

# **The Classical City on the Molyvoti Peninsula (Aegean Thrace): Landscape, Urban Development, and Economic Networks**

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The Rhodopi mountain range and its large, fertile plain dominate Aegean Thrace, a well-watered region with a few lakes and several lagoons. Between the Strymon and Evros Rivers, *emporía* and colonies were established during the Archaic period. From Paros, colonists founded Thasos, and later the Thasians established colonies on the Thracian coast, forming the so-called Thasian Peraia. Greeks from Asia Minor founded Abdera and colonists from Chios founded Maroneia at the foot of Mount Ismaros. Further to the east, the inhabitants of Samothrace (Aeolians and Ionians who had arrived there in the early 7<sup>th</sup> century BC) were active in foundations on the mainland (the Samothracian Peraia). Ainos, the easternmost colony of the Aegean Thracian coast, was established by Aeolians at the mouth of the Evros River.<sup>1</sup>

This paper discusses the walled city on the Molyvoti Peninsula in its river environment (fig. 1). The settlement was one of the four principal Greek establishments between the Nestos River and Mount Ismaros, and it flourished during the Classical period and was re-occupied during the Late Roman Period. We will focus here, firstly, on how rivers contributed to a dynamic and changing landscape and, secondly, how rivers configured regional trade networks.

Herodotus provides important information on the topography of Aegean Thrace when he describes the route of Xerxes' army from Asia to mainland Greece (Hdt. 7.108–109). The passages, and especially those that mention Maroneia and Stryme, have been subject to considerable discussion and have led to varying reconstructions of the regional topography. During the 1950s, professor George Bakalakis combined the report of Herodotus with the excavation record, and suggested that the walled ancient city on the Molyvoti Peninsula should be identified with Stryme, the only Thasian colony founded in the 7<sup>th</sup> century BC to the east of the Nestos River, and a site known from other literary sources as both a polis and an emporion.<sup>2</sup> His view was widely accepted, but some scholars continue to express reservations about the identification.<sup>3</sup> Without epigraphic testimony, the debate will probably continue, and this is not the place to lay out the evidence in support of the identification. We may, however, point out that most of the arguments against seeing the city as Ancient Stryme stem from assumptions about the size and nature of an emporion, yet a consideration of other factors of the archaeological record, including the settlement's relationship to the landscape and rivers, shows how it was a "place between" land and sea well-situated for trade, commerce, and interaction of a type associated with emporia.



Fig. 1: The settlement on the Molyvoti Peninsula identified as Ancient Stryme.

The evidence discussed here stems from a new period of research for the city on the Molyvoti Peninsula that began in 2013.<sup>4</sup> The Molyvoti, Thrace, Archaeological Project (MTAP) aims to study the settlement on the peninsula, hereafter called Stryme, in its regional context. The five-year expedition is a cooperation between the Ephorate of Antiquities of Rhodopi (Komotini) and the American School of Classical Studies at Athens, represented by Princeton University. The project combines geomorphological studies, geophysical survey, and surface survey with focused excavation. The Molyvoti Peninsula is located southwest of modern Komotini, at the end of a long plain. Today, widespread cultivation takes place between the Rhodopi mountains and the Aegean Sea, predominantly of cotton and wheat. In the area of the ancient site there is one large lake, Lake Mitrikon, and two rivers, the Vosvozis River and the Filiouris River. Lake Mitrikon is usually identified as ancient Lake Ismaris, and the Filiouris River as the Lissos River (Hdt. 7.108–109). During the 4<sup>th</sup> century BC the city occupied an area of approximately 60 hectares and had probably two harbors. On the west side of the city, a lagoon existed also during the habitation period of the city.

The plain that extends to the north of the fortified settlement as far as Lake Ismaris, is the area known as Mitrikon. In this extended landscape there are more than 30 tumuli. The tumuli are scattered across an area roughly 5 km long and 3 km wide, starting 500 m north of the city wall and ending near Lake Mitrikon. Most follow a linear path along the eastern ridge of the hinterland, almost certainly indicating the presence of an important



Fig. 2: Satellite image of the Molyvoti Peninsula and its hinterland.

road running north from the city. The identification of a possible Ionic temple near Lake Mitrikon further supports this hypothesis. The locations of other tumuli cannot be explained with reference to this road: there are eight tumuli on the western ridge and three near a stream delta that fall outside the linear pattern. These might have been located on secondary roads or they could represent burials on private estates.

