



ANCIENT LAND ROUTES ON THE PAXIMADHI PENINSULA, KARYSTOS, EUBOEA

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ABSTRACT

Recent regional surface surveys have placed more focus on rural investigations, but the means of transport and communication within those rural surroundings has not always received adequate attention. The Southern Euboea Exploration Project has undertaken a new phase of research in the Karystos area with the goal of developing a methodology that allows for a more detailed record of the pre-modern land routes. On the Paximadhi peninsula it was possible to identify numerous fragments of suspected ancient routes dating to the Classical and Hellenistic periods. In the majority of cases these fragments were closely associated with adjacent datable ancient sites. By taking into consideration the evidence recorded during the survey it was sometimes possible to propose the extension of these ancient segments and to theorize the directions, lengths, and purposes of ancient networks.

KEYWORDS: Karystos, Paximadhi peninsula, ancient routes, ancient roads, rural landscape, archaeological survey, Classical and Hellenistic sites

INTRODUCTION: THE PROJECT

Recent regional surface surveys have placed more focus on rural investigations, but the means of transport and communication within those rural surroundings has not always received adequate attention. Ancient routes are a category of archaeological material that can be studied independently. Or, to be more precise, physical roads and trails may be considered an autonomous category of archaeological material that can be isolated, measured and described, but routes and lines of communications must be analyzed by taking into consideration other aspects of the research environment. The reconstruction of the system of communication (within a specific region for a given time period) needs also to include a discussion of the surrounding landscape, the location of resources, the habitation pattern, and the use of the land. It is a combination of these aspects of human behavioral patterns, together with the topographical characteristics that determined the evolution of the route system in the first place.

Analysis of the routes can provide insight into the distribution of population centers as well as areas of economic activities (such as harbors or landings, quarries, fields and grazing lands). It can also widen our understanding of the reasons for communication (trade, social contacts, religious activities, political relations and boundaries).

The first field project undertaken (in 1986 and 1987) by the Southern Euboea Exploration Project (SEEP) was an intensive surface survey of the Paximadhi peninsula to the west of Karystos (Keller and Wallace 1986, 1987, 1987a). During this survey, routes were recorded whenever their relationship with an ancient findspot or site was obvious or when they had features that made them stand out from the more recent network of trails.

In 1989 SEEP initiated a new phase of research in the larger area to the east and north of the Karystos bay (Keller and Wallace 1990, Wallace et al. 2006, Rotroff and Wickens 2010). This was a systematic extensive or reconnaissance survey over the larger area in order to gain an initial sample of archaeological remains in the region. The methodology employed smaller teams walking the pre-modern routes and trails recorded on Greek 1:5000 topographical maps and recording material at 10 meters to either side of the trails. These routes then served as survey transects instead of following lines of the compass as on an intensive survey. A second aspect of this "route survey" methodology was a more detailed recording of the premodern trails themselves. Following this extensive route survey in the east, it was decided to revisit Paximadhi and record the peninsula routes and networks in the same method. This would make use of recording methods devised in the east to provide a better understanding of the routes on the Paximadhi peninsula

The Paximadhi peninsula (fig. 1) is a triangular-shaped area with its apex pointing south and its base delineated by the flat alluvial Karystos plain (Kampos) on the north. The defining feature of the 22 square kilometer peninsula is a northsouth, V-shaped ridge (ca. 214–242 masl) pointing south. The range encloses a ravine-valley area that opens onto the plain at the north. The western side of the peninsula faces the open sea and is characterized by steep slopes extending down to a rugged coast. The eastern side, in contrast, faces the shallow Karystos bay and offers a more hospitable landscape. The summit of the eastern ridge top extending from Paximadhi peak to Karababa peak lies farther back from the shoreline and the slopes descending from the ridge top are more gradual, giving way to a series of low spur hills that project onto a continuous stretch of low coastal land.

