

## ARCHAEOLOGY IN GREECE 2017–2018

# Newsround

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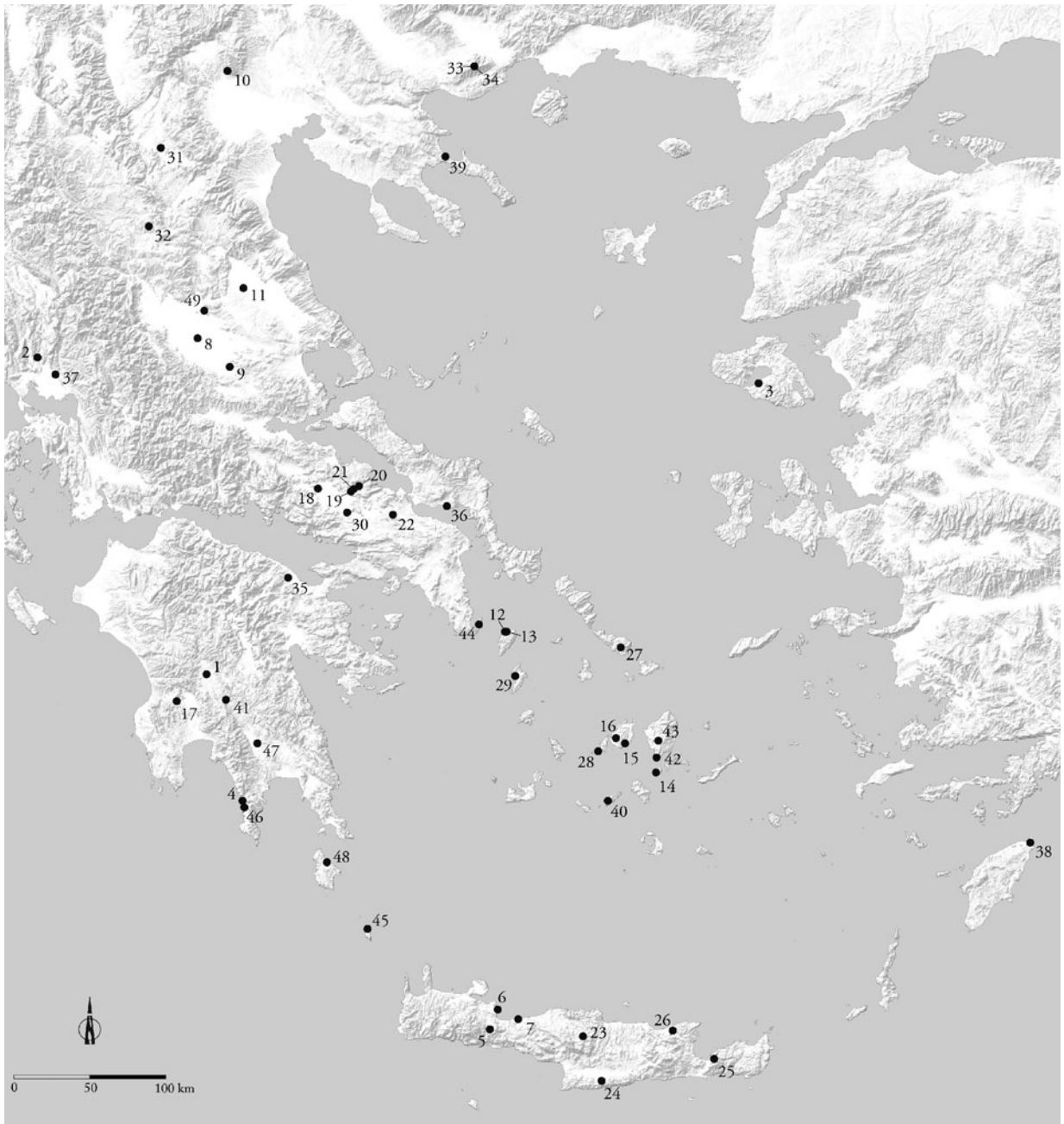
### Palaeolithic to Mesolithic (*David Smith*)

The publication of several specialist studies has made clear the exceptional importance of the Lower Palaeolithic site of **Marathousa 1** (MAR-1), previously reported in *AR* 61 (2014–2015) 14. The site features in the first episode of a recent documentary film funded by the Latsis Foundation: *To ταξίδι της διατροφής* (<http://www.latsis-foundation.org/ell/ekpaidefsi-epistimi-politismos/politismos/xrimatodotiseis/all/2016/dokimader-laquoto-taksidi-tis-trofisraquo-nbsp>). Particularly significant are the results of litho-magnetostratigraphic analysis, which has generated a preferred date range for artefact-bearing sediments within the MAR-1 sequence of *ca.* 480–420 Ka BP (equated to Marine Isotope Stage [MIS] 12). This fits well with determinations resulting from both post-infrared infrared stimulated luminescence and electron spin resonance, which place the site at *ca.* 500–400 Ka BP, although an earlier date of *ca.* 560–540 Ka BP, based on the identification of lignite seams above and below the archaeological sediments (lignite seams IIB top and LIIIa) with MIS 15a and MIS 14, remains possible (Tourloukis *et al.* 2018b; Tourloukis and Harvati 2018: 49). If correct, even the minimum age estimate of 420 Ka BP would make MAR-1 the earliest Palaeolithic site in Greece and considerably earlier than recently published minimum radiometric dates place material from **Kokkinopilos** (Tourloukis *et al.* 2015) or luminescence dates place **Rodafnidia** on Lesbos (Galanidou *et al.* 2016).

The site itself is located in the Megalopolis basin, on the northwestern edge of the open-cast Marathousa lignite mine, and comprises two discrete areas, A and B, separated by a distance of *ca.* 60m. Area A is characterized by the presence of cranial and post-cranial elements belonging to a single adult male straight-tusked elephant, *Palaeoloxodon antiquus*, and a small number of additional faunal remains, among which is the first Greek example of the Pleistocene otter taxon *Lutra simplicidens*. The identification of percussion damage, anthropogenic fractures and cut marks on *Palaeoloxodon antiquus* (Konidaris *et al.* 2017) confirms MAR-1 Area A as the first elephant-butcher site identified to date in southeastern Europe. Area B, conversely, offers a larger faunal assemblage representative of a broader range of taxa (some, again,

### Abstract

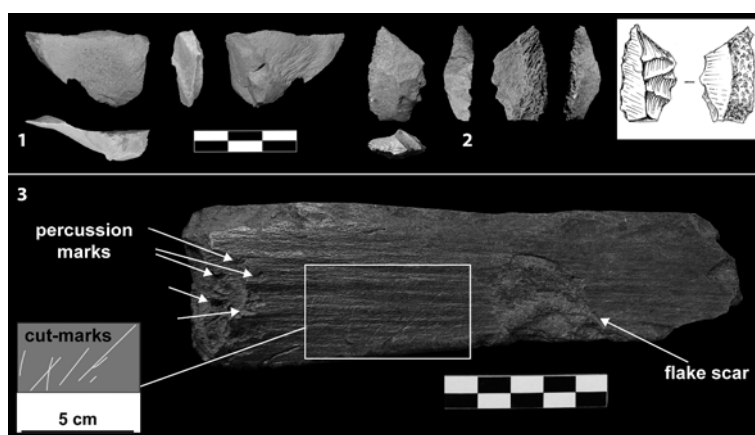
'Newsround' offers a platform for new data which do not appear within the specialist contributions of this year's Archaeological Reports but which nevertheless warrant emphasis, either as a result of their particular characteristics or for the contribution they make to broader archaeological narratives. This section is not intended to be exhaustive, but is designed, rather, to highlight recent discoveries in a way which complements digital content made available through Archaeology in Greece Online (<https://chronique.efa.gr>). The very varied nature of this material has meant that, for the most part, it has proved preferable to organize this section chronologically, although dedicated sections are provided for the inclusion of both marine archaeology and archaeological survey.



Map 3. Sites referred to in the text: 1. Marathousa 1; 2. Kokkinopilos; 3. Rodafnidia; 4. Kalamakia Cave; 5. Asphendou Cave, Crete; 6. Liko Cave, Crete; 7. Gerani Cave, Crete; 8. Magoula Rizava, Thessaly; 9. Magoula Imvrou Pigadi, Thessaly; 10. Archontiko; 11. Argissa; 12. Kephala, Kea; 13. Ayia Irini, Kea; 14. Irakleia caves; 15. Kalampaki Cave, Paros; 16. Katafy Cave, Paros; 17. Malthi; 18. Prosilio; 19. Gla; 20. Agios Ioannis; 21. Agia Marina Pyrgos; 22. Eleon; 23. Zominthos; 24. Koumasa; 25. Azoria; 26. Anavlochos; 27. Vardalakos, Xobourgo, Tenos; 28. Despotiko, Antiparos; 29. Vryokastro, Kythnos; 30. Onchestos; 31. Mavropigi, Kozani; 32. Diporon, Grevena; 33. Asimotrypes, Mount Pangaeon; 34. Valtouda, Mount Pangaeon; 35. Sikyon, Corinthia; 36. Amarynthos; 37. Ambrakia; 38. Rhodes; 39. Ierissos; 40. Sikinos; 41. Kyparissi, Logkanikos; 42. Southern Naxos Greek-Norwegian Underwater Survey; 43. Kastro Apalirou; 44. Makronisos; 45. Antikythera wreck; 46. Diros Bay, Laconia; 47. Palaiopyrgi, Laconia; 48. Australian Palaiochora Kythera Archaeological Survey; 49. Vlochos, Thessaly.  
© BSA.

The extent to which the 'small tool' character of the assemblage was a matter of choice or a product of raw-material size and reduction intensity remains unclear.

displaying cut marks) and a larger and more typologically diverse lithic assemblage (Tourloukis *et al.* 2018a). The MAR-1 assemblage in toto ( $n = 1,170$ ) currently lacks large cutting tools and any evidence of bifacial debitage. Most artefacts (83.9%) were produced on red radiolarite, with much smaller numbers on flint, quartz, limestone and sandstone; surviving cortex indicates the exploitation of small pebbles and cobbles recovered from the streams and rivers which fed the lake upon which MAR-1 lay (Tourloukis *et al.* 2018a: 5; on the depositional formation of the site, see Karkanas *et al.* 2018). Some 90% of the total assemblage consists of micro-debitage and debris (including core-maintenance flakes, potential thinning flakes, resharpening flakes and spalls), 7% of flakes and 3% of tools ( $n = 42$ ); the latter were preferentially manufactured on flakes or flake fragments (62%) and demonstrate an emphasis on backed pieces. The rarity of cores and opening flakes (*éclat d'entame*) suggests that cores may have been disposed of elsewhere or that they were decorticated in advance of their arrival on site. Lithic material from Area A (four flakes, 63 chips) appears to derive from the resharpening and repair of tools explicitly associated with the exploitation of *Palaeoloxodon*, while that from Area B ( $n = 1,105$ ) identifies a more complete *chaîne opératoire* and a greater range of carcass-processing tasks (on the integrity of the site, see Guisti *et al.* 2018). The extent to which the 'small tool' character of the assemblage was a matter of choice or a product of raw-material size and reduction intensity remains unclear (Tourloukis *et al.* 2018a: 15). The rapid burial of MAR-1 in a very fine-grained matrix has, in addition, resulted in the extraordinary preservation of a small number of bone tools (**Fig. 27**); the first Lower Palaeolithic examples discovered in Greece. Of exceptional significance for the insight they provide into the development and exploitation of Lower Palaeolithic organic technologies, this group derives from Area B and consists of a small bone flake, a denticulated bone flake/tool with a remarkable morphological similarity to percussion-flaked lithic counterparts



27. Marathousa 1, Megalopolis basin: Lower Palaeolithic bone flake, denticulated bone flake and bone percussor. © Vangelis Tourloukis.

and a diaphysis fragment from a probable elephant limb bone; the latter evidences a flake scar and possible cut marks on one side and overlapping percussion pits on its edge, suggesting its use as a soft hammer (Tourloukis *et al.* 2018a: 12–13).