Today the mouth of the Filiouris River is located ca. 3.5 km from the wall of the city, and Lake Mitrikon is ca. 4.5 km distant. This was not always the case. The satellite image shows quite clearly how the area around the river, which is not cultivated, is a coastal marsh-swamp, suggesting how alluviation and river deposits may have changed the location of bodies of water and even of the coastline itself (fig. 2). During our project, a team from the University of Aristotle at Thessaloniki, led by George Syrides and Konstantinos Vouvalidis, explored the geomorphology of the coast and the area around the lake. A core adjacent to the lake provided valuable information. In the following discussion, we draw on their forthcoming report as well as other published studies.<sup>5</sup> The core revealed a stratum from ca. 3500–1500 BC with marine deposits and microfaunal evidence for marine species characteristic of shallow marine environments. In addition, there were some fresh water indicators, probably transported into the area by a stream. The next stratum, from ca. 1500–1000 BC, continued to represent a marine

deposit, but there were more fresh water indicators, probably indicating something like a lagoon that still communicated with the sea. In a subsequent stratum, associated with the period of the city's foundation, from ca. 1000 BC to the turn of the millennium, evidence showed that there was a closed lagoon, and by the turn of the millennium, a fresh water environment (Lake Mitrikon) with river activity (the Vosvozis River) had formed.

In short, what this geomorphological data indicates is that the sea once extended as far as the location of the present day lake. Unfortunately, the strata in the core are not so precise as to date the formation of the lake closely. What we know, however, is that in the Archaic period, at the time of the foundation of Stryme, there was a lagoon and river activity in the area of the present-day lake, and that the lake formed sometime between 1000 BC and the turn of the millennium. As the only fresh water lake in Thrace, it is almost certainly Lake Ismaris, which Herodotus mentions when he describes the route of Xerxes in the 5<sup>th</sup> century BC, although its exact placement and size probably shifted somewhat over time. Currently it is 3 km<sup>2</sup> in size, with an average depth of 1 m.

The important point is that the coastline was a dynamic environment, and that geographic contours around the city changed quite quickly. As the two rivers brought sediments into the lake and delta, the coastline extended out towards the Molyvoti Peninsula. Only in recent times did this situation become more stable. Specifically, in the 1970s, a channel was cut for the Vosvozis River, changing its entry point to the northwest of the lake, so that sediment was deposited in the lake itself, and a second channel was cut through the delta plain to connect the lake with the sea.

The pollen from the core next to the lake provides evidence on how humans engaged with this dynamic landscape. The stratum from ca. 3500–1500 BC revealed the presence of a rich deciduous forest. Mountainous forests were also detected, with conifers and beech trees. Human presence in the area could be traced by the occurrence of several apophytes and coprophilous fungi, but there was no evidence of cereal cultivation. From ca. 1500–1000 BC, the landscape became more open as the mountainous forests retreated, although Mediterranean forests with evergreen oak, pine, and juniper remained part of the landscape. The increase of ruderal herb vegetation, the high diversity of apophyte taxa, and the presence of coprophilous fungal spores indicate human presence and the implementation of grazing activities, while charcoal shows that there were some significant regional fires. This activity probably should be associated with regional Thracians who were predominantly pastoral and occupied the land prior to Greek colonization. In fact, when the course of the Filiouri River was moved in 1973, Diamantis Triantaphyllos was able to excavate a Thracian cemetery at Ampelia, 3 km SE of Mikro Doukato.<sup>6</sup>

Unfortunately, we do not have much data from the core for pollen related to the period when Stryme itself was occupied, and our next evidence comes from the turn of the millennium. At this time, the retreat of the forest was more pronounced, and oak and deciduous trees were scarce. But there is not much evidence for human vegetation

and cultivation in the area in the pollen record. This correlates with the abandonment of Stryme in the 3<sup>rd</sup> century BC. Although our surface survey has shown that activity did continue in the chora, evidently there was little cultivation, and rural activity was minimal.

