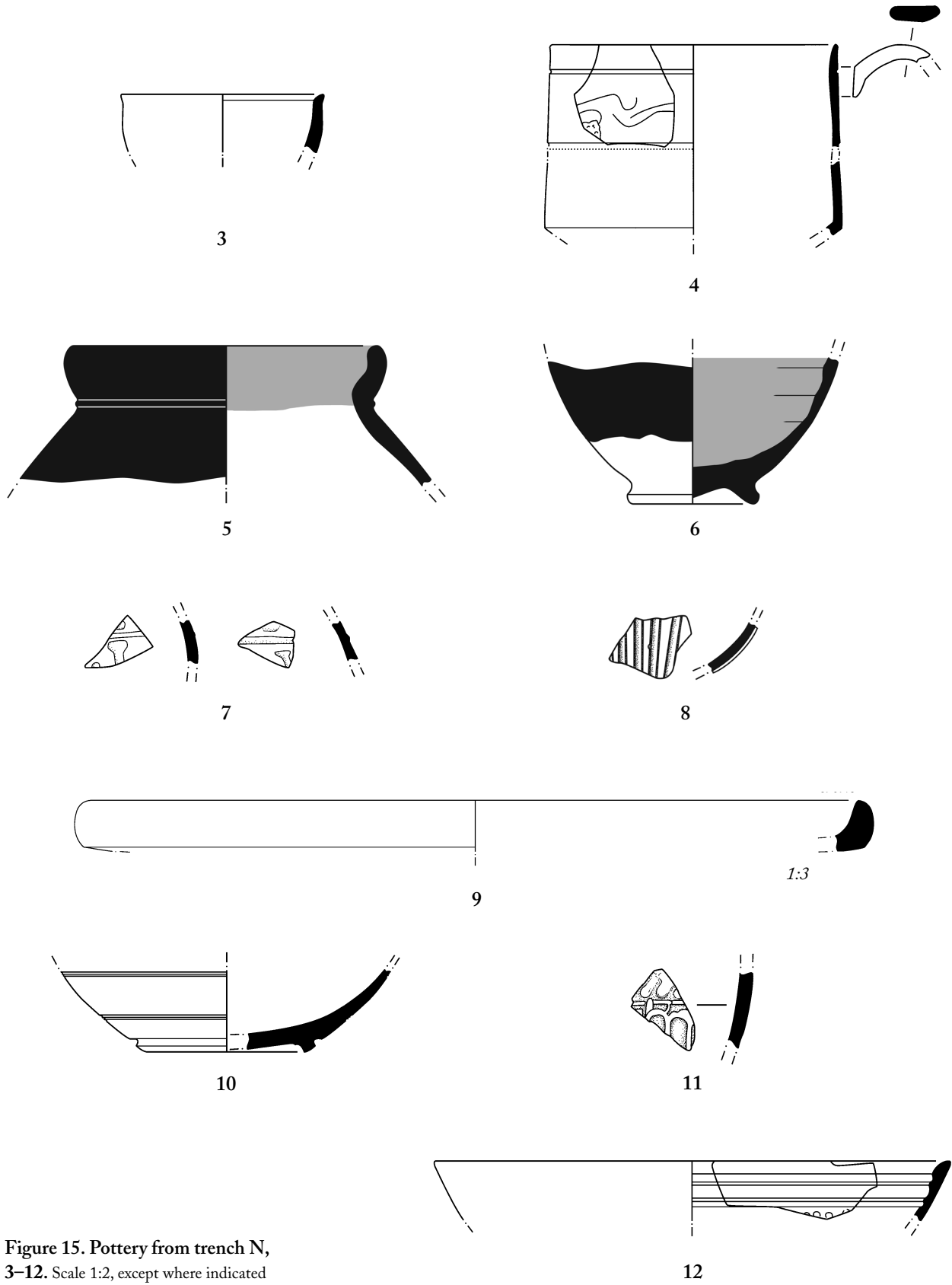


Figure 15. Pottery from trench N, 3-12. Scale 1:2, except where indicated

About half of base and part of lower wall. Fabric: 5YR 6/6 reddish yellow, soft and fine. Slightly shiny black gloss inside and upper outside.

Hellenistic

7 Moldmade relief bowl Fig. 15

C-N-15/16-8. Trench N; basket 15/16 (SU 3).

Max. p. dims. 0.024, 0.020 m.

Two nonjoining wall sherds, possibly from a single vessel. Fabric: tan. Brown gloss. Registers divided by horizontal ridge, top of columns(?) below ridge.

2nd–1st century B.C.

8 Moldmade relief bowl Fig. 15

C-N-15/16-9. Trench N; basket 15/16 (SU 3).

P.H. 0.022; p.W. 0.028 m.

Wall sherd. Fabric: gray. Dull, dark gray gloss inside and out. Parts of five petals on exterior.

Ca. 150–1st century B.C.

9 Ionian platter Fig. 15

C-N-23-9. Trench N; basket 23 (SU 2).

Est. Diam. 0.40 m.

Rim sherd. Fabric: gray to orange. Dull gray gloss.

Third quarter of 1st century B.C.

10 Hemispherical cup Fig. 15

C-N-13-34. Trench N; basket 13 (SU 2).

Est. Diam. base 0.060 m.

Fragment of base and lower wall. Fabric: tan. Dull black gloss inside and out. Wall decorated with two groups of very fine, closely spaced grooves.

Ca. 275–200 B.C.?

11 Long-petal bowl Fig. 15

C-N-23-19. Trench N; basket 23 (SU 2).

P.H. 0.029 m.

Wall sherd. Fabric: 10YR 7/2 light gray. Dull light brown gloss. Parts of three petals below, bounded by ridge; heart-shaped leaves positioned on their sides above.

Ca. 150–1st century B.C.

12 Hemispherical cup (mastos) Fig. 15

C-N-23-06. Trench N; basket 23 (SU 2).

Est. Diam. 0.180 m. Rim sherd. Fabric: 2.5YR 6/8 light red. Slightly shiny red gloss (2.5YR 5/8). Interior of rim molded, with small impressed circles below.

Late 2nd–early 1st century B.C.

13 Moldmade relief bowl Fig. 16

C-N-23-13. Trench N; basket 23 (SU 2).

Max. p. dim. 0.059 m.

Fragment of bottom of bowl. Fabric: 5YR 7/4 pink. Dull brown gloss. Rosette medallion within double ridges; appliqué shell foot. Possible figured motifs on lower wall.

2nd–1st century B.C.

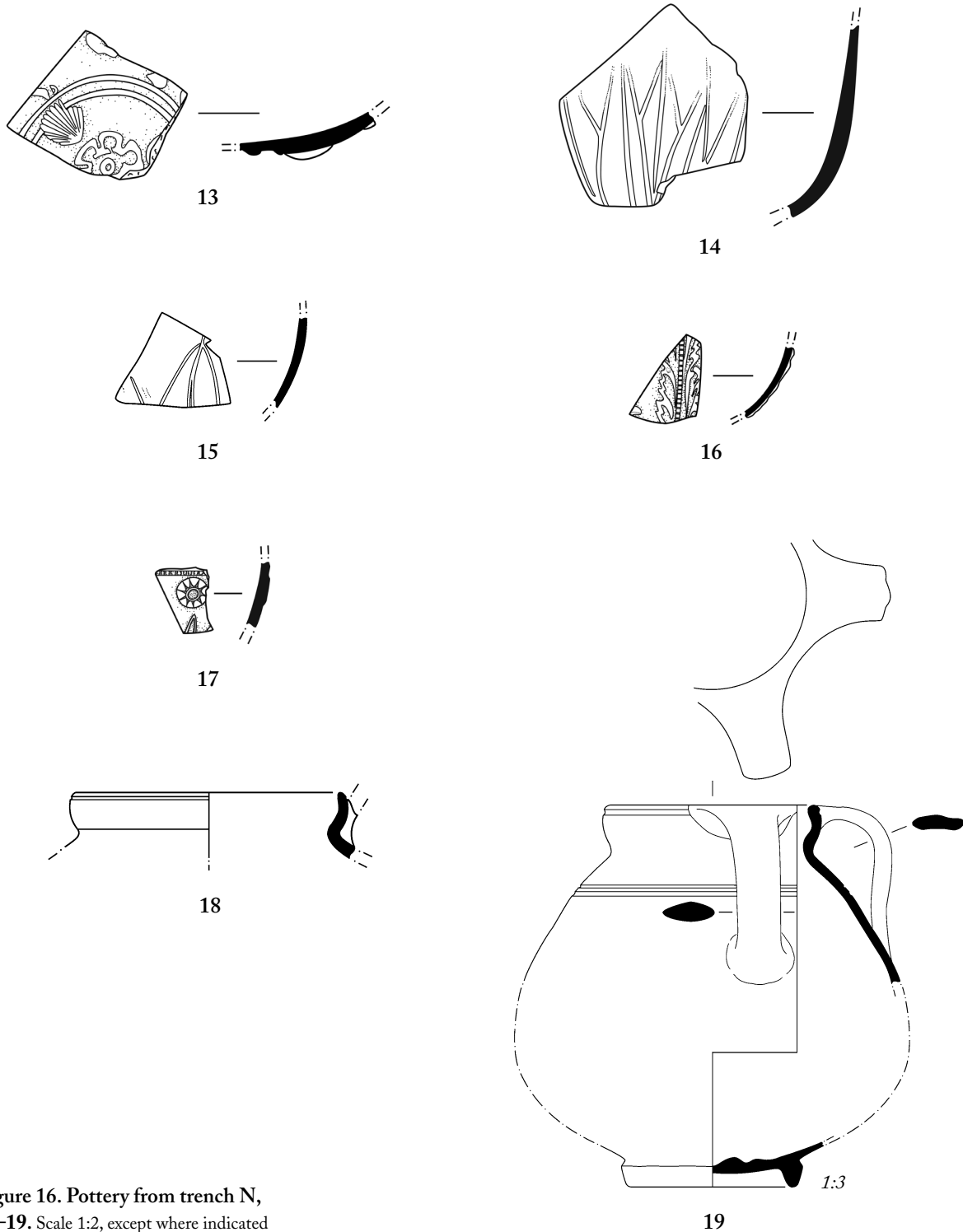
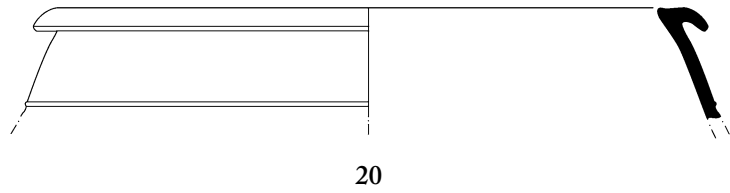


Figure 16. Pottery from trench N,  
13–19. Scale 1:2, except where indicated

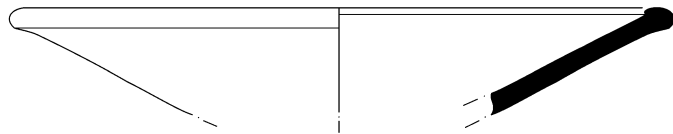
14 Moldmade relief bowl  
C-N-23-08. Trench N; basket 23 (SU 2).  
P.H. 0.066 m.  
Wall sherd. Fabric: 5YR 6/6 reddish yellow. Thin dull brown gloss. Overlapping  
pointed lotus petals, upper wall undecorated.  
2nd–1st century B.C.

Fig. 16

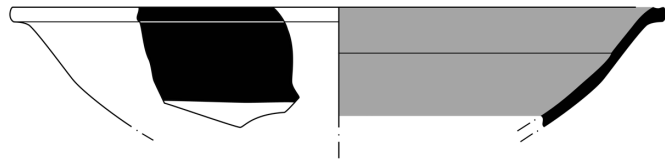
- 15 Moldmade relief bowl Fig. 16  
 C-N-23-12. Trench N; basket 23 (SU 2).  
 P.H. 0.031 m.  
 Wall sherd. Fabric: gray. Dull dark brown gloss. Parts of two lotus petals in low relief.  
 2nd–1st century B.C.
- 16 Moldmade relief bowl Fig. 16  
 C-N-46-04. Trench N; basket 46 (SU 2).  
 P.H. 0.029 m.  
 Wall sherd. Fabric: tan clay. Dull brown gloss. Acanthus leaf.  
 2nd–1st century B.C.
- 17 Moldmade relief bowl Fig. 16  
 C-N-23-17. Trench N; basket 23 (SU 2).  
 P.H. 0.021 m.  
 Wall sherd. Fabric: gray clay. Dull black gloss. Rosette above tip of lotus petal; horizontal line of fine beading above.  
 2nd–1st century B.C.
- 18 Kantharos with convex rim Fig. 16  
 C-N-46-09. Trench N; basket 46 (SU 2).  
 Est. Diam. rim 0.088 m.  
 Rim sherd with handle root. Fabric: tan. Dull brown gloss. Glossed groove below lip.  
 Hellenistic
- 19 Two-handled jug Fig. 16  
 C-N-46-13. Trench N; basket 46 (SU 2).  
 Diam. base 0.086; est. Diam. rim 0.105 m.  
 Many fragments, including base, two complete handles, and fragments of wall and rim. Fabric: orange. Unglossed.  
 Hellenistic
- 20 Mixing bowl Fig. 17  
 C-N-46-06. Trench N; basket 46 (SU 2).  
 Est. Diam. rim 0.270.  
 Rim sherd. Fabric: pinkish buff. Black gloss.  
 Hellenistic
- 21 Rolled-rim plate Fig. 17  
 C-N-46-08. Trench N; basket 46 (SU 2).  
 Est. Diam. 0.260 m.  
 Rim sherd.  
 Hellenistic
- 22 Bowl, offset inside Fig. 17  
 C-N-23-14. Trench N; basket 23 (SU 2).  
 Est. Diam. 0.260 m.  
 Rim sherd. Fabric: pinkish buff. Dull black gloss inside and upper outside.  
 Hellenistic
- 23 Bowl, offset inside Fig. 17  
 C-N-13-31. Trench N; basket 13 (SU 2).



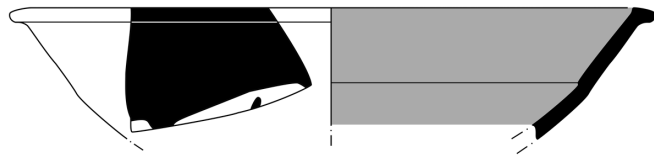
20



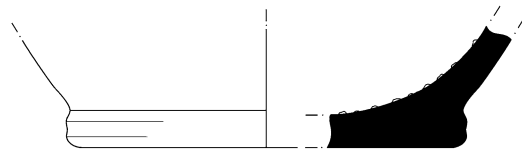
21



22



23



24

Figure 17. Pottery from trench N,  
20–24. Scale 1:3

Est. Diam. 0.255 m.  
Rim sherd. Fabric: pinkish buff. Dull black gloss inside and upper outside.  
Hellenistic

24 Mortar

Fig. 17

C-N-23-03. Trench N; basket 23 (SU 2).

Est. Diam. base 0.160 m.

Part of base and lower wall. Fabric: 5YR 6/8, soft, with fine sand inclusions;  
worn black grits embedded in floor.

Hellenistic

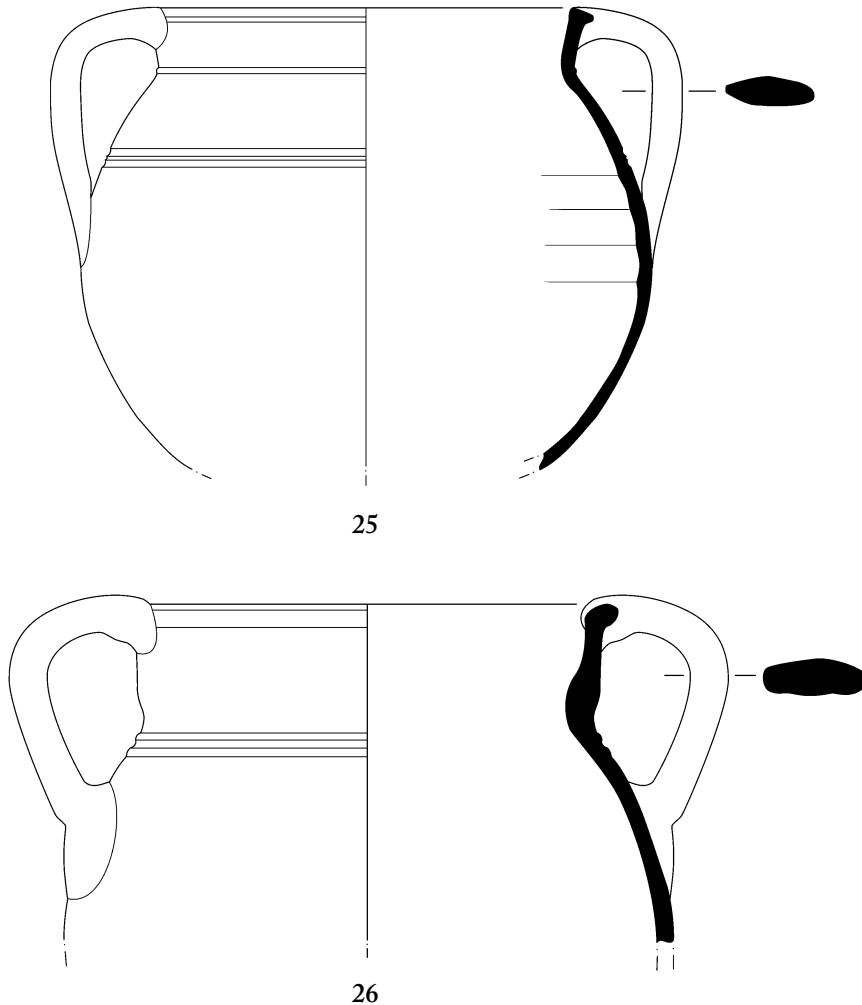


Figure 18. Pottery from trench N,  
25, 26. Scale 1:3

- 25 Chytra Fig. 18  
 C-N-46-11. Trench N; basket 46 (SU 2).  
 Est. Diam. body 0.223; Diam. rim 0.175 m.  
 Fragment preserving about one-third of vessel, from rim to lower wall, with  
 one handle. Fabric: 2.5YR 6/8 with large red inclusions. Unglossed.  
 Hellenistic
- 26 Chytra Fig. 18  
 C-N-43-01. Trench N; basket 43 (SU 2).  
 Est. Diam. rim 0.200; body 0.240 m.  
 Fragment preserving rim and upper body, with one handle. Fabric: light brown  
 with large inclusions. Traces of white paint on surface.  
 Hellenistic
- 27 Corinthian coin Fig. 19  
 MTL 298. Trench N; basket 28 (SU 2).  
 Wgt. 1.893 g.  
 Corinth; AE. Obverse: Pegasus flies left. Reverse: trident with controls [I] on  
 left, star on right. Price Group IV.  
 340–335 B.C.