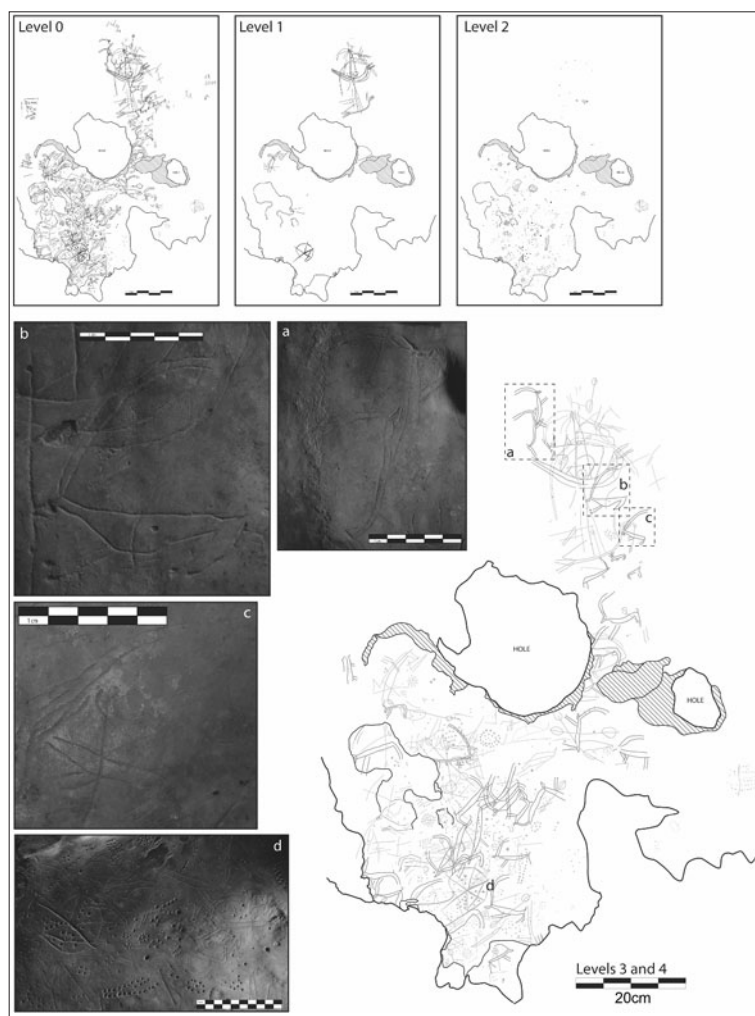
The analysis of plant microremains preserved in Neanderthal dental calculus from Vindija (Croatia), Grotta Fossellone (Italy), Grotta Guattari (Italy), Sima de las Palomas del Cabezo Gordo (Spain) and **Kalamakia Cave (ID4480)** offers an important Mediterranean perspective on Middle Palaeolithic dietary variability (Power *et al.* 2018). The samples from Kalamakia yielded only low numbers of starch grains and phytoliths, including at least one identified as deriving from a non-monocotyledon taxon, as well as a sponge spicule likely ingested in drinking water or through the consumption of the stomach contents of animals. However, those from other sites illustrate the foraging of low-ranked foods such as grass seeds (and perhaps also green grain) and tubers as well as legumes, alongside the dominant high-cost medium to large game economy. With caution, the lack of diversity in plant use between climatic and ecological conditions suggests that plant consumption at Kalamakia and elsewhere may have been a relatively stable strategy for the addition of dietary macronutrients which, for example, may have served to offset the risk of protein toxicity associated with overconsumption of low-fat game species (Power *et al.* 2018: 38–39).

A new programme of study at the **Asphendou Cave** in Sphakia, western Crete, has yielded the earliest example of figurative art in Greece (Strasser *et al.* 2018). The interior of this small cave (*ca.* 8.5m × 3.5m, with a roof height of only 0.6m) preserves a flowstone speleothem decorated with a complex sequence of overlapping figural and geometric petroglyphs, including a boat, ‘starburst’, paddles and cupules, over an area of 1.15m × 0.8m. Photogrammetric recording of this surface permitted the creation of a topographical map which has clarified variation in the depth of these petroglyphs and in the technique of their production, and revealed the group to be a product of multiple distinct creative episodes. The basal composition, Level 4, includes a total of 37 quadrupeds, each approximately 0.05m in length, which, based on parallels in antler morphology with fossil examples from the caves at **Liko** and **Gerani**, are identified as the Pleistocene Cretan dwarf deer, *Candiacervus*, perhaps *Candiacervus ropalophorus* (**Fig. 28**; Strasser *et al.* 2018: 106). Absolute dates derived from amino acid racemization of *Candiacervus* remains from the Rethymno area place the last occurrence of *Candiacervus* on Crete during the Upper Palaeolithic (*ca.* 21.5 ± 4.3 Kya) and, with stylistic affinities to other Palaeolithic depictions of quadrupeds, it is argued that the Asphendou herd should be dated similarly.

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28. *Asphendou Cave, Sphakia, Crete: quadruped petroglyphs.*  
© Sarah Murray and Christina Kolb.

### Neolithic to Bronze Age (David Smith)

Athanasia Krahtopoulou and colleagues (2018) report the discovery of a Middle Neolithic ceramic workshop during 2017 test excavations by the Ephorate of Antiquities of Karditsa at the Early to Middle Neolithic settlement of **Magoula Rizava** on the western Thessalian plain (Fig. 29). At least six closed ‘ovens’ were identified on the western edge of the tell. This group, delineated by a mud-brick wall, represents a sequence of oven construction in the same location, with new structures often incorporating elements of those overbuilt. The latest and best-preserved example, designated O1, was built on a raised platform; it measured 1.6m × 1.25m at its floor and possessed a domed superstructure of coarse clay with a heavy organic temper coated in white plaster. A small clay ‘table’ (0.23m × 0.21m × 0.15m) had been set to the front. A second group of comparable structures was identified and partially excavated immediately to the west (cf. the Middle Neolithic kiln group from **Magoula Imvrou Pigadi**, ca. 20km to the southeast: Kyparissi-Apostolika 2012). Excavation into the space between



29. *Magoula Rizava, western Thessalian plain: Middle Neolithic thermal structures and associated ceramic deposit.* © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Karditsa/Athanasia Krahtopoulou.

these two oven groups yielded a large deposit of manufacturing debris, including pottery, clay (raw and processed, fired and unfired) and heat-altered limestone, as well as tools for burnishing and grinding, and a clay ‘stamp’ (Krahtopoulou *et al.* 2018: 3), for which a group of barley seeds recovered therein has provided a radiocarbon date of 5797–5664 cal. BC. The associated ceramic assemblage consists overwhelmingly (*ca.* 90%) of Middle Neolithic ‘Scraped’ ware and includes examples of all shapes known to have been produced in this ware, thus identifying the workshop at Magoula Rizava as a specialist local, if not regional, production centre.

Archaeobotanical analyses of sprouted cereal grains from Phase IV Buildings C and E at **Archontiko** (*ca.* 2135–2020 BC) and Middle Bronze Age Phase 4 House 7b at **Argissa** (Middle Helladic I, *ca.* 2000–1900 BC; see Maran 1992) suggest that beer may have been brewed on the Greek mainland already by the late Early Bronze Age (Valamoti 2018). At both sites, sprouted grains (primarily wheat) are considered indicative of malt preparation, while at Archontiko, additional ‘lumps’ (including *Hordeum* sp.) may represent the remains of a dried mash (Valamoti 2018: 619). Structures plausibly connected to the brewing process are noted at both sites, including examples at Archontiko which may have served for the roasting of sprouted grains and the soaking of ground malt. These new data are particularly significant considering earlier studies which have linked the appearance of new ceramic shapes on the mainland during the late Early Bronze Age to a shift in mainland drinking habits plausibly connected to the consumption of beer or similar (see, for example, Rutter 2008).

Evilena Anastasiou and colleagues (2018) report the results of the first palaeoparasitological analysis to be undertaken on a Prehistoric insular Aegean population and the first archaeological evidence of intestinal helminths in Greece. A total of 25 samples were drawn from the cemeteries of **Kephala** and **Ayia Irini** on Kea, ranging in date from the Final Neolithic to the Byzantine period. Of these, four yielded evidence of intestinal parasites, including Final Neolithic Kephala Grave 37 (whipworm, *Trichuris trichiura*) and Late Bronze Age Ayia Irini Grave 44 (roundworm, *Ascaris lumbricoides*). Both are common in sedentary populations with poor hygiene and those that use human waste to fertilize crops (Anastasiou *et al.* 2018: 863); malnutrition and anaemia are among the complications arising from infection. The identification of whipworm and roundworm stands in contrast to the more diverse parasitic picture of contemporary populations in northern Europe and may reflect ecological constraints on the proliferation of other species, including the absence of perennial water sources on Kea, and the limited reliance of insular Cycladic groups on wild game.

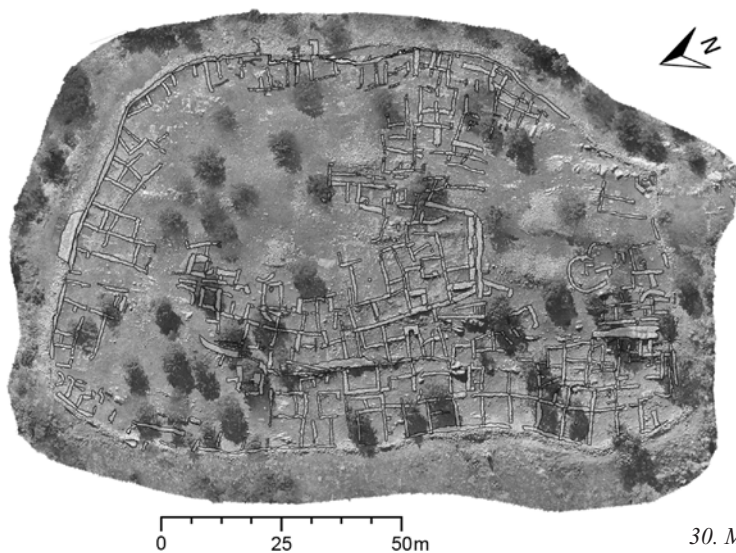
*The identification of whipworm and roundworm stands in contrast to the more diverse parasitic picture of contemporary populations in northern Europe and may reflect ecological constraints on the proliferation of other species.*

*The Agios Ioannis Cyclops Cave complex ... seems to have served as a sanctuary from the Early Iron Age into the Classical period.*

Elsewhere in the archipelago, excavation by the *Irakleia Caves Exploration Project* within the remote **Agios Ioannis Cave** has yielded the first example of Late Neolithic Saliagos Culture pottery from the island (Mavridis *et al.* 2018). One of four caves (along with Cyclops, Mantri and Alimia) which make up the Agios Ioannis Cyclops Cave complex on the western slope of Mount Pappas, Early Cycladic activity is attested at Agios Ioannis by both coarse and slipped and burnished pottery, while an assemblage of fine drinking vessels, including kylikes, suggests a change of function during the Late Bronze Age. The space seems to have served as a sanctuary from the Early Iron Age into the Classical period (Mavridis *et al.* 2018: 256). **Mantri Cave** yielded a large volume of ovicaprid bones, some held in pits, and a pair of well-preserved late Middle to early Late Cycladic vessels which may have formed part of a structured deposit. A fragment of human maxilla from the same cave suggests that it served a funerary function for at least some of its history. Of note alongside the larger Early Cycladic to Byzantine assemblage of the **Cyclops Cave** is the identification of a Prehistoric clay-lined pit preserving a quantity of unidentified seed in its interior. A small test trench yielded an assemblage of Prehistoric to Historic pottery from within the **Alimia Cave**; more significant, however, is the discovery of a pecked spiral petroglyph at a cliff-top site nearby.

New data have also emerged from recent work in the Parian caves of **Kalampaki** and **Katafy** (Mavridis 2018). Kalampaki, located on the northwestern slope of Prophitis Ilias, has yielded an assemblage of more or less well-preserved conical cups, vessels (of unidentified shape) with pierced bases, seashells and animal bone, along with traces of burning, suggestive of ritual activity; Katafy, on Mount Kavalos, has yielded an assemblage of late Middle Cycladic to early Late Cycladic pottery, some of it Cretan in origin, which includes conical cups, askoi, cups, nipples ewers, oval-mouth pithoi and Melian bowls, as well as a bronze dagger and a sealstone (Mavridis 2018: 4).

