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Notes on the Topography of Eresos

GERALD P. SCHAUS AND NIGEL SPENCER

Abstract

This paper is a tripartite study of the topography of the polis of Eresos in southwest Lesbos, addressing three specific problems. The first part provides a topographical discussion of the previously ignored *chora* of the Archaic polis, considering the possible definition of the marginal areas of the polis territory. The second part is a reexamination of the evidence for the ancient shoreline at Eresos and the position of the acropolis in relation to the coast. The third section discusses the extensive remains of ancient agricultural terracing on the hills around Eresos and comments on their relevance for the local wine industry in antiquity.*

INTRODUCTION: THE ENVIRONMENT OF SOUTHWEST LESBOS

Eresos, one of the five independent city-states on Lesbos in the Classical period, is noted most often as the birthplace of Sappho, Theophrastos, and

* This article is the result of separate research by the two authors. The first part is drawn from the doctoral thesis of N. Spencer, while the last two sections, on the ancient shoreline and agricultural terracing, represent fieldwork and research carried out by G. Schaus in the southwest of the island over the last several years. The authors would like to thank the British Academy, the Social Sciences and Humanities Research Council of Canada, and Wilfrid Laurier University for research funding, including a Senior Research Fellowship from the last, and the British School at Athens and the Canadian Archaeological Institute in Athens for logistical support. Air photographs were provided by the Air Photo Archive, University of Keele, and permission to publish them was granted by the British Ministry of Defense through the Archive, and the U.S. Department of Defense, Defense Intelligence Agency.

In Lesbos, we would like to acknowledge the cooperation of Aglaia Archontidou-Argyri, the Ephor of Antiquities, in allowing us to carry out our work. Other members of the Ephoreia staff who are to be thanked include Lilian Acheilera and Eleni Bomboulaki. Many of the *archaiophylakes* in Lesbos helped by offering their extensive knowledge of the island; we would like to thank especially Sophoklis Roumeliotis. Michailis Bathrokoulis, the former mayor of Skalochori, provided additional source material. Hector and Caroline Williams generously shared their knowledge and experience in the archaeology of the island. We owe a special debt to Pamela Schaus for her work on the maps that accompany the article. A. Head assisted with fig. 8. John Barron, Jan Sandars, Lin Foxhall, Jane Francis, and John Lenz all read drafts of the first section of this article in one form or another, and their

Phanias. It is situated in the southwestern "prong" of the irregularly shaped northeast Aegean island (fig. 1). The western part of the island is composed of volcanic deposits that have since become deeply dissected to form a series of deep, winding valleys and torrent beds, leading to coastal plains of varying sizes.¹ Four high outcrops of rock have been left, forming the mountain ranges of Ordymnos (512 m), Kourouklo (589 m), Polyphos (606 m), and Routphas (673 m) (fig. 2). These four ranges together constitute a great impediment to communication in the west of the island (even today), and although the modern road network skirts the highest areas, it is still forced to wind up and down steep gradients to link the villages. The upland soil coverage has suffered greatly from valley-cutting and deposition. Such processes have led to large areas of western Lesbos being reduced to bare rock, and it has little use except as marginal summer pasturage

suggestions and advice improved the piece immeasurably. C. Grant Head, Alexis Young, Amalia Kyriacou, John Parrish, and other members of the Canadian group to visit the island in 1991 helped in many ways with fieldwork necessary for the last two sections. Robert Fowler offered helpful advice with Greek passages in those two sections of the article. We wish also to thank the anonymous *AJA* reviewers for their helpful comments and suggestions.

The following abbreviations are used:

- | | |
|---------------|---|
| Koldewey | R. Koldewey, <i>Die antiken Baureste der Insel Lesbos</i> (Berlin 1890). |
| Kontis | I.D. Kontis, <i>Λέσβος και η Μικρασιατική της Περιοχή</i> (Ancient Greek Cities 24, Athens 1978). |
| Laskaris | G. Laskaris, "Τα λείψανα της αρχαίας Ερεσού," <i>Lesbiaka</i> 3 (1959) 67-74. |
| Papazoglou | I. Papazoglou, <i>Ιστορία της Ερεσού</i> (Athens 1981). |
| Paraskeuaidis | P.S. Paraskeuaidis, <i>Οι Περιηγητές για τη Λέσβο</i> ² (Athens 1983). |

¹ For the geology of the island see *Greece* 3 (Naval Intelligence Division, London 1945) 493-97, fig. 128; K.D. Jones, "An Outline of the Geology of the Islands of Mytilini and Chios," in A.S. Campbell ed., *Geology and History of Turkey, 13th Annual Field Conference, Petroleum Exploration Society of Libya* (Tripoli 1971) 275-82; G.M. Choutzaïou, "Συμβολή στη μελέτη του κλιμάτος της νησού Λέσβου," *Mytilini* 1 (1981) 85, map 2; I.K. Whitbread, *The Application of Ceramic Petrology to the Study of Ancient Greek Transport Amphorae with Special Reference to the Study of Corinthian Amphora Production* (Diss. Univ. of Southampton 1986) I 235-36, II fig. 33; Kontis 13-15.

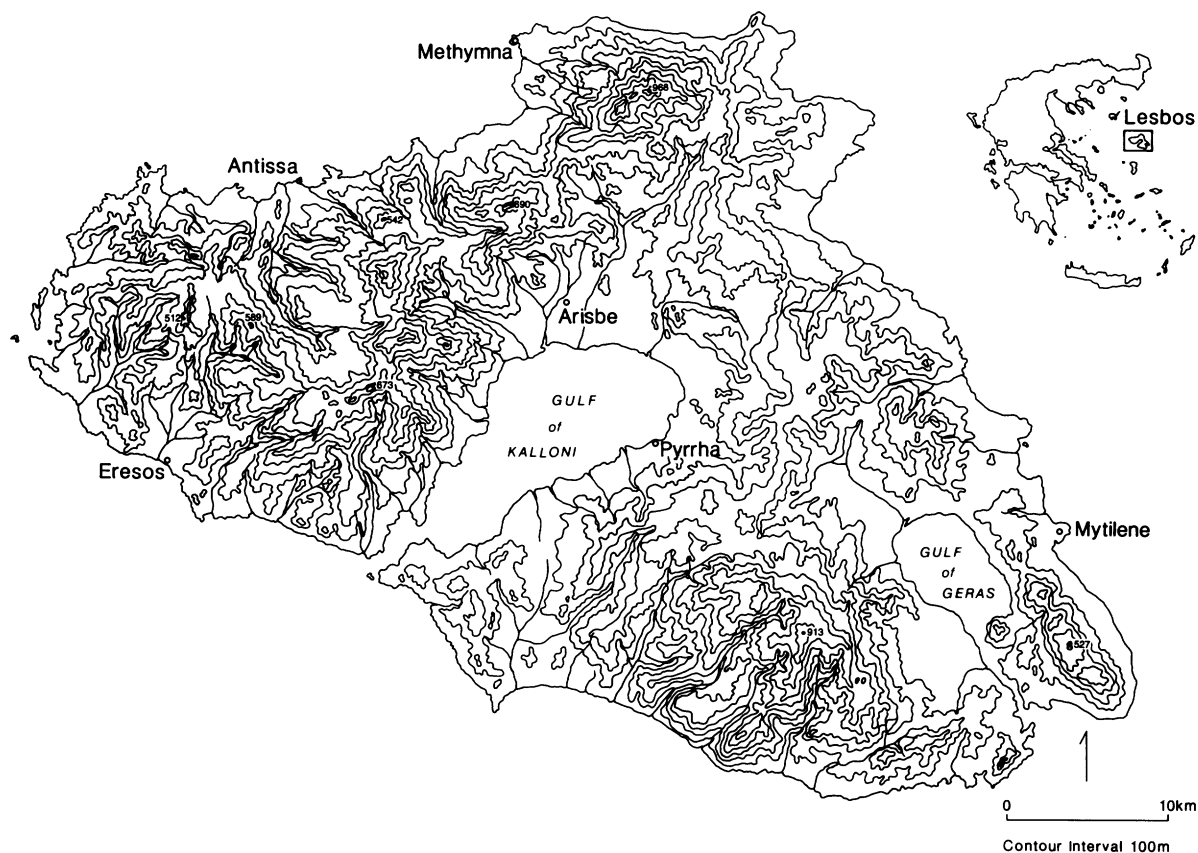


Fig. 1. Ancient cities of Lesbos. (P. Schaus)

for sheep and goats.² Cultivation is primarily limited to the coastal plains, where cereals, vegetables, and fruits are grown; a few olive trees are supported in areas of upland terracing immediately surrounding the inland villages. Many of the upland terraces are now abandoned, together with the rest of the marginal land, and only the coastal river plains are intensively cultivated.

In antiquity, two city-states shared the western part of the island, Antissa to the north and Eresos to the south. The borders between the two have been difficult to ascertain because of terrain and lack of archaeological and literary evidence. I.D. Kontis placed them along an arc from Sigri (Cape Sigreion) on the west coast to Apothekai on the Gulf of Kalloni at a radius of about 10–15 km from the ancient coastal town of Eresos (fig. 2). His proposed demar-

cation, however, based at least partly on the traditional ecclesiastical boundaries between these two areas, lacks support and is reexamined below.³

Discussions of the history and archaeology of Eresos have not been numerous. Notable among these are studies by the 19th-century German travelers to the island, A. Conze and R. Koldewey, both of whom described the visible antiquities and produced maps of the valley and site of Eresos;⁴ the summary article by L. Bürchner for *RE*;⁵ a discussion of the harbor at Eresos by K. Lehmann-Hartleben;⁶ G. Laskaris's brief description of the antiquities, including valuable comments on the harbor and temples of the city;⁷ Kontis's collection of information on the antiquities from the entire area of the city-state in his *ekistikal* study of Lesbos;⁸ a recent compilation on the history and remains of Eresos by I. Papazoglou

² An indication that the present degraded landscape is not the result of very recent geomorphological phenomena is given by the French traveler Philippe du Fresne, who noted in 1573 that the far west of the island was "barren, rocky and deserted," *Paraskeuaidis* 25.

³ Kontis 127–28, 318 figs. 18–30.

⁴ A. Conze, *Reise auf der Insel Lesbos* (Hannover 1865; repr. Amsterdam 1982) 27–39, title page pl., and pls. 2,

12–15; Koldewey 22–26, pls. 8–10.

⁵ *RE* 6.1 (1907) 420–21, s.v. Eresos (L. Bürchner).

⁶ K. Lehmann-Hartleben, *Die antiken Hafenanlagen des Mittelmeeres* (*Klio Beiheft* 14, Leipzig 1923) 76–77 n. 5, 103 n. 1, 104, plan xiii, 254 cat. no. 89.

⁷ Laskaris 67–74.

⁸ Kontis 318–39.