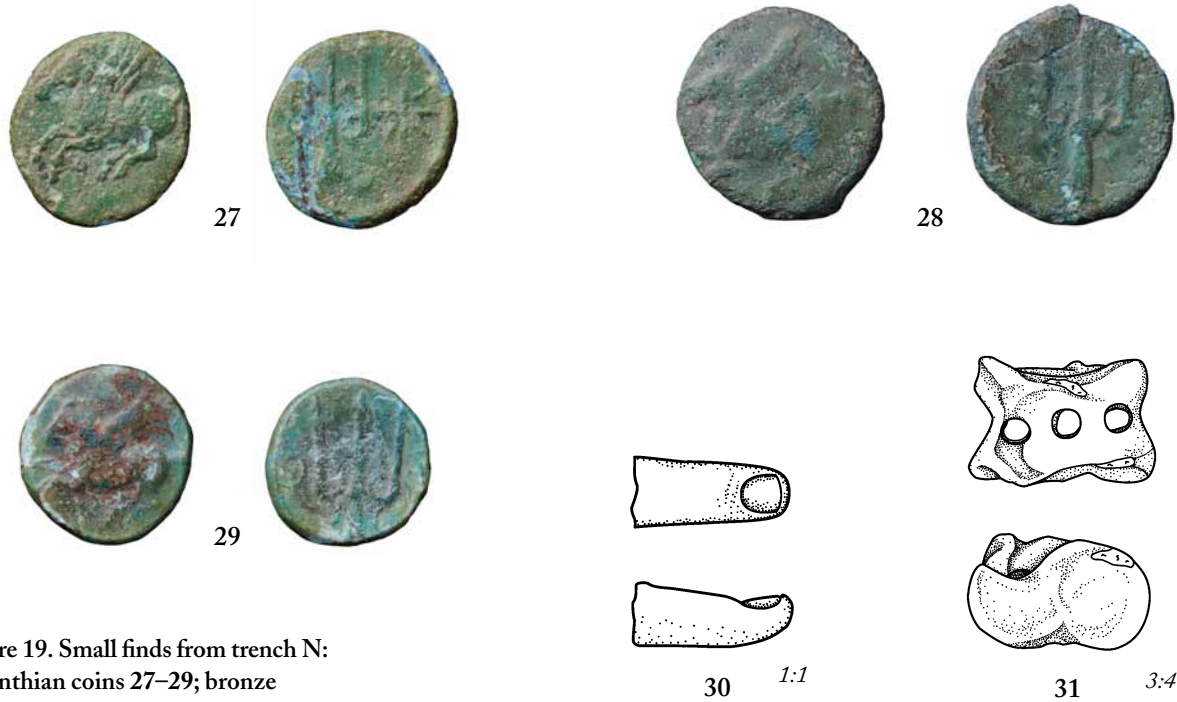


Figure 19. Small finds from trench N: Corinthian coins 27–29; bronze finger 30; bone gaming piece 31. Scale 2:1, except where indicated. Photos E. Ferguson

- 28 Corinthian coin Fig. 19  
 MTL 217. Trench N; basket 27 (SU 2).  
 Wgt. 1.750 g.  
 Corinth; AE. Obverse: Pegasus flies left. Reverse: trident with effaced field controls. Price Groups I–VII.  
 368–287 B.C.
- 29 Corinthian coin Fig. 19  
 MTL 342. Trench N; basket 33 (SU 2).  
 Wgt. 1.483 g.  
 Corinth; AE. Obverse: Pegasus flies left. Reverse: trident with controls N-in-circle on left, flying dove on right. Price Group VII.  
 303–287 B.C.
- 30 Bronze finger Fig. 19  
 MTL 297. Trench N; basket 28 (SU 2).  
 P.H. 0.021; p.W. 0.009 m.  
 Good condition. Bronze finger from a small sculpture, one-third to one-fourth life-size; fingernail perfectly visible, as well as crease between distal and middle phalanges.  
 Hellenistic
- 31 Bone gaming piece Fig. 19  
 MTL 385. Trench N; basket 43 (SU 2).  
 P.H. 0.020; p.W. 0.016; p.L. 0.032 m.  
 Excellent condition. Polished bone fragment from a sheep or goat with three holes drilled through horizontally. Probably an astragalus (anklebone) gaming piece.  
 Hellenistic

## INTERPRETATION

The original use of the corridor changed dramatically during the history of the sanctuary. This passageway was apparently converted into a convenient dumping ground sometime in the 3rd century B.C. We suggest that the discarded material likely came from the administrative building, and also perhaps from the nearby stoa.

The pottery from the lowest level of the corridor at Mt. Lykaion is black gloss of the 4th century B.C. and includes, as mentioned above, a rim fragment dated to the second quarter of the 4th century B.C. (3). This must represent the construction phase of the structure. The bulk of the pottery from the dumped fill is Hellenistic in date, and reflects over three centuries of use as a dumping ground. Of the four coins found in the fill of the corridor, three are of the Pegasos/trident type from Corinth (27–29), one of which dates to 340–335 B.C., the other two more generally to 368–287 and 303–287 B.C.<sup>30</sup> They may be associated with the use of the administrative building, if the fill is from this building. It must be assumed that in the clearing away of the later Hellenistic pottery, earlier material was also gathered. It is thus clear from the ceramic evidence found in the corridor that it was no longer used as a passageway by ca. 275–200 B.C.; rather, it became a convenient dumping ground for banqueting debris.

If the corridor originally served the purpose of bringing athletes from the vicinity of the administrative building to the athletic area to the north, it may have had a religious/ceremonial function as well. There are several parallels for such an open-air structure. The 5th-century B.C. stadia at Isthmia and Halieis both have an open-air entrance corridor that leads toward the stadium. At Isthmia the entrance corridor is located at the curved, northwest end of the early stadium, and takes the form of a ramp, approximately 11 m long and 1.90 m wide. Originally the ramp was flanked by two walls, only the lower courses of which remain. The entrance led from a point about 5 m south of the southwest corner of the Temple of Poseidon to the northern side of the stadium. The corridor angles down toward the stadium at a slope of approximately 5 degrees.<sup>31</sup> At Halieis, in the sanctuary of Apollo, an open-air entrance corridor, 8.8 m long and 2.85 m wide, extended from the outside of the eastern embankment of the stadium to the racecourse floor.<sup>32</sup>

There are several examples of vaults constructed as entrance passages into the Hellenistic stadia at Olympia, Nemea, and Epidauros.<sup>33</sup> At Olympia, the entranceway also relates to several buildings to the west of the western embankment of the stadium: the Echo Colonnade, the open hallway immediately to the east of the colonnade, and the building to the south of the colonnade, which Mallwitz suggests was a Sanctuary of Hestia.<sup>34</sup>

30. Orestes Zervos has kindly looked at these coins and has provided the information concerning their types and dates. He also suggested that 27 most likely belongs in Price's Group IV, while 28 is likely Price's Groups I–VII, and 29 is Price's Group VII. For the comparanda, see Price 1967.

31. *Isthmia* II, pp. 47–55; Gebhard and Hemans 1998, p. 36.

32. Romano 1993, pp. 34–35.

33. *Nemea* II, pp. 62–83; Boyd 1978; Romano 1981, pp. 231–234.

34. Mallwitz 1972, pp. 200–203. There could have been a passageway for athletes at Olympia from the area of

the sanctuary of Hestia along the open-air hallway to the east of the Echo Colonnade to the entrance vault that linked to the stadium. This may have been the route the athletes took if they were making a dedication to Hestia before competing.



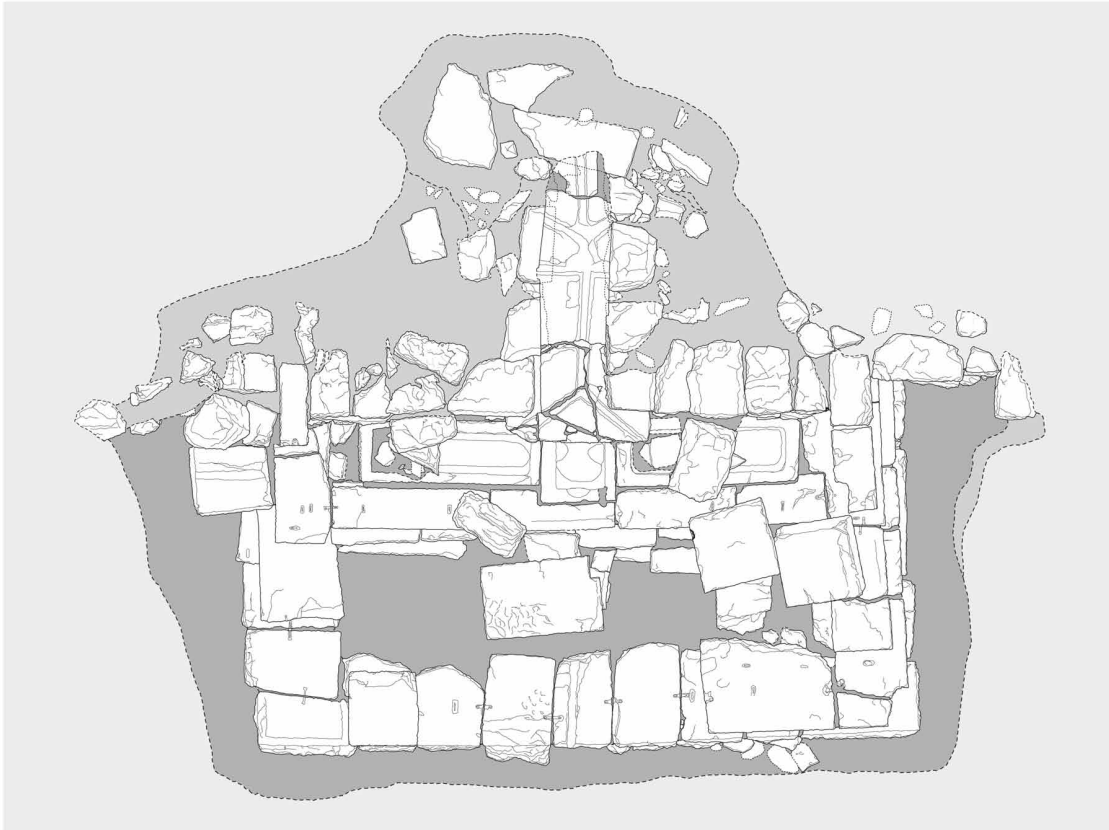


Figure 20. Actual-state plan of fountain house. X. Valle, P. Jordan, and J. Hong



0 1 2 3 4 m

## FOUNTAIN HOUSE

Kourouniotis discovered and excavated a fountain house approximately 20 m to the southwest of the administrative building.<sup>35</sup> In the subsequent century, this fountain house was almost completely covered by the earth of the hillside. One of our goals since 2007 has been to clear this structure, and to study and draw the remains.<sup>36</sup> The overall dimensions of the rectilinear limestone structure are  $6.97 \times 3.83$  m. There may have been several phases of construction (Figs. 20, 21). The structure includes an open stone water channel that is at least 3.0 m long, 0.80 m wide, and 0.12 m high, which emanates from the western hillside, probably from a subterranean spring. The stone water channel fed through to the back wall of the structure.<sup>37</sup> Three rectilinear stone basins in a north–south line received the water from the channel; two of them measure  $1.9 \times 0.65$  m, and the third  $0.95 \times 0.77$  m. Originally a low parapet wall separated the basins from the eastern entrance of the fountain. From the central water basin, the water flowed by means of a cutting, and later by means of a metal tube, toward the east and under what must have been the floor slabs of the eastern aspect of the fountain house. There is an exit flow for water from the front of the building to the east.

The principal eastern section of the fountain is built of regular rectilinear limestone blocks on top of three foundation courses, surmounted by a

35. Kourouniotis 1909, p. 198, fig. 21.

36. In the future we hope to protect the fountain house with a roof. We have dug temporary diversionary channels to reduce the amount of water that washes across the building from the hillside.

37. Two of the blocks used in the construction of the channel from the west have been identified as reused blocks, both showing base moldings.



Figure 21. Actual-state elevation of fountain house, looking west. X. Valle, P. Jordan, and J. Hong

course of orthostates. Originally there must have been floor slabs that covered this rectangular area, which is characterized by purple schist bedrock. Trench JJ (Fig. 3) was dug as a test trench within the large rectangular area at the building's southeast corner in an attempt to learn more about the nature of construction and its date. The purple schist bedrock was exposed beneath a hard-packed clay, without any sherds or finds of any kind; nor was any trace of hydraulic cement found.

Side orthostates are preserved to one course in places, and Kourouniotis suggested that the structure was roofed, since he found roof tiles in the fountain.<sup>38</sup> He further proposed to associate with this building a dentil block found nearby.<sup>39</sup> It is possible that the fountain house originally had a colonnade on the eastern facade.<sup>40</sup> The back wall of the fountain house and the sidewalls that extend to the north and the south are built of a rusticated polygonal masonry.

The second course of limestone foundation blocks on the east is joined with metal clamps, as are a number of the orthostate blocks of the sidewalls.

## INTERPRETATION

The fountain house, maintained by a natural spring in the mountainside, served as the principal source of water in the lower sanctuary, primarily for the structures to the south of the hippodrome and stadium, the administrative building, the stoa, and the seats. The basins at the fountain itself provided the access point for people, and the runoff toward the east from the fountain house served as another source for the areas below. Although we have as yet no firm date for the fountain house, its general architectural appearance resembles other buildings in the sanctuary, particularly the bath, characterized by a combination of rectangular ashlar and rusticated polygonal masonry, so it would be in keeping with a 4th-century B.C. date.

38. Kourouniotis 1909, pp. 198–199.

39. Kourouniotis 1909, pp. 198–199.

40. There is a somewhat similar fountain house known from Phigaleia. For a map of its location, see Cooper

and Myers 1981, p. 127, fig. 4; for discussion, see Glaser 1983, pp. 32–33, fig. 60. There is also a brief mention of the Lykaion fountain house in Glaser 1983, pp. 33–34, fig. 54.

## STOA

Kourouniotis excavated a portion of the stoa, but wrote only general comments about the building.<sup>41</sup> He mentioned that some rooms were intact toward the eastern end and that there was a large amount of Byzantine activity associated with the building, represented by coins and a small number of simple Christian tombs.

Since 2007 we have been clearing the stoa and excavating in areas untouched by previous excavations (in trenches K, L, M, O, CC, DD, EE, and FF). The overall dimensions of the building are 67.08 m long × 13.70 m wide (Figs. 3, 22, 23). We have found evidence of some burning and destruction, probably from several episodes. The eastern wall of the building has not survived, although some of the foundations are visible amid the rubble at the eastern end of the building. The back and western walls have survived in part, as have the front foundations (in different levels).<sup>42</sup> The back wall of the stoa is preserved to ca. 45 m in length and is characterized by ashlar limestone blocks. Kourouniotis reported that he found large mud bricks on top of orthostates.<sup>43</sup> The west wall is preserved to ca. 11 m in length and shows a combination of trapezoidal and polygonal masonry (Fig. 24). In addition to the back wall of the building, there is also a stone retaining wall that was built behind it, 1.44 m to the south, extending its entire length (ca. 45 m). It is characterized by polygonal and trapezoidal masonry, together with some large blocks of cut local stone at lower elevations, and with a horizontal string course at the top (Fig. 25). In trench O, between the back wall and the retaining wall, a portion of a terracotta water channel was found, running along the long axis of the stoa, and at the bottom of the trench, a stone foundation with a water channel cut into the north side was uncovered (Fig. 26).

The lowest course of the eastern end of the stoa is higher in elevation than the lowest course at the western end, due to the slope of the hillside. There may, therefore, have been several levels incorporated into the design of the structure, as reflected by differing floor levels found in various areas of the building. Between trenches CC and LII the elevation of the excavated floors differs by more than 1 m. Trench MII revealed two drums, 0.42 m in diameter, that may be from the columns of the interior colonnade of the stoa.

A number of worn and fragmentary Doric column capitals have been discovered in and around the vicinity of the stoa, but we have found no columns or column bases that can be definitely associated with them. The stoa was probably built in the Late Classical period, although there may have been an earlier phase, based on the appearance of what may be lower foundations at a slightly different orientation in trench O. Kourouniotis published a group photograph of architectural elements from the lower sanctuary that includes a number of Doric capitals, although it is unclear if these are from the stoa.<sup>44</sup>

41. Unfortunately, Kourouniotis did not publish any drawing that indicates the locations of the trenches he excavated in the stoa.

42. Coulton (1976, pp. 252–253)

mentions that the stoa faces southeast, but it is clear from the foundations that the stoa faces northwest.

43. Kourouniotis 1909, p. 187.

44. Kourouniotis 1909, fig. 22. He

associates these column capitals with the Temple of Pan, which he was unable to find. For further discussion on the Sanctuary of Pan, see p. 245, below.

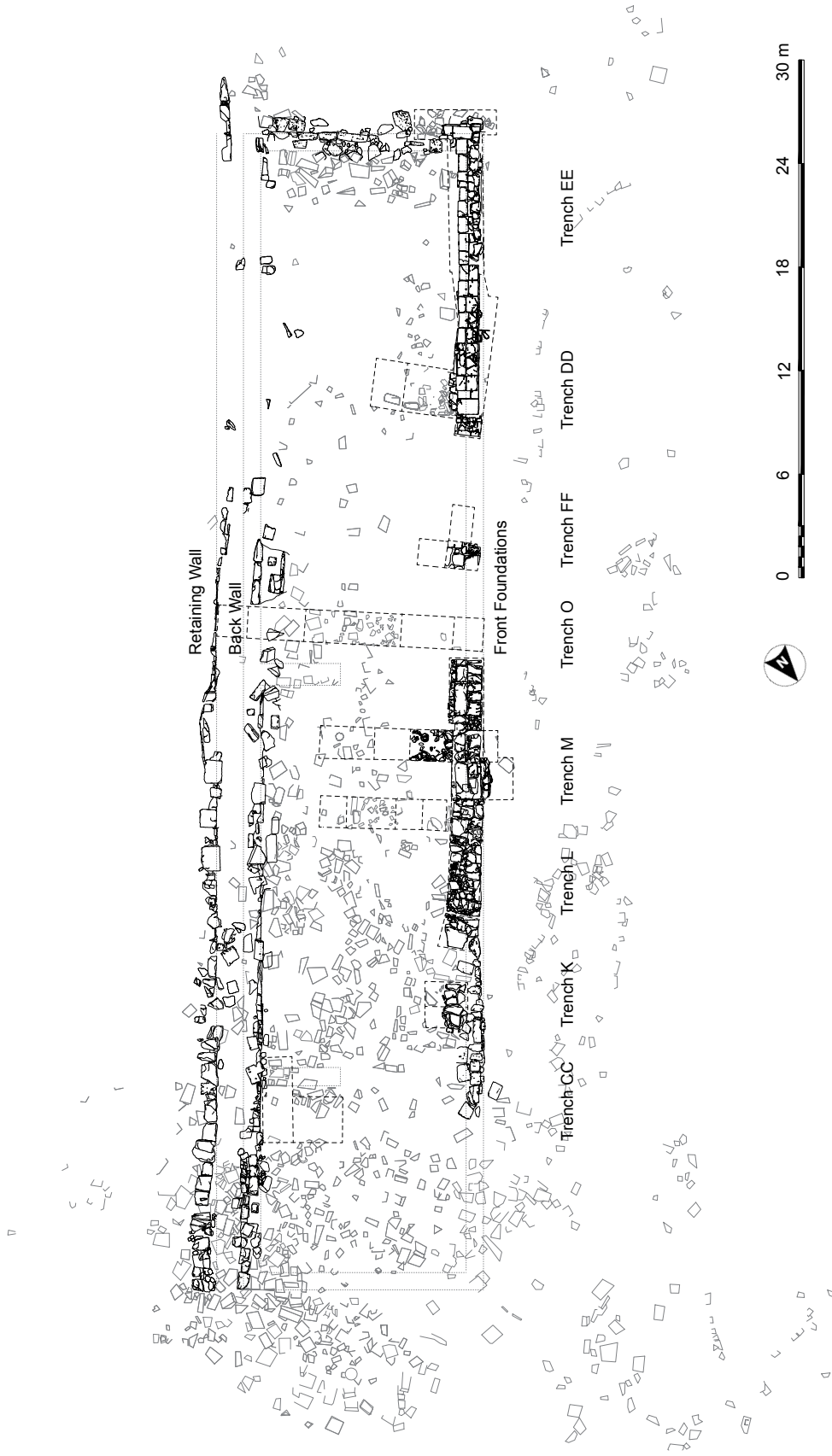


Figure 22. Actual-state plan of the stoa, including the location of the trenches. X. Valle, P. Jordan, G. Burkett, and P. Biswas

