

Surveying Aegean Thrace in the Digital Era

Proceedings of the Workshop held for the Research Project Archaeological and Geophysical Research at the Peraia of Samothrace (HFRI-FM17-750)

Edited by Amalia Avramidou and Jamieson C. Donati



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Preface

A egean Thrace has long been a focus of archaeological investigations, producing a remarkable array of new sites, monuments, and artifacts from Prehistory through the Early Modern Era. During recent decades, this archaeologically rich area has attracted the interest of multidisciplinary research teams to explore the landscape and its surroundings with complimentary methods of site analysis, including intensive pedestrian surveying, satellite and aerial remote sensing, and geophysical prospection using when applicable geographic information system (GIS), custom-made field applications, and other digital tools.

The workshop *Surveying Aegean Thrace in the Digital Era* was held on September 12, 2022, bringing together researchers currently active in fieldwork projects in Aegean Thrace with the intention of discussing the latest results and formulating comprehensive perspectives on the wider region. This one-day event was held within the framework of the research project *Archaeological and Geophysical Research at the Peraia of Samothrace* (HFRI-FM17-750). Participants included the members of fieldwork projects from Greece and abroad with an active research agenda on the archaeology and landscape of Aegean Thrace (for the program see http://www.peraiasamothraceproject.gr/en/home-page/).

The publication of the Workshop Proceedings marks an important milestone for the Peraia of Samothrace Project, which reflects the work of numerous people. Tzeni Katsari, Thanos Vafeiadis, and the editorial team at 2K Project are commended for the attention to detail and their assistance throughout the publication process. Special thanks are owed to the collaborators of the Peraia of Samothrace Project for joining this journey across the local topography, to our volunteers and administrators, and to the authors of this volume for readily contributing to a publication that aspires to become a reference point for the study of Aegean Thrace.

Abbreviations follow the standards of the *American Journal of Archaeology* https://www.ajaonline.org/submissions/abbreviations. Additionally, we use the following:

AEMTh

Το Αρχαιολογικό Έργο στη Μακεδονία και τη Θράκη

Δινήεσσα

P. Adam-Veleni – K. Tzanavari (eds), 2012, Δινήεσσα – τιμητικός τόμος για την Κατερίνα Ρωμιοπούλου, Thessaloniki.

Μνήμη

Ch. Koukouli-Chrysanthaki – O. Picard – T. Petrides (eds), 1990, Μνήμη Δ. Λαζαρίδη, Πόλις και Χώρα στην αρχαία Μακεδονία και Θράκη, Καβάλα 9–11 Μαΐου 1986, Thessaloniki.

Other Abbreviations:

ca circa

cf. confer

ed. editor

eds editors

et al. et alii

fig. figure / figs. figures

ha hectare(s)

i.e. id est

km kilometer(s)

m meter(s) / **μ.** μέτρο(α)

masl. Meters above sea level

Max. Maximum

Min. Minimum

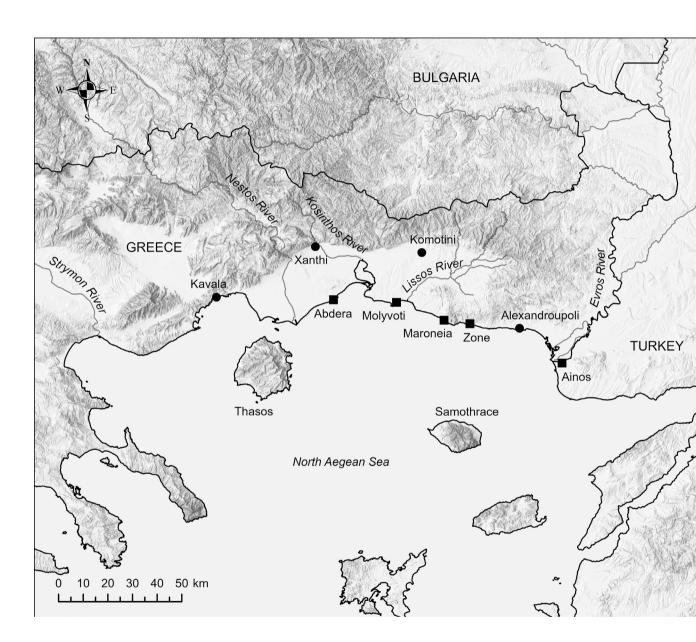
n. note / nn. notes

no. number / nos. numbers

pl. plate / pls plates

sq m square meter(s)

sq km square kilometer(s)



Map of Aegean Thrace with sites mentioned in the volume (figure by J. C. Donati)

Introduction

«Οι γνώσεις μας, γενικά για την τοπογραφία της δυτικής Θράκης και ειδικά της περιοχής που μας ενδιαφέρει εδώ για τα παλαιότερα χρόνια του ιωνικού αποικισμού στο βόρειο Αιγαίο, είναι γνωστό πως είναι πολύ φτωχές [...] [Επανεξέταση του χώρου] δεν μπορούσε να γίνει σε μια παλαιότερη εποχή. Αλλά μόνο στα χρόνια μας, ύστερα από [...] τις αποζηράνσεις των ελών και τις διευθετήσεις των ποταμών [...] με επιμονή και επίπονη πεζοπορία.»

"Our knowledge on the topography of western Thrace and especially on the region we are interested here regarding the earliest years of the Ionian colonization in the Northern Aegean, is indeed very limited [...]

[Any revision] could not have taken place in the past but only during our time, following [...] the draining of swamps and river flow arrangements [...] with persistence and strenuous hiking."

(Bakalakis, G. 1959, Προανασκαφικές έρευνες στη Θράκη, Thessaloniki, 84–85 Trans. by the editors)

It is nearly a century since Georgios Bakalakis's first, pre-WWII exploration of Aegean Thrace and almost 65 years since the publication of his pioneering work on the archaeology of the region. Even though the landscape of the coastal zone between the Nestos and Evros rivers has changed significantly in the interim and our methodologies have vastly improved, the basic principles of surveying the land remain the same: walking the fields is still the key to understanding the local topography, observing how the environmental conditions affect the local economy and how human occupation is imprinted across spatial and temporal frames.

Today, land surveys have evolved from simple grabs into multi-disciplinary approaches to the archaeological landscape, involving complex methodologies that aim to complement each other. A pedestrian survey alone, no matter how intensive, cannot give us a satisfactory picture of the changes that have occurred in the landscape without the study of historical aerial photographs and satellite imagery. Moreover, no hypothesis can be built solely on ceramic density maps without the assistance of non-invasive techniques, such as geophysical prospection. Investigating traces of archaeo-fauna and -flora, as well as the geology of a region provides important information for a site's diachronic occupation. When all this is combined in GeoInformatics and custom-made archaeo-tools, we gain more in-depth, accurate perspectives of the local topography, in formats that are easier to manage, visualize, and share.

The contributions to this volume reflect both the core principles of Bakalakis (perseverance

¹ Bakalakis 1959, Preface. As expected, the bibliography on the archaeology of Aegean Thrace is very rich; it would be futile to list references here when bibliographical collections are available online on sites such as http://arena.athenarc.gr (Archaeological Research in the Northern Aegean) and http://www.peraiasamothra-ceproject.gr/en/bibliography/ (Peraia of Samothrace Project).

and trekking) and the use of multi-disciplinary applications and technologies when studying Aegean Thrace. The volume comprises six papers arranged in geographical order from east to west. Starting with the Samothrace Archaeological Survey (SAS) and the Peraia of Samothrace Project (PSP) on the mainland opposite the island, we continue further west with the investigations at Maroneia (Tsokas et al.) and at Molyvoti, undertaken by the Molyvoti, Thrace, Archaeological Project (MTAP), and finish with two surveys at Abdera by the Nestos river, the multi-year project of the Archaeological Program of Abdera and Xanthi (APAX) and the targeted work at the Theater of Abdera (Tsokas et al.). Time constraints did not allow for the translation of all papers into English, but English abstracts provide descriptions of all projects and their outcome.