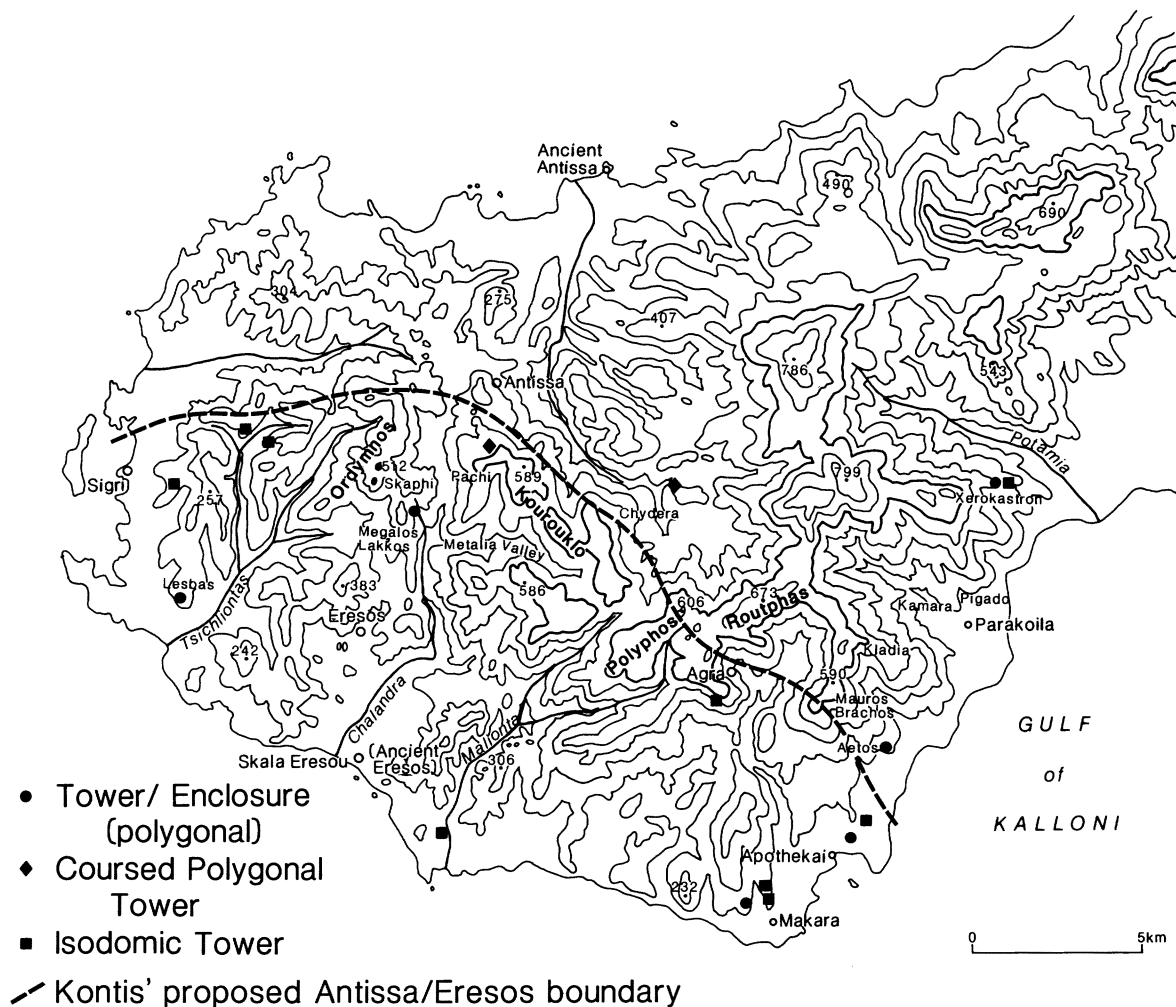


Fig. 2. Enclosures and towers around Eresos. (P. Schaus)

based often on Koldewey and the reports of the Greek Archaeological Service in *ArchDelt*,⁹ and two doctoral dissertations, by R. Levang¹⁰ and N. Spencer,¹¹ which concern the Roman and pre-Classical period on Lesbos, respectively, with important sections on the history and archaeology of Eresos.

Very little actual excavation has been carried out in the area other than work on two Early Christian basilicas published by A. Orlandos,¹² and probes in areas where new building has been carried out, especially around Skala Eresou (the beach village on the west side of the acropolis of ancient Eresos).¹³

The present study is offered in order to clarify two persistent issues in the topography of Eresos;

the first concerns the *chora* of Eresos and its possible limits. The importance of outposts situated along routes into the valleys controlled by Eresos is discussed in light of the archaeological evidence. The second issue concerns the line of the coast in relation to the ancient city. Evidence for the shift of the coastline since antiquity is examined next. In the third section we comment on the extensive system of agricultural terraces, now long abandoned, but already noticed by Koldewey and clearly visible in World War II aerial photographs of southwestern Lesbos. The connection between these terraces and the important wine industry of the island in antiquity is noted.

⁹ Papazoglou.

¹⁰ R. Levang, *Studies in the History of Lesbos* (Diss. Univ. of Minnesota 1972).

¹¹ N. Spencer, *Asty and chora in Early Lesbos* (Diss. Univ. of London 1993).

¹² A. Orlandos, *ArchDelt* 12 (1929) 29–71.

¹³ Some of these are reported in *Prakt* 1925–1926, 95, 154–56; *ArchDelt* 16 (1960) *Chronika*, 237–38; 18 (1963) *β2 Chronika*, 269; 19 (1964) *β3 Chronika*, 397–98; *Lesbiaka* 12 (1989) 58, 71–73.

THE CHORA OF ERESOS

Scholarly consideration of the area beyond the city of Eresos proper has been slight. Kontis in his study of the island merely repeated the reports of H. Kiepert, R. Koldewey, and S. Charitonidis about the *chora* of Eresos, all of whom noted a series of polygonal masonry towers and enclosures in southwest Lesbos,¹⁴ but Kontis offered no further analysis of the sites.¹⁵ Nor did he provide a discussion of the possible relationship (or importance) of the edifices to the other traces of habitation in the polis of Eresos, almost arbitrarily sketching a line across the southwest of the island to represent the limit of the polis territory (see fig. 2).

Kontis's proposal takes no account of topography or the archaeological data beyond the polis center, and needs revision. In order to facilitate this revision, the *chora*, and in particular the structures of polygonal masonry within it, are examined here in light of the diachronic patterns of habitation in southwest Lesbos. The structures themselves raise interesting questions for the purpose behind similar enclosures all over the central and western parts of the island. Some of these examples are brought in as comparanda below, but such far-reaching questions lie beyond the scope of this article, which focuses only on southwest Lesbos.

Lesbian ("Polygonal") Masonry

As a prelude to the discussion, a brief comment must be made on the dating of the towers and enclosures of polygonal masonry. The particular style

of polygonal masonry employed, the so-called "Lesbian style," is distinguished from other types of polygonal masonry by the peculiar curved edges that the polygonal blocks exhibit. Aristotle (*Eth. Nic.* 1137b.29–32) described the use of a leaden rule that could be bent along the curved edges of the blocks in order that they fit more exactly. The style was first given detailed treatment by Scranton, who noted its wide use within the island and elsewhere in Greece, the Aegean islands, and western Turkey.¹⁶ Scranton, Winter, Adam, and Lawrence all came to the conclusion that the Lesbian style was a phenomenon of the Archaic period,¹⁷ and all securely dated examples of the style (even new ones discovered since their publications) both inside and outside Lesbos support this conclusion.¹⁸ Although the precise dating of the towers and enclosures on Lesbos is difficult (diagnostic material is rarely found at the sites), it is our working hypothesis that all such structures on the island built with Lesbian-style masonry probably date to the Archaic period.¹⁹

Settlement Patterns and Enclosures of Polygonal Masonry in Southwest Lesbos

In southwest Lesbos, from antiquity to the present day, the coastal plains have remained the richest areas for agricultural production. The most extensive plain, in which Eresos lies, is fertile enough to support many crops. A few vines still survive, but only in very small plots in gardens, and on nothing like the scale of a century ago before the decimation of the crop by a phylloxera blight in 1927–1928.²⁰

¹⁴ Koldewey 43–44, pl. 15 (Apothekai), 87 fig. (Makara) (Kiepert visited Lesbos in 1841, 1886, and 1888, and made contributions to Koldewey's study of the island); S. Charitonidis, *ArchDelt* 16 (1960) pl. 210d; Charitonidis, *ArchDelt* 17 (1961–1962) *Chronika* 265, pl. 320a (Makara, Aetos); Charitonidis, *ArchDelt* 19 (1964) β3 *Chronika* 397, pl. 464a (Tsichliontas valley, Megalos Lakkos).

¹⁵ Kontis 332 (Megalos Lakkos, Aetos, and the Tsichliontas valley), 334 (Makara), 336–38 (Apothekai). Some of his comments (especially those for Aetos and the Tsichliontas valley) that merely repeat verbatim those of Charitonidis suggest that he did not in fact visit all the sites.

¹⁶ R.L. Scranton, *Greek Walls* (Cambridge, Mass. 1941) 25–44 and 159–61.

¹⁷ Scranton (supra n. 16) 43; F.E. Winter, *Greek Fortifications* (London 1971) 81, 85–86; J.P. Adam, *L'architecture militaire grecque* (Paris 1982) 27; A.W. Lawrence, *Greek Aims in Fortification* (Oxford 1979) 237.

¹⁸ Spencer (supra n. 11) 149–51, ns. 193–96. A full discussion of Lesbian masonry is promised by L. Acheilera; a detailed preliminary study of the style can be found in Spencer (supra n. 11) 121–51.

¹⁹ The lack of a secure chronology for the structures cannot be attributed solely to the fact that examination of

the structures has been restricted to surface study rather than excavation. Even when Chatzi excavated in an attempt to find a date for the Lesbian masonry wall at Arisbe, and the chronological relationship of the house remains to the wall, the data from the trenches were of no use. D. Chatzi, *ArchDelt* 27 (1972) *Chronika* 593–95, pls. 543–47a.

²⁰ Koldewey pl. 31 shows the large extent of vine cultivation in the late 19th century. It is clear from his map that the vineyards were virtually all in the fertile bottomland of the valley, not on the hillsides. Nearly all the island's extensive vineyards were destroyed by the blight that had already begun to affect grapes grown around Kalloni and Plomari by about 1910 (A.I. Sophianopoulos, *Περί της διομηχανικής κινήσεως εν τη νήσω Λέσβω* [Mytilene 1913] 32; K. Syrakis, *Η κατάσταση της γεωργίας της νήσου Λέσβου* [Mytilene 1913] 82–83). It was particularly severe by 1927–1928. Although new vines resistant to the disease were introduced from the United States soon afterward, cultivation of grapes on a large scale soon decreased. Today only at Arisbe are large fields devoted to vineyards, and most of the island's wine is now imported from Athens, Salonika, and Kavala. Indeed, ouzo has replaced wine as the drink of choice in Lesbos and is manufactured

Sheep are usually kept in more marginal pastures beyond the edges of the plain to the east, and also north and west of the upper village of Eresos.

The enormous number of water sources in the plain makes irrigation easy; today there are 20 springs and wells in the plain, in addition to another 22 on the slopes immediately to the east and west. Admittedly, springs are not perennial, altered especially by earthquakes and the consequent disturbance of the underground channels, but the ease with which wells locate water in the plain makes it difficult to imagine that a good water supply was a problem in antiquity. Another advantage for dwellers and cultivators in the plain is that the area does not flood and there is thus no threat to the farmers whose plots lie even in the lowest reaches.

This plain must have been the area where many of the Eresians lived and possessed their *kleroi*. Ancient and modern agricultural practice in Greece, however, has always favored the possession of scattered plots of land in order to minimize the risk of localized crop failure and to provide variable conditions for different crops.²¹ The hills surrounding the plain exhibit impressive terracing (see below), indicating that this practice was once a part of the agricultural strategy employed in the plain of Eresos, but the plain must have provided the main base for the cereal cultivation necessary for the polis. Eresos was famous for its barley meal in antiquity, as Athenaeus's citation of the fourth-century B.C. gastronomer Archestratos shows:

The best that one may get, ay, the finest in the world, all cleanly sifted from the rich fruit of barley, grows where the crest of glorious Eresus in Lesbos is washed by the waves. It is whiter than snow from the sky. If it so be that the gods eat barley-meal, Hermes must go and buy it for them there.²²

by several dozen local factories. Thanks are due to Michailis Bathrokoulis for information concerning the phylloxera blight and its consequences.

