ALEX R. KNODELL, SYLVIAN FACHARD, KALLIOPI PAPANGELI

THE MAZI ARCHAEOLOGICAL PROJECT 2016: SURVEY AND SETTLEMENT INVESTIGATIONS IN NORTHWEST ATTICA (GREECE)

OFFPRINT FROM ANTIKE KUNST, VOLUME 60, 2017 Alex R. Knodell, Sylvian Fachard, Kalliopi Papangeli

Introduction

The 2016 field season of the Mazi Archaeological Project (MAP) involved multiple components: intensive and extensive pedestrian survey, digital and traditional methods of documenting archaeological features, cleaning operations at sites of particular significance, geophysical survey, and artifact analysis and study¹. The intensive survey expanded upon the 2014–2015 work of the project to focus on the middle of the plain (Area d) and the Kastanava Valley, yielding new information regarding the main periods of occupation (*fig. 1*)². The extensive survey explored large areas of the wooded slopes overlooking the plain to the north and south, as well as the surroundings of the Kastanava Valley.

Antike Kunst 60, 2017, pp. 146–163

¹ Fieldwork took place between June 13 and July 15, under the direction of S. Fachard, A. R. Knodell, and K. Papangeli. The team involved some 35 individuals, including senior collaborators, graduate and undergraduate students, and specialists: S. Alcock, B. Baker, M. Berenfeld, C. Bergstrand, M. Brennan, J. Cherry, A. Claman, C. Cloke, S. Craft, E. Davis, M. Drielsma, L. Fine, M. Groninger, J.-Q. Haefliger, C. Hunziker, T. Kerboul, T. Krapf, E. Levine, X. Mabillard, M. McHugh, J. Miller, J. Morton, S. Murray, B. Niedert, N. Piree Iliou, T. Poenitz, M. Rothenberg, R. Salem, C. Steidl, E. Svana, E. Tsalkou, P. Valta, J. Vaughn. We are grateful to the Ministry of Culture for its confidence and support over the course of the project (2014-2016), especially to S. Chrysoulaki (Ephor of West Attica, Piraeus, and the Islands) and K. Reber (Director of the Swiss School of Archaeology in Greece), as well as the institutions that provide financial and other support to MAP: the Swiss National Science Foundation, the Loeb Classical Library Foundation, the Institute for Aegean Prehistory, Carleton College, University of Geneva, University of Nebraska - Lincoln. The following individuals led aspects of the project and produced reports that contributed to the preparation of this article: C. Cloke (pottery study), S. Murray (DGPS mapping and photogrammetry), T. Krapf and T. Pönitz (cleaning operations at Kato Kastanava), R. Salem (architectural tile); further pottery study and drawings were undertaken by C. Hunziker and M. Brennan. Reports on the work of each of the three survey teams were prepared by team leaders: M. McHugh and E. Levine (Team 1), C. Steidl and T. Kerboul (Team 2), and S. Craft and T. Pönitz (Team 3). The geophysical survey team from the University of Thessaloniki was led by G. N. Tsokas, working with G. Vargemezis, E. Fikos, A. Nivorlis, and P. Tsourlos. ² On 2014 and 2015 field seasons see: Fachard – Knodell – Banou 2015; Knodell – Fachard – Papangeli 2016.

Digital initiatives in high-resolution mapping and three-dimensional recording of archaeological features continued through the investigation of several sites. Targeted cleaning at the prehistoric site of Kato Kastanava yielded ambiguous results, especially in terms of the architectural remains, some of which are clearly early modern; however, the analysis of the pottery and the lithics confirmed the presence of a Neolithic/Early Helladic occupation at the site. Cleaning at the Eleutherai fortress allowed for the production of the first comprehensive plan of the site; further investigations confirmed the existence of Mycenaean graves and a Classical dam, and produced an architectural drawing of an Early Christian basilica. Finally, geophysical exploration was conducted at and around the deme center of Oinoe.

Intensive Survey

The 2016 field season saw the completion of the intensive surface survey. All 'walkable' and accessible territory in the study area has now been subject to intensive fieldwalking in survey units covered by transects at 10 m spacing (table 1). Not only is this the first survey in Attica to achieve this level of coverage, it also makes the Mazi Plain one of the most comprehensively documented regions in all of Greece, since our sampling strategy was to aim for as near to complete coverage as possible; we are already able to show broad patterns of ceramic and lithic distribution across the entire landscape (figs. 1. 2). Fieldwalking in 2016 was undertaken by three field teams: one worked in Area d in the middle of the Mazi Plain; a second focused on Area e in the Kastanava Valley; a third team aimed to close gaps in parts of the survey area left uncovered in previous years, especially in Areas a, b, and c, and undertook gridded collection at sites of particular interest (Aghios Dimitrios and Kato Kastanava).

Area d

The center of the Mazi Plain was the principal focus of the intensive survey in 2016 (*fig. 3*). The modern village of Oinoe occupies the southeastern part of Area d, and

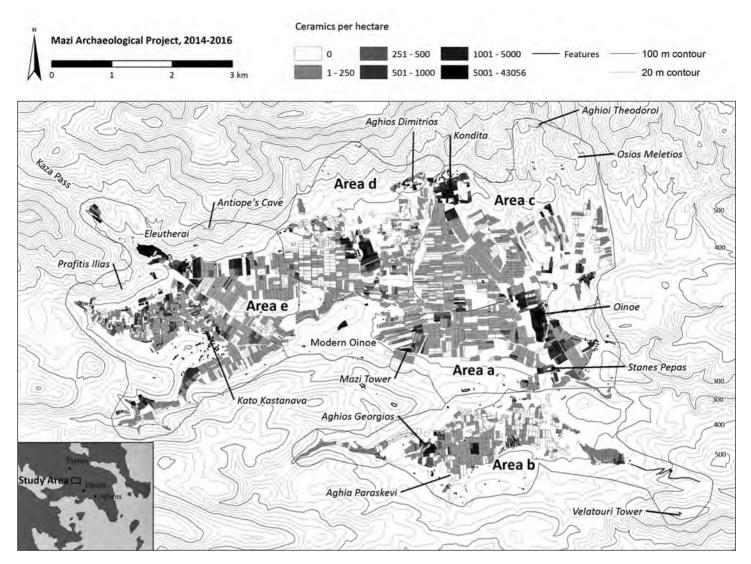


Fig. 1 Map of the Mazi Archaeological Project Survey Area: Survey Units, overall ceramic densities, and sites or places of special interest

Survey Area	Number of Survey Units	Total Area covered (ha)	Average Survey Units Size (ha)	Number of Features
Area a (2014)	400	204	0.51	77
Area b (2015)	441	169	0.38	82
Area c (2015)	626	257	0.41	48
Area d (2016)	695	222	0.32	115
Area e (2015 and 2016)	800	308	0.39	230
Total	2962	1160	0.40	552

Table 1: Summary of survey areas and coverage

includes some dispersed residential areas to the north. Finds across this zone were relatively few, with more survey units with zero finds than anywhere else in the survey area. However, several significant concentrations and discoveries deserve attention.

Aghios Dimitrios

In the northeast corner of Area d, north of the church of Aghios Dimitrios, a Byzantine-period site was discovered, consisting of several built structures and a dense pottery scatter (*fig. 3*). The structures and terraces are arranged along a hillside, west and across a ravine from the apparently contemporaneous settlement at Kondita³. Intensive survey was conducted in the few clearings in

³ The two settlements are intervisible and less than 0,5 km apart. On Kondita: Knodell – Fachard – Papangeli 2016, 138–140.