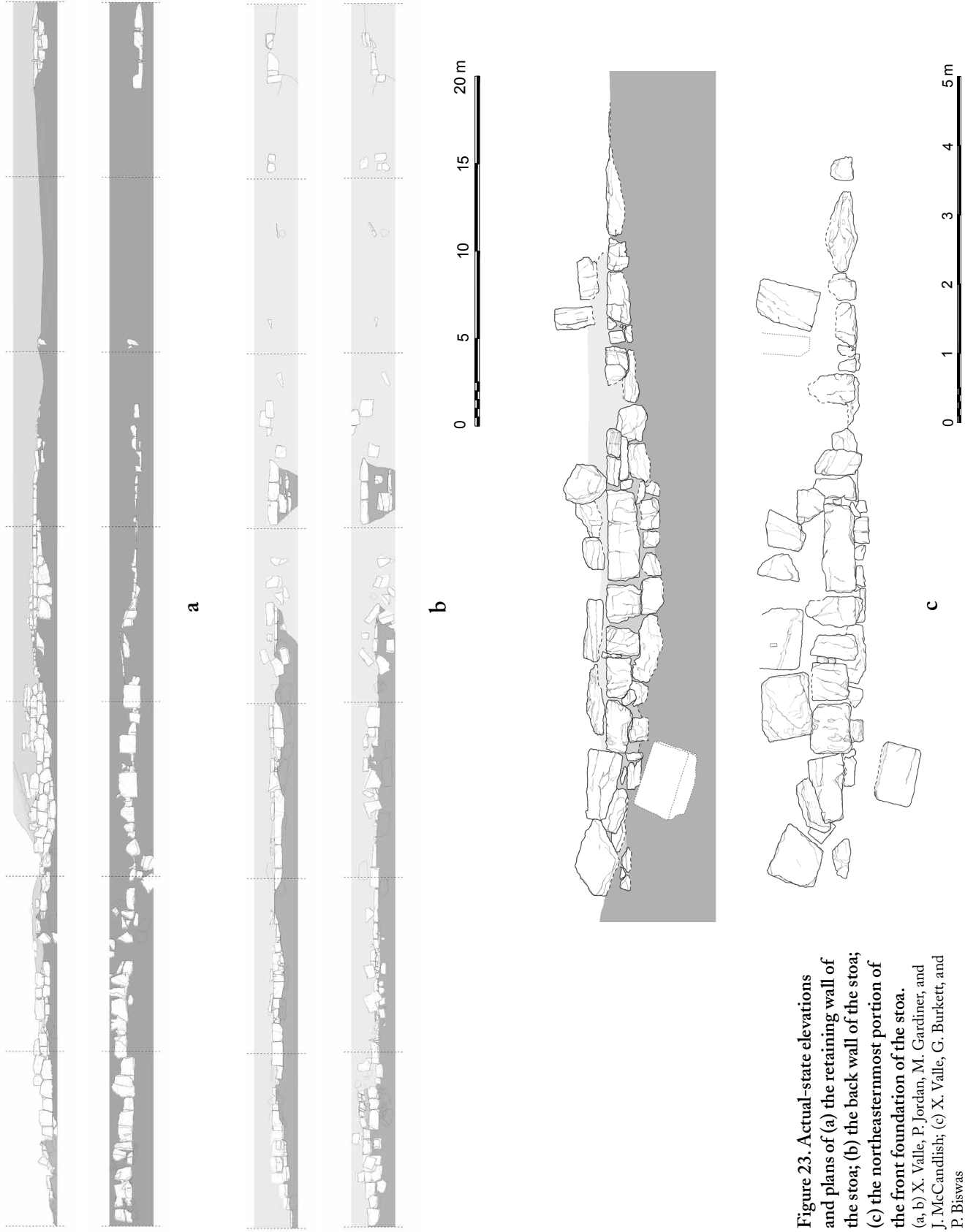


Figure 23. Actual-state elevations and plans of (a) the retaining wall of the stoa; (b) the back wall of the stoa; (c) the northeasternmost portion of the front foundation of the stoa. (a, b) X. Valle, P. Jordan, M. Gardiner, and J. McCandlish; (c) X. Valle, G. Burkert, and P. Biswas

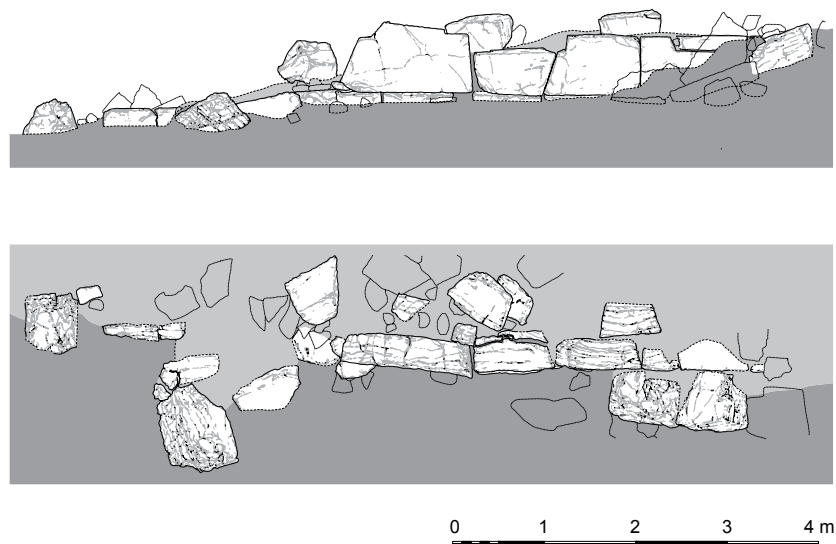


Figure 24. Actual-state elevation and plan of the west wall of the stoa.  
X. Valle and P. Jordan

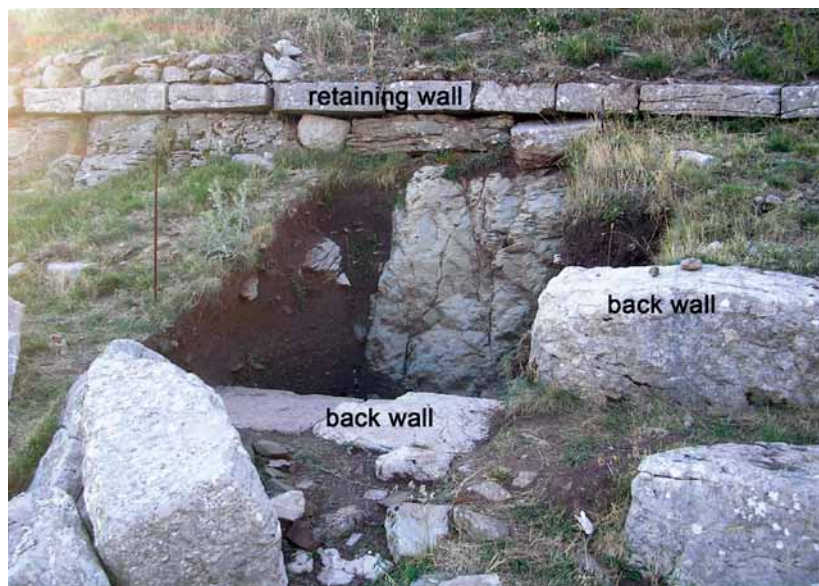


Figure 25. Retaining wall and back wall of the stoa, looking southeast.  
Photo D. G. Romano

A significant goal of the work thus far in the stoa has been to understand more fully the front (northern) foundation of the building, which is ca. 1.6 m wide and built of large, dressed fieldstones. The front foundation was exposed in trenches K, L, M, DD, and EE. Trench O (with a total length of 15.9 m) was dug across the full width of the building from the front foundation to the retaining wall of the stoa behind the rear wall. The structure continued to be used for some time, but presumably fell out of use before it was transformed into a burial ground in Byzantine times. Kourouniotis reports finding many Byzantine coins in the stoa (Justinian I and Justinian II, A.D. 527–578), as well as a few Christian tombs.<sup>45</sup>

45. Kourouniotis 1909, p. 188.

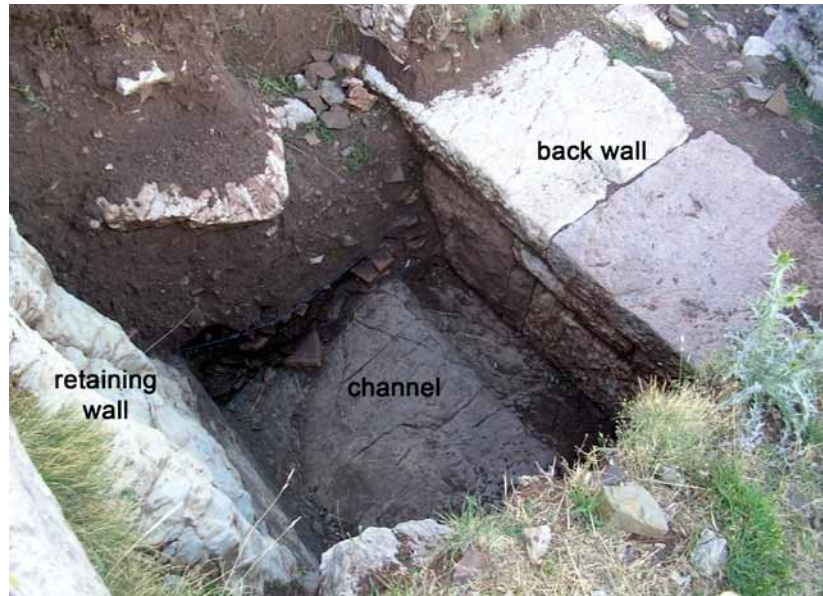


Figure 26. Channel between the retaining wall and the back wall of the stoa, looking northwest.  
Photo D. G. Romano

Many small finds were discovered in the various trenches of the stoa, and include such items as a “flesh hook,” iron nails, glass vessel fragments (e.g., 32), terracotta lamp fragments (33, 34),<sup>46</sup> and a Byzantine cross (35).<sup>47</sup> The small finds and ceramics have yet to be fully studied. The ceramics uncovered from the stoa include Middle to Late Byzantine pottery, such as an almost completely preserved jug (36), and other large vessels (37, 38).<sup>48</sup>

- 32 Glass vessel base Fig. 27  
 MTL 156. Stoa, trench O; basket 7.  
 P.H. 0.027; Diam. base 0.051; Th. 0.001 m.  
 Very good condition. Half of conical base and part of clear glass bowl, with lead band along edge of base.  
 4th–7th centuries A.D.
- 33 Terracotta lamp fragment Fig. 27  
 MTL 167. Stoa, trench O; basket 8.  
 P.W. 0.021; p.L. 0.046; Th. 0.006 m.  
 Good condition. Fabric: 7.5YR 8/6 reddish yellow. Fragment from shoulder of lamp with visible molding.  
 4th–5th centuries A.D.
- 34 Terracotta lamp fragment Fig. 27  
 MTL 168. Stoa, trench O; basket 8.  
 Max. p.W. 0.027; max. p.L. 0.042; Th. 0.007 m.  
 Good condition: fragment with molded decoration visible. Fabric: 5YR 6/6 reddish yellow. Fragment broken from lamp shoulder area, molded decoration of a leaf/vine.  
 4th–5th centuries A.D.
- 35 Bronze cross pendant Fig. 27  
 MTL 403. Stoa, trench MV; basket 5.  
 P.W. 0.016; p.L. 0.034; Th. 0.001.

46. Both lamp fragments 33 and 34 may date to the 4th–5th centuries A.D. See *Corinth* IV.2, pp. 118–121, nos. 1509, 1456, types XXXI and XXXII. Somewhat similar types of lamps are dated to the end of the 6th century A.D. by Slane and Sanders (2005, pp. 266–269).

47. For possible parallels, see *Corinth* XII, p. 258, nos. 2073, 2074, dating to the 10th–12th centuries A.D.

48. We are grateful to Joanita Vroom and Elli Tzavella, who reviewed the Byzantine ceramic assemblage from the site, and provided a preliminary analysis of these pieces (36–38) for this report.

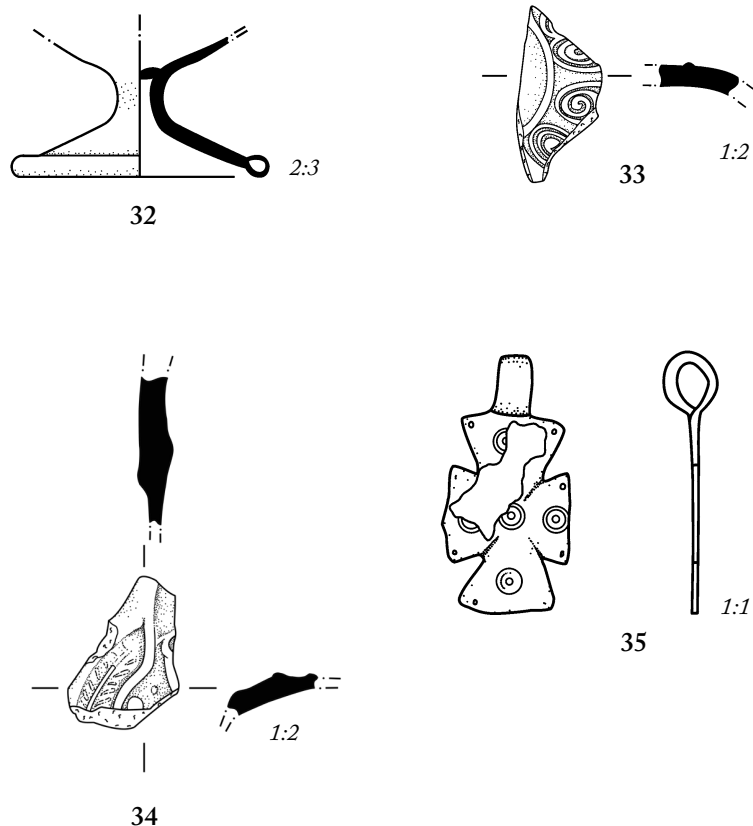


Figure 27. Small finds from the stoa: glass vessel base 32; terracotta lamps 33, 34; bronze cross pendant 35. Scale as indicated

Very good condition: complete, intact. Greek Orthodox Byzantine cross pendant, with a thick round suspension loop at top. Four flat, wedge-shaped parts, each stamped with concentric circles, plus a set of concentric circles in the middle of the cross.

10th–12th centuries A.D.

36 One-handled jug

Fig. 28

C-O-07-01. Stoa, trench O; basket 7.

P.H. 0.210; p.W. 0.120; Diam. rim 0.074, base 0.088 m.

Jug with trefoil lip and carination below everted rim, preserved almost complete (in two joining parts). Flat base with recessed bottom and angular transition. Thick vertical handle (oval, slightly grooved) from rim to top of belly. Fabric: 5YR 7/8 reddish yellow on exterior, semifine, medium-fired; medium to large white inclusions (limestone), a few angular reddish brown inclusions, a few fine silver mica and rare fine gold mica. Shallow grooves on shoulder.

Late Byzantine (ca. 13th–14th centuries A.D.)

37 Body sherd

Fig. 28

C-OII-07-01. Stoa, trench OII; basket 7.

P.H. 0.135; p.W. 0.145; Th. 0.085 m.

Body sherd from a large closed vessel. Fabric: 7.5YR 7/6 reddish yellow, with common medium white inclusions (limestone), some medium brownish red, common round small and medium black, and very rare tiny silver and small golden bits of mica. Six horizontal grooves visible above belly area. No painted decoration.

Middle Byzantine period (ca. 10th–12th centuries A.D.)



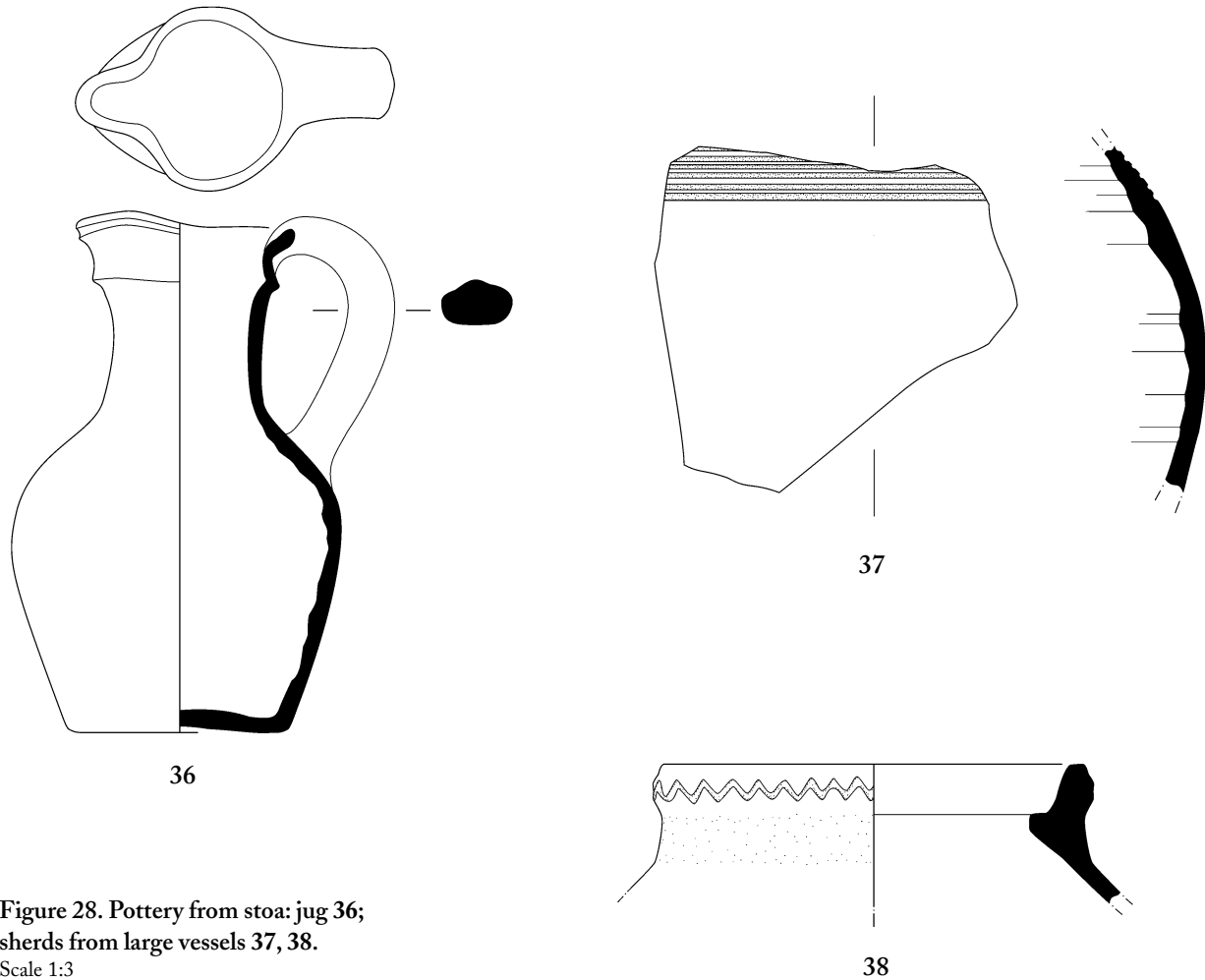


Figure 28. Pottery from stoa: jug 36; sherds from large vessels 37, 38. Scale 1:3

38 Storage vessel rim

Fig. 28

C-OII-08-01. Stoa, trench OII; basket 8.  
P.H. 0.565; p.W. 0.147; Diam. 0.170 m.

Vertical rim sherd, with a ledge inside for receiving a lid, from a large closed storage vessel. Fabric: 5YR 6/6 reddish yellow, medium to coarse, very hard-fired; with a few medium white (limestone), common angular reddish brown, and common medium round black inclusions. Impressed horizontal zigzag decoration below lip. No painted decoration.

Middle to Late Byzantine period(?)

HEMICIRCLE BUILDING

Kourouniotis reported the discovery and excavation of a building with a semicircular rear wall near the southwestern corner of the stoa (Fig. 3).<sup>49</sup> The overall dimensions of the structure were 6.8 × 5.8 m. He described the building as a rectangle on the outside with double steps on the front, and with the steps continuing on the east and west sides for 2.5 m. There were five prostyle Ionic columns on the front, north side of the building,

49. Kourouniotis 1909, p. 197.

and the back interior wall was a semicircle. The back of this so-called hemicycle building is in line with the back wall of the stoa nearby. Kourouniotis reported that he found a marble cornice to the building, as well as epistyle blocks and a tympanon.<sup>50</sup> No trace of the hemicycle building has been found at the site in the current campaigns, nor have any architectural members that could be definitely assigned to it been found in the sanctuary or nearby. Kourouniotis also described the discovery in this area of stone bases for two life-sized human statues without inscriptions, as well as a part of a marble stele with the inscription *Lykaionikon*.<sup>51</sup> None of these blocks have been uncovered in the current campaign.

Remote sensing was carried out over the identified site of the hemicycle building without any indication of foundations or a building footprint.<sup>52</sup>

## SEATS OR STEPS, TERRACES, AND MONUMENT AREA

Approximately 21 m to the north of the stoa and at a lower elevation are a series of roughly worked stones interpreted as seats or steps; these are preserved to a maximum of four rows, and extend for a total length of 39.09 m (Figs. 3, 29, 30). The orientation of the seats is in alignment with that of the stoa, although the seats curve slightly toward the north at their western end. There are several monument bases, none of which are inscribed, that are associated with the seats, mostly at the highest level, toward the west end.<sup>53</sup> Kourouniotis also excavated in this area and described the blocks, their construction, and their location. He stated that they were made of medium-sized stones, but not very well worked.<sup>54</sup> Kourouniotis imagined that they were used as seating for spectators to watch events taking place in the hippodrome.<sup>55</sup> We now know, however, that the south end of the hippodrome is further away from the seats than Kourouniotis realized, and the seats are in fact oriented in a different direction, more in keeping with the orientation of the stoa above it.

From our investigations we can determine that the irregularly shaped fieldstones that make up the seats have varying course heights, between ca. 0.15 and 0.32 m. The courses of the seats slope downhill slightly from west to east, and they have a subtle curve at the western end, where they turn gently toward the north. There is a rectilinear recess ca. 3.0 × 0.76 m built into the seats, toward the middle of its length, suggesting an area of significance (Fig. 31). This may indicate that a group of seats were reserved for special use, as at some Greek stadia.<sup>56</sup> Alternatively, these stones may represent a staircase that led through the line of seats and up toward the stoa to the south.

Several trenches were opened in the vicinity of the seats. To their south, we excavated trench I and the 39th Ephorate excavated trench J. To their north, we conducted extensive excavations in trench G. Trenches I and J produced huge numbers of roof tiles, presumably related to the collapse of the stoa roof on the terrace above. The material from the Ephorate's trenches is currently under study.