The focus of each paper varies as certain projects target site-specific locations, trying to shed light on archaeological questions with non-invasive methods as a precursor to or in lieu of excavations (e.g., Theater of Abdera, Maroneia), while others cover a much larger territory, the survey at the island of Samothrace for example. On the other hand, research at Abdera (APEX) and Molyvoti (MTAP) fans out from urban contexts to their *chora*, studying differences in settlement patterns and material diffusion between inland and coastal zones. On the Peraia of Samothrace Project (PSP), investigations comprise intensive surveying, sampling both coastal and mountainous territories with diverse topographical characteristics.

Legacy data and its multi-faceted exploitation are at the core of the Samothrace Archaeological Survey, while the results of previous pedestrian surveys, excavations, and/or geophysics are included to a larger or smaller extent in all projects. Since some surveys are relatively new (e.g., the Peraia of Samothrace Project [PSP], the Abdera Program [APEX]), the processing of the collected material (ceramics and other) is not as advanced as, for example, in the case of the Samothrace Archaeological Survey (SAS) or the Molyvoti Project (MTAP), where the treatment of the ceramic record is quite detailed. Conversely, for projects where geophysical prospection plays the primary role (e.g., the work of Tsokas et al. at the Theater of Abdera and Maroneia), it is the methodological innovations and the support these lend to the archaeological research that is highlighted.

The Peraia of Samothrace Project (PSP) explores four areas of interest between Mt Ismaros and the village of Makre, expanding from the coast to the slopes of the Rhodope mountain range. Intensive pedestrian surveying, remote sensing, as well as geophysics were used to investigate the diverse topography of the region. The results so far include a single cluster of Neolithic material; a distinct presence of local coarse ware at inland locations in most study areas; key areas with Classical, Hellenistic, and Early Roman finds, including a possible fortified, coastal settlement and a Roman Station by the Via Egnatia; and ample evidence for Late Roman, Byzantine, and post-Byzantine material scattered through most of the region. The scarcity of finds in certain areas of interest confirms the diachronic agricultural character of the land.

The Samothrace Archaeological Survey (SAS) integrates a rich legacy dataset from the 1980s into contemporary frameworks of geoinformatics, providing a plethora of evidence regarding the chronological horizon of the finds and a refined understanding of occupation patterns on the island over the centuries. The majority of the surface material dates to the Late Archaic through Hellenistic periods and can be primarily associated with activities related to agriculture and storage. On the other hand, the study of Roman and Early Byzantine amphoras and fine ware demonstrates the vital role Samothrace played in the regional trade network. Equally important must have been the participation of Samothrace during the Byzantine and later periods, according to the preliminary analysis of Medieval coarse and fine wares and their distribution on the island.

On the opposite coast, the geophysical prospection undertaken by Tsokas et al. at ancient Maroneia in 2004 included both magnetic and electrical mapping surveys, yielding linear anomalies and rectangular outlines that are most likely signatures of buried ancient features. These datasets were recently revisited and reprocessed, applying custom-built algorithms for image fusion. This new calculation model aimed to put together in a single image all the information produced by individual methods in a clear and comprehensive way. The quality of the results proves the efficiency of the image-fusion and its potential in archaeological investigations. At the same time, the survey enhanced our knowledge of Maroneia's urban fabric, confirming that it was a planned settlement.

Focusing on the peninsula where ancient Stryme is thought to be located, the Molyvoti, Thrace, Archaeological Project (MTAP) distinguishes itself from the programs active in Aegean Thrace by including systematic excavation to its multi-disciplinary approach. The ability to cap the investigations through ground-truthing offers a unique opportunity to compare the results of pedestrian surveys and geophysical prospection to material unearthed within closed stratigraphic frames. In addition, expanding the survey beyond the city to its *chora* allows for more nuanced observations regarding the typology and chronology of the material discovered on the coast (urban) and inland (countryside). Preliminary studies indicate that the peak of the site was in the Classical and Early Hellenistic periods, while occupation continued through the Byzantine and Ottoman periods, with agricultural and commercial activities being consistently characteristic of the site.

Moving to the westernmost site discussed in this volume, since 2015 the Archaeological Program of Abdera and Xanthi (APAX) pursues a diachronic, multi-disciplinary survey in the territory of the ancient coastal city of Abdera and its hinterland. The focus of the investigation lies on the city and its periphery during its peak in the Archaic period, while samples from neighboring coastal and mountain zones have also been included in the study for comparison. Satellite and remote sensing along with geophysical prospection and paleoenvironmental analyses complement the intensive pedestrian survey, the results of which are integrated into computational and similar digital methods. This multifaceted investigation produces manifold information on settlement dynamics, landscape evolution, and land-uses as well as a more holistic approach to the topography of the region.

In contrast to the all-encompassing scope of APAX, a target-specific geophysical survey was conducted by Tsokas et al. at the ancient theater of Abdera from 2009–2010. The goal was to trace any subsurface architectural elements of the theater and any possible surrounding structures. Soil consistency and the estimated depth of buried remains dictated the use of geoelectrical tomography, producing a rather promising image of subsurface traces.

Overall, the papers in this volume demonstrate how the rich archaeological landscape of Aegean Thrace is an ideal venue for researchers to explore the local topography and the results of anthropogenic and natural activities through the application of combined methodologies. Whether aiming for a diachronic examination, a targeted investigation, or a modern approach to legacy data, this publication sheds new light on the archaeology of the North Aegean, while functioning at the same time as a unique node for scholars and students of various disciplines.

Articles

The Molyvoti, Thrace, Archaeological Project (MTAP): Discovering and Recording a Diachronic Landscape

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ABSTRACT: Since 2013, the Molyvoti, Thrace, Archaeological Project (MTAP) has been investigating a coastal urban settlement and its hinterland in Aegean Thrace. This paper presents some preliminary results and interpretations of the pedestrian surface survey, juxtaposed with excavation data. We discuss the uses of the landscape, the evidence for settlement, the relation of the region to broader Mediterrane-an networks, and the problems in drawing sharp lines of periodization when describing change. In the Archaic period, the material record suggests a small but well-connected trading port. As the city grew in the Classical and Early Hellenistic periods, activity in the landscape reached a peak of intensity. The city ceased to be occupied in the later Hellenistic period, but landscape use continued, with agricultural activity (broadly defined) occurring in the Roman, Byzantine, and Ottoman periods. Ceramic evidence shows consistent links with the sea and with wider Mediterranean networks, even in those periods when there was no coastal settlement.

Introduction

The Molyvoti, Thrace, Archaeological Project (MTAP) is a *synergasia* (joint venture) between the Ephorate of Antiquities of Rhodope and the American School of Classical Studies at Athens, represented by Princeton University. The project began in 2013 and the first phase ended in 2015. MTAP received a second permit for a phase that began in 2019 and is currently underway (Figure 1).

The project investigates the site often identified as Ancient Stryme, an *apoikia* of Thasos that ancient sources refer to as both an *emporion* and a *polis*.² Nevertheless, the project aims to do more than excavate one city from one time period, and instead to examine the relationship between settlement and landscape in the micro-region from a diachronic perspective. This is an understudied area that can contribute to scholarship on Greek colonization, settlement dynamics, and environmental relations. Survey, accordingly, has been part of the project from the beginning. In the first campaign, Thomas F. Tartaron directed the survey and pioneered many of the methods we still use. It has proven productive to run survey and excavation concurrently, for each approach provides a different scale of anal-

¹ The manuscript of the final publication of the 2013–2015 excavation and the 2014 urban survey is currently under review. For preliminary reports, see Arrington – Terzopoulou – Tasaklaki 2013; Arrington et al. 2016; and Archaeology in Greece Online Record IDs 4213, 5057, 5452, 6182, and 8120. Further bibliography may be found on the project's website: https://scholar.princeton.edu/mtap. For the earlier Greek projects at the site, see Loukopoulou 2004, 880–881; Loukopoulou et al. 2005, 287–288; Psoma et al. 2008; Triantafyllos – Terzopoulou 2012; Arrington et al. 2016, 5–12.

² The main sources are: Hdt 7.108.2; Androtion *FGrHist* 324 F 31; Harpokration *s.v.* Stryme = Archilochos fr. 291 (West); Philostephanos fr. 19 (Müller); Herakleides Pontikos fr. 125 (Wehrli); Philochoros *FGrHist* 328 F 43. All the sources are gathered and discussed in our final publication, which is currently under review.