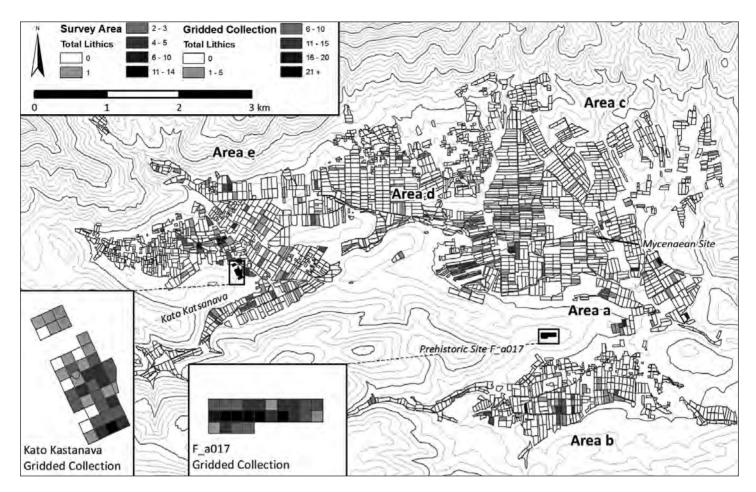


Fig. 2 Lithics found in each survey unit

the vicinity that allowed for it, but the bulk of work at this site consisted of feature mapping and gridded collection. Feature mapping revealed numerous terrace walls and enclosures, and several single-room structures built into terrace walls (*fig. 4*)⁴. At least one multi-room structure is also present, but precise mapping and documentation was hampered by thick vegetation and overgrowth.

Gridded collection took place over $72\ 20\ \times\ 20\ m$ squares, covering 2,88 hectares. In each grid square all artifacts were counted, collected, and weighed, and diagnostic pottery and tile were brought back to base (along with all lithics). All ceramics were collected initially for each square, then analyzed in the field by specialists. Non-diagnostic material was left in the square from which it was collected, while a broad sample of diagnostic material was collected.

Large quantities of tile were noted and collected. Some grid squares contained over 600 fragments, indicating the

⁴ We notice this pattern at the site of Palaeochori Villion, near Villia (see Papakonstandinou 2006).

presence of roofed structures. The gridded collection also recorded a large amount of Byzantine pottery, including many glazed fine wares. This material could form the basis of a substantial study in its own right, and will be especially interesting when viewed alongside material collected from the neighboring site of Kondita (F_{c025}).

Thekeristra – Xylotyrthi

These toponyms designate a large sector situated immediately northwest of the village of Oinoe/Mazi. It is composed of elongated fields on sloping ground formed by a major deposit cone. In the eastern part of the sector, due north of the village, is a fairly widely dispersed group of high-density survey units with pottery and tile dating to the Early Roman, Late Roman, and Byzantine periods. There were also several features present in this zone, including terrace walls, circular structures, and a cistern, suggesting agricultural occupation.

Rachi Stratonos (Kazarma)

The elongated limestone hill of Rachi Stratonos forms the northernmost extension of the Mount Makron range

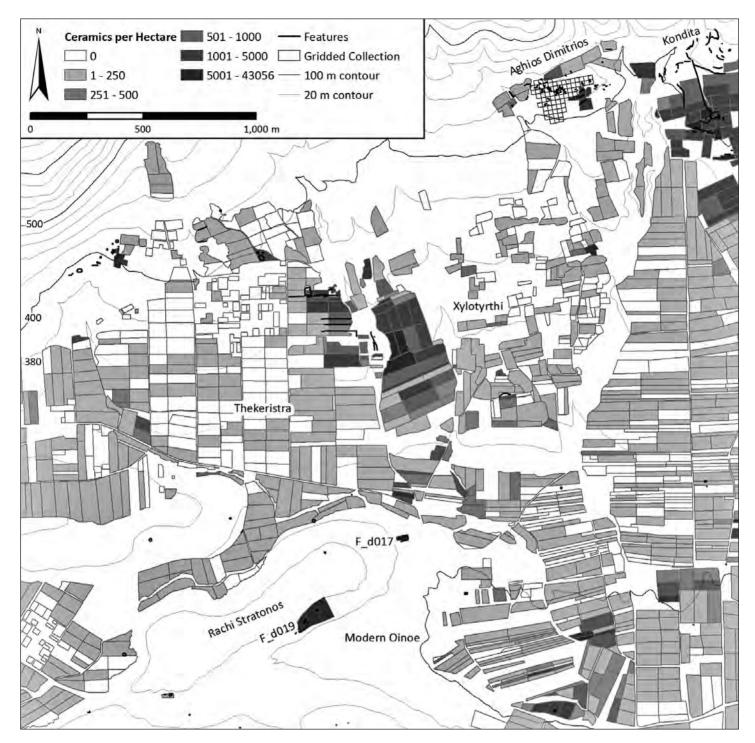


Fig. 3 Area d map

into the Mazi Valley. It creates a natural obstacle, situated near the middle of the plain, and has been noted by topographers as a probable border landmark separating Boeotia from Attica⁵. It is now covered by thick maquis, hampering thorough investigation. A limited concentration of tiles and pottery was found below its eastern tip and included black-glazed pottery (F_do17). To the southwest, below the summit, extensive survey revealed a complex of architectural features that may comprise a small Byzantine settlement (F_do19) surrounding the ruins of a chapel, perhaps one of the *paralavria* of the Monastery of Osios Meletios.

⁵ Camp 1991; Fachard 2013.

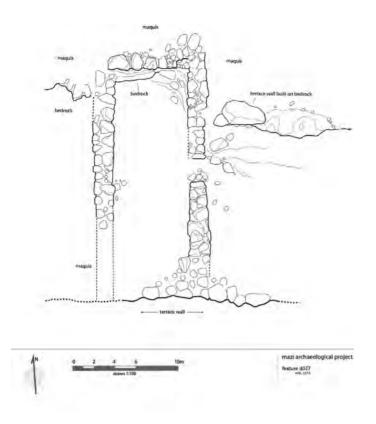


Fig. 4 Aghios Dimitrios: stone plan of a building

Area e

Area e is the largest in the survey zone. The Kastanava Valley was the focus of fieldwork in Area e in 2016 (*fig. 5*). It consists of a narrow strip of agricultural land occupied by grain fields with a few modern farms. At its western end it forms a bottleneck and then continues – with a drivable track that probably also has a premodern antecedent – out of the survey area to the ancient tower of Kryo Pigadi, where two important ancient roads meet: the route linking the Megarid with Plataea, also known as 'Hammond's road', and the road to Aigosthena⁶. The Kastanava Valley was therefore a natural corridor linking the Mazi Plain to Aigosthena and the Corinthian Gulf.

The sparse modern occupation of the Kastanava Valley seems to have been characteristic also in the past, with very low artifact densities scattered across the area as a whole. Archaeological features, however, were recorded in some abundance along the northern edge of the valley, suggesting the presence of an agricultural community in the area during the Classical, Late Roman, Byzantine, and Modern periods. Features such as terrace walls, small structures, lime kilns, and perhaps a small farmstead line the lower slopes of the Kastanava ridge and a few isolated features were also noted on the opposite slopes. A small Byzantine settlement was located at the western end of the valley, with its focal point at the church of Aghios Konstantinos (F_{e162}).

