

Traces of commercial activity at the site of Loutros Pallene in the Late Classical and Hellenistic periods: the bronze and lead object

Anastasia Rammou, Vassiliki Stefanaki

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TRACES OF COMMERCIAL ACTIVITY AT THE SITE OF LOUTROS PALLENE IN THE LATE CLASSICAL AND HELLENISTIC PERIODS: THE BRONZE AND LEAD OBJECTS*

Summary

The present article concerns the study of the bronze and lead objects (coins, tokens, commercial weights, loom weights, clothes weights) of the Late Classical and Hellenistic periods that were discovered during the rescue excavations carried out by the former 2nd Ephorate of Prehistoric and Classical Antiquities for the construction of the “New Free Stavros-Rafina Highway” in the area of Loutros in the modern deme of Pallene during the years 2002-04. Through the study of these few metal objects and their comparison with similar assemblages discovered in the Attica’s *chora*, a preliminary interpretive approach to the residential remains in the area is attempted. Nevertheless, it is difficult to determine to which ancient Attic deme the structures uncovered in the Loutros site belonged, as well as to ascertain their precise function. Awaiting for the study of the remaining large quantity of clay objects, the Athenian coins and mainly the trade weights point to a form of commercial activity operating at a local level. This interpretation is further supported by the site’s location within an extensive road network, as well as the storage facilities of the excavated structures, which could probably indicate their market-oriented function.

Keywords: Pallene, Attic demes, road network, farmhouses, markets

I) The historical and archaeological data

A) Topography

The basin of Attica is surrounded by four mountain ranges, Hymettos, Parnitha, Pentelikon and Aigaleo, leaving the exit to the sea free and thus creating three large sub-regions, namely the city (*asty*), the coast (*paralia*) and the inland (*mesogaia*)¹.

* We would like to express our gratitude to E. Papatoma, conservator in the Ephorate of Antiquities of East Attica, to E. Kontou, conservator in the Numismatic Museum, for the photography of the metal objects of the catalogue, to Ch. Binteri and Y. Stavrinou, graphic designers in the Numismatic Museum, for the photo editing and the realisation of the map with the horizontal profile of the “New Free Stavros-Raphina Highway” respectively, as well as to K. Petrou, archaeologist in the Ephorate of Antiquities of East Attica, for facilitating our study in the Archaeological Museum of Brauron.

¹ According to written sources, the settlements and small cities created in these three regions were independent and administratively autonomous, while some of them formed larger entities or organisations (Whitehead 1986, 16, 184-185, n. 46). This is testified by Strabo (*Geographica* 9, 1.20), according to whom Kekrops was the first to unite all these settlements into 12 cities. However, the Athenians believed that the political union was achieved by Theseus and this is attested in Thucydides

The site of Loutros is located at the outskirts of the urban web of the modern deme of Pallene to the south, in the northwest part of the Mesogeia plain, south of the modern city of Pallene and outside the city plan, approximately 5 km from the temple of Athena Pallenis, 12 km from the coast of Raphina and approximately 160 m above sea level.

The boundaries of the Mesogaia plain are defined by the large mountain ranges of Hymettus to the west and Pentelikon to the north. It is an area of low altitude ranging from 50 to 200 m and a hilly terrain in the eastern coastal area and in the Lavrion area to the southeast, as well as in the south where the foothills of Mount Panio are situated. Other well-known hills that surround the plain are those of Kantza, Kollegio and Boura to the south, the Petreza hill range to the east, and the low hills of Levidis, Kontra Mesosporitissa and Kontra protruding in the interior. The streams of Panagitsa, Gerakas, Pallene and Mariza, which spring from Mount Pentelikon and join the Great Raphina Stream, run through the plain². The area has no surface springs, but is rich in groundwater, as perhaps indicated by the toponym “Loutros”, which is due to the geological background of the wider area. The latter comprises brown-colored terrestrial and fluvial deposits, marls, clays, sandstones and conglomerates belonging to a lacustrine phase.

During the decade preceding the Athens Olympic Games (*ca* 1994-2004), the enormous building activity due to the urban redevelopment of Attica, as well as the huge public works for the infrastructure of the 2004 Olympic Games, offered to the Archaeological Service the opportunity to acquire important excavation data from prehistoric times to the Roman period in almost the entire area of Attica. In this context, the construction of the “New Free Stavros-Raphina Highway” in the Loutros area of the modern deme of Pallene, during the years 2002-04, functioned as an extensive trial section measuring 3750 m length and 100 m width (fig. 1). The extensive excavations carried out by the former 2nd Ephorate of Prehistoric and Classical Antiquities along the entire length and width of the highway, demonstrated the intensive and almost continuous use of the area from the Neolithic period to Late Antiquity³.

B) Ancient demes

The findings that have been uncovered during the aforementioned rescue excavations indicate a strong human presence related to commercial activities unfolding within a network of settlements of the ancient Attic demes, which were discovered in the wider area of the modern deme of Pallene⁴.

The initial number of ancient demes in Attica is unknown. During the 4th c. BC, however, 139 demes are attested with various demographic and territorial

(*Historiae*, 2, 15.1-3) where it is stated that, when Theseus assumed power, he abolished the *bouleuteria* and the authorities of each small city, he established a *prytaneion* and a *bouleuterion* and he imposed on them a single center of administrative and judicial power, the city of Athens. On the problematic issue of the unification of Attica and the Athenian foundation myth, see Fachard 2021, 23-24; Μαθηαίου 2010, 16-18; Hansen 2004, 624-625.

² Σταϊνχάουερ 2024, 150.

³ Ράμμου 2013, 180-181; 2022; Ζούβελου 2015, 421-424.

⁴ Σταϊνχάουερ 2008, 167.

sizes⁵. According to the studies of Steinhauer, only a small number of Attic demes seem to correspond to the image of the village as we know it today⁶. Therefore, if we exclude the larger demes with an urban and nucleated character and the few fortified ones, such as Rhamnous, Eleusis and Sounion, with a specific military and religious function, the small and medium-sized demes are characterized by a loose organization of habitation that included mainly scattered farmsteads and, in some cases, two or three settlements near main roads and intersections⁷.

C) Ancient road network

The impressive road network of Attica connected all demes with each other and enabled all residents to easily access the *asty*. It comprises 3.50 m wide dirt roads with low side walls⁸. The layout and density of the road network provide valuable information on the habitation of Attica, as well as on the communication between the demes and the direct contact of the entire countryside with the center of Athens⁹. The Athens basin was connected to Mesogaia and Lavreotiki through two carriage roads to the north and south of Hymettos, which followed the course of the current roads of Mesogeia-Stavros and Vouliagmeni-Vari Koropi respectively¹⁰. Specifically, in the area of ancient Mesogaia, the road network consists of a series of roads starting from Pallene, at the entrance to Mesogeia, and spreading out radially. The first road is heading to the east towards Marathon, while the other two are crossing the plain in a northwest/southeast direction towards the great coastal sanctuaries of Artemis at Brauron and Loutsa, and the major harbours of the Euboean Gulf, Steira and Prasies at Porto Raphti, and to Thorikos in Lavreotiki to the South¹¹.

The ancient deme of Pallene has been located in the area of Gerakas, 3 km along the Marathonos Avenue from Stavros to the so-called Vigla or Vigla of the Thieves, namely the area of southern Pentele sheepfolds and the Pallene stream¹². It is worth noting that at a short distance from the site of Loutros and within the boundaries of the ancient deme of Pallene (area of Stavros Geraka) the early classical

⁵ Σταϊνχάουερ 2024, 50, n. 15 and 2010, 93. It is well known that in 508/7 BC, Kleisthenes increased the number of the Athenian tribes (*phylai*) from four to ten and established the Council (*Boule*) of Five Hundred with 50 members from each tribe. The three regions of Attica, namely the *asty*, the *paralia* and the *mesogaia*, were represented equally within each of these tribes. In this way, the territory of Attica was divided into 30 local units, the *trittyes*, and each tribe was composed of three *trittyes*, one per region. The latter included a certain number of demes, which were local autonomous communities with their own resources. The demes decided about their community affairs, their land, municipal and sacred, their worship, and their sanctuaries. See Σταϊνχάουερ 2024, 49-52; Fachard 2021, 24-25; Ματθαίου 2010, 19-22.

⁶ Besides the archaeological data, our knowledge of the ancient demes of Attica derives from pseudo-Aristotle's *Ath. Pol.*, the inscriptions discovered throughout Attica, the legal speeches of Lysias and Demosthenes, the comedies of Aristophanes and Menander, as well as from historians and later geographers (Strabo and Pausanias). See Σταϊνχάουερ 2024 and 2010, 98.

⁷ On the settlement pattern of the Attic demes, the density of population and the estimated number of houses, see Σταϊνχάουερ 2024, 298-304, 460-465; Fachard 2021, 26-28; Δημακόπουλος 2017, 289; Σταϊνχάουερ 1994, 183-187.

⁸ Σταϊνχάουερ 2010, 98.

⁹ Fachard 2021, 29-30.

¹⁰ Σταϊνχάουερ 2009a, 49.

¹¹ See Σταϊνχάουερ 2001, 81; Ραντοπούλου 2009, 340.

¹² Σταϊνχάουερ 2001, 83.

sanctuary of Athena Pallenis was discovered. This is attested in written sources dating back to the years of Peisistratus (561-527 BC). According to the inscriptions, the temple of Athena Pallenis was the religious center of a federation consisting of the demes of Pallene, Gargettos, Paiania, and, probably, the distant deme of Acharnai, which lasted from the Archaic to the Roman period¹³.

At the entrance of the modern deme of Pallene, part of a road with an east-west direction was discovered. This was essentially part of the main road that connected the deme of Pallene with Araphen and Marathon, and passed south of the Loutros site¹⁴, thus giving it a special dynamic with a potentially commercial character. Therefore, excavations at the site of Loutros revealed parts of four road axes running through the area. One of them, running from southwest to northeast, connected the Loutros area with the ancient road to Erchia, while a second one, with an east-west direction, was probably the road that passed north from the Kontra hills, towards Araphen and met the road to Vilaneza¹⁵. Along these, residential remains of the Late Classical and Hellenistic periods were identified, while to the south of the junction of the two roads, a cemetery of the Geometric period was discovered (fig.1)¹⁶.

D) Residential remains in the wider area

The settlements that have been discovered in the wider area of Mesogeia testify to its residential character. This was formed by individual farmhouses in a particularly sparse arrangement with distances that may have exceeded 300 m. The farmsteads are interspersed with family tomb enclosures and pottery workshops, mainly along the roads that crossed the plain¹⁷.

