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The fortification wall of Chaleion: the current state of research

Nikolaos PETROCHILOS

SUMMARY *The fortification wall of Chaleion: the current state of research*

Picturesque Galaxidi, with its good harbor (*eulimēnos politeia*) and rich nautical tradition, was constructed on the site of ancient Chaleion. The continuous habitation of the site as well as the fact that ancient stone blocks were used to build the modern harbor facilities have contributed to the extensive destruction of the ancient structures, and in particular of the fortifications. These last, which were likely founded in the late 4th century BC, are preserved in fragments among the modern city. This paper gathers the results of previous and more recent studies, mainly of a rescue nature. Its aim is to graphically reconstruct, with the greatest possible degree of accuracy, the course of the walls, and to understand the defensive function of the fortification in the context of contemporary siege operations.

RÉSUMÉ *Les remparts de Chaleion : l'état actuel de la recherche*

La pittoresque Galaxidi, cité prospère à la riche tradition navale, a été construite sur le site de l'ancienne Chaleion. L'occupation continue du site ainsi que la réutilisation d'anciens blocs de pierre dans les installations portuaires modernes ont contribué à la disparition des anciennes structures et en particulier des fortifications. Ces dernières, probablement datées de la fin du IV^e siècle av. J.-C., sont conservées à l'état fragmentaire dans la ville moderne. Cet article rassemble les résultats d'études antérieures et plus récentes. Son but est de reconstruire graphiquement, avec le plus grand degré possible de précision, le tracé des murs et de comprendre leur fonction défensive lors des opérations militaires de l'époque.

ΠΕΡΙΛΗΨΗ *Το οχυρωματικό τείχος του Χαλείου: η σημερινή κατάσταση της έρευνας*

Το γραφικό Γαλαξίδι, η ευλίμενος πολιτεία με την πλούσια ναυτική παράδοση, οικοδομήθηκε στη θέση του αρχαίου Χαλείου. Η συνεχής κατοίκηση του χώρου αλλά και η χρησιμοποίηση των λιθοπλίνθων για την κατασκευή των σύγχρονων λιμενικών εγκαταστάσεων συνέτειναν στην εκτεταμένη καταστροφή των αρχαίων οικοδομημάτων και ιδιαίτερα της οχύρωσης. Η τελευταία, η οποία θεμελιώθηκε μάλλον στα τέλη του 4^{ου} αι. π.Χ., διατηρείται σε αποσπασματική κατάσταση ανάμεσα στις σύγχρονες κατασκευές. Στο κείμενο συγκεντρώνονται τα αποτελέσματα παλαιότερων και πρόσφατων ερευνών, κυρίως σωστικού χαρακτήρα. Ζητούμενο είναι η σχεδιαστική αποκατάσταση με τη μεγαλύτερη δυνατή ακρίβεια της πορείας του τείχους, καθώς και η κατανόηση της αμυντικής λειτουργίας του στο πλαίσιο της πολιορκητικής της εποχής.

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BIBLIOGRAPHICAL ABBREVIATIONS

A complete bibliography is provided at the end of the paper.

Galaxidi¹ occupies the site of ancient Chaleion², one of the cities in Western or Hesperia Locris that extended from the land of Apollo to Aetolia (fig. 1). This city, that was probably founded during the early years of the Aetolian occupation, in the late 4th c. BCE, survived through the upheaval of the late Hellenistic period and probably also outlived the emergence of Christianity. Its abandonment can be placed with some degree of certainty to the 10th c. CE, when the raiding Bulgarians occupied the settlement and reduced it to ashes. This destruction saw the end of a long history of settlement at the site and resulted in the elimination of almost all the remains of earlier structures, save the fortification wall. The latter, in spite of the hardships it has gone through, is still preserved in a fair condition since almost all of its features are discernible, whereas it functions as the sole landmark of the site. This paper aims to collect the available material on the fortification wall of Chaleion, which is rarely mentioned in handbooks on ancient fortifications³.

