



# **THE DRAGON HOUSES OF STYRA: TOPOGRAPHY, ARCHITECTURE AND FUNCTION**

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## **ABSTRACT**

This paper deals with the so-called Dragon houses in southern Euboea and particularly in the region of Styra. In the publications of both N.K. Moutsopoulos and T. Skouras a series of different houses are mentioned, but without precise information on their location. Thus, my first aim was to rediscover these houses and to verify whether they correspond to the type of the well-known houses at Palli Lakka, Kapsala and on Mount Ochi. I soon realized that some of the Dragon houses in the lists of the two authors are in fact ancient farmhouses or watch towers.

I will present the typology of the “real” Dragon houses and will also compare them with some stone houses found in other regions around the Mediterranean: in Italy, France, Switzerland, and the former republic of Yugoslavia. Despite different opinions concerning their function, I will add some arguments in favor of that proposed by Moutsopoulos. I believe that we are dealing with shepherd dwellings, used perhaps only part of the year, mostly in summer, when shepherds crossed mountains with sheep and goats or maybe even with some cows.

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**KEYWORDS:** Dragon houses, Euboea, Mount Ochi, Palli Lakka, Kapsala, Styra, herding

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## INTRODUCTION

On 21 October 1797 the British Engineer John Hawkins climbed Mount Ochi near Karystos and discovered on its summit at a high of 1400 m a building that was constructed entirely of stone (fig. 2,1). He realized that this building must date from a very ancient age. A first account of his discovery appeared in 1820, but it was the German archaeologist H.N. Ulrichs who published it in more detail in 1842 (Hawkins 1820; Ulrichs 1842; cf. Ulrichs 1863). Ten years later it was the French scholar J. Girard who focused attention in his publication *“Mémoire sur l’Île d’Eubée”* on a second building situated at Palli Lakka (fig. 3,3) near Styra (Girard 1852). The local population called these buildings “Drakospita” (Dragon houses) because they imagined that Dragons were housed in these buildings in ancient times (for the legend see Carpenter and Boyd 1976; 1977, 179 note 2).

These two Dragon houses were discussed afterwards in a number of publications of more or less scholarly character (see bibliography). Between 1980 and 1991

three Greek scholars, A. Lambraki, N.K. Moutsopoulos and T. Skouras published a series of other buildings in the region of Styra which were also called “Dragon houses” because of the similarity in the technique of construction (Lambraki 1980; Moutsopoulos 1982; Skouras 1991). Previously the scholarly community did not pay attention to these newly discovered buildings for two reasons: the publications were written in Greek and difficult to find in libraries outside of Greece and the authors failed to give detailed information about the exact location of these buildings. As I began to interest myself in these Dragon houses I had first to try to relocate them in the mountains around Styra. Achilles Katsarelias, the former guardian of the Eretrian Museum, was a great aid in helping me to find these houses. After weeks of climbing in the Styrean mountains, our research proved successful. In fact, we re-discovered all of the buildings mentioned by Moutsopoulos and Skouras and we were able for the first time to draw a map giving the location of these buildings (fig. 1).

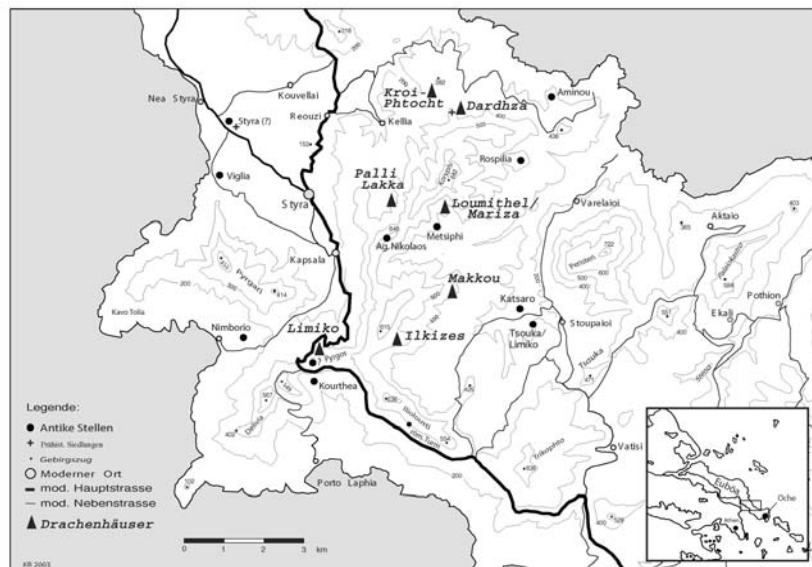


Fig. 1 Map of the region round Styra (updates map in Reber 2001, pl. 51,1)(K. Reber)