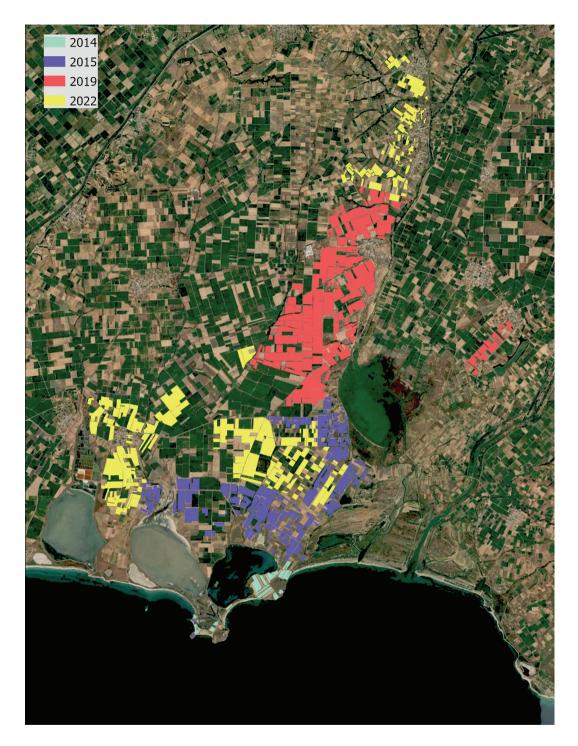


Fig. 1 MTAP survey zones, by year.

ysis. With excavation, we have finds from carefully controlled, stratigraphic contexts, yet limited in their geographic extent. Over the course of two campaigns, we have been able to excavate two 4th-century BCE houses, a small Roman farm, and a Byzantine granary, however, this represents only a small fragment of the Classical city and the post-Classical habitation. Survey provides the horizontal coverage that excavation cannot obtain, but without the contextual detail.³

In 2014, the surface survey focused on the peninsula, the headland, and the city itself. In 2015 and 2019, we moved into the *chora* of the city, as far as ca 8 km away from the city walls. In 2022, we examined the edges of the *chora*, moving to a distance approximately 16 km away from the city. In order to enrich our understanding of the landscape and the environment, we also have conducted a geomorphological study and a palynological study. In addition, the excavation recovers plant and animal remains from the archaeological site. Together, these different data sets offer a new and rich conception of the interrelationship of settlement and landscape from a diachronic perspective.

Since the project is ongoing and the study of the material found in previous seasons is currently underway, this paper must necessarily be preliminary in nature, and it relies primarily on the data from 2014 and 2015. First, we present some information on the periodization that we use at the site. Then we discuss our survey methodology. Next, we provide some preliminary assessments of the main periods. We describe the major patterns in the material evidence and explore what these patterns might represent, with attention to points of continuity and change.

Periodization

Like many archaeological projects, MTAP is interested in investigating and, to the extent possible, measuring and analyzing diachronic change. This requires attention to slow change, with an eye to those broad patterns recurring across the landscape from one phase to another. For example, there are places (as we will see below) that seem to consistently receive more activity than others and routes that seem to be used over millennia. And many developments in the local environment and landscape took place slowly. An important instance of MTAP is the alluviation of rivers and the resulting progradation of the coastline and formation of marshes and lagoons, which occurred over centuries. Alongside these examples of gradual change and continuity, there were also moments of sharper change. Often these inflection points are sought across a chronological divide: a period. Indeed, archaeologists and historians tend to assume that time periods will correlate with some significant changes in the survey record. Two risks emerge for any archaeological project. Firstly, periodization can impose changes that do not actually occur, with boundaries drawn that do not exist, or that do not exist in a meaningful way. The (somewhat arbitrary) divide between periods primes us to look for breaks and shifts which may not be there. Secondly, these periods are usually defined by historical events, which are not necessarily closely tied to the local region. Alexander the Great's death (323 BCE), for example, is usually considered to mark the beginning of the Hellenistic period, but this watershed political moment may not necessarily indicate a major point of transition for the region being studied. Similarly, we tend to assume that there is a major change in the transition from the Late Byzantine to the Ottoman period, mainly because of the advance of the Ottomans in Thrace in the late 14th century. However, in the Molyvoti Peninsula, survey data, as we will see, indicate a certain degree of continuity from the 13th through the end of the 14th century.

³ For the usefulness of survey, see Athanassopoulos – Wandsnider 2004.

⁴ Koukousioura et al. 2020.

On MTAP, excavation has helped provide the periodization that we apply to survey. We look below at the extent to which there were major changes (or not) across these periods, but for now, it will be useful to lay out the periodization scheme. The death of Alexander, it turns out, does not mark a major rupture at the site. Instead, the use of the site continues until ca 300 BCE, when activity drops precipitously. A similar pattern played out in the survey, with Hellenistic material rare, and 300 BCE marking a juncture. Therefore, we tend to analyze the Classical-Early Hellenistic period together, as one meaningful phase. The urban city becomes the setting for a farmstead dating 320-450 CE, providing dates for our Late Roman period.⁵ Subsequently, there is a new stratum, with a granary dating 500-550 CE; we assign it to the Early Byzantine period. To the same phase belongs a small village on the headland, which survived into the 7th century CE. These dates provide a chronological and periodization framework. But we are careful to place excavation and survey in dialogue and to allow survey to produce results that challenge or modify what we find on excavation. We do find periods present on survey and not on excavation, specifically, later Hellenistic, Early Roman, Middle Roman, Middle Byzantine, Late Byzantine, and Ottoman. The discussion below, moreover, will demonstrate that we must not overemphasize the division between periods, especially those typically treated as culturally distinct.

Methods

Our survey methods evolved over the years. On the ground, we follow well-established practices for investigating surface traces of human activity in the Eastern Mediterranean.⁶ We involve teams of four or five walkers proceeding in parallel lines and on average 15 m apart in small territorial units usually marked by the boundaries of the modern fields. Each walker counts two classes of artifacts (pottery and tile) on hand-held tally counters while collecting diagnostic sherds. The counts give an approximate indication of material density in each unit and, cumulatively, across the landscape. At the end of each unit, a collection of pottery provides a 'presence vs. absence' measure of cultural material on the surface of the survey area. The collected pottery to be brought to the excavation house represents a sample of the full range of material found on the surface of a unit. Duplicates are eliminated: for example, a unit may produce dozens of coarse ware body sherds, but we sort out and collect only a sample of those, with a few representative specimens with different fabrics. Overall, the survey results can be classified under two broad categories: the qualitative and the quantitative. The total counts of pottery recorded by all walkers offer a quantitative measure of pottery and tile present in each field but do not give any indication about chronology or typology. It is only the detailed reading of the collected pottery in the excavation house that gives us qualitative information about the periods being present or absent in the sample and the typology of artifacts found (for example, coarse ware, fine ware, pithoi, etc.).

The survey landscape around the Molyvoti Peninsula consists primarily of agricultural fields (cotton and wheat), tree groves, and wetlands, including many streams. Surveying the city's rural hinterland, which has many places with no or very few artifacts, necessitates the covering of areas in a less intensive method than that followed within the urban zone in 2014. Thus, in addition to the Standard Survey Units (40 x 100 m, with four walkers lining up on the short side of 10 m apart), we make good use of Extensive Discovery Units.

⁵ For the range of divisions and dates survey projects have assigned to Roman periods, see Pettegrew 2007, 747.

⁶ For a recent list of survey-projects in Greece, Italy, Turkey, and Cyprus, see Alcock - Cherry 2004; Athanassopoulos - Wandsnider 2004.

In these, walkers are placed 20, 30, or 40 m apart depending on the dimensions of the field. EDUs help us cover large areas of territory, which produce little material, but also unusual types of locations, such as tumuli, often located outside survey units or where visibility is low. In 2015, when EDUs were rarely utilized, walkers were placed 40 m apart and walked swiftly through each field. In 2019, and particularly in 2022, as we moved away from the archaeological site, EDUs became our standard unit format; the dimensions of the field determined the distance we set between the walkers, typically 20–25 m. Surveyors still walked at a normal pace, counting and collecting artifacts in a systematic manner.