Extensive Survey

Exploration of the landscape outside of zones subject to intensive survey was an especially important component of the 2016 field season. This work focused on areas not accessible by or practical for side-by-side fieldwalking, consisting mostly of the hilltops and slopes surrounding the Mazi Plain, as well as crucial routes in and out of it (fig. 6). Areas of particular interest were (1) the ridge along the top of Mount Pastra, which overlooks the Mazi Plain to the south and Boeotia to the north; (2) the wooded slopes surrounding Oinoe, especially to the south; and (3) the Kaza Pass that connects the Mazi Plain with Boeotia. Methods were a combination of groundtruthing the presence of features detected in multispectral satellite imagery, systematic inspection of zones of interest, and exploring certain routes and their surroundings. Extensive survey was also conducted piecemeal throughout the survey area in order to supplement the work of the intensive survey.

Mount Pastra

A particular target for extensive survey in 2016 was the ridge of Mount Pastra that forms the geographical boundary between the Mazi and Boeotian plains, as well as the modern borders between the prefectures of Attica and Central Greece. Several features of interest were noted along the ridge in the systematic analysis of satellite imagery, which were then 'ground-truthed' through targeted extensive survey. Ground-truthing revealed that all of the round or oblong features identified in the satellite imagery were rubble-built *mandria* (sheepfolds). These appear to come from a range of periods and relate to past pastoral practices.

⁶ N. G. L. Hammond, The Main Road from Boeotia to the Peloponnese through the Northern Megarid, BSA 49, 1954, 103–122; Ober 1985, 124–125.

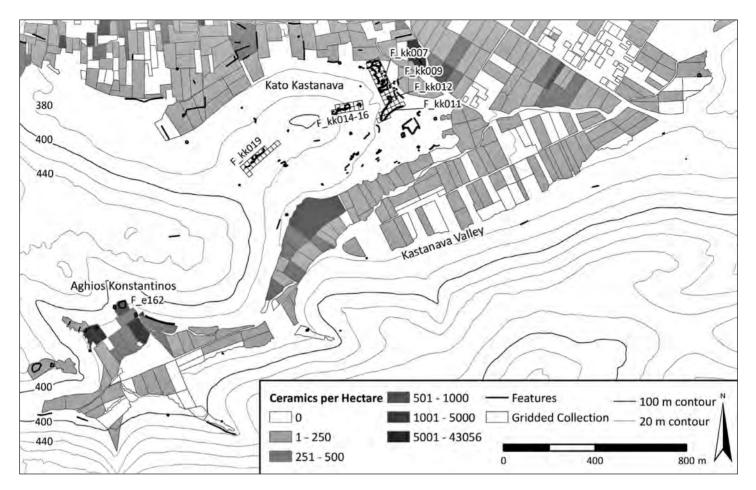


Fig. 5 Kastanava Valley and ridge map

The middle and lower slopes on the south side of Mount Pastra have similar constructions. Several clearings contained remains of *mandria*, *strounges*, and wells⁷. An encounter with one shepherd, at the well F_do26 near Aghios Dimitrios, revealed information about several place names and a description of contemporary and recent historical patterns of land-use. One location of interest is situated just below the cave of Petrogeraki (700 m above sea level). A central habitation area is surrounded by smaller buildings used for storing cheese, *strounges* for milking the animals, and a well. The *mandri* is connected to the plain by a well-built path, some stretches of which are supported by coarse rubble walls. The site was typically used during the summer by shepherds from Mandra. They would remain there with their

families from late April to late August. The slopes of Mount Pastra were used for grazing and cheeses were produced during the entire period. At the end of the season, the cheeses were brought down the path with the help of horses. Besides grazing, the families of the shepherds were also involved in resin gathering. While these activities are difficult to date precisely, we were told that the *mandri* was in use well before World War II, and perhaps even in the 19th century.

The final location of interest on the slopes of Mount Pastra (at least in terms of 2016 findings) was a hill-top site of apparently prehistoric date (F_co64), located up-slope and to the north of Kondita and Aghios Dimitrios. This bedrock outcrop has remains of a few walls *in situ*, along with substantial collapse down the southern slopes.

Kaza Pass

On the western end of the survey area a small gorge runs northwest from Eleutherai to the Kaza Pass, the

⁷ A *Mandri* refers to a built sheepfold common in rural Greece. A *strounga* is also a kind of pen, where milked and unmilked animals are separated and let in and out through two entrances: A. I. Oikonomou, Φύση, τεχνολογία και κοινωνία στις οξεινές κοινότητες του Κιθαιζώνα (Athens 2007).



0 1 2 3 Km

Fig. 6 Extensive survey map: features and toponyms mentioned in the text

saddle of Dryoskephalai⁸. The Old National Road follows this path, overlaying earlier roads, some of which are visible beneath the modern asphalt. This is the main carriageable road between the Mazi Plain and Boeotia, called the "direct road" by Pausanias⁹. There is a small clearing about 1 km up the small gorge from Eleutherai, where the Ephorate excavated a building dated to the Roman period based on a coin find (F_e200)¹⁰. Further inspection of the architecture and pottery collected during intensive survey of the surrounding fields suggests that an earlier phase of this building was built in the Classical or Hellenistic period¹¹. Due north of F_e200, on the left bank of the Kaza stream, we located a long terrace that might have supported the ancient road leading to the pass of Dryoskephalai (F_e215).

⁸ On this ancient route, known as the "road by Eleutherai", see Ober 1985, 119–120.

¹¹ Further analysis of the MAP survey and Ephoreia excavation material, along with revisitation of the site, is planned for 2017. Further exploration of the Kaza Pass followed the modern road along the length of the pass from Eleutherai to the Karoumbalo towers, a set of two Classical towers that were clearly built as a pair¹². Located only c. 20 m apart, one overlooks the Kaza Pass to the south, providing direct intervisibility with Eleutherai, while the other overlooks the remainder of the pass as it enters Boeotia, maintaining intervisibility with Plataia and Thebes. These surveillance structures are crucial for understanding the relationship of the Mazi Plain to its surroundings, and we believe that this evidence further solidifies the claim that Eleutherai was tied into a broader Boeotian network of communication and border control¹³.

⁹ Paus. 9, 2, 1.

¹⁰ We are grateful to our senior collaborator E. Svana for sharing the Ephorate's archives.

¹² Ober 1985, 163–164.

¹³ See Fachard 2013; Knodell – Fachard – Papangeli 2016, 150.

Bozari

Further extensive survey was conducted in the eastern part of the Mazi Plain, east of the sector of Stanes Pepas, where an important Classical to Early Hellenistic and Late Roman hamlet was discovered in 2014. This area, known as Bozari (also Isoma), marks a bottleneck-passage between the Mazi and Kouloumbi valleys. Surveyors followed a series of east-west tracks on the maquiscovered Hill 324 to discover a mandri complex (F b075-77) and two obsidian scatters (F bo80 and F bo81). Farther north, the southern slopes of the Mesonychi Hill were investigated, revealing a multi-room complex, most likely a farmstead (F_ao84). Carved blocks were used for the construction of the walls, and a basin was located in the southeast room. A large assemblage of glazed pottery and tile is Classical to Hellenistic in date. Terrace walls were built below, suggesting this is one of a few farmsteads found in our survey area.