Such a settlement was located at the intersection of two roads, *i.e.* the ancient road of Marathon and a secondary small perpendicular rural road running from north to south, towards Anthousa and ancient Gargettos, parallel to the Pallene stream. On either side of these roads, farmhouses and a building complex were uncovered. These were situated at a distance of 200 m to each other and approximately 400 m from the Mesogeion Avenue. In addition, burial monuments dated to the Classical and Early Hellenistic periods (5th-first quarter of 3rd c. BC) were unearthed¹⁸. Their concentration beyond the deep stream of Gerakas renders possible that the site constitutes the entrance to another deme. Based on the demotic and the names inscribed on the funerary monuments (*lekythoi* and gravestones), this probably refers to the small deme of Kydantidai, bordered by the demes of Pallene and Erchia (Spata), to which two locations had long been attributed, Matrigou and Vlycho, east of Harvati¹⁹.

¹³ Whitehead 1986, 185, n. 46; Πλάτωνος- Γιώτα 1997; Ραυτοπούλου 2009, 340-341, with relevant bibliography; Σταϊνχάουερ 2024, 153.

¹⁴ See Σταϊνχάουερ 2009, 52.

¹⁵ On the geomorphology of the area, its history and the road network, see Ζούβελου 2015, 421-423.

¹⁶ Ράμμου 2022, 21.

¹⁷ Σταϊνχάουερ 2008, 167.

¹⁸ Σταϊνχάουερ 2001, 85-86; 2005, 171-172; 2009b, 309-311; 2024, 173; Δημακόπουλος 2017, 123-124; Χριστοδούλου 2014, 214.

¹⁹ On the proposed location of the deme of Kydantidai, see Trail 1975, 40-41; Ματθαίου 1989 and 1993, 85-86; Δημακόπουλος 2017, 119; Σταϊνχάουερ 2024, 165, n. 53.

In the Kleisthenic system, the tribal affiliation of the deme of Kydantidai was that of Aigeis²⁰. Following the establishment of the Macedonian tribes, however, it was transferred to Ptolemais in 224/3 BC²¹. This small deme was represented in the Council of Five Hundred by either one or two members and, therefore, did not probably exceed 40 houses in size²². The epigraphic testimonies attest its demographic and economic development during the Classical period, echoing the influence of the powerful family of the well-known general Νικίας Νικηράτου Κυδαντίδη²³.

E) Excavation research results

The total length of the “New Free Stavros-Raphina Highway” under construction was 3.750 m. Ten sectors (I-X)²⁴ were defined along its line, in order to facilitate and better organize the excavation work, which brought to light a wide variety of finds that provide information about the periods of activity in the area.

Up to PK 0+500 (sector I) destruction layers of different sorts, pit features, stone piles and a deposit with neolithic pottery were revealed. The most notable find, however, was a cemetery dating to the Late Geometric period, in which eleven burials and offering places were excavated. The latter comprised a large number of vessels with an impressive variety of shapes (amphoras, oinochoe, skyphoi, kantharoi, etc.)²⁵. Near the cemetery, the section of an ancient road following a southwest-northeast direction was discovered, as well as a pit with final neolithic pottery and stone tools.

A stone-paved area with geometric pottery and a prehistoric female figurine were discovered, among others, in sector II (PK 0+600), while two rooms (a small and a larger one) were uncovered in sector III (PK 0+650-800). The destruction layer of the larger room was particularly rich in pottery dating to the Classical period. In the nearby area a bell-shaped deposit with an abundance of pottery and a remarkably large number of pyramidal clay loom weights (approximately 300) was excavated. In addition, the excavation revealed 25 almost circular stone piles arranged in a semicircle and dating to the Neolithic period.

The finds of sector V (PK 0+900-1200) include destruction layers, a stone-built well with classical pottery, an ancient pit with classical and hellenistic pottery, a building (30x15 m) dating to the Classical-Hellenistic period, a rectangular cistern lined with hydraulic mortar and a pipeline. Excavations in this sector also revealed the remains of a large rectangular building (18.5x7 m) with elaborate masonry on the inside and with buttresses in order to more evenly distribute the load of the superstructure. Its thick layer of destruction yielded a multitude of ceramic, stone and marble architectural fragments, as well as a large quantity of utilitarian and storage vessels. Worth mentioning is the large number of stamped amphora handles

²⁰ Whitehead 1986, 369-370.

²¹ Traill 1975, Table II (Aigeis).

²² Hansen 1986, 51-64; Σταϊνχάουερ 2005, 172 and 2009b, 310. However, see Σταϊνχάουερ 2024, 461, t. II.

²³ Ζούβελου 2015, 426; Whitehead 1984, 311-312.

²⁴ The sectors are the following: 0 (PK 0+200μ.), I (PK 0+320-550 m), II (PK 0+550-650 m), III (PK 0+650-800 m), IV (PK 0+800-900 m), V (PK 0+900-1200 m), VI (PK 0+1600 m), VII (PK 0+1800 m), VIII (PK 0+1900 m), IX (PK 0+2100 m) and X (PK 0+2900 m).

²⁵ On the cemetery of the Geometric period, see Ράμμου 2022.

dating to the late 4th and the 3rd c. BC from Paros, Rhodes and Knidos²⁶. Four coins (nos 1, 3, 17-18), two lead loom weights (nos 28-29) and one token (no. 22) were collected from the area. To the west and north, part of a small road, oriented east-west and consisting of stones of approximately 0.50 cm in size, was identified. This intersected with the main road a little further to the east.

In any case, regarding coins, commercial weights and lead loom weights, there are two important findspots, specifically two building complexes adjacent to the main road and dating to the Late Classical and Hellenistic periods. The first is in sector VI (PK 0+1600) where residential remains from Hellenistic times were brought to light. The building complex consisted of at least five small rooms (figs 2-3). These were located along the western and northern sides of a courtyard that was defined by walls to the south and east, while to the north it was connected to the central road that came from the southeast in a north and west direction. Moreover, the excavation brought to light a large quantity of vessels and hives, loom weights, animal bones, lead joins, five coins (nos 4-8), three lead commercial weights (nos 24-26) and one token (no. 23).

Further to the north, in sector VII and at a distance of 200 m (PK 0+1800) (fig. 4), another building complex was discovered. This comprised at least six rooms along its western and northern sides, which were open to a large courtyard (fig. 5). To the west, a large outdoor or semi-roofed storage space was probably defined. The excavated deposits, especially those of room 9, which was located in the northernmost point (fig. 6), and of the courtyard, have unearthed a large quantity of pottery, querns, loom weights (nos 30-31), masses of raw lead, nine coins (nos 9-15, 19-20), one commercial weight (no. 27), miniature offering vessels, as well as the upper part of a marble loutrophoros of the 4th c. BC²⁷.

Moreover, deposits (PK 0+1900 and 0+1950) rich in classical and hellenistic pottery are quite frequent and finally, a rectangular building (21x10.8 m) of the Roman period, with a destruction layer rich in a variety of finds, was discovered in sector X (PK 0+2900).

To sum up, the excavation data indicates that the site of Loutros, where roads with intense mobility intersected, was characterized by commercial activity in organized facilities. Most of the findings (coins, commercial weights, tokens, loom weights) have been found at sectors V (PK 0+900-1200), VI (PK 0+1600) and VII (PK 0+1800). The common element that characterizes all three sectors is the extensive building remains that were uncovered²⁸, with a large quantity of pottery, as well as other finds, including metal and marble objects.

Observing the distribution of the ancient remains in the natural relief of the Pallene area, it is established that the Loutros site is directly intertwined with the existence of the local roads that ensured communication with the *asty*, the inland areas and the coast, as well as with the streams of the area that provided water supply to the agricultural and craft activities, while the Gerakas stream seems to constitute the natural northeast boundary with the ancient deme of Pallene. As mentioned above, the latter deme was a religious and economic center of Attica in

²⁶ See also Ζούβελου 2015, 423.

²⁷ Ζούβελου 2015, 421-424.

²⁸ It is certain that deep plowing, applied for the cultivation of vineyards in modern times, has greatly affected the archaeological remains. Judging mainly from the extensive destruction layers, as well as from the dense road network, we suspect that the site would have been much more extended.

close connection to the *asty* and with notable development. Therefore, the building complexes discovered in Loutros probably played a significant role in the commercial activities of the wider area, enjoying the privileges of a location adjacent to a very wealthy deme.

(A.R.)

II) The bronze and lead objects from the area of Loutros Pallene

A) Catalogue

The following catalogue (see table of coins and other metal objects) includes 21 bronze coins, two lead tokens, four commercial lead weights, four lead loom weights and one clothes lead weight. They were discovered in an area 2 km long, located 500 m east of the Kantza junction, at the site of Loutros Pallene, where the rescue excavations of the Ephorate of Antiquities of East Attica (former 2nd Ephorate of Prehistoric and Classical Antiquities) for the construction of the Stavros-Raphina Highway in the years 2002-04 have revealed the remains of six structures of Late Classical, Hellenistic and Roman periods²⁹.

Bronze coins

Ancient Greek coins

Macedonia/Antigonos II Gonatas

Sector V

1. Helmeted head of Athena r./Pan r., erecting trophy to r.; B-A across upper field, monogram of Antigonos between legs; in field r. or l. symbols, letters or monograms (6.27 g; 19.4 mm; 3.00) (Inv. no. N1) (see *SNG Alpha Bank*, 1010 *et seq.*) (277/6-239 BC).

Attica/Athens

Sector III

2. Triptolemos l., holding grain ear, seated in winged chariot being drawn by two serpents/Pig standing r. on mystic staff; ΕΛΕΥΣΙ below; all in wheat wreath (3.39 g; 15.9 mm; 12.00) (Inv. no.: N1) (*Agora XXVI*, p. 44, no. 51, pl. 5) (307-300 BC).

Sector V

3. Triptolemos l., holding grain ear, seated in winged chariot being drawn by two serpents/Pig standing r. on mystic staff; ΕΛΕΥΣΙ below; all in wheat wreath (1.86 g; 14.4 mm) (Inv. no.: N6) (*Agora XXVI*, p. 44, no. 51, pl. 5) (307-300 BC).

²⁹ See Ράμμου 2013, 180-181; Ζούβελου 2015; Σταϊνχάουερ 2024, 164, map XVII B (nos 1-5) and A. Rammou, above.

Sector VI

4. Triptolemos l., holding grain ear, seated in winged chariot being drawn by two serpents/Pig standing r. on mystic staff; ΕΛΕΥΣΙ below; all in wheat wreath (2.17 g; 12.6 mm; 11.00) (Inv. no.: N9) (*Agora XXVI*, p. 44, no. 51, pl. 5) (307-300 BC).

5. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; all in olive wreath (2.72 g; 11 mm; 11.00) (Inv. no.: N8) (*Agora XXVI*, pp. 44-45, no. 52, pl. 5) (287-284 BC).

6. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; in field r., ear of wheat (3.00 g; 13.7 mm; 12.00) (Inv. no.: N2) (*Agora XXVI*, p. 46, no. 58, pl. 6) (270-261 BC).