There are several locations where finds stand out for their unusual density, quality, and chronological significance (for example, when one period appears to be more represented than others). We tend to draw these locations out from the background and designate them as places of special interest (POSIs). We should note that artifact density alone does not characterize a POSI, but the combination of all the aforementioned characteristics. Once we identify a POSI, we walk with a gridded urban survey technique by dividing it into standard units of 20 by 20 m, where walkers are 5 m apart. The dimensions and boundaries of the POSI are dictated by the concentration of the artifact scatter.

The survey data are recorded in a geographic information system (GIS). GIS contains layers, including data about units, special finds such as coins, photographs, and satellite imagery for tracing the boundaries between fields. The latter makes it possible for the drawing of the tracts (individual fields) to be walked prior to survey. In the first seasons, field data were documented on a standard paper form. This data was then entered into a Microsoft Access database, usually toward the end of each season. The transcription process, however, often led to mistakes, and syncing the Access database with the GIS database proved problematic. In 2019, we transitioned into iPads and Esri's Collector software (rebranded as Field Maps in 2020) for collecting data in the field, which was connected with ArcGIS. This new system made it easier to draw units on the spot in the field, and also to edit and analyze field data after survey. In 2022, we changed the method of pottery processing by replacing the Access database with a digital form in an ArcGIS-integrated software called Survey123. This database allowed us to have both the data entered in the field and the post-survey record of the collected pottery in the same repository.

Databases and GIS produce statistics for each survey season. By looking at the summary of results, it is evident that we covered less ground in 2015, but in a more intensive manner in comparison with the next two seasons. In 2022, we managed to cover a larger percentage of the walked survey units than in 2019, by simply walking consistently at 20–25 meters apart and not at greater distances, which, in 2019, essentially minimized the area covered (Table 1).

Table 1. Survey coverage by	vear (2015)	included an u	ırban survey).

	2015	2019	2022
Number of Units	1302	478	583
Total Area Surveyed (sq km)	4.83	8.39	7.24
Area of Survey Units Viewed	1.44	0.98	1.08
Percentage of Survey Units Viewed	30	11.5	15

⁷ On terminology, see Cherry – Davis – Mantzourani 1991.

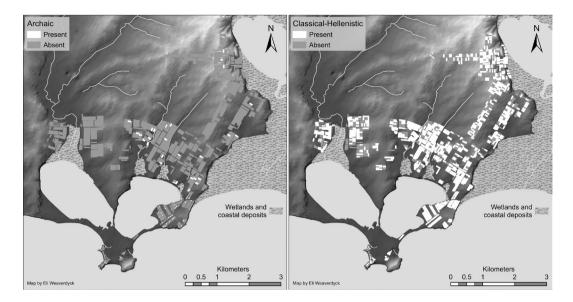


Fig.2 Survey units with Archaic material (left); Classical-Hellenistic material (right).

Archaic-Classical/Hellenistic

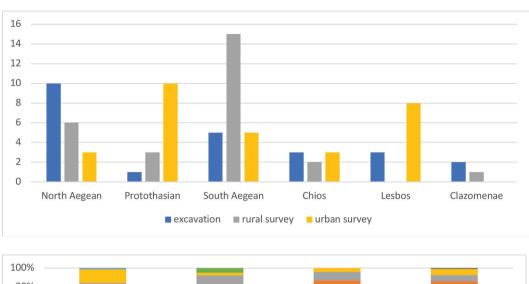
Only a little Archaic material has been found on either excavation or survey. The earliest date for the material is the second half of the 6th century BCE. On excavation, it is not associated with any standing architecture or stratigraphy. On survey, it appears throughout the peninsula and the *chora*, but in only a few survey units, and in limited quantity, with just a sherd here and there (Figure 2). The material consists primarily of fine ware and amphora sherds. In addition, prior to the start of our project, some Archaic funeral markers were documented.8 We deduce from the finds and their distribution that the settlement on the peninsula in the Archaic period was relatively small, albeit with signs of wealth and prosperity. The fine ware points to interconnections with other cities: Attica, Corinth, East Greece, Abdera (because of the presence of Clazomenian-style fine ware), and Thasos.9 Mark Lawall has studied the amphoras, which also show an interconnected place (Figure 3). Northern Greek wares are prominent, but there are also amphoras from the south Aegean, Chios, and Lesbos. This graph demonstrates clearly how survey can contribute to the material record of a site. If we had relied on excavation data alone, we would have overvalued northern Greek wares. The urban survey, however, shows the strong presence of Thasos, and the rural survey brings out the southern Aegean imports. In our opinion, the fine ware and amphora finds, and their distribution are characteristic of a small but well-connected site, and fit the picture from the literary sources that we have an emporion founded by Thasos, namely, Stryme.¹⁰

The quantitative difference with the next phase, Classical—(Early) Hellenistic, is striking (Figure 2). The city creates a more pronounced archaeological signature and there is an

⁸ The sculptural finds are surveyed in Arrington et al. 2016, 5, n. 13. For the tombstones with inscriptions, see Terzopoulou 2000.

⁹ For a preliminary publication of the Archaic pottery, see Tsiafaki 2021.

¹⁰ This is not the place to discuss the identity of the city at length, which receives detailed treatment in the final publication that is currently under review. For arguments that the city is not Stryme but Archaic and Classical Maroneia, see Loukopoulou – Psoma 2008; Gatzolis – Psoma 2019, 151–155.



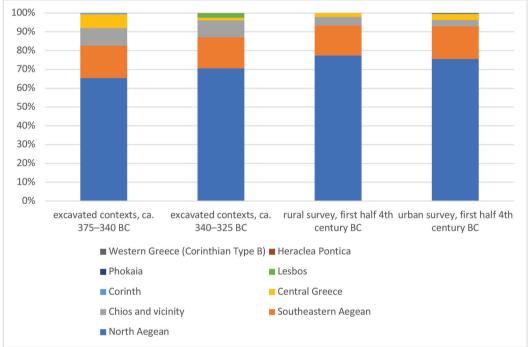


Fig. 3 Amphora data from MTAP. Top: Archaic amphoras; bottom: 4th-century BCE amphoras. Data and graphs by Mark Lawall.

explosion of material in the *chora*. The urban survey found extensive evidence for this phase on the site of the city and across the peninsula and headland. On excavation, too, the majority of the architecture and finds date to the 4th century BCE. Stratigraphic analysis has shown that ca 375 BCE there was a major reorganization of the site, with a grid plan imposed. This was likely the time when walls were built, which enclose over 63 ha. The re-foundation of the site might be associated with the resurgence of Thasos after the Peloponnesian War, as the drop in Athenian power created a vacuum in the north and freed Thasos from some of its constraints. It tried to re-establish a foothold on the mainland at several locations, perhaps most famously at Krenides (360/59 BCE), and minted coins inscribed Θ A Σ IONH Π EIPO. It is around this very time that Demosthenes records a conflict

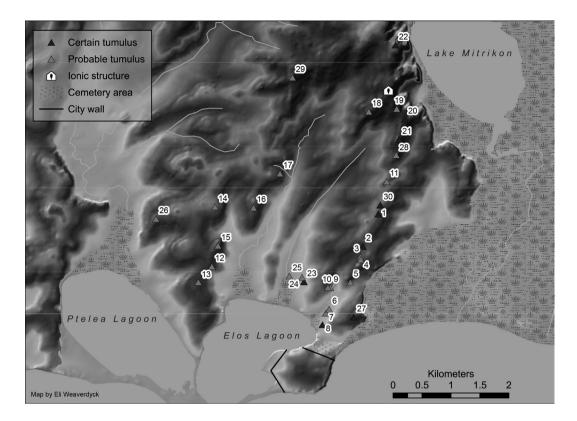


Fig. 4 Location of tumuli in the survey area. The "Ionic structure" marks the location of the possible sanctuary area, in a toponym known as Metochi.

in 361/0 BCE between Maroneia and Thasos over the site of Stryme.¹¹

Many of the finds creating the presence/absence map, particularly in the *chora*, are amphora sherds. Mark Lawall's study has shown a decided north Aegean orientation to this body of material, and there is now consistency in the data across excavation, urban survey, and rural survey (Figure 3). Other finds are primarily fine ware and cook ware. The imports are more restricted than before, and we seem to see the development of a trading hub that was more regional in nature.