Connection to Skourta

A final area of interest for extensive survey is analogous to the Kaza Pass, where the Mazi Plain connects to the Skourta Plain from the northeast corner of the survey area. Visitation of certain sites and features documented by the Skourta Plain Survey Project provided new insights into our own datasets¹⁴.

Remains of an ancient road are visible about 30 m northeast of a bend in the modern road that connects the Mazi and Skourta, approximately 1 km due west of the modern village of Panakto (*fig. 7*). The switchbacks present in this road are somewhat similar to those observed in the Panakton engineered path between Kokkini and Prasino¹⁵, and the use of switchbacks is also present in the Eleusis-Oinoe road documented by MAP in 2014 (F_b010)¹⁶.



Fig. 7 Ancient road remains in pass connecting the Mazi and Skourta plains

We also visited several sites documented by the Skourta Plain Survey Project¹⁷. The most useful analogue in our exploration of Skourta was site B19, associated with the toponym of Patima. This site was noteworthy for its rubble-built masonry, prehistoric pottery, groundstone celts, and abundance of obsidian both at the site and in the surrounding area, including several blades. This is the closest case for comparison we have for Kato Kastanava, and additional work is needed in terms of comparing the Skourta documentation and finds with those documented by MAP at Kato Kastanava.

Feature Documentation

All features encountered in the course of intensive and extensive survey within the designated survey area were mapped, described, photographed, sketched, and catalogued in the project database. A total of 552 archaeological features and feature complexes have now been documented in this way, with 225 new features recorded in 2016. A major focus of the 2016 field season was further work at locations or sites of special interest. Features of special interest were therefore subject to a variety of other modes of documentation (table 2).

 $^{^{\}rm 14}\,$ We are grateful to Mark and Mary Lou Munn for guiding this venture.

¹⁵ See Vanderpool 1978; Ober 1985; S. Fachard – D. Pirisino, Routes out of Attica, in: M. Miles (ed.), Autopsy in Athens: Recent Archaeological Research in Athens and Attica (Oxford 2015) 139–153.

¹⁶ Fachard – Knodell – Banou 2015.

¹⁷ M. H. Munn – M. L. Z. Munn, Studies on the Attic-Boiotian Frontier: The Stanford Skourta Plain Project, 1985, in: J. M. Fossey (ed.), Boeotia Antiqua I: Papers on Recent Work in Boeotian Archaeology and History (Amsterdam1989) 73–127; Munn – Munn 1990.

General Location	Specific Location	Documentation
Eleutherai	Southwest Gate	Photogrammetry; DGPS Mapping; Aerial Photography
	North Curtain Walls and Towers (1–6)	Photogrammetry; DGPS Mapping
	Southeast Gate and Southeast Gate Tower	Photogrammetry; DGPS Mapping
	Tower 13	Photogrammetry; DGPS Mapping; Aerial Photography
	Elevations of Parts of Curtain Wall 10	Photogrammetry; DGPS Mapping
	Eleutherai Dam	Photogrammetry; DGPS Mapping
	Basilica A	Photogrammetry; Architectural Drawing
Kato Kastanava	All Features with F_kk Designation	DGPS Mapping
	Classical? 'Farmstead' F_kk032	Cleaning; Architectural Drawing
	Enclosures F_kk015 and F_kk016	Gridded Collection
	Enclosure F_kk019	Gridded Collection
	Enclosure F_kk012	Gridded Collection; Cleaning
	Enclosure F_kk009	Cleaning
	Enclosure F_kk007	Cleaning
Oinoe	Lower Town	Magnetometry; Ground Penetrating Radar
	Western Slope	Magnetometry; Electrical Resistivity
	Western Circuit	Tomography
	Mycenaean Site North of Oinoe	Magnetometry; Electrical Resistivity
Mazi Tower	F_a073	Photogrammetry
Velatouri Tower	F_b010	Photogrammetry; DGPS Mapping; Gridded and Spot Collection; Cleaning; Architectural Drawing
Aghios Dimitrios	F_do25	DGPS Mapping; Gridded Collection
	Well F_d022	Photogrammetry, RTI imaging, Architectural Drawing
	Building F_do27	Architectural Drawing
Area b	Tumulus F_b037	Architectural Drawing

Table 2: Summary of Feature documentation at locations of particular interest

Kato Kastanava

Kato Kastanava is the toponym associated with a prehistoric site discovered in 2015¹⁸. Standing rubble walls were revealed by a forest fire that affected the eastern edge of a low ridge that divides the Profitis Ilias Valley and the Kastanava Valley in the southwest corner of the survey area. The discovery of obsidian and prehistoric pottery indicate the presence of a settlement, and the large stone enclosures suggest that this site was of a size unknown in the area.

Work in 2016 aimed to complete the total exploration of the site through detailed architectural survey and mapping with DGPS, and to clarify the chronology of the stone enclosures by removing vegetation and surface cleaning. The survey revealed several further enclosures and structures in the wider area, while cleaning clarified the plan, construction, and potential use of structures of several different types (*fig. 5*). Chronological information remains somewhat fleeting, however. It now seems that at least one of the enclosures is an early modern *mandri*

¹⁸ Knodell – Fachard – Papangeli 2016, 142–143.

(F_kk007), but further finds associated with other structures (most notably F_kk009) and throughout the area, continue to suggest the presence of a substantial prehistoric settlement.

Gridded collection in the main part of the site was expanded in 2016. Finds were similar to those collected in 2015: diagnostic lithics and pottery of Final Neolithic and Early Helladic I periods were especially noteworthy¹⁹. Gridded collection was also undertaken in two further locations: F_kk014-16 and F_kk019. Both are groups of enclosures located up a small gully from Kato Kastanava. Each has a small building built into it, and at F_kk019 pottery and tile were found in association with it, apparently early modern.

Cleaning operations were carried out in four locations. The first was the round enclosure F_kk007. This was the most substantial of the structures discovered in 2015, although upon clearing heavy brush it appears to be a *mandri* or perhaps a *strounga*, directly comparable to several others found in the survey area.

The second cleaning operation was undertaken at F_koo9 , the large rectangular enclosure in the center of the complex (*fig. 5*). Walls were cleared of vegetation, while more detailed work and surface cleaning was done on the east and west walls. This served to clarify the plan considerably, revealing a very large enclosure with an opening in the northeast corner. High densities of lithic and ceramic finds were recorded here in 2015 and further finds were collected in the course of cleaning in 2016. This may have been a locus of prehistoric habitation, although the stone structural remains are far too large to be a building. More likely they formed an enclosure within which there may have been a habitation location built of more ephemeral materials.

The largest enclosure recorded at Kato Kastanava is F_kko12 . Cleaning was undertaken here and at a smaller enclosure immediately north of it (F_kko11 ; *fig. 5*). The clearing of vegetation confirmed that F_kko12 is a continuous circuit with openings on either side, including a



Fig. 8 Kato Kastanava Aerial Photo

corridor-style entrance in the northwest corner. F_kko11 is similar in appearance to F_kk007 and may have served a similar function, perhaps as a smaller holding pen for milking adjacent to the much larger animal enclosure. Aerial photography following cleaning documents the site as a whole with a new level of detail (*fig. 8*).

This complex of features is puzzling. Architecturally, their rubble-built forms have most in common with structures normally designated as early modern farming installations, but the concentration of prehistoric surface finds around them indicates earlier activity as well. This can be explained either in terms of multi-period occupation, with artifacts coming first and structural remains later, or multi-period incidents of use and re-use, quite likely involving rebuilding. At this point the latter seems the most likely explanation, but we still have more questions than answers regarding this site. We expect that they can only be answered through excavation.