7. Head of Demeter wearing wheat wreath r., border of dots/ΑΘΕ, Plemochoe with wheat ear passed through each handle; in field r., owl (overstruck) (4.59 g; 20.5 mm; 12.00) (Inv. no.: N6) (*Agora XXVI*, p. 62, no. 74, pl. 7) (224/3-198 BC).

8. Head of Athena wearing Attic helmet r./ΑΘΕ, owl standing, $\frac{3}{4}$ facing r., wings lifted; in field r., amphora or plemochoe (6.95 g; 16.8 mm; 3.00) (Inv. no.: N7) (*Agora XXVI*, pp. 60-61, nos 69-70, pl. 7) (224/3-198 BC).

Sector VII

9. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; in field r., ear of wheat (2.53 g; 11 mm; 6.00) (Inv. no.: N6) (*Agora XXVI*, p. 46, no. 58, pl. 6) (270-261 BC).

10. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; in field r., cornucopia (2.17 g; 13 mm; 12.00) (Inv. no.: N5) (*Agora XXVI*, p. 47, no. 59, pl. 6) (270-261 BC).

11. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; in field r., unidentified symbol (2.78 g; 14.7 mm; 3.00) (Inv. no.: N4) (*Agora XXVI*, pp. 46-47, nos 57-60, pl. 6) (270-261 BC).

12. Head of Athena wearing Corinthian helmet r./ΑΘ[H], owl standing r., facing; all in olive wreath (2.52 g; 13 mm; 11.00) (Inv. no.: N7) (*Agora XXVI*, pp. 44-45, no. 52, pl. 5) (287-284 BC).

13. Head of Athena wearing Corinthian helmet r./ΑΘΕ (?), owl standing r., facing; all in olive wreath (2.77 g; 12 mm; 12.00) (Inv. no.: N9) (*Agora XXVI*, pp. 44-45, no. 52, pl. 5) (287-284 BC).

14. Triptolemos l., holding grain ear, mounting in winged chariot being drawn by two serpents/Pig standing r. on mystic staff; ΕΛΕΥΣΙ below; all in wheat wreath (2.53 g; 12.3 mm; 12.00) (Inv. no.: N3) (*Agora XXVI*, p. 44, no. 49, pl. 5) (322/317-307 BC).

15. Head of Athena wearing Corinthian helmet r./ΑΘΕ, owl standing r., facing; in field r. ear of wheat (2.87 g; 14.1 mm; 12.00) (Inv. no.: N1) (*Agora XXVI*, pp. 46-47, nos 58-59, pl. 6) (270-261 BC).

Roman coins

Sector III

16. Illegible inscription. Head of emperor r./worn, unidentified (1.81 g; 13.8 mm) (without inv. no.) (4th-5th c. AD).

Unidentified coins

Sector V

17. Worn (2.52 g; 11.6 mm) (Inv. no.: N3).

18. Worn (2.36 g; 13.8 mm) (Inv. no.: N4).

Sector VII

19. Worn (3.76 g; 14.2 mm) (Inv. no.: N8).

20. Worn, probably Athenian (head of Athena wearing Corinthian (?) helmet r./Owl or two owls?) (2.33 g; 12 mm) (Inv. no.: N10).

Sector X

21. Worn, probably Athenian (head of Athena wearing Corinthian helmet r.) (4.93 g; 17.4 mm) (Inv. no.: N1).

Lead tokens

Sector V

22. Mystic ring enclosed in wreath (3.70 g; 15 mm) (Inv. no.: N 5) (Cf. Σβορώνος 1900, p. 335, no. 205, pl. ΙΘ'(III). 48) (3rd-1st c. BC).

Sector VI

23. A lidded Panathenaic amphora (4.80 g; 16 mm) (Inv. no.: N 5) (Postolaccas 1866, 348, no. 154, pl. XXXII; Cf. *Agora X*, p. 101, nos L157-L158, pl. 25) (3rd-1st c. BC).

Commercial lead weights

Sector VI

24. Circular weight; incised numerals ΗΗΙΙΙ (3 Attic dr. and 3 ob.) (11.58 g; 20.8 mm) (Inv. no.: N6).

25. Circular weight; incised numerals ΗΗΙΙ (2 Attic dr. and 3 ob.) (10.28 g; 22.1 mm) (Inv. no.: N3).

26. Square Athenian weight; 1/6 stater; raised edges; in relief, half amphora. On the field, the raised letters Δ/Η/Μ/Ο for δημόσιον, as state guarantee (159.91 g; 40.4x39.6x8.6 mm) (Inv. no.: M31) (see *Pondera on line* 137; for the Panathenaic type half amphora weights, see *Agora X*, pl. 6) (4th-3rd c. BC).

Sector VII

27. Square Athenian weight; pierced; 1/12 stater (1/6 mina); raised edges; in relief, crescent (78.43 g; 28.3x29x9 mm) (Inv. no.: M39) (for the crescent weights, see *Agora X*, pl. 8. LW. 50) (4th-3rd c. BC).

Loom lead weights

Sector V

28. Conical weight; pierced (227.3 g; 50x30 mm) (Inv. no.: M55).

29. Conical weight (187.5 g; 45x30 mm) (without inv. no.).

Sector VII

30. Conical weight; pierced (214.1 g; 51x34 mm) (Inv. no.: M37).

31. Conical weight (95.4 g; 52x29 mm) (Inv. no.: M30).

Clothes lead weights

Sector VII

32. Biconical weight with central hole encircled on one side by a rosette with nine leaves or rays and on the other by a wreath of ivy leaves and bunches of grapes (28.38 g; 25.6 mm) (Inv. no.: M44) (cf. *Pnyx* I, p. 101, nos 23-26, fig. 45. *Corinth* XII, p. 304, no. 2633, pl. 125. *Rhamnous* VI, p. 242, fig. 59, no. 7).

B) Brief commentary on the entries of the catalogue

Bronze coins

The numismatic material found at the site of Loutros, despite its small number and poor state of preservation, does not surprise in terms of its provenance and circulation, since it includes mainly athenian bronze coins of the Late Classical and Early Hellenistic periods, as well as a Pan-raising-trophy Antigonid bronze alluding to the victory of Antigonos Gonatas over the Celts at Lysimacheia (277 BC) (nos 1-15)³⁰. The important circulation of the bronze coinage of Antigonos II Gonatas attested in Attica after 260 BC is associated with the aftermaths of the Chremonidean war (267-261 BC) when Athens was occupied by the macedonian king (261-255 BC) and is related either with the *siteresion* of the macedonian garrisons in the area or with an unrecorded king's benefaction to the Athenian people³¹. Besides this bronze of Antigonos II Gonatas, the identified coin finds at Loutros do not include foreign issuing authorities of the Classical and Hellenistic periods, compared to those found at other sites of the Attic countryside³². Nevertheless, the material includes some very worn and unidentified coins (nos 17-21) and also a bronze (no. 16), which probably dates in the Late Roman period.

Lead tokens

The iconography of the Athenian lead tokens (*σύμβολα*) (nos 22-23) found in sectors V and VI, reveals their public purposes and functions since they depict images, referring to the major state festivals: the Panathenaea and probably the Eleusinian Mysteries, administered by the Council of Five Hundred³³.

Specifically, the token no. 22 with the mystic ring enclosed in wreath is probably related to the annual celebration of the Eleusinian Mysteries, as have been

³⁰ Panagopoulou 2020, 357.

³¹ On the coins of Antigonos II Gonatas, see *Agora* XXVI, 36-37 and 166; Lönnqvist 1997, 136-137. On their circulation, see Panagopoulou 2020, 357-358 with relevant bibliography.

³² On coin finds attested in the area of Mesogeia and generally in Attica, see indicatively, Σταϊνχάουερ 2024, 150-249; Τιμοθέου 2023, 149, fig. 14; Βασιλειάδου 2023, 110, fig. 10; Μιχαηλίδη and Τιμοθέου 2023, 135, fig. 8; Dalakoura-Vogiatzoglou and Apostolou 2020; *Rhamnous* V, 6-7 (on the coins of Antigonos II Gonatas) and 17-23 (on the coins of the Athenian mint); Γιαμαλίδη 2013; Αγαλλοπούλου 2009; Λιώνης *et al.* 2005, 203-204.

³³ Gkikaki 2023a, 11 and 2023b, 81-82.

interpreted those with the *kernos*, Triptolemos in his serpent car and probably the piglet-on-mystic-staff³⁴. Several tokens with the mystic ring are preserved in the collections of the Numismatic Museum. Nevertheless, some of them carry the inscription ΠΕΝ and are included in the category of the PEN tokens, assigned by Svoronos to the Council of Five Hundred³⁵ and recently by Gkikaki to the *Πεντεδραχμία* of the late 4th c. BC, a term used for the *theôrikon* distributed to attend the festival of the Great Dionysia³⁶. Moreover, the lidded Panathenaic amphora which figures on the token no. 23 is the *par excellence* Athenian device and is depicted either alone, as in this case, or with a variety of legends and adjunct objects³⁷.

Therefore, the above tokens could be official tokens served for the *theôrikon*, a money distribution attested already from the 5th c. BC, for the entrance to the civic festivals of Athens and for the provisions of goods and services to the participants³⁸.

It should be mentioned that besides the well-known lead and clay tokens found in the Athenian Agora, the Pnyx, the Hill of the Muses and the residential area of Ancient Athens³⁹, tokens within the boundaries of the Athenian state are attested indicatively in the ancient theater of Thorikos⁴⁰, in Piraeus⁴¹, in Rhamnous⁴², in the temple of Poseidon at Sounion⁴³, in a farmstead at the area of Varabas (Markopoulo)⁴⁴, in a small sanctuary of a chthonic deity at Myrrhinous⁴⁵ and in Koropi, where an important hoard of 93 lead tokens was found in 1905⁴⁶.

Finally, according to Gkikaki⁴⁷, “the lead tokens after their distribution, and after they had fulfilled the role for which they had been issued, were carefully collected again and melted down in order to issue new ones. What has been found today are those that were accidentally lost before they had time to fulfill their role”.

Commercial lead weights

The two square lead weights found in sectors VI and VII are Athenian commercial weights used in the markets for the measuring of commodities and items, such as agricultural products, base metals, textiles and other manufactured goods. In Athens, ten public officials, mentioned as *metronomoi* in the written sources, five in the Athenian Agora and five in Piraeus, were responsible for checking the balances and balance weights used by merchants. The official bronze

³⁴ Gkikaki 2022, 98; 2023a, 10-11 and 2023b, 80-81.

³⁵ Σβορώνος 1900, 334-336.

³⁶ Gkikaki 2021, 60-62; 2022, 99; 2023b, 82.

³⁷ See *Agora X*, p. 101, nos L157-L158, pl. 25; Gkikaki 2020, 132-133, nos 57-58, pl. 15; 2021, 60 and 70, no. 2).