50. Kourouniotis 1909, p. 197.

51. Kourouniotis 1909, pp. 187–188.

52. On a hand-drawn sketch of the site of Mt. Lykaion made in 1956, Eugene Vanderpool indicated the location of the hemicycle building at the west end of the stoa, so it would appear that it may have been visible at that time.

53. Pausanias (8.38.5) mentions a portrait statue of a victor from the Lykaion Games, Astyanax, of the race of Arceas.

54. Kourouniotis 1909, p. 189.

55. Kourouniotis 1909, p. 189.

56. The design of this area shares some similarities with areas within a Greek stadium that are often referred to as “judges’ areas.” See Romano 1981, pp. 226–229.

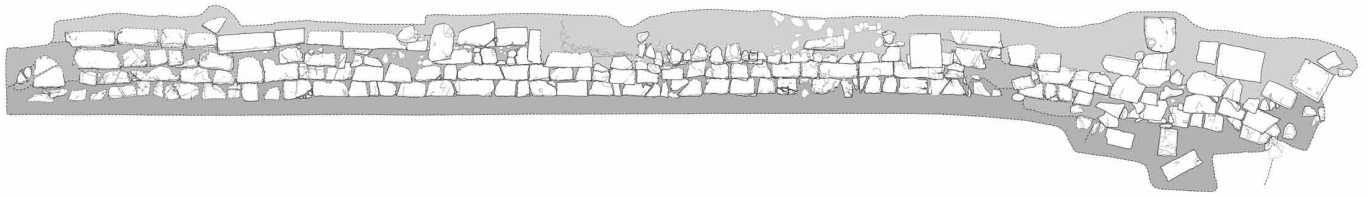


Figure 29. Actual-state plan of seats or steps, plan view. X. Valle, P. Jordan, O. Tarricone, and S. B. McKay



0 3 6 9 12 m



Figure 30. Seats or steps, looking southwest. Photo D. G. Romano

Trench G is located to the north of the seats and includes an extensive area of 39.25 m<sup>2</sup> excavated over several years (Figs. 3, 32). The objectives of working in this region were to determine the date of construction of the seats and to learn about the use of the space in front of them. Our excavations revealed that the seats were constructed on top of uneven ground. Beneath the central section of seats in trench G we discovered a layer of used roof tiles that had been laid down to level a hollow in the ground (Fig. 33). Below the layer of roof tiles, in the lowest levels of the trench (0.85 m below the bottom course of the seats) we uncovered evidence of burning and indications of earlier activity dating to the 7th century B.C.



**Figure 31. Rectilinear recess in the seats or steps, looking south.**  
Photo D. G. Romano



**Figure 32. Trench G, showing deep stratigraphy under seat or step blocks, looking south.** Photo D. G. Romano

The ground level to the north of the central section of the seats, immediately opposite the area of the rectilinear recess and dating to their primary period of use, was covered with a reddish gravel in an approximate area of 20.0 m<sup>2</sup>. At the northern edge of this gravel area, ca. 5.0 m to the north, was found a nearly complete 4th-century B.C. black-gloss oinochoe (see below) with an area of burning around it.<sup>57</sup> Three sections of a terracotta water channel were also uncovered, in situ, parallel to the seats and at a distance of ca. 2.0 m to the north (Fig. 34).

As the gravel surface is fairly coarse, it is unlikely that this area in front of the seats was used for the combat athletic events of wrestling or

57. We investigated this region based on the results of the remote-sensing work undertaken by Sarris. See Romano and Voyatzis 2014, appendix 1.

Figure 33. Trench G with tile packing, looking south. Photo K. McBride



Figure 34. Trench G with terracotta water channel, looking east. Photo K. McBride



58. A bronze object (44) from a horse trapping was found in the area in front of the seats.

pankration, or even boxing. Nor is the ground compatible with a running surface for footraces. Moreover, the length of this area in front of the seats (ca. 128 feet) falls well short of a typical 600-foot stadium; the presence of the water channel, however, suggests that the space was used as some kind of dromos. The seats and the monument bases, including those for stelai and statues, are likely to have been related to the agonistic events of the Lykaion Games, possibly used to view processions, or for the review of athletes or horses.<sup>58</sup> One wonders if horses could have gained access to this terrace, although it is clear that the dromos in front of the seats ends to the east before reaching the concentration of statue and monument bases. Trench GG, excavated in this vicinity in 2010, revealed only bedrock and

showed very clearly that this eastern end was not the location of a pathway or road (Fig. 3).<sup>59</sup>

The pottery from trench G remains to be studied, but a preliminary examination indicates early material below the seats, including the Corinthian kotyle base (39), probably of the third quarter of the 7th century B.C., which represents an earlier phase of the sanctuary than hitherto known.<sup>60</sup> In addition, there is a good amount of 4th-century B.C. material in layers contemporary with the use of the seats, such as the small black-gloss oinochoe (41).

Other finds from trench G include a bone seal (40), a cylinder from a snaffle bit for a horse's bridle (44), a terracotta plaque, and a very fine antefix plaque with palmette (45).<sup>61</sup> The fragment from the snaffle bit consists of a bronze cylinder with projections all around; there are numerous parallels for such objects from other sanctuary sites.<sup>62</sup> Two coins were found in front of the seats immediately adjacent to the seat blocks and in the primary use level. One of the coins, 43, is a posthumous bronze of Philip II, an issue of Miletos, minted in the time of Philip III, dating 320–319 B.C. The other, 42, is of a similar type, although precise details are not visible.<sup>63</sup>

Kourouniotis excavated another group of seats nearby, to the south of the hippodrome. He described these as a single row of blocks found 15 m from the larger seating area, and at a lower level.<sup>64</sup> Kourouniotis characterized these blocks as large, rectilinear, and of high-quality workmanship clearly different from the series at the higher elevation, which are composed of fieldstones. We have not yet discovered this second series of seats in our campaign, although it is possible that they are hidden by a modern agricultural retaining wall, which is now covered by vegetation.<sup>65</sup> Kourouniotis associated both of these seating areas with the hippodrome and the stadium because he thought that the hippodrome extended further to the south and to the west than our investigations have found to be the case.<sup>66</sup> In any event, this lower series of seats would have been closer to the location of the hippodrome, but still a great distance away, and may have been built for another purpose.

In an area approximately 15 m to the north of the 39 m long series of seats, and at a lower level, a single trench was excavated, trench F, where

59. Trench GG begins 26.31 m to the northeast of the northeast end of the seats and extends for 11 m. In trench Q, to the northeast of the seats, was found a limestone base with a lead fitting and fragment of a limestone hermaic pillar of a type common in Arcadia. Irene B. Romano is studying the corpus of some 30–35 monument bases at the site. All are of local limestone and once supported marble or bronze sculpture, stelai or hermaic pillars, and possibly bronze tripods or other votive and honorific monuments. Few of the monuments themselves survive. None of the bases are inscribed. Clusters of

monument bases are located in or around the seated area and in the stoa. Several were also found in the administrative building.

60. For a parallel, see *Corinth* VII.1, p. 49, no. 179, pl. 24.

61. For the antefix, see Themelis 1994, pp. 152–155, pls. 50–52. Themelis dates plain groups 2–6 from Messene to the late 4th and early 3rd centuries B.C.

62. For parallels, see Furtwängler 1890, no. 1250, pl. 66; *Perachora* I, p. 182, no. 24, pl. 82 (from the *temenos* of Hera Limenia); *Corinth* XII, p. 337, no. 2889, pl. 136.

63. Barbara Burrell is currently working on the coins for publication. We thank her, as well as Orestes Zervos, who also examined the coins.

64. Kourouniotis 1909, p. 189, fig. 6.

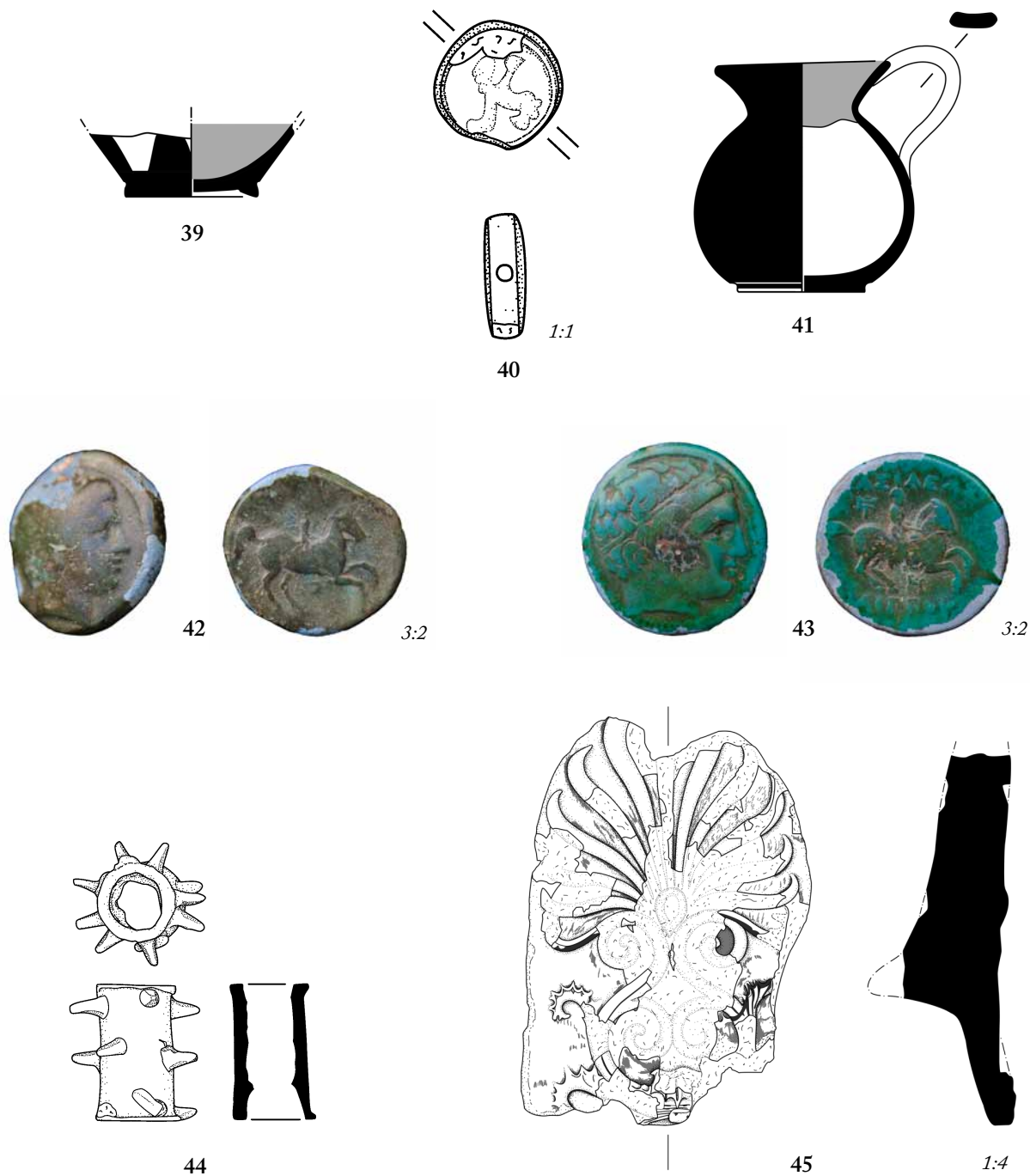
65. It is also a possibility that the well-cut seat blocks may have been removed during the last century, as have other examples of architectural blocks from the site.

66. The northeast extent of the seats is approximately 83 m to the south of the southernmost limit of the hippodrome.

we found no building foundations but uncovered successive ancient clay surfaces of dark green and brown clay with some pottery and tiles, suggesting that the area had been used in antiquity (Fig. 3).<sup>67</sup> In modern times, these two areas are separated by a modern farming terrace wall, mentioned above, and it is not clear what the ancient lay of the land would have been.

- 39 Corinthian kotyle base Fig. 35  
 C-G-44-01. Trench G; basket 44.  
 P.H. 0.021; Diam. base 0.041 m.  
 Base and low flaring ring foot of a kotyle. Fabric: 2.5Y 8/1 white. Surface worn; traces of decoration in brown at junction of foot and base preserved. Around circumference of the base, ghosts of rays rise in two zones.  
 Late Protocorinthian/Transitional (650–630 B.C.)
- 40 Bone seal Fig. 35  
 MTL 71. Trench G; basket 48.  
 Diam. 0.020; Th. 0.006 m.  
 Good condition: smooth surface with worn image and one scraped edge. Pierced horizontally with a small hole. Two incised lines around edge and image in intaglio, possibly a flower. Opposite side contains no apparent image.  
 7th century B.C.
- 41 Black-gloss oinochoe Fig. 35  
 C-G-16-01. Trench G; basket 16.  
 P.H. 0.069; p.W. 0.068; Diam. foot 0.040 m.  
 Small jug with disk foot, globular belly, high strap handle and flaring rim. Fabric: 7.5YR 8/6 reddish yellow. Black gloss covers entire exterior except for thin reserved line at bottom of foot.  
 4th century B.C.
- 42 Macedonian coin Fig. 35  
 MTL 354. Trench G; basket 123 (SU 2).  
 Wgt. 6.106 g.  
 Philip II of Macedon? Or Arrhidaios III? Obverse: head right with diadem(?) (or Helios[?]). Reverse: horseman galloping right, wreath(?) below; [ΦΙΛΙΠΠΟΥ]?  
 356–ca. 300 B.C.(?)
- 43 Macedonian coin Fig. 35  
 MTL 348. Trench G; basket 123 (SU 2).  
 Wgt. 5.356 g.  
 Philip III Arrhidaios; Miletos mint. Obverse: male head with diadem right. Reverse: horseman galloping right, double ax in field left; ΒΑΣΙΛΕΩΣ [ΦΙ]ΛΙΠΠΟΥ.  
 Ca. 323–319 B.C.
- 44 Bronze snaffle bit Fig. 35  
 MTL 41. Trench G; basket 13.  
 P.L. 0.041; Diam. (with points) 0.036; Diam. (without points) 0.025; Th. 0.005 m.  
 Good condition: almost complete, bronze points clipped, surface worn. Thick bronze cylinder, heavy with nine conical points attached.  
 Late Classical–Hellenistic

67. The location of this trench as a potential area of interest was indicated by the remote-sensing work of Sarris; see Romano and Voyatzis 2014, appendix 1.



## 45 Terracotta antefix

MTL 221. Trench G; basket 76.

P.H. 0.242; p.W. 0.183; Th. 0.062 m.

Good condition: nearly complete antefix with five joining fragments. Fabric: 7.5YR 8/4 pink; slip: 10YR 8/4 very pale brown. Molded palmette ornament with brown slipped surface visible on various leaves.

Late 4th/early 3rd century B.C.

## Fig. 35

Figure 35. Small finds from trench G: Corinthian kotyle 39; bone seal 40; black-gloss oinochoe 41; Macedonian coins 42, 43; bronze snaffle bit 44; terracotta antefix 45. Scale 1:2, except where indicated. Photos E. Ferguson



## INTERPRETATION

In addition to their function as seats or steps, the upper series of blocks (39 m long) also served as a retaining wall for the terrace immediately above. Between the seats and the stoa there may have been an east–west passage-way toward the fountain and the south side of the administrative building where the only door was located. The subtle curve of the seats toward their western end suggests some focus of attention in front, perhaps a theatral or athletic area. There are a great number of blocks on the outside of the eastern facade of the administrative building, suggesting that there may have been another monument or structure in this area. A parallel for the theatral area of the seats, or steps, may exist at Oropos, where there are three preserved rows of stones set in a curve; according to an inscription, these were used to accommodate spectators for sacrifices performed on a nearby altar.<sup>68</sup> The date of the construction of the seats at Mt. Lykaion appears to be in the 4th century B.C., and certainly before the two Macedonian coins from Miletos were dropped on the terrace in front of them.

## SANCTUARY OF PAN

One of the objectives of our project has been to find the sanctuary of Pan that Pausanias (8.38.5) described as being located in a grove of trees near the hippodrome and stadium. He also noted statue bases nearby with no statues on them.<sup>69</sup> In his search for the sanctuary, Kourouniotis dug a narrow diagonal trench between the hemicycle building toward the fountain. He found no trace of a temple except for four Doric capitals, near the hemicycle building, which he associated with a Temple of Pan.<sup>70</sup> As Pausanias uses the word *ιερόν* (sanctuary), it is possible that Pan's cult place was a fairly modest shrine, conceivably without a temple.<sup>71</sup> We have not yet uncovered any evidence for this sanctuary.

## HIPPODROME AND STADIUM

The hippodrome at Mt. Lykaion is the only example in the Greek world that can be seen and measured. The shape of the facility is still recognizable in the mountain meadow at an elevation of ca. 1,165 masl (ca. 217 m lower in elevation than the altar). It is a unique example of a structure that was fairly common in ancient Greek sanctuaries and cities, but is known only from literary texts.<sup>72</sup> Its overall measurement is approximately 260 × 102 m at its greatest extents (Fig. 4).<sup>73</sup> In the modern day, portions of the area

68. Petrakos 1974, pp. 48–49.

69. Jost (1985, pp. 460–461) discusses the evidence for Pan at Mt. Lykaion, indicating that Pan was likely “born” there in Greek mythology.

70. Kourouniotis 1909, pp. 199–200, fig. 22. Although there is no scale indicated in the photograph, the capitals

appear to be fairly large.

71. See Romano and Voyatzis 2014, pp. 571–573, for a discussion of the ancient references.

72. For the best description of a Greek hippodrome, see Pausanias's account (6.20.10–19) of the one at Olympia. There are many examples of

the Roman circus, which is descended from the Greek hippodrome, from all over the Roman world; see Humphrey 1986, pp. 1–24.

73. These revised measurements are based on electronic total station survey, together with the results of the excavation trenches.

of the hippodrome are still used as agricultural fields, including artificial farming terraces that were created decades ago; the southern end has been the site of the Modern Lykaion Games since 1973.<sup>74</sup>

The shape of the hippodrome is irregular, with an oblique side on the southwest end (Fig. 4), where it meets a low terrace. To the north, west, and east sides, the available space for the hippodrome width is limited by low hills. Several early travelers to Mt. Lykaion recorded architectural elements of the hippodrome, including parts of the eastern retaining wall and a nearby bath facility to the northeast.<sup>75</sup> Certain portions of the ancient hippodrome received earth fill, while in other areas the surface comes very close to the stone bedrock. In addition, parts of the area were artificially terraced in the modern day for agricultural purposes. The hippodrome is characterized by a tongue of land that projects to the north, and although there is no northern retaining wall in modern times, there are remains of an ancient one on the east side.

Based on Kourouniotis's investigations, as well as our topographical and archaeological work at the site, it appears that the hippodrome and stadium were constructed as two parts of a whole, with the dromos (race-course) of the stadium being found within the limits of the hippodrome. This is an architectural design unique not only in mainland Greece, but also in the entire ancient world.<sup>76</sup> Kourouniotis found individual architectural features of both the hippodrome and the stadium, many of which have been rediscovered and documented in our current work.

With respect to the stadium, Kourouniotis did not specify how many starting-line blocks he found, but he mentioned them in his text and illustrated three of them.<sup>77</sup> In 1956 Eugene Vanderpool made a simple plan of the lower sanctuary and included the location of seven starting-line blocks on the surface of the agricultural fields in the middle of the hippodrome. Several of these blocks were situated roughly in a line toward the center of the hippodrome. During the 1996 computerized topographical survey of the site conducted by Romano, four starting-line blocks were found roughly in a line on the hippodrome surface. Others were discovered on the eastern embankment of the hippodrome near the retaining wall.<sup>78</sup> In our current campaign, we have documented a total of seven stone starting-line blocks, all of which have two parallel grooves on one side of the block. Some of the blocks also have postholes (Fig. 36). The total length of the preserved starting-line blocks is 8.43 m.

74. A modern oval track has been constructed of crushed stone above the level of the ancient hippodrome, and with a different orientation. The Modern Lykaion Games have been organized and instituted by the Cultural Society of the village of Ano Karyes, the *Sylogos of Lykaion Zeus*.