²¹ P. Garnsey, *Famine and Food Supply in the Greco-Roman World: Responses to Risks and Crises* (Cambridge 1988) 48–53. For the scattered nature of plots in modern times, and the central location of villages to facilitate access to all plots, see J.M. Wagstaff, *The Development of Rural Settlements: A Study of the Helos Plain in Southern Greece* (Avebury 1982) 88–89; J.C. Wright et al., “The Nemea Archaeological Project: A Preliminary Report,” *Hesperia* 59 (1990) 600; A.M. Snodgrass, *An Archaeology of Greece: The Present State and Future Scope of a Discipline* (Berkeley 1987) 74, and 75 fig. 14 (citing the evidence of Forbes in Methana).

²² Ath. 3.111f–112a (trans. C.B. Gulick, Loeb ed.).

²³ Charitonidis 1961–1962 (supra n. 14). These tombs are still visible today; see M. Axiotēs, *Περπατώντας τη*

The coastal plains were the foci of settlement in southwest Lesbos in antiquity. Near these plains, and on important natural routes to and from them, five enclosures built of Lesbian polygonal masonry are situated (fig. 2). The purpose of these installations must be considered in relation to the topography of the coastal areas, which were the main centers of habitation and production in antiquity.

The east coast. Three of the enclosures are located on the coast to the east of the polis center of Eresos, sited at almost equal intervals (ca. 4 km apart) as far north as the Mauros Brachos hill (fig. 2).

The enclosure furthest to the south lies on the bluffs to the west of the valley at Makara. In the valley itself, Charitonidis noted three cist tombs of crudely worked blocks, which he compared to Late Mycenaean tombs at Eleusis and Psara.²³ Although the tombs were devoid of grave goods, Early Bronze Age (and later Archaic/Classical) sherds from the site are in the collection of the British School at Athens,²⁴ and Kontis reported that in 1972 a cistern of Archaic date with Lesbian masonry walls was uncovered in the valley near the settlement.²⁵

That there was occupation at the mouth of the valley in many periods in antiquity is not surprising given the fertility of the small plain at Makara in contrast to the very degraded and barren upper part of the valley further north toward Apothekai. Much of the geomorphological change apparent today had obviously taken place before the locations were chosen for these ancient settlements. The modern hamlet also clings to the valley mouth where wells readily find water, the soil coverage is better, and cultivation can be supported.²⁶

The irregular enclosure of polygonal masonry noted by Charitonidis measured 25 × 13 m, inside

Λέσβο (Mytilene 1992) 531–32, pls. 62, 62a.

²⁴ British School at Athens, sherd archive, *Makara* unpublished.

²⁵ Kontis 335. Kontis does not state whether the cistern was dated to the Archaic period merely because of the style of the masonry. No other dating evidence is mentioned.

²⁶ Three wells are marked on the 1943 British Army map (grid refs. 469584, 469588, 470587), providing plenty of water for the few fields at the valley mouth near the houses. Presumably this soil coverage in the valley mouth is the result of the degradation of the slopes in the upper part of the valley. Cereal crops, olives, and fruits can be cultivated on a limited scale in the valley today, and a century ago cereal crops were marked by Koldewey pl. 31 on his visit to the site.

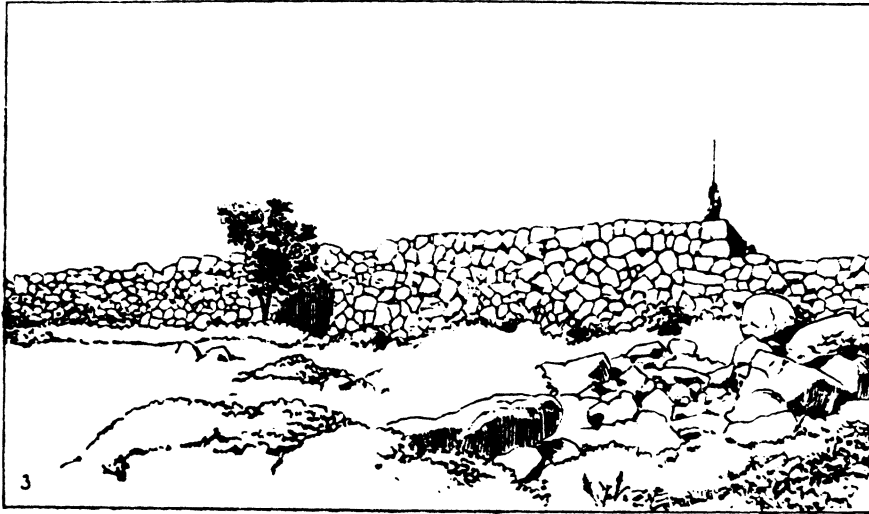


Fig. 3. Apothekai enclosure. (Koldewey pls. 15.2, 15.3)

which was a rectangular tower.²⁷ It stands above the valley to the west, beside a road that leads northwest to the modern village of Agra and eventually enters the plain of Eresos from the east. The view from the site covers the whole of the shore to the south, including the approach by sea to the mouth of the Gulf of Kalloni. The approach to and from the valley of Makara westward toward the polis center of Eresos also can be seen. The importance of the location here at Makara is emphasized by the construction of two later isodomic towers (probably of Hellenistic date) further north in the valley.²⁸

At the small inhabited bay of Apothekai, an enormous platform 41.0 × 45.5 m (with a ramp at one end) was created by polygonal terrace walls, first

located and drawn by Koldewey (fig. 3).²⁹ The low position of the structure suggests that the purpose of this particular edifice was not to serve as a lookout post or some other military function. Indeed, there is no indication that the walls were ever designed to be more than terraces. The massive scale of the terrace wall led Koldewey to associate the site with cult practice.³⁰ In addition to this important feature (paralleled by the massive Archaic Lesbian masonry terrace wall at Delphi), the low position of the site (with a very poor view, completely unsuitable for a defensive post), the very large size of the platform, the ramp at one end, and especially a pottery scatter almost entirely of fine wares³¹ make this a sound assertion.

²⁷ Charitonidis 1960 and 1961–1962 (supra n. 14); see also Axiotes (supra n. 23) 532–33, pl. 62a. There are problems with the exact nature of this enclosure because the reports of polygonal walls at the site vary so considerably. In 1841 Kiepert gave the dimensions of some polygonal walls at Makara as “200–250 feet” in a north-south direction (ca. 61–76 m) and “70 feet” (ca. 21 m) from east to west (Koldewey 87). These walls were preserved to a height of 1 m. Yet in 1855 when Boutan visited the site, he reported “an impressive Pelasgian wall, nearly completely undamaged. It is 6 m. in height and 5 m. long” (Paraskeuaidis 144). Kiepert’s report (and sketch) makes no reference to such a high piece of polygonal walling, but the exact nature of Boutan’s “Pelasgian” wall (is “polygonal” to be understood?) is unclear. It is unattested by any other source and, had such a section of polygonal walling existed, Kiepert would surely have seen it when he visited the site 14 years earlier. Whether Kiepert’s or Boutan’s walls were part of the same structure seen by Charitonidis (since broken down to the smaller size he reported in

1961–1962?) is unclear. Today only the structure illustrated in 1961–1962 is visible and it is impossible to reconcile Kiepert’s large dimensions for the “polygonal” walls he saw with any later reports. Charitonidis states that the enclosure (the measurements for which he gives) had straight edges with rounded corners, and that there was a tower inside (for the latter he gives no details). His illustration, Charitonidis 1960 (supra n. 14) pl. 210d, shows part of a structure that possesses a rounded corner that is presumably part of the enclosure. Today no trace remains of the tower said to have been inside the enclosure, and the enclosure has been extensively rebuilt to serve as a *mandra* or shepherd’s fold.

²⁸ Koldewey 62, pl. 27.3, 5.

²⁹ Koldewey 43–44, pl. 15.

³⁰ Koldewey 44.

³¹ A black-figure sherd from the site exists in the archive of the British School at Athens, and other fine wares of many periods (as late as the Roman period) are visible at the site itself.

The location of Apothekai, however, is critical in understanding this structure. The site overlooks the small bay and harbor around which a small modern fishing village is centered, one of the two inhabited locales (and the only obvious harbor) along this coastline. It is also from this bay that the other road northwest toward modern Agra leads inland over the gentle contours of this part of the coastline. The importance of this location is emphasized by the siting nearby of a Hellenistic tower employing isodomic masonry, a structure that Koldewey suggested had been designed to serve as a watchtower, with a view over the bay.³²

Furthest to the north, on the most southern spur of the Mauros Brachos hill (named Aetos), Charitonidis and Kontis both report an enclosure of polygonal masonry (now incomplete).³³ The north-south wall measured 33.3 m long, the east-west wall 14.9 m, and inside the enclosure wall internal divisions were visible.³⁴ Lower on the south-facing slopes of Aetos, olives are terraced today, but on top of the spur where the enclosure stands, there is no clear evidence of terracing nor are there other traces of habitation activity. This may be because the loss of soil coverage from the upper part of the hill is so extensive that the area is now considered unviable for cultivation. The land is reduced to bare rock in places and only maquis covers the slopes.

The position of this enclosure marks the end of the low approaches west to the interior of the island toward the polis center of Eresos. It is only to the south of Aetos that the lower contours offer easy communication with the interior of the island (toward Agra some 5 km further inland). Further north, Mt. Kladia forms a substantial barrier to any attempted progression westward toward Eresos. The site of Aetos is therefore particularly important because it marks the first point along the coast where one can easily proceed inland. In addition, a

fine view of the Gulf of Kalloni is obtained from the site.³⁵

The west coast. On the west coast, there is only one coastal plain before Sigri³⁶ and in this river plain (the Tsichliontas) there are traces of habitation together with an enclosure of polygonal masonry. The south side of the valley mouth is permanently flooded, so only part of the valley floor can be cultivated (some fig trees are grown on the south side of the river near the shore). The steep sides of the valley, well exceeding the angle of slope considered critical for plowing,³⁷ show few signs of modern or abandoned terracing except to the southeast.

The remains of the enclosure stand at the valley mouth near the coast. Only one wall is now visible, and this stands on the low plateau immediately above the modern road leading from the valley north toward Sigri.³⁸ There are also “megaron”-style building remains on the sheltered east spur of the Lesbos hill on the north side of the plain,³⁹ and nearby was found the oldest-known inscription from the island, a much-damaged boustrophedon example.⁴⁰

The activity in this plain marks the point furthest west for which there is such evidence in the Archaic period. The dual importance of the enclosure’s position is that it lies at the mouth of the Tsichliontas valley, and also above the only route in and out of the plain. This valley offers the easiest approach to the plain of Eresos from the west coast, which surely explains the location of the enclosure here. The importance placed on this deep river valley for communication in the west of the island is underlined by the construction of two Hellenistic towers further up the valley to the north.⁴¹

The approach from the north. The only possible approach to the polis center and the plain of Eresos from the north is along the barren, rocky valley through which the present road winds from mod-

³² Koldewey 62.

³³ Charitonidis 1961–1962 (supra n. 14) pl. 320a; Kontis 332.

³⁴ Kontis 332.

³⁵ Kontis 332.

³⁶ Kontis 338 notes that the surface remains around Sigri are all late in date (Late Antique and medieval), but he also suggests that this area must have been settled in all periods because of its geographical advantages. A Mycenaean stirrup vase purchased in Sigri was found between Sigri and Telonia (modern Antissa), see Koldewey 38, sketch.

³⁷ M. Wagstaff and C. Gamble, “Island Resources and Limitations,” in C. Renfrew and J.M. Wagstaff eds., *An*

Island Polity: The Archaeology of Exploitation in Melos (Cambridge 1982) 101; here the authors propose a viable limit of 5% slope for plowed land. Wagstaff (supra n. 21) 74–75 considers a slope of <5% in relation to choice of settlement location. One should not, of course, be too dogmatic about taking this “5%” as a strict limit to cultivation, especially if arable crops are not part of the equation, as Lin Foxhall pointed out to me.