While constructing the database of these buildings I became aware of another problem: I realized that many of them were in fact not real “Dragon Houses.” Moutsopoulos and Skouras presented in their publications a total of 19 Dragon houses, 13 of them in the region of Styra. In fact, additional investigation has shown that a number of the structures reported by Moutsopoulos and Skouras should be interpreted as ancient military or agricultural towers. Only six buildings could be considered as belonging to the “Dragon house” group as defined by the two sites of Mt. Ochi and Palli Lakka (Reber 2001). This brings the total number of known Dragon houses to eight. The six additional structures are the following:

### THE DRAGON HOUSES

The most northern Dragon house is situated at Kroi-Phtocht near the village of Kellia (Moutsopoulos 1982, 387-389 fig. 99-100 Pl. 106-110; Reber 2001, 347 Pl. 51,2). The name “*Kroi-Phtocht*” derives from the Arvanite language and means something like “*cold water-spring*.” Actually, a small stream passes just beside the house. The Kroi-Phtocht-house (fig. 3,4) is composed of two rooms, arranged at the north and east sides of a central courtyard. The west wall of the eastern room is preserved up to the height of the door lintel, and although the roof has fallen, the beginning of the corbel vault is visible.

The same is true for the roof of the Makkou house (fig. 3,1), which consists of two independent rooms constructed on a small terrace (Skouras 1991, 49-52 Pl. 21-24; Reber 2001, 346-347 Pl. 51,2. 52.5). The eastern room is built against the natural rock on the north side of the terrace. Between these rooms and the cliff there is a narrow hall, which was accessible from the west side.

At a distance of only one kilometer southwest of the Makkou house is found the Dragon house Ilkizes (fig. 3,2), a long-rectangular building with a small courtyard, which was limited in the south by the steep cliff (Skouras 1991, 45-48 Pl. 18-20; Reber 2001, 346 Pl. 51,2. 52,4). The different technology of construction in the lower and in the upper part of the walls demonstrates that the walls, probably already collapsed in antiquity, had been rebuilt in modern times for a secondary use of the building.

The Dragon house of Limiko near Kap-sala (fig. 2,2) has only a single room, resembling the Dragon house on the Ochi Mountain peak (Moutsopoulos 1982, 396-397 fig. 112 Pl. 133-141; Lambraki 1980, 37 fig. 1-2; Reber 2001, 344-345 Pl. 51,2. 52,1). The entrance in the south is framed with lateral stones as at the Ochi house. Over the door lies a gigantic flat stone, which is set directly on the walls to both sides of the door in order to reduce weight on the door-lintel. As at Ilkizes, part of the walls are constructed with smaller stones, indicating a secondary use in later times.

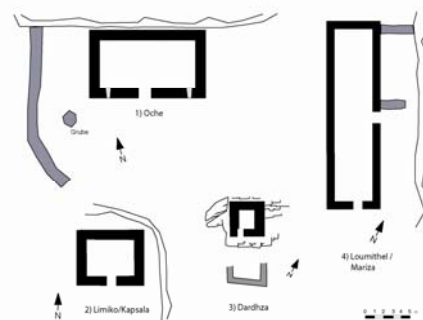


Fig. 2 Drakospita (K. Reber)

The smallest Dragon house is found at Dardhza (fig. 2,3) and consists of a single 4 m square room (Moutsopoulos 1982, 385-387 fig. 98; Reber 2001, 347). Below the cliff on which the house stands is a terrace

that contains the remains of walls that may have surrounded an open court.

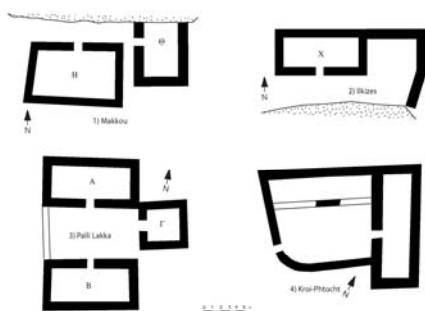


Fig. 3 Drakospita (K. Reber)

Finally, the largest Dragon house is that at Loumithel-Mariza (fig. 2,4), which has a width of 6 ms and a length of 21.8 ms (Moutsopoulos 1982, 381-385 fig. 95-97 Pl. 57-67; Reber 2001, 345-346 Pl. 51,2. 52,2-3). Stones from the collapsed roof lie as they had fallen. The house had an entrance on the southern narrow side, which was to be entered over a few steps, and a second entrance in the eastern side, which can still be recognized. From the second entrance one enters a courtyard situated between the house and the cliff behind it.