As described in the methodology section above, these presence-absence maps can be a little misleading. Despite the remarkable change from the Archaic to the Classical–Hellenistic maps, it is important to stress the limitations of the data. In particular, they do not record quantity, and so they can give the false impression that the Classical–Hellenistic material spreads continuously across the landscape, like a dense carpet. But in many of the survey units, the Classical–Hellenistic material consists of only a few sherds. And even on the presence-absence map, it is evident that there are survey units without any Classical–Hellenistic finds. In the 2022 season, we started to perceive some of the edges of the Classical–Hellenistic activity, with a drop in material about 12 km away north from the site. The Classical–Hellenistic material was therefore patchy and cannot be read as evidence for continuous and coterminous activity from the city outward.

There are instead several possible types of activity that could produce the material we found on survey. One possibility is the mortuary use of the landscape, which Eli Weaverd-

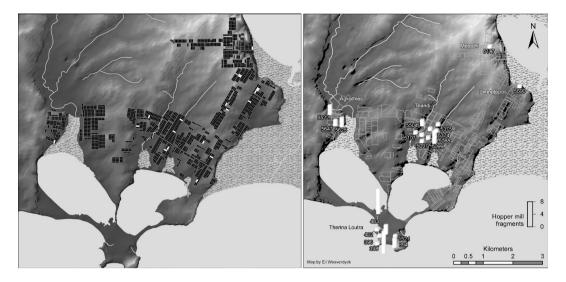


Fig. 5 Survey units with Classical-Hellenistic pithoi (left) and with Classical-Hellenistic hopper mills (right). The Classical-Hellenistic city is not included in the hopper mill counts.

yck has documented by reconstructing the placement of tumuli (Figure 4). The burials and the post-depositional rituals would result in some of our finds, although we have not identified any consistent tracers of funeral rites. The tumuli trace the route of presumed roads, which suggests another type of activity: travel and movement throughout the landscape along routes. One magnet for travel, in addition to the tombs, was a possible sanctuary located approximately 5 km north of the city, in an area known as Metochi. It was first identified by Diamantis Triantafyllos in the 1970s on the basis of column bases that were found in the fields. Our surface survey found a high density of material. Subsequently, a geophysical survey conducted by Grigorios Tsokas and his lab revealed what seems to be a temenos wall surrounding a series of other walls. Samuel Holzman has studied the column bases and concludes that the temple (or other public structure) dates to the Archaic period or to an Archaicizing phase of the 4th century BCE. The survey finds make the second possibility much more likely. We have opened several test trenches in the area and in 2022 we may have identified part of the architecture that belongs with the building.

A site to the north of the possible sanctuary, a little over 7 km from the walls of the city, also served as a locus of activity and magnet for travel. It contained abundant ceramics of the Classical—Hellenistic period, including fine ware and stamped amphora handles. Most notable was the discovery of sixteen coins, which contrasts with the rest of survey that produced only two. This seems to be a second-order site located a little over an hour's walk from the city, a place where settlement and commercial activity occurred.

In the rest of the landscape, it is difficult to know where there was settlement. It seems quite clear that there was extensive agricultural activity, but it was not necessarily associated with permanent farms. One tracer of agriculture is the Classical–Hellenistic pithoi, which unlike amphoras were not usually moved, but used for storage. As such, they can reflect the location of agricultural activity and sometimes of associated settlement. They occur in many survey units, as this map shows (Figure 5). This map almost certainly underrepresents the number of pithoi, because pithoi fragments are easily misidentified on

¹² Triantafyllos 1971.

survey and counted as tiles. In addition, we have only included on this map those pithoi that can be dated confidently by (1) morphology and fabric (with comparison to finds from secure contexts on the archaeological site) or (2) the exclusive co-presence of Classical–Hellenistic pottery, without other periods in the survey unit. Even when undercounted, the map indicates widespread agricultural activity. Yet the pithoi could represent temporary storage locations rather than farmsteads, and when we look at other types of material evidence, only a few places seem to represent residence. In particular, hopper-mills cluster in only two spots north of the city, in areas known as Agkathies and Triaridi (Figure 5). At first, they are joined by loom weights, cook ware, and fine ware. Together, this evidence could show a cluster of small farms. At the second, they are joined by loom weights, mortars, louteria, cook ware, and a particularly wide range of fine ware. Again, we might have a small cluster of farms at this location.

In the later Hellenistic period, after ca 300 BCE, activity at the urban site virtually ceases and there is a drop in activity in the landscape as well. The major exception is the area where we identified a possible sanctuary (Metochi). Here, there is an abundance of 3rd-, 2nd-, and 1st-century BCE material, including distinctive types of materials that are never found at the urban site, such as mold-made bowls. Yet the function of this "sanctuary" area shifted dramatically. Preliminary excavation and study, including the recovery and analysis of plant remains by Dr Chantel White, suggest that it was a farm and that it was close to wine-producing activities.

Roman-Early Byzantine

Roman pottery from excavation and survey offers different levels of insight into the occupation patterns on the peninsula from the 1st through the early 7th centuries CE. Together, survey and excavation yield a Roman assemblage that can be organized into four sub-phases: Early Roman, Middle Roman, Late Roman, and Early Byzantine (Figure 6). The assigned chronology of these phases (1st–mid-2nd, mid-2nd–3rd, early 4th–mid-5th, and 6th–early 7th century CE), reflects the patterns of externally datable imported pottery recovered from across the rural survey or from excavated contexts at the urban site. ¹⁴ The relatively rich dataset of Roman pottery recovered from the excavations provides detailed insight into the nature of the Late Roman and Early Byzantine assemblages, but next to nothing on the earlier phases. In comparison, what the survey material lacks in abundance and nuance, it makes up with a broader diachronic perspective. Our understanding of the Roman ceramic data leads us to deduce Roman settlement patterns on the peninsula that saw farmsteads first appear in the 1st century CE, reached a peak intensity in the later 2nd through 3rd century CE, and then a consolidation of estates in the Late Roman period, and the advent of a thriving port on the headland in the Early Byzantine period.

Our knowledge of the earliest Roman phase (1st—mid-2nd century CE) is extremely limited. Only a few sherds of imported fine ware datable to the Early Roman phase could be identified from the excavations. The survey produced more, but never in consistent amounts that could be called clusters, and always in highly fragmentary states, to the point that positive identification of form was frequently difficult. The paucity of Early Roman pottery in the landscape may suggest there was limited permanent settlement on the peninsula during the 1st century and a half of the Imperial period. The Early Roman assemblage

¹³ On the challenges of identifying farms in the archaeological record, see Pettegrew 2001; 2002.

¹⁴ The Late Roman amphoras are not discussed in detail here, but receive treatment in Alistair Mowat's unpublished MA thesis, "The Late Roman Amphoras of Thrace: The Perspective from the Molyvoti Peninsula", University of Manitoba, 2016.