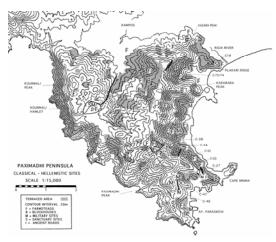


Figure 1. Map of the Paximadhi Peninsula showing terraced landscape and sites of Classical - Hellenistic date. Ancient routes indicated by bold lines between "r"s

As predicted by the topography, the relatively flat tops of both the eastern and western segments of the V-shaped ridge and the eastern shoreline provided more evidence of traffic than the steep and ravine-segmented coast of the western side. Additionally, evidence of ancient habitation and agriculture was concentrated on the more hospitable eastern side of the peninsula.

On the Paximadhi peninsula it was possible to identify several fragments of suspected ancient routes. In the majority of cases these fragments were closely associated with adjacent datable ancient sites. By considering the evidence recorded during the survey of routes on the peninsula, it was sometimes possible to propose the extension of these ancient segments and to theorize the directions, lengths, and purposes of ancient networks. In theorizing the function of various routes it was also necessary to consider the terrain of the area as well as the location, distribution, and function of the

recorded ancient sites on the peninsula. The most identifiable of the ancient route segments are those that show some evidence of joint community efforts, as in construction of retaining walls, cutting through bedrock, or build up at gully crossings. In some cases it can be determined that later pre-modern trails make use of ancient routes and then divert where the ancient constructions have fallen into disrepair. In some respects, the Paximadhi peninsula presented a unique time capsule for the study of a variety of ancient rural routes in a small undisturbed environment. Archaeological evidence demonstrates that the peninsula had been inhabited and cultivated from the Archaic through Roman periods. From the Byzantine period to the present, however, the peninsula—with the exception of the Kourmali plateau, (discussed below) was used only for the winter grazing of sheep and goats. Except for the construction of some shepherds' huts and the ravages of time, the remains of the pre-Byzantine buildings, agricultural terraces, and traces of routes had remained undisturbed.

A discussion of the theoretical framework devised to study ancient routes remains outside the scope of this paper. Here is presented tentative conclusions and summary information on the ancient Paximadhi routes—grouped into three categories: access routes to sanctuaries, a route connecting a Classical hamlet to the world beyond the peninsula, and a network of routes connecting a number of individual sites on the peninsula.

SANCTUARY ROUTES

The Archaic-Classical sanctuary C19 (findspot number) is located near the eastern end of Plakari ridge (Keller 1985, 104-105, 182-183). The remains include a te-

menos enclosed by walls on three sides and high ground to the west. Remains of a temple are located near the center of the temenos and a 14 line religious inscription was found built into a hut just southeast of the site. At the northwest corner of the site a possible ancient approach leads to the northwest and down the northern slope of Plakari. It is a flat ramp-like area with a width of 6 to 8 m that descends at a gentle gradient and does not follow the contours of the hill, as an agricultural terrace would. The ramp does not have a down slope retaining wall nor any other signs of construction. The ramp-like approach can be followed for about 60 m, but then is lost in a hollow on the hillside, which is occupied by curved terrace walls of a more recent date. At the foot of the northern slope of Plakari, in the Rigia river area, a cluster of findspots dating to the early Iron age and Classical periods have been recorded. These findspots may represent the 7th through 5th century BC location of ancient Karystos. In this case, the ramp leading down from the C19 sanctuary would link the settlement to the sanctuary, which, together with an earlier Geometric-Archaic sanctuary on Plakari ca. 300 m west of C19, may have served as the acropolis of the ancient settlement.

The Archaic-Classical rural sanctuary C73-74 is located just below the peak on the eastern slope of the Karababa range (Keller 1985, 98-99, 188-189). The remains include a 8.5 by 10 m rectangular platform extending west behind a natural rock outcrop with a niche that contains a small rock cut basin in its base. A few meters to the east of this feature a rectangular 7.5 x 11.8 m area is supported by a terrace wall built of huge cut schist blocks. Between these two features is a horseshoe shaped altar made of very finely cut light green schist blocks.

The sanctuary sits on the steep eastern slope of Karababa. The slope itself defines the western boundary of the temenos. The higher landscape then drops abruptly towards the south to a wide saddle just beyond the southern wall of the temenos. At the northern end of the temenos a well-constructed roadbed leads northeast away from the site (fig. 2).