The buildings, briefly introduced here, have a variety of common characteristics, which may be evaluated in the definition of a Dragon house. First, all constructions are completely of stone. Second, the building material consisted of stone from the immediate vicinity. Third the roofs have the form of a corbel vault, built with large, flat stones. Fourth, the buildings stand isolated in the mountains, i.e. detached from any settlement patterns and far from commercial or traffic routes. The structures are all oriented to the south and are associated with an enclosed area or courtyard.

## THE FUNCTION

Many different suggestions have been made concerning the function of the

Dragon houses. H.N. Ulrichs supposed that the house on Mt. Ochi was a temple to the goddess Hera and, as Stephanos of Byzantium mentioned, the location of a cult in honor of the *ieros gámos*, the holy wedding, of Zeus and Hera (Ulrichs 1842; Ulrichs 1863). Others declared it as a monumental tomb (Thiersch 1852) or as a watch post (Wiegand 1896). The complex at Palli Lakka was interpreted by F.G. Welcker, A. Rangabé and others as a sacred place, although the authors could not agree on the dieties honored there (Welcker 1856; Rangabé 1853).

Entirely different is the suggestion of H. G. Lolling who proposed a relationship with the Roman cipolin quarries and interpreted the Dragon houses as lodgings for the stone quarry workers (Lolling 1876 / 1877). This idea was taken up by J. Carpenter and D. Boyd (Carpenter and Boyd 1976; 1977) as well as recently by T. Kozelj and M. Wurch-Kozelj, who explained the Dragon houses as lodgings, not for workers, but for the Roman officers who supervised the workers in the quarries (Kozelj and Wurch-Kozelj 1995). Even if this idea demonstrates a certain originality, it must definitely be rejected, because the complex at Palli-Lakka is the only Dragon house within sight of a Roman stone quarry (for the quarries see Vanhove 1996; Lambraki 1980).

Finally, the suggestion of T. Skouras, who proposed to interpret the Dragon houses as sanctuaries for Heracles, the protector of the stone quarry workers also has to be rejected (Skouras 1991). It makes little sense to construct eight sanctuaries to Heracles in the area of Styra, when the majority of them lie far from the stone quarries.

There remains the interpretation of the Dragon houses as architectural evidence of an ancient shepherd's tradition. This

possibility was first considered by L. Ross (Ross 1851). N.K. Moutsopoulos took up this idea again and referred to some modern stone constructions in the Ida Mountain on Crete, which are covered, as are the Dragon houses, with corbel vaults (Moutsopoulos 1982, 454; Santillo Frizell 2001; Blitzer 1990; Warren 1973; Marinatos 1971). These modern shepherd huts, which on Crete are called *Mitàta*, served as lodgings for the shepherds as well as for the production and storage of cheese. They were combined with a walled courtyard, which was used for milking of the sheep and goats.

Stone buildings with corbel vault are known through all periods, not only on Crete, but also in many other locations around the Mediterranean. Already in 1925, F.P. Johnson had compared some ancient Carian constructions on the peninsula of Halicarnassus with the Euboean Dragon houses (Johnson 1925; cf. Radt 1970, 196; Carpenter and Boyd 1977). At Mt. Aipos on the island of Chios, Vassilis Lambrinouidakis found other ancient stone constructions with corbel vaults (Lambrinouidakis 1982), and a similar building is also known on Mt. Hymmetos in Attica (Carpenter and Boyd 1977, 189-193 fig. 16-20).

In addition to these ancient constructions we also know a large number of modern stone huts which continue the ancient tradition of corbel vaulting. In Bici in Istria we find modern huts with conical roofs, which recall the so-called Trulli in Italy (Hamm 1974). Similar buildings are also found in the Swiss Alps, for example on the Bernina or on the Alp Grüm (Meyer et al. 1998; Hamm 1974). These buildings are known as "*Heidenhütli*" and date mostly from the Middle Ages or later: however, some of them seem to date as far back as the Bronze Age. Fi-

nally, we could also mention the famous *Bories*, which are common in the Provence in the South of France (Lassure and Repérant 2004).

The geographically scattering of these examples from different ages show that we can hardly speak of mutual influence, but that the phenomenon of stone buildings with console or corbel vault in mountain areas can appear in different times at different places (Hamm 1974; Santillo Frizell 2001; Santillo Frizell 1989).