³⁸ Gkikaki 2021, 60-63.

³⁹ Gkikaki 2022, 89-93. On the 20 lead tokens found at the ancient Koile road, see Dakoura-Vogiatzoglou and Apostolou 2020, 282. On the 19 lead tokens discovered in Makrygiannis plot, see Karra 2023.

⁴⁰ Gkikaki 2022, 92, n. 41.

⁴¹ Gkikaki 2022.

⁴² *Rhamnous V*, 51, nos 749-751.

⁴³ Gkikaki 2022, 92, fig. 2.

⁴⁴ Τιμοθέου 2023, 148-149, fig. 14.

⁴⁵ Σταϊνχάουερ 2010, 100-101, fig. 131; Κακαβογιάννη 2009, 74; Ανετάκης 2009, 194; Πέτρου 2003, 41 (fig. 3α-β).

⁴⁶ Ράλλη 2009.

⁴⁷ Personal communication.

commercial weights were kept in the Tholos in the Athenian Agora, in the Acropolis, in Piraeus and in Eleusis.

The Athenian system of commercial weights and measures is a complex structure organised around three units of weights: the stater, which was equivalent to two minas, the mina and the drachm. The symbols that appear on the Athenian weights from the Archaic to the Hellenistic periods are usually associated with precise denominations. Therefore, the Panathenaic half-amphora is related to 1/6 of a stater or 1/4 of a mina and the crescent may refer to 1/4 or 1/6, or 1/8 of a mina⁴⁸.

We should mention that in Athens, although the weight of the “coin mina” would remain unchanged, that of the “trade mina” was increased during the Classical and Hellenistic periods, as attested by the literary and epigraphic testimonies, as well as the inscribed Athenian commercial weights. The city of Athens applied at least five different weight standards for its commercial mina between the 5th and the end of the 2nd c. BC⁴⁹.

Therefore, in our case, the two lead weights follow probably the Athenian 112 dr standard, where the mass for the mina is 487.2 g, for the 1/6 stater 162.4 g and for 1/12 stater (1/6 mina) 81.2 g. The above standard was probably used from the early part of the 4th c. BC until its replacement with the 138 dr standard in the late 3th c. BC⁵⁰.

Athenian weights were found not only in the Athenian *asty*, such as in the Agora and the Pnyx⁵¹, to mention the most well-known excavation finds, but all over Attica. We could mention indicatively, those found in the “agora” of the deme of Halai Aixonidai⁵² in the modern suburb of Voula, in the Tower B of the “priestly” residence of the temple of Apollo Zoster in Mikró Kavouri/Vouliagmeni⁵³, in the large farmstead discovered in the area of Varabas (Markopoulo) of the deme of Konthyle⁵⁴, in the agora of the deme of Myrrhinous in the area of Merenda (Markopoulo)⁵⁵, in the complex found in Pouli in the limits of the demes of Oe (Koropi) and Erchia (Gialou, Spata)⁵⁶, in the “agora” located in the Limani Pasa of the deme of Sounion, identified with the agora *εν Κοίλιη* of the tribe of Salaminien⁵⁷, in the famous building complex⁵⁸ discovered in the area of modern Pallene at a distance of 400 m from Marathonos Avenue and attributed to the Attic deme of Kydantidai, in the deme of Rhamnous⁵⁹ etc.

⁴⁸ Willocx 2020, 23-24.

⁴⁹ Willocx 2020, 25-26. See also Tekin 2016, 35-46, with the previous bibliography.

⁵⁰ Kroll 2020, 63-64; Willocx 2020, 26.

⁵¹ *Agora X*; *Pnyx I*, 28-29.

⁵² Μακραδήμα *et al.* 2014, 259; Κουράγιος 2009-11, 42; Γιαμαλιδη 2013, 31-32; Δημακόπουλος 2017, 156-157; See also Ντόβα 2022, 709.

⁵³ Σταυρόπουλος 1940, 7, fig. 7; Δημακόπουλος 2017, 149-151; Σταϊνχάουερ 2024, 310.

⁵⁴ Τιμοθέου 2023, 147, fig. 11.

⁵⁵ Κακαβογιάννη and Βλαχοδημητροπούλου 2003, 46-47; Κακαβογιάννη 2009, 64-67; Kakavogianni and Anetakis 2012, 187-188.

⁵⁶ Κακαβογιάννη *et al.* 2005, 219, fig. 8; Kakavogianni and Anetakis 2012, 193-194; Δημακόπουλος 2017, 132-133.

⁵⁷ Σταϊνχάουερ 2024, 272; Kakavogianni and Anetakis 2012, 195-197; Σαλλιώρα-Οικονομάκου 2004, 52-55.

⁵⁸ The building complex consists of three neighboring farmhouses. Each of them includes a central courtyard, various rooms and storerooms on the sides, with an entrance on the south side. On the weights discovered in the building, see Σταϊνχάουερ 2024, 170-171.

⁵⁹ *Rhamnous V*, 201-203, nos 814-835.

It should be noted that the majority of Athenian commercial weights were discovered in places linked to trade (agoras, shops). However, it is not uncommon to find them in an artisanal context, notably workshops linked to metalworking, and also in a religious context⁶⁰.

The two last circular weights, no. 24 and no. 25 discovered in sector VI, are inscribed with numeral notations ΗΗΙΙΙ and ΗΗΙΙ in order of reference. A single drachm in Attic inscriptions is denoted by the sign Η and the obol by the Ι⁶¹. Therefore, the values of these small circular weights are expressed not in fractions of minas or staters, but are recorded in numbers of Attic drachms and obols.

The mass of the weight no. 25 is 10.28 g and the value inscribed is two Attic drachms and three obols (drachm of 4.11 g). Given that the weight of an Attic drachm is 4.36 g, its original mass would be at 10.9 g. and so its loss of weight would have come to only *ca* 0.62 g (6%). Nevertheless, the mass of the weight no. 24 is 11.58 g and the value inscribed is three Attic drachms and three obols (drachm of 3.30 g). Therefore, if its original mass would be at 15.26 g, we could assume either a deliberate incorrect value or more probably a significant weight loss of 3.68 g (12%), due to corrosion and cleaning, as some lead Attic weights with numerals also attest⁶².

Loom lead weights

The four conical lead weights (nos 28-31) discovered in sectors V and VII add to the already known examples of similar weights, usually pyramidal but also disc-shaped⁶³ and conical that have been found in settlements, agoras or workshops in mainland and insular Greece during the Late Classical and Hellenistic periods⁶⁴.

The shape of these four weights is almost a perfect cone with a circular base, slightly flattened top, and the lower edges at the bottom are turned underneath. None of them bears stamps and two of them (nos 28 and 30) have a single suspension hole below the top. Similar weights are attested in Pnyx and Corinth⁶⁵.

The use of the above lead objects remains uncertain and different opinions have been formulated regarding their function, with the most prevalent those of loom weights for wrap-weighted looms, weight units for the raw materials of textiles or sinkers for fishing lines or nets.

Although the four conical lead weights from Loutros do not bear seals, there are examples of pyramidal and conical lead weights, which carry stamps with relief figurative themes, letters or monograms mainly on their square or circular base⁶⁶. The terracotta loom weights also bear markings, such as gem stamps and images, letters, names and symbols, impressed by stamps or incised before or after firing, which are interpreted as owner's marks or as identification marks of a set, denoting different series or groups of loom weights, related to the textile's production

⁶⁰ See indicatively Σταυρόπουλος 1940.

⁶¹ Tod 1911-12, 101; *Agora* X, 30-31, nos LW 58-LW 60.

⁶² Perniche 1894, 144-160; Βασιλοπούλου 1996.

⁶³ Burnier and Hijmans 2003, 119.

⁶⁴ For relevant bibliographical references, see Γαβαλάς 2014, 233-234.

⁶⁵ *Pnyx* I, 79 and 94, nos 151-153, fig. 42; *Corinth* XII, 163 and 172, no. 1212/roughly conical.

⁶⁶ Κακαβογιάννης 1984, 131-133; Κακαβογιάννη 2014, 244; Γαβαλάς 2014, 230-231; *Rhamnous* VI, 203-208; Τιμοθέου 2023, 146, fig. 9.

process⁶⁷. We know that the weight and thickness of the loom weights were functional characteristics for the operation of the warp-weighted loom and determined the process of textile production and the result of weaving⁶⁸.

The same is observed in the case of lead pyramidal weights, where series of the same size and weight are attested⁶⁹. According to Gavalas⁷⁰, the discovery of lead weights together with clay loom weights probably indicates either their similar but at the same time specialized use in the loom, due to their small number⁷¹ and the small cross-section of their holes in relation to terracotta ones, or their use as suspended weights of scales during the weighing stage (*ταλασία*) of the raw materials⁷², which precedes the spinning and the weaving. The first view, however, seems more likely due to the shapes of the lead weights, which refer to loom weights, as well as their hanging hole, which is inconsistent with their use as weights⁷³.

Moreover, in the aforementioned building complex of the Attic deme of Kydantidai, an important number of lead loom weights have been found⁷⁴. Conical and pyramidal lead weights were also discovered in the deme “agora” of Halai Aixonides⁷⁵, the farmstead in the area of Varabas (Markopoulo) of the deme of Konthyle⁷⁶, the north-east complex (“agora”)⁷⁷ and the Aphrodision⁷⁸ in the deme of Myrrhinous.

Lead weights, mainly pyramidal with a notch, hole or hanging ring at the top, are also found in shipwrecks and in coastal areas of the Eastern Mediterranean and were interpreted by Kletter⁷⁹ as sinkers for fishing lines or nets and not as units of weight. In this case, their shape and weight depended on the form (rocky or sandy) of the bottom and the depth of the sea, and the markings they bear refer to fishermen’s stamps⁸⁰. Moreover, a lead conical weight from Rhamnous carries a stamp on its circular base, probably an anchor or a hook⁸¹ and some lead pyramidal weights from the collections of the Numismatic Museum depict probably a fish bone (or cypress branch?) on the lateral surfaces.

We therefore conclude that the textile or fishing use of the above lead objects depends on the areas of discovery and the assemblages.

⁶⁷ Lawall 2014, 168-170. See also Stefanaki and Seroglou 2019, 47, n. 47, with relevant bibliography.

⁶⁸ Τζαχίλη 2006, 223; Mårtensson *et al.* 2009.

⁶⁹ Γαβαλάς 2014, 229-231; Κακαβογιάννη 2014, 244.

⁷⁰ Γαβαλάς 2014, 236.

⁷¹ Nevertheless, the small number of lead loom weights in comparison with the larger number of terracotta ones could also be explained on account of the possibility of lead loom weights having been recycled (Burnier and Hijmans 2003, 119; Wilson 1930, 118).