75. E.g., Blouet 1831, pl. 33; Curtius 1851, pl. 7.

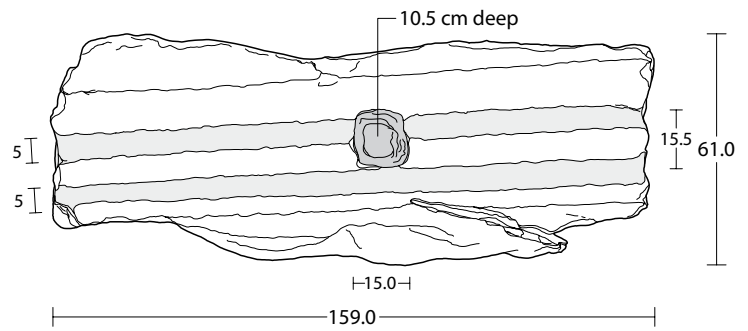
76. One should note that the hippodrome at Mt. Lykaion is the first in the

Greek world to undergo survey and excavation, so there are no comparative data. There are also no literary references to a Greek stadium being found inside a hippodrome. It is known, however, that the *Circus Maximus* in Rome was used for Greek athletic events at certain times, possibly for the first time in 217 B.C.; see Crowther 2004. Harris (1972, p. 163) has suggested that the hippodrome surface at Mt. Lykaion was used for human athletic events after the equestrian

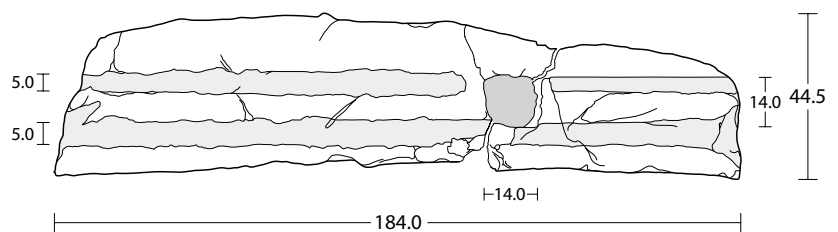
events were no longer practiced.

77. Kourouniotis 1909, pp. 190–191, fig. 8.

78. Some of the starting-line blocks have been moved since 1996 due to the preparations for the Modern Lykaion Games held on the site of the hippodrome; see Romano 2005, pp. 387–388. During the 2011 season, we moved many of the athletic blocks to a common location at the south end of the hippodrome.



A025



A103



Figure 36. Stone starting-line blocks A025 and A103, the latter drawn in situ. Scale 1:20. X. Valle, O. Tarricone, and P. Biswas

Greek stadia typically had starting lines at both ends of the dromos.<sup>79</sup> Kourouniotis located the position of one starting line at Mt. Lykaion, but the other end has yet to be discovered. The low embankment bordering the hippodrome on the southwest side is oblique to the axis of the dromos and, depending on the original width of the dromos, probably would have intersected it beginning at approximately 138 m from the location of the starting-line blocks (Fig. 4). Archaeological evidence from trench D, presented below (pp. 252–253), suggests that the racecourse floor continued, at least on the eastern side of the dromos, to 145 m, perhaps as the area of overrun for the athletes. The length of the dromos of the stadium, between starting lines, would need to be somewhat less than this distance.<sup>80</sup>

With respect to the architectural elements of the hippodrome, Kourouniotis found evidence for two stone turning posts (*nyssai*) on the surface of the field of the hippodrome, as well as two circular stone bases on which the turning posts originally would have stood. We have rediscovered most of the component parts of both turning posts and one circular base (Figs. 37, 38), so that it is now possible to reconstruct what the turning posts looked like. Each post consisted of three superimposed unfluted limestone drums tapering upward for a total height, including the base, of 2.94 m.

In addition, as noted by the early travelers, there was evidence of a stone retaining wall on the east side of the hippodrome, in its northern half.<sup>81</sup> Kourouniotis also discovered a number of large stone basins in different parts of the hippodrome.<sup>82</sup> Neither Kourouniotis nor our current team (including Sarris's geophysical team) has found any evidence for a central barrier wall running parallel to the long sides of the hippodrome. This kind of wall was a common feature of the Roman circus, preventing head-on collisions of competing chariot teams, but no existing literary source for Greek hippodromes mentions such a barrier wall.<sup>83</sup>

A series of trenches has been dug in the area of the hippodrome and stadium in search of evidence for the level and composition of the original floor surfaces for each, as well as information about their relative dates. During the 2006 season, four trenches (A, B, C, and D) were opened in the southern area of the hippodrome (Fig. 4). The trenches yielded material primarily of the Classical and Hellenistic periods.<sup>84</sup> Kourouniotis did not mention any finds from this region in his publications.

Trench A (2 × 4 m; Figs. 4, 39) was opened along the southeastern edge of the hippodrome. In the lowest levels, we may have found the

79. Romano 1993, p. 17.

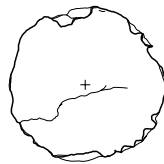
80. It should be noted that this would be a short distance for the dromos of a stadium.

81. Blouet 1831, pl. 33.

82. One such stone basin was found in an area to the west of the hippodrome during the preparations for the Modern Lykaion Games in 2005. This is an area to the west of the terrace that borders the hippodrome on the southwest side. The diameter of the basin is 0.81 m.

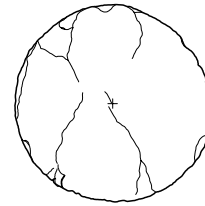
83. Pausanias (6.20.7–20), in his description of the hippodrome at Olympia, does say, however, that one side of the hippodrome is longer than the other, which is also true at Mt. Lykaion, where the eastern long side of the hippodrome is longer than the western long side. Further evidence for the absence of a barrier wall comes from Sophocles' description (*El.* 699–761) of a chariot race that involves a head-on crash, with no mention of a wall.

84. Because of the use of the ancient hippodrome and stadium floor for the Modern Lykaion Games since 1973, a considerable amount of modern fill is brought in to raise the level of the modern track surface above the agricultural field every four years. This has meant that the ancient surface of the stadium and hippodrome in the southern area of the hippodrome is now under approximately 1.8 m of fill, much of which has been deposited since 1973.



41.0

A024



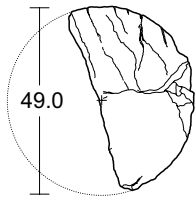
52.0

A026

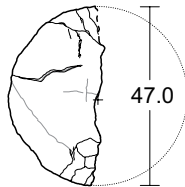


TOP

BOTTOM



49.0



47.0

A135



TOP

BOTTOM



38.5



41.0

A136

Figure 37. Hippodrome turning-post stone drums A024, A026, A135, and A136. Scale 1:20. X. Valle, O. Tarricone, and P. Biswas

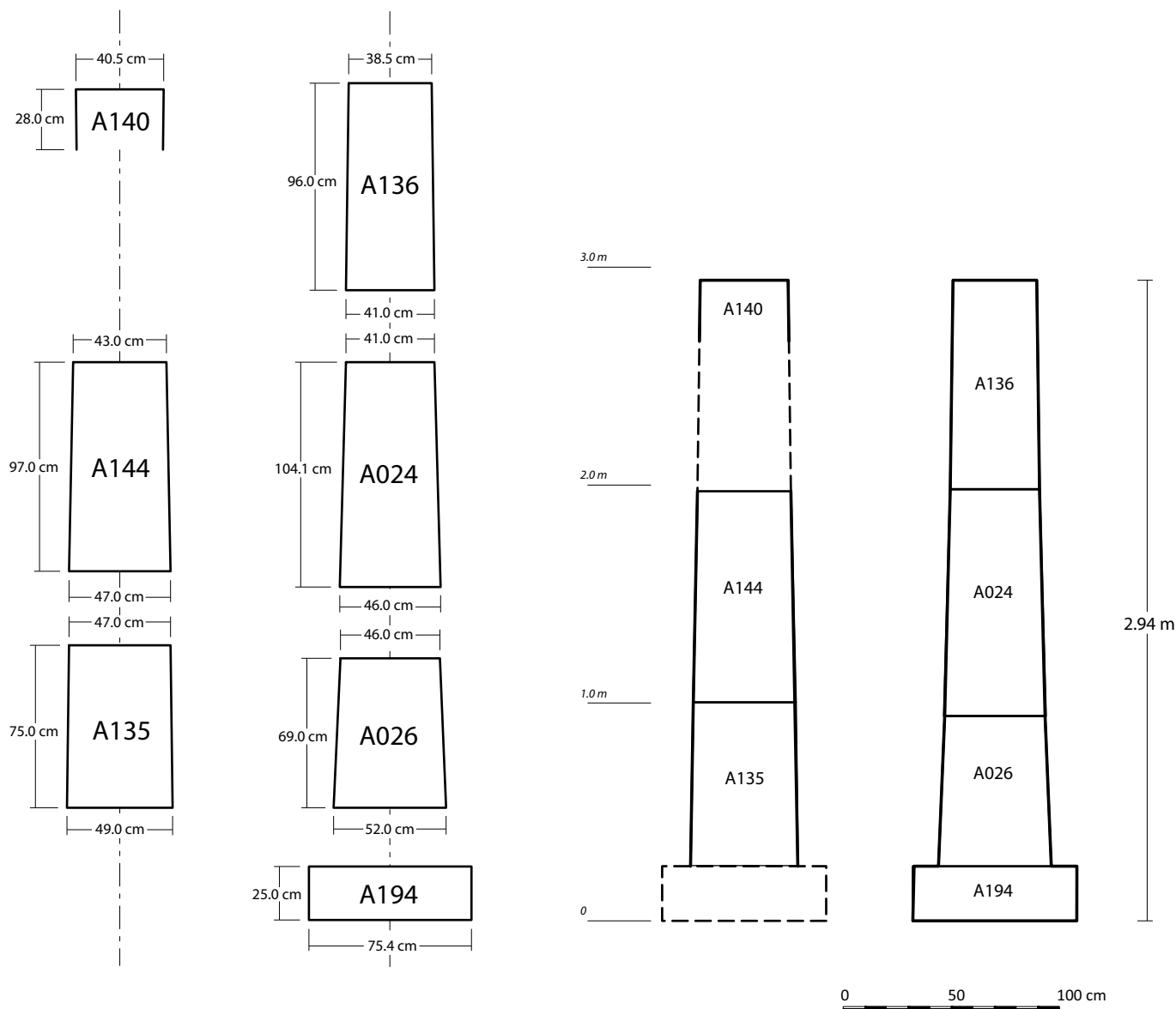


Figure 38. Hippodrome turning posts (a) extant blocks; (b) reconstruction. Scale 1:30. X. Valle, O. Tarricone, and P. Biswas

edge of a floor level of the ancient hippodrome. The floor (SU 8) was characterized by a light brown claylike soil together with large chunks of local black limestone gravel. In this trench we uncovered a fair number of pottery sherds, mostly of coarse ware, but also a small amount of fine ware. One diagnostic piece of the 3rd–2nd centuries B.C. (46) was found on the floor level, ca. 1.6 m below modern ground level.<sup>85</sup> The elevation of this probable floor surface (1,165.66 masl) corresponds well with the elevation of the in situ stadium starting-line block some 178 m to the northwest (1,165.78 masl), suggesting that the racecourse floor for the hippodrome and the stadium were likely at the same elevation.

Trench B (2 × 4 m; Figs. 4, 40) was situated on a terrace (entire length ca. 150 m) toward the southwestern part of the hippodrome. Since the northeastern edge of this terrace shares its orientation with the long side

85. It is a rim and body from a small bowl. See the catalogue entry below for further details.



**Figure 39. Trench A, looking west.**  
Photo A. Stoimenoff

86. The relative elevations of the hippodrome and terrace should be further explained. As in modern times, it appears that the ancient terrace was ca. 1.5–2.0 m above the level of the ancient hippodrome floor. Similarly, the modern terrace is at approximately the same elevation as the surface of the modern track floor.

87. Susan Mentzer is undertaking micromorphological studies of soil samples from many of the trenches in the lower sanctuary.

of the track for the Modern Lykaion Games (but with a different orientation from the ancient hippodrome), it was not initially clear if the terrace was ancient or modern. In the upper levels of this trench a great deal of modern material was found, but beginning approximately 1.8 m below the ground surface was a series of clay layers (SU 7–10).<sup>86</sup> In particular, two clay surfaces, separated by a thin layer, were documented. The two surfaces are characterized by very smooth, dense clay levels, although the lower one had numerous pieces of gravel embedded in it. The question of the original use of the two clay surfaces cannot be answered with certainty at this stage. We can, however, state that the terrace was certainly ancient and requires further investigation.<sup>87</sup>

There are some diagnostic finds from these surfaces. A small number of tile and iron fragments were found, and an obsidian blade was uncovered in the lower clay surface. Overall, the trench yielded a fair amount of ancient material, including fine pottery sherds, an iron ax (47), and other metal objects. The pottery sherds remain to be studied fully, but include 5th- and 4th-century B.C. black-gloss ware (48).



Figure 40. Trench B, showing two clay surfaces, looking west. Photo D. Bloy



Figure 41. Trench C, showing at modern ground level the gravel track surface of the Modern Lykaion Games, looking north. Photo A. Belis

Trench C (2 × 4 m; Figs. 4, 41), situated toward the southern end of the modern track surface, was opened in order to learn more about the region thought to be the southern end of the ancient hippodrome. Bedrock was clearly reached at a high level in the southernmost part of the trench. From this area (SU 3) were found several coins, a small bronze leaf, possibly from a bronze crown (49), and sherds of fine black-gloss pottery. One of the coins has been identified as a Roman provincial coin.<sup>88</sup> The bottom of SU 5 (1,165.78 masl) was at approximately the same level as the in situ starting-line block, ca. 177 m to the northwest, as well as the possible hippodrome floor from trench A.

Trench D (2 × 4 m; Figs. 4, 42) was opened ca. 44 m northwest of trench C, where we hoped to reveal the floor surfaces of both the stadium and the hippodrome. Using the location of the starting-line blocks on

88. MTL 013 has been identified by Barbara Burrell as a Roman or Roman provincial coin of the period A.D. 100–260.



Figure 42. Trench D, showing two manmade clay levels likely related to the racecourse floor of the dromos of the stadium, looking west. Photo H. Kelly



the hippodrome floor as a possible indicator of the northern extent of the dromos of the stadium, we strategically located trench D in this area. The trench was dug at a distance of 145 m from the starting-line blocks. At an elevation of 1,166.35–1,165.74 masl, two manmade clay layers were found side by side, on a roughly north–south axis. One was reddish in color and the other was brown. These colored clays are likely to be related to the racecourse floor of the dromos, and since they continue into the southern scarp of trench D, we can be assured that the track surface continues further to the south toward the low terrace and may correspond to the overrun area of the racecourse. This elevation measurement (ca. 1,165 masl), since it is found at three different points (in trenches A, C, and D) and as it corresponds with the level of the starting-line blocks further north, confirms the ancient floor level of the hippodrome–stadium facility. We uncovered a small amount of ancient pottery and tiles in the lowest levels of trench D; nearly all of it was coarse ware, with a small amount of fine ware.

During the 2007 season, trench E (2 × 4 m; Fig. 4) was dug approximately 45 m to the northwest of trench B on the same terrace to the west of the hippodrome. The clay surfaces that were discovered in trench E were not as clear as in trench B, but there was a similar change in the stratigraphy at approximately the same elevation ca. 1,168 masl, suggesting that the clay surface may have existed at this location as well.

During the 2009 season, we excavated three additional trenches in the area of the hippodrome: trenches R, S, and BB (Fig. 4). Trench R (2 × 4 m) was dug on a modern agricultural terrace toward the southern end and on a lower level. The beginning height of the trench was lower than the ancient floor levels found in trenches A and D. Within trench R, a stratum was found that showed a high concentration of cobbled limestone and tiles in a mixture, likely representing a deep foundation level of the hippodrome (Fig. 43).<sup>89</sup> It is conceivable that the builders of the hippodrome were faced with the task of filling in low levels of the area. Although no ceramics were uncovered here, pottery and tiles were found in the two levels immediately above the layer of cobbled stones. It is possible that these three levels combined may have been a part of the hippodrome leveling and construction

89. The top elevation of this level is 1,164.073 masl.



**Figure 43.** Level in trench R showing cobbled stones and area underneath the hippodrome, looking north. Photo J. R. Son

process. Below the level of the cobbled stones and tiles was found a concentration of animal bone fragments and charcoal.

Trench S (2 × 4 m; Fig. 4) was dug as a result of the 2007 geophysical survey. According to the geophysical report, the area responded strongly to a magnetic prospection device that is capable of detecting anomalies in the subsurface magnetic field at depths between 1.0 and 1.5 m. Based on the exceptionally high magnetic gradient values, Sarris raised the possibility that the area “may be related to residues of extremely burned structural remains.”<sup>90</sup> Trench S is in a centrally located position in the hippodrome floor, approximately equidistant from the east–west and the north–south sides of the hippodrome. A deep trench was dug but yielded few finds, until we reached a low level (1,162.16 masl, approximately 3 m below the hippodrome floor in trenches A and D), where we discovered a heavy concentration of charcoal and animal bone surrounding a large, amorphous area of orange–red earth (Fig. 44).<sup>91</sup> No pottery, tiles, or other objects were found with this material. The lowest level of pottery and tile was found above at an elevation of 1,162.69 masl.

The location of trench BB (2 × 4 m; Fig. 4) was also chosen as a result of Sarris’s geophysical survey, which found an anomaly roughly equidistant between the east and west limits of the hippodrome, toward its northern end. In our excavations we found no evidence to corroborate an anomaly, nor did we find any artifacts. We concluded that this northern end of the hippodrome had been washed away.

During the 2010 season, one additional trench was dug in the hippodrome surface, trench HH (2 × 20 m; Figs. 4, 45). It was situated within the area of the gravel track that was created for the Modern Lykaion Games at the southern end of the ancient hippodrome. Although there were no artifacts from this deep trench, we discovered several interesting features about the hippodrome, including its southern limit, composed of silty green clay with streaks of brown, orange, and lighter green. It begins at a higher level to the south and drops down to the north, giving the appearance of a kind of clay barrier at its southern end (Figs. 45, 46). Some portion of this same silty green clay was also found in trench C (p. 252, above). The

90. See Sarris’s report in Romano and Voyatzis 2014, appendix 1.

91. Calibrated C<sup>14</sup> dating for the charcoal found in trench S indicates a date of 670 ± 127 B.C. The C<sup>14</sup> testing was undertaken as a part of NSF grant no. 1125523.