The shepherds of ancient Greece were—as known from different sources—slaves belonging to the holdings of rich citizens, like the herds they had to look after (Forbes 1994, 192; Skydsgaard 1988; Hodkinson 1988). Already in Homer's *Iliad* (XI, 697) Nestor reports that his father Neleus had seized a herd of cattle and a herd of sheep including the shepherd from the Eleians. This is confirmed by Isaios (6.33), where we read that Euktemon from Athens had sold his herds together with the shepherd. Eumaios, the pig herder of Odysseus, had built his lodging and stable with his own hands (*Odyssey* XIV, 5). Eumaios lived on this farm together with four other pig herders. Besides them, several goat herders under the leadership of Melanthios stood in the services of Odysseus (*Od.* XX, 175), as well as other cattle and goat herders under the direction of Philoitios (*Od.* XX, 185). It seems therefore that Odysseus owned enough staff that could have been put to work in the construction of such houses (cf. *Od.* XIV, 100).

Therefore, the suggestion that herd owners had entrusted their slaves with the construction of rural stone huts is quite probable. Indeed, the owners of the herds probably made available manpower and technical equipment as well as the trained professional masons who mastered the


static problems of such corbel constructions. This, at least, is what the shepherds on Crete relate. They no longer build the *Mitàta* in the old style with corbel vaults because they lack the necessary masons with the traditional knowledge (Moutsopoulos 1982).

The isolated position of the Dragon houses in the mountainous region of southern Euboea, like the apparently timeless and geographically independent typology of the corbel construction, speaks in favor of the interpretation suggested by Ross and Moutsopoulos as lodgings for the shepherds, stables, and for cheese and dairy processing.

Animal farming, along with agriculture, represented the most important branches in the industry of the Greek *Poleis*. Euboea was at least, as its name indicates, known for cattle breeding (*eu bous* – rich in cattle) and the bovine animal is to be found as a symbol on many Euboean coins (Brunner 1998; Picard 1979). The fact that there was good pasture land on Euboea is also mentioned by Thucydides (II, 14), who states that the Athenians took their herds over to Euboea at the beginning of the Peloponnesian War to protect them from the aggression of the Spartans.

Although the Dragon houses, in comparison to the modern alp-huts, are found at lower altitudes (in Euboea they are between 500 and 1400 meters above sea level) and closer to rural communities, the buildings might not have been used during the entire year. From the sources it appears that the ancient pastoral societies were organized after the model of seasonal transhumance, and accordingly the higher pasture regions were visited only in the summer (for the discussion about the forms of animal husbandry see Forbes 1994; Nixon-Price 2001; Skydsgaard 1988; Hodkinson 1988). Thus Varro informs us

in his *res rusticae* (2, II, 8) that the winter pastures often lie many miles away from the summer grazings. Nevertheless, one of the most important reports on this kind of transhumant cattle economy is found in Sophokles' *King Oedipus* (1132ff), where it is described how the shepherd of Laios, instead of abandoning the newly born Oedipus in the mountains, gave the baby to his colleague who traveled from Corinth up to the Boeotian mountains to pasture his herds. The image of a shepherd with his supplies walking in summer from Corinth to the Kitharaion Mountain south of Thebes seems to have been usual at the time of Sophokles. Indeed, a juridical problem arose from it because the pastures often lay in the territory of different *poleis* and arrangements concerning the rights of use had to be found in order to avoid conflicts. Fortunately, such a convention is preserved among the inscriptions in the sanctuary of Apollo at Delphi, which inform us how the Locrian towns Myania and Hypnia had regulated the use of the pastures in the border area at the beginning of the 2nd century BC (Bousquet 1965). From this convention it appears that the foreign shepherds might use the pastures up to time of the sheep shearing in the spring, then they had to move. Shepherds who led their sheep later to this area had to leave the pastures again after 10 days.

It is to be supposed that a contract with similar content existed also between the cities of Styra and Karystos. The Dragon houses south of Styra lay exactly in the boundary zone between the territories of both cities. This is shown by the inscription  on a rock at Metsiphi, mentioned for the first time by Moutsopoulos (Moutsopoulos 1982, 338-342 fig. 54-55; cf. Kalaloungas and Kalaloungas 1998 fig. 40; Reber 2002, 45

pl. 10, 4-5), indicating the frontier-line between Styra and his neighboring Demos.

We may assume that the Dragon houses in the region of Styra had served exclusively as summer lodgings for the shepherds. The life that these shepherds had in that area is described in Dio Chrysostomos' seventh (Euboean) discourse. The main persons in this discourse lived in an uncultivated area in the vicinity of Cape Kaphereus in southern Euboea in

the time of Domitian. In summertime, they used a small hut called "skepi" together with eight goats, a cow and a calf. In wintertime they descended with their cattle down to the valley as would the shepherds that used the Dragon houses described above. The corbel vault buildings of southern Euboea are accordingly some of the rare architectural testimonies of an ancient pastoral society of Classic and Hellenistic times in Greece.

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