⁷² Kroll and Stefanaki 2020.

⁷³ Κακαβογιάννη 2014, 244, n. 38.

⁷⁴ Σταϊνχάουερ 2024, 170.

⁷⁵ Μακραδήμα *et al.* 2014, 259; Κουράγιος 2009-11, 42; Δημακόπουλος 2017, 156-157. See also Ντόβα 2022, 709.

⁷⁶ Τιμοθέου 2023, 146.

⁷⁷ Ανετάκης and Μάρκου 2003, 52-53; Σκλάβος *et al.* 2009, 86-91; Κακαβογιάννη 2009, 70; Kakavogianni and Anetakis 2012, 189; Δημακόπουλος 2017, 140.

⁷⁸ Κακαβογιάννη 2009, 69.

⁷⁹ Kletter 2013.

⁸⁰ Kletter 2013, 23-24.

⁸¹ *Rhamnous* VI, 203, no. 840.

Clothes lead weights

The biconical lead weight found in sector VII (no. 32) carries floral designs in relief on both sides, as those found in Pnyx, Rhamnous and Corinth, as well as in Mesogeia, indicatively in the area of Varampas (Markopoulo)⁸². According to Petrakos⁸³, “these discoid flat or biconical weights, decorated or not, with a hole in the center, were placed on the edges of cloths to create harmonious vertical folds or to prevent the wind from lifting them”.

C) Deme “agoras” and wealthy farmsteads

These bronze and lead objects constitute only a small part of the findings at the site of Loutros, given the discovery of a large quantity of clay objects, such as pottery, amphoras, loom weights etc. Therefore, since the study of the material is still pending, we could only formulate some preliminary results on the role and chronology of the five structures discovered in sectors III, V, VI and VIII.

Apart from a single coin (no. 16) issued in the Roman period, the findings included in the catalogue above are dated in the Late Classical and the Hellenistic periods. Nevertheless, two problems arise. The first concerns the identification of the site of Loutros, given that we do not know which Attic deme it belonged to, and the second, the domestic and/or commercial function of the buildings uncovered in the area.

The site of Loutros is located in the northern plain of Mesogeia, where approximately eight demes are mentioned in written sources and, in most cases, have also been identified archaeologically: Gargettos, Pallene, Kydantidai, Ionidai, Teithras (Pikermi), Halai Araphinidai (Loutsa), Araphen (Raphina)⁸⁴. As Fachard underlines, although the spatial borders of most of the 139 Kleisthenic Attic demes were delimited, as also attested by the presence of a board of *horistai* (boundary commissioners) in Attica during the 4th c. BC, few were actually demarcated⁸⁵. This fact makes it even more difficult today to precisely define the territory of most of them. It is therefore uncertain to which of the neighboring demes, including Pallene, Kydantidai, Ionidai, Teithras or Erchia, belonged these structures of the site of Loutros. Moreover, it is uncertain whether these structures constituted the scattered individual houses and farmsteads of a small deme or the low residential area of a larger deme. Given the extensive layers of destruction, as well as the dense road network, the site could have been much more extended than what has survived today. Nevertheless, it is more likely that the structures in question either formed the south-eastern boundary of the large ancient deme of Pallene or that of the small deme of the Kydantidai, if we assume that the latter extended beyond the Pallene stream. They could also belong to another neighboring deme, such as the small deme of the Ionidai, of the same *trittys* as the Kydantidai, located either to the south or to the east of the latter⁸⁶. An important early hellenistic joint decree of the Kydantidai and the Ionidai, which honor three Kydantidai *demotai* for the proper conduct of the festivals of Herakles, informs us about a common sanctuary of the

⁸² Τιμοθέου 2023, 147, fig. 11.

⁸³ *Rhamnous* VI, 240-244.

⁸⁴ Σταϊνχάουερ 2024, 152-177.

⁸⁵ Fachard 2016 and 2021, 25.

⁸⁶ Σταϊνχάουερ 2024, 165, n. 52 and 174-175; Ματθαίου 1993, 85, n. 3.

god-hero which was probably located on their borders, and according to Zouvelou, in the area of Loutros⁸⁷.

Regarding the function of the buildings, there is an ongoing debate⁸⁸ whether the Attic demes could have their own local “agora”, as a public gathering space or a demotic meeting point, smaller than the Athenian one, where the communal, administrative and religious⁸⁹ affairs, under the jurisdiction of the local authorities (*demarchos, bouleutai, tamiai, hieropoioi* etc.), as well as some commercial activities, would be concentrated. As pointed out by Bresson, this does not mean that each of the 139 demes of Attica had its own “agora”⁹⁰.

Worth noting is that deme “agoras”, as centers of political and religious life and/or as market places⁹¹, are attested directly or indirectly in written sources, *e.g.* in Eleusis, Halai Aixonidai, Gargettos, Rhamnous, Erchia, Besa, Thorikos, Sounion etc.⁹². Moreover, several structures located in the centre of the demes or in key-spaces of the Attic *chora*, where political, religious or commercial activity could be expected, have been identified as “agoras” with a permanent, seasonal or periodical operation⁹³, such as those in the mining district of Lavreotiki, the borders of Attica or of Attic demes (*ἐφορία ἀγορά*⁹⁴), the sanctuaries, the large demes, the harbours⁹⁵ and the ports (*ἐμπόριον*). Specifically, in the area of Mesogeia, several large building complexes, ranging from 1350 to 3000 m² in size, and, sharing or not all the characteristic architectural features and the relevant findings of an agora, have been interpreted either as markets or as wealthy farmsteads, which could have fulfilled the local commercial needs, as well as those of the *asty*, with the buying and selling of commodities, possibly to itinerant traders, who then sold them to wholesalers in the Athenian market or directly to the consumers⁹⁶.

It should be noted that the site of Loutros is well incorporated within the terrestrial and road networks since it is located along the main road that connected the area with the coastal demes of the Aigeis tribe, Araphen, Halai Araphinidai, Philaidai, as well as the important harbour at Prasiai (Porto Raphiti). Therefore, the typical commercial findings, discovered in the site, *i.e.* the coins and the trade

⁸⁷ Ματθαίου 1989 and 1993; Ζούβελου 2015, 430.

⁸⁸ Σταϊνχάουερ 2024, 385-386; Harris and Fachard 2024; Ντόβα 2022, 709-712; Fachard 2021, 25; Δημακόπουλος 2017, 201-202; Kakavogianni and Anetakis 2012; Κακαβογιάννη 2009, 70, n. 105 and 109.

⁸⁹ Paga 2010, 368-370.

⁹⁰ Bresson 2008, 20.

⁹¹ On the much larger meaning of the term *agora*, see Whitehead 1986, 87; Karvonis 2018, 11-12. By the term *agora*, in Classical and mainly in Hellenistic times, we mean multi-functional large complexes composed of open spaces or courtyards, delimited by walls and surrounded by public buildings, shops, *stoai*, storage and cooking spaces, craft activities, shrines, theaters, and honorific decrees and statues (see Harris 2019).

⁹² Whitehead 1986, 45, 86-87, 90-91, 96-97, n. 5; Harris and Lewis 2016, 13; Harris and Fachard 2024. On the term *ἀγοραστικόν*, see Bresson 2008, 20; Kakavogianni and Anetakis 2012, 185; Bubelis 2013; Harris and Lewis 2016, 13, n. 71.

⁹³ On the different types of markets, see Harris 2002, 74-75; Harris and Lewis 2016, 9-24.

⁹⁴ Kakavogianni and Anetakis 2012, 194.

⁹⁵ On the “agora” uncovered in Porto Raphiti, see Τοιργιώτη-Δρακωτού 2013, 128-129. On the “agora” of Limani Pasa, see Σαλιώρα-Οικονομάκου 2004, 51-63 and 141-142. On the significance of Attica’s regional harbours in the agricultural economy, see Lewis 2022.

⁹⁶ Σταϊνχάουερ 2024, 386.

weights, as well as the stamped amphoras handles⁹⁷ and the storage facilities for the *pithoi* (πιθεῶνας), could suggest either a deme's market place located near trade routes and important crossroads, or a regional market serving several neighboring demes, or the market-oriented activity of individual farmsteads of the Attic countryside⁹⁸.

According to the typology of the Attica farmhouses proposed by Dimakopoulos and Steinhauer, the structures discovered specifically in sectors VI and VII belonged to a common type of farmhouse of the Mesogeia plain, which “consists of an enclosed square or rectangular building whose rooms are organized around a central yard in two, three or even four sides”⁹⁹. Indeed, most of the finds of the four residential sectors at Loutros, whose size does not correspond to that of the large building complexes, interpreted as “agoras”, are characteristic of many buildings discovered in Attica and identified as farmhouses. We mention indicatively, among many others, the rural complex of 1.200 m², dated to the 4th-mid 3rd c. BC, and discovered in the area of Varabas (Markopoulo) of the deme of Konthyle, which includes very similar findings, such as storage facilities, hives, cistern, clay and lead loom weights, commercial weights, clothes lead weights, coins, tokens, pottery and lead joins for repairing and soldering clay vessels, as well as masses of raw lead. The latter attest the importation and procession of the lead in order to cover the needs of the farmhouse¹⁰⁰. Furthermore, regarding the function of the large rectangular building of sector V, the significant assemblage of vessels and amphoras suggests, according to Zouvelou¹⁰¹, its use as a place for consuming food and drinks, possibly a tavern (*kapeleio*).

Awaiting for the study of the remaining finds from the Loutros area, the metal objects, mainly the coins and the commercial weights, certainly testify a commercial activity at a local level and the vitality of the Attic rural economy, as well as the interaction between the *asty* and the demes¹⁰².

(V.S.)

Bibliography-abbreviations

- Agora X*: Lang, M. and M. Crosby 1964. *Weights, Measures and Tokens. The Athenian Agora*, v. X. Princeton, NJ: The American School of Classical Studies at Athens.
- Agora XXVI*: Kroll, J.H. (with the contribution of A.S. Walker) 1993. *The Greek Coins. The Athenian Agora*, v. XXVI. Princeton, NJ: The American School of Classical Studies at Athens.
- Bresson, A. 2008. *L'économie de la Grèce des cités. II. Les espaces de l'échange*. Paris: Armand Colin.
- Bubelis, W. 2013. “The Agorastikon of Hellenistic Athens: Not a Market-Tax”, *ZPE* 185, 122-126.

⁹⁷ On the Athenian amphora imports in the Classical and Hellenistic periods, see Lawall 2021. On the findings and use (or reuse) of amphoras in private households or in locations of amphora-related commerce (shops or taverns), see Lawall 2016.

⁹⁸ See Harris and Lewis 2016, 19-24, with relevant bibliography. On the textile production of the Greek households beyond self-sufficiency, see Tsakirgis 2016.