Figure 44. Trench S, showing an area of red earth, looking northeast. Photo J. R. Son

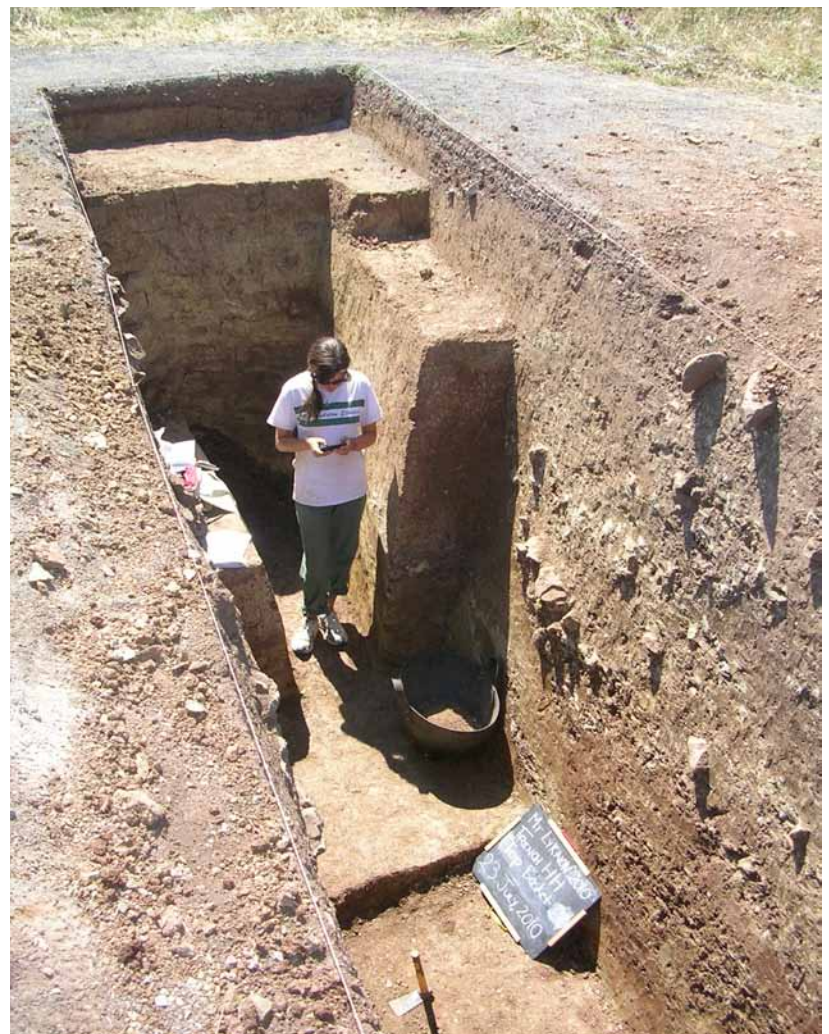


Figure 45. Trench HH, showing deep stratigraphy at its southern end, looking south. Photo D. G. Romano

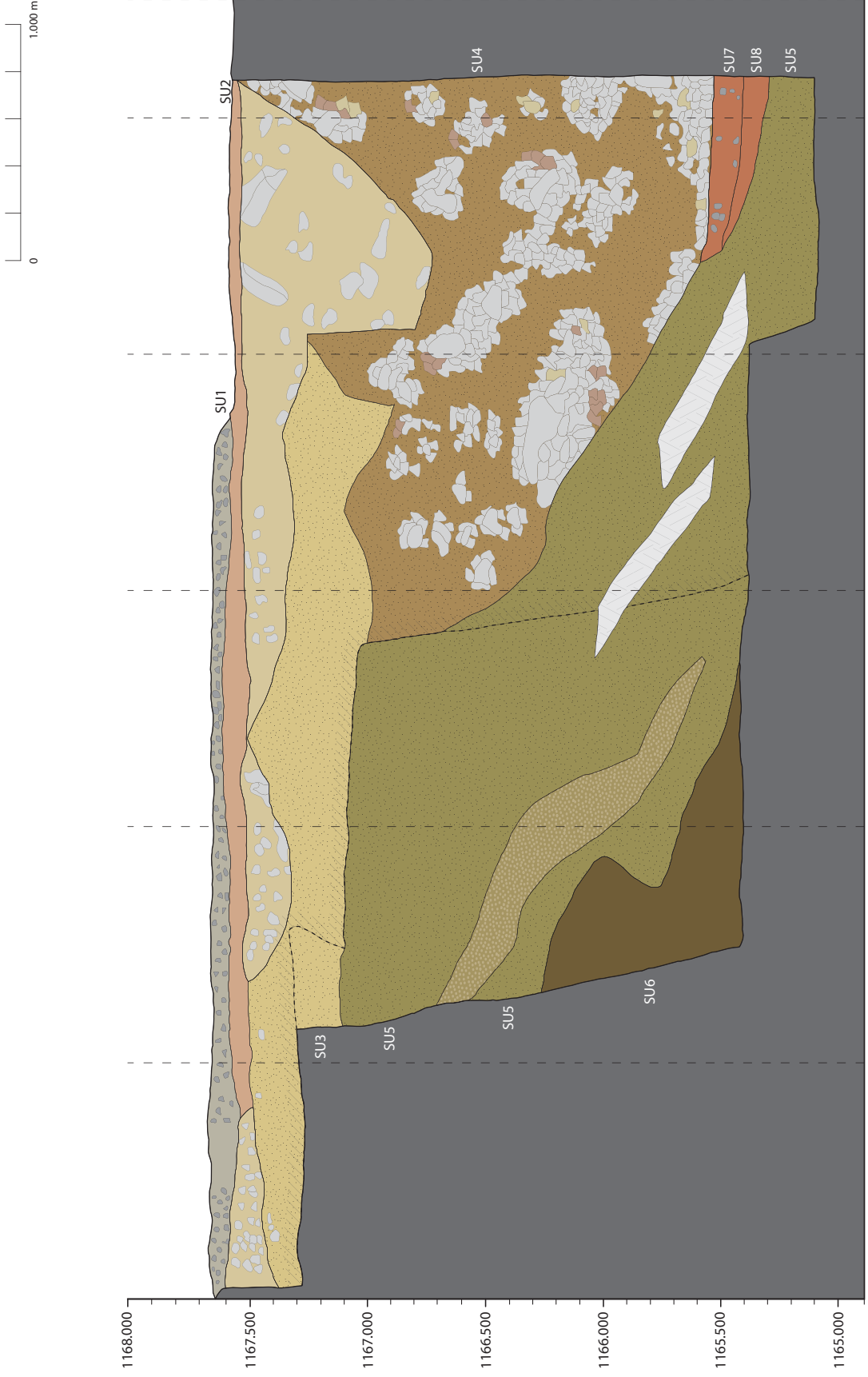


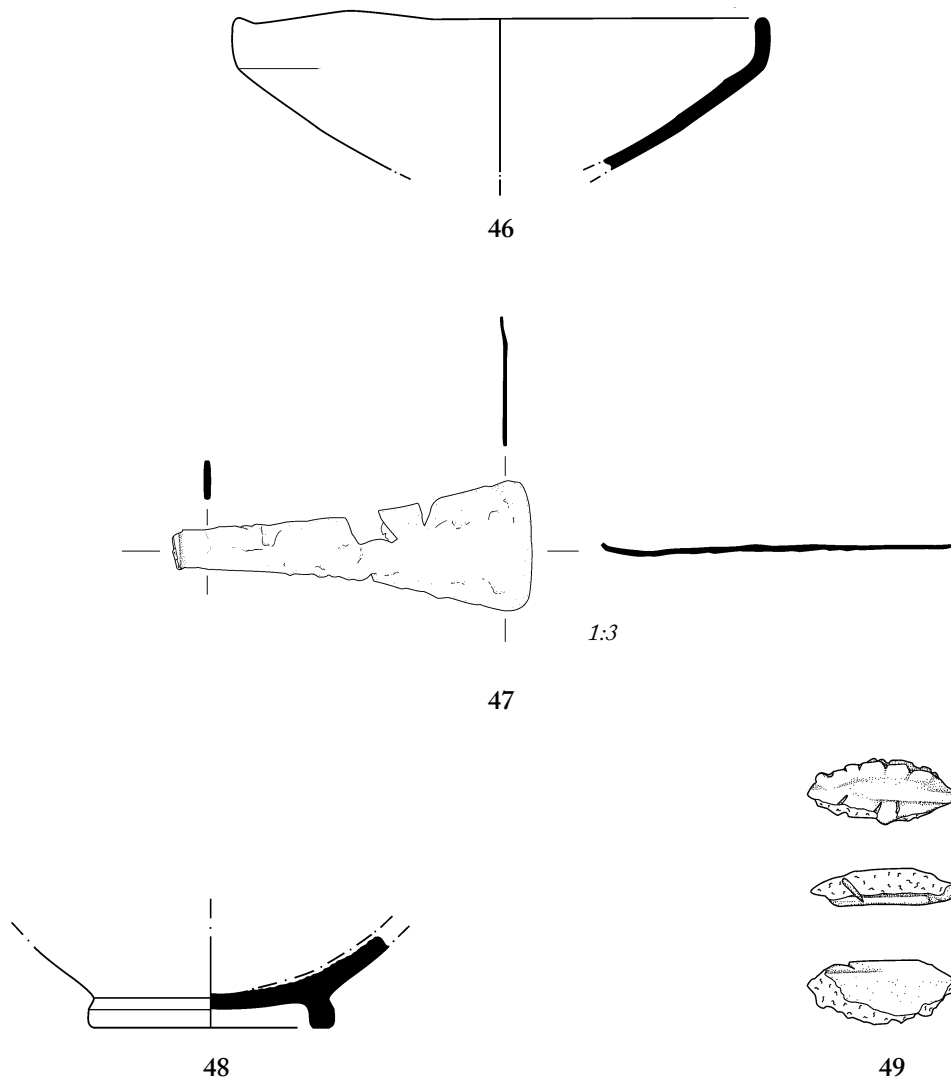
Figure 46. West profile of south scarp of trench HH, with stratigraphic units. A. Plopper

clay would have served as a barrier at the southern boundary between the hippodrome floor and the rocky hillside to the south. The ancient hippodrome surface in trench HH was located at 1,165.76–1,165.12 masl on the bottom, at the same approximate elevation as in trenches A, C, and D, and as the starting-line blocks from the hippodrome surface.

46 Bowl rim Fig. 47  
 C-A-09-01. Hippodrome, trench A; basket 9.  
 P.W. 0.090; p.L. 0.046; Diam. 0.140 m.  
 Fabric: 5YR 7/8 reddish yellow. Rim and body from a small bowl.  
 3rd–2nd century B.C.

47 Iron ax head Fig. 47  
 MTL 06. Trench B; basket 9.  
 Max. p.W. 0.051; p.W. 0.013 (from narrower end); p.L. 0.139; Th. 0.003–0.004 m.  
 Good condition: broken with mending, missing parts. Tool shaped wide at one end and tapering to the other; each end is curved; surface is rough.  
 Late Classical–Hellenistic

Figure 47. Small finds from the hippodrome: Hellenistic bowl 46; iron ax head 47; 4th-century pottery base 48; bronze leaf 49. Scale 1:2, except where indicated



- 48 Base and foot of small bowl Fig. 47  
 C-B-5-000001. Trench B; basket 5.  
 P.H. 0.025; Diam. foot 0.065 m.  
 Small bowl with ring foot, flat resting surface. Convex wall. Fabric: 7.5YR 7/4 pink. Black gloss covers interior and exterior, except for resting surface, interior of foot, and undersurface. Very worn.  
 Early 4th century B.C.
- 49 Bronze leaf Fig. 47  
 MTL 12. Trench C; basket 15.  
 P.W. 0.017; p.L. 0.039 m.  
 Good condition: surface worn with broken edges. Leaf-shaped piece of heavy leaded bronze with flat back and raised top with ridge on long axis. Possibly originally from a bronze wreath/crown.  
 Late Classical–Hellenistic

### INTERPRETATION

The results of our excavations from the trenches in the area of the hippodrome and stadium have revealed a small portion of the floor level of the hippodrome dating to the 3rd to 2nd century B.C., as determined from the Hellenistic bowl. Based on the bedrock reached in the southern part of trench C, and on the finds in the northern part of the same trench, as well as the information from trench HH, we have determined the likely location of the southern end of the hippodrome.<sup>92</sup> We now know that the south end of the hippodrome was at least 80 m north of the northeast corner of the stoa (see pp. 250–252, above). The fine, black-gloss pottery sherds found primarily in trenches B and C also indicate activity in and near the hippodrome in the 5th and 4th centuries B.C.<sup>93</sup> We have also found evidence of the floor of the dromos of the stadium from trench D. Further study and analysis are needed in order to comment further on the significance of the material from the excavation of this area. Although we do not know the date of the earliest use of the stadium and hippodrome, it is attractive to suggest that the earliest athletic activity at the sanctuary may have taken place in the area labeled as the “proto-stadium,” adjacent to the southern peak of the mountain and the site of the ash altar (Fig. 2).

There is some epigraphical evidence that relates to the question of the use of the hippodrome and stadium. An inscription found on the Athenian Acropolis, *IG II<sup>2</sup> 993*, records the Athenian acceptance of an invitation from the city of Megalopolis to participate in the refoundation of the Lykaion Games in the year 215 B.C.<sup>94</sup> Although it is known from the victor inscriptions found by Kourouniotis in the administrative building (*IG V ii 549* and *550*) that the athletic contests of the Lykaion Games were held on the mountain until the late 4th century B.C., the refounded games may have taken place in the city of Megalopolis.<sup>95</sup> The date of *IG II<sup>2</sup> 993* may reflect the beginning of the renewed Lykaion festival held in the city, that is, 215 B.C. It is likely that Megalopolis in fact controlled the Lykaion Games from the time of its foundation in 370/69 B.C.<sup>96</sup> It is clear, in any case, from the ceramic evidence from the corridor, discussed above (pp. 218–219), that there continued to be some significant activity in the lower sanctuary through the 1st century B.C.

92. Kourouniotis 1909, p. 187.

Kourouniotis believed that the hippodrome extended much further south, toward the southern edge of the stoa.

93. See Pikoulas in Appendix 1, for a brief discussion of 5th-century B.C. activity in the vicinity of Mt. Lykaion.

94. Dow 1937, pp. 120–126.

95. We thank Kyle Mahoney, who is engaged in a study of epigraphical evidence for the Lykaion Games, for the information that evidence is missing from the second and third quarters of the 3rd century B.C.

96. Pausanias (8.30.2) mentions that there was a *ἱερόν* in the agora of Megalopolis to Lykaion Zeus, but we do not know what the original date of this shrine might have been.

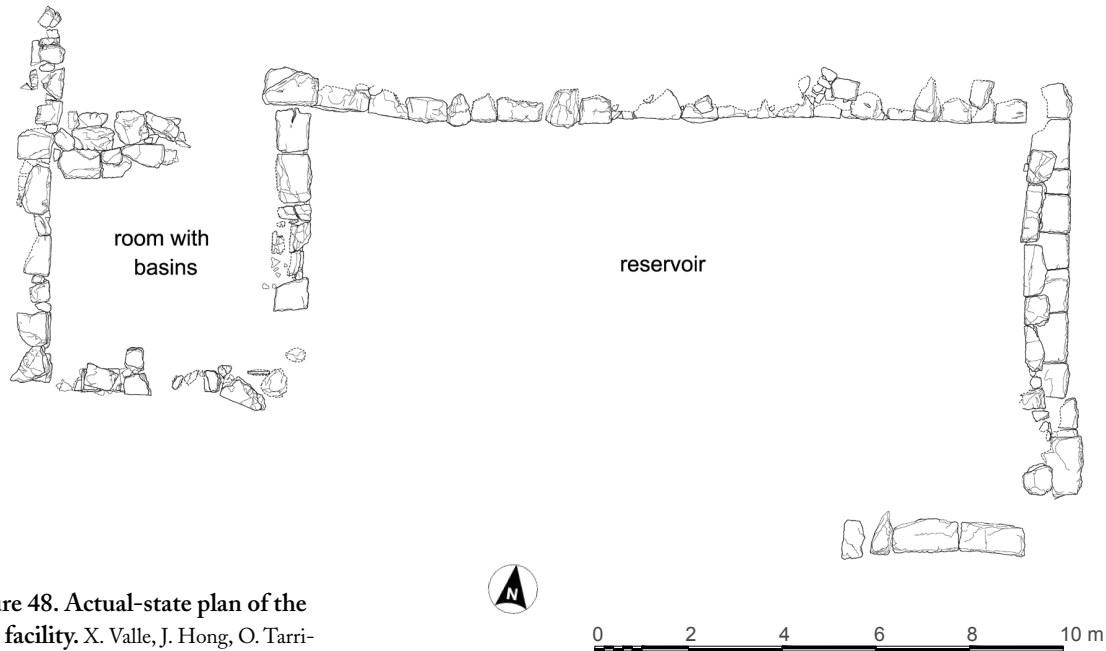


Figure 48. Actual-state plan of the bath facility. X. Valle, J. Hong, O. Tarricone, and P. Biswas

## BATH FACILITY

Located immediately adjacent to the hippodrome at its northeast extent is a bath facility that is only partially visible (Figs. 4, 48). It was documented as early as Blouet's publication in 1831, and if his drawing is accurate, only around one-half of the structure that he drew can be clearly seen today.<sup>97</sup> It is now possible to see a large rectangular reservoir at the eastern end of the facility, ca.  $17 \times 10$  m on the exterior (interior space is  $15.2 \times 8.7$  m), that is partially filled with blocks and rubble (Fig. 49). The reservoir is constructed of regular ashlar and polygonal masonry on the west, north, and east sides. The south wall has been covered with piles of rubble by the local farmers and is not visible. Immediately to the west of the reservoir is a smaller room (with interior dimensions  $4.7 \times 4.7$  m). It contains the remains of several limestone basins or bathtubs that have been fractured and partly removed from this location. The original overall size of the basins is ca.  $2.20$  long  $\times$   $0.65$  wide  $\times$   $0.48$  m high. The area to the west of this room is less clear, as only some wall blocks are visible. From our recent topographical survey it appears that there is a second small room similar in size to the room with the basins immediately to the west of it, and then another large area ca. 22 m long further west. The total east–west length of the bath facility may be close to 49 m. No excavation has yet been undertaken in the bath building, but remote sensing in the area to the south suggests that there may be additional walls possibly related to the bath in this direction.<sup>98</sup>

97. Blouet 1931, pl. 33.

98. See Sarris in Romano and Voyatzis 2014, appendix 1, for the results of the remote sensing. Further investiga-

tion in this area will be undertaken in the future in conjunction with the 39th Ephorate in Tripolis.



The east exterior wall of the bath reservoir continues to the south 8.5 m beyond the likely limit of the reservoir itself, which also suggests that there may be more of the bath facility to the south.

**Figure 49.** Bath facility, showing north and west walls of reservoir, looking northwest. Photo D. G. Romano

## ARCHITECTURAL AND TOPOGRAPHICAL SURVEY

In the summers between 2004 and 2010, a computerized topographical and architectural survey was undertaken in order to fully document the aboveground architecture. One of the objectives of this work was to create an actual-state, stone-for-stone drawing of the entire site. This seemed especially important since parts of the site were exposed by excavation in the early 20th century. Since that time the area has withstood general exposure to the elements, removal of architectural members, and the movement of blocks around the site. There exist standing walls, visible foundations, and individual blocks throughout the sanctuary, sometimes without clear provenience. A principal goal of the survey has been to document all of the buildings, walls, and foundations and to relate the individual blocks, when possible, to the remains of the extant buildings and structures.

The topographical work was undertaken with two electronic total stations that were also utilized for simultaneous excavation support at the southern peak of Mt. Lykaion and in the lower mountain meadow.<sup>99</sup> The exact location of each block was surveyed with a series of points and then drawn by hand according to a predetermined system of priority. Architecturally significant blocks were drawn at a scale of 1:5, while less

99. The topographical survey continued the work of the earlier computerized architectural and topographical survey of the sanctuary that took place in the summer of 1996. See Romano 2005, pp. 381–391.



significant blocks were drawn at a scale of 1:10.<sup>100</sup> The hand-drawn blocks were then converted to digital images and were inserted into the overall surveyed drawing, creating a new actual-state plan of the entire sanctuary. The architectural survey also includes standing walls of buildings, such as the back wall and the retaining wall of the stoa, the remains of the administrative building, the fountain house, and the bath facility. The topographical survey has been useful in understanding the relative location and elevation of each of the buildings, structures, and terraces in the lower sanctuary. One of the long-term goals of the architectural documentation project is to gain a better understanding of the overall design of the sanctuary; in addition, it opens up the possibility of a future digital reconstruction of some of the buildings and monuments.

A preliminary analysis of the topographical and architectural data suggests that the general layout of the lower sanctuary was likely planned and constructed in a single phase. These buildings and structures include the stoa, administrative building, seats, and fountain house, as well as the hippodrome, stadium, and bath. The grouping of the buildings to the south of the hippodrome also reflects a unified design that was likely carried out in a single building phase. With respect to the sanctuary design, the long axis of the stoa is roughly parallel to that of the line of seats below.<sup>101</sup> The long axis of the administrative building is roughly parallel to the front foundations of the nearby fountain house, and is very close to the north-south orientation of the hippodrome and stadium. The bath building is oriented roughly perpendicular to the long axis of the hippodrome, as evidenced by the line of the eastern retaining wall.<sup>102</sup> Table 1 shows the orientation and elevation of each of the structures and buildings in the lower sanctuary.

It is noteworthy, moreover, that certain architectural masonry styles are common to this group of buildings in the lower sanctuary. For instance, pseudopolygonal masonry was used in the sidewalls of the fountain house, in the higher courses of the reservoir of the bath building, in the east and north walls of the administrative building, and in the back wall of the stoa. There are also examples of trapezoidal masonry in the exterior walls of the administrative building, the retaining wall of the stoa, and in the upper parts of the reservoir of the bath.

The date of the architectural development of the Sanctuary of Zeus can be placed in the second quarter of the 4th century B.C., based on the

100. The methods employed were documented in the exhibit “Tracing Ancient Architecture” that was created for the School of Design at the University of Pennsylvania in October 2007. The exhibit was organized by the Mt. Lykaion Excavation and Survey Project under the direction of David Romano, with Ximena Valle and Pam Jordan. The architectural documentation project has involved graduate and undergraduate architecture students, mostly from the University of Pennsylvania, who have come to Mt. Lykaion.

The graduate architecture students have been largely supported by the Samuel H. Kress Foundation.

101. The principal orientation of the stoa and seats would be approximately 53 degrees west of north. The question remains as to why the stoa and the seats would be facing this direction, as it is not in line with the orientation of the stadium or the hippodrome. At a distance of ca. 240 m to the northwest of the stoa is a mountain ridge that leads from the level of the hippodrome to the area of the Agno fountain, roughly

parallel to the east-west orientation of the stoa. As it is possible that this ridge served as a means of communication between the lower and higher areas, it is conceivable that this mountain ridge played some role at the site, and could be a cause of the orientation of the stoa and seats. There could also have been other reasons related to geology or the necessity for terracing in the terrain. We continue to explore this question.