Work undertaken by the *Malthi Mapping Project* has clarified the Middle and Late Helladic occupation on the northern spur of the Ramovouni ridge (Lindblom and Worsham 2018) (**Fig. 30**). Photogrammetric recording has refined Natan Valmin's 1938 site plan, while excavation, in combination with the restudy of ceramics recovered during the earlier Swedish excavations, has provided a Middle Helladic II foundation date for the site. Excavation to bedrock in Valmin's Room D43 (Trench 7) yielded two primary infant burials and an adult male pit burial, increasing the total number of burials known from this space to five (Valmin 1938: 196, 203); that in Room A42 (Trench 9) yielded a total of three primary and three secondary infant (< six months) burials, the latter interred



30. Malthi, Messenia: site plan. © SIA.

together in one of the former. Levelling fills containing large volumes of MH II–III ceramics and some Late Helladic I, below Rooms B76 (Trench 8) and A42, identify a major reorganization of the settlement space during LH I which included construction of the monumental fortification wall. The latest phase of occupation on the site is identified by low quantities of LH IIB and LH IIIA1 ceramics; the complete absence of the kylix from the shape repertoire indicates abandonment during LH IIIA1 early, perhaps associated with the foundation of the settlement at Gouves (traditionally LH IIB), *ca.* 400m to the west.

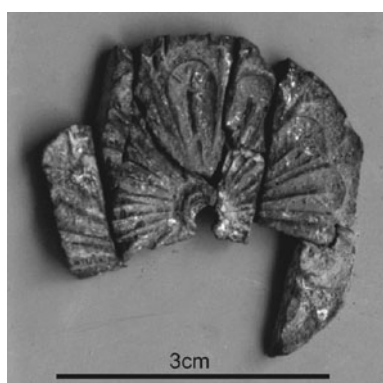
One of several projects currently shedding light on the Mycenaean presence in Boeotia (see below), the first season of excavation by the Ephorate of Antiquities of Boeotia and the University of Cambridge/BSA has yielded the remains of an exceptionally large Late Helladic IIIA2–B chamber tomb at **Prosilio**, *ca.* 3.5km west of Mycenaean Orchomenos (**ID6170**). With a dromos measuring *ca.* 20m in length, a façade of *ca.* 5.4m in height and a chamber height of *ca.* 3.5m, Tomb 2 is reportedly the ninth largest of its type found to date; its impressive size is made more significant by the fact that it has survived inviolate. A rock-cut, mud-plastered bench extended around the periphery of the chamber, while at the centre lay the burial of a male, 40–50 years old at the time of his death. The grave goods include a group of ten tinned ceramic vessels, a pair of horse bits, bow nocks (Yannis Galanakis, personal communication), arrows, pins, combs and a large volume of jewellery, including a sealstone and signet ring. Painted pottery is conspicuous by its near absence, attested only by a pair of stirrup jars that may post-date the original burial.

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31. Agios Ioannis, Boeotia: Western House. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Boeotia/University of Maryland Baltimore County.



32. Agia Marina Pyrgos, Boeotia: Late Helladic ivory rosette. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Boeotia/University of Maryland Baltimore County (photo: Andrew B. Gibson).

Some 20km east of Orchomenos, 2017 saw the conclusion of a two-year programme of excavation and geomorphological analysis in the northeastern Copais basin under the aegis of the *Mycenaean Northeastern Kopais Project (MYNEKO)* (Lane and Kountouri 2016; 2017). On the hill of **Agios Ioannis**, excavation of a series of buttresses at intervals of 3m along the interior face of the Cyclopean fortification wall has revealed a direct architectural parallel to the site of **Gla**, some 5km to the northwest. Moreover, the identification of a ramp leading from the basin of the lake to a *ca.* 3m-wide gate in the eastern wall of the fortification suggests that the northeastern bay of the Copais basin was already fully drained during the Late Helladic period. At the interior of the settlement, excavation has yielded two groups of six cist graves of probable late Middle Helladic date. Of these, Group 1 Tomb 1 yielded an assemblage which includes a stone pestle, an obsidian blade, two incised whorls, a zoomorphic figurine and a Middle Helladic III to Late Helladic II askos with parallels from Mycenae Circle B Tomb O and Argos Tumulus D (Lane and Kountouri 2017: 10–11). Of the graves comprising Group 2, three were delineated by a stone peribolos and two (II-2 and 4) were covered by a low tumulus measuring 4.5m in diameter and 0.65m in height. The probable Middle Helladic burial of a horse in a stone-covered pit is also reported. Excavation of the so-called Western House (**Fig. 31**) yielded an amphora with scroll decoration (FS69) and Group B deep bowls which provide a *terminus ante quem* of LH IIIC early for its destruction. A further MHII(–III) to LH IIIC early/middle settlement was excavated *ca.* 2km northwest of Gla at **Agia Marina Pyrgos**. A late Middle Helladic destruction here saw parts of the early settlement given over to funerary use. Noteworthy among the subsequent Early Mycenaean burial group is Cist Grave A (1751–1619 cal. BC); this probable double neonate interment yielded a jewellery group that includes beads of faience and shell/bone with glass-paste infill. Elsewhere in the settlement, a LH IIIB2 floor surface in Trench 2 yielded a burnt ivory rosette with a direct parallel from the contemporary Lamiospito Tholos at Dimini (**Fig. 32**).

Finally, at **Eleon (ID6179)** work continued on the excavation of the so-called Blue Stone Structure (BSS). Built within an existing cemetery during Middle Helladic III to Late Helladic I, it is, at *ca.* 17m in length, one of the largest Early Mycenaean structures in central Greece (Charami *et al.* 2017). A total of 13 built graves have now been identified at its interior, of which eight have been excavated. Those explored during 2017 include the cist grave of a child *ca.* nine years old, accompanied by a miniature Vapheio cup, a miniature pyxis and two copper alloy coiled rings at the head (Tomb 6), the burial of a child *ca.* seven years old, also accompanied by a

group of three copper alloy rings at the head (Tomb 8), and an unusual stone-lined cist containing the comingled remains of at least eight (sub-)adults and several intact vessels in different ceramic traditions, including Grey Minyan and Bichrome jugs, and a Matt-Painted ring-handled cup (Tomb 7). The entire structure was covered by a substantial tumulus formed of large slabs of unfired clay and at least two undecorated monumental stelae were erected close to its centre. The identity of the settlement with which the BSS was associated has yet to be established, although Early Mycenaean material has now been recovered during excavation within the LH IIIC settlement northwest of the site; among this material is an incised bone disk or button with an S-scroll motif which has exact parallels from Shaft Grave V at Mycenae (Karo 1930: pl. LXIII; Charami *et al.* 2017).

At **Zominthos**, excavation has revealed two large entrances in the east of the Central Building (Ergon 2017 [2018] 45–49; <https://www.culture.gr/el/Information/SitePages/view.aspx?nID=2027&nID=2027>; for recent work, see **ID4430**, **ID5436**, **ID5437**, **ID6504**, **ID6505**). That at the southeast had been damaged during the Mycenaean and Roman periods (activity during the latter is dated by a coin of Marcus Aurelius, AD 161–180), as well as by modern looting activity, and appears to have led, via a large and impressive staircase, to the Central Court. That at the northeast preserved a paved anteroom with benches at its interior and provided access to the Shrine with the Stepped Altar (Fig. 33). Further rooms were exposed in the West Wing, as was an internal staircase which provided access to a columned space of unclear character. The survival of walls to a height of *ca.* 3m confirms the existence of multi-storey architecture in this part of the building. The material assemblage recovered in this area includes daggers and knives in bronze, pestles, vessels in ceramic and stone, and a seal of the Parading Lions Group. More than 100 vessels are reported from a room to the north as well as several empty cists, apparently looted during the Mycenaean period. Other finds of note include inlays in bone and rock crystal, a seal with sacral knot motif and another in bronze in the form of a scarab, a malacomorphic pendant (Fig. 34), a bone plaque resembling those of the well-known gaming board from Knossos and a vessel with a depiction of a piglet in relief which, the excavator suggests, may have carried cultic connotations given the later association of the animal with Zeus at the Idean Cave (noting also the recovery of a Late Minoan I pig rhyton from the northwest of the Central Building during earlier excavations and a further example from Phaistos). An ancillary room of the potter's workshop yielded fragments of a potter's wheel, while another workshop located beyond the main building yielded fragments of beehive indicative of the practice of apiculture.



33. Zominthos, Crete: northeast entrance. © ASA.



34. Zominthos, Crete: malacomorphic pendant (top) and other small finds. © ASA.



35. Koumasa, Crete: burial pit between Tholos Tomb A and Building Gamma. © ASA.



36. Koumasa, Crete: gold amulet in the form of a bull's head. © ASA.

Renewed excavation by Diamantis Panagiotopoulos and colleagues (ASA) has yielded much new data from the cemetery and settlement at **Koumasa (ID3409, ID4436, ID5438, ID5439, ID6506, ID6507)**; Panagiotopoulos 2016a, 2016b, 2018). This work has pushed back the foundation of the cemetery into Early Minoan I and has succeeded in clarifying the architectural sequence, both within each structure and across the cemetery as a whole. To the earliest, EM I, phase belongs Tholos Tomb A and its burial deposits, as well as several burials probably made within an earlier funerary structure in the area of Tholos Tomb B. Building Gamma belongs to an early phase of EM IIA. Later in this phase, the open areas of the cemetery were provisioned with a surface of beaten earth and lime plaster, and Tholos Tomb B was constructed. Tholos Tomb E perhaps belongs to a later phase. Between EM IIA and MM II a pavement was laid between Tholoi B and E. All structures were in use between EM IIA and MM II, with the exception of a newly identified burial pit situated between Tholos Tomb A and Building Gamma (**Fig. 35**), which was covered during EM IIA (Panagiotopoulos 2018: 562–63). In addition to huge volumes of human bone, excavation has resulted in the recovery of a very large number of small finds. Several fragments of Cycladic/Cycladicizing figurines are noted, including Koumasa types from the annexe of Tomb A (Panagiotopoulos 2016a: 433) and east of Building Gamma, as well as the head of a Dokathismata type preserving traces of paint (find-spot unknown). A gold band and triangular bronze dagger are reported from the interior of Tholos Tomb B (Panagiotopoulos 2016b: 541–42), as is a gold ring-shaped ‘counter’, while Proto- to Neopalatial seals (in steatite, ophite and ivory), stone beads, anthropomorphic and zoomorphic figurines, stone-vessel fragments, obsidian blades, objects in gold and bronze and EM IIA ceramics are noted within a looter’s fill in the tomb’s exterior. A gold amulet in the form of a bull’s head is noted from a deposit to the southwest of Tholos Tomb B (**Fig. 36**). The same deposit also yielded some 110 beads/seals of various forms and materials (including a biconical example in gold, a partially preserved trefoil seal in hippopotamus ivory, a stamp seal of white paste in the form of antithetic monkeys and a prismatic stamp seal of soft white stone decorated with animal and plant motifs) as well as a Minoan scarab in fluorite, a bronze ring with incised linear decoration, fragments of stone vessels, stone tools and obsidian blades. A gold diadem with dot-punched decoration represents a rare find from the area of Stephanos Xanthoudides’ earlier spoil heap, northeast of Building Gamma (Panagiotopoulos 2016b: 544–45). Elsewhere, excavation in the settlement has yielded a date for its abandonment during Late Minoan I (Panagiotopoulos 2018: 564) and has also identified the first evidence for later activity, in the form of a small trapezoidal building of probable Hellenistic date.



### Early Iron Age, Archaic and Classical

(David Smith and Alexandra Daphne Vlanti)

Excavation of the West Building at **Azoria (ID5576)**, Kavousi (University of North Carolina at Chapel Hill/Ephorate of Antiquities of Lasithi), has yielded compelling evidence for the centralized storage and redistribution of foodstuffs at state level during the Archaic period (Haggis and Mook 2017: 8).