³⁸ Sophoklis Roumeliotis, personal communication.

³⁹ Charitonidis 1964 (supra n. 14).

⁴⁰ S. Charitonidis, *Αι Επιγραφαι της Λέσβου* (Athens 1968) 92 (no. 135), pl. 46b.

⁴¹ Koldewey 62, pl. 27.1–2.

ern Antissa. On both sides of this valley, the high hills of Skaphi and Pachi (reduced nearly completely to bare rock) show no signs of terracing or former cultivation and the land is now considered too marginal for cultivation, used today only for marginal pasturage by shepherds from Eresos. This main valley running north-south is joined by another from the east (the Metalia valley) some 3 km northeast of modern Eresos, and it is at precisely this junction that another enclosure of Lesbian masonry was set up at a place named the "Megalos Lakkos." This small enclosure of less regular polygonal masonry stands on the west slope of the valley somewhat above the modern road.⁴² From this position one can look down the Metalia valley to the east and also over the valley that runs north-south, thereby watching the two possible approaches toward the polis center of Eresos from the north.

Definition of the chora of Eresos

From these observations, it is clear that the enclosures occupy significant positions in relation to the natural routes through the more marginal regions of southwest Lesbos, leading to the central plain in which the polis center of Eresos lies. Four of the five enclosures are located near the coast; the three to the east lie in an area where the immediate hinterland allows easy passage inland; on the west coast, the Tsichliontas valley forms a similar corridor in the landscape leading toward the central Eresos plain, and this passageway is again marked by an enclosure of polygonal masonry. The only inland enclosure at the Megalos Lakkos lies on another important route toward the central settlement, at the junction of the only two possible low-level valley approaches from the north.

Koldewey emphasized that the Classical/Hellenistic towers with isodomonic masonry in the west of the island were important in the definition of the *chora* of Eresos,⁴³ fulfilling a function similar to those in northern Attica, which are suggested to lie on the

Classical border between Attica and Boiotia.⁴⁴ Kontis, however, created his "border" of the polis of Eresos by drawing a more arbitrary line across the southwest of the island (fig. 2). The criteria for the border he proposed seem to have been conditioned in three ways: partly by these isodomonic towers (although by ignoring the tower at Xerokastron, Kontis's version of the *chora* of Eresos was smaller than that of Koldewey); partly by two Classical towers of coursed polygonal masonry at Kourouklo⁴⁵ and northeast of Chydera;⁴⁶ and especially by the later ecclesiastical boundaries. Kontis also concluded that the *chora* of the polis of Eresos was the same size from the Geometric period until the fourth century A.D.⁴⁷ This is clearly unacceptable since, among other problems, there is not yet any evidence for the existence of a central settlement in the Geometric period. It is proposed instead that in the Archaic period the enclosures of polygonal masonry were of special importance in defining the marginal points in the *chora*. It needs to be demonstrated first, however, that the definition of marginal areas of territory was of importance to Archaic poleis in Greece. By the Classical period great emphasis was placed upon polis borders,⁴⁸ but were there such concerns about the definition of the *eschatiai* in the Archaic period?

Much recent attention has been focused on this question, especially the *religious* aspect of the Archaic territorial definition and group identity. Snodgrass discussed the possible importance of Early Archaic cults in relation to polis territory,⁴⁹ while de Polignac detailed the marginal position of many cults in Archaic poleis and different roles played in the emerging states by these religious entities.⁵⁰ Points of special relevance here are de Polignac's observations on the location of cult sites at the edges of plains (a feature of many of the enclosures in Lesbos),⁵¹ and also the establishment of liminal installations by newly founded colonies.⁵² At pres-

⁴² Charitonidis 1964 (supra n. 14); Kontis 332.

⁴³ Koldewey 61–62, pl. 27.

⁴⁴ For the most recent discussion, see J.M. Camp II, "Notes on the Border of Attica and Boiotia," *AJA* 95 (1991) 193–202. The whole Athenian defensive system on this border in the fourth century B.C. is analyzed by J. Ober, *Fortress Attica: Defense of the Athenian Land Frontier 404–322 BC* (*Mnemosyne* Suppl. 84, Leiden 1985).

⁴⁵ S. Paraskeuaidis, "Οδοιπορικές σημειώσεις," *Tachydromos* 26 (September 1929).

⁴⁶ S. Paraskeuaidis, "Οδοιπορικές σημειώσεις," *Tachydromos* 29 (September 1929).

⁴⁷ Kontis 127–28, 318, figs. 17–28.

⁴⁸ See Camp (supra n. 44) and Ober (supra n. 44); also D. Rocchi, *Frontiera e confini nella Grecia antica* (Rome 1988) passim, and S.E. Alcock, *Graecia capta: The Landscapes of Roman Greece* (Cambridge 1993) 118.

⁴⁹ A.M. Snodgrass, *Archaic Greece: The Age of Experiment* (London 1980) 38–40.

⁵⁰ F. de Polignac, *La naissance de la cité grecque* (Paris 1984) passim.

⁵¹ de Polignac (supra n. 50) 42–44.

⁵² de Polignac (supra n. 50) 93–126, passim.

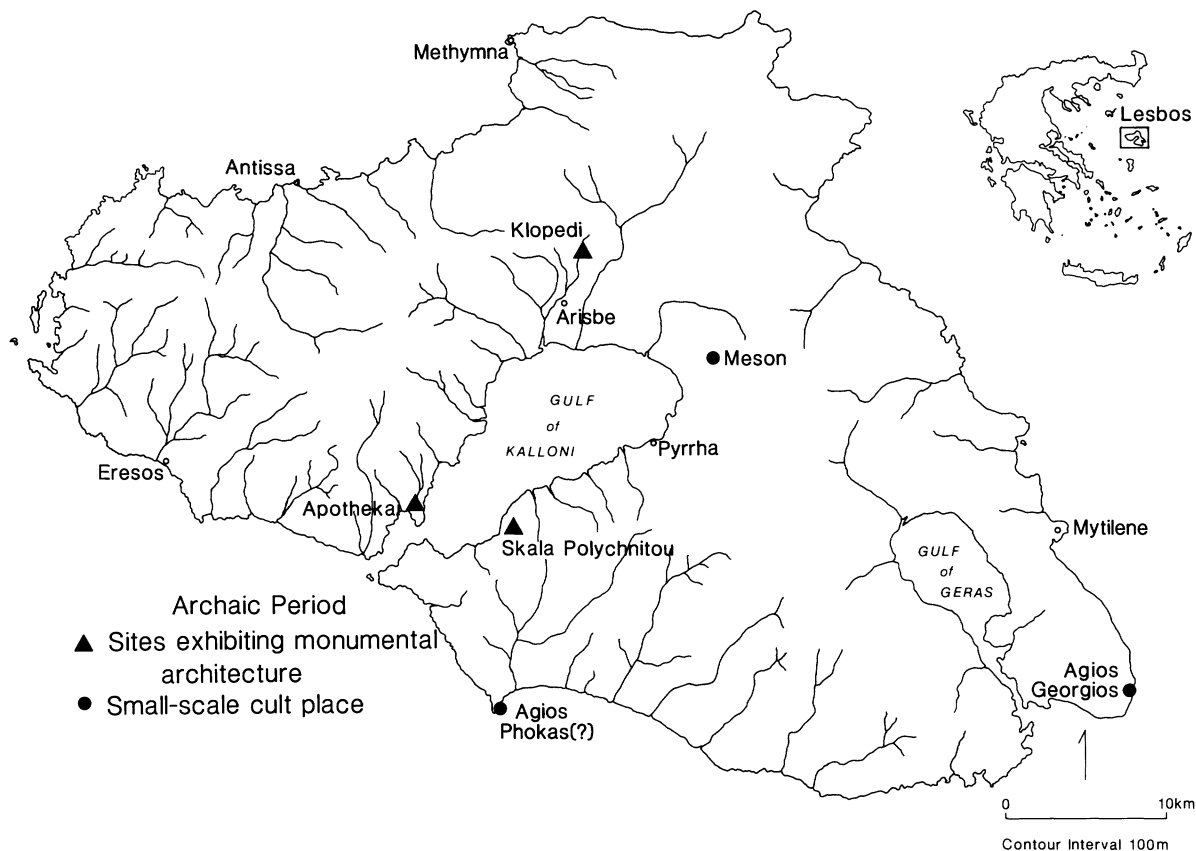


Fig. 4. Archaic cult sites on Lesbos. (P. Schaus)

ent, occupation at the polis center of Eresos can only be traced from the Archaic period, implying that this group of Aeolian Greeks may have been as new to Lesbos as those colonizing groups that de Polignac cites as being primarily concerned with defining their territories in Sicily.⁵³

The site of Apothekai is a good example of an Archaic site where cult was practiced in an area marginal to any central settlement. Five other Archaic cult sites in Lesbos (both small-scale and monumental) are also (surely not coincidentally) either in positions remarkably distant from any polis center or in a location “marginal” in some other sense, such as at the edge of an extensive plain (fig. 4). Yet none of the other enclosures in the southwest of the island appear to be cult sites based on the architecture and the associated finds, so de Polignac’s model cannot be applied to all the data. Indeed, in southwest Les-

bos, and throughout the whole island, the marginal cult sites are spatially distinct from the enclosures of polygonal masonry (see fig. 5). The establishment of a monumentally built cult site therefore appears to be only a *complement* to other expressions in the marginal areas of southwest Lesbos in the Archaic period.⁵⁴

It seems clear, therefore, that the Eresians were ready to invest a great deal of time and effort in constructing a series of carefully built edifices far from their central settlement, in positions that could arguably be said to define their *chora*. The models suggested for other areas of Archaic Greece, however, in particular the religious definition of the polis *chora*, can be applied only in part. Where the land of the Eresians was closest to that of another polis, on the east coast opposite Pyrrha, three installations were set up; one was a monumentally built site of

⁵³ de Polignac (supra n. 50) 110–13.

⁵⁴ The precise function of these other non-cult sites is obviously a major question for the enclosures of polygonal masonry in the central and western parts of the island, but it raises issues far beyond the intended scope of these

topographical notes. See the full discussion in Spencer (supra n. 11) 151–93; and N. Spencer, “Multi-dimensional Group Definition in the Landscape of Rural Greece,” in N. Spencer ed., *Bridging the “Great Divide”: The Social and Temporal Contexts of Greek Archaeology* (in preparation).