As forests retreated and agriculture took hold, the geomorphological processes described above (i.e., alluviation and silting) created marshy conditions in the region of Stryme. The health hazards of such an environment tend to be emphasized, and certainly from nearby Abdera there are many ancient sources linking the swampy environment with illness and disease. Yet wetlands also support abundant and variegated animal and plant life, and they offered a rich range of resources for the community at Stryme.<sup>7</sup> Today, no fewer than 233 types of birds in the region of the Ismaris Lake have been recorded. We can imagine a similar faunal variety in antiquity, and bones from the archaeological site indicate extensive engagement with this diverse landscape. Zooarchaeologist Demetrios Brellas has identified bones from a wide variety of animals that once flourished in the wetlands. These include geese, swans, cranes, storks, coots, flamingo, cormorants, as well as several varieties of duck. Additionally, species of fish, such as mullet and shad, which thrive in the brackish waters of Stryme's coastal wetlands today, have also been identified.

The fresh water of the lake and rivers were also an important source of fish. Bones from catfish, freshwater salmonids, and particularly those of various species of cyprinids are common at the site. In addition to faunal evidence for the importance of fish and fishing at the site, fishing implements, such as bronze fish hooks and lead fish weights, contribute to the picture. It is difficult to date these objects by morphology or style, but they come from both the Classical and Late Roman levels. Some of these tools, of course, may have been used in the sea as well as the lakes and rivers, but the bones indicate that people engaged just as much if not more with their fresh water as their salt water environments.

The wetlands also provided an excellent place to pasture animals. The faunal assemblage from the site indicates a strong preponderance of sheep, which would thrive in this type of landscape. In the Ottoman period, maps and other historical documents show that herders would come from the mountains to the marshy plains in the winter to graze their animals.<sup>8</sup> Still today, the area around the lake and the river delta is frequented by grazing sheep.

While the marshes offered unique opportunities and resources to the community, they also presented constraints. In particular, the wetland environment could create health hazards, and residents of Stryme may have suffered from similar maladies as the people of Abdera. At Stryme, we lack the type of literary record that could document such travails, and we may only hypothesize that environmental factors contributed to the decline of the city in the Classical-Hellenistic period. Activity at the site petered out in the 3<sup>rd</sup> century BC, with no destruction horizon. There are, of course, many possible reasons for the termination of settlement, including

the deterioration of regional security and trade networks, but one factor was the changing environmental conditions, as alluviation and silting intensified the marsh nature of the landscape.

Rivers, therefore, contributed to the formation of a landscape at once dynamic, fertile, and hazardous in which coastlines shifted relatively rapidly, a lake took shape, and wetland conditions emerged. In addition, the two rivers played a role in the development of trade networks. Both served as important routes of communication, linking the maritime site with inland resources and communities. River trade in ancient Greece and the Balkans is usually not considered significant, but this view may need to be reassessed. Three big rivers that arise in central Thrace and flow into the Aegean Sea certainly were navigable: the Strymon, Nestos and Evros Rivers, the latter a liquid highway until the beginning of the 20<sup>th</sup> century.<sup>9</sup> The importance of rivers for Classical emporia has been clearly demonstrated by the site of Bulgarian Pistiros, and Zosia Archibald has repeatedly drawn attention to the interconnections between coastal sites and the hinterland.<sup>10</sup> Might minor rivers have played an important role, too? River transport was less costly than land transport, and in antiquity, as today, land, sea and river transport complemented each other.<sup>11</sup>

The Vosvozis and Filiouris Rivers are not particularly deep today, but they may have been more substantial in antiquity. We have seen that the changes in the geomorphology of the area are significant enough that we should not assume on the basis of current appearances that rivers were not navigable in antiquity. Moreover, recent records show that from 1966 to 1999, rainfall averaged 507 mm, with a range from 270 to 876 mm, and a long drought from 1981 to 1993. Assuming that a similar degree of variability existed in antiquity as well, it is possible that at least in some years the rivers were navigable by rafts or canoes. A shallow boat found near the village of Peschcanoe (Ukraine) carrying 15 Greek gold-plated vessels is the type of transport vessel one can imagine on rivers that were not particularly deep and that was engaged in trans-cultural communication (fig. 3).<sup>12</sup>