Eleutherai

Mapping and documentation at Eleutherai focused on several features. Cleaning operations resulted in a comprehensive plan of the fortress, extensive work on the two main gates of the site, the rediscovery of a Mycenaean grave, drawing one of the basilicas located between the fortress and settlement, and documentation of a large dam in the ravine northeast of the fortress.

Fortress

At the Eleutherai fortress, the main goal of the 2016 season was to complete the stone plan begun in 2015

¹⁹ Study in summer 2016 by M. Nazou and T. Krapf confirmed and refined dates described more tentatively in Knodell – Fachard – Papangeli 2016.

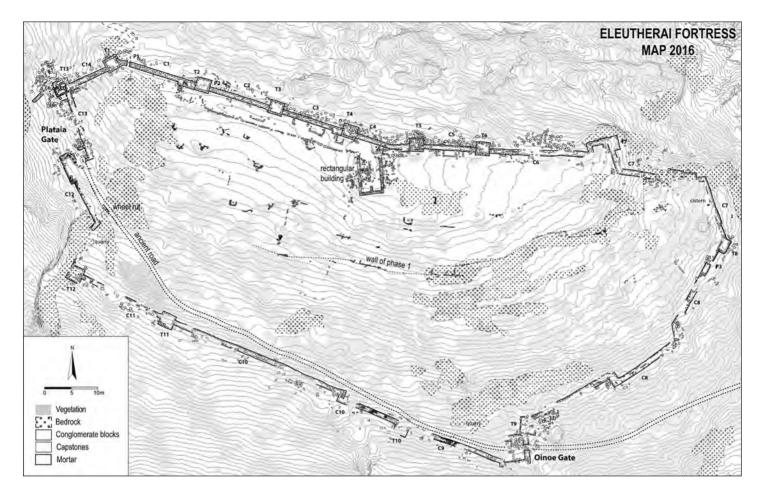


Fig. 9 Eleutherai Fortress

(fig. 9). Sections of the walls were cleaned, including both gates and a part of the ancient road. The entire fortress was mapped and documented using photogrammetric modeling and RTK DGPS mapping²⁰.

Three phases of construction can now be described. Several sections of polygonal retaining walls found midway between the summit and the south wall of the fortress make up the first phase (I). This phase includes a large bastion-like structure with drafted edges, east of which the wall is poorly preserved, but it can be followed northeast for another 70 meters, where it probably met the north wall, later reused by the walls of phase II (curtain C7). The western extent cannot be determined, but it might have enclosed the flat plateau west of the rectangular building at the summit²¹. The masonry of the wall, consisting of polygonal limestone blocks carved locally, is similar to the masonry of the rectangular building. This construction has a different orientation than the fortress wall but was respected and saved when the fourth-century curtain was constructed. According to Chandler, it was a tower, built "considerably earlier in date than the main fortification, and must have belonged to the old Boeotian town of Eleutherai"²². Based on the masonry and the earliest surface pottery, it seems reasonable to assign a date in the second half of the 5th or early 4th century BC.

The second phase (II) includes the most visible remains at the site, the spectacular fortress usually dated to the 4th century BC^{23} , consisting of 13 towers and 14 curtain walls. Three posterns were built on the north and east sides, while two monumental gates allowing the passage of carts were positioned on the southeast and southwest sectors.

A stretch of the ancient road crossing the fortress was cleaned and mapped precisely in 2016. The roadbed is partially carved in the bedrock and a wheel-rut is preserved on the side of the slope prevent carts from sliding

²⁰ This work was undertaken by S. C. Murray.

²¹ On this building, see E. G. Stikas, Ανασκαφή "Ελευθεφών (Πανάκτου)", Prakt 1938, 47-49; Ober 1985, 162.

²² L. Chandler, The North-West Frontier of Attica, JHS 46, 1926, 12.

²³ On the date of Eleutherai, see Ober 1985, 162–163; Fachard 2013, 91.



Fig. 10 Eleutherai Fortress: roadbed with wheel rut

(fig. 10)²⁴. The road was functional by Phase II at the latest, and would have been especially useful during the construction of the south wall to bring the conglomerate blocks from the quarries located in the stream bed east of the Basilicas.

The third phase (III) is represented by repairs on the south wall as well as the modification of both the Oinoe and Plataia gates. These repairs involve the use of spolia, mostly blocks from Phase II reinserted in the walls (often in a position in which they were not originally meant to be), some capstones from the crenellation, fragments of tiles, and, more important, mortar. The chinking of stones and tiles between reused blocks are characteristic of Justinianic walls²⁵. The abundant Late Roman pottery from the site makes a Justinianic phase of repairs possible, without excluding a later Byzantine occupation, as indicated by the presence of pottery from this period²⁶.

The walls of the fortress were damaged in the Early Modern and Modern periods. A large lime kiln (F_e121), 5 m in diameter and over 3,6 m high, was found west of the fortress and is likely responsible for much of the damage suffered by the southwest section of the fortress. This lime kiln was exploited by people from Villia and the lime was sold on the main road to Thebes²⁷. Further damage to the walls took place during World War II, and many German cartridge shells attest to the combat that took place in this strategic zone. At the end of the war, the fortress was used by the ELAS forces²⁸.

²⁷ Information provided by the owner of the Kaza taverna, who inherited it from his grandfather.

²⁸ ELAS: Greek People's Liberation Army.

The Mazi Archaeological Project (Attica) 2016

Mycenaean Graves

A Mycenaean cist-grave (F_{e210}) was excavated by the Ephorate in 1984²⁹, but its position was somehow lost afterwards. Thanks to old photographs, it was possible to locate it on the south slope of the hill, just above the modern road. Following cleaning, it appears to be a cist grave made of two parallel slabs on the north and south sides, with rubble walls forming the east and west limits. It reportedly contained Late Helladic II pottery. The presence of graves in this ravine is best explained by the existence of a road or path at that time.

Basilica A

Two Early Christian basilicas, excavated in 1939 by Stikas, are situated on the lower eastern slopes of the hill where the ancient road exits the fortress through the Oinoe Gate and reaches a natural terrace³⁰. Cleaning operations and documentation focused in 2016 on Basilica A (*fig. 11*). The masonry of the building uses blocks from the fortress exclusively, including window blocks. The narthex is entered from the southwest through a monumental gate; there are subsidiary rooms to the west of the narthex that do not appear to open through the south, north or west wall. The apsidal room in the northeast corner may have been a baptistery; the masonry is composed of reused blocks (mainly from the fortress), stones, and mortar.

Dam

Northeast of the basilicas, a large polygonal wall discovered by a stream in 2015 (F_e148) was entirely cleared of vegetation and documented with photogrammetry. The masonry consists of massive limestone blocks precisely fit together. Only the east face of the wall, 12 m long, is visible; its profile is inclined, indicating that it acted as a retaining wall. Given its position in the bed and

²⁴ See also Ober 1987, 213.

²⁵ L. W. Daly, Echinos and Justinian's Fortifications in Greece, AJA 46, 1942, 506.

²⁶ C. N. Edmonson, The Topography of Northwest Attica (unpubl. Ph.D. Thesis, University of California, Berkeley 1966) 58; Ober 1987, 215.