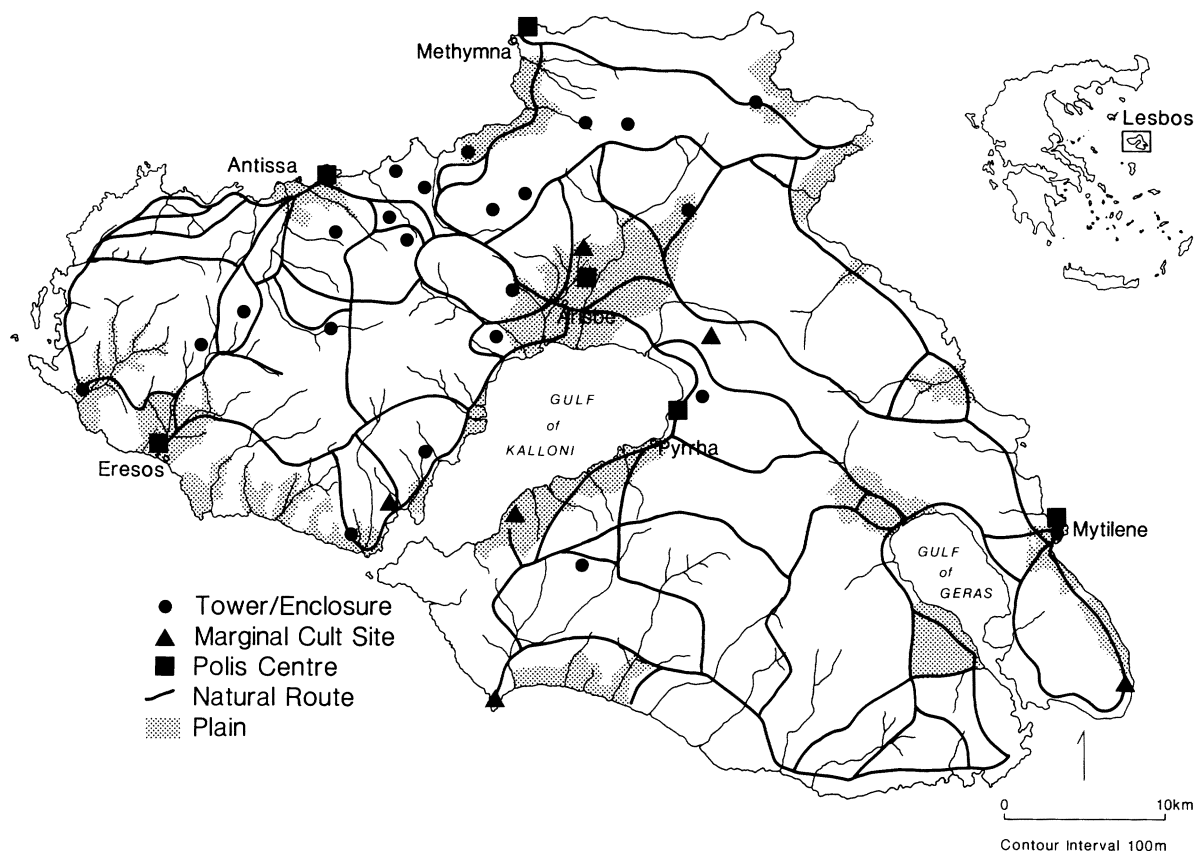


Fig. 5. Towers/enclosures and polis centers on Lesbos. (P. Schaus)

cult practice, while two other, less formal structures were also established.⁵⁵ In times of tension between the poleis, these installations were suitable to serve as watchposts (and possible refuges for any nearby inhabitants), but at other times they probably served a number of roles in the marginal, largely pastoral areas of the *chora*.⁵⁶ The one feature common to all these installations is their significant topographical position in relation to the routes through the *chora* to the central resource area of the polis, the plain of Eresos. That is why similar edifices were set up on

the only other approaches to this valued central area of the polis from the north and west. Perhaps it is significant that in these last two areas, less need was felt to build an intensive system such as that employed on the east coast (where the lands of the polis of Pyrrha were only 5–6 km away across the narrow bay). To the north and west, the mountainous hinterland and few low passes insured that any perceived threat from the nearest neighbor, Antissa, would have been much less immediate and could be countered by just two installations.

⁵⁵ This is an interesting parallel for another observation of de Polignac's regarding the Archaic Greek colonies of Italy and Sicily. He notes (*supra* n. 50) 112–13 that in cult places oriented toward the indigenous peoples, the architecture employed was more modest. Sites facing other Greek communities, however, employed more monumental, and recognizably "Greek," construction work. This model is of interest not only because at Apothekai the scale of the cult building is immense, but because opposite Apothekai on the shore of the coast of Pyrrha (near Skala Polychnitou), fragments of a Late Archaic Ionic temple and altar provide the only trace of monumental religious

architecture along the whole coast, G. Daux, "Chronique des fouilles en 1959," *BCH* 84 (1960) 809; Charitonidis 1960 (*supra* n. 14) *Chronika* 237, pl. 209e; M. Paraskeuaidēs, "Νέες αρχαιολογικές ενδείξεις για τη Λέσβο," *Lesbiaka* 5 (1965) 203, 211–12; Paraskeuaidēs, *Η σελλάδα της Αγίας Παρασκευής της Λέσβου—Επίμετρον* (Athens 1970) 261. One could hypothesize that the more informal enclosures elsewhere were aimed at the indigenous population, while the larger-scale and more recognizably "Greek" cult places were set up merely where the lands of two poleis came closest together.

⁵⁶ Spencer (*supra* n. 54).

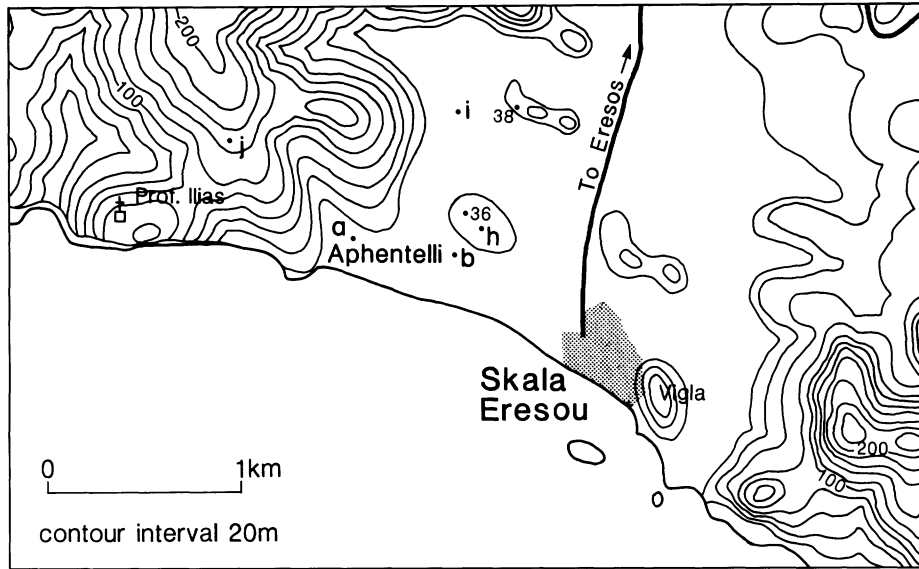


Fig. 6. Lower valley around Eresos. (P. Schaus)

THE SHORELINE AT ERESOS

The present shoreline at Eresos follows almost a straight line beginning from the steep ridge bounding the plain on the west, and going eastward as far

as the southwestern edge of the ancient acropolis (figs. 6-7). It then curves gently southeastward to the modern harbor mole. This present line of the shore has not appreciably changed in the past 100 years since Koldewey surveyed the valley in 1885-

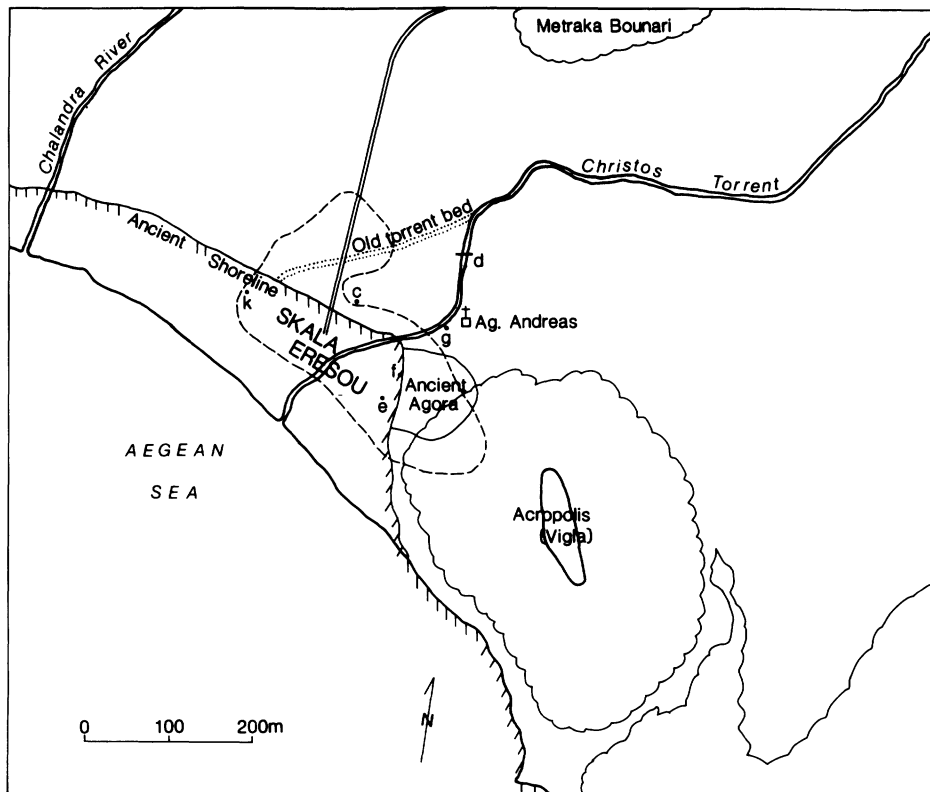


Fig. 7. The coast at ancient Eresos. (After Laskaris, map between pp. 72 and 73)

1886.⁵⁷ There is good evidence to suggest, however, that it indeed has shifted 100 m or more since antiquity, and although this is not a great change, it is significant since it has altered to some extent the natural position of Eresos's acropolis in relation to the sea and so perhaps affected the anchorage close to Eresos.

Silt brought down the valley streams from the hills enclosing Eresos, together perhaps with shifting coastal sand, has caused the shoreline to move further to the south in the last two millennia. The evidence for this shift was first noted by G. Laskaris, who accompanied his study of Eresos's antiquities with a map suggesting where the line of the ancient shore once was (see fig. 7, after Laskaris).⁵⁸ His evidence, and more that has come to light in recent years, consists mostly of ancient remains delineating the possible limits of the earlier shore to the north of the present one. There is, however, also some negative evidence from recent trenches dug for building projects close to the beach in Skala Eresou. In this area near the foot of the ancient acropolis, one would expect to find preserved remains in clear strata; however, there is in fact a notable absence of stratified material.⁵⁹ This in itself suggests that the beach and the land just behind it lying to the west of the ancient acropolis (Vigla) were once under water.

Ancient remains have been located at various points a short distance north of the coast. In all areas, these remains represent the northernmost possible limit of the coast in antiquity and in all cases they are buried from 0.50 to 1.00 m or more below the present-day ground surface, suggesting the amount of soil deposition since antiquity contributing to the shift of coastline.

Beginning at the far west end of the beach, an area called Aphentelli by the local people, in 1926 a mosaic floor belonging to a large Early Christian

basilica was found at a depth of a little over 0.50 m. It is located 250 m from the present shore, close to the rocky ridge that rises up from the plain and encloses the valley on the west (fig. 6:a). The site was excavated in 1927–1928 by Orlandos, and dated on the basis of the mosaic inscription to the second half of the fifth or first half of the sixth century A.D.⁶⁰

About 400 m to the east of the basilica, 300 m to the west of the Chalandra riverbed, and 350 m north of the shoreline, a pair of ancient walls running parallel to the shore has been exposed at more than a meter depth in the middle of a field (fig. 6:b).⁶¹ Determination of their date and use requires further study.