⁹⁹ Δημακόπουλος 2017, 201-203 (Type A) and 341; Σταϊνχάουερ 2024, 309-310 (Τύπος 2).

¹⁰⁰ Τιμοθέου 2023, 146. Cf. Κουράγιος 2009-11, 42.

¹⁰¹ Ζούβελου 2015, 428.

¹⁰² Fachard 2021, 25.

- Burnier, Y. and St. Hijmans 2003. “Loomweights”, in H. Reinder Reinders and W. Prummel (eds), *Housing in new Halos. A Hellenistic Town in Thessaly, Greece*. Lisse, NL: A.A. Balkema, 118-123.
- Corinth XII: Davidson, G. 1952. *Corinth, The Minor Objects*, v. XII. Princeton, NJ: The American School of Classical Studies at Athens.
- Dalakoura-Vogiatzoglou, O. and E. Apostolou 2020. “A small numismatic group from the ancient road of Koile”, in K.A. Sheedy and G. Davis (eds), *Mines, metals and money, Ancient World Studies in Science, Archaeology and History*, (Metallurgy in Numismatics 6, Australian Center for Ancient Numismatics Studies, Macquarie University, The Royal Numismatic Society, Special Publication 56). London: Gutenberg Press Ltd, 275-289.
- Fachard, S. 2016. “Modelling the Territories of Attic Demes: A Computational Approach”, in J. Bintliff and K. Rutter (eds), *The Archaeology of Greece and Rome, Studies in Honour of Anthony Snodgrass*. Edinburgh: Edinburgh University Press, 192-222.
- Fachard, S. 2021. “Asty and Chora. City and Countryside”, in J. Neils and D.K. Rogers (eds), *The Cambridge Companion to Ancient Athens*. Cambridge: Cambridge University Press, 21-34.
- Gkikaki, M. 2020. “Tokens of Hellenistic Athens. Lead tokens in the Archaeological Institute of the University of Goettingen: Part I. The Haller von Hallerstein Collection and other Greek tokens with no provenance information”, *SNR* 98, 91-138.
- Gkikaki, M. 2021. “Tokens for festivals in Hellenistic Athens”, in A. Crisà (ed.), *Tokens, Value and Identity. Exploring Monetiform objects in Antiquity and the Middle Ages*. Brussels: European Centre for Numismatic Studies, 57-75.
- Gkikaki, M. 2022. “Athenian Lead Tokens: Thoughts on their imagery and function occasioned by the Rediscovery of Part of the Alexandros N. Meletopoulos Collection”, *NC* 182, 87-118.
- Gkikaki, M. 2023a. “Introduction”, in M. Gkikaki (ed.), *Tokens in Classical Athens and Beyond*. Liverpool: Liverpool University Press, 1-20.
- Gkikaki, M. 2023b. “The Council of Five Hundred and Symbola in Classical Athens”, in M. Gkikaki (ed.), *Tokens in Classical Athens and Beyond*. Liverpool: Liverpool University Press, 63-82.
- Hansen, M.H. 1986. *Demography and Democracy: The number of Athenian Citizens in the Fourth Century B.C.* Herning: Systime.
- Hansen, M.H. 2004. “Attika”, in M.H. Hansen and T.H. Nielsen (eds), *An Inventory of Archaic and Classical Poleis*. Oxford: Oxford University Press, 624-642.
- Harris, E.M. 2002. “Workshop, marketplace and household. The nature of technical specialization in classical Athens and its influence on the economy and society”, in P. Cartledge, E. Cohen and L. Foxhall (eds), *Money, Labour and Land. Approaches to the Economies of Ancient Greece*. London: Routledge, 67-99.
- Harris, E.M. 2019. “Markets in the ancient Greek world: An overview”, in L. Rahmstorf and E. Stratford (eds), *Weights and Marketplaces from the Bronze Age to the Early Modern Period*. Göttingen: Wachholtz Verlag Kiel/Hamburg-Murmann Publishers, 255-274.
- Harris, E.M. and S. Fachard 2024. “Markets in the Demes. A New Approach to the Attic countryside”, Lecture presented in January 18, 2024 in the American

- School of Classical Studies at Athens, <https://www.ascsa.edu.gr/news/newsDetails/markets-in-the-demes-a-new-approach-to-the-attic-countryside>.
- Harris, E.M. and D.M. Lewis. 2016. "Introduction: Markets in Classical and Hellenistic Greece", in E.M. Harris, D.M. Lewis and M. Woolmer (eds), *The Ancient Greek Economy: Markets, Households and City-States*. Cambridge: Cambridge University Press, 1-37.
- Kakavogianni, O. and M. Anetakis 2012. "Les agoras commerciales des dèmes antiques de la Mesogée et de la région du Laurion", in V. Chankowski and P. Karvonis (eds), *Tout vendre, tout acheter. Structures et équipements des marchés antiques* (Scripta Antiqua 42). Bordeaux/Athènes: Ausonius éd.; École française d'Athènes; Diff. de Boccard, 185-199.
- Karra, I. 2023. "The lot of lead tokens from Makrygianni Plot in Athens", in M. Gkikaki (ed.), *Tokens in Classical Athens and Beyond*. Liverpool: Liverpool University Press, 153-175.
- Karvonis, P. 2018. *Oikèma ou pièce polyvalente: recherches sur une installation commerciale de l'Antiquité grecque*. Oxford: Archaeopress.
- Kletter, R. 2013. "Pyramidal Lead Objects: Scale Weights, Loom Weights, or Sinkers?", *JESHO* 56, 1-28.
- Kroll, J.H. 2020. "Reconstructing the chronology of Athenian balance weights on the 'Solonian' trade standard", in Ch. Doyen and L. Willocx (eds), *Pondera antiqua and mediaevalia I* (Numismatica Lovaniensia 22). Louvain-la-Neuve: Presses Universitaires de Louvain, 42-72.
- Kroll, J.H. and V. Stefanaki 2020. "Women's Weights for Measuring Wool: 'Mastoid' Weights from Knidos, Rhodes and Elsewhere", in Ch. Doyen and L. Willocx (eds), *Pondera antiqua and mediaevalia I* (Numismatica Lovaniensia 22). Louvain-la-Neuve: Presses Universitaires de Louvain, 79-93.
- Lawall, M.L. 2014: "Transport Amphoras and Loomweights: Integrating Elements of Ancient Greek Economies?", in M. Harlow and M.-L. Nosch (eds), *Greek and Roman Textiles and Dress: An Interdisciplinary Anthology*. Oxford: Oxbow, 150-189.
- Lawall, M.L. 2016. "Patterns of Amphora Discard from Houses, Shops, Taverns, and Brothels", in A. Glazebrook and B. Tsakirgis (eds), *Houses of III Repute. The Archaeology of Brothels, Houses, and Taverns in the Greek World*. Philadelphia: University of Pennsylvania Press, 59-74.
- Lawall, M.L. 2021. "The Archaeology of Markets and Trade", in J. Neils and D.K. Rogers (eds), *The Cambridge Companion to Ancient Athens*. Cambridge: Cambridge University Press, 244-256.
- Lewis, D.M. 2022. "Attic Deme Harbours, the Rural Economy, and the Maritime Trade: The Incident of Φωρῶν Λιμῆν ([Dem.] 35.28-29)", *Pnyx, Journal of Classical Studies* 1.2, 81-101.
- Lönnqvist, K. 1997. "Studies on the Hellenistic Coinage of Athens: the Impact of Macedonia on the Athenian Money Market in the 3rd century BC," in J. Frosen (ed.), *Early Hellenistic Athens: Symptoms of a Change* (Papers and Monographs of the Finnish Institute at Athens, v. VI). Helsinki: Foundation of the Finnish Institute at Athens, 119-212.
- Mårtensson, L., M.-L. Nosch and E. Andersson Strand 2009: "Shape of things: Understanding a loom weight", *OJA* 28.4, 373-398.

- Paga, J. 2010. “Deme Theaters in Attica and the Trittys System”, *Hesperia* 79, 351-384.
- Panagopoulou, K. 2020. *The Early Antigonids. Coinage, Money, and the Economy*. New York: The American Numismatic Society.
- Perniche, E. 1894. *Griechische Gewichte*. Berlin.
- Pnyx* I: Davidson, G.R. and D.B. Thompson 1943. *Small Objects from the Pnyx*, v. I (Hesperia Supplement 7). Princeton: American School of Classical Studies at Athens.
- Postolaccas, A. 1866. “Medaglie inediti del nazionale museo numismatico di Atene”, *Annali* 38, 339-356, with illustrations (drawings) on pl. XXXII in *Monumenti*, VIII.
- Rhamnous* V: Πετράκος, Β.Χ. 2020. *Ο Δήμος του Ραμνούντιος, V: Τα νομίσματα, οι λύχνοι, τα γλυπτά*. Αθήνα: Εν Αθήναις Αρχαιολογική Εταιρεία.
- Rhamnous* VI: Πετράκος, Β.Χ. 2020. *Ο Δήμος του Ραμνούντιος, VI: Οι επιγραφές, τα χαράγματα, τα σταθμιά, οι μαρτυρίες*. Αθήνα: Εν Αθήναις Αρχαιολογική Εταιρεία.
- SNG Alpha Bank: *Sylloge Nummorum Graecorum, The Alpha Bank Collection*. Athens: Alpha Bank, 2000.
- Stefanaki, V.E. and F.K. Seroglou 2019. “Coin Types on Amphora Stamps of the Classical and Early Hellenistic Periods”, in N. Badoud and A. Marangou (eds), *Analyse et exploitation des timbres amphoriques grecs, Colloque International, Athènes, 3-5 Février 2010*. Rennes: Presses Universitaires de Rennes, 45-58.
- Tekin, O. 2016. *Balance Weights in the Aegean World, Classical and Hellenistic periods*. Istanbul: Turkish Institute of Archaeology.
- Tod, M.N. 1911-12. “The Greek Numeral Notation”, *ABSA* XVIII, 98-132.
- Traill, J.S. 1975. *The Political Organization of Attika. A Study of the Demes, Trittyses, and Phylai, and Their Representation in the Athenian Council*. Princeton: American School of Classical Studies at Athens.
- Tsakirgis, B. 2016. “Whole Cloth. Exploring the Question of Self-Sufficiency through the Evidence for Textile Manufacture and Purchase in Greek Houses”, in E. Harris, D. Lewis and M. Woolmer (eds), *The Ancient Greek Economy. Markets, Households and City-States*. Cambridge: Cambridge University Press, 166-186.
- Whitehead, D. 1986. *The Demes of Attica, 508/7-ca. 250 BC, A Political and Social Study*. Princeton: Princeton University Press.
- Willocx, L. 2020. “Athenian Commercial Weights: A History of Museum Collections and a General Overview of the Corpus”, in Ch. Doyen-L. Willocx (eds), *Pondera antiqua and mediaevalia I* (Numismatica Lovaniensia 22). Louvain-la-Neuve: Presses Universitaires de Louvain, 23-46.
- Wilson, L. 1930. “Loom Weights”, in D.M. Robinson, *Excavations at Olynthus, Part II, Architecture and Sculpture: Houses and other buildings*. Baltimore: John Hopkins Press, 118-131.
- Αγαλλοπούλου, Π. 2009. «Νομίσματα από τις ανασκαφές του Ωρωπού», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β' ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 299-307.