²⁹ E. Baziotopoulou-Valavani, ADelt 40, 1985, 46. See AntK 59, 2016, 147. The report mentions a second grave, but we were unable to locate it.

³⁰ G. Stikas, Ανασκαφή "Ελευθερών", Prakt 1939, 44-52.

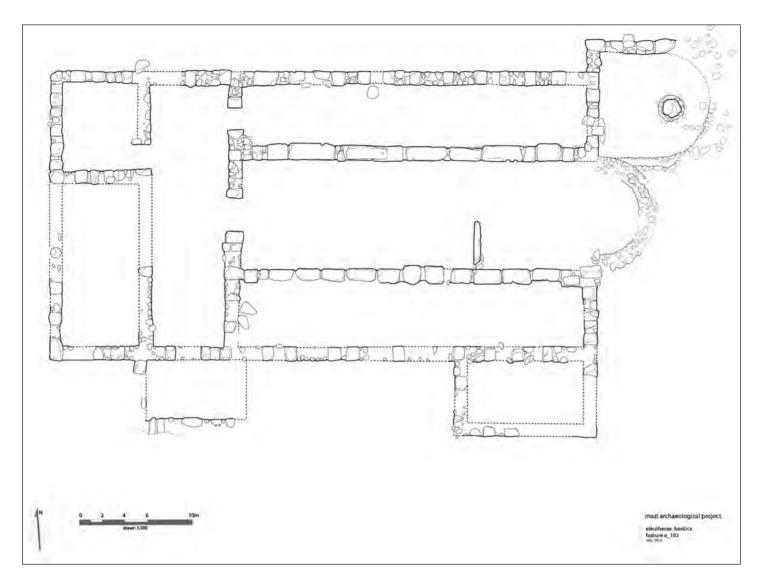


Fig. 11 Eleutherai, Basilica A

right bank of the stream, it is best interpreted as a dam³¹. Its function would have been to protect the town of Eleutherai and its surroundings from floods, possibly providing a balancing reservoir as well³².

Geophysical Survey at Oinoe

Geophysical investigations were carried out at the ancient settlement and deme center of Oinoe. The goals of this operation were to locate potential streets and buildings and to gather evidence regarding the position

of the Late Roman and possibly Classical fortification walls of the lower town. Magnetometry was employed, using a fluxgate gradiometer to investigate two sectors of the lower town, totaling an area of c. 6800 sq m. One sector of 1600 sq meters was selected for Ground Penetrating Radar (GPR), focusing on the potential presence of several streets and buried structures. Moreover, 27 electrical resistivity tomographies (ERTs) were carried out in various sectors of the site. Most of them were positioned on the supposed line of the west wall in order to locate its trace. An anomaly was detected in sectors W1, W2, and W3, suggesting the existence of a large wall approximately oriented north-south, which can be associated with the Classical west fortification wall of the settlement running down from the upper town (fig. 12). In W3, another wall oriented NW-SE seems to join this section: based on its orientation, it could link up with the Late

³¹ It appears that this is the same "dam" described in Ober 1985, 119 n. 23. This wall was also known to C. Edmonson, who believed it was a 5th century bridge (J. Ober notebooks, 1979. 02. 09).

³² For a sophisticated parallel, see the Inopos reservoir in Delos (M. Fincker – J.-C. Moretti, Le barrage du réservoir de l'Inopos à Délos, BCH 131, 2007, 187–228).

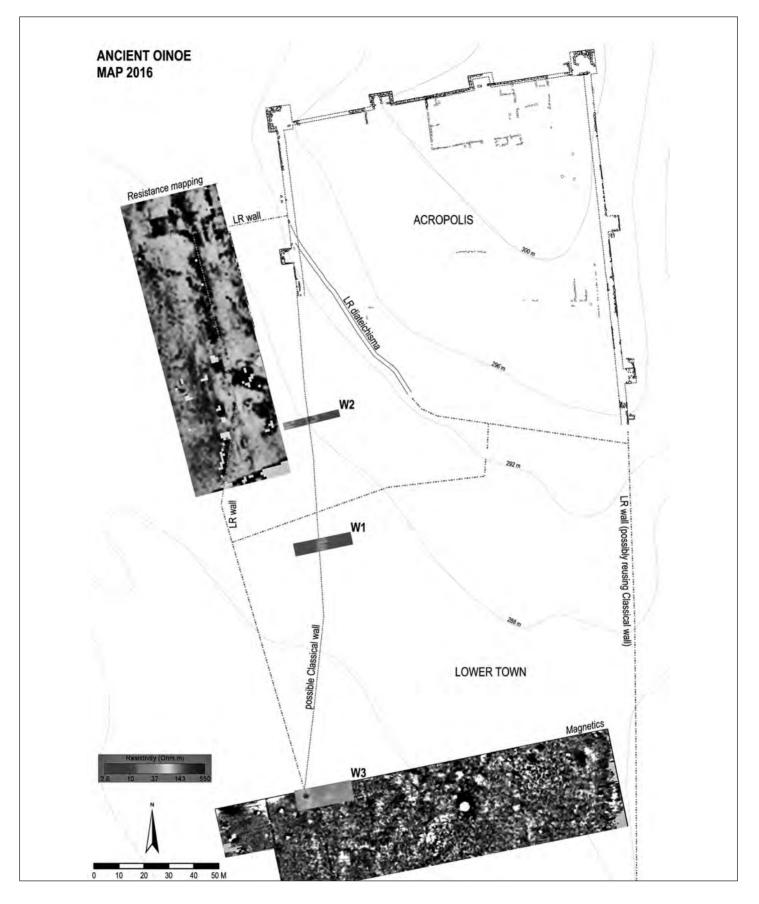


Fig. 12 Oinoe: geophysical survey locations

Roman defensive line visible further north. At this point, it seems that two different traces should be distinguished: a Classical-Hellenistic wall to its east, and a Late Roman extension to the west. A limited magnetic survey was also conducted at the Mycenaean site located northwest of Oinoe.

Diachronic Discussion and Conclusions

The 2016 season brought to a conclusion the fieldwalking survey of the entire Mazi Plain. In the span of three seasons, 11.6 sq km were investigated using intensive methods, while the main landmarks, hills, and summits surroundings the plain were explored using extensive methods. In 2962 survey units 63,569 pottery sherds, 39,452 tile fragments, and 377 lithics were counted. Perhaps most importantly, all artifacts collected in the course of the project have now been subject to preliminary analysis, which makes the diachronic discussion below possible.

The first observable occupation of the Mazi Plain seems to have occurred in the Late Neolithic and Early Helladic I periods. The main settlement was situated at Kato Kastanava, at the confluence of several streams, stretching over several hectares on the low limestone slopes. Some large rubble enclosures were built, perhaps grouping together dwellings and animal sheds. Another site, perhaps fortified, existed on the summit of the Pournari hill, located 900 m southwest of the Neolithic hunting site discovered in 2014 (F_a017). Overall, it seems that the early occupation of the plain is best characterized as small-scale communities of agro-pastoralists who also undertook limited hunting activities. Based on the quality of the pottery, the community of Kato Kastanava cannot be compared with the large sites found in the rich farmland of the south bank of the Asopos Valley in Boeotia (see for example Kotronaki near Plataia), or with those of East Attica. Following the Early Helladic I period, no traces of occupation have been found until the Late Bronze Age. Parallels may be found in the settlement history of the Skourta Plain³³.