Occupying a rock-cut terrace on the western slope of the southern acropolis, the West Building is substantial (**Fig. 37**). Measuring *ca.* 36m in length and *ca.* 7m in width, it survives to a height of *ca.* 3m at its eastern end; it has been preserved by a thick colluvial layer which yielded the bronze foot of a basin or *podanipter* stand of Corinthian or Laconian manufacture and a Daedalic terracotta plaque (Haggis and Mook 2016: 7) among an assemblage of objects and architectural elements washed from upslope. Nine interconnected rooms provide a total internal area of at least *ca.* 140m<sup>2</sup>. That the largest of these spaces – D3200 *ca.* 7m × 5m (35m<sup>2</sup>) – was given over to storage is indicated by 11 pithos stands (and associated ceramic scatter) and a large stone-lined bin; the latter contained a predominance of goat leg fragments within a larger assemblage of burnt animal bone. It is likely that this deposit, in conjunction with two sets of Agrimi horn cores recovered at the eastern wall, reflects an abandonment-phase sacrifice (Haggis and Mook 2017: 5). A probable incense burner is noted elsewhere in the room. Three further stands and a large number of pithos fragments were recovered in the adjacent room, D2500 (15m<sup>2</sup>), and a high concentration of olive is visible within the archaeobotanical sample. Olive and grape also dominate samples from D3100 (which housed as many as seven pithoi and four amphorae) with grain and pulse present in lower quantities. Pulses and, to a lesser extent, grain dominate in D3400; this space also yielded a variety of fine ceramics, including hydriae (or table amphorae), lekane, cups, a strainer and a chytra (Haggis and Mook 2017: 6). A minimum of seven pithos stands were identified in D2800 (21m<sup>2</sup>), although

*Excavation of the West Building at Azoria ... has yielded compelling evidence for the centralized storage and redistribution of foodstuffs at state level during the Archaic period.*



37. Azoria, Crete: Archaic West Building.  
© ASCSA.



*It is likely that this deposit, in conjunction with two sets of Agrimi horn cores recovered at the eastern wall, reflects an abandonment-phase sacrifice.*

capacity for eight pithoi of up to 500 litres each is proposed; they perhaps contained wine or must, based on the predominance of grape within the archaeobotanical sample. The remains of a built hearth and an assemblage of stone tools perhaps hint at a degree of food preparation in this room, although the absence of grain and pulse remains is not typical of kitchen spaces.

A conservative estimate of *ca.* 31,000 litres is offered for the maximum pithos capacity of the building. The total storage volume, incorporating non-pithoid ceramic vessels and organic containers, would, of course, be larger still. Indeed, the prevalence of chickpea, broad bean, lentil, wheat and barley in samples from those rooms which lack dense pithos scatters (D3300, D3400) suggests the preferential use of perishable containers for dry foodstuffs. Fig, pomegranate and almond may have been stored similarly. Much of the pithos capacity then should be related to the storage of grapes or must (particularly in D3100 and D2800) and olives (olive remains are more widely distributed, although at higher concentrations in D2500). This allocation of space for storage is unprecedented in the Aegean during the Archaic period (Haggis and Mook 2017: 8). The archaeobotanical profile of the West Building suggests short-term storage for consumption, rather than long-term storage of agricultural surplus. This strategy very likely connects it with communal feasting activities undertaken within the so-called Civic Complex, comprising the Monumental Civic Building (incorporating a hall and hearth shrine), the Service Building and the Communal Dining Building located immediately upslope from the West Building and readily accessible from it via stairs to the north and south. Moreover, continued excavation of the so-called Southwest Buildings, located south of the West Building along the same contour, has demanded reinterpretation of their 'residential' character; it is suggested, instead, that they too may have served for large-scale food storage (Haggis and Mook 2017: 8).

*The archaeobotanical profile of the West Building suggests short-term storage for consumption, rather than long-term storage of agricultural surplus. This strategy very likely connects it with communal feasting activities.*

A tumulus was discovered in August 2018 during the five-year (2017–2021) programme of systematic excavations being conducted by the EfA at **Anavlochos**, Crete (**ID6195**; for recent work at Anavlochos, see <https://anavlochos.hypotheses.org/>; for the most recent discoveries, see <http://www.arxeion-politismou.gr/2017/11/anathimatika-eidolia-ston-Anavloxo-Kritis.html>). The imposing funerary monument, 15m in diameter, contained three circular pits with the remains of burials and cremation pyres. A fourth pit, devoid of osteological material, yielded five spearheads and 15 clay vases. Finally, a fifth pit was uncovered under a sandstone block that marked the centre of the tumulus. The pit's prominent location, the thick layer of charcoal found inside it, its calcined side walls and the human



38. Anavlochos, Crete: kourotrophos figures. © Efa/Anavlochos Project.

remains and objects recovered from it suggest that this is the location of the primary cremation of the first burial associated with the tumulus. A preliminary study of the pottery demonstrates the use of this tumulus during the eighth and seventh centuries BC. Another three tumuli, unfortunately very damaged by erosion and repeated looting, have been located in the area. Furthermore, on the western part of the summit of Anavlochos, the votive deposit located during the 2016 survey (ID6195; AR 63 [2016–2017] 2) was excavated in 2017. In the crevices of an outcrop of bedrock, 550 fragments of terracotta figures, figurines and plaques, all representing females, were recovered, dating from the Protogeometric to the Classical period (Figs 38, 39).

Continued research conducted by the University of Athens under the direction of Nota Kourou has revealed valuable new information for the Classical necropolis of Vardalagos, east of Xobourgo, Tenos (Fig. 40) (Kourou 2017; for previous work at the site, see ID5054, ID4220). The necropolis extends over two separate terraces, each located on either side of the road leading to the settlement of the Classical period. A cluster of fifth-century BC graves has been discovered on the lower terrace of



39. Anavlochos, Crete: Daedalic plaque with female head. © Efa/Anavlochos Project.



40. Vardalagos, Xobourgo, Tenos: aerial view of the site. © Takis Katsibiris.

the site (south), while the upper terrace (north) is occupied by a series of funerary monuments. Excavations in 2017 revealed three similarly constructed stone monuments. Traces of fire and vases broken *in situ* – mainly lopades and kantharoi with pierced bottoms – testify that a fragmentation ritual took place on and around these constructions.



41. Vardalakos, Xoburgo, Tenos: view of the area of the metallurgical pits.  
© Nota Kourou.

The most interesting find of the 2017 excavation season is, however, a series of pits found under the floor of the fourth-century BC building unearthed in 2016, along its northern wall (Fig. 41 left). Most are deep, conical-shaped pits coated with clay soil and frequently arranged in pairs. Burned soil and the remains of ores and slags were found in the fill of the pits. One pit stands out and must have served a cultic function during its final stage of use; this is suggested by the discovery of the base of a high-footed phiale that stood on a small Π-shaped structure which contained a coin. A much different series of wide, shallow pits, which must have served as large water basins (Fig. 41 right), was revealed along the southern wall of the same building in 2018. These pits have been interpreted as belonging to an important metallurgical workshop which must have been in use until the construction of the large fourth-century BC building. This assemblage is of exceptional importance for understanding ancient metallurgy in Classical times as well as the organization of the site of Xoburgo at this time.

At the site Mandra on **Despotiko**, near Antiparos, excavations over the course of the last 20 years have brought to light an extended sanctuary dedicated to Apollo (Fig. 42; for previous research at the site, see **ID550**, **ID551**, **ID655**, **ID656**, **ID1304**, **ID1958**, **ID2329**, **ID 3072**, **ID4745**, **ID5227**, **ID5825**; *AR* 62 [2015–2016] 34–35). Cultic activities are attested in the sanctuary from the late eighth century BC, reaching a peak in



42. Despotiko: aerial view of the site.  
© Hellenic Ministry of Culture and Sports:  
Ephorate of Antiquities of the Cyclades,  
Yannos Kourayios.



the Archaic period. According to the excavator, Yannis Kourayios, at this time the sanctuary at Despotiko became the largest sanctuary in the Cyclades after that of Delos, establishing Parian supremacy in the Aegean. The 2018 excavations have helped to elucidate further the topography and organization of the sanctuary during the Archaic period by the discovery of new buildings and structures (**Fig. 43**; <http://www.kathimerini.gr/978621/gallery/politismos/eikastika/s-poydaia-eyrhmata-sto-iero-toy-apolwna-sto-despotiko>). In particular, in the area south of the Archaic temenos a 12m × 3m paved area with a large concentration of Archaic and Classical pottery was revealed. A further 12 spaces serving the sanctuary's auxiliary functions had been unearthed in the same area during previous investigations.

Important results also came from the investigation of the building phases prior to the mid-sixth-century BC Archaic temple; a building dated to the first half of the sixth century included an *eschara* and a cooking pot that were found *in situ*, while earlier floors and thresholds had been sealed before the temple was built. Finally, this year's excavation season revealed a new building in the area south of the South Stoa and Building E. The two-room structure contained, among others, many metal finds and decorated pottery of the sixth century BC, as well as fragments of Archaic kouroi and two fragments of relief pithoi, one depicting a warrior and the other a dance scene (**Fig. 44**).

Further excavation in the vicinity of Buildings 1 and 2 at **Vryokastro**, Kythnos, under the direction of Alexandros Mazarakis Ainian has yielded convincing evidence for the existence of a sanctuary dedicated to Asclepios and Aphrodite (**ID6187**, **ID6188**; for recent investigations, see <http://www.kathimerini.gr/983056/article/epikairothta/ellada/spoydaia-arxaiologikh-anakalyph-sthn-kythnos>; <http://www.archaiologia.gr/blog/2018/02/16/ασκληπιείο-και-αφοροδίσιο-πιθανόν-να-σ/>). Notable among the finds are terracotta figurines of women and children, a bearded marble head probably representing Asclepios, a fragmentary statuette of Aphrodite and marble statuettes depicting children (**Fig. 45**), as well as a kioniskos bearing the dedication ΚΑΛΛΙΣΤΩ ΑΣΚΛΗΠΙΩ ΕΥΧΗΝ and a votive stele dedicated to Syrian Aphrodite. Mazarakis Ainian proposes that Building 1 may be linked securely to Asclepios. According to him, this conclusion is supported not only by the discovery of the bearded marble head of the god in the building's interior but also by its immediate proximity to the water reservoir investigated in 2016–2017 (water being an important element in the cultic activities related to the god). Building 1 seems to have been in use from the Classical period until at least the second century AD, but the discovery of Geometric and Archaic pottery



43. Despotiko: the newly discovered Building T. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Cyclades, Yannis Kourayios.



44. Despotiko: relief pithos depicting a dance scene. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Cyclades, Yannis Kourayios.



amongst its foundations suggests a sacred use of the area from the eighth century BC. Future exploration at the site will help clarify the identity of the divinities venerated there.

At **Onchestos**, Boeotia, a new programme of geophysical survey and excavation (2014–2017) under the auspices of the ASA, the Ephorate of Antiquities of Boeotia and Columbia University has provided valuable new data regarding the size and character of the Sanctuary of Poseidon (Mylonopoulos 2016a; 2016b; 2018). In Area A (situated south of the 91km marker of the Athens-Livadia highway), excavation has focused on a large rectangular building, previously exposed by historic rescue excavation and characterized as an early bouleuterion (*ADelt* 28 [1973] *Chr.* 269–71; Mylonopoulos 2016a: 168–71). This so-called Archaic Hall was built during the mid-sixth century BC (Mylonopoulos 2016a: 173). Measuring 19.2m × 12.6m, it was divided into two spaces along its north-south axis; the largest (western) room incorporated a series of three wooden columns on stone bases to support the roof. The hall was extended during the second half of the fourth century BC, when it received a hastily built trapezoidal annexe to the north and further additions to the east (Mylonopoulos 2016b: 219). The interior of this annexe space, accessed by doors in the northern and eastern walls, was covered by a substantial destruction layer of high-quality tile and preserved the stone base of a small oval column at its centre. It appears to have served as a store for the sanctuary and yielded a large number of metal and far fewer ceramic objects. Among this group, a large fourth- to third-century BC numismatic assemblage includes issues in bronze from Boeotian Thebes, Lokris, Phlious, Chalcis, Aetolia and Macedonia (including one, marked ΦΙΛΙΠΠΙΟΥ, which may be connected with the transfer of the seat of the Boeotian League to Onchestos after 338 BC and another of Alexander the Great), and in silver from Sikyon and Chalcis (perhaps reflecting the short-lived membership of Chalcis in the Boeotian league, 308–304 BC). The metal assemblage includes inscribed bronze plaques, nails, spits, jewellery, horse trappings, sporting equipment (including strigils), possible votive shields and arms and armour in iron and bronze. Of particular note is a bronze sword of *machaira* type; measuring 0.56m in length; it appears to have been deliberately bent and, thus, ritually decommissioned. The letter H is incised on the blade above the hilt (Mylonopoulos 2016a: 78 fig.7); this is apparently an abbreviation of *ἡερόν*, also visible as graffito – *ἡ(ερόν)* or *ἡε(ρόν)* – on a handful of vessels within the modest Late Classical to Early Hellenistic ceramic assemblage. Low volumes of Late Archaic pottery are also noted from the interior of the Archaic Hall. Elsewhere in Area A, excavation has exposed the eastern and northern stereobate of the Archaic ‘Temple of Poseidon’.