Figure 2. Access road to the C73-74 Sanctuary, view from northeast

The road has a retaining wall and varies in width from 1.5 to 2.1 m. The gradient and width of the road would have been suitable for wheeled traffic. The surface is level and unusually smooth. It continues evenly for ca. 85 m along the slope of the ridge before losing definition as it approaches the large saddle between Karababa and Kazara. A definite continuation beyond this saddle could not be defined, but it may coincide with some of the modern herder trails that descend the north slope of Kazara in the direction of the Rigia river at the north base of Plakari, the proposed site for Iron Age and early Classical Karystos. It should be noted that the herder trails coming up from the Rigia area and passing over the Kazara saddle tend to continue southwest on the ridge top, that is above the ancient road and sanctuary. Recent herder trails can be found criss-crossing the saddle south of the sanctuary, but there is no evidence that the ancient road continues south beyond the site. It appears that the sanctuary itself was the end point of the ancient road.

Another rural sanctuary is located at findspot C32, near the center of the eastern side of the peninsula (Keller 1985, 88, 207). At C32 a man-made terrace sits above a large dome-shaped outcrop of rock, clearly visible from most points along the eastern shore of Paximadhi. On the terrace are the remains of a stone wall enclosing an area of 6 x 6.5 m in front of a natural boulder that has had a large niche cut into its face. In the floor of the niche is a rock cut basin and runoff channel. A path and rock cut steps lead down from the niche and temenos to an open cave or rock shelter beneath the dome.

On the nose of a spur ridge immediately to the northeast of the C32 sanctuary site are traces of a route leading uphill and southwest. The remains can be divided into three fragments. At first, a 5.5 m wide stretch of the route runs for 29 m between the bedrock on the uphill side and a wall on the down slope side. The route then curves around a large oval outcrop of bedrock for ca. 8 m and continues its uphill course. The width of the curving section of the route is ca. 3.5 m. The route can then be followed beyond the bedrock for another 11.5 m. This upper section runs between two parallel rubble walls along the top of the spur ridge and has a width of 3 m. The highest traceable point of the route is on the same elevation as the sanctuary, which is ca. 75 m to the south.

The area between the end of the route and the sanctuary is covered in eroded terraces and it is possible that the route has collapsed. Given the unusual construction of the route and the lack of any signs that it continued in other directions, it appears that the route was meant as an access route to the sanctuary.

OUTSIDE ROUTE

In the northwestern area, a Classical-Hellenistic hamlet is located at the northern edge of the Kourmali plateau (Wickens and Keller 2001). The hamlet consists of 12 individual findspots and includes sections of an enclosure wall with one semi-circular tower preserved. The hamlet enclosure wall can be traced north from a substantial Classical building at the southeastern corner of the site to a series of structures at the northeast. The settlement wall then appears to turn west toward the findspot with the semi-circular tower. In contrast to the scattered Classical-Hellenistic farmsteads in the southeast area of Paximadhi, we found only two possible Classical-Hellenistic farmsteads outside the hamlet in the northwest.

At Kourmali two large Late Roman farming estates were also recorded. One is situated at the western edge of the Kourmali hamlet and the later structures here, including two large threshing floors, obscure some of the earlier Classical remains. The second Roman estate is located at the southern end of the plateau. Kourmali is also the only area of the peninsula were evidence of recent farming activities in the form of still standing kalivia and recently abandoned threshing floors is found.

At the northeast corner of the Kourmali Classical hamlet, a route can be traced leading to the northeast. The route gradually descends the eastern slopes of the Kourmali range for a distance of ca. 1 km until it reaches the flat land of the a valley extending to the Karystos plain north of the peninsula. Down slope retaining walls are present along most of the route and there are several points where large stones have been placed in gullies to facilitate crossing. There are also points where rubble fill has been used to level out sections

of the route crossing uneven bedrock. At points where the route runs between the down-slope retaining walls and up slope bedrock, measurements were taken that provide an almost constant 2.5 m width.

The Kourmali road is the longest, most complete route recorded on the peninsula. Unfortunately, as noted above, the Kourmali plateau contained not only the Classical hamlet, but also was heavily used in the Late Roman period and recent past. Therefore, although it seems that the road leads directly to the northeast corner of the Classical hamlet, it is possible that it was created and used during one of these later periods.

