



The Metal Finds from Pyla-Vigla: An Early Hellenistic Fort in Southern Cyprus

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Introduction

The death of Alexander the Great in 323 BCE cast a great shadow of uncertainty throughout the Eastern Mediterranean in the absence of a clear path to successorship. The epitome of an autonomous leader, Alexander did little to share his authority but surrounded himself with the strongest, most capable leaders that Greece and his newly acquired lands had to offer. It was this approach to leadership and those individuals that both proved integral to the success of his campaigns and led to one of the most disruptive eras of the ancient world. Furthermore, Alexander's imperial policies following the subjugation of any given area often mimicked the political structure of the former entity. Those regions previously subject to the Achaemenid Persian Empire continued a system of satrapies, where Alexander replaced local satraps with an ally. The eastern provinces, especially around the Indus River Valley, maintained a kingdom-oriented organization with a monarch of Alexander's choosing. While one can argue the degree to which Alexander created a centralized empire after the conclusion of his campaigns in 326 BCE, it is clear that the continuation of such an entity was simply impossible. Alexander's realm was in its infancy and required regular interventions against local uprisings and reassertions of authority to maintain control. It was at this juncture that his former generals devised a minimum of three separate plans in 323 BCE, 320 BCE, and 311 BCE to stabilize the empire. All three documented partitions named a king (or soon to be king), a regent, and divided the realm into satrapies or regions governed by a formal general or ally. The plans paved the way for either Alexander's son (Alexander IV) or his half-brother Arrhidaeus (Philip III) to become the sole legitimate heir of Alexander the Great and provide the long-term answer to dynastic succession and stability. These plans, however, never materialized. The assassinations of Philip III (Alexander's half-brother) in 317 BCE, Olympias (Alexander's mother) in 316 BCE, and Roxane (Alexander's wife) and Alexander IV (Alexander's son) in 310 BCE ended the Argead Dynasty and any hopes of a singular ruler taking over Alexander's great empire.

Following these assassinations, there were no less than twenty individuals with legitimate claims to at least part of the empire. The nearly thirty years following Alexander's death were fraught with assassinations, the formation and collapse of coalitions, and war. Finally by 294 BCE, three successors – Ptolemy, Seleucus, and Antigonos – had carved out their

own disparate imperial spheres from Alexander's realm. Moving beyond the assassinations, alliances, and power grabs characterizing this period, one must also consider the imperial machinations of the successors. Alexander's system of using a highly skilled, technologically advanced army to take over a region and then, from a centralized position to maintain the status quo, was not an option moving forward. The Ptolemies, Seleucids, and Antigonids, devised unique methods to take over an area and maintain control of it. The fortified site of Pyla-Vigla (Vigla) in southeast Cyprus reflects one of the many disparate methods the Diadochoi deployed to achieve their greater imperial aspirations. Either Ptolemy or Antigonos constructed and garrisoned small, yet heavily fortified, forts situated in strategic locations to exercise imperial dominion over a previous semi-autonomous island and protect those interests against others.

The Site of Pyla-Vigla

The site of Vigla was discovered by the Pyla-Kousopetria Archaeological Project (PKAP), a landscape oriented archaeological project ongoing since 2003 (**fig. 1**)¹. The site sits atop a natural plateau overlooking the Mediterranean and with an in-filled embayment to the south and Cyprus' interior to the north. The site is also situated along the primary terrestrial route connecting Salamis and Kition, the two major urban entities in the region. Five years of intensive pedestrian survey yielded remnants of significant fortifications and a settlement dated to the Hellenistic period based on the presence of a robust ceramic assemblage dating to this era. Alongside the main PKAP survey project, small-scale excavations were conducted at Vigla in 2008, 2009, and 2012, with the specific goal of the ground-truthing of survey results and refining the site's chronology. Larger excavation seasons followed in 2018, 2019, 2022, and 2023 beginning a longer-term, multi-year excavation project to further investigate Vigla's fortification system and its inhabitants².

The majority of the layers excavated at Vigla that produced cultural material presented a high level of stratigraphic integrity, as they were sealed on the top by mudbrick tumble and on the bottom by bedrock. Also absent were later intrusions into the stratified layers that are common throughout archaeological sites in the Eastern Mediterranean. The excavations have identified five discrete phases of occupation: Phases 1, 2, and 3 date to the Hellenistic period; Phase 4 includes limited evidence for a post Roman phase on the western edge of the plateau; and Phase 5 represents modern land use primarily associated with agricultural activities. These phases have left nearly two meters of accumulated soil sitting atop bedrock, and while small fragments of Iron Age pottery were found scattered throughout the ridge, the earliest and most substantial architecture is consistently associated with the early Hellenistic period.

Evidence for the earliest phase at the site Phase 1 is represented by a plastered mudbrick wall discovered in various units below the Phase 2 floor surface. Phase 2 occurs in the majority of Vigla excavation units and consists of stone socles for mudbrick walls and packed earth and clay floors set immediately on bedrock, which was partially exposed across the plateau during the earliest period occupation. Packed earth subfloors served to level irregularities in the bedrock and in the absence of ceramic roof tiles, the structures were most likely covered with a thatched roof. A preliminary analysis of the ceramics, coins, and diagnostic metal implements dates Phase 2 from the end of the 4th century to early decades of the 3rd century BCE. The presence of another floor surface above the Phase 2 floors confirmed the presence of a third phase (Phase 3) of activities at Vigla that appears to have immediately followed Phase 2. The ceramic and numismatic assemblages excavated up to this point from all three phases are chronologically indistinguishable, suggesting little lag between phases. With limited evidence for Phase 1, little can be ascertained regarding the function and nature of the earliest phase, but

1 CARAHER ET AL. 2005; CARAHER ET AL. 2007; CARAHER ET AL. 2008; CARAHER ET AL. 2011–2012; CARAHER ET AL. 2014; OLSON ET AL. 2013.

2 LANDVATTER ET AL. 2018; STEPHENS ET AL. 2019; OLSON ET AL. 2021.



Fig. 1

it is clear that following the end of Phase 2, those living at the site leveled Phase 2 debris, using it for sub-floor packing, and continued the tradition of mudbrick walls set on stone socles and packed earth floors.

Catalog

The following is the catalog of non-numismatic metal objects found at Vigla that have been conserved and studied excavated in 2008, 2009, 2012, 2018, and 2019. If objects have the same inventory number, that means they were kept together from the same context during excavation and conserved together, even though below in the catalog objects are separated by function. Findspots specify whether the objects were found in the central plateau, where domestic and workshop spaces have been found, or in the fortifications. ›EU‹ stands for Excavation Unit, or trench in which the object was found. Overall most finds appear to be from the early Hellenistic period, and if found in a floor level the finds date to either Phase 2 (referred to as earlier floor level) or Phase 3 (referred to as later floor level). As mentioned above, though, the chronology of the three early Hellenistic phases is indistinguishable. The many examples of weapons, such as projectiles and sling bullets, as well as pieces of chainmail armor confirm military activity at the site. Other metal finds provide insight into the daily life of the soldiers, including pieces of adornment; nails, spikes, and fittings for furniture and possibly tents; cosmetic and medical equipment; fishing equipment; and other tools. At least some portion of the weapons were produced on-site, in particular lead sling bullets, attested by a lead sprue leftover from the casting process, and a stone mold for the casting of bronze spearheads (found in 2023). The exact location of these on-site metalworking activities has yet to be found, however.