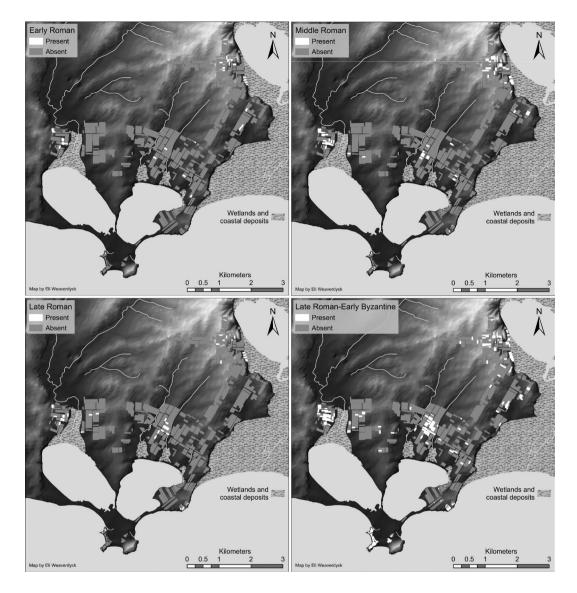


Fig. 6 Survey units with Early Roman – Early Byzantine material.

includes rare instances of western sigillatas – most likely Italian Sigillata of the early 1st century CE– and at least one instance of early Eastern Sigillata A (Figure 7). Otherwise, the imported fine ware consists of Asia Minor imports, with occasional occurrences of Eastern Sigillata B, but especially early series of Çandarlı Ware. The limited evidence of activities on the peninsula during the 1st century CE may reflect a certain lack of attention given to coastal Thrace during the early Principate, as Imperial authority was focused on the interior of the new province, continuing the low level of activity on the peninsula seen in the later Hellenistic period.

The Middle Roman ceramic assemblage (mid-2nd—3rd century CE) is well-represented in the field survey, though barely perceptible in the excavation. In the rural survey, noticeable dense clusters of Middle Roman sherd scatters were identified as potential farmsteads, in particular at the locations with Classical settlements, Agkathies and Triaridi, and the location with a possible sanctuary that later saw use as a Hellenistic farmstead, Metochi (Figure 6; see Figure 5 for the toponyms). The overall picture presented by the clusters was

of a rural landscape with small farming households, or hamlets peppered throughout the peninsula. The pottery reveals these farmsteads had access to markets whose fine imported pottery came almost exclusively from Asia Minor. With the exception of a small amount of Eastern Sigillata B (represented entirely by later examples of *Atlante* form 60), all Asia Minor imports were of the late series of Çandarlı Ware (Figure 7). The most common Çandarlı Ware forms present in the survey material are forms H1, L26b/H2, H3, and H4. These four forms are commonly found together in Aegean assemblages of the 2nd and 3rd centuries CE, constituting a veritable fine ware ceramic kit for many Aegean households. The Middle Roman period was a moment of economic dynamism for Thrace, especially in the early 3rd century CE. The sudden expansion of new settlements on the peninsula may reflect this moment of economic luster, with small farmsteads appearing near the coast to tap into local and interregional trade networks.

The Late Roman ceramic phase (early 4th-mid-5th century CE) is well-understood because of the abundance of Late Roman pottery recovered from the excavation. Scattered clusters of Late Roman pottery in the survey, often corresponding with the Middle Roman clusters, suggesting some level of occupational continuity, yield a comparable corpus to the excavation assemblage (Figure 6). Analysis of the ceramic material from the excavations and the associated architectural remains paint a picture of a Late Roman farmstead occupied from the early 4th through the early 5th century CE. Despite the farmstead's location inside the walls of Classical-period Stryme, it is likely the walls had long since fallen into ruin and had become part of a rural landscape in which the Late Roman habitation was situated. The recovery of comparable Late Roman pottery from the rural survey may well indicate the scattered presence of similar small farmsteads across the landscape.

The most common imported fine ware of the Late Roman assemblage is African Red Slip (ARS), (Figure 7). ARS first began to appear in quantities in the Eastern Mediterranean either in the second half of the 3rd century CE, at which point it was competing with the latest series of Çandarlı Ware, 17 or in the first half of the 4th century CE. 18 The evidence from the Molyvoti Peninsula favors the later dating scheme. The most common forms of ARS found on the peninsula are Hayes forms 50B, 59, 61, and 67. Collectively, these forms have a production date range from the mid-4th through the early 5th century CE. Other ARS forms, less commonly encountered on the peninsula, include Hayes forms 51B, 52B, 53, 68, and 71, all of which have comparable date ranges as the more commonly identified ARS forms on the peninsula.

By the beginning of the 5th century CE, Phocean Red Slip Ware (PRS) began to supplant ARS as the dominant fine ware on the Molyvoti Peninsula. By the mid-5th century CE, PRS dominated the local market as ARS disappeared. The disappearance of ARS from the area in the early 5th century CE is consistent with the broader pattern of the North African ware's distribution in the Eastern Mediterranean, which appears to be greatly diminished from the early 5th century CE onward.¹⁹ The sudden increase of PRS found in the inland area of the survey seemingly points to a return of traditional market flows between littoral Thrace and Asia Minor. Common forms of PRS in the Late Roman assemblage are Hayes form 1 (ca late 3rd—mid-5th century CE), 2 (end of 4th—mid-5th century CE), and forms 3A

¹⁵ Hayes 1972, 318-321.

¹⁶ Velkov 1981.

¹⁷ Hayes 2008, 71.

¹⁸ Bes – Poblome 2009, 78.

¹⁹ Hayes initially modeled the distribution of ARS in the Eastern Mediterranean with a hard drop-off around 400 CE (Haynes 1972). A more gradual diminishment of the ware in eastern markets has been convincingly modeled by Bes (Bes 2015, 102).

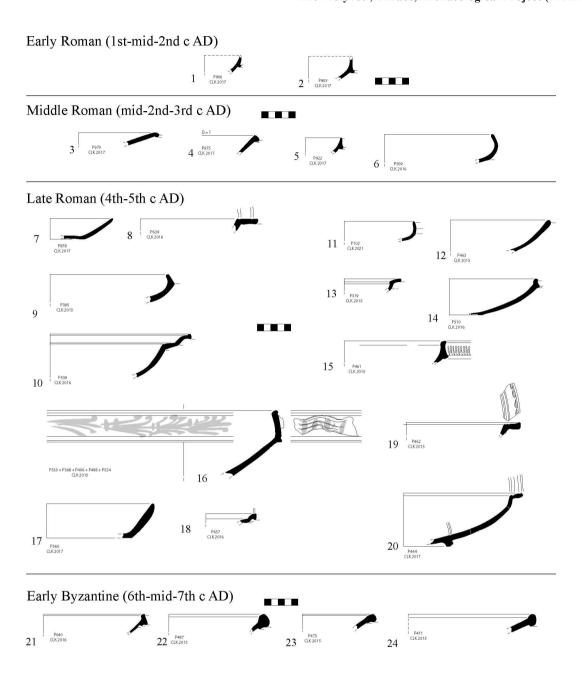


Fig. 7 Early Roman fine ware: Italian Terra Sigillata: 1) Conspectus form 33/34 (1st–early 2nd century CE). Çandarlı Ware: 2) form L19 (ca 100–150 CE). Middle Roman fine ware: Çandarlı Ware: 3) form L26b (2nd century CE); 4) form H1 (later 2nd–mid-3rd century CE); 5) form H3 (3rd century CE); 6) form H4 (3rd century CE). Late Roman fine ware. ARS: 7) Hayes 50B (ca 350–400 CE); 8) Hayes 59 (ca 320–420 CE); 9) Hayes 61A (ca 325–400/420 CE); 10) Hayes 67 (ca 360–440/430 CE). PRS: 11) Hayes 1A (late 3rd–early 4th century CE); 12) Hayes 1D (early 5th century CE); 13) Hayes form 2 (end 4th–mid-5th century CE); 14) Hayes form 3A (ca 400–450 CE); 15) Hayes form 3B (ca 450–500 CE). Attic Late Roman: 16) Keel-rim Painted Bowl (4th–early 5th century CE); 17) Imitation ARS form 50 (mid-3rd–early 4th century CE); 18) Imitation ARS form 67 (second half 4th century CE). Late Roman Light-Colored Ware: 19) ledge rim bowl (5th century CE); Ephesian Red Slip: 20) ledge rim bowl (mid-4th–mid-5th century CE). Early Byzantine fine ware: PRS: 21) Hayes form 3F (ca 500–550 CE); 22) Hayes form 10A (ca 550–early 7th century CE); 23) Hayes form 10C (early to mid-7th century CE). ARS: 24) Hayes form 105 (ca 580–660 CE).

(ca 400-450 CE) and 3B (ca 450-500 CE).