NETWORK ROUTES

Three definite stretches of ancient roads are found in the southeast quarter of the peninsula. These sections seem to form part of a network of roads connecting agricultural and military sites of late 6th or early 5th century BC date (Keller and Wallace 1988, Keller 2004). The network of roads and associated sites appear to remain in use through the Classical period and in some cases the Hellenistic period as well.

Road between C27 and C30

The surface remains at C27 indicate a number of open spaces and buildings within a partial enclosure wall (Keller 1985, 84-85, 206, Keller and Snyder 2004). The overall area of the site is 40 by 120 m. At the southwest end of the site is a raised platform and possible foundation for a square tower standing beside a rock-cut cistern. The site is located above a series of sheltered coves and has a view over both the bay and the sea between Kea and Attica. The rock-cut cistern at the south end of the complex is a unique feature on Paximadhi. The cistern is 8 m deep with a

bell-shaped main chamber and a separate adjoining access shaft. Site C27 appears to be a small outpost or emborio; that is, a place of refuge for the farmers living in the area and possibly a center for the collection and distribution of goods.

The farmstead of C30 (Keller 1985, 86-87) is the southernmost of a string of five or six farmsteads extending north along the lower slopes of the eastern coast. These farm sites all have visible remains of three or four rooms or enclosures: some have associated towers and some have associated threshing floors.

At the northeast corner of the emborio site, at a saddle on the ridge top, a road leads northeast along the upper eastern slope of the ridge (fig. 3).



Figure 3. Remains of the ancient road that connected Sites C27 and C30, view from northeast.

The location is at the gully before Site C30.

Most of the ancient road has been destroyed by new construction

The route descends at gradients of 0 to 5 % and continues ca. 300 m toward the Classical farmstead of C30. A retaining wall is preserved in places along the road. The average width of the road is 2.7 m. The road can only be traced to the gully just south of the farm, but there is evidence that it continued north along the slope just west of the remaining Classical farms arranged north of C30. Several of these farmsteads, for example C38, an excavated farmstead with pottery phases

that parallel those at the C27 emborio site, appear to have pathways leading west from the sites, back to the slope along which the proposed road would have passed (Keller and Schneider 2005).

At the point where the road leaves the emborio site and runs north along the eastern slope, there is evidence of a second route extending along the ridge top toward the northwest. This route could be followed, but its nature and date are uncertain because of the difficulty in defining routes along ridge tops.

Road between C46 and C47

West of the C27 emborio site, and above the inlets area between Cape Mnima and Ay. Paraskevi, are found the Classical sites of C46 and C47, which are joined by an ancient road (fig. 4). Site C46 consists of a 7×10 m structure adjoining a long wall that encloses an area of 18×34 m. Site C47, to the north, consists of one 5×6 m structure adjacent to a smaller enclosure of 10×10 m, Both sites appear to be more military than agricultural due to their location outside terraced landscape and the lack of multi-room buildings found at farmsteads (Keller 1985, 83-84).



Figure 4. North end of the ancient road between C46 and C47, view from northeast

The road between the sites runs northsouth along the upper slope below the Classical watch tower on Paximadhi peak. The preserved 100 m of the route includes short sections of retaining wall in places and in at least two cases seems to have been marked by upright marking stones. The route is 1 to 1.5 m wide and it appears to continue north beyond C47.

At C47 a recent mule trail, which may indicate a reuse of the ancient route, continues to the northeast, following the contours of the landscape to reach the ridge top extending north from the C27 emborio site. A theoretical extension of the C46-C47 road to the southeast of C46 would lead to a Classical farmstead and a military site at Ayia Paraskevi.