Weapons and Armor (figs. 2–3)

The many metal weapons that have been found at Vigla confirm that the site was used as a fortified settlement and attests to the tumultuous time of the Early Hellenistic period. Weapon types include the following: bronze and iron tanged projectiles with four-sided pyramidal points, a bronze point of the Scythian type, iron knives, and lead sling bullets. The projectiles have tangs that would have been slotted into likely a wooden shaft. The bronze Scythian type point has a hollow socket opening for a wooden shaft³. Some lead sling bullets still have the seam preserved from casting, suggesting that they were made on-site. One has an inscription ΘΑΡΥΤΙΟΣ, which is the name in the genitive of the owner or maker of the sling bullet⁴. Pieces of armor have been found in the form of small bronze rings that were likely originally parts of chainmail armor. The weapons and armor are a reminder of the constant fighting and uncertain times during the Hellenistic period.

1 Inv. No.: LN 76/2020

Measurements: D.: 0.009, Wt.: 10.8 g.

Description: bronze tanged projectile with four-sided pyramidal point.

Findspot: EU 19 in northern end of plateau. Mudbrick collapse of northern fortification. Excavated in 2019.

Comparanda: MERKER 2012, 255–258 pl. 37, M180a. M181 for shape, but made of iron.

2 Inv. No.: LN 3/2014

Measurements: L.: 0.071, W.: 0.011, Wt.: 13.4 g.

Description: bronze tanged projectile with four-sided pyramidal point.

Findspot: EU 8 in southern plateau. Later floor level of a room. Found in sieve but identified as coming from a floor level. Excavated in 2009.

3 Inv. No.: LN 275/09

Measurements: L.: 0.063, W.: 0.007, Wt.: 10.6 g.

Description: bronze tanged projectile with four-sided pyramidal point.

Findspot: EU 2 in plateau. Occupation and destruction in earlier floor level. Excavated in 2008.

4 Inv. No.: LN 7/14

Measurements: L.: 0.047, W.: 0.006, Wt.: 9.2 g.

Description: bronze tanged projectile with four-sided pyramidal point.

Findspot: Surface Find. Found in 2009.

5 Inv. No.: LN 203/2018

Measurements: L.: 0.045, W.: 0.010, Wt.: 5.2 g.

Description: bronze tanged projectile with four-sided pyramidal point; flatter in section than previous ones and has beaded tang.

Findspot: EU 15 in north-central part of plateau. Destruction, foundation cut, and fill before construction of later floor level. Excavated in 2012.

6 Inv. No.: LN 198/2018

Measurements: L.: 0.066, W.: 0.006, Wt.: 9.4 g.

Description: bronze tanged projectile with four-sided pyramidal point

Findspot: EU 15 in north-central part of plateau. Destruction of later phase. Excavated in 2012.

3 See OLSON ET AL. 2021, 295–296; on Scythian type arrowheads see OLSON – NAJBÆRG 2011–2012; OLSON ET AL. 2018.

4 See OLSON ET AL. 2021, 295–296; OLSON 2014.

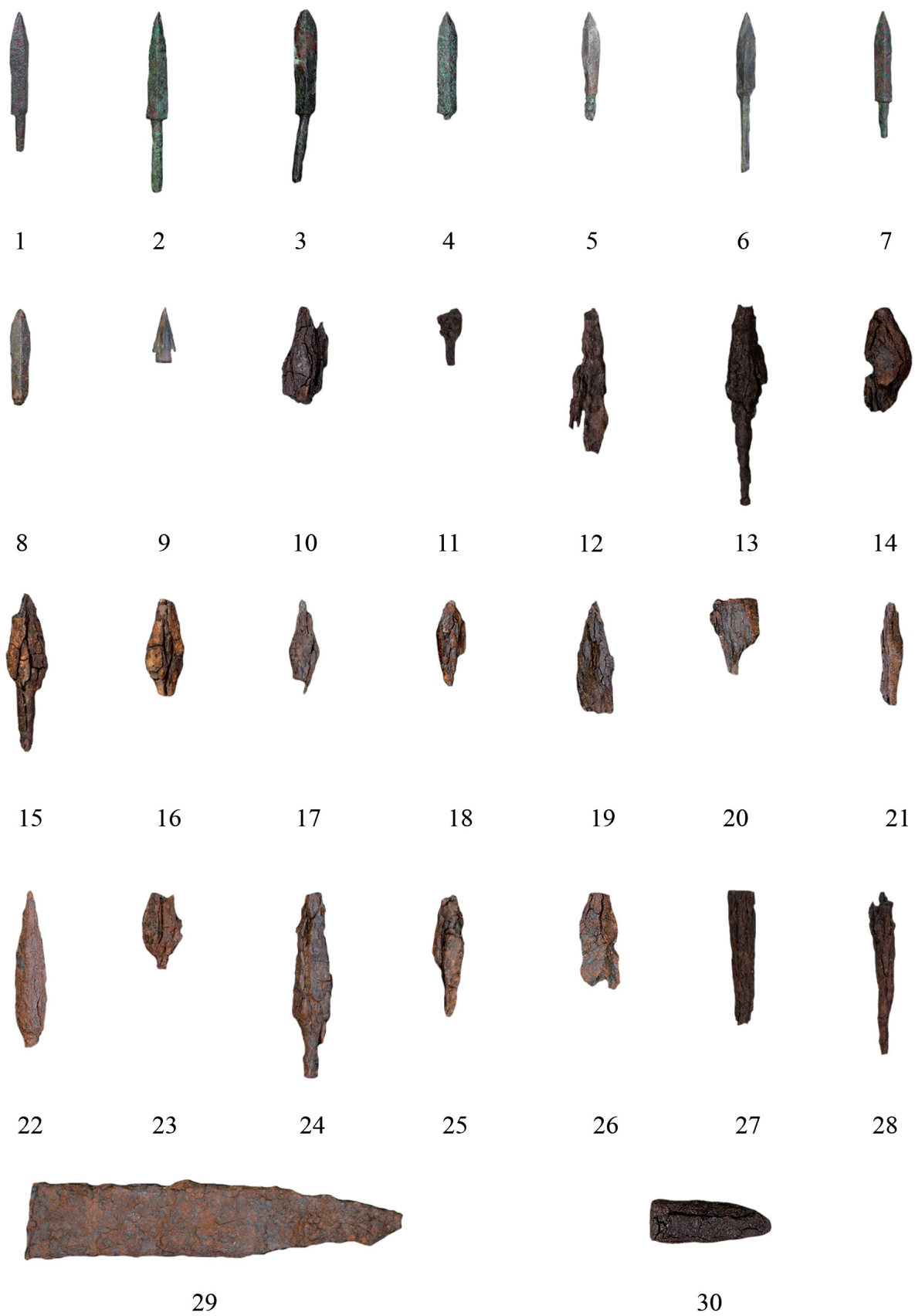


Fig. 2

- 7 Inv. No.: LN 189/2018.1
Measurements: L.: 0.051, W.: 0.008, Wt.: 7.1 g.
Description: bronze tanged projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.
- 8 Inv. No.: LN 222/2020
Measurements: L.: 0.039, W.: 0.007, Wt.: 7.0 g.
Description: bronze tanged projectile with four-sided pyramidal point; flatter in section than others.
Findspot: EU 18 in northern part of plateau by northern fortification. Modern plow zone. Excavated in 2018.
- 9 Inv. No.: LN 196/2018
Measurements: L.: 0.021, W.: 0.006, Wt.: 1.9 g.
Description: bronze trilobate arrowhead of the Scythian type with a circular hollow opening at other end for shaft insertion (socketed).
Findspot: EU 15 in north-central part of plateau. Destruction of later phase and plow zone. Excavated in 2012.
- 10 Inv. No.: LN 91/2020
Measurements: D.: 0.014, total Wt.: 28.5 g, weight includes other iron objects.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.
- 11 Inv. No.: LN 98/2020
Measurements: D.: 0.007, Wt.: 1.4 g.
Description: iron projectile tang with broken four-sided pyramidal point.
Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.
- 12 Inv. No.: LN 95/2020
Measurements: D.: 0.018, total Wt.: 58.7 g.
Description: iron projectile with four-sided pyramidal point. Weight includes other iron fragments.
Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.
- 13 Inv. No.: LN 102/2020
Measurements: D.: 0.016, total Wt.: 36.5 g.
Description: one iron projectile with four-sided pyramidal point (second from top), three iron fragments.
Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019.
- 14 Inv. No.: LN 23/14
Measurements: L.: 0.037, W.: 0.011, Wt.: 9.2 g.
Description: iron tanged projectile with short four-sided pyramidal point.
Findspot: EU 8 in southern plateau. Collapse layer in southern and northern room. Excavated in 2009.