- Ανετάκης, Μ. 2009. «Νεκροταφεία και ταφικοί Περιβόλοι, Χθόνιο ιερό και κτίριο με ανδρώνα στη Μερέντα», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β΄ ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 189-204.
- Ανετάκης, Μ. and Σ. Μάρκου 2003. «Νοτιοανατολική αγροικία», in Ο. Κακαβογιάννη (ed.), *Αρχαιολογικές έρευνες στην Μερέντα Μαρκόπουλου, στον χώρο κατασκευής του νέου Ιπποδρόμου και του Ολυμπιακού Ιππικού Κέντρου*. Athens: Οργανισμός Διεξαγωγής Ιπποδρομιών Ελλάδος, 52-53.
- Βασιλειάδου, Μ. 2023. «Αγροικία στον άγιο Ραφαήλ», in Ε. Ανδρικού (ed.), *Διασχίζοντας τα Μεσόγεια μέσα στον χρόνο*. Athens: ΥΠΠΟ, Εφορεία Αρχαιοτήτων Ανατολικής Αττικής, 106-111.
- Βασιλοπούλου, Β. 1996. «Τα αττικά τετράδραχμα σταθμια», in *Χαρακτήρ, Αφιέρωμα στη Μάντω Οικονομίδου* (Δημοσιεύματα του Αρχαιολογικού Δελτίου 57). Athens: ΥΠΠΟ, ΤΑΠΑ, 41-48.
- Γαβαλάς Γ.Ι. 2014. *Σφονδύλια και υφαντικά βάρη από την Αμοργό. Συμβολή στη μελέτη της αρχαίας κλωστικής και υφαντικής στις Κυκλάδες*, Unpubl. PhD Thesis, University of Ioannina.
- Γιαμαλίδη, Μ. 2013. "The two numismatic 'hoards' and the coins from the S. & I. Sklavenitis S.A. plot in Voula", *Νομισματικά Χρονικά* 31, 17-44.
- Δημακόπουλος, Σ. 2017. *Αγροικίες κλασικής και ελληνιστικής εποχής στην Αττική*, Unpublished PhD dissertation, University of Thessaloniki.
- Ζούβελου, Π. 2015. «Παλλήνη-παλαιές και νέες ανασκαφές συνθέτουν την αρχαία τοπογραφία», in *Πρακτικά της 1Ε΄ Επιστημονικής Συνάντησης ΝΑ. Αττικής*. Καλυνία Thorikou Attikis: Εταιρεία Μελετών Νοτιοανατολικής Αττικής, 421-433.
- Κακαβογιάννη, Ο. 2009. «Τοπογραφία του αρχαίου δήμου Μυρρινούντος», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β΄ ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 47-78.
- Κακαβογιάννη, Ο. 2014. «Ειδώλια, κοσμήματα και άλλα μικρά αντικείμενα από το οικ. Πανάγου Β΄ στο νοτιοανατολικό τμήμα της πόλης της Ρόδου», in Α. Γιαννικουρή (ed.), *Κοροπλαστική και μικροτεχνία στον αιγαιακό χώρο από τους γεωμετρικούς χρόνους έως και τη ρωμαϊκή περίοδο, Διεθνές Συνέδριο στη μνήμη της Ηούς Ζερβουδάκη*, v. II. Athens: ΥΠΠΟΑ, ΤΑΠΑ, 237-248.
- Κακαβογιάννη, Ο. and Β. Βλαχοδημητροπούλου 2003. «Κτίριο με στοά», in Ο. Κακαβογιάννη (ed.), *Αρχαιολογικές έρευνες στην Μερέντα Μαρκόπουλου, στον χώρο κατασκευής του νέου Ιπποδρόμου και του Ολυμπιακού Ιππικού Κέντρου*. Athens: Οργανισμός Διεξαγωγής Ιπποδρομιών Ελλάδος, 46-47.
- Κακαβογιάννη, Μ., Φ. Νέξερη and Δ. Λιώνης 2005. «Αρχαίο ιερό και κτηριακό συγκρότημα πριν από την είσοδο του αεροδρομίου», in Γ. Σταϊνχάουερ (ed.), *Αττικής Οδού Περιήγησις*. Athens: IDEA, 214-219.
- Κακαβογιάννης, Ε.Χ. 1984. «Παραγωγή μολύβδου από λιθάργυρους στην Ελληνιστική Ρόδο», *ΑΑΑ* 27.1-2, 124-140.
- Κουράγιος, Γ. 2009-11. «Ο αρχαίος δήμος των Αιξωνιδών Αλών Αττικής (σημ. Βούλα-Βουλιαγμένη)», *Ευλιμένη* 10-12, 33-62.
- Λιώνης, Δ., Φ. Νέξερη, Μ. Στάθη and Ε. Μαυρομάτη 2005. «Αρχαία Νεκροταφεία στα Μεσόγεια», in Γ. Σταϊνχάουερ (ed.), *Αττικής Οδού Περιήγησις*. Athens: IDEA, 199-212.

- Μακραδήμα, Λ., Γ. Κουράγιος and Μ. Γιαμαλιδή 2014. «Βούλα», *ΑΔ* 62 (2007), Β'1 Χρονικά, 257-260.
- Ματθαίου, Α. 1989. «Ψήφισμα Κυδαντιδών και Ιωνιδών», *Horos* 7, 7-16.
- Ματθαίου, Α. 1993. «Δημοτικό ψήφισμα Κυδαντιδών και Ιωνιδών», in *Πρακτικά Δ' Επιστημονικής Συνάντησης ΝΑ Αττικής*. Καλυνία Θεοδικού Αττικής: Εταιρεία Μελετών Νοτιοανατολικής Αττικής, 81-90.
- Ματθαίου, Α. 2010. «Ιστορικοί Χρόνοι», in Α. Βλαχόπουλος (ed.), *Αρχαία Αθήνα και Αττική, Ιστορική τοπογραφία του άστεως και της χώρας*. Athens: Μέλισσα, 16-39.
- Μιχαηλίδη, Π. and Γ. Τιμοθέου 2023. «Αγροικία με πύργο και ληνό», in Ε. Ανδρικού (ed.), *Διασχίζοντας τα Μεσόγεια μέσα στον χρόνο*. Athens: ΥΠΠΟ, Εφορεία Αρχαιοτήτων Ανατολικής Αττικής, 132-137.
- Ντόβα, Χ. 2022. *Υμηττός. Συμβολή στην Ιστορική Τοπογραφία και Αρχαιολογία της δυτικής πλευράς του*, Unpublished PhD thesis, University of Thessaly.
- Πέτρου, Α. 2003. «Ιερό Βόρειου Νεκροταφείου», in Ο. Κακαβογιάννη (ed.), *Αρχαιολογικές έρευνες στην Μερέντα Μαρκόπουλου, στον χώρο κατασκευής του νέου Ιπποδρόμου και του Ολυμπιακού Ιππικού Κέντρου*. Athens: Οργανισμός Διεξαγωγής Ιπποδρομιών Ελλάδος, 41.
- Πλάτωνος-Γιώτα, Μ. 1997. «Το ιερό της Αθηνάς Παλληνίδος (στο οικοπέδο Θανοπούλου-Φλώρου)», *Αρχαιολογία και Τέχνες* 65, 92-97.
- Ράλλη, Ε. 2009. «Θησαυρός μολύβδινων συμβόλων από το Κορωπί Αττικής», in Σ. Δρούγου *et al.* (eds), *Κεράμια Φιλίας, Τιμητικός τόμος για τον Ι. Τουράτσογλου*, v. Α. Athens: ΥΠΠΟ, Νομισματικό Μουσείο, 235-245.
- Ράμμου, Α.Ν. 2013. «Ευρήματα αρχαιολογικής έρευνας στο έργο: 'Λεωφόρος Σταυρού-Ραφήνας, τμήμα Σταυρού-Πικερμίου'», *ΑΔ* 60 (2005), Β'1 Χρονικά, 180-181.
- Ράμμου, Α.Ν. 2022. *Νεκροταφείο ύστερων γεωμετρικών χρόνων στη θέση Λουτρό δήμου Παλλήνης Αττικής* (Δημοσιεύματα του Αρχαιολογικού Δελτίου 115). Athens: ΤΑΠ.
- Ραυτοπούλου, Μ. 2009. «Γέρακας: Νέα στοιχεία για τη χωροταξία και τη σημασία του αρχαίου δήμου της Παλλήνης», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β' ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 331-342.
- Σαλλιώρα-Οικονομάκου, Μ. 2004. *Ο αρχαίος δήμος του Σουνίου, Ιστορική και τοπογραφική επισκόπηση*. Athens: Τουμπής.
- Σβορώνος, Ι.-Ν. 1900. «Περί των εισιτηρίων των αρχαίων, Μέρος Δ', Τα μολύβδινα σύμβολα», *JIAN* 3, 319-343.
- Σκλάβος, Μ., Ε. Τσελεπή, Μ. Ανετάκης and Σ. Μάρκου 2009. «Αγροικίες και άλλα οικοδομικά συγκροτήματα στη Μερέντα», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β' ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 80-92.
- Σταϊνχάουερ, Γ. 1994. «Παρατηρήσεις στην οικιστική μορφή των Αττικών Δήμων», in W.D. Coulson *et al.* (eds), *The Archaeology of Athens and Attica under the democracy, Proceedings of an International Conference celebrating 2.500 years since the birth of democracy in Greece held at the American School of Classical Studies at Athens, December 4-6, 1992* (Oxbow Monograph 37). Oxford: Oxbow, 175-189.