5cm

45. Vryokastro, Kythnos: marble statue fragments from the sanctuary. © Alexandros Mazarakis-Ainian.

In Area B (northwest of A at the 92km marker of the Athens-Livadia highway), excavation has focused on a previously unknown monumental building (the Large Rectangular Building, LRB) that was identified during geophysical survey in 2014 to the east of the known stoa. The northern wall of the LRB, heavily scarred by modern ploughing, was exposed over a minimum length of *ca.* 24m and a maximum width of *ca.* 4m. A large number of architectural terracottas (including simas and antefixes) have been recovered in association; vividly painted with floral and geometric motifs in red, white and black on a thick buff ground and occasionally incorporating relief decoration, they should be dated to the late fourth century BC. Importantly, the LRB has been shown to overlie and partially incorporate the remains of an extraordinary monumental circular structure, some 40m in diameter with a wall *ca.* 0.8m wide built of well-cut stone blocks. Two fragmentary Ionic corner capitals have been recovered in association, and the drum of a large Ionic column and base, apparently still *in situ*, has been identified *ca.* 2m to the north of the wall (**Fig. 46**). The functions of both the LRB and the circular structure remain unclear. Elsewhere in Area B, excavation of the previously identified stoa yielded several fragments of Doric capital and others of large limestone Ionic columns coated with white plaster of exceptional quality (Mylonopoulos 2016b: 224), fragments of a probable *perirrhantērion*, a modest ceramic assemblage of the late fourth to early third century BC and a small contemporary numismatic assemblage including bronze issues from Locris, Thebes and Boeotia, and a silver issue from Chalcis. Excavation in one of five rooms identified during geophysical survey to the north of the LRB yielded an assemblage of undecorated pottery. Though evidently operating from at least the Late Archaic period, the sanctuary appears to have enjoyed renewed fortunes with the transfer of political and religious power to Onchestos in the last quarter of the fourth century BC.

At **Mavropigi**, Kozani, at the locality of Mikro Livadi, seven clusters comprising 197 graves were unearthed in 2011; they were enclosed by a large stone peribolos separating them from habitation remains of the Hellenistic period (*AEMTh* 26 [2012] 50; for earlier investigations, see **ID2576**, **ID5726**). The peribolos was erected in the initial phase of burial use at the site during the Archaic period but was respected by the inhabitants of the region during the Hellenistic period, when houses were erected outside it. In 2012 another cluster of 62 graves was investigated in Sector A (*AEMTh* 26 [2012] 48–72). Fifty-four of these burials were placed in pits cut into the bedrock, while eight were made inside stone-built tombs. The majority of burials date to the Archaic and Classical periods while a smaller number are Hellenistic in date. Some were organized inside an enclosure; others were marked by vertically placed stones.



46. Onchestos, Boeotia: Ionic column associated with the circular structure. © ASA.



47. Mavropigi, Kozani: finds from Grave 18. © Georgia Karamitrou-Mentesidi.

Although most of the interments had been disturbed, the works carried out in 2011 allow for a better understanding of the cemetery's burial customs.



48. Mavropigi, Kozani: small bronze lekanis from Grave 36. © Georgia Karamitrou-Mentesidi.



49. Mavropigi, Kozani: view of Grave 29 and finds from the tomb. © Georgia Karamitrou-Mentesidi.

Even though osteological material associated with the graves was scarce, it is apparent that inhumation seems to have prevailed as a mode of disposal, with the exception of one or two cremations. Despite the severe disturbance of most of the graves, only seven of the 54 funerary pits and two of the stone-built graves lacked funerary offerings. A total of 81 terracotta vessels was retrieved from 32 of the graves. Included in the assemblage are miniature skyphoi, hydriae, oinochoae and jugs, and also Corinthian vases such as the incised and painted aryballos and the cylindrical *exaleiptron* of the late sixth-century BC Grave 18 (Fig. 47 top and middle). Metal vessels associated with the burials include lebetes, phialae, a small lekanis (Fig. 48), a calyx and a kantharos-shaped kylix. Jewellery also very frequently accompanied the deceased. Examples include bronze pins and fibulae of various types (Fig. 49), gold sheets, as well as silver earrings such as that from Grave 18 in the shape of an  $\Omega$  with a dragon-snake head terminal (Fig. 47 bottom). Iron items include spearheads, daggers and three swords. Finally, other types of artefacts associated with the graves at Mavropigi include faience aryballoi, a small number of bobbins and spindle-whorls, glass and amber beads, and astragaloi.

A number of pits of varying size were investigated within the cemetery. They contained rough stones, masses of clay and mud-brick, pottery fragments of storage vessels and animal bones. Eight pithoi were found in five of these pits; where the evidence was preserved it was evident that they were placed in pairs inside the pits, in specially dug cavities in the bedrock. Based on the analogy of finds from Pontokomi (ID7545), it is clear that the pits belong to domestic installations at the site, predating the burials.

Judging from the traces of pits and stone concentrations that have been detected in the vicinity of the graves, as well as the scattered vessels and other objects found in the area under investigation, the number of graves in the cemetery must originally have been much higher. Among such assemblages we can single out two large bronze bracelets with incised decoration and the biconical beads found inside a shallow cutting close to the pithos of Pit 2, of which they may have constituted grave offerings (Fig. 50).

In Sector B investigations within an area of 2,875m<sup>2</sup> revealed habitation remains, pits and pithoi, as well as a few burials. While the excavation has not yet been completed, work so far



has demonstrated the residential use of the area during the end of the Iron Age and the Early Archaic period, as well as in Hellenistic times. The earliest finds include stone concentrations, circular constructions and floors, clusters of pits interpreted as cuttings of semi-underground houses, with pithoi usually found in their immediate proximity. On the other hand, the residential use of the area during the Hellenistic period may be demonstrated by the discovery of pottery, roof tiles, stones belonging to fallen walls and a partially preserved wall found in the immediate vicinity of a circular construction preserving strong traces of fire (Fig. 51). Among the finds confirming the residential use of this particular area are clay vessels, a medusa protome figurine, as well as part of a small rectangular millstone (Fig. 52). Even clearer habitation traces are provided by the discovery of Buildings A and B. Finds from their interiors, such as stone, tile, remains of floors, loomweights, a figurine fragment, a bronze coin of Cassander and a fragment of an iron dagger, clearly testify to their residential function.

The investigations at Mavropigi, as well as the preliminary study of the finds, bring to light important data for the organization of the site, especially during the Archaic and Classical periods. According to the excavator, Georgia Karamitrou-Mentesidi, the cemeteries at Mavropigi seem to have been used by the inhabitants of small agro-pastoral units whose humble architectural remains are situated in the immediate vicinity. The rarity of cremation is thus hardly surprising considering its connection to the disposal of high-ranking individuals, as testified by the chamber tombs discovered at neighbouring Aiani (*AEMTh* 26 [2012] 52). Nevertheless, and despite repeated looting over the years, the investigated burials and associated artefacts demonstrate the existence of a stratified society, organized in *gene* and *oikoi*.

Rescue excavations in 2009–2011, prompted by construction work on the new hydroelectric station on the Hilarion dam (Haliakmon) at **Diporon**, at the location of Ktíon, revealed habitation remains in the eastern sector and a large rectangular pottery kiln. In the western sector Neolithic and Bronze Age habitation remains were exposed as well as 86 burials of the Archaic to Hellenistic and Byzantine periods (**ID2162**, **ID2722**, **ID5748**). In 2012 three burials were found in the same area (*AEMTh* 26 [2012] 73–75). Grave no. 136 contained a male secondary cremation. Even though it was partially disturbed by its proximity to the Haliakmon river, key elements of the grave assemblage were preserved, namely an iron sword, whose scabbard and hilt were decorated with bone ornaments, and the iron frame of the soles of a pair of shoes, most likely boots (Figs 53, 54). A bronze decorated buckle-like strip was attached

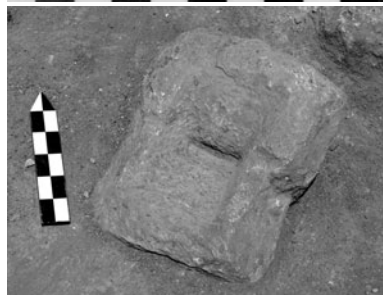


50. Mavropigi, Kozani: finds from the area of the pithos in Pit 2. © Georgia Karamitrou-Mentesidi.



51. Mavropigi, Kozani: circular construction in Sector B. © Georgia Karamitrou-Mentesidi.





52. *Mavropigi, Kozani: finds from the area of the circular construction.*  
© Georgia Karamitrou-Mentesidi.



53. *Diporon, Ktision: shoe remains from Grave 136.* © Georgia Karamitrou-Mentesidi.

54. *Diporon, Ktision: grave goods from Grave 136.* © Georgia Karamitrou-Mentesidi.

along the right outer side of the right shoe, in order to keep in place a leather *krepis*. Accompanying the deceased were three iron knives, part of an iron pin and a double silver pin; based on the latter, a provisional date of the fourth century BC has been proposed.

### Hellenistic to Roman

(David Smith and Alexandra Daphne Vlanti)

Markos Vaxevanopoulos and colleagues (2017) report on recent excavations designed to trace ancient metallurgical activity at two locations on Mount Pangaeon, Kavala, an area renowned in Antiquity as a source of precious metal. The first of these sites, **Asimotrypes**, is located on the eastern slope of Mount Pangaeon, at an altitude of 1,300masl. A total of eight historic galleries (AS1–8) has been identified here. Trial trenching in AS1, AS4 and AS6 yielded large volumes of mining waste which had apparently been used to support the gallery ceilings or to fill older sections. The ceramic assemblage, mirrored at the surface, was dated exclusively to the Late Byzantine and Ottoman periods and offered no evidence of earlier activity. The second site, **Valtouda**, is located to the south, just below the mines at **Mavrokorfi**, at an altitude of *ca.* 1,000masl. Well supplied in terms of water and wind, large volumes of slag are noted on the surface, alongside furnace fragments and an assemblage of gneiss tools, presumably used to process ore. Excavation in Trench Val-1 yielded the remains of a circular furnace with a slab-paved floor (*ca.* 1.5m in diameter), preserving slag and metallurgical residue in its interior (**Fig. 55**). Trench Val-2 exposed a sequence of sandy and loamy deposits, containing ore fragments and lumps of malachite, to a depth of 1.95m. The ceramic assemblage recovered from here, and elsewhere at Valtouda, consists exclusively of undecorated sherds (including small amphorae, oinochoae and chytrae) of the late first to early fourth century AD; many of them preserve



metallurgical residues on their surfaces. Preliminary analysis of slag samples from Valtouda suggests the exploitation of local ores from Mavrokorfí and the nearby site of Avgo (see also Vaxevanopoulos *et al.* 2018; forthcoming).