- 15 Inv. No.: LN 291/09.1
Measurements: L.: 0.061, W.: 0.017, Wt.: 13.4 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.
- 16 Inv. No.: LN 291/09.2
Measurements: L.: 0.039, W.: 0.008, Wt.: 9.1 g.
Description: iron projectile with possible tang and four-sided pyramidal point.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.
- 17 Inv. No.: LN 189/2018.2
Measurements: L.: 0.037, W.: 0.013, Wt.: 3.8 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Scarp cleaning. Excavated in 2012.
- 18 Inv. No.: LN 188/2018.1
Measurements: L.: 0.044, W.: 0.14, Wt.: 3.1 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.
- 19 Inv. No.: LN 188/2018.2
Measurements: L.: 0.033, W.: 0.010, Wt.: 3.0 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.
- 20 Inv. No.: LN 188/2018.3
Measurements: L.: 0.032, W.: 0.13, Wt.: 3.6 g.
Description: iron projectile with four-sided pyramidal base with partial tang.
Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.
- 21 Inv. No.: LN 185/2018
Measurements: L.: 0.041, W.: 0.008, Wt.: 3.0 g.
Description: broken iron projectile with four-sided pyramidal point.
Findspot: EU 16 in northern fortification. In monumental fortification wall made of field stones and roughly cut stones for facings. Excavated in 2012.
- 22 Inv. No.: LN 181/2018.1
Measurements: L.: 0.061, W.: 0.011, Wt.: 13.5 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.
- 23 Inv. No.: LN 204/2018
Measurements: L.: 0.035, W.: 0.018, Wt.: 12.1 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 15 in north-central part of plateau. Fill above earlier floor level and before construction of later floor level. Excavated in 2012.

- 24 Inv. No.: LN 208/2018
Measurements: L.: 0.069, W.: 0.014, Wt.: 16.9 g.
Description: iron tanged projectile with four-sided pyramidal point.
Findspot: EU 15 in north-central part of plateau. Sub-floor fill before earlier floor level. Excavated in 2012.
- 25 Inv. No.: LN 268/09
Measurements: Projectile: L.: 0.041, W.: 0.010, Wt. 5.0 g.
Description: iron projectile with four-sided pyramidal point.
Findspot: EU 5 in plateau. Later occupation associated with late wall.
Excavated in 2008.
- 26 Inv. No.: LN 210/2018
Measurements: L.: 0.035, W.: 0.013, Wt.: 6.0 g.
Description: possible iron projectile; flatter than other examples. Round at one end and hollow opening at the other end.
Findspot: EU 14 in center of plateau. Mudbrick collapse layer above occupational buildings. Excavated in 2012.
- 27 Inv. No.: LN 99/2020
Measurements: D.: 0.009, Wt.: 8.7 g.
Description: iron tang.
Findspot: EU 21 in southern fortification. Mudbrick collapse layer north of fortification. Excavated in 2019.
- 28 Inv. No.: LN 89/20
Measurements: D.: 0.061, Wt.: 5.28 g.
Description: iron tang.
Findspot: EU 20 in center of plateau. Destruction layer above later floor.
Excavated in 2019.
- 29 Inv. No.: LN 212/2018
Measurements: L.: 0.106, W.: 0.021, Wt.: 25.2 g.
Description: iron knife.
Findspot: EU 14 in center of plateau. Subfloor packing, possibly from floor level in second phase of construction (this trench found three levels of occupation). Excavated in 2012.
Comparanda: MERKER 2012, 225 pl. 5, M21b. M21c.
- 30 Inv. No.: LN 111/20
Measurements: D.: 0.015, Wt.: 8.9 g.
Description: iron knife point
Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.
- 31 Inv. No.: LN 181/2020
Measurements: L.: 0.032, D.: 0.013, Wt.: 29.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Fill above later floor. Excavated in 2019.
- 32 Inv. No.: LN 176/2020
Measurements: L.: 0.031, D.: 0.016, Wt.: 33.9 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Articulation of stone socle wall.
Excavated in 2019.

- 33 Inv. No.: LN 74/2020
Measurements: L.: 0.031, D.: 0.014, Wt.: 30.0 g.
Description: lead sling bullet.
Findspot: EU 19 in northern end of plateau. Mudbrick collapse of northern fortification. Excavated in 2019.
- 34 Inv. No.: LN 174/2020
Measurements: L.: 0.031, D.: 0.013, Wt.: 36.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.
- 35 Inv. No.: LN 235/09
Measurements: L.: 0.019, D.: 0.016, Wt.: 16.4 g.
Description: lead sling bullet, miscast during manufacture.
Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.
- 36 Inv. No.: LN 176/2018
Measurements: L.: 0.032, D.: 0.016, Wt.: 40.8 g.
Description: lead sling bullet with one hole (hole depth: 0.003).
Findspot: EU 17 in collapsed part of southwestern face of ridge. Soil deposit from erosion down south face. Excavated in 2012.
- 37 Inv. No.: LN 197/2018
Measurements: L.: 0.034, D.: 0.013, Wt.: 39.1 g.
Description: lead sling bullet with inscription ΘΑΡΥΠΠΙΟΣ on one side and a possible vegetal motif or spearhead on the other; stamping seams present (possibly unused?). Name is in third-declension genitive singular. Π has longer left leg than right leg.
Findspot: EU 15 in north-central part of plateau. Destruction of later phase. Excavated in 2012.
Comparanda: Decorative motif similar to 1978/XI-20/2 in OLSON 2014, 156. 163.
- 38 Inv. No.: LN 184/2018
Measurements: L.: 0.029, D.: 0.016, Wt.: 30.3 g.
Description: lead sling bullet with partially preserved inscription depicting an α Λ.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern half of trench. Excavated in 2012.
- 39 Inv. No.: LN 223/2020
Measurements: L.: 0.031, D.: 0.017, Wt.: 31.7 g.
Description: lead sling bullet, broken on one side.
Findspot: EU 18 in northern part of plateau by northern fortification. Mudbrick collapse of northern fortification. Excavated in 2018.
- 40 Inv. No.: LN 180/2020
Measurements: L.: 0.031, D.: 0.015, Wt.: 33.8 g.
Description: lead sling bullet.
Findspot: EU 20 in center of plateau. Destruction layer above later floor level. Excavated in 2019.