In Skala Eresou, Laskaris pointed out three ancient sites of significance for defining the earlier shoreline. About 70 m to the west of Aghios Andreas church, a pithos was found at a depth of 2 m, containing two lamps, a cup with a narrow spout, an aryballos decorated in "Asiatic style," and a very large tooth (fig. 7:c).⁶² Cutting across the present bed of the Christos torrent, 90 m to the north of Aghios Andreas, is the wall of a large building made of ashlar masonry (fig. 7:d).⁶³ On the basis of this find, Laskaris suggested that the ancient torrent bed must have run further to the north and west to reach the shore. Finally, there is a segment of the city wall on the west side of the acropolis. Laskaris noted that the wall must begin a little behind the house of the local priest, S. Konstantinidi (figs. 7:e and 8:e), without, however, showing exactly where this was on his map. He pointed out that the wall is seen clearly at the base of the southwest corner of the enclosure wall around Aghios Andreas (figs. 7:g and 8:g).⁶⁴ In recent years another section of the ancient city wall was found exactly where Laskaris suggested it must run. Between the house of S. Konstantinidi and the previously known section of wall

⁵⁷ A comparison of Koldewey's map of the area with World War II photographs and maps, or more modern maps (though available ones are at a smaller scale), shows no apparent change of shoreline. Some filling in of the small modern harbor is noticeable, especially at the shore end of the modern mole.

⁵⁸ Laskaris 68, 70, map between pp. 72 and 73, reproduced in Papazoglou 154.

⁵⁹ No stratified remains in the area of the village close to the beach have been reported in excavation notices despite much recent building activity. In 1988, for example, while foundations for a new building near the post office were being constructed ("k" on figs. 7–8), no evidence of any occupation strata whatsoever could be observed.

⁶⁰ A. Orlandos, *ArchDelt* 12 (1929) 43–71.

⁶¹ I. Papazoglou (personal communication) reports that these walls were exposed by the Antiquities Service on land that was proposed as a hotel development. No report on their excavation has appeared yet to our knowledge.

⁶² Laskaris 73. Laskaris noted that antiquities were found commonly in new building projects around this site but that they went unreported by the owners and workmen.

⁶³ Laskaris 69, 71–72, mentioned that it crosses from the property of Joseph Abagianou (owned by L. Linara) to that of K. Konstantinidi. The wall was kindly pointed out by I. Papazoglou.

⁶⁴ Laskaris 69. The house of S. Konstantinidi is noted by Laskaris (p. 70) as the location of the mooring ring (see *infra*) set into a large marble block.

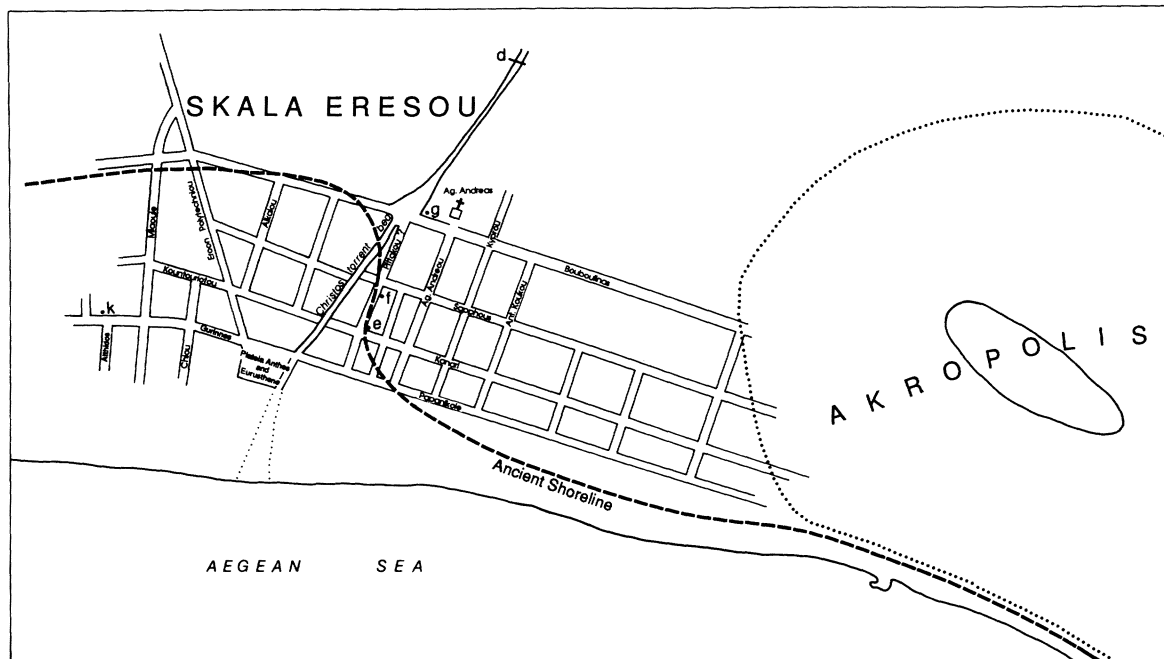


Fig. 8. Map of Skala Eresou. (A. Head and P. Schaus)

near Aghios Andreas, a 5-m-long section described as pseudo-isodomic masonry was excavated and reported on by the Antiquities Service (figs. 7:f and 8:f).⁶⁵

A probable mooring ring, however, is the most important piece of evidence for the ancient shoreline. It was found during construction of S. Konstantinidi's house in the 1930s and buried again in the foundations of the building (figs. 7:e and 8:e). Laskaris only says that a large ring (χαλκάς) was set in the middle of a large square marble block, which itself sat on other smaller ones.⁶⁶ Papazoglou repeats the same information about the large stone blocks (τεράστιοι πέτρινοι όγκοι) but adds that the ring was made of iron.⁶⁷ Prof. Papazoglou, who once saw

the ring himself, kindly pointed out the spot where the ring was found and indicated that it was some 40 cm in diameter. It seems very likely that it served the purpose that Laskaris and Papazoglou claim for it, to tie up ships along the waterfront, and if it is indeed of iron, a date in the Roman period seems most likely.⁶⁸ Assuming such a date, this area to the west of the acropolis must have been a second place where boats could tie up at Eresos in the Roman period, and no doubt earlier. The ancient mole that extends southward from the southeast side of the acropolis probably provided greater shelter from stormy seas. This mole has not been studied closely, though more attention ought to be given it.⁶⁹ The core of this structure is made of medium-sized and

⁶⁵ A. Archontidou-Argyri, *Lesbiaka* 12 (1989) 58. This section of the wall is described as 3.00 m wide and 5.10 m long, in pseudo-isodomic masonry. Its location is given as the property of Konstantinidi on Pittakou Street. There is no street name plaque along this street, nor did any of the local residents seem to know its name when they were asked, but the section of wall visible in an open basement some 50 m south of the Aghios Andreas wall section must be that described by Archontidou-Argyri.

⁶⁶ Laskaris 70.

⁶⁷ Papazoglou 17.

⁶⁸ D.J. Blackman, "Ancient Harbours in the Mediterranean," *IJNA* 11 (1982) 203 notes that "ships made fast to pierced mooring-stones or to bollards or, in the Roman period, to iron rings." He gives a fair sampling of both mooring stones and bollards (203-204), but all are of stone

and he makes no further mention of the iron rings. For problems of mooring methods, see also Blackman's paper summarized in A. Raban ed., *Archaeology of Coastal Changes* (*BAR-IS* 404, Oxford 1988) 34.

⁶⁹ The mole is discussed briefly by Lehmann-Hartleben (supra n. 6) 76-77 n. 5, 103 n. 1, 104 plan xiii, 254 cat. no. 89, who noted the width as 17 m and that it was built over a natural stone reef. Kontis 327 gives its width as about 7 m and mentions a wall built over the outside (eastern?) half of the mole. He states that it is constructed in the same manner as the moles of Mytilene and other cities on the island and that all were built during the Classical period. Lehmann-Hartleben is correct that it is built over a natural stone reef, but Laskaris's measurement of 7 m is correct, at least for the section still preserved and visible beyond the modern mole.

large stones set in cement, which suggests a date no earlier than the Roman period for its construction. Evidence for earlier harbor facilities must still be sought.

Laskaris's suggested line for the ancient shore is therefore confirmed, though with some minor adjustments and more accurate placement on a map. It is worth stressing, however, that this shift of the shoreline over the past two millennia has changed the appearance of the coast around the acropolis of Eresos. In antiquity, the acropolis jutted out more into the sea, with the shoreline wrapping itself around the acropolis on the west side.

Two ancient authors describe the seaside position of this acropolis. Strabo (13.2.4) notes simply that Eresos is situated on a hill and that it reaches down to the sea ([Ἐρεσσός] ἴδρυται δ' ἐπὶ λόφου καθήκει τε ἐπὶ θάλατταν). More important though is the reference in Athenaeus (3.111f) quoting the gastronomer, Archestratos (*SH* 135), who describes the acropolis as a "μαστόν περικύμονα": ἐν Λέσβῳ κλεινῆς Ἐρέσου περικύμονι μαστῶ.⁷⁰ The sense of the adjective "περικύμονι" is "surrounded by waves," and so used of islands, as Archestratos himself describes Lesbos, ἐκ Λέσβου περικύμονος ἐκγεγαῶτα (*Ath.* 1.29b, *SH* 190), or as Euripides writes of Salamis, μελισσοτρόφου Σαλαμίνος . . . νάσου περικύμονος (*Eur. Tro.* lines 799–800). One may also, however, imagine it applied to a promontory jutting into the sea, so that the sea "lies around" it. The present situation of Eresos with the sea touching the acropolis only on one side makes "περικύμων" seem inappropriate, but as we have seen, the ancient shoreline must once have curved around part of the western side of the acropolis. The shore could never have curved very far around the acropolis in antiquity judging from the presence of archaeological remains. The fact that a harbor mole was eventually built at the southeastern side of the acropolis, pre-

sumably to offer protection for boats, also confirms that the curve of the shore west of the acropolis offered little natural shelter.⁷¹

AGRICULTURAL TERRACING

There's not another wine pleasanter to drink than a draught of Lesbian, says Alexis.

—Athenaeus⁷²

So therefore of the many wines which come from Lesbos, . . . the best is the one which is produced in Eresos, then the one in Methymna, and the third is that produced in Mytilene.

—Galen⁷³

While the eastern half of Lesbos is largely covered by olive trees and pine forests, the western half, in stark contrast, has great areas where the hills are entirely treeless. The barren hillslopes in the region of Eresos are used today for little except pasturing sheep and goats. Yet it is clear that these same barren hillslopes were once extensively cultivated. The evidence for this was first noted by Koldewey in 1885 while studying the antiquities of southwest Lesbos. He observed a number of places where long low terrace walls had been built over extensive areas of hillsides, no doubt for agricultural purposes. These terraces, however, had long been abandoned even then. He took note of these "Stützmauern" especially in the region of Makara, in the area north of Parakoila at Kamara and Pigado, and between modern Eresos and modern Antissa (formerly Telonia) (fig. 2). As to their exact purpose, he suggested that the long, narrow terraces supported by these walls did not offer enough room for growing grain, and they did not suit olive trees, so that they must have been constructed specifically for the growing of grapes.⁷⁴

His conclusion about the use of the terraces makes sense. The narrow width of these terraces, as

⁷⁰ This line is accepted as transmitted by H. Lloyd-Jones and P. Parsons, *Supplementum Hellenisticum* (Berlin 1983) (abbreviated in the text as *SH*) 48 no. 135 line 5, but a couple of emendations have been offered by other editors. I am grateful to R. Fowler for his helpful comments on this passage.

⁷¹ Büchner (*RE* 6.1 [1907] 420, s.v. Eresos) argued that when Thrasyboulos brought an Athenian fleet of 40 ships to attack Eresos [392 or 389 B.C., not 412 B.C. as Büchner suggests, 421] (*Diod.* 14.94), he anchored off the coast during a storm because there was not enough room for his whole fleet in the harbor created by the still visible mole. The storm consequently destroyed 23 of his

ships. One might assume that Thrasyboulos would attempt to take advantage of any coastal shelter available to save his fleet, without of course exposing his ships to attacks by the Eresians. Finding no viable alternative, he decided to ride out the storm. This assumption is not very secure, however, since we have no information about other circumstances of the incident, including for example the direction and speed of onset of the storm.