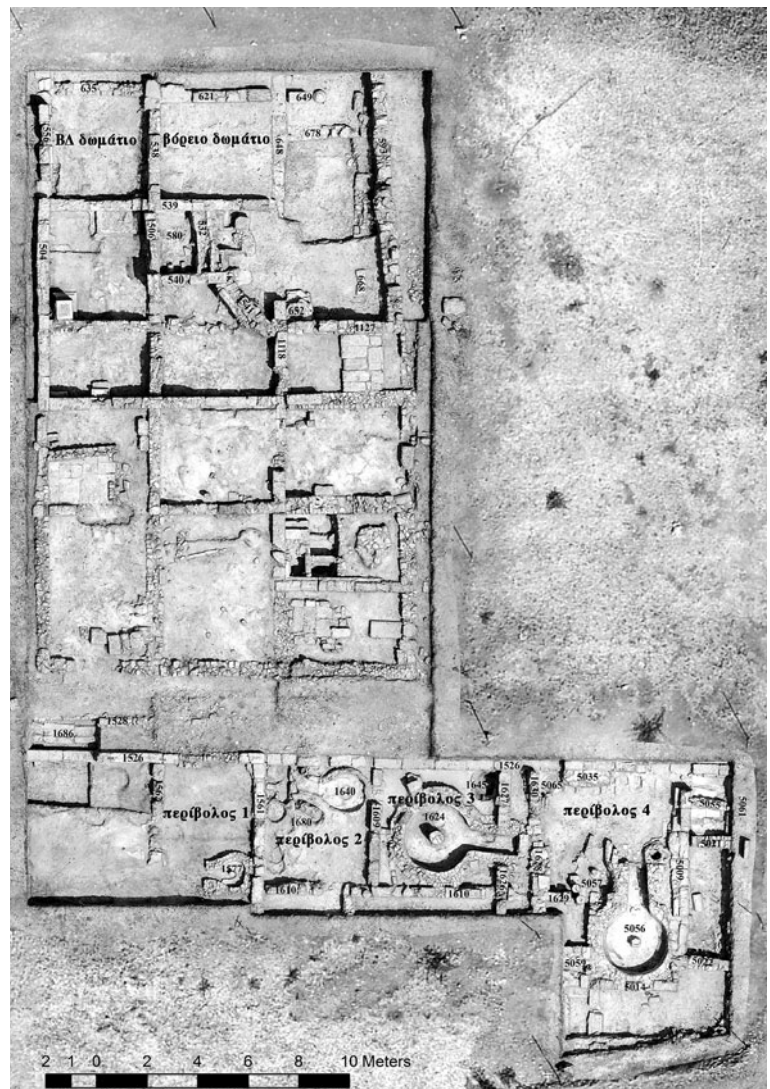
In the Corinthia, excavations since 2013 around the periphery of the agora at **Sikyón (ID6500)** continue to provide important details of activity within the Roman to Late Roman settlement. Work to date has yielded a small Hellenistic to Roman temple in Area 3, north of the palaestra (Lolos 2016a: 117–22; 2016b: 163–64; 2018: 197–201) and, in Area 2, an Early Roman stoa (with a single aisle and a Doric colonnade) on a north-south alignment immediately southeast of the Hellenistic South Stoa, as well as much evidence of commercial and industrial activity. During 2017 (*Ergon* 2017 [2018] 24–29), further evidence of commercial activity was identified in Area 1, to the rear of the Hellenistic stoa at the southeast of the agora, in the form of a group of 55 coins recovered from the so-called ‘Northern Room’ alongside a large assemblage of glass vessels, metal objects and ceramics (**Fig. 56**). This latter group includes 11 amphorae, one pithos, three African red-slip plates, chytrae, amphora lids, jugs and amphoriskoi. Once part of a larger structure, rooms either side of this space appear to have been almost entirely robbed for building material between the fifth and seventh centuries AD. Also noted is a fragmentary Roman dedicatory inscription – [- - -]λον Δά[ματρι;] – and the remains of a kiln of the late sixth or early seventh century AD. A further two ceramic kilns have been noted to the south and four more have been identified from previous excavation, also built into existing rooms (*Ergon* 2017 [2018] 24; Lolos 2018: 194–97). Additional industrial activity in this area is attested by the remains of presses and a cistern (Lolos 2016b: 145–46). The poorly preserved remains of a further four rooms are noted in Area 4, northwest of the Temple of Apollo; these are rectangular in plan and of varying sizes, and range in date from the Early Hellenistic period and the seventh century AD. Within the largest of these rooms (Room 1) was a well filled to a depth of 6m with utilitarian cooking ware dating between the late first century BC and the early first century AD, as well as a fragment of a terracotta sima, brightly decorated with palmette and lotus motifs above a meander. The character and volume of the ceramic assemblage suggests that it represents waste from an inn; indeed, other rooms within the same complex, likely a stoa which opened to the east, seem to have served for the sale and consumption of food. Built during the Hellenistic period, the well (and perhaps the inn with which it was associated) fell out of use during the reign of Augustus (27 BC–AD19). Work has also begun on the excavation of a well-built rectangular building (7.3m by 8.05m) of the first century BC, the character of which remains unclear.



55. Valtouda, Mount Pangeon: (top) circular furnace and (bottom) metallurgical furnace residue. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Serres.

*The character and volume of the ceramic assemblage suggests that it represents waste from an inn; indeed, other rooms within the same complex, likely a stoa which opened to the east, seem to have served for the sale and consumption of food.*





56. Sikyon, Corinthia: Area I. © ASA.

Also at Sikyon, investigations carried out in 2011 and 2012 during the construction of the Olympia Odos at the locality of Siryona, revealed part of the fifth- to fourth-century BC Classical city. Urban space was evidently organized in multi-roomed habitation units, separated from each other by roads (*ADelt* 66 [2011] *Chr.* 442–49). For example, Rooms I–VI, excavated in 2011 in the northern part of Sector A, form part of a single habitation unit, with spaces destined for cultic and artisanal activities, storage and also residential use. Room V, identified as the complex’s *andron* was probably the most interesting find in this habitation unit. Its square floor was covered with a pebble mosaic decorated with floral motifs organized around a central rosette, all inscribed inside a circle. Outside this circular pattern, an animal is depicted at each corner of the mosaic floor (**Fig. 57**). The threshold leading to Room V was also decorated with a pebble mosaic, this one depicting an octopus. Both mosaics date the construction of



57. Sikyon, Siryona, Corinthia: Sector A, mosaic floor in Room V. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Corinthia.



58. Sikyon, Siryona, Corinthia: aerial view of the Central Habitation Unit. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Corinthia.

Room V to the first half of the fourth century BC, while finds from the other areas of the complex demonstrate its use from the late fifth to the second half of the fourth century BC.

Further excavations in the northern area of Sector A in 2012 (*ADelt* 67 [2012] *Chr.* 321–27) led to the discovery of the so-called Central Habitation Unit, a residential complex consisting of ten rooms serving various functions and organized in three separate wings around a central courtyard (**Fig. 58**). The *andron* was once again decorated with a pebble mosaic with faunal and floral decoration inscribed inside a circle and bordered by chequerboard patterns, swastikas and a meander (**Fig. 59**). The base of an altar was also found within the complex, as well as pottery, tiles and bronze coins, which, together with the mosaic, date the construction and use of the unit to the first quarter of the fourth century BC .



59. Sikyon, Siryona, Corinthia: view of the mosaic floor in the *andron* of the Central Habitation Unit. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Corinthia.

Excavations in the southern part of Sector A revealed parts of further residential complexes, with rooms serving multiple functions, on either side of the ancient road (Areas VII–XIX). Area VII was paved with a partially preserved pebble mosaic with vegetal decoration organized inside two concentric circles (**Fig. 60**). Part of a cemetery dated to the Geometric period was also located in the same area and excavated.



60. Sikyon, Siryona, Corinthia: Sector A, mosaic floor in the *andron* (Room VII). © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Corinthia.

These finds reveal the existence at Sikyon of urban features known from other large contemporary settlements such as Eretria and Olynthos. They also confirm the wealth of ancient Sikyon, both in terms of domestic architecture and its elaboration as a powerful centre of the arts prior to its abandonment in 303 BC.

In last year's volume, Sylvian Fachard and colleagues (2017) discussed the work carried out in the area of **Amarynthos**, Euboea, which resulted in a far better understanding of the





61. Amarynthos, Euboea: aerial view of the site. © ESAG.



62. Amarynthos, Euboea: bronze quiver from the sanctuary. © ESAG.



63. Ancient Ambrakia: pebble mosaic from the Small Theatre. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Ambrakia.

topography of the site and the character of the large sanctuary enclosure unearthed more than ten years ago (**Fig. 61**; **ID448**, **ID2962**, **ID4225**, **ID5062**, **ID5446**, **ID6176**; <https://www.thenationalherald.com/210642/finds-in-amarynthos-confirm-sanctuary-belonged-to-artemis>).

Roof tiles stamped with the name of Artemis (ΑΡΤΕΜΙΔΙΟΣ, ‘belonging to Artemis’) from a building dedicated to her, dated to the Hellenistic period, were found during previous excavation seasons (*AR* 63 [2016–2017] 178). This year the focus of investigations was a large building, over 20m long, that is dated to the early seventh century BC and rests on an earlier apsidal building of Geometric date. Bronze and ceramic objects discovered during the 2018 season provide further confirmation that the sanctuary was dedicated to Artemis. Among the diagnostic finds are the base of a statue mentioning Artemis, Apollo and their mother Leto, as well as a bronze quiver believed to belong to a statuette of Artemis (**Fig. 62**). While the actual temple devoted to the goddess has not yet been located, the numerous buildings and finds of the sanctuary dating between the Early Archaic and the Hellenistic period, as well as its extension over a significant area, corroborate the importance of the site presented in ancient sources.

Excavation undertaken at the site of the Small Theatre as part of the conservation and enhancement of the archaeological site of **ancient Ambrakia**, Arta, revealed, among other features, a mosaic floor which once decorated a circular area within a bath building ([http://www.kathimerini.gr/978929/article/epikairothta/ellada/en\\_typwsiako-yhfidwto-sthn-arta-apokalyye-h-arxaiologikh-skapanh](http://www.kathimerini.gr/978929/article/epikairothta/ellada/en_typwsiako-yhfidwto-sthn-arta-apokalyye-h-arxaiologikh-skapanh)). The pebble mosaic, which has been dated to the fourth century BC, covers the central part of the bath building which pre-existed the Small Theatre. Made of small white, ash-yellow and dark-coloured river pebbles, the mosaic depicts scenes of young Erotes playing games with swans (**Fig. 63**) and riding dolphins, as well as flying swans, fish, water birds and an octopus. The pebble floor is connected to another with similar decoration, found partly covered by the theatre’s *cavea* during excavations undertaken in the 1970s. Taking into account the architectural style of the bath building, as well as the nature of the mosaic floors, which present many similarities to those of the Centaur Bath in ancient Corinth, the pebble floor can be dated to the fourth century BC.

Excavation carried out on the New Peripheral Road of the city of **Rhodes** during the construction of a roundabout yielded important new data for the eastern cemetery of the city (**Fig. 64**) (*ADelt* 66 [2011] *Chr.* 1017–22). A cluster of 32 graves was revealed, mainly cists but also a few rectangular and circular

*thekai* (containing cinerary hydriae and stone ossuaries). While most of the interments seem to have been looted, a few burials were richly furnished. Examples of the artefacts unearthed include a bronze mirror, a silver alabastron, a gold-plated bronze ring and seven Rhodian coins that can be dated to the last quarter of the third century BC. Notable among the grave goods is a gold ring with a rotating quartz gemstone decorated with the embossed figure of a naked warrior. Worth mentioning is a cist grave dated to the middle or the second half of the third century BC which contained an almost intact gold ivy wreath, a silver alabastron with gilt decoration as well as a gold-plated iron ring. These impressive finds complement our knowledge about burial practices in the eastern cemetery of Rhodes and are indicative of the wealth of the city in the third century BC (for earlier investigations in the necropolis, see **ID5339**, **ID5584**, **ID5844**, **ID5872**).