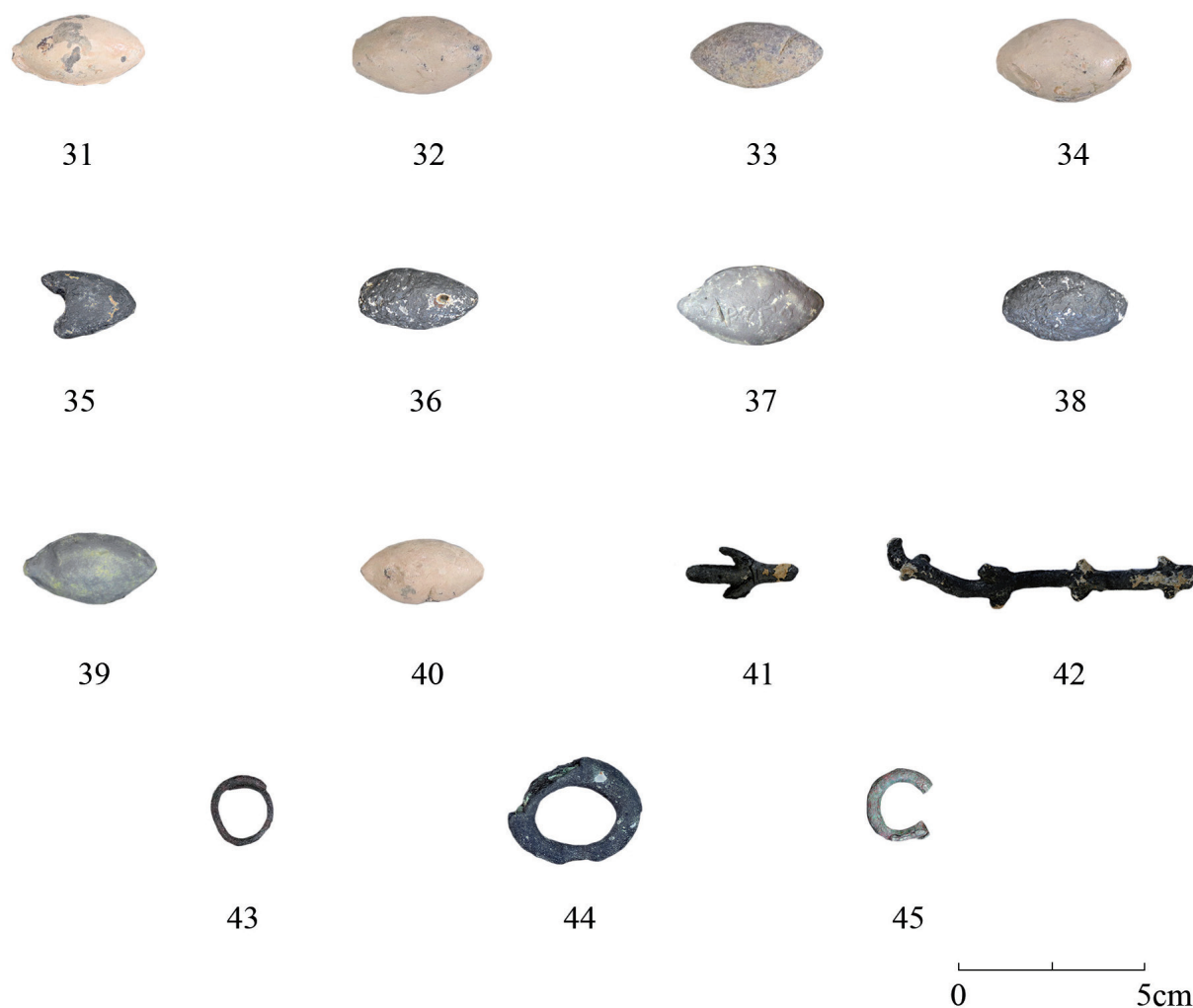


Fig. 3

41 Inv. No.: 5016_1001

Measurements: L.: 0.029, D.: 0.005, Wt.: 2.8 g.

Description: lead sling bullet sprue.

Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

42 Inv. No.: 5016_1002

Measurements: L.: 0.092, D.: 0.005, Wt.: 22.9 g.

Description: lead sling bullet sprue.

Findspot: EU 1 in south-central plateau. Floor surface and part of floor fill east of wall (only one level of occupation found in this trench). Excavated in 2008.

43 Inv. No.: LN 104/2020

Measurements: D.: 0.012, Wt.: 1.1 g.

Description: bronze chain mail link, ends overlap.

Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

44 Inv. No.: LN 288/09

Measurements: D.: 0.037, Th.: 0.004-0.008, Wt.: 9.4 g.

Description: bronze chain mail link, worn down on one side.

Findspot: Surface find. Found in 2008.

45 Inv. No.: LN 181/2018.2

Measurements: D.: 0.019, Th.: 0.0035, Wt.: 2.0 g.

Description: bronze chain mail link, broken.

Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.

Nails, Spikes, and Other Fittings (figs. 4–5)

Many metal objects found at Vigla are nails and spikes of bronze and iron. These objects are an attestation to the need for hardware in daily life at the fortified settlement. They were likely used in furniture and anchors for a wooden roof frame supporting a thatch overlay. As Merker suggests, more delicate nails could have been used in applying appliques to wood⁵. There are some bent examples of both bronze and iron spikes; some examples were also found at Tel Anafa which Merker says were »hammered into a right angle after being driven through the wood«⁶. Merker suggests some larger spikes could have been used for pinning down tents at Tel Anafa, and this could be a possibility for Vigla⁷.

46 Inv. No.: LN 191/2018

Measurements: D.: 0.015, L.: 0.059, Wt.: 9.9 g.

Description: bronze spike.

Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

47 Inv. No.: LN 183/2018

Measurements: D. of head: 0.015, L. of head: 0.018, L. total: 0.062, Wt.: head: 3.8 g; shaft: 5.5 g.

Description: bronze spike with shaft bent at obtuse angle; broken.

Findspot: EU 17 in collapsed part of southwestern face of ridge. Dark brown soil in northern part of trench. Excavated in 2012.

48 Inv. No.: LN 108/2020

Measurements: D.: 0.006, Wt.: 31.0 g.

Description: bronze spike with bent shaft.

Findspot: EU 20 in center of plateau. Destruction layer above later floor. Excavated in 2019.

49 Inv. No.: LN 93/2020

Measurements: D.: 0.004, D. of nail head: app. 0.010, Wt.: 2.6 g.

Description: bronze nail.

Findspot: EU 20 in center of plateau. Pit deposit cut into mudbrick collapse layer. Excavated in 2019.

50 Inv. No.: LN 86/2020

Measurements: D.: 0.006, Wt.: 10.3 g.

Description: bronze nail or spike.

Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

5 MERKER 2012, 238.

6 Ibid.

7 Ibid.



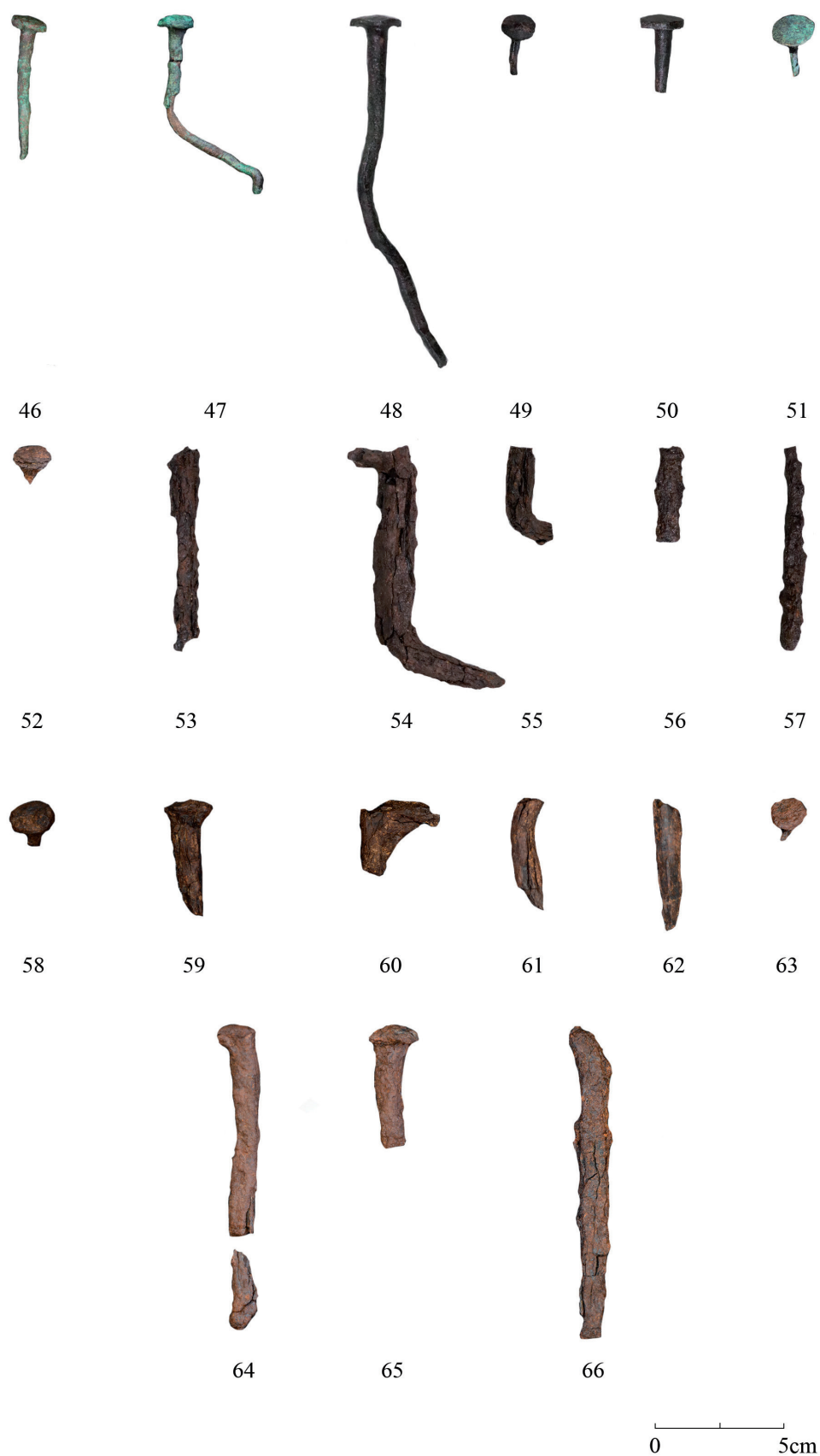


Fig. 4

- 51 Inv. No.: LN 186/2018.1
Measurements: D.: 0.018, L.: 0.020, Wt.: 3.0 g.
Description: bronze nail.
Findspot: EU 16 in northern fortification. Monumental fortification made of field stones and roughly cut stones for facings. Excavated in 2012.
- 52 Inv. No.: LN 186/2018.2
Measurements: D.: 0.016, L.: 0.019, Wt.: 3.0 g.
Description: iron nail.
Findspot: EU 16 in northern fortification. Monumental fortification made of field stones and roughly cut stones for facings. Excavated in 2012.
- 53 Inv. No.: LN 92/2020
Measurements: D.: 0.011, Wt.: 19.6 g.
Description: iron nail.
Findspot: EU 20 in center of plateau. Pit deposit cut into mudbrick collapse layer. Excavated in 2019.
- 54 Inv. No.: LN 96/2020
Measurements: D.: 0.014, Wt.: 37.1 g.
Description: iron spike with two right angle bends.
Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.
- 55 Inv. No.: LN 84/2020
Measurements: D.: 0.011, Wt.: 7.7 g.
Description: bent iron spike.
Findspot: EU 20 in center of plateau. Topsoil. Excavated in 2019.
- 56 Inv. No.: LN 80/2020.1
Measurements: D.: 0.007, Wt.: 8.5 g.
Description: iron spike.
Findspot: EU 19 in northern end of plateau. Second ash layer and fill underneath mudbrick elevation. Excavated in 2019.
- 57 Inv. No.: LN 80/2020.2
Measurements: D.: 0.005, Wt.: 13.5 g.
Description: iron spike.
Findspot: EU 19 in northern end of plateau. Second ash layer and fill underneath mudbrick elevation. Excavated in 2019.
- 58 Inv. No.: LN 224/09.1
Measurements: L.: 0.017, D.: 0.019, Wt.: 4.6 g.
Description: iron nail head.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.
- 59 Inv. No.: LN 224/09.2
Measurements: L.: 0.047, D.: 0.020, Wt.: 13.3 g.
Description: iron nail.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

- 60 Inv. No.: LN 224/09.3
Measurements: L.: 0.030, W.: 0.015, Wt.: 11.7 g.
Description: iron spike bent at right angle.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.
- 61 Inv. No.: LN 224/09.4
Measurements: L.: 0.044, W.: 0.009, Wt.: 8.7 g.
Description: iron curved end of nail or spike (square in section).
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.
- 62 Inv. No.: LN 224/09.5
Measurements: L.: 0.028, W.: 0.006, Wt.: 1.0 g.
Description: pointed iron piece (nail end?).
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.
- 63 Inv. No.: LN 179/2018
Measurements: L.: 0.011, D.: 0.019, Wt.: 2.7 g.
Description: iron nail.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Dense stratum potentially from a looter's pit. Excavated in 2012.
- 64 Inv. No.: LN 180/2018
Measurements: larger piece: L.: 0.085, W.: 0.011, Wt.: 27.3 g; smaller piece: L.: 0.033, W.: 0.009, Wt.: 4.9 g.
Description: iron spike in two pieces, square in section.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Soil deposit from erosion down south face. Excavated in 2012.
- 65 Inv. No.: LN 177/2018
Measurements: L.: 0.046, D.: 0.07, Wt.: 15.0 g.
Description: iron nail, shaft square in section.
Findspot: EU 17 in collapsed part of southwestern face of ridge. Opening cleaning. Excavated in 2012.
- 66 Inv. No.: LN 206/2018
Measurements: L.: 0.121, W.: 0.013, Wt.: 31.0 g.
Description: iron stake with bend at one end; round in section.
Findspot: EU 15 in north-central part of plateau. Earlier floor level. Excavated in 2012.
- 67 Inv. No.: LN 224/09.6
Measurements: head: L.: 0.011, D.: 0.013; shaft: L.: 0.044, W.: 0.004; total Wt.: 7.9 g.
Description: bronze nail (?) in two pieces: one head with hole, one body piece round in section.
Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.
- 68 Inv. No.: LN 78/2020
Measurements: D.: 0.04, total Wt.: 4.2 g.
Description: looped end bronze fitting. Weight includes another fragment.



Fig. 5

Findspot: EU 19 in northern end of plateau. Mudbrick wall and part of first ash layer underneath mudbrick elevation. Excavated in 2019.

Comparanda: MERKER 2012, 236–238 pl. 17, M92.

69 Inv. No.: LN 224/09.7

Measurements: L.: 0.043, W.: 0.007, Wt.: 3.7 g.

Description: iron fitting with looped end.

Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

70 Inv. No.: LN 224/09.8

Measurements: L.: 0.070, W.: 0.01, Wt.: 20.3 g.

Description: iron rod fitting with hooked end.

Findspot: EU 1 in south-central plateau. Floor surface on east side of wall (only one level of occupation found in this trench). Excavated in 2008.

71 Inv. No.: LN 24/14

Measurements: largest piece: L.: 0.345, W.: 0.013, Wt.: >100g; medium piece: L.: 0.200, W.: 0.012, Wt.: 66.0g; smallest piece: L.: 0.024, W.: 0.008, Wt.: 3.3 g.

Description: large iron spit.

Findspot: EU 8 in southern plateau. Found in occupation context with large bones in later floor level. Excavated in 2009.

Fishing Equipment (fig. 6)

The following lead objects are suggested to have been used for fishing. Most were found in occupation levels or in destruction above occupation. The folded lead weights are similar to examples from Naukratis (now at the British Museum) which have been suggested to be net weights⁸. The Vigla finds could have been used as weights for fishing lines. A similar stone that was modified to be a net weight to those found at Myos Hormos were also found during the Vigla excavations in 2022⁹. The last folded lead and ›lead strap‹ pieces in this section are not as similar to other folded lead net weights, but they could have functioned as such. The presence of fishing equipment is logical, as Vigla is close to the Mediterranean Sea and soldiers could have easily gone out to fish. These objects provide more insight into the daily life of the soldiers apart from their experiences in war. Similarly loom weights have been found made of ceramic from excavations, indicating that the soldiers or other family members, perhaps women, were weaving and producing textiles on-site.

72 Inv. No.: LN 177/2020

Measurements: D.: 0.014, Wt.: 17.5 g.

Description: folded lead fishing weight.

Findspot: EU 20 in center of plateau. Destruction layer above later floor.

Excavated in 2019.

Comparanda: MERKER 2012, 228–229 pl. 10, M42.

73 Inv. No.: LN 237/09

Measurements: L.: 0.032, D.: 0.017, Wt.: 24.9 g.

Description: folded lead fishing weight.

Findspot: EU 2 in plateau. Occupation debris in second phase of occupation.

Excavated in 2008.

Comparanda: MERKER 2012, 228–229 pl. 10, M41.

74 Inv. No.: LN 179/2020

Measurements: D.: 0.014, Wt.: 26.4 g.

Description: folded lead, possible net weight.

Findspot: EU 20 in center of plateau. Later floor level. Excavated in 2019.

75 Inv. No.: LN 178/2020

Measurements: D.: 0.011, Wt.: 22.4 g.

Description: lead strap, possible net weight.

Findspot: EU 20 in center of plateau. Destruction layer above later floor.

Excavated in 2019.

Cosmetic or Medical Equipment (fig. 6)

A few objects that were likely used for cosmetics or medicine give a glimpse of activities beyond warfare at Vigla. Injuries and everyday medical issues would have been present at the site, so instruments like these would have been necessary to treat the ailments.

76 Inv. No.: LN 90/2020

Measurements: D.: 0.05, Wt.: 5.5 g.

Description: rounded end of bronze implement with bent shaft, possibly from spatula or curette. Broken at shaft.

8 https://www.britishmuseum.org/collection/object/X__6104, catalogued by the British Museum, now at the Bolton Museum.

9 Recorded but not kept. See THOMAS 2010, 127.

Findspot: EU 20 in center of plateau. Destruction layer above later floor.
Excavated in 2019.

Comparanda: MERKER 2012, 232–234 says that some spatulas »have been bent into a right angle and apparently were meant to be used in that way«. The rounded end with the bend in the shaft is similar to a curette in BLIQUEZ 2015, 411 figs. 48a and 48b. The other end of the curette in BLIQUEZ has a scooped tool used for scraping.

77 Inv. No.: LN 106/20

Measurements: D.: 0.02, Wt.: 6.8 g.

Description: bronze probe with two rounded ends.

Findspot: EU 20 in center of plateau. Destruction layer above later floor level.
Excavated in 2019.

78 Inv. No.: LN 87/2020

Measurements: D.: 0.01, total Wt.: 9.1 g.

Description: bronze dual ended implement, possibly a forceps.

Findspot: EU 20 in center of plateau. Modern plow zone. Excavated in 2019.

Jewelry and Accessories (fig. 6)

The examples of adornment objects below also provide insight into the daily life of the soldiers and perhaps their families. The pieces include one hair pin, a fibula, a possible pin, a small silver relief of the head of a Hellenistic ruler, and a bronze ring that was found in occupied areas of Vigla. The fibula is of the semicircular type. The curved end on one side identifies it as a fibula, as this is where the pin would have rested when closed. This piece of adornment provides insight into the daily life aspect of clothing. The hair pin especially could indicate the presence of women at the site, but it is not possible to say whether women lived longer term or not at Vigla.

79 Inv. No.: LN 4/2014

Measurements: D.: 0.010, Th.: 0.020, Wt.: 0.5 g.

Description: silver round object with portrait of a Hellenistic ruler looking to right and wearing a fillet.

Findspot: EU 9 in fortification in northwest corner of plateau. Fill associated with later rubble wall attempt to repair fortification. Excavated in 2009.

80 Inv. No.: LN 224/2020

Measurements: L.: 0.017, W.: 0.014, Th.: 0.002, Wt.: 1.3 g.

Description: bronze ring; twisted on one end, the other end has flat oval bezel.

Findspot: EU 18 in northern part of plateau by northern fortification.

Mudbrick collapse of northern fortification. Excavated in 2018.

Comparanda: MERKER 2012, 251 pl. 33, M158.

81 Inv. No.: LN 199/2018

Measurements: L.: 0.097, W.: 0.003, Wt.: 3.2 g.

Description: bronze hair pin with round beaded decoration at one end.

Findspot: EU 15 in north-central part of plateau. Mudbrick collapse above later floor level. Excavated in 2012.

Comparanda: MERKER 2012, 250 pl. 33, M154.