⁷² *Ath.* 1.28e.

⁷³ *Gal.* 14.28k. See *infra* n. 77. Citations of Galen are by volume and page in C.G. Kühn ed., *Galenus, Opera Omnia* (Leipzig 1821–1833).

⁷⁴ Koldewey 38–39.

well as the steepness of the hillslopes, would make it very difficult for plowing in order to sow grain. Land on the valley floor would, therefore, be much more suitable for such crops. For olives, the system of terraces would not need to be as extensive as it is, with long continuous lines of walls. If olives were the intended crop, individual trees could often have been supported by small semicircular terraces such as those used for olive trees today on the hills between Mytilene and the Gulf of Geras. At the very least, one would expect to find some places where terraces for individual trees had been created rather than the long narrow terraces found throughout.

Besides the terraces themselves, the other piece of evidence that suggested grapes to Koldewey was the presence of large stones once belonging to grape presses. He noticed three such stones at Kamara near Parakoila, and illustrated one with a cross carved into it.⁷⁵ This, he thought, showed that in the Byzantine period the stone was no longer used in a press. He found no such stones around Makara, but noted that all vine-growing areas, including Makara, must have had these press stones.⁷⁶

Lesbos was renowned in the ancient world for its wine. As early as the seventh century B.C., wine was exported from Lesbos to Egypt (by Charaxos, the brother of Sappho) (Strab. 17.1.33). It is often praised by ancient writers, such as Ehippus, a fourth-century B.C. comic writer: "Many the drops of Lesbian that are gulped down eagerly" (Ath. 1.28f); Archestratos, also from the fourth century: "Lesbian will seem to you to possess the glory of ambrosia rather than wine" (Ath. 1.29c); and Eratosthenes, a third-century B.C. physician, who is quoted by Pliny (*HN* 14.73) as having included Lesbian wine with that from Chios and Thasos as "one of the wines held in highest esteem."⁷⁷

The grapes of Lesbos in antiquity have been described by one scholar as growing in bushes along the ground without any stakes or supports, but in fact there is no clear evidence to substantiate this.⁷⁸ The description may simply be based on a variety of

grape still cultivated on the island. On the other hand, it is worth noting Pliny's description of the grapes of Chios and Thasos, relative neighbors of Lesbos among wine-producing regions of the Mediterranean:

From Chios or Thasos is imported a Greek light wine not inferior in quality to the Aminaean vintages; the vine has a very tender grape and such small clusters that it does not pay to grow it except in very rich soil.⁷⁹

It is not difficult to imagine the same type of grapes being grown on Lesbos.

Athenaeus (1.30b) notes that the people of Mytilene have a special wine called *prodromus* or *protropus*, which refers to the first flow of juice from the presses made by the weight of the grapes themselves, before the press stone is lowered on them.

Galen not only praises the wine of Eresos as the best from the island, he gives a good description of that wine and why it is esteemed:

Lesbian wine is very fragrant, less so in Mytilene, more and at the same time better in Eresos and Methymna.⁸⁰

So also of the many wines which come from Lesbos, the tawny-colored and light wine, fragrant and least astringent, having the slightest hint of sweetness—this is not at all unclear; this one is properly called Lesbian. But the best such wine is produced in Eresos, then the one in Methymna, and the third is that produced in Mytilene. So you may select the best among these, judging by the aforementioned criteria. For whichever may be the most fragrant, and sweetest, and lightest in consistency among what is available, this is the best.⁸¹

The abandoned terraces that Koldewey's keen eye observed on the barren hillslopes of southwest Lesbos are especially visible in the raking sunlight of mid-morning and mid-afternoon (fig. 9). What is difficult for any observer on the ground to do, however, is to demonstrate just how extensive the system of terraced hillslopes is in this part of the island. Here we can judge better from studying aerial pho-

⁷⁵ Koldewey 39, top figure. He also illustrates (p. 37, top figure) another stone from a wine press found at Tsulumudra (Tsilikoundra) near the northwestern tip of the island.

⁷⁶ Longus (2.13) mentions such a press stone and the ropes used for hauling it up, in a scene set on Lesbos.

⁷⁷ Ancient references to Lesbian wine are collected by B. Clinkenbeard, "Lesbian Wine and Storage Amphoras: A Progress Report on Identification," *Hesperia* 51 (1982) 254–56. Other references include Strab. 14.1.15, 14.2.19;

Vitr. 8.3.12; Hor. *Carm.* 1.17, *Epod.* 9.34; Pliny *HN* 14.9.74, 14.16.97; and Gal. 6.334, 10.832, 11.604 (also 13.405 and 14.28k, see below).

⁷⁸ *RE* 12.2 (1925) 2119, s.v. Lesbos (L. Burchner). Repeated by Clinkenbeard (*supra* n. 77) 256. Longus (4.2) describes a taller, rarer type of grapevine seeming to reach the height of fruit trees.

⁷⁹ Pliny *HN* 14.4.25 (trans. H. Rackham, Loeb ed.).

⁸⁰ Gal., *Περὶ συνθεσέως φαρμάκων τῶν κατὰ γένη* 1.8.

⁸¹ Gal., *Περὶ ἀντιδότηων* 1.5.



Fig. 9. Terraced hillslope on west side of Eresos valley. (Photo G. Schaus)

tographs taken in 1943 over almost the entire district (e.g., fig. 10, the area near modern Eresos).⁸² One set of photographs was taken around midday in June, while a second, better set was taken during the late afternoon in November. Viewed through a stereoscope, the overlapping photographs yield a three-dimensional bird's-eye view of the landscape. Because the hills are so barren of vegetation, they reveal very clearly the shadows of the terracing, at least on the east and north slopes of the hills. It is more difficult to see the terraces on south and west facing slopes. Nevertheless, an attempt can be made to trace the extent of the ancient vineyards in the area covered by the photographs (see fig. 11). Observations of terraced areas made from the photographs were then checked by fieldwalking over approximately 70% of the coverage area.

It is obvious from the photographs that large-scale terracing of the lower, middle, and even upper slopes of the hills throughout southwest Lesbos occurred wherever there was sufficient soil cover. In the best cases the walls are built of carefully laid fieldstones and are preserved up to a meter in

height. Many other times the walls are barely recognizable ridges of stones pushed to one side to create a somewhat flat, less rocky, long narrow terrace behind them. In the worst cases, rocks have been collected into piles in a kind of random way and no clear terrace can be discerned. Although they are rare, at least one well-built set of stairs was found built into a terrace wall.

It is common to find well-preserved, carefully built field boundary walls surrounding these terraced or at least "cleared" areas. These, no doubt, mark boundaries for ownership purposes, but they may have had another function as well. It is very common to find such walls in Greece today topped by a continuous row of thorny bushes or sharp branches in order to prevent sheep and goats from climbing the walls. If such were the practice around Eresos in antiquity, it would be especially valuable in protecting vineyards from the flocks, at least more so than protecting orchards of olive or fig trees.

The evidence of the terracing gives a strong hint that the population in this region was greater than in the recent past since the land was much more

⁸² The entire island was photographed from the air; only a small selection of the available photos was ordered

from the University of Keele Air Photo Archive for use in the present study.

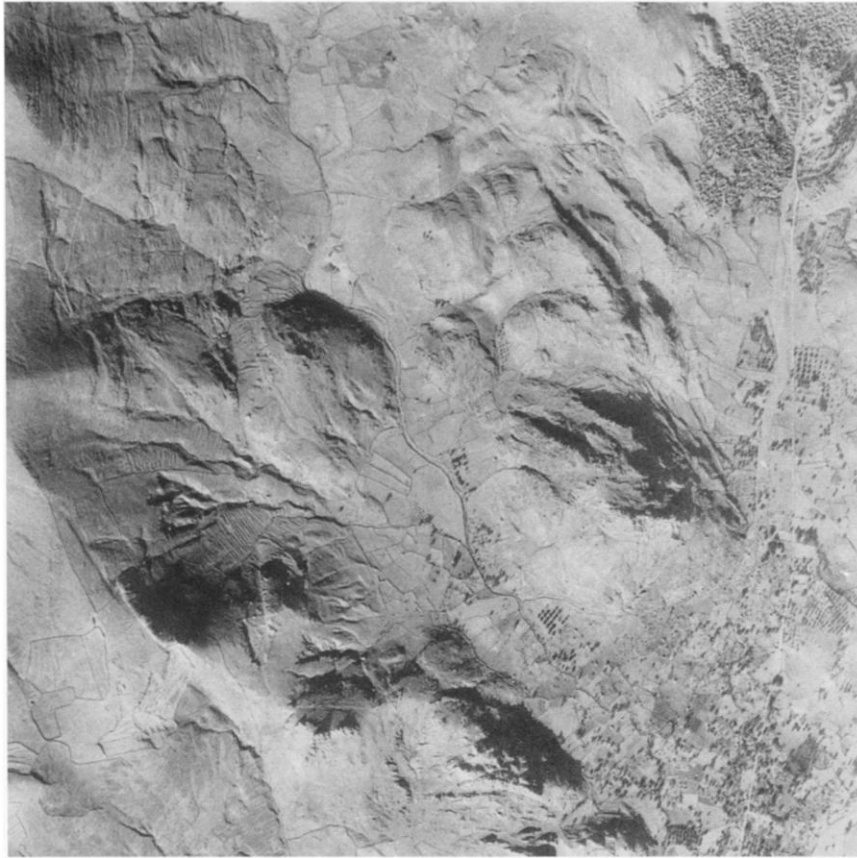


Fig. 10. Aerial photograph (November 1943) of the west side of the Eresos valley. (Courtesy Air Photo Archive, University of Keele)

extensively cultivated.⁸³ The period during which these terraces were in use, however, cannot be judged from the photographs or even from the walls themselves.⁸⁴

It is very unlikely that this vast terracing could have been created or even used extensively at any time in the Byzantine period between the seventh

and 15th centuries. Skala Eresou has very little to show from the Byzantine era, only a small fort on the acropolis built apparently by the Gattelusi, a Genoese family controlling the island in the 14th and 15th centuries, and perhaps kept in repair during the Turkish occupation of Lesbos, judging by the green-glazed pottery scattered over the hill.

⁸³ It is interesting to compare Koldewey's map (pl. 31) showing the extent of the cultivation in the Eresos valley with population data of the past century. The map clearly indicates that only the valley floor was being cultivated with grain, grapes, and olives. Census information for the Eresos valley is available only since 1920, M. Chouliarakis, *Εξελίξεις του πληθυσμού των αγροτικών περιοχών της Ελλάδος, 1920–1981* (Athens 1988) 63, 513:

	1920	1928	1940	1951	1961	1971	1981
Eresos	2,485	2,892	3,131	2,793	2,675	1,772	1,392
Skala Eresou	136	213	169	142	112	34	102

The number of houses in Eresos, however, is reported by several sources. The gymnasiarch of Mytilene, S.G. Paraskeuaidis, visited Eresos in 1924 and noted that the town had 1,000 houses, Paraskeuaidis 189–90. Koldewey 90 reports from information in the *Courrier de Smyrne*

newspaper that an earthquake that struck Lesbos on 29 November 1889 caused very severe damage to Eresos. There were 560 Christian and 100 Turkish houses in the village at the time, and 50 houses, 3 churches, and 3 schools were entirely destroyed, while 250 houses were partially damaged. All the buildings in Skala Eresou were destroyed. Finally, the French traveler Boutan visited Eresos in 1855 and noted that the town had 400 Greek and Turkish houses (Paraskeuaidis 143–44).