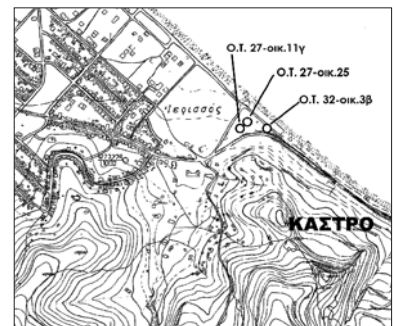
### Late Antique to Early Modern

(David Smith and Alexandra Daphne Vlanti)

Rescue excavation in three coastal plots below the hill of Akanthos at **Ierissos** has exposed the remains of a Middle Byzantine industrial quarter (**Fig. 65**; *ADelt* 67 [2012] *Chr.* 580–83). Two Middle Byzantine buildings are noted in Plot 3B (O.T. 32), oriented east-west and separated by a road, *ca.* 3.5m in width. The most northerly, dating to the 11th century AD, measured at least 17.7m in length and 4.2m in width, and preserved a substantial destruction layer in its interior which yielded glazed ceramics, bronze coins and a large number of glass bracelet fragments. This building was constructed immediately above an earlier, tenth-century AD structure that mirrored its plan almost exactly. This earlier building, like its successor, was destroyed by fire and appears to have functioned as a silversmith's workshop. Notable among the material assemblage is a large quantity of polychrome, monochrome and painted pottery from Constantinople and, particularly, a lead seal of Judge Samonas of Thessaloniki (AD 927; Tavlakis and Maladakis 2006). Two construction phases are also evident within the poorly preserved southern building. The recovery of kiln furniture (including tripod stilts and kiln bars) confirms the presence of a ceramic workshop on the site during the late 12th century AD. Two probable Middle Byzantine industrial warehouses are noted to the northwest in Plot 25 (O.T. 27) (**Fig. 66**). The material assemblage again includes a large quantity of glass bracelet fragments, as well as further kiln furniture. A poorly preserved circular oven belonging to the final, early 12th-century AD occupation phase is also noted. Earlier occupation is represented by several fragmentary Early Christian walls, a number of which incorporated spolia. Early Christian architecture and a further Middle Byzantine complex of the



64. Rhodes, eastern cemetery: view of the excavated area. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Dodecanese.



66. Ierissos, Chalcidice: plot location. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Chalkidiki and Mount Athos.



65. Ierissos, Chalcidice: Middle Byzantine room complex. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Chalkidiki and Mount Athos.



67. Sikinos: the burial. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of the Cyclades (courtesy of Dimitris Athanasoulis).



68. Kyparissi Logkanikos: view of Bath 2. © Hellenic Ministry of Culture and Sports: Ephorate of Antiquities of Laconia.

tenth to late 12th century AD were identified in Plot 11C (O.T. 27). Like the buildings in Plot 25, it too underwent modification during its use life, with the blocking of internal partitions, the construction of an eastern extension and the formal demarcation of an external courtyard or similar. A group of three iron tools – two hammers and a set of tongs – was recovered *in situ* from the floor of its largest room, while traces of a further ceramic kiln and additional kiln furniture are reported at the north of the plot.

On **Sikinos** in the Cyclades a grave of particular interest was discovered during conservation of the Episcopal church of the island (<http://www.kathimerini.gr/978071/gallery/epikairothta/ellada/apo-th-neikw-sthn-panagia>). The building was constructed in the second to third century AD as a temple-like mausoleum and was later converted to a Byzantine church. The cist grave, also dated to the second to third century AD, was found within a double wall that was probably built for the sole purpose of hiding it. The burial belonged to a woman and was richly furnished with numerous artefacts, including gold jewellery (bracelets, rings and a necklace) and a cameo brooch, as well as glass and metal vessels (**Fig. 67**). Organic remains from the dress of the deceased were also retrieved from the grave. The funerary assemblage clearly indicates that the grave belonged to a prominent female of Sikinos society. According to Dimitris Athanasoulis, director of the Ephorate of Antiquities of the Cyclades, this exceptional grave could belong to Neiko, whose funerary epigram was discovered on one of the church's walls during the recent conservation works.

A bath complex was discovered during construction works at **Kyparissi** for the Logkanikos overpass, in the region of Velona bridge, located between Arcadia and Laconia (*ADelt* 67 [2012] *Chr.* 99–111). The complex consisted of two baths and various other buildings. Bath 2 is a small complex (13.5m × 9.5m) consisting of five rooms organized around the large, central rectangular *frigidarium* (**Fig. 68**). Pottery fragments and coins – one depicting Philip the Arab (AD 244–249) – collected from Bath 2 may date its use from the mid-third to the end of the fourth century AD. The partially investigated contemporary building on the southern and western sides of Bath 2 is in all likelihood part of the housing complex to which Bath 2 belonged. Much larger than Bath 2, Bath 1 is located only 25m to the northeast. Its largest room, located on the southwestern edge of the building, formed the centre of the bath complex. Around its southwestern and southeastern parts, three small reservoirs constituted the bath's *frigidarium*. The northeastern area of the building included the warm rooms (the *tepidarium* and *caldarium*). An underfloor hypocaust system was used for



heating. Once again, finds from the interior of Bath 1 include a large quantity of pottery sherds belonging to undecorated and *terra sigillata* vessels, and a few bronze Roman coins, among which is one of the emperor Galerius Maximianus (AD 260–311).

The bath complex at Kyparissi is situated exactly midway on the ancient road connecting Sparta and Megalopolis, and is one of the very few complexes of this sort known to date from Laconia. It most likely constitutes part of a *villa rustica* or of some other establishment linked to the ancient road.

### Marine archaeology

(David Smith and Alexandra Daphne Vlanti)

Subsurface survey undertaken during the first and second seasons (2016 and 2017) of the **Southern Naxos Greek-Norwegian Underwater Survey** (NIA/Norwegian Maritime Museum, Oslo/EMA) has mapped a variety of archaeological remains along some 20km of the Naxian coastline between Alyko and Panormos (Ahrens 2018; Ahrens *et al.* 2018; for the preliminary results of the recently completed Cambridge/BSA *Southeast Naxos Survey*, see **ID5567**). A large ceramic assemblage and a number of anchors attest activity between the Archaic to Classical and Late Roman periods in the large bay of **Souzon** at **Cape Moni**. The former group, as might be expected, comprises principally transport amphorae, with lower quantities of fine ware likely representing the lost or discarded personal effects of crews moving through the bay. A total of 15 anchors presents a chronologically broad range of stone, composite and iron types (Ahrens *et al.* 2018: 56). Those in stone include simple weight anchors with a single rope-holes and others with up to two additional ‘tooth-holes’ designed to accommodate lengths of wood which would have provided improved holding power for large vessels (**Fig. 69**). At least one stone example has parallels from Late Bronze Age Kommos, although the longevity of the type renders a Prehistoric date uncertain. The arrival of large vessels into the bay during the Historic period is attested by at least one Classical anchor which incorporates cast lead into its stock to increase its total weight and by two large Hellenistic to Roman hook-types in iron whose minimum weight is estimated at *ca.* 200kg. A further stone-stocked anchor, of which the stock alone now survives, was very likely of comparable weight.

Activity in the bay contemporary with the occupation of the important hilltop fortress and settlement at **Kastro Apalirou** is attested by a Y-type anchor of Middle Byzantine date (for work at Kastro Apalirou, see Hill *et al.* 2017 and multiple contributions to the recent NIA monograph, *Naxos and the*

Activity in the bay contemporary with the occupation of the important hilltop fortress and settlement at Kastro Apalirou is attested.



69. Southern Naxos Greek-Norwegian Underwater Survey: members of the team lifting a stone anchor with a balloon at Cape Moni, Naxos. © Frode Kvalø (Norwegian Maritime Museum).



*Byzantine Aegean*: Hill 2018; Hill and Ødegård 2018; Hill *et al.* 2018; Indgjerd 2018; Ødegård 2018; Roland 2018). A minimum of 15 ballast piles are noted from the bay of **Panormos**, of which the largest, incorporating much Late Roman pottery, is estimated to have a volume of *ca.* 24m<sup>3</sup> and a weight of 46 tonnes (Ahrens 2018; Ahrens *et al.* 2018: 57). Much of the ballast is volcanic, probably basaltic, and thus not local to Naxos. Some of this ballast appears to have been recovered from the bay for use in the construction of a *ca.* 30m-long ramp, now submerged, seemingly intended to facilitate the movement of cargo between ship and shore.

A smaller number of ballast piles are noted in the bay of **Andrios** to the west. An assemblage of Archaic to Late Roman pottery and several Archaic to Classical stone anchor stocks appear to mark the site of multiple wrecks or groundings atop the reef south of the entrance to the bay of Panormos; one is perhaps a Roman amphora carrier to be identified with a large scatter (*ca.* 90m × 60m) of Dressel 24 *similis* (Ahrens 2018). No archaeological remains are reported from bays at **Kalados**, **Agiassos** or **Potamides**, and only a small number of sherds is noted at **Alyko** (Ahrens *et al.* 2018: 57). Shifting patterns of trade are visible within the Roman and Late Roman to Byzantine ceramic assemblage recovered to date; the former derive primarily from Asia Minor, the latter evidence a far broader network incorporating Anatolia, North Africa and the Levant (Indgjerd and Ahrens 2018). There is, as yet, no direct archaeological evidence for the ships themselves; a total of five possible wrecks has been identified using side-scan sonar (Ahrens *et al.* 2018: 55), although their locations remain unpublished and, in the absence of excavation, their dates uncertain. Preliminary details of the 2018 season have recently been released by the Ministry of Culture and Sports (<https://www.culture.gr/el/Information/SitePages/view.aspx?nID=2249>; see also <https://archaeologynewsnetwork.blogspot.com/2018/06/underwater-archaeological-research.html#VbK5uXq1UcPtUFKR.97>).



70. *Makronisos*, shipwreck in the bay of Vathy Aulaki: side view from the south. © Hellenic Ministry of Culture and Sports: EMA (photo: V. Mentogiannis).

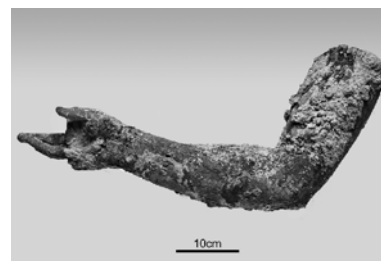


71. *Makronisos*, shipwreck in the bay of Vathy Aulaki: a cluster of bronze vessels and lead rods at the northern end of the shipwreck. © Hellenic Ministry of Culture and Sports: EMA (photo: V. Mentogiannis).

Between 2011 and 2013 the seafront around **Makronisos** on the southern Euboean gulf became the focus of an extensive underwater survey as part of a wider research project undertaken by the Hellenic Institute of Marine Archaeology in collaboration with the EMA. Its aim was to locate, record and corroborate the presence of ancient and Medieval shipwrecks in the area. A total of five ancient shipwrecks was recorded, none of which has so far been excavated. Nevertheless, the systematic documentation of their surface finds and the recovery of samples of amphorae from their cargoes (**Figs 70, 71**) allow for some preliminary conclusions (Koutsouflakis and Agryri 2017).

The cargoes of the shipwrecks, mainly transport amphorae but also vessels made of bronze and lead rods, date them between the middle of the Hellenistic and the beginning of the Late Roman period. Based on the cargoes it has been concluded that all five ships were destined to travel from the southern to the northern Aegean. Makronisos itself seems unlikely to have been the destination for ships carrying such cargoes. Nevertheless, its location right at the entrance of the southern Euboean gulf must have made it a marine junction of prime importance for navigation in the Aegean as well as a place of safe anchorage.