102. Some aspects of these relationships are discussed in Jordan 2007.

**TABLE 1. ORIENTATION AND ELEVATION OF BUILDINGS AND STRUCTURES**

| <i>Structure</i>                     | <i>Orientation</i> | <i>Elevation (masl)</i> |
|--------------------------------------|--------------------|-------------------------|
| Stoa, east–west                      | 37–38° northeast   | 1,182                   |
| Seats, east–west                     | 32–37° northeast   | 1,179                   |
| Administrative building, north–south | 13° northwest      | 1,181                   |
| Fountain house, north–south          | 17° northwest      | 1,183                   |
| Corridor passage, north–south        | 4–7° northeast     | 1,177                   |
| Hippodrome, north–south              | 8–9° northwest     | 1,165                   |
| Stadium, north–south                 | 11–13° northwest   | 1,165                   |
| Bath, north–south                    | 7–8° northwest     | 1,159                   |
| Agno fountain, north–south           | 24–26° northwest   | 1,234                   |

The variation in the angles in degrees is due to the fact that the orientations have been taken in different places of the buildings and structures and in many cases these foundation courses are irregular.

archaeological evidence from our excavations, the ceramic and numismatic evidence found in the area of the seats (see pp. 238–245, above), the ceramic and numismatic evidence found as construction debris in the corridor (see p. 218, above), and the ceramic evidence found on the terrace to the west of the hippodrome (see pp. 250–251, above). The combination of the architectural, spatial, ceramic, and numismatic evidence thus suggests that the buildings and structures of the lower sanctuary were built as a part of a single phase of construction in the second quarter of the 4th century B.C.

There are very few architectural elements in the upper sanctuary. The column and stele bases located to the southeast of the southern peak of the mountain are the principal features. The two column bases that are at 1,355 masl are oriented 2–3 degrees northwest.

## THE ARCHITECTURAL BUILDING PROGRAM IN THE LOWER SANCTUARY AT MT. LYKAION

The archaeological evidence from the ash altar of Zeus clearly documents activity there from the Final Neolithic period through the Hellenistic period. And although the evidence from the lower sanctuary shows some evidence of activity from the late 7th century B.C., it is likely that it was during the Archaic, Classical, and Hellenistic periods that the lower sanctuary was the location of the athletic festivals in honor of Lykaion Zeus and Pan. The local people in this vicinity were called Parrhasians and the region was referred to as the Parrhasia; the topography is presented in a preliminary way by Yanis Pikoulas as Appendix 1.

Despite the great antiquity of the site (especially of the upper sanctuary), it is interesting to note that the earliest architectural evidence in the lower sanctuary appears to be Late Classical. It is tempting to associate these buildings with the establishment of Megalopolis. According to Diodoros (15.72.4), the city of Megalopolis was founded in 368/7 to serve as the capital city of the Arcadian League. Pausanias (8.27.1–8), on the other hand, places the foundation date two years earlier, and he links the

synoecism of the city with the Arcadians' desire to fortify the area against the Spartans. Furthermore, Pausanias mentions that it was Epaminondas, the Theban general, who stimulated the Arcadians to make the foundation, and who also sent military assistance under Pammenes to assist.<sup>103</sup> Although some ancient sources link the three foundations of Messene, Mantinea, and Megalopolis with Epaminondas, and associate these cities with the planned defense of Arcadia against Sparta, many modern scholars doubt that there is enough evidence to link all three cities with Epaminondas and his master plan.<sup>104</sup>

Clearly, this was a time of important architectural development and expansion in Arcadia and Messenia, when multiple cities were under construction at the same time, including massive fortification systems and major building projects. Many architects, masons, and workmen must have been employed for several years in each city to carry out these large-scale projects more or less simultaneously. Since Megalopolis would have acquired the Sanctuary of Zeus at Mt. Lykaion as a part of the synoecism of 368/7, it would not be surprising if the Arcadians' most famous sanctuary saw a revitalization and reorganization at this time.<sup>105</sup>

From a historical standpoint, the period between 368 and 362 B.C. would be the most likely time for the Sanctuary of Zeus at Mt. Lykaion to have undergone a major building campaign intended to monumentalize the famous Arcadian sanctuary that overlooks Megalopolis and is within sight of Mt. Ithome in Messenia.

## CONCLUSIONS

Our investigations of the lower sanctuary make it clear that there was a long history of use in this part of the site. The traces of activity going back to the 7th century B.C. are significant and will be further explored in a future campaign. We may now conclude that the lower sanctuary underwent a major building phase in the second quarter of the 4th century B.C., which likely corresponded with the founding of Megalopolis. It is during this period that the majority of the buildings were constructed on the mountain terrace. It is unclear how long this phase of activity lasted, since the games (and perhaps the cult of Zeus itself) may have been relocated to Megalopolis sometime in the 3rd century B.C., based on the text of *IG II<sup>2</sup> 993*. In any case, there continued to be extensive dining activity in at least part of the sanctuary, as reflected by the abundance of ceramic evidence in the lower sanctuary from the 3rd to the 1st centuries B.C. There is also Byzantine evidence from the lower sanctuary, including the building found in Spyropoulos's unpublished excavations (inside the administrative building; see Fig. 5, above), some tombs and coins found in Kourouniotis's excavations of the stoa, and the ceramic evidence we uncovered in the stoa.

In conclusion, we may say that the Mt. Lykaion Excavation and Survey Project has produced important new results. It promises to continue to provide valuable information about ancient Greek sanctuaries in terms of their ritual activities, cult practice, athletics, architecture, and the relationships between the sanctuary and the local communities in Arcadia, from

103. See also Demand 1990, pp. 111–119.

104. Diod. Sic. 15.66.1–67.1; Nepos 15.8.5; Plut. *Pelop.* 24.5; *Ages.* 34.1–2; Isoc. *Lycurgus against Leocrates* 5.28, 5.49, 6.25; Paus. 4.19.3, 20.4, 26.5–27.7. See the summary of this period in Demand 1990, pp. 108–119.

105. Roy 2007, p. 291. For recent publications of important buildings in the area of the agora at Megalopolis, see Lauter-Bufe 2009; Lauter-Bufe and Lauter 2011.

prehistoric times to the end of antiquity. We plan to expand our investigation of this region with a renewed excavation program in both the upper and lower parts of the sanctuary at Mt. Lykaion. We also intend to continue our efforts to create the Parrhasian Heritage Park, as described below.

## PARK PROPOSAL

One of the major initiatives of the Mt. Lykaion Excavation and Survey Project is the creation of the Parrhasian Heritage Park of the Peloponnese. The proposed area of the park is 550 km<sup>2</sup>, encompassing parts of Arcadia, Messenia, and Elis (Fig. 50). The initiative is an international one, spearheaded by the Mt. Lykaion Excavation and Survey Project, but it involves Greek, American, and British colleagues with a broad base of support and collaboration.<sup>106</sup> The goal of the park is to protect and preserve an area of cultural significance, outstanding natural beauty, and rich archaeological sites, while encouraging local communities to continue living and working within the protected landscape.<sup>107</sup> This “living park” approach encourages natural, cultural, and scenic resources to be managed both for long-term vitality and for use as essential parts of local livelihoods and traditions. Success for the park will mean the enhancement of local residents’ pride and sense of stewardship, support for ongoing cultural activities, increased economic strength in the region, and the protection of the natural, archaeological, scenic, and recreational resources for future generations.

The mountainous landscape of the western Peloponnese—including western Arcadia, northern Messenia, and southern Elis—is a spectacularly beautiful region of Greece, worthy of preservation and protection. It is characterized by forested hills, river valleys, peaks, mountain meadows, springs, isolated but attractive villages and towns, and winding roadways. It contains native flora and fauna still largely undisturbed by modern civilization.

The area of the proposed park includes important ancient sanctuaries and cities in southwest Arcadia and parts of modern-day Messenia and Elis. The following archaeological sites will be included: the Sanctuary of Zeus (and Pan) on Mt. Lykaion, the Sanctuary of Pan at Neda (Berekla), the Sanctuary of Apollo Parrhasios at Cretea, the Sanctuary of Demeter and Despoina at Lykosoura, a sanctuary near Ano Melpēia, the Temple of Athena at Phigaleia, the Temples of Aphrodite and Artemis at Kotilon, the Sanctuary of Apollo Epikourios at Bassai, and the ancient cities of Trapezous, Megalopolis, Lykosoura, Eira, and Phigaleia.<sup>108</sup>

During the summer seasons of 2011 through 2014, further work was accomplished with the goal of creating the Parrhasian Heritage Park, including the opening of portions of four trails: the Trail of Pan, the Trail of

106. The concept of the Parrhasian Heritage Park has been embraced by the Greek Ministry of Culture and by the 39th Ephorate of Prehistoric and Classical Antiquities in Tripolis, together with the local communities

included in and bordering the area of the park.

107. Costas Cassios and Mark Davison, together with the authors, have been instrumental in the overall concept and design of the park. They

have worked closely with a number of others, including Ximena Valle and Nicholas Stapp, on the details of the planning.

108. Romano and Voyatzis 2010b.



Zeus, the Trail of Rhea (all in the immediate area of Mt. Lykaion), and, in conjunction with the village of Vasta, the Trail of Ayia Theodora.<sup>109</sup> Public meetings were held in Megalopolis during the summers of 2010, 2011, and 2012, in which the Ministry of Culture, the mayor of Megalopolis, civic officials, village leaders, community groups, and individual citizens met to discuss the plans for the Parrhasian Heritage Park of the Peloponnese.

## ACKNOWLEDGMENTS

For a full list of acknowledgments, see Romano and Voyatzis 2014, pp. 632–634. For assistance in the preparation of the final manuscript, the authors also thank Natalie Joy Gleason, Matt Pihokker, and Emilio Rodriguez-Alvarez.

Since 2004, the project has maintained a website at <http://lykaionexcavation.org>. The Parrhasian Heritage Park has its own website, which is found at <http://parrhasianheritagepark.org>.

109. During the summer season of 2011 the Parrhasian Heritage Field School was initiated, and it has continued through 2014. Greek and American students are being taught skills and theory related to the creation of a European heritage park.

# APPENDIX I

## MT. LYKAION AND ITS SURROUNDINGS: THE SURVEY OF 2006–2008

The greater part of Mt. Lykaion and its surroundings, especially to its south, east, and north, belonged to the Arcadian tribe of the Parrhasians. During a three-year extensive survey that took place in the summers of 2006–2008, we investigated this area in order to identify its ancient road network, defense system, and settlement patterns.

Our primary aim was to define the Parrhasian topography. Based on the testimonia (on Parrhasioi, Parrhasia), as well as the results of our survey, we have gained a thorough idea of the road network and the pathways all around Mt. Lykaion. There were two main ancient roads from the Megalopolitan basin to the sanctuary, both constructed to handle animal-driven carts. In addition, there was a dense network of pathways used by pedestrians and pack animals.<sup>110</sup>

We did not locate isolated towers or forts in the area, except for those on the northern slopes of Mt. Lykaion. We did, however, identify five isolated patrol stations (*phylakeia*), which belonged to the southern part of the territory of Theisoa, and can be dated after the middle of the 4th century B.C. I have already concluded that these patrol stations formed a network that controlled access to the basin of Megalopolis from the west, over Mt. Lykaion. This network must have been planned by the city of Megalopolis itself.<sup>111</sup>

The recently excavated town at Kyparissia, on the easternmost slopes of Mt. Lykaion and in the heart of Parrhasia, had a well-organized city plan, and, based on the ceramic evidence, dates to the Late Archaic period through the 4th century B.C. This site offers new evidence that may allow for a fresh interpretation. The excavator, Anna Karapanagiotou, has identified the town at Kyparissia as ancient Trapezous, which I find the most reasonable possibility. We believe that Mantinea must have inspired or been directly involved in the synoecism of the Parrhasians into the new town of Trapezous, which was situated in a more central location than Lykosoura to the west. A likely period for its foundation would be 464–455 B.C., when Sparta was involved in the Third Messenian War. The battle of Dipaea (Hdt. 9.35.2) in the decade of 460 B.C. must be a terminus post quem for the synoecism. Sparta first acted against the synoecism with the support of Tegea in 423 B.C. (Thuc. 4.134), and later, during the summer

110. Pikoulas 1999, pp. 248–319.

111. Pikoulas 2008, pp. 251–260.

of 421 B.C., Spartan troops marched against the Parrhasians (Thuc. 5.33). Therefore, I believe that the center for the production of the Parrhasians' coinage was their capital city, Trapezous, and not Lykosoura, and that the issue of their silver *obolos* (Head 1911, p. 451; *BCD Collection* 2006, p. 378, nos. 1594, 1595) must be dated to the middle of the 5th century B.C., and not to the end of that century.<sup>112</sup>

112. Pikoulas 2009.

*Yanis Pikoulas*

UNIVERSITY OF THESSALY  
ANCIENT GREEK HISTORY, DEPARTMENT HASA  
ARGONAUTON AND PHILELLINON  
VOLOS 38221  
GREECE

pikoulas@uth.gr



## APPENDIX II

### THE POTTERY FROM TRENCH N

A large collection of pottery of Hellenistic date was recovered from the corridor running northeast from the administrative building. The layers of SU 2 were particularly rich, and although the material is very fragmentary, it offers a window into the ceramic furnishings of the sanctuary in the 2nd and 1st centuries B.C. The pottery of the units that lay below it can help in a limited way to define the chronological limits of the use of the area.

#### STRATIGRAPHIC UNIT 5

Only a handful of sherds were recovered from the lowest unit, apparently associated with the construction of the retaining walls that formed the corridor. Most of the material is not closely datable, but one small rim fragment may belong to a Classical black-gloss one-handler (3). The form of the rim, flat on top and sloping toward the interior, and with a slight concavity just below the lip on the exterior, suggests a date in the 4th century.<sup>113</sup>

#### STRATIGRAPHIC UNIT 4

There was no diagnostic pottery in SU 4.

#### STRATIGRAPHIC UNIT 3

Pottery was better represented in SU 3, with close to 1,000 sherds, and about 50 diagnostic fragments. The most securely datable piece is a Corinthian articulated kantharos, identifiable on the basis of both shape and the fine, creamy yellow fabric (4). At least nine fragments are preserved, enough to document the characteristic angular profile, straight upper wall, groove below the rim, and vertical strap handle, and there are traces of incised West Slope decoration.<sup>114</sup> Another small Corinthian fragment, with a strongly concave upper wall, plain rim, and strap handle, comes from a

113. Cf. *Agora* XII, p. 290, nos. 759, 762, fig. 8 (second quarter of the 4th century B.C.); *Agora* XXIX, p. 329, no. 857, fig. 58, pl. 71 (ca. 300 B.C.).

114. Cf. *Corinth* VII.3, pp. 84–85, nos. 460–466, pls. 16, 53.

cyma kantharos, another characteristic Corinthian shape.<sup>115</sup> These two forms are represented in small fragments in other, unidentified wares as well.<sup>116</sup> The Hellenistic kantharos was the characteristic drinking cup of the 3rd century, probably coming into general use no earlier than the second quarter of the century. The likeliest date for these pieces, then, is between 275 and 200 B.C.

A third kantharos form (discussed further below) is represented by a large fragment of the rim and upper wall, documenting an ovoid or globular body, a constricted neck demarcated by a neat ridge at the bottom, and a rim that is convex to the exterior (5). The vessel is covered with a matte brown gloss inside and out, but three fragments of similar convex rims are unglazed. A large fragment preserving the lower body and ring foot of a somewhat smaller vessel, glazed to within 2 cm of the bottom, may also come from this shape (6). This form is very well represented in the later SU 2, and it is probably a local or regional product. Its dating, however, is an open question, which I discuss in detail below.

Fragments of two moldmade bowls from SU 3 date to the 2nd or early 1st century B.C. Two small pieces from a single bowl (7) show a wall divided into horizontal registers by a ridge, with the lower parts of columns above, probably functioning as spacers between figures.<sup>117</sup> A single fragment of a second moldmade bowl (8) belongs to the long-petal variety, characterized by tall, round-topped petals set side by side. This form was introduced in the second quarter of the 2nd century but was most common after ca. 150, and continued to be produced in the 1st century B.C.<sup>118</sup> These moldmade bowl fragments come from basket 15/16, the uppermost section of the unit, and it is possible that they are intrusive from SU 2, where moldmade bowls similar to these were well represented. But if the kantharos with convex rim is also dated to the late Hellenistic period, there is no way to escape a date at least as late as the third quarter of the 2nd century B.C. for SU 3. A decisive verdict on the date of SU 3 thus awaits a fuller understanding of this local kantharos shape.

## STRATIGRAPHIC UNIT 2

Sherds recovered from SU 2 number in the many thousands. The complete count for this unit has not yet been determined, and so far only a sample consisting of some of the largest baskets has been examined.<sup>119</sup> The fragmentary state of the pottery indicates that these layers represent a secondary dump thrown piecemeal into the corridor. Some of the material, especially the fragile fine ware, is extremely fragmentary, and although some larger pieces have survived, no completely reconstructable vessels were found in the sample examined.

The finds include a wide variety of fine-ware imports, though their sources can be determined in only a few cases. There is a large and consistent collection of glazed and semiglazed tablewares and of unglazed household ware, all probably manufactured in the immediate region. A modest collection of apparent cooking pottery is also probably local.

115. Cf. *Corinth* VII.3, p. 79, nos. 399, 408, pls. 15, 52, 53.

116. The forms are widespread. For examples of eastern Peloponnesian manufacture, see Rudolph 1978, pp. 218–219, 230, nos. 30, 31, fig. 7.

117. Cf. Abadie-Reynal 2007, no. 8.1, pl. 2 (Argos); Hausmann 1996, pp. 72–73, no. 125, pl. 28 (Olympia); *Délos* XXXI, pp. 174, 177, nos. 3311–3313, pls. 38, 39, 125 (Ionian); *Kyme* I, pp. 52, 54, nos. A, MB 16, MB 22, figs. 1, 8.

118. The most fully studied Peloponnesian series is the Corinthian one, for which see Edwards 1981, pp. 191–193, pls. 41, 42, 46–48.

119. Baskets 7, 13, 23, 43, and 46. The present report is based on the examination of about 1,300 fragments.

## DATE

The imports provide the best evidence for chronology. The latest pieces are rim fragments of three Ionian gray-ware platters (e.g., 9). Broad, flat vessels of this form, often measuring well over 50 cm in diameter, have been found in large numbers in Ephesos and, despite their size and fragility, were widely exported.<sup>120</sup> The earliest examples date before the middle of the 1st century B.C., the latest in the Tiberian period. Two of the platters in SU 2 have the plain, thick, triangular rims of Hayes's type 1 and probably date in the third quarter of the 1st century.<sup>121</sup> The form of the third piece is more elaborate, with a projecting rim with a deep groove on the top, and is probably to be placed somewhat later.<sup>122</sup> The other datable material is earlier, however, and the absence of Roman red wares, such as Eastern Sigillata B and Western Sigillata, suggests that the deposit was closed before the beginning of the Common Era.

At the other end of the span, a few pieces probably date within the 3rd century B.C. (two fragments of small kantharoi with concave or straight upper walls, similar to fragments in SU 3, and perhaps hemispherical cups, e.g., 10), but most diagnostic pieces belong in the 2nd and early 1st centuries. This is the date of the large collection of moldmade bowl fragments (about 140 items), representing all of the standard decorative schemes. Long-petal bowls, typical of the second half of the 2nd century and the first half of the 1st, are represented by fragments of 14 vessels in the sample examined (e.g., 11). Also Late Hellenistic is a red-gloss mastos with a row of tiny stamped circles on the inner rim (12). It imitates Eastern Sigillata A cups of the late 2nd and early 1st centuries, where rim decoration is provided by beading rather than stamp impressions.<sup>123</sup>

## SOURCE OF IMPORTS

Much of the finer pottery in the collection was brought to the site from some distance. Mention has already been made of the three Ionian platters, large objects that would not have been easy to transport to the site. Ionia is also represented by a fragment of a rouletted gray-ware cup from Knidos, identifiable by the rouletted decoration of the wall.<sup>124</sup> Among the moldmade bowls are at least two from Argos, identified by distinctive stamps from the Trojan cycle: Priam on his throne and Cassandra grasping the Palladion.<sup>125</sup> Also perhaps Argive is a miniscule fragment preserving part of the figure of a seated Apollo playing the kithara.<sup>126</sup> Sparta was probably a second source

120. *Ephesos* IX.2.2, pp. 82–84, pls. 94–100. See the discussion in *Agora* XXXII, pp. 60–61.

121. Cf. *Agora* XXXII, pp. 212–213, nos. 905, 906, fig. 29; *Ephesos* IX.2.2, p. 82, no. F 10, pl. 94.

122. Hayes dates platters with comparable (but not closely similar) deeply

grooved rims around the turn of the era; see *Agora* XXXII, p. 213, no. 908, fig. 29.

123. Cf. *Samaria* III, p. 335, no. 16, fig. 80:16; *Hama* III.2, p. 118, form 18:1, figs. 46, 61; Hayes 1985, pp. 21–22, form 17A, second half of 2nd century B.C. and perhaps a little later.