The Vosvozis and Filiouris Rivers provided different degrees of connectivity with the hinterland. The Vosvozis River flows from the mountains of Thrace. The location of the river near the site and the discovery in our campaign of a few Thracian coins, inscriptions, and sherds suggest some type of connection between the emporion and Thracians.<sup>13</sup> Although the mountain range of Rhodopi appears to be an insurmountable barrier to communication, in the 16<sup>th</sup> century, Komotini's (Ott. Gümülcine) administrative zone (*sancak*) included towns in present-day Buglaria.<sup>14</sup> In other words, in at least one pre-modern period, the two sides of the mountains were closely entwined. The Makaza Pass, now a highway and border crossing, offers an important point of connection. Further west, the ancient site of Linos, in the foothills of the mountains, has an archaeological record that closely matches Stryme in terms of chronology and artifact type, and it may have been part of a broader network of communication across the mountains.<sup>15</sup> The Vosvozis River running across the plain



Fig. 3: The Peshchannoe canoe in the National Museum of the History of Ukraine, Kiev with Philip Katz and Christopher Parmenter for scale. Some of the Greek bronze vessels found with the canoe appear in the display case in the back left.

could participate in this network, helping to transport goods on their final journey down from the mountains and through the plain.

The Filiouris River offered a different path for connectivity. Bending toward the northeast, the river, almost certainly to be equated with the ancient Lissos River (there is no other river in the vicinity that could meet Herodotus' description), connected Stryme to the fertile valley behind the hills of Maroneia. The archaeological record at Stryme supports a close relationship between Maroneia and Stryme, which the river would have facilitated. Like other emporia, Stryme, which did not mint its own coins and was not on the Athenian Tribute lists, was politically and economically dependent on a regional power. The abundance of Maronitan coins from Stryme and the presence of even a few weights testify to its close connection to Maroneia, itself a settlement known for its strong ties to Thracians, including to the Odrysian court across the mountain pass.<sup>16</sup>

A consideration of both of these rivers re-oriens our view of the seaside trading port, drawing attention to its landward connections. Indeed, surface survey of Stryme's chora has shown a much more extensive engagement with the landscape than the term emporion might suggest, which generally implies a static node