The third year (2017) of excavation at the site of the **Antikythera** shipwreck (Lund/EMA) has delivered further elements of cargo, including statuary in bronze and marble, and important new information regarding the character and origin of the ship itself. Among the former are a fragment of bronze *himation* (ca. 0.5m in length) and the right arm, preserved from shoulder to fingertip (ca. 0.48m from elbow to fingertip), of a life-size male bronze (**Fig. 72**); the disposition, with palm open and upturned, perhaps identifies it as representing a philosopher (<https://www.culture.gr/el/Information/SitePages/view.aspx?nID=2040>). The marble feet and base of a probable nude male were recovered in proximity. It seems likely that these fragments lay more or less *in situ* within the ship's hold, though further excavation is rendered problematic by the presence above it of a substantial boulder-fall resulting from historic earthquake activity. Among the other objects retrieved from the seabed during 2017 are a simply decorated rectilinear table top of reddish marble (0.68m × 0.35m × 0.05m; Simosi 2018) and an amphora handle apparently bearing the stamp of the potter Menodoros (MHNOΔ), of which other examples are noted from earlier excavations (*cf.* National Archaeological Museum acc. no. 30997, 30998; Kourkoumelis 2012: 214–15). X-ray analysis of a large fragment of iron concretion has revealed an intact *omphalos* phiale within it, in addition to fragments of lead sheet, wood and ceramic visible within its surface. Application of the same technique to a heavily oxidized bronze disk (0.09m in diameter) has revealed the depiction of a large quadruped, apparently a bull, on its upper face. The function of this disk is, as yet, unclear, although the presence of four equidistant brackets around its circumference seem to indicate that it was once secured to a larger object. The 100kg lead 'counterweight' reported previously (AR 62 [2015–2016] 41) is now identified as the single-surviving archaeological example of a so-called 'dolphin'; a Classical naval weapon deployed from a spar to punch through enemy hulls in a manner not dissimilar to a modern wrecking ball (Foley 2017; see Thucydides 7.38.2–3, 7.41.2–3). Isotope analysis has revealed the source of the lead used in the manufacture of the dolphin and, indeed, of almost



72. Antikythera shipwreck: right arm from a life-size male bronze. © Hellenic Ministry of Culture and Sports: EMA.

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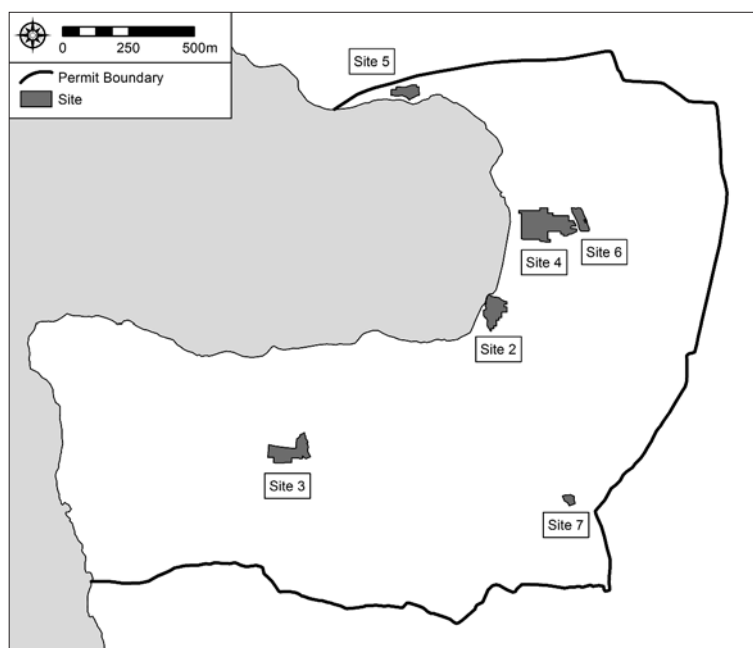
*Classical to Hellenistic and Medieval to Modern remains are reported alongside the well-publicized Final Neolithic material from Xagounaki.*

all the lead from both the Antikythera ship (Wreck A) and Wreck B to be northern Greece; this is a discovery which, in combination with its evidently substantial carrying capacity, has led excavators to the revelatory identification of the Antikythera ship as a Greek-built grain ship.

#### **Regional histories** (*David Smith*)

The preliminary publication by Daniel Pullen and colleagues of intensive survey conducted between 2011 and 2014 over an area of almost 2.5km<sup>2</sup> above **Diros Bay**, Laconia, notes the recovery of ca. 5,500 Final Neolithic to Modern objects from a total of 330 tracts and intensive collection from six sites (**Fig. 73**; Pullen *et al.* 2018). Classical to Hellenistic and Medieval to Modern remains are reported alongside the well-publicized Final Neolithic material from **Xagounaki** (Site 2), while an assemblage of coarse storage vessels and a low volume of obsidian (seven pieces) identifies Final Neolithic and Early Helladic I–II activity to the west at **Pano Katozikia** (Site 3). The latter represents the first evidence of Early Helladic occupation in the environs of Diros (Pullen *et al.* 2018: 423). A modest Classical to Hellenistic and Medieval component is also noted, alongside the presence of several very large enclosure walls of uncertain date.

A substantial ceramic assemblage largely composed of table ware and storage vessels (amphorae, pithoi) perhaps reflects the non-domestic function of Classical to Hellenistic **Kampinaria** (Site 4, Classical to Medieval/Early Modern). With very little evidence for kitchen wares, the authors suggest



73. Diros Bay, Laconia: map of survey zone.  
© Diros Project (plan: R. Seifried).



a possible role in the storage and transport of maritime trade from the bay to the polis at Pyrrichos and/or to other settlements in the region. The Late Roman assemblage is more typically domestic in character. This also seems to be true of **Mastakaria** (Site 5), which was likely first established on the cliff-top at the northern edge of the bay during the Roman period. In addition to standing architecture, the site yielded fragments of Late Roman 2 amphorae and spirally grooved ware, and an Agora Group N pitcher which identifies continued activity between the fourth and sixth/seventh centuries AD. A small number of sherds attests to later Medieval and Ottoman to Venetian activity; low volumes of Classical to Hellenistic material very likely represent material eroded from a site upslope.

Markedly high densities of Classical to Hellenistic, Roman to Late Roman and Medieval material are reported from **Agioi Theodoroi** (Site 6). With the addition of both painted Laconian and Corinthian tile, the Classical to Hellenistic assemblage closely parallels that noted from Kampinaria and should probably be taken to indicate a similar function (Pullen *et al.* 2018: 423). Here too, the Roman and Late Roman material offers a greater variety of shapes (Late Roman 2 amphorae, combed and spirally grooved wares are noted) and suggests a change of function in this period. A modest Medieval assemblage, within which the rolled base of a blown glass goblet or cup may be dated as early as the sixth century AD, is tentatively associated with a possible monastic occupation.

Immediately to the east of Kampinaria, fragments of Koroni pithoi, Grottaglie ware and so-called ‘yoghurt pots’ are reported from the area of a ruined Early Modern tower house at **Psiata** (Site 7). Notwithstanding the earlier use of Alepotrypa Cave, these data suggest relatively little human activity above Diros prior to a Final Neolithic expansion which seems not to have continued beyond Early Helladic II. Classical to Hellenistic remains are likely connected with port activities in the bay and, while modest quantities of Late Roman material attest to some habitation, extensive exploitation is not apparent until the Byzantine and Ottoman periods (Pullen *et al.* 2018: 424).

Elsewhere in Laconia, surface survey over an area of 0.12km<sup>2</sup> between the **Vapheio Tholos** and the site of **Palaiopyrgi** (AAIA/Ephorate of Antiquities of Laconia) offers further insight into the diachronic use of the central Sparta plain (Hitchcock 2017; 2018). The recovery of diagnostic Final Neolithic pottery (including two lug handles and an incised rim found to the southwest of Palaiopyrgi), particularly, represents an important addition to the single (unpublished) Final Neolithic sherd noted in Waterhouse and Hope-Simpson 1960

*Markedly high densities of Classical to Hellenistic, Roman to Late Roman and Medieval material are reported from Agioi Theodoroi.*

*Notwithstanding the earlier use of Alepotrypa Cave, these data suggest relatively little human activity above Diros prior to a Final Neolithic expansion which seems not to have continued beyond Early Helladic II.*



74. Palaiopyrgi: animal figurine.  
© AAIA/Susan Hitchcock, Anne Chapin  
and Emilia Banou.

(78–80). The well-documented Early Helladic settlement on Palaiopyrgi is represented by a large ceramic assemblage, deriving principally from the northwestern slope of the hill; included in the assemblage are fine table wares and a fragment of baking tray. An Early Helladic terracotta quadruped is also reported from the summit (**Fig. 74**), one of two examples recovered. Middle and Late Helladic occupation is attested on the western, southern and eastern slopes; the latter is particularly well represented by a fine-ware assemblage including kylikes, deep bowls and kraters. A number of possible chamber tombs associated with Late Helladic III ceramics are reported among a total of 96 surface features recorded within the survey zone (Hitchcock 2018: 14), though LH IIIC remains elusive; an absence previously noted at Palaiopyrgi (Waterhouse and Hope-Simpson 1960: 78). Classical and Byzantine activity is visible in the far southwest of the survey area, although Roman remains are conspicuously absent. Survey has also recorded an extension of, presumably, Mycenaean quarrying activity (see Hitchcock *et al.* 2016) into conglomerate strata on the slopes of Palaiopyrgi.

Off the Laconian coast, renewed work in northern Kythera as part of a second phase (2016–2018) of the *Australian Palaiochora Kythera Archaeological Survey* (AAIA/Ephorate of Antiquities of West Attica and the Islands) has yielded a probable Palaeolithic tool assemblage close to a series of rock shelters at **Koupharika-Krotiria**. With the first evidence of Mesolithic activity only recently recognized (**ID4888**; AR 61 [2014–2015] 15), this assemblage, if correctly identified, pushes back still further the earliest human exploitation of the Kytherian landscape (Tzortopoulou-Gregory and Gregory 2017; 2018). Koupharika-Krotiria is one of several sites to offer evidence of Neolithic and/or Bronze Age activity. Neolithic, Early to Late Helladic and Minoan ceramics are reported from **Theodorakia**, alongside several Prehistoric rock-cut grinding installations (**Fig. 75**) and a possible mine of uncertain date, while Early Helladic to Middle Helladic and Minoan material is documented at **Ammoutses-Tholaria/Korones** and at several sites in the area of **Pyreatides** to the north of Karavas (Waterhouse and Hope-Simpson 1961: 149). A possible Late Helladic fortification wall is noted at **Vythoulas**. Analysis of the ninth- to 11th-century AD fortified site at **Agios Georgios Kolokythias** and the tower complex at **Gerakari**, north of Potamos, offers important data on a difficult period of Kytherian history that is poorly represented within the archaeological record (Coroneos *et al.* 2002: 132; Herrin 2013: 138–39). Further work is noted at the Byzantine to Early Modern sites of **Agios Ioannis Ammoutsas**, **Agios Artemios-Koupharika** and **Agios Mammias**.



75. Australian Palaiochora Kythera Archaeological Survey: Prehistoric rock-cut grinding installations at Theodorakia. © AAIA.

A programme of geophysical (magnetometry, GPR) and architectural survey, fieldwalking and aerial reconnaissance mounted under the aegis of the *Vlochos Archaeological Project* (SIA/Ephorate of Antiquities of Karditsa) has clarified a minimum of four major building phases across the western Thessalian hill of **Strongilovouni** (Vaiopoulou *et al.* 2017). The earliest phase is represented by a Late Archaic to Early Classical fortification wall and two monumental roads located on the summit.

This is followed by a major period of reorganization, tentatively assigned to the fourth century BC, that saw construction of a new city wall and the partial demolition of its predecessor. This new wall enclosed the summit and southern slope of Strongilovouni, as well as the urban settlement below it. This latter is oriented upon a principal road that runs northwest-southeast; it was traced over a minimum distance of 830m and measures *ca.* 8m in width. A network of at least 24 smaller streets, *ca.* 4m in width, lead off from the principal road. In terms of urban architecture, the phase is characterized by typical Classical to Hellenistic building types, as well as a number of possible monumental public buildings and, close to the summit, a large Classical to Hellenistic courtyard house with a well-built cistern at its centre. A polygonal enclosure occupies the summit itself, although both its exact date and its function are currently unclear.

The third major building phase on the hill is dated to the Late Roman period and is identified with the construction of yet another fortification wall. The line of this wall cuts across the Phase 2 town plan and is, today, marked over much of its length by a substantial robber trench, previously misidentified as a wartime trench system. The wall incorporates a total of 23 towers and reuses the southeastern section of the Phase 2 enceinte. The final construction phase saw a fourth fortification built on the southern slope. It too makes use of the Phase 2 wall and there is evidence of repairs to the superstructure over a distance of more than 200m; these were, apparently, never completed. There is very little evidence of post-Byzantine activity on the hill, with the exception of the robbing out of the Late Roman wall, which is connected, perhaps, with a large lime kiln at **Patoma** and others identified by magnetometry in the surrounding area.

*In terms of urban architecture, the phase is characterized by typical Classical to Hellenistic building types, as well as a number of possible monumental public buildings and, close to the summit, a large Classical to Hellenistic courtyard house with a well-built cistern at its centre.*



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