⁸⁴ An attempt to date such field walls by counting the number of plant species that have become established along a given length has been made by a recent University of Minnesota expedition in the southwestern Peloponnese. I am grateful to Michael Nelson for this information together with references. This method was first developed to date English hedgerows, see E. Pollard, M.D. Hooper, and N.W. Moore, *Hedges* (London 1974) 79–85; O. Rackham, *The History of the Countryside* (London 1986) 191–204.

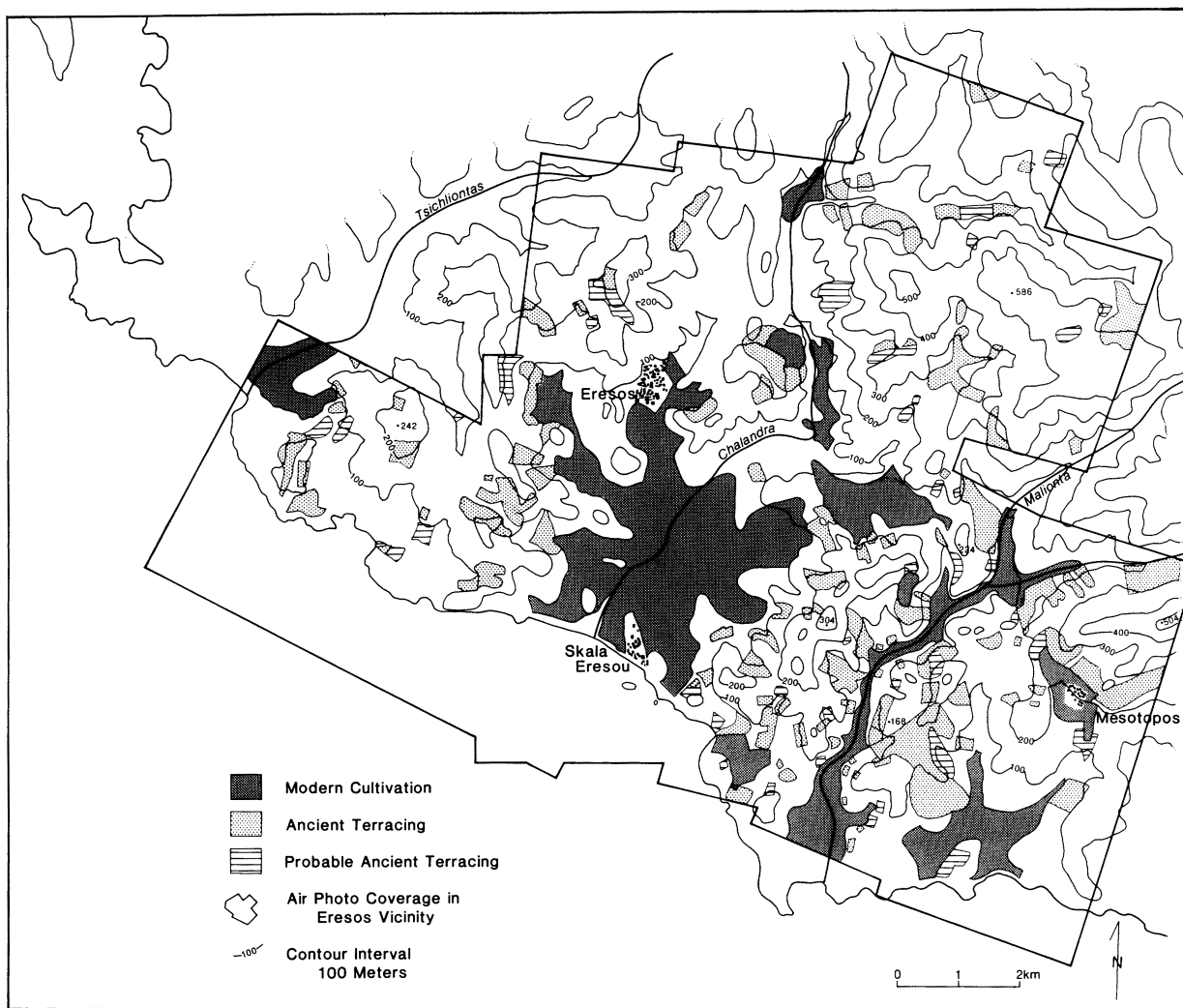


Fig. 11. Area of ancient terracing visible in 1943 aerial photographs. (P. Schaus)

Since the sixth-century basilica of Aghios Andreas was destroyed and abandoned at the foot of the acropolis, at least by the time of the Saracen invasions of the ninth to 11th centuries, it seems unlikely that the town continued to exist throughout this period. A village grew up around the acropolis perhaps under the more prosperous era of the Gattelusi. It was seen by the English traveler Pococke in 1739, but it must have been abandoned shortly afterward since it was apparently not seen by Choiseul-Gouffier in the late 18th century.⁸⁵

Modern Eresos, located about 5 km inland to the north, was settled as recently as the 18th century, perhaps because of the threat of sea raiders.⁸⁶

Houses and ruins of houses are commonly found scattered among the fields in the valley floor, but in all instances where these were checked, the pottery scattered about the buildings was no earlier than the Turkish period, characterized by green- and yellow-glazed wares, as well as some pieces of fine china.

These extensive agricultural terraces, therefore, seem to have been used at least as far back as the Late Roman-Early Byzantine period, after which they were abandoned to fall into their present state of disrepair. They were no doubt created much earlier than this, though it must have taken centuries for them to reach such great limits. It is fair to suppose that the efforts needed to reclaim such mar-

⁸⁵ Paraskeuaidis 57, 68.

⁸⁶ This is a common assumption in explaining inland locations of settlements in the Aegean area, but it has been

questioned recently. See M. Wagstaff and J.F. Cherry, in Renfrew and Wagstaff (*supra* n. 37) 259–61.

ginal land were generously rewarded by economic factors existing at the time. One can only speculate on the market demand for the excellent wine of this region in antiquity and the resulting income of the grape growers who expanded their vineyards to fill that demand.

Literary records tell of the high reputation of wine from Lesbos through the Roman period. Wine transport amphoras also help to demonstrate the extent of the wine trade. A type made of gray ware with a distinctive "rat-tail" ridge of clay from the handle onto the belly of the amphora has been identified as coming from the island.⁸⁷ Surprisingly, the type disappears by the end of the fourth century B.C., despite the fact that ancient writers of the Hellenistic and Roman period continue to mention Lesbian wine as though it were common to find. Barbara Clinkenbeard proposed that the production of transport amphoras was given up on the island and that instead, Lesbian wine was carried in amphoras produced on Thasos.⁸⁸ On the basis of the literary evidence, it is probable that Lesbian wine continued to hold its share of the ancient trade until the general collapse of this trade in the seventh century A.D.⁸⁹

There is also some archaeological evidence to support this thesis. A number of large-scale public building projects continued to be undertaken in Eresos, including a Hellenistic city wall,⁹⁰ a harbor mole (although the date is not well established),⁹¹ and two very fine Early Christian basilicas.⁹² The basilicas suggest that in the late fifth century A.D., the Eresians must still have had a thriving economy, for they constructed not one but indeed two very impressive churches decorated with mosaic floors, one at Aphentelli and the other at Skala Eresou beside the modern Aghios Andreas church. The one

in town might be expected, although its size and decoration are noteworthy, especially given the present size of Skala Eresou. Christian communities throughout the Mediterranean were constructing new places of worship in the fifth and sixth centuries that were notable for their size and ornamentation.

The Aphentelli basilica is more difficult to explain. There is certainly no town or even village at this end of the beach to associate with the church. On the other hand, in a brief inspection of the terrain in this part of the valley, three Roman sites (fig. 6:h-j) were discovered, all of which may have been occupied at the time when the basilica was built, judging from the pottery.⁹³ Architectural remains are almost entirely absent from two of the sites (h, i); perhaps stones from the walls were reused in later constructions, but the location and size of the pottery scatters would suit those of small farming establishments. The site at "i" is significant because a very large press stone with squared cutouts on either end for the insertion of horizontal beams lies in the field just below the site (see fig. 12).⁹⁴ The



Fig. 12. Grape press block at "i" on figure 6. (Photo G. Schaus)

⁸⁷ Clinkenbeard (*supra* n. 77) 248–68 pls. 69–72; P. Dupont, "Amphores commerciales archaïques de la Grèce de l'Est," *PP* 204–207 (1982) 193–208, esp. 201–203.

⁸⁸ B. Clinkenbeard, "Lesbian and Thasian Wine Amphoras: Questions Concerning Collaboration," in J.-Y. Empereur and Y. Garlan eds., *Recherches sur les amphores grecques: Actes du colloque international, Athènes, 10–12 sept. 1984* (*BCH* Suppl. 13, Paris 1986) 353–62.

⁸⁹ For the disappearance of this flourishing trade, see P. Arthur, "Amphorae and the Byzantine World," in Empereur and Garlan (*supra* n. 88) 655–60.

⁹⁰ Stretches of the isodomic and pseudo-isodomic city wall appear on the west and north side of the acropolis, Papazoglou 22–26 figs. 1, 3, 6; Archontidou-Argyri (*supra* n. 65).

⁹¹ *Supra* pp. 423–24 and n. 69. It is possible that this mole was constructed not only to provide shelter for ships during storms and high winds, but also to facilitate the

loading and unloading of ships for products such as wine or indeed grain for which Eresos also had a good reputation (*supra* p. 415 n. 22). Not surprisingly there is a noticeable increase in the number of transport amphora fragments to be seen on the ground on the southeastern side of the acropolis. This is in the vicinity of the harbor mole. Unfortunately, additional study of these fragments was not possible.

⁹² Orlandos (*supra* n. 12).

⁹³ A fourth possible Roman site, with terra sigillata pottery, has been reported recently by Axiotes (*supra* n. 23) 488 site 409, map 7 pp. 472–73.

⁹⁴ A local shepherd, Andreas Zazaros, reports that older people in the neighborhood had for years told young children that this large stone had a buried treasure below it, but that whoever tried to find the treasure by digging below it would immediately turn into stone.

third site (j) is more substantial though still not especially large. A 2-m-high retaining wall built of large fieldstones supports a terrace on which a house once stood. The limits and rooms of this house are now almost impossible to establish without excavation. Nevertheless, a half dozen ashlar blocks standing on their narrow sides are still to be seen in situ, and foundation courses for several walls are visible. Pottery is scattered widely around this building and in substantial quantity. The majority of it is Late Roman, of the fourth and fifth centuries, but there is some earlier Roman, and at least one piece may be Hellenistic black-glazed ware, in a fabric similar to that of Corinthian pottery.

This last site is situated high on the ridge that separates the valley of Eresos from the neighboring valley to the west, that of the Tsichliontas River. Its identification as a farming establishment is confirmed by the series of field enclosures and terrace walls that radiate around the building itself. These terrace walls are the same as those seen throughout the valley and noted on the aerial photographs.

Evidence from the sites both at "i" and "j" therefore suggests that wine production was still being carried out in the Late Roman period. The lack of

evidence for similar farming establishments in earlier periods may be fortuitous, or it may be that inhabitants of the valley tended to live in the town of Eresos until the Roman period. The basilica at Aphentelli, not to mention other Early Christian churches located away from settlements in this region,⁹⁵ point to continuing success in wine production and trade until the seventh century, when this trade throughout the Mediterranean came to an abrupt end. It is surely then that the extensive system of terraces was abandoned and the marginal land that they made viable for cultivation returned to its original use as pasturage.

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⁹⁵ See S. Charitonidis, *ArchDelt* 23 (1968) A1, 39–40 map 1 for other Early Christian churches in western

Lesbos that are located away from settlements.