Less common Late Roman imported wares include occasional finds of Attic Late Roman Table Ware, Late Roman Light-Colored Ware, and Ephesian Red Slip Ware. The Attic imports belong to the first half of the Late Roman phase. Many of the forms are imitations of the more common ARS forms found on the peninsula, especially ARS forms 50 and 67. Late Roman Light-Colored Ware and Ephesian Red Slip Ware, both Asia Minor products, date to the second half of the phase. The overall impression left by the imported fine ware is a market shift from west to east over the course of the 5th century CE. The presence of Attic Late Roman Table Ware, a product without widespread distribution, along with an abundance of ARS, presents an opportunity to suggest the North African ware arrived in the Aegean through Athens.

In addition to Aegean and broader Mediterranean imports, the Late Roman ceramic assemblage includes imports from the Danubian river basin. A small but noticeable amount of Late Roman green glazed pottery was recovered from 4th-century CE stratigraphic contexts of the excavations. A few body sherds from the rural survey might also be identified as the same class of pottery. The ware, which is not especially fine, is not known to have been exported beyond its production zones in the provinces of Moesia Prima, Dacia Ripensis, Dardania, and Dacia Mediterranea from the 4th through 5th centuries CE.²⁰ The examples identified at Stryme belong to utilitarian wares such as coarse jugs. Though poorly represented in the Late Roman assemblage, the presence of the Danubian ware in the Molyvoti region suggests some level of commercial/transport flow between the northern regions of the provinces and the coastal plain south of the Rhodope Mountains during the 4th century CE.

The survey and excavation data corroborate to suggest agricultural exploitation increased on the peninsula during the Late Roman period. Given the threats and stresses caused by the Goths from the mid-3rd through the 4th century CE, it is likely that increased agricultural activities were efforts to maintain supply chains with the northern *limes*. The appearance of Danubian Green Glaze further hints at the flow of goods moving between the *limes* and the coast.

Early Byzantine (late 5th-early 7th century CE) imported fine wares on the Molyvoti Peninsula suggesting a certain level of occupational movement toward the shore. The dense clusters of pottery found further inland in the rural survey date principally between the 2nd and 4th centuries CE, with a dramatic drop-off in the second half of the Late Roman phase. In contrast, the survey identified dense clusters of Late Roman and Early Byzantine pottery along the southern area of the MTAP survey. The Late Roman farmstead excavated at the Classical site belongs to this later development and included a distinct Early Byzantine ceramic phase. In addition to the small coastal clusters of Early Byzantine pottery, the survey identified a large settlement on the headland beach of Therina Loutra. Ceramic finds date the occupation of the settlement between the 6th and mid-7th centuries CE.

Overall, the most common imported fine ware of the Early Byzantine assemblage is PRS, represented by late versions of form 3 (3F, ca 500–550 CE), and especially form 10, in particular forms 10A (ca 550–early 7th century CE) and 10C (early–mid-7th century CE) (Figure 7). In addition to the continued presence of PRS from the previous period, we also see the return of ARS in quantities that suggest a steady flow of materials from North Africa. ARS forms from the headland are limited in range, represented principally by form 99 (6th–early 7th century CE) and form 105 (ca 580–660 CE). The return of ARS at this late

date is consistent with broader distribution patterns in the Eastern Mediterranean.²¹ The new settlement on the headland in the Early Byzantine Period may reflect a larger program of increased agricultural exploitation of Thrace as part of systematic efforts to supply Constantinople and the Balkan *limes*. Procopius (*Buildings* 4.6–8) describes Justinian's efforts to build new towns and granaries throughout the Eastern Mediterranean, including in Thrace, to maintain and secure grain supplies. It is tempting to see the new port on the headland and the latest architectural phase at Stryme as part of the larger Imperially-controlled agricultural system.

Byzantine-Ottoman

There is a sharp break between the Early Byzantine period and the beginning of the Middle Byzantine period in the second half of the 12th century. There is no more standing architecture at the site and no more finds from the city of Stryme. The period between the 8th and 11th centuries is not documented in the survey of fine wares, either. This gap, however, does not necessarily indicate discontinuity in activity or abandonment. Pottery specialists have indicated that this was a time when workshops experimented with the making of glazed wares; most of the glazed ceramics found even in excavations in different parts of Greece were imported from Constantinople. Surface surveys at several sites in mainland Greece and Asia Minor have pointed to local and regional levels of pottery production in the 8th and 9th centuries, mostly of utilitarian ceramics. At the same time, archaeological investigations of different rural landscapes of the Eastern Mediterranean have noted the absence of, or perhaps the difficulty in identifying, fine wares from the 8th through the 11th century.²² Ceramic remains found through surface survey in southern Greece suggest increased activity in urban centers only in the 10th and early 11th century, and an identifiable peak in the countryside between the mid-12th and mid-13th century.²³ Similarly, the MTAP survey produced substantial quantities of Byzantine pottery belonging to two later phases: the middle (12th-early 13th century) and, subsequently, the late (early 13th-mid 15th century). Cities like Maroneia in the east and Mosynopolis in the north had buildings, including churches, dating from the late 10th and early 11th century. Simultaneously, documentary evidence such as the typikon (monastic foundation document) of Gregory Pakourianos for the monastery of the Virgin Mary Petritzonitissa (1083) confirm the existence of extensive estates and settlements in Aegean Thrace, including villages in the region around Peritheorion and Mosynopolis in the surroundings of Molyvoti. Accordingly, we should not preclude the possibility of settlement continuity in the early part of the Middle Byzantine era (10th–11th centuries) outside of the peninsula itself.

The MTAP material offers important information about settlement patterns and landscape usage in the immediate hinterland of the peninsula during the medieval and post-medieval periods (Figure 8). This region was a core part of the Byzantine Empire after the foundation of Constantinople in the 4th century CE until the 14th century. Unlike other Byzantine provinces, the part of Thrace between Constantinople and the Strymon River remained under firm imperial control for much of this millennium. The Ottoman conquest of our region happened shortly after the conquest of Komotini (Byzantine Koumoutzena) in the second half of the 14th century. Historians indicate that alongside the new Ottoman residents, parts of the local Greek-speaking populations remained in their original locations

²¹ Bes 2015, 138.

²² For the Troodos Mountains in Cyprus, for example, see Given et al. 2013, 336. For absence in the Asea Valley in the southern Peloponnese, see Mackay 2003, 291. For Corinth, a major production center of the Byzantine world, see Sanders 2000 and 2003, 394. For Boiotia, see Vionis 2017.

²³ Vionis 2017, 168-169

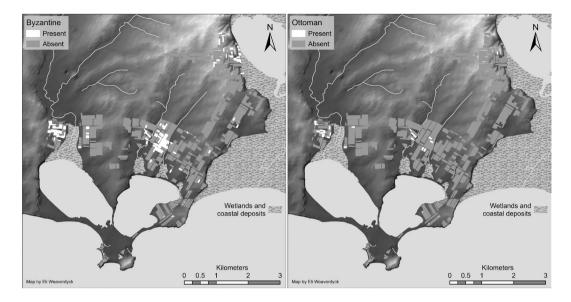


Fig. 8 Survey units with Byzantine material (left); Ottoman material (right).

despite the invasions, especially those near sea-side centers like Maroneia. So far, historians have had difficulty detecting the archaeological signature of this transitional phase, especially outside of cities.

The triangle between Koumoutzena in the north, Maroneia in the east, and the fortified settlement of Poroi (modern Porto Lagos) in the west, of which the Molyvoti region was an important part, was primarily a rural landscape without a major central urban settlement, but with direct access to the sea. In the absence of standing Middle-Late Byzantine or Ottoman monuments, the survey pottery throws light onto the lives of non-elite people, who have left no other record. The material includes glazed fine wares, amphora fragments, and other coarse ware. As in various other regions of Greece and Cyprus, the majority of the Byzantine diagnostic fine wares from the survey area can be dated to the 12th-14th centuries. Some pieces belong to the 15th century, but most of the glazed pottery dates to this narrow chronological period. From this period, we have local products such as Sgraffito Wares with concentric circles on the floor of the vessels, which may come from the ceramic workshop of Mikro Pisto, excavated in the 1990s not far from the survey area, near the village of Sapes.²⁴ Other finds such as the so-called Fine Sgraffito Wares indicate commercial links with the Aegean but also surrounding urban sites, including Maroneia. This type of fine pottery is noteworthy because of its abundance in the *chora*. Other most likely local products include the Slip-Painted Wares, which start being produced in the 12th century and with some variations continued until at least the 17th century. The MTAP Slip-Painted sherds demonstrate some variation in fabric and decoration, suggesting that they date from different periods. The Byzantine fragments of Slip-Painted ware have a similar decoration as sherds found in Mosynopolis (a place that may have had a ceramic workshop as well) and Maroneia that date from the 13th century.