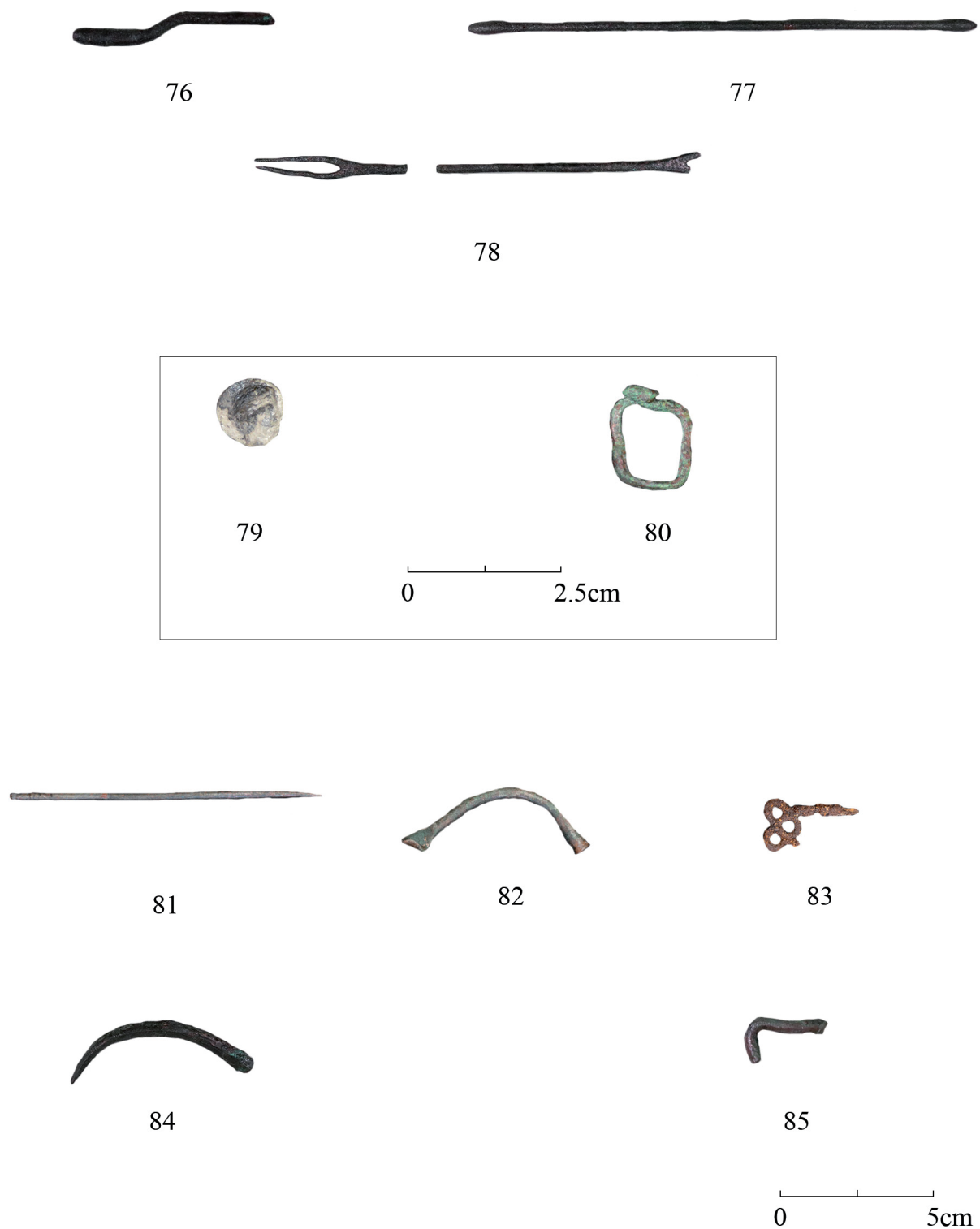


Fig. 6

82 Inv. No.: LN 200/2018

Measurements: L.: 0.059, W.: 0.005-0.008, Wt.: 6.4 g.

Description: bronze semicircular fibula, missing pin and part of hinge.

Findspot: EU 15 in north-central part of plateau. Mudbrick collapse above later floor level. Excavated in 2012.

Comparanda: MERKER 2012, 252–253 pl. 34, M166.

83 Inv. No.: LN 194/2018

Measurements: L.: 0.029, W.: 0.016, Wt.: 1.0 g.

Description: iron pin (?) with one twisted end in design (“pretzel-shaped”); one shaft coming off of design and small stub present opposite extant shaft.

Findspot: EU 16 in northern fortification. Dump fill in slab-lined pit. Excavated in 2012.

Other Tools (fig. 6)

The functions of these objects are not definitively known, but they do not fall within other categories above. Two bronze curved objects (84 and 85) are similar to possible grappling hooks identified at Tel Anafa by Merker.

84 Inv. No.: LN 100/2020

Measurements: D.: 0.004, Wt.: 7.1 g.

Description: bronze grappling hook (?) with square section and socket.

Findspot: EU 21 in southern fortification. Mudbrick collapse layer north of fortification. Excavated in 2019.

Comparanda: MERKER 2012, 231–232 pl. 12, M56 and M57 but in iron.

85 Inv. No.: LN 103/20

Measurements: D.: 0.004, Wt.: 3.1 g.

Description: bronze grappling hook (?).

Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019

Comparanda: MERKER 2012, 231–232 pl. 12, M56 and M57 but in iron.

Miscellaneous (fig. 7)

These objects do not fit in with the categories above. Some pieces of slag indicate metal production on-site at Vigla, also demonstrated by the lead sprues above.

86 Inv. No.: LN 178/2018

Measurements: L.: 0.074, W.: 0.019-0.042, Th. 0.014, Wt.: 64.8 g.

Description: round, flat iron piece with shaft (handle of an object?).

Findspot: EU 17 in collapsed part of southwestern face of ridge. Opening cleaning. Excavated in 2012.

87 Inv. No.: LN 97/2020

Measurements: D.: 0.012, Wt.: 8.3 g.

Description: fragment of iron horse shoe.

Findspot: EU 21 in southern fortification. Modern plow zone. Excavated in 2019.