- Σταϊνχάουερ, Γ. 2001. «Η Κλασική Μεσογαία (5ος-4ος αι. π.Χ.)», in Χρ. Ντούμας (ed.), *Μεσογαία, Ιστορία και Πολιτισμός των Μεσογαίων Αττικής*. Athens: Διεθνής Αερολιμένας Αθηνών Ελευθέριος Βενιζέλος-IDEA, 81-147.
- Σταϊνχάουερ, Γ. 2005. «Η Αττική Οδός από τον κόμβο του Σταυρού έως τους κόμβους Λεονταρίου και Παλλήνης», in Γ. Σταϊνχάουερ (ed.), *Αττικής Οδού Περιήγησις*. Athens: IDEA, 159-173.
- Σταϊνχάουερ, Γ. 2008. «Αττικοί Δήμοι», in Α.Γ. Βλαχόπουλος (ed.), *Αρχαιολογία, Εύβοια και Στερεά Ελλάδα*. Athens: Μέλισσα, 156-173.
- Σταϊνχάουερ, Γ. 2009a. «Το οδικό δίκτυο της Αττικής», in Μ. Κορρές (ed.), *Αττικής Οδοί, Αρχαίοι δρόμοι της Αττικής*. Athens: Μέλισσα, 34-73.
- Σταϊνχάουερ, Γ. 2009b. «Ανασκαφές στην Αττική Οδό στην περιοχή της Παλλήνης», in Β. Βασιλοπούλου and Στ. Κατσαρού-Τζεβελέκη (eds), *Από τα Μεσόγεια στον Αργοσαρωνικό, Β' ΕΠΚΑ, Το έργο μιας δεκαετίας 1994-2003, Πρακτικά Συνεδρίου, Αθήνα, 18-20 Δεκεμβρίου 2003*. Athens: Δήμος Μαρκοπούλου Μεσογαίας, 310-316.
- Σταϊνχάουερ, Γ. 2010. «Αττικοί Δήμοι», in Α. Βλαχόπουλος (ed.), *Αρχαία Αθήνα και Αττική, Ιστορική τοπογραφία του άστεως και της χώρας*. Athens: Μέλισσα, 92-111.
- Σταϊνχάουερ, Γ. 2024. *Οι Δήμοι της Αττικής, Οικιστική της Αττικής Χώρας στην Αρχαιότητα*. Athens: Μέλισσα.
- Σταυρόπουλος, Φ. 1940. «Ιερατική οικία εν Ζωστήρι της Αττικής», *ΑΕ* (1938), 1-31.
- Τζαχίλη, Ι. 2006. «Η υφαντική στην περιοχή του Πανόρμου κατά την ελληνιστική περίοδο», in Ε. Γαβριλάκη and Ι. Τζιφόπουλος (eds), *Ο Μυλοπόταμος από την αρχαιότητα ως σήμερα, Πρακτικά Διεθνούς Συνεδρίου, v. II: Αρχαίοι Χρόνοι*. Rethymnon: Ιστορική και Λαογραφική Εταιρεία Ρεθύμνου, 219-238.
- Τιμοθέου, Γ. 2023. «Αγροικία με πιθεόνα και ελαιοτριβείο», in Ε. Ανδρικού (ed.), *Διασχίζοντας τα Μεσόγεια μέσα στον χρόνο*. Athens: ΥΠΠΟ, Εφορεία Αρχαιοτήτων Ανατολικής Αττικής, 138-151.
- Τσιριγώτη-Δρακωτού, Ι. 2013. «Ειδήσεις για την Αττική από τις πρόσφατες ανασκαφικές έρευνες», in Μ. Δόγκα-Τόλη and Στ. Οικονόμου (eds), *Αρχαιολογικές Συμβολές, v. Α: Αττική*. Athens: Μουσείο Κυκλαδικής Τέχνης, 123-136.
- Χριστοδούλου, Δ.Ν. 2014. «Δήμος Παλλήνης», *ΑΔ* 64 (2009), Β'1 Χρονικά, 207-214.

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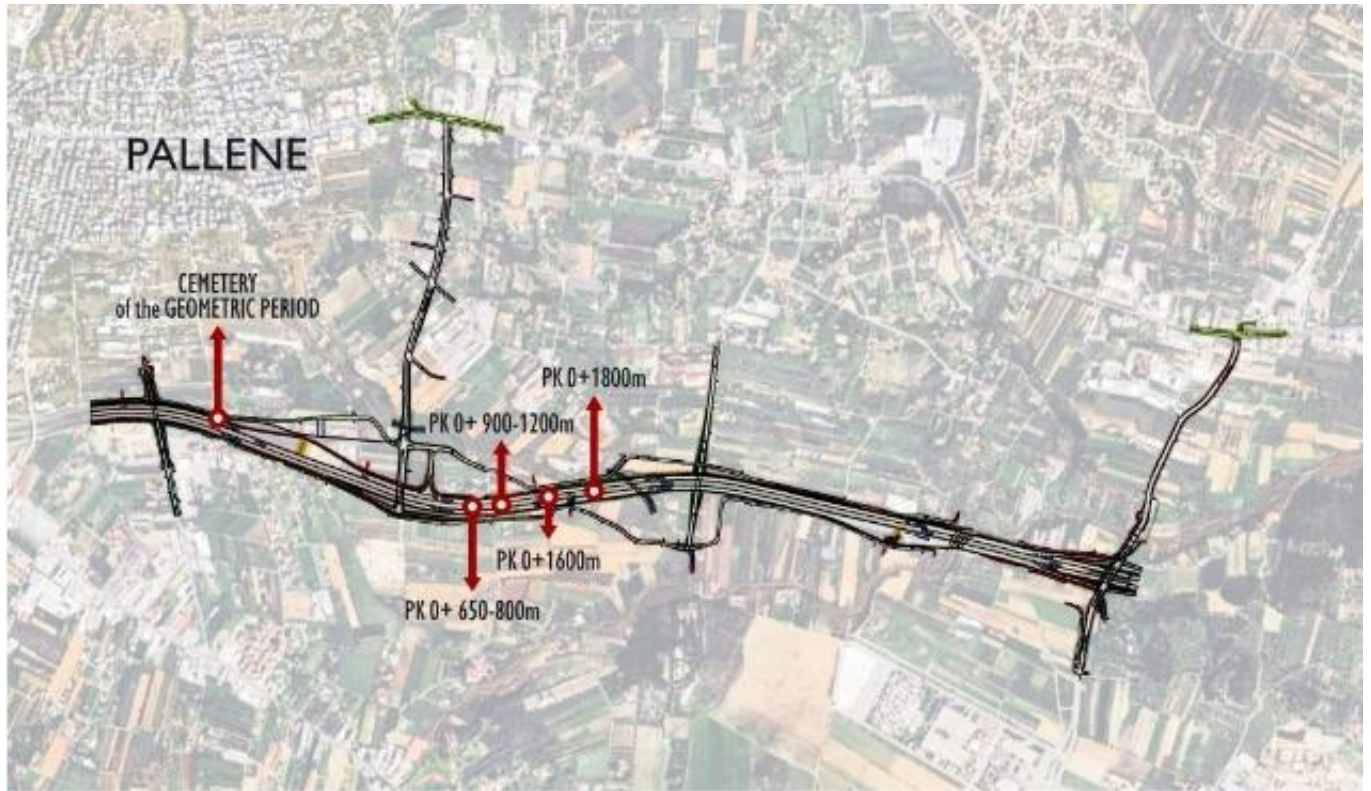


Figure 1. Horizontal profile of the “New Free Stavros-Raphina Highway” (by Y. Stavrinos).



Figure 2. Ground plan of the building complex in sector VI (from the archives of the Ephorate of Antiquities of East Attica).



Figure 3. The building complex in sector VI (from the archives of the Ephorate of Antiquities of East Attica).



Figure 4. General view of the residential remains in sector VII (from the archives of the Ephorate of Antiquities of East Attica).

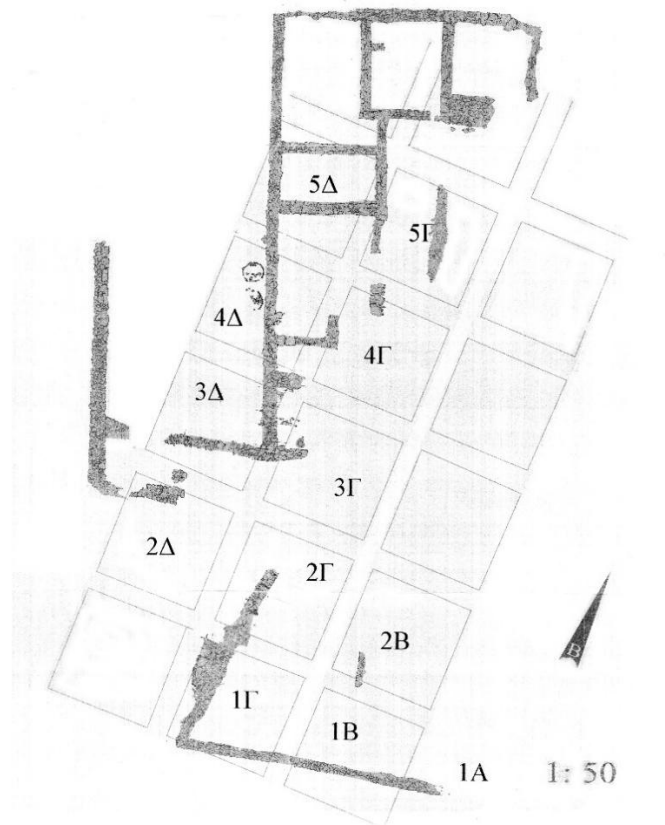


Figure 5. Ground plan of the building complex in sector VII (from the archives of the Ephorate of Antiquities of East Attica).

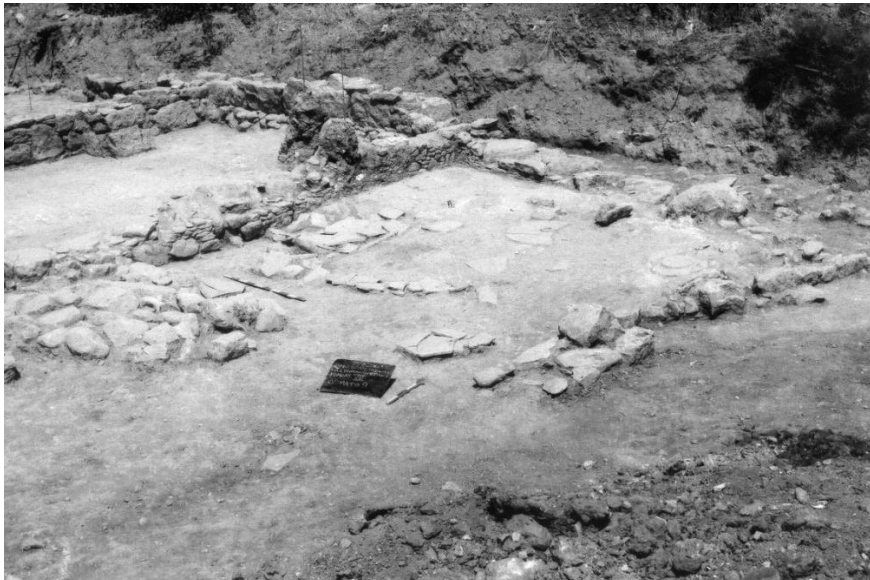


Figure 6. The building complex in sector VII (Room 9) (from the archives of the Ephorate of Antiquities of East Attica).

Table of coins and other metal objects



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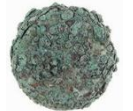
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