124. In basket 42. Cf. Kögler 2010, pp. 123–126, form VI, type A, fig. 71.

125. Cf. Siebert 1978, pp. 352–353, nos. M.32, M.33, M.37–M.39, pl. 26; Abadie-Reynal 2007, no. 17.1, pl. 4.

126. Cf. Siebert 1978, p. 352, no. M.31, pl. 26.

for moldmade ceramics. The lotus and tendril decoration of a red-glossed fragment finds close parallels there;<sup>127</sup> the fragment is signed, but all that survives of the signature is a single omicron. Shell feet in low relief, like those of 13, are also a common feature of Spartan bowls.<sup>128</sup> A number of fragments decorated only with a highly linear lotus calyx (e.g., 14, 15) also find parallels at Sparta,<sup>129</sup> although the extreme simplicity of the scheme makes it difficult to insist on the attribution. An unusual combination of a linear rinceau and long petals finds parallels closer at hand, at Gortys.<sup>130</sup> Other pieces show by their stunning quality that they too are imports (e.g., 16, 17), but without sufficiently distinctive stamps to allow an identification.

It is also worth noting what is absent. Corinthian pottery, easy to pick out because of its pale yellow fabric, is represented by only a single possible fragment in SU 2, a plain plate made of very pale clay, and it is therefore possible that most of the deposit dates after the destruction of that city in 146. Attic pottery is also lacking, partly because Attic potters were no longer exporting their wares in quantity at this time, but perhaps also because the sanctuary was too distant to attract frequent pilgrims from the city.

## REGIONAL PRODUCTION

A few recurring and unusual forms can be identified as local or regional specialties. The kantharos with convex rim stands out as one of the most common shapes (e.g., 18), with a total of 67 fragments in the sample examined. Nothing approaching a complete example is preserved, but fragments attest a globular or ovoid body, a constricted neck, sometimes with a ridge or grooves at the base, above which the rim is convex to the outside, sometimes strongly so. This rim may be plain, may have a single groove just below the lip, or several grooves in its outer face. A plain, vertical strap handle, probably one of two, is attached to the rim, below or occasionally at the lip. There is considerable range in size, with rim diameters varying from 8.5 to 12.0 cm. The cups probably rested on a ring foot, though it has not been possible to associate any bases with the rim fragments. Most of these vessels are made in a gritty, bright orange clay that recurs throughout the collection and is probably a sign of more or less local production. Most are glossed, but some are not.

The overall design of the shape, with a constricted neck setting off the rim from the body, finds a parallel in a series of black-gloss kantharoi manufactured at Athens from ca. 260 to the early 1st century B.C.<sup>131</sup> It is tempting to see the Lykaion vessels as a local version of this rather ordinary shape, and to date them throughout the Hellenistic period. The closest parallels for the unusual convex lip, however, date in the Late Hellenistic period. A complete kantharos of similar form furnished a tomb at Argos, dated by Bruneau to the second half of the 1st century.<sup>132</sup> Two more come from Argive deposits of the late 2nd or early 1st century.<sup>133</sup> These vessels differ in some details from the Lykaion fragments—their rims are higher and the handles are embellished with a rotelle at the arch—but the overall similarity and their manufacture not far from our site suggest that they are likely to be contemporary.

127. Cf. Siebert 1978, pp. 375–377, pl. 47, from the workshop of Sosimos; Hobling 1923–1925, p. 283, fig. 2:τ, σ, τ, υ, ζ.

128. Hobling 1923–1925, p. 287, fig. 4:i, k–p; Zavvou 2005, pp. 113–114, 118, nos. 3–5, 13, figs. 4, 5, 9.

129. Cf. Hobling 1923–1925, p. 283, fig. 2:n.

130. Cf. Siebert 1978, pp. 381, 382, nos. Go:3, Go:27, pl. 49.

131. *Agora* XXIX, p. 106, fig. 19, pls. 29, 30.

132. Bruneau 1970, p. 478, no. 61.10, figs. 110, 111.

133. Pariente 1990, p. 858, fig. 9; Kolia 2000, pp. 389–390, pl. 205:3. Other parallels, although they are less close, are also Late Hellenistic in date (e.g., *Agora* XXIX, p. 415, nos. 1698, 1699, fig. 101, pl. 135, imported vessels found in Late Hellenistic contexts, with reference to examples from the Antikythera wreck, Delos, and Olympia); Kaltsas 1990, pp. 22–23, 37, no. 13, fig. 7, pl. 29:η (Pylos, 1st century B.C.); Williams, MacIntosh, and Fisher 1974, pp. 30–31, no. 44, pl. 8 (brittle ware, Corinth, Early Roman).

Whatever the date, the shape was sometimes adapted to functions other than drinking. Of particular interest is an unglazed jug in the regional orange fabric with two strap handles set at approximately right angles to one another (19). In addition to the handles and the characteristic convex rim, enough is preserved to reconstruct a baggy body on a ring foot. This unusual handle arrangement, possibly designed for easy passing, is documented elsewhere in the Peloponnese and the western parts of mainland Greece; McPhee has recently traced its development from the Archaic to the Hellenistic period at Corinth.<sup>134</sup> Here, it seems, we encounter another regional variant.

Another distinctive regional product is a large, probably round-bodied vessel that curves in toward the top. It has a projecting, downcurved rim, sometimes grooved (20). The form of the lower body cannot be reconstructed. Some of these vessels are relatively thin-walled and glazed, others are glazed only on the inside, while still others have no gloss at all, suggesting that they served a variety of purposes. Some of the finer examples are sizable (Diam. > 20 cm), and could have served as mixing bowls.

The most frequently occurring food vessel is a plate with a rolled rim (21); most of these are glazed, but the quality of fabric and gloss vary considerably. Less common, but apparently a local specialty, is a large, spreading, well-finished bowl with a slightly outturned lip and a careful offset on the interior, well below the rim (22, 23).

## FUNCTION

The forms present suggest that the pottery supported drinking and feasting in the sanctuary. As is commonly the case with Greek pottery, the largest single category is wine cups (moldmade bowls, wheelmade hemispherical cups, and kantharoi), and there is a small collection of vessels for wine service (table amphoras and possible mixing bowls). Vessels for serving food, and especially plates, are also well represented. A few household vessels can be linked with certainty to food preparation (e.g., a fragment of a mortar, 24). Several large vessels made of a coarse, gritty orange or brown fabric resemble stewpots (chytrai), with globular bodies and a broad strap handle (25, 26). It is a puzzling fact, however, that many show no signs of sooting, an observation that casts doubt on their function as cooking pots. As is to be expected, toilet vessels (pyxides, perfume containers) are lacking altogether.

134. McPhee 2005; see also *Agora* XXXIII, pp. 72–73.

*Susan I. Rotroff*

WASHINGTON UNIVERSITY  
DEPARTMENT OF CLASSICS  
CAMPUS BOX 1050  
ST. LOUIS, MISSOURI 63130  
rotroff@artsci.wustl.edu

## REFERENCES

- Abadie-Reynal, C. 2007. *La céramique romaine d'Argos: Fin du II<sup>e</sup> siècle avant J.-C. – fin du IV<sup>e</sup> siècle après J.-C.* (Études péloponnésiennes 13), Athens.
- Agora = *The Athenian Agora: Results of Excavations Conducted by the American School of Classical Studies at Athens*, Princeton
- XII = B. A. Sparkes and L. Talcott, *Black and Plain Pottery of the 6th, 5th, and 4th Centuries B.C.*, 1970.
- XXIX = S. I. Rotroff, *Hellenistic Pottery: Athenian and Imported Wheelmade Table Ware and Related Material*, 1997.
- XXXII = J. W. Hayes, *Roman Pottery: Fine-Ware Imports*, 2008.
- XXXIII = S. I. Rotroff, *Hellenistic Pottery: The Plain Wares*, 2006.
- BCD Collection 2006 = A. Walker, *Coins of Peloponnesos: The BCD Collection*, LHS, Auction 96 (8–9 May 2006), Zurich 2006.
- Blouet, A. 1831. *Expédition scientifique de Morée, ordonnée par le gouvernement français: Architecture, sculptures, inscriptions, et vues du Péloponnèse, des Cyclades, et de l'Attique 2*, Paris.
- Boyd, T. D. 1978. "The Arch and the Vault in Greek Architecture," *AJA* 82, pp. 83–100.
- Bruneau, P. 1970. "Tombes d'Argos," *BCH* 94, pp. 437–531.
- Cooper, F. A. 2000. "The Fortifications of Epaminondas and the Rise of the Monumental Greek City," in *City Walls: The Urban Enceinte in Global Perspective*, ed. J. D. Tracy, Cambridge, pp. 155–191.
- Cooper, F. A., and J. W. Myers. 1981. "Reconnaissance of a Greek Mountain City," *JFA* 8, pp. 123–134.
- Corinth = *Corinth: Results of Excavations Conducted by the American School of Classical Studies at Athens*
- IV.2 = O. Broneer, *Terracotta Lamps*, Cambridge, Mass., 1930.
- VII.1 = S. S. Weinberg, *The Geometric and Orientalizing Pottery*, Cambridge, Mass., 1943.
- VII.3 = G. R. Edwards, *Corinthian Hellenistic Pottery*, Princeton 1975.
- XII = G. R. Davidson, *The Minor Objects*, Princeton 1952.
- Coulton, J. J. 1976. *The Architectural Development of the Greek Stoa* (Oxford Monographs on Classical Archaeology), Oxford.
- Crowther, N. B. 2004. "Greek Games in Republican Rome," in *Athletika: Studies on the Olympic Games and Greek Athletics* (Nikephoros 11), Hildesheim, pp. 381–385 (previously published in *AntCl* 52, 1983, pp. 268–273).
- Curtius, E. 1851. *Peloponnesos: Eine historisch-geographische Beschreibung der Halbinsel 1*, Gotha.
- Délos XXXI = A. Laumonier, *La céramique hellénistique à reliefs 1: Ateliers "ioniens" (Délos XXXI)*, Paris 1977.
- Demand, N. H. 1990. *Urban Relocation in Archaic and Classical Greece: Flight and Consolidation* (Oklahoma Series in Classical Culture 6), Norman.
- Dow, S. 1937. "Athenian Decrees of 216–212 B.C.," *HSCP* 48, pp. 105–126.
- Edwards, C. M. 1981. "Corinth 1980: Molded Relief Bowls," *Hesperia* 50, pp. 189–210.
- Ephesos IX.2.2 = V. Mitsopoulos-Leon, *Die Basilika am Staatsmarkt in Ephesos: Kleinfunde 1: Keramik hellenistischer und römischer Zeit (Forschungen in Ephesos IX.2.2)*, Vienna 1991.
- Furtwängler, A. 1890. *Die bronzen und die übrigen kleineren funde von Olympia (Olympia IV)*, Berlin.
- Gebhard, E. R., and F. P. Hemans. 1998. "University of Chicago Excavations at Isthmia: II," *Hesperia* 67, pp. 1–63.
- Glaser, F. 1983. *Antike Brunnenbauten (KRHNAI) in Griechenland (DenkschrWien 161)*, Vienna.
- Hama III.2 = A. P. Christensen and C. F. Johansen, *Les poteries hellénistiques et les terres sigillées orientales (Hama III.2)*, Copenhagen 1971.
- Harris, H. A. 1972. *Sport in Greece and Rome*, Ithaca.
- Hausmann, U. 1996. *Hellenistische Keramik: Eine Brunnenfüllung nördlich von Bau C und Reliefkeramik verschiedener Fundplätze in Olympia (OIForsch 27)*, Berlin.

- Hayes, J. W. 1985. "Sigillate orientali," in *EAA 2: Ceramica fine romana nel bacino mediterraneo (tardo ellenismo e primo impero)*, Rome, pp. 1–96.
- Head, B. V. 1911. *Historia Numorum*, 2nd ed., Oxford.
- Hobling, M. B. 1923–1925. "Excavations at Sparta, 1924–25: 5. Greek Relief-Ware from Sparta," *BSA* 26, pp. 277–310.
- Humphrey, J. 1986. *Roman Circuses: Arenas for Chariot Racing*, Berkeley.
- Isthmia II = O. Broneer, *Topography and Architecture (Isthmia II)*, Princeton 1973.
- Jordan, P. F. 2007. "Architecture as Artifact and the Re-rendering of Fragmentary Experience" (M.S. thesis Univ. of Pennsylvania).
- Jost, M. 1985. *Sanctuaires et cultes d'Arcadie (Études péloponnésiennes 9)*, Paris.
- Kaltsas, N. 1990. "Από τα ελληνιστικά νεκροταφεία της Πύλου," *ArchDelt* 38, A', pp. 1–77.
- Kögler, P. 2010. *Feinkeramik aus Knidos vom mittleren Hellenismus bis in die mittlere Kaiserzeit (ca. 200 v. Chr. bis 150 n. Chr.)*, Wiesbaden.
- Kolia, E. 2000. "Κλειστό σύνολο ελληνιστικής κεραμικής από το οικόπεδο I. Κολυγιάτη στο Άργος," in *Ε' Επισημοτική Συνάντηση για την Ελληνιστική Κεραμική: Χρονολογικά προβλήματα, κλειστά σύνολα, εργαστήρια*, Athens, pp. 387–392.
- Kontopoulos, K. 1898. *Prakt* 53, pp. 17–18.
- Kourouniotis, K. 1903. "Ανασκαφή Λυκαίου," *Prakt* 58, pp. 50–52.
- . 1904a. "Ανασκαφή Λυκαίου," *ArchEph* 43, cols. 153–214.
- . 1904b. "Ανασκαφή Λυκαίου," *Prakt* 59, pp. 32–34.
- . 1905. "Κατάλογοι Λυκαίωνικων," *ArchEph* 44, pp. 161–178.
- . 1909. "Ανασκαφή Λυκαίου," *Prakt* 64, pp. 185–200.
- Kyme I = J. Bouzek, ed., *Anatolian Collection of Charles University (Kyme I)*, Prague 1974.
- Lauter-Bufe, H. 2009. *Das Heiligtum des Zeus Soter in Megalopolis*, Mainz.
- Lauter-Bufe, H., and H. Lauter. 2011. *Die politischen Bauten von Megalopolis*, Darmstadt.
- Lawrence, A. W. 1979. *Greek Aims in Fortification*, Oxford.
- Mallwitz, A. 1972. *Olympia und seine Bauten*, Munich.
- McPhee, I. 2005. "The Corinth Oinochoe: One- and Two-Handled Jugs in Ancient Corinth," *Hesperia* 74, pp. 41–94.
- Miller, S. G. 1978. *The Prytaneion: Its Function and Architectural Form*, Berkeley.
- Müth, S., and H. Stümpel. 2007. *Eigene Wege: Topographie und Stadtplan von Messene in spätklassisch-hellenistischer Zeit* (Internationale Archäologie 99), Rahden/Westfalen.
- Nemea II = S. G. Miller, *The Early Hellenistic Stadium (Excavations at Nemea II)*, Berkeley 2001.
- Pariante, A. 1990. "Argos: 1. Terrain Karmoyannis," *BCH* 114, pp. 851–858.
- Perachora I = H. Payne et al., *Architecture, Bronzes, Terracottas (Perachora, the Sanctuaries of Hera Akraia and Limenaia: Excavations of the British School at Athens, 1930–1933 I)*, Oxford 1940.
- Petrakos, V. C. 1974. *The Amphiareion of Oropos*, Athens.
- Pikoulas, Y. A. 1999. "The Road-Network of Arkadia," in *Defining Ancient Arkadia. Symposium, April, 1–4, 1998* (Acts of the Copenhagen Polis Centre 6), ed. T. H. Nielsen and J. Roy, Copenhagen, pp. 248–319.
- . 2008. "The Defense System of Theisoa at Lykaion: Revisiting Stereotypes," in *Ιστορίες για την αρχαία Αρκαδία. Proceedings of the International Symposium in Honour of James Roy, Psari Trikolonon 9–10.5.2008*, ed. Y. A. Pikoulas, Stemnitsa, pp. 251–260.
- . 2009. "Ένα νόμισμα και κάποιες ιστορίες," in *ΚΕΡΜΑΤΙΑ ΦΙΛΙΑΣ: Τιμητικός τόμος για τον Ιωάννη Τουράτσογλου* (Numismatic Museum 1), Athens, pp. 45–53.
- Price, M. J. 1967. "The Introduction of Bronze Coinage and Its Particular Development at Corinth" (unpublished diss. Cambridge Univ.).
- Romano, D. G. 1981. "The Stadia of the Peloponnesos" (diss. Univ. of Pennsylvania).
- . 1993. *Athletics and Mathematics in Archaic Corinth: The Origins of the Greek Stadion* (Memoirs of the American Philosophical Society 206), Philadelphia.
- . 1997. "Topographical and Architectural Survey of the Sanctuary of Zeus on Mt. Lykaion, Arcadia," *AJA* 101, p. 374.
- . 2005. "A New Topographical and Architectural Survey of the Sanctuary of Zeus at Mt. Lykaion," in *Ancient Arcadia. Papers from the Third International Seminar on Ancient Arcadia, Held at the Norwegian Institute at Athens, 7–10 May 2002* (Papers from the Norwegian Institute at Athens 8), ed. E. Østby, Athens, pp. 381–396.
- Romano, D. G., and M. E. Voyatzis. 2010a. "Excavating at the Birthplace of Zeus," *Expedition* 52, pp. 9–21.
- . 2010b. "Preserving Ancient Arcadian Heritage: Proposal for an Archaeological Park," in *Paysage et religion en Grèce antique: Mélanges offerts à Madeleine Jost* (Travaux de la Maison René-Ginouvès 10), ed. P. Carlier and C. Lerouge-Cohen, Paris, pp. 41–54.
- . 2014. "Mt. Lykaion Excavation and Survey Project, Part 1: The Upper Sanctuary," *Hesperia* 83, pp. 569–652.
- Roy, J. 2007. "The Urban Layout of Megalopolis and Its Civic and Confederate Context," in *Building Communities: House, Settlement, and Society in the Aegean and Beyond. Proceedings of a Conference Held at Cardiff University, 17–21 April 2001* (BSA Studies 15), ed. R. Westgate, N. Fisher, and J. Whitley, London, pp. 289–295.
- Rudolph, W. 1978. "Hellenistic Fine Ware Pottery and Lamps from above the House with the Idols at Mycenae," *BSA* 73, pp. 213–234.
- Samaria III = J. W. Crowfoot, G. M. Crowfoot, and K. M. Kenyon, *The Objects from Samaria (Samaria-Sebaste III)*, London 1957.
- Siebert, G. 1978. *Recherches sur les ateliers de bols à reliefs du Péloponnèse à l'époque hellénistique (BÉFAR 233)*, Athens.
- Sinn, U. 2007. "Die Ἱερὰ κορυφή der Arkader: Zur sakralen Topographie des Zeus-Heligtums im Lykaion,"

- in *Αμόμωνα Έργα: Τιμητικός τόμος για τὸν καθηγητὴ Βασίλη Κ. Λαμπρινουδάκη* (Αρχαιογνωσία 5), ed. E. Simantoni-Bournia, A. A. Laimou, L. G. Mendoni, and N. Kourou, Athens, pp. 177–188.
- Sioumpara, E. P. 2011. *Der Asklepios-Tempel von Messene auf der Peloponnes: Untersuchungen zur hellenistischen Tempelarchitektur* (Athenaia 1), Munich.
- Slane, K. W., and G. D. R. Sanders. 2005. "Corinth: Late Roman Horizons," *Hesperia* 74, pp. 243–297.
- Themelis, P. 1994. "Hellenistic Architectural Terracottas from Messene," in *Proceedings of the International Conference on Greek Architectural Terracottas of the Classical and Hellenistic Periods, December 12–15, 1991* (*Hesperia* Suppl. 27), ed. N. Winter, pp. 141–169.
- Williams, C. K., II, J. MacIntosh, and J. E. Fisher. 1974. "Excavation at Corinth, 1973," *Hesperia* 43, pp. 1–76.
- Winter, F. E. 1971. *Greek Fortifications* (*Phoenix* Suppl. 9), Toronto.
- Ζαννου, Ε. 2005. "Σπάρτη: Εργαστήρια ανάγλυφων σκύφων," in *Ελληνιστική κεραμική από την Πελοπόννησο*, Athens, pp. 107–125.

### *David Gilman Romano*

UNIVERSITY OF ARIZONA  
SCHOOL OF ANTHROPOLOGY  
1009 E. SOUTH CAMPUS DRIVE  
P.O. BOX 210030  
TUCSON, ARIZONA 85721

dgromano@email.arizona.edu

### *Mary E. Voyatzis*

UNIVERSITY OF ARIZONA  
SCHOOL OF ANTHROPOLOGY AND DEPARTMENT OF CLASSICS  
1009 E. SOUTH CAMPUS DRIVE  
P.O. BOX 210030  
TUCSON, ARIZONA 85721

mev@email.arizona.edu