Road at C54

The Classical farmstead C54, at 240 masl, is one of the higher farmsteads in the group along the eastern slopes of the peninsula (Keller 1985, 91-92, Keller and Wallace 1988). The main structure at the site is a 17 x 18 m building with three or more rooms or enclosures. A straight field wall projects westwards from the building to bond with a perimeter wall of ca. 1,200 m in length. This unique feature, an intact estate wall, encloses an area of ca. 9 hectar, an area of land holding that agrees well with the spacing noted between the other farmsteads in the southeastern quarter. There is an opening in the estate wall at the southwest, beside a small 3.5 x 4 m structure. A section of ancient road passes along the estate wall on the south and southwest and past this opening or gate. The route that runs outside the C54 estate wall here has a width of about 2 m and is bordered by the estate wall on the east and bedrock along the west. There is some indication that rubble fill was used in places to level the surface of the route over the bedrock. The area to the south and southwest of the estate wall is a relatively flat saddle that continues on to the flat

ridge, extending southeast to the C27 emborio site.

Thus a network of routes appears to have extended north and west from the emborio site. One route extending along the slope of the eastern ridge to eventually reach shore level about half way up the coast of the bay, near a point where many traces of un-dateable routes and a Classical rock-cut cist grave are found. Another section of route extended north west along the higher ground to reach farmsteads at the higher elevation. A third section of route seems to have branched off from the ridge top route to continue southwest passing above the inlets of the Ayia

Paraskevi area and linking a string of military sites in the area.

CONCLUSION

In conclusion it can be stated that even in a small area such as the Paximadhi peninsula, various levels of communications existed between different types of sites of human activity. The study and analysis of survey and excavation material from the Paximadhi peninsula continues and it is believed that additional segments of premodern routes in the area may eventually be identified as ancient and thus provide a fuller picture of ancient communication routes on the peninsula.

REFERENCES

- Keller, D.R.(1985) Archaeological Survey in Southern Euboea, Greece: A Reconstruction of Human Activity from Neolithic Times through the Byzantine Period. Unpublished. Ph.D. dissertation, Indiana University.
- Keller, D.R (2004) Karystian Farmsteads and Agriculture of the Classical-Hellenistic Periods. Paper read (by N. Kennell) at the International Euboean Conference at Chalkis, Euboea, October 2004.
- Keller. D.R. and Schneider, R. (2005) The Palio Pithari Classical Farm Site, Karystos, Euboea. Poster exhibit at the 106th General Meeting of the Archaeological Institute of America.
- Keller, D.R. and Snyder, L.(2004) The Cistern Site at Cape Mnima. Poster exhibit at the 105nd General Meeting of the Archaeological Institute of America.
- Keller, D.R. and Wallace, M.B.(1986) The Canadian Karystia Project, *Echos du monde classique /Classical Views* 30(2):155-159.
- Keller, D.R. and Wallace, M.B. (1987) The Canadian Karystia Project: 1986, Echos du monde classique /Classical Views 31 (6):225-227.
- Keller, D.R. and Wallace, M.B. (1987a) The Canadian Karystia Project: How to Catch a Cleruch, Canadian Archaeological Institute in Athens Bulletin 8(4), October.
- Keller, D.R. and Wallace, M.B. (1988) The Canadian Karystia Project: Two Classical Farmsteads, *Echos du monde classique /Classical Views* 32(7):1 51-157.
- Keller, D.R. and Wallace, M.B. (1990) Pre-Modern Land Routes in Southern Euboea, *Echos du monde classique /Classical Views* 34(9):1 95-199.
- Rotroff, S.I. and Wickens, J. (2010 forthcoming) Survey of the Bouros-Kastri Peninsula in the Southern Karystia, Euboea, Euboea and Athens: Proceedings of a Colloquium in Memory of Malcolm B. Wallace. Athens, 26-27 June 2009 (Publications of the Canadian Institute in Greece, No. 6). Athens.

- Wallace, M.B., Keller, D.R., Wickens, J. and Lamberton, R. (2006) The Southern Euboea Exploration Project: 25 Years of Archaeological Research, *Antiquities of Karystos*, pp.18-50 (Kosmos press: Karystos).
- Wickens, J. and Keller, D.R. (2001) The Classical Hamlet and Late Roman Sites of Kourmali near Karystos, Euboea. Poster session at the 102nd Annual Meeting of the Archaeological Institute of America, San Diego, CA, January 3-6, 2001.