In the Mycenaean period, the region seems to be reoccupied on a larger scale. One site has been located in the eastern part of the plain, northwest of Ancient Oinoe. Abundant ceramic evidence points toward an Late Helladic IIIA/B occupation. Another Late Bronze Age site is located north of Aghios Dimitrios, where a hilltop (F co64) produced a small number of ceramic finds including prehistoric coarse ware sherds and short stems that may belong to Late Bronze Age cups. Another find spot was the hill of Eleutherai, where two cist-graves were excavated by the Ephorate on its southern slopes and a kylix stem was found at the summit. The nature and extent of the Mycenaean occupation in the Mazi Plain is still difficult to assess, but the survey has brought new light to this region, especially in terms of its role as a crossroads, with sites at the major entry points on each side of the plain. This new evidence, combined with the study of communication networks in Attica, suggests that the Mazi Plain was situated on the main route linking Eleusis to the Mycenaean palace of Thebes³⁴.

The total absence of pottery evidence between the Mycenaean and Archaic periods is surprising, as it is difficult to believe that no human presence tried to exploit this valuable land for so many centuries. Geometric pottery has been claimed at Antiope's Cave³⁵, but we have none in our recent assemblage. In our collection, the earliest pottery from the Cave of Antiope is Archaic and goes back to the late 7th – early 6th century BC³⁶. It is plausible that the settlement of Eleutherai was also occupied at this time, but no firm material evidence exists. Recent epigraphical discoveries from Thebes indicate that Eleutherai and Oinoe existed in the last quarter of the 6th century³⁷, and Oinoe became a Cleisthenic deme after

³⁷ V. L. Aravantinos, A New Inscribed Kioniskos from Thebes, BSA 101, 2006, 369–377; A. P. Matthaiou, Four Inscribed Bronze Tablets

³³ Munn – Munn 1990, 33–34.

³⁴ S. Fachard – A. R. Knodell, Modeling Mobility in Mycenaean Attica, in: J. C. Wright – N. Papadimitriou – N. Polychronakou-Sgouritsa – S. Fachard (eds. [with E. Andrikou and E. Banou]), Athens and Attica in Prehistory, forthcoming.

³⁵ E. Baziotopoulou-Valavani reports the presence of Geometric pottery at the Cave of Kissos above Eleutherai (ADelt 45, 1990, 68), which we take as the cave of Antiope.

³⁶ Knodell – Fachard – Papangeli 2016, 146–147.

508/7. Therefore, the earliest archaeological evidence for both settlements should go back to the last quarter of the 6^{th} century at the latest. Athenian military involvement beyond the Kaza Pass is attested in our sources, as early as 519 BC, when the boundaries of Thebes are fixed on the Asopos³⁸. Plataia and Hysiai were then under Athenian protection and influence, as is Eleutherai. In 506, the Boeotians attacked Oinoe³⁹, but the Athenians struck back and seem to have pushed the borders of Attica back to the Kaza Pass. Thus our earliest sources already attest to the border dynamics that make this landscape so interesting.

The Classical period saw a dramatic increase of occupation and exploitation in the Mazi Plain, as in the rest of Attica. The site of Oinoe was a deme, fortified before 431 BC and used as an Athenian strongpoint during the Peloponnesian War⁴⁰. In the western part of the plain, habitation was centralized at the large settlement of Eleutherai. The latter was not fortified, but we now have enough evidence to suggest that a fort was built above Eleutherai on the acropolis hill in the second half of the 5th century. Activty at the Cave of Antiope continued throughout the Classical period into the Roman period.

The 4th century marks a peak in occupation and exploitation. The central hubs of habitation in the Mazi Plain remained Eleutherai and Oinoe, but a series of hamlets emerged around them. Near Oinoe there were hamlets at Stanes Pepas, the Mazi tower, and in the Kouloumbi plain. Near Eleutherai, a substantive hamlet existed east of the town. A farmstead with a possible tower (F_e200) seems to have existed 1.7 km to the northwest of Eleutherai, just south of the ancient road leading to the Kaza Pass. Overall the evidence suggests a double-nucleic model, with secondary settlements gravitating around two main hubs.

The 4^{th} century was a period of extreme political tension and economic competition between Attica and

Boeotia. These tensions have left a signature in the landscape in the form of large-scale fortifications at Eleutherai and Oinoe. The presence of two massive fortifications in the same plain and only 6 km apart is strange and has no parallels in Boeotia and Attica. It is best explained by the existence of a political border in the middle of the plain, which can be tentatively placed at Rachi Stratonos⁴¹. Ceramic densities are among the lowest in the plain for the Classical period, which may relate to the existence of a border space. The Eleutherai fortress can be interpreted as a demonstration of Theban force. In reaction, the Athenians were probably compelled to strengthen and update their defenses at Oinoe.

At the end of the 4th century, occupation in the Mazi Plain may have suffered from the military operations of Kassander and Demetrios recorded at Panakton, Eleusis, and Phyle⁴². In the early 3rd century BC, robbery and murder are mentioned in Mount Kithairon, and one later source states that "the region of Eleutherai was entirely desolate because of the wars"43. These troubled times perhaps forced the Athenians and Boeotians to remove their garrisons from Oinoe and Eleutherai, resulting in a security vacuum. However, Early Hellenistic pottery is still found throughout the plain, at Eleutherai (fortress and settlement), Oinoe, and most of the hamlets occupied in the 4th century. However, pottery evidence becomes increasingly scarce after the period 250-200 BC, with the exception of the Cave of Antiope⁴⁴. More precisely, no clearly identified 2nd-century pottery has been found at Oinoe or in the hamlets of the deme. This does not mean that these sites are abandoned, but the pottery evidence stands in sharp contrast with earlier periods. Throughout the entire survey area, we have very limited evidence for the 2nd and 1st centuries BC. This trend corresponds with what has been observed in other field

from Thebes: Preliminary Notes, in: N. Papazarkadas (ed.), The Epigraphy and History of Boeotia: New Finds, New Prospects (Leiden 2014) 211-222.

³⁸ Hdt. 6, 108.

³⁹ Hdt. 5, 74, 2; SEG 56, 521.

⁴⁰ Thuk. 2, 18, 1–2.

⁴¹ Camp 1991; Fachard 2013.

⁴² Plut. Demetrios 23, 1–2 and 33.

⁴³ Lukian. Dialogues of the Dead 27, 2. On the context of this passage, see Fachard 2013, 85–86.

⁴⁴ Ritual activity at the cave was apparently long-lived, as shown by the button base of a 2nd century BC mouldmade bowl and several other later Hellenistic pieces.

surveys in Greece, including Boeotia and southern Attica⁴⁵.

This declining curve seems to continue through the Early Roman period, but it is reversed in the Middle and Late Roman periods, with abundant evidence of revival throughout the plain. This change may have to do with Late Roman pottery recognition, but the overall distribution of Late Roman pottery is comparable to the Late Classical period. The town of Oinoe was occupied and perhaps extended with a new fortification wall in the lower town. The previous defenses on the acropolis were also repaired and modified at that time, possibly for the needs of a garrison. These building operations show that an important community was seeking security behind rebuilt walls in the 5th and 6th centuries AD. At the Eleutherai fortress walls were repaired, and the plans of the monumental gates were modified. Several hamlets and even farmsteads of the Classical to Early Hellenistic periods were also reoccupied. One of the largest highdensity scatters of pottery discovered during intensive fieldwalking was in the north-central part of the Mazi Plain. Many sherds from Late Roman vessels were recovered in these Survey Units, suggesting a strong Late Antique presence in this stretch of the valley. Borders were not an issue anymore for some time: in the 2nd century AD, Pausanias noted that Eleutherai was part of Attica and it most likely remained so until Late Antiquity. The disappearance of the border zone at that time could provide an explanation for the progressive occupation and settlement of the north-central section of the plain in the Middle to Late Roman periods (2nd-7th centuries AD).