Two places of special interest near the village of Glyphada–Agkathies and Triaridi (Figure 8; for toponyms, see Figure 5) yielded mixed-period scatters. These are the same locations where we hypothesize the presence of Classical farmsteads or hamlets. It seems fitting to

²⁴ On this type of ware, see Walksman et al. 2014.

assume that similar kinds of settlements would have existed in the Byzantine period as well. Whether these were permanent agricultural installations or seasonally occupied facilities remains an open question. A couple of Painted Fine Sgraffito sherds dated most likely from the late 12th century come from these POSIs and could be associated with workshops in large urban centers, such as Thessaloniki and Constantinople. Other smaller workshops could have existed in between these cities in northern Greece.

Perhaps the most popular category of Byzantine pottery is the Incised Ware and Painted Ware in their several variations, depending mainly on the color of the glaze. These types were spread across the Eastern Mediterranean and the Balkans and, because of their abundance, specialists assume that each region was producing its own subtypes. They date primarily to the 13th and 14th centuries, but production continues in later periods as well. A similarly common category is the Painted Sgraffito pieces. Painted Sgraffito Wares start to pick up across mainland Greece and the Aegean in the 13th century and continue through the end of the 14th century as colors become richer and more varied. It is found in all POSIs in the Molyvoti *chora* that produced Byzantine material. Some sherds of this type indicate connections with Serres, another major production center of the late 13th/14th century. Despite the relatively poor preservation of many ceramic fragments, the survey samples discussed in this chapter represent some of the most common Middle–Late Byzantine table wares that circulated across the Aegean and the Eastern Mediterranean more broadly. We also have detected local products that are more than mere imitations of the aforementioned popular types.

Monochrome glazed sherds, which are abundant in the survey area, may come from the 14th–15th centuries as well. The same holds true for some of the Incised Wares, which continue to be produced in various cities in northern Greece. However, with the lack of stratigraphic data from nearby sites or the peninsula itself, it is difficult to identify in the survey assemblage. This picture may indeed be misleading and points to the incompleteness of the survey.

Fine ware fragments of the Ottoman period can safely be attributed to the 18th and 19th centuries. Fragments of Çanakkale plates from Eastern Thrace are the most common in Glyphada-Triaridi and Molyvoti-Triaridi. The distribution of these wares was remarkable with fragments traced all the way to Tunisia and Morocco. In our region, the quality is good, pointing to the early phase of production in the 18th century. Examination of the Ottoman material reminds us that we need to be mindful of the peculiar distribution patterns and the presence vs. absence maps. Indeed, Ottoman sherds, especially in the southern parts of the survey zone are rare and do not provide the "dense carpet" impression attested in earlier periods. The occurrence of representative types of Ottoman fine wares, however, in areas with Byzantine pottery points directly to continued human activity and indirectly to the presence of additional types of pottery, such as glazed and/or coarse wares, which are harder to identify. As mentioned with regard to the Byzantine period, for example, monochrome glazed sherds could originate in the early Ottoman period as well. It should be noted that documentary sources from the Ottoman period, such as tax registers of the 16th century, enrich the view offered by the pottery. Emily Neumeier and Sotirios Dimitriadis present the evidence in the forthcoming final publication of the project. It shows local grain cultivation and its sale at ports in the vicinity of the Molyvoti Peninsula, as well as the operation of very profitable saltworks in the many lagoons of the area, including Lake Mitrikon. A map from 1901–1902 witnesses the emergence of new small settlements in the surroundings of the area's salt lagoons, thus hinting at the locations where the users of the retrieved fine wares were actually based.

Overall, the Byzantine and Ottoman pottery is dispersed across the survey zone. There

are three sites of Byzantine/Ottoman activity to the north of Molyvoti: to the west, at Agkathies; a second right in the middle of the survey zone in Triaridi; and a third just below the ancient Classical—Hellenistic sanctuary site, at Metochi. All these spots also yielded material from previous periods as well, thus indicating a certain level of continuity, if not in the same localities, at least in the vicinity.

Conclusions

This preliminary discussion of the survey and excavation data shows several points of continuity in the hinterland of the Molyvoti Peninsula. From the Archaic period onward, the landscape was used consistently.²⁵ With the present state of study, we can describe the majority of this activity only loosely as agricultural in nature. In the Archaic–earlier Hellenistic periods, there was also pronounced funeral and sacred activity, but these are not yet detectible in the post-Classical landscape. People consistently engaged above all in agriculture. A variety of more specific activities could be gathered under this umbrella term, along with a range of settlement types, from small farms to villages, from seasonal to permanent residence, which future study may elucidate. In the Ottoman period, historical sources give us more information about the variegated practices in the area—fishing in streams, salt production along the coast, seasonal pastoralism in the marshes—that may have occurred earlier, too.²⁶ Across the centuries, three places on the landscape were consistently the focus of this agricultural activity and possibly of settlement: Agkathies, Triaridi, and Metochi. Interestingly, the peninsula itself, the site of the Archaic–Early Hellenistic city, is not.

The agricultural activity produced goods for local consumption and for a wider market. This market had distinctly regional elements, with a strong north Aegean focus always present, but at all times it was also connected to much wider Mediterranean circuits, reaching its broadest extent in the Roman period. Consistently, there was a pronounced orientation of the network to Asia Minor, traceable through the fine ware and the coarse ware, and discernible in all periods of analysis. This is an important finding about Aegean Thrace. The region formed a land bridge between Europe and Asia and was part of a maritime circuit that embraced the Asia Minor littoral through the Aegean Sea.

We might also draw attention to the major points of change or discontinuity. With the caveat that we are relying primarily on ceramic evidence, which can present a distorted picture, we can posit changing intensities in the use of the landscape. The peak was in the Classical period, more specifically, in the 4th century BCE. Conversely, the low point was in the later Hellenistic and Early Roman periods. There was a resurgence in the Late Roman–Early Byzantine period, which saw the continuation of trends that had started in the Middle Roman period. Finally, the survey yielded substantial material dating to the Late Byzantine period, which emerges as another important phase. None of these major points of change neatly aligns with traditional historical periodization, although they are not unrelated to historical events, such as the establishment of Constantinople.

Another major change was in the settlement pattern, which we have already mentioned briefly. Only in the Archaic—earlier Hellenistic period was there a major urban settlement along the coast. The city itself was never reoccupied as such. In the Roman and Byzantine periods, Maroneia was the dominant force on the coast. If we are correct that the site was

²⁵ The palynological evidence also indicates that agricultural activity occurred prior to the foundation of the Greek city, but we omit the Early Iron Age from this paper for reasons of length.

²⁶ Emily Neumeier and Sotirios Dimitriadis present the Ottoman evidence in the forthcoming publication of the 2013–15 phase of MTAP.

indeed ancient Stryme, then the dominance of Maroneia likely occurred as early as the 4th century BCE, when the finds of Classical Maronitan coins and weights suggest Stryme was within its economic orbit and political sphere of influence. When urban settlement on the peninsula ceased, habitation shifted to possible hamlets or large farmsteads in the hinterland. Urbanization took place further inland, near the Rhodope Mountains, drawn not least by the construction of the Via Egnatia. This is not to say, however, that the coast was completely neglected. On the contrary, we see Roman farms on the peninsula and an Early Byzantine settlement on the headland, and the Roman and Byzantine fine wares (of all sub-periods) indicate that the hinterland was connected with maritime networks. By combining excavation and survey, the project illustrates the different levels and types of activity in coastal Thrace, even in those periods when the Archaic–Hellenistic city was not a prominent feature of the landscape.

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