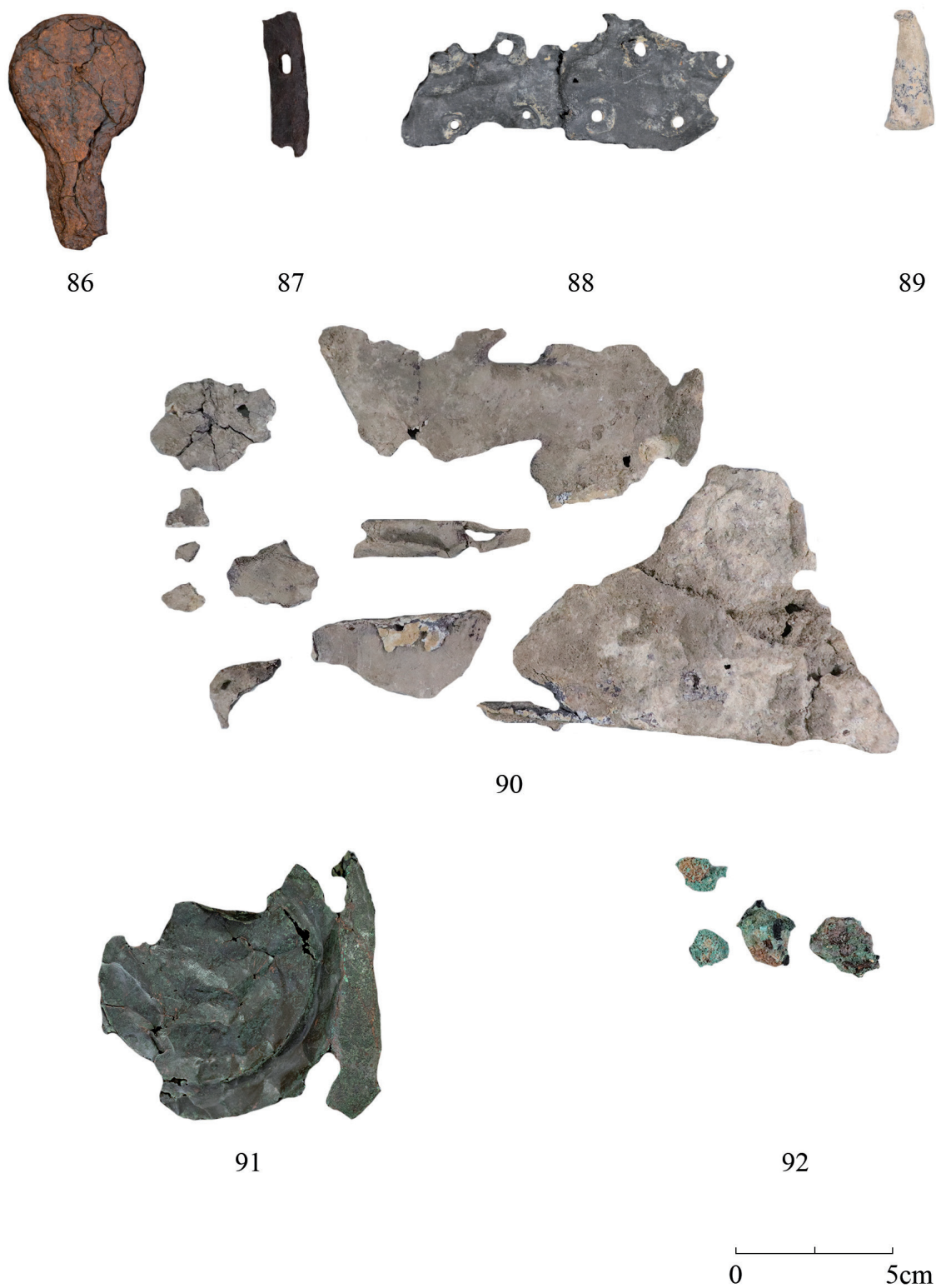


Fig. 7

- 88 Inv. No.: LN 225/09
Measurements: L.: 0.100, W.: 0.034-0.041, Th.: 0.001, Wt.: 36.4 g.
Description: lead sheet with six holes and two partial holes.
Findspot: EU 1 in south-central part of plateau. Mudbrick collapse layer.
Excavated in 2008.
- 89 Inv. No.: LN 182/2020
Measurements: D.: 0.011, Wt.: 32.0 g.
Description: lead weight?
Findspot: EU 22 in southern fortification. Foundation trench for earlier phase of fortification. Excavated in 2019.
- 90 Inv. No.: LN 175/2020
Measurements: D.: N/A, Wt.: >100 g.
Description: miscellaneous lead.
Findspot: EU 21 in southern fortification. Intentional backfill after construction of fortification. Excavated in 2019.
- 91 Inv. No.: LN 8/2014
Measurements: L.: 0.080, W.: 0.032-0.080, Wt.: 6.2 g.
Description: thin bronze fragment, portion of the base and rim of a shallow bowl or other vessel?
Findspot: Excavated in 2009.
- 92 Inv. No.: LN 81/2020
Measurements: D.: 0.012, Wt.: 6.6 g.
Description: miscellaneous slag, four pieces.
Findspot: EU 19 in northern end of plateau. Compact, burned layer of mudbrick under mudbrick fortification. Excavated in 2019.

Conclusion

This survey of the metal finds from Vigla demonstrates the militaristic nature of the site in the early Hellenistic period, but also provides insight into daily life at the fortified settlement. In addition to the abundant weapons, many pieces of metal hardware came from the furniture, architecture, and possibly tents that the soldiers were using. Other activities that took place included fishing and metal production, as evidenced by the lead fishing weights, and slag and lead sprues. The everyday personal objects also include possible cosmetic or medical equipment as well as pieces of adornment that show a more personal side to the soldiers and perhaps their families. As excavations at Vigla continue, more metal finds in context with other objects from the site will continue to give information on the people stationed at Vigla.

Bibliography

- BLIQUEZ 2015 L. J. Bliquez, *The Tools of Asclepius. Surgical Instruments in Greek and Roman Times*, *Studies in Ancient Medicine* 43 (Leiden 2015)
- CARAHER ET AL. 2005 W. Caraher – R. S. Moore – J. S. Noller – D. K. Pettegrew, *The Pyla-Koutsopetria Archaeological Project: First Preliminary Report (2003–2004 Seasons)*, *RDAC* 2005, 245–267
- CARAHER ET AL. 2007 W. Caraher – R. S. Moore – J. S. Noller – D. K. Pettegrew, *The Pyla-Koutsopetria Archaeological Project: Second Preliminary Report (2005–2006 Seasons)*, *RDAC* 2007, 293–306
- CARAHER ET AL. 2008 W. Caraher – R. S. Moore – D. K. Pettegrew, *Surveying Late Antique Cyprus*, *NEA (ASOR)* 71/1–2, 2008, 82–89
- CARAHER ET AL. 2011–2012 W. Caraher – R. S. Moore – D. Nakassis – D. K. Pettegrew, *Pyla-Koutsopetria Archaeological Project: Recent Work at the Site of Pyla-Vigla*, *RDAC* 2011–2012, 443–459
- CARAHER ET AL. 2014 W. Caraher – R. S. Moore – D. K. Pettegrew, *Pyla-Koutsopetria I. Archaeological Survey of an Ancient Coastal Town*, *American Schools of Oriental Research Archaeological Reports* 21 (Boston, MA 2014)
- LANDVATTER ET AL. 2018 T. Landvatter – B. R. Olson – D. S. Reese – J. Stephens – R. S. Moore, *Pyla-Koutsopetria Archaeological Project: Excavations at Pyla-Vigla in 2018*, *JHP* 3, 2018, 179–186
- MERKER 2012 G. S. Merker, *The Objects of Metal*, in: A. M. Berlin – S. C. Herbert (eds.), *Tel Anafa 2, 2. Glass Vessels, Lamps, Objects of Metal, and Groundstone and Other Stone Tools and Vessels* (Ann Arbor, MI 2012) 213–280
- OLSON 2014 B. R. Olson, *A Contextual and Epigraphic Analysis of the Inscribed Glandes (Sling Bullets)*, in: W. Caraher – R. S. Moore – D. Pettegrew, *Pyla-Koutsopetria I: Archaeological Survey of an Ancient Coastal Town*, *American Schools of Oriental Research Archaeological Reports* 21 (Boston, MA 2014) 155–163
- OLSON ET AL. 2013 B. R. Olson – W. Caraher – D. K. Pettegrew – R. S. Moore, *The Pyla-Koutsopetria Archaeological Project: A Preliminary Report on Excavations at Pyla-Vigla, A Fortified Settlement Dating to the Hellenistic Era*, *JAEI* 5/3, 2013, 74–82
- OLSON ET AL. 2018 B. R. Olson – T. Najbjerg – R. S. Moore, *Chasing Arsinoe (Polis Chrysochous, Cyprus): A Sealed Early Hellenistic Cistern and Its Ceramic Assemblage*, *JHP* 3, 2018, 9–29
- OLSON ET AL. 2021 B. R. Olson – R. S. Moore – T. Landvatter – J. Stephens, *Pyla-Vigla: A Case Study Assessing the Imperial Strategies of the Hellenistic Diadochoi in Cyprus*, *Études et Travaux* 34, 2021, 287–306
- OLSON ET AL. 2023 B. R. Olson – T. Landvatter – S. Stephens – R. S. Moore, *Pyla-Koutsopetria Archaeological Project: Excavations at Pyla-Vigla in 2022*, *JHP* 6, 2023, 155–168
- OLSON – NAJBJERG 2011–2012 B. R. Olson – T. Najbjerg, *A Deposit of Scythian Type Arrowheads from Polis Chrysochous (Ancient Arsinoe)*, *RDAC* 2011–2012, 639–656

- STEPHENS ET AL. 2019 J. Stephens – B. R. Olson – T. Landvatter – R. S. Moore, Pyla-Koutsopetria Archaeological Project: Excavations at Pyla-Vigla in 2019, JHP 4, 2019, 28–43
- THOMAS 2010 R. Thomas 2010, Fishing Equipment from Myos Hormos and Fishing Techniques on the Red Sea in the Roman Period, in: T. Bekker-Nielsen – D. Bernal Casasola, Ancient Nets and Fishing Gear. Proceedings of the International Workshop on «Nets and Fishing Gear in Classical Antiquity: A First Approach», Cádiz, November 15–17, 2007 (Cádiz – Aarhus 2010) 139–160