In the Roman period, the Mazi Plain remained a station on the road between Attica and Boeotia, as attested by a *miliarium* dated to the Tetrarchy (AD 293–305), long forgotten until Sironen published it in 1997⁴⁶. Its original

⁴⁶ E. Sironen, The Late Roman and Early Byzantine Inscriptions of Athens and Attica (Helsinki 1997) 103–104 n° 32bis; E. Sironen (ed.),

position must have been on the ancient Oinoe road, attesting that it was a major imperial road.

The next boom in the long-term history of the plain began in the 11th century, when the Monastery of Osios Meletios became one of the major monastic centers of Central Greece. Founded by a Cappadocian monk then based at Thebes, the monastery reorganized communication routes through the mountains, promoting in particular the route through the Portes Pass, dotted with small affiliated churches such as Aghioi Theodoroi. By the 12th century, the settlement pattern in the Mazi Plain had changed dramatically. Eleutherai and Oinoe had been abandoned, and two new hubs of settlement emerged. The first is a sort of two-part zone comprised of the sites of Kondita and Aghios Dimitrios. This location high on the hills of Mount Pastra, overlooks the plain from above while being safely hidden from the main road. The second is located on the western end of Area b, near two previously known churches connected to Osios Meletios: Aghios Georgios and Aghia Paraskevi.

The arrival of Arvanites (Albanian) populations in this region is dated to the 15th-16th century, when the villages in the region were known as the Dervenochoria. They were granted some level of autonomy during the Turkish occupation and controlled passage between central Greece and the Peloponnese.

The evidence of the modern period is chiefly of rural production, mostly related to pastoralism, agriculture, or resin production. These remains are less impressive, but no less significant. In 1889 the villages of Mazi and Villia had a combined population of 1847 individuals, rising to 3313 in 1928⁴⁷.

The bulk of the fieldwork for the Mazi Archaeological Project is now concluded. Site-based investigations and follow-up work at places of particular interest will continue to illuminate aspects of settlement in the Mazi

⁴⁵ For Greece generally, see S. E. Alcock, Graecia Capta: The Landscapes of Roman Greece (Cambridge1993); on Boeotia: J. Bintliff, The Complete Archaeology of Greece: From Hunter-Gatherers to the 20th Century A.D. (Oxford 2012) 313; for Atene, see H. Lohmann, Atēnē: Forschungen zu Siedlungs- und Wirtschaftsstruktur des klassischen Attika (Köln 1993).

Inscriptiones Graecae consilio et auctoritate Academiae Scientiarum Berolinensis et Brandenburgensis editae: Voluminis II et III editio altera, pars V: Inscriptiones Atticae aetatis quae est inter Herulorum incursionem et Imp. Mauricii tempora (Berlin 2008) 32 n° 13297.

⁴⁷ A. Philippson, Die Griechischen Landschaften: Eine Landeskunde. Das östliche Mittelgriechenland und die Insel Euboea 1, 2 (Frankfurt 1952) 531.

Plain, and final publication will provide a more detailed view. It is already apparent, however, that the long-term history of this small mountain plain sheds substantial light on the wider regional history of northwest Attica and provides important insights into the comparative study of borderlands and regional crossroads.

A. R. Knodell	aknodell@carleton.edu
Department of Classics	
Carleton College	
One North College Street	
USA-Northfield, Minnesota 55057	
S. Fachard	Sylvian.Fachard@unige.ch
Département des sciences de l'Antiquité	
Université de Genève, Faculté des lettres	
5, rue de Candolle	
CH-1221 Genève 4	

K. Papangeli kpapangeli@gmail.com Ephorate of Antiquities of West Attika, Pireus, and Islands GR-Athens

GENERAL ABBREVIATIONS

DGPS	Differential Global Positioning System
RTI	Reflectance Transformation Imaging
RTK	Real Time Kinematic

BIBLIOGRAPHICAL ABBREVIATIONS

- Camp 1991 J. McK. Camp, Notes on the Towers and Borders of Classical Boeotia, AJA 95, 1991, 193–202
- Fachard 2013
 S. Fachard, Eleutherai as the Gates to Boeotia, in: C. Brélaz – S. Fachard (eds.), Pratiques militaires et art de la guerre dans le monde grec antique. Etudes offertes à Pierre Ducrey à l'occasion de son 75^{ème} anniversaire, Réma 6 (Paris 2013) 81–106
- Fachard Knodell Banou 2015 S. Fachard – A. R. Knodell – E. Banou, The 2014 Season of the Mazi Archaeological Project, Northwest Attica, Greece, AntK 58, 2015, 178– 186
- Knodell Fachard Papangeli 2016
 - A. R. Knodell S. Fachard K. Papangeli, The 2015 Mazi Archaeological Project: Regional

Munn – Munn 1990	2016, 132–152 M. H. Munn – M. L. Z. Munn, On the Frontiers of Attica and Boiotia: The Results of the Stanford Skourta Plain Project, in: A. Schachter (ed.), Es- says in the Topography, History and Archaeology of Boiotia, Teiresias Suppl. 3 (Montreal 1990)
Ober 1985	33–40 J. Ober, Fortress Attica: Defense of the Athenian Land Frontier, 404–322 BC. (Leiden 1985)
Ober 1987	J. Ober, Pottery and Miscellaneous Artifacts from Fortified Sites in Northern and Western At-
Papakons- tandinou 2006	tica, Hesperia 56, 1987, 197–228 Μ. Α. Papakonstandinou, Τα Βίλλια. Στο πέρα- σμα του χρόνου 1821–1949 (Athens 2006)
Vanderpool 1978	E. Vanderpool, Roads and Forts in Northwestern Attica, California Studies in Classical Antiquity 11, 1978, 227–245

Survey in Northwest Attica (Greece), AntK 59,

LIST OF FIGURES

- Fig. 1 Map of the Mazi Archaeological Project Survey Area showing Survey Units, overall ceramic densities (pottery and tile per hectare), archaeological features, and sites or other places of special interest.
- Fig. 2 Lithics found in each survey unit.
- Fig. 3 Area d map.
- Fig. 4 Aghios Dimitrios: stone plan of a building (drawing by M. Berenfeld).
- Fig. 5 Kastanava Valley and ridge map.
- Fig. 6 Extensive survey map showing the features and toponyms mentioned in the text.
- Fig. 7 Ancient road remains in pass connecting the Mazi and Skourta plains.
- Fig. 8 Kato Kastanava Aerial Photo (photo by G. Asvestas).
- Fig. 9 Eleutherai Fortress (drawing by S. Murray, S. Fachard and T. Theurillat).
- Fig. 10 Eleutherai Fortress: roadbed with wheel rut.
- Fig. 11 Basilica A at Eleutherai (drawing by M. Berenfeld).
- Fig. 12 Geophysical survey locations at Oinoe (map by G. Tsokas, with additions).

Figures by authors unless otherwise indicated.