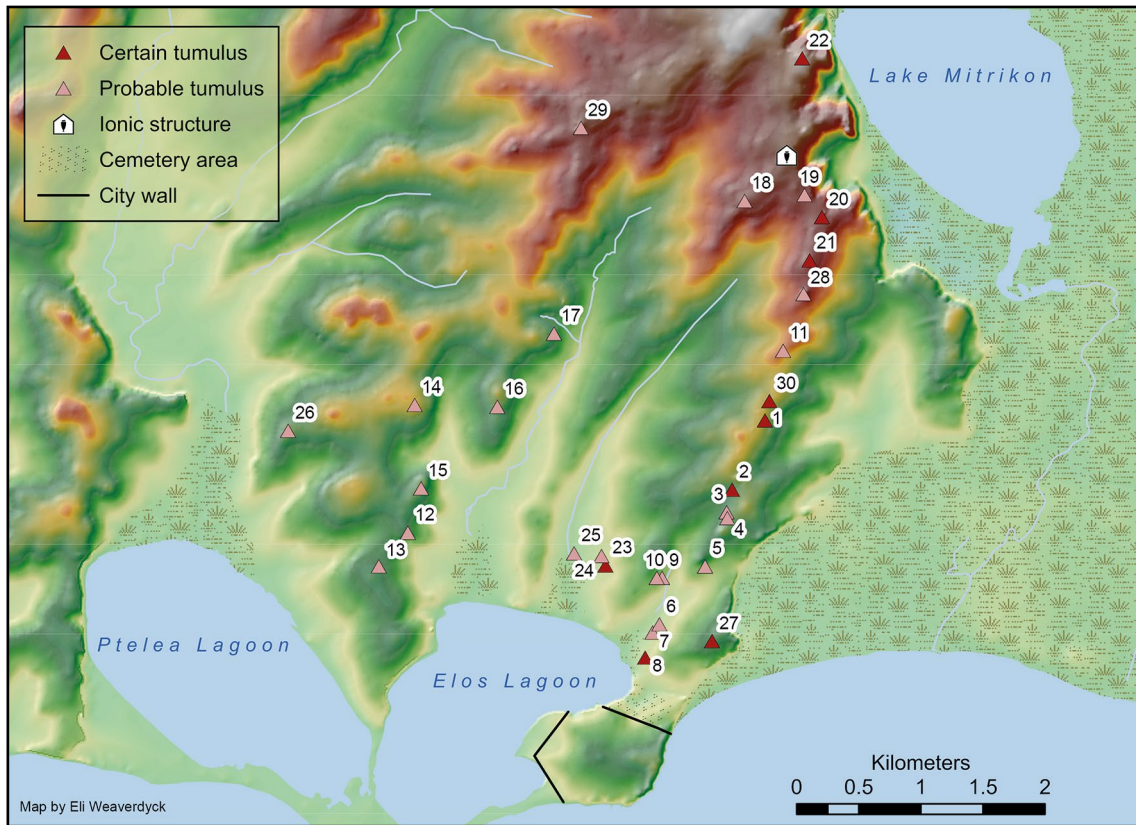


Fig. 4: The tumuli and Ionic temple in the *chora* of Stryme. The tumuli document the purported path of a road leading toward the mountains.

oriented toward the sea. In addition to abundant surface sherds that testify to a busy landscape dotted with farms, there are more than 30 tumuli across an area roughly 5 km long and 3 km wide (fig. 4). The majority almost certainly follow the course of an ancient road that connected the settlement with the mountains. The identification of an Ionic temple near Lake Mitrikon supports this hypothesis. Outside the linear pattern, there are eight tumuli on the western ridge and three near a stream delta, which might have been located on secondary roads or could represent burials on private estates.

In conclusion, although seaside trading points are usually interpreted in terms of their connection to the sea, this paper has demonstrated the importance of rivers for understanding the relationship of emporia to dynamic environmental conditions and for revealing how they participated in mainland trade networks. Located on the Thracian Sea, Stryme maintained a close connection with a fertile *chora* and a rich wetland created and enabled by fluvial activity. Rivers also linked the settlement to powerful Maroneia and to resources across the plain and even mountains. No doubt



the rivers in part explain the puzzling choice of the Molyvoti Peninsula for settlement. Unlike most other colonies in Aegean Thrace, Stryme was not located close to sources of valuable metals, instead occupying an important geo-political place in a fertile and changing landscape nourished and traversed by rivers.

### Notes

<sup>1</sup> On colonization in Thrace, see esp. Tiverios 2008. On the history of the individual settlements, Loukopoulou 2004 offers an excellent starting point.

<sup>2</sup> Bakalakis 1958, 91–97; Bakalakis 1967.

<sup>3</sup> Esp. Loukopoulou – Psoma 2008.

<sup>4</sup> Arrington et al. 2013–2017; Arrington et al. 2016. On the work of the 1990s, see Triantaphyllos – Terzopoulou 2012, with further bibliography.

<sup>5</sup> Pinarasa et al. 2007; Katsavouni et al. 2012; Karadimou et al. 2016. The geomorphological and palynological studies of MTAP will be presented in more detail in the project’s final publication, which is currently in preparation.

<sup>6</sup> Triantaphyllos 1983.

<sup>7</sup> On wetlands, see Horden – Purcell 2000, 186–190.

<sup>8</sup> The Ottoman records will be presented by Emily Neumeier and Sotirios Dimitriadis in the project’s final publication.

<sup>9</sup> De Boer 2010.

<sup>10</sup> Most recently, Archibald 2016.

<sup>11</sup> On cost, see Duncan-Jones 1982, 368.

<sup>12</sup> Tsatskhladze 1998, 65.

<sup>13</sup> For Thracian coins found in the past in Molyvoti see: Gatzolis et al. 2007.

<sup>14</sup> Sarinay 2003, 138. We owe this information to the research of Emily Neumeier and Sotirios Dimitriadis, who will present their findings in detail in the project’s final publication.

<sup>15</sup> Anagnostopoulou-Chatzipolychroni 1991.

<sup>16</sup> Psoma et al. 2008.

### Image Credits

Fig. 1: Map by Eli Weaverdyck. – Fig. 2: by the authors. – Fig. 3: Photo by Samuel Holzman. – Fig. 4: Map by Eli Weaverdyck.

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