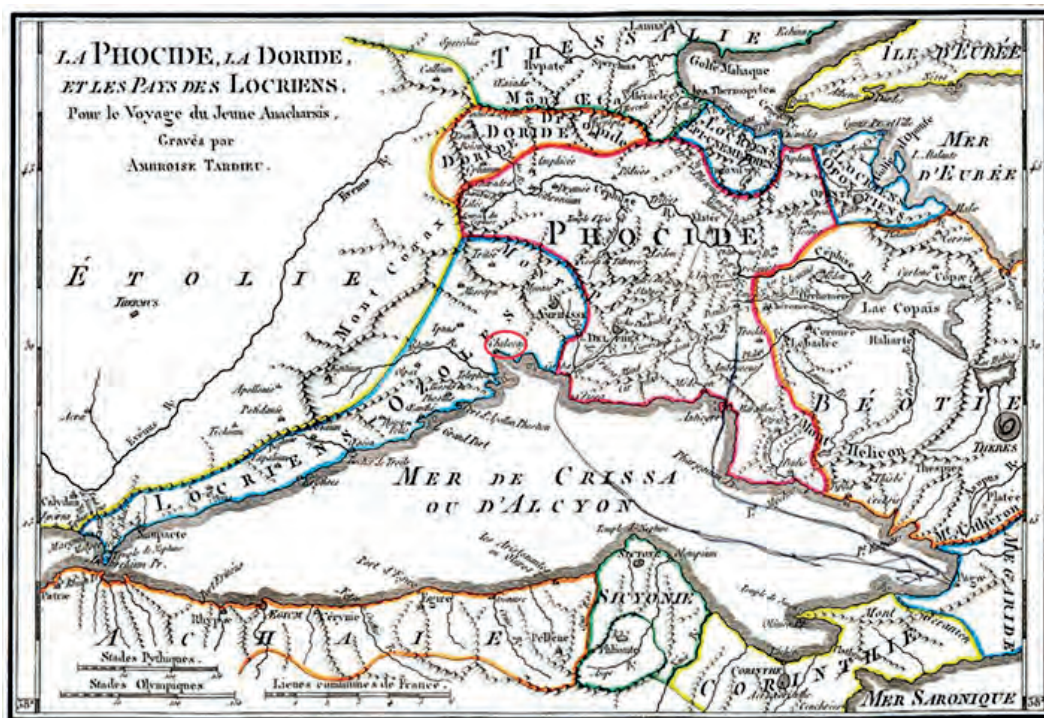


Fig. 1 — Central Greece in Antiquity (J. J. Barthélemy, *Voyage du jeune Anacharsis en Grèce, vers le milieu du quatrième siècle avant l'ère vulgaire*, Paris [1832]).

1. The literature on Chaleion is collected by FREITAG 2000, p. 107-110.
2. For the forms of the name as recorded in the sources, cf. LERAT 1946, p. 331.
3. LAWRENCE 1979, p. 438, n. 9.

I. PREVIOUS ARCHAEOLOGICAL WORKS

The identification of the city's ruins is credited to Lucien Lerat, who, after conducting an extensive survey in Western Locris during the 1940s, discarded the previous suggestions that Galaxidi should be identified with Oeantheia, and suggested instead the correlation between the evidence on Chaleion and the ruins of the modern marine town⁴. Lerat, through his work published in 1952, not only revised earlier assumptions but also set the foundations for the study of the site's defense system. The fortification wall that was destroyed long before Lerat visited the region, probably by the late 10th c. CE⁵, did not attract travelers' attention, who were content with vague references⁶. Among them, the most informative is Dodwell's description⁷ and that of Sathas, the editor of Galaxidi's Chronicle, who explicitly states that the wall consisted of three fences made of rectangular stones⁸. Both the aforementioned testimonies were reported by Lerat⁹. There is only one explicit testimony as to its destruction: according to Sathas, the wall was demolished in 1830 to provide material for the queue-side of the modern harbour¹⁰. Lerat, with no information from pre-existing surveys, traced out a new course for the wall on an aerial photo, over which he drew the outline of the plots and the course of the defensive construction as far as possible when not covered by later buildings (fig. 2). Not much was added to Lerat's work by Travlos' plan that was published by Threpsiades¹¹ and reproduced by Papachatzes in his translation and commendation of Pausanias' travels¹² (fig. 3). In 1998, Portelanos, in his unpublished dissertation, collected the available material and described the wall, relying mainly on Lerat's work¹³ (fig. 4). A final

4. LERAT 1952, I, p. 198-209.
5. According to Galaxidi's Chronicle, compiled by the monk Euthymios, the most informative text on the history of the region over a period of almost seven centuries, from the 10th c. to 1690, Bulgarians under the rule of kings Simeon and Samuel raided Central Greece four times, while Galaxidi was captured and destroyed in 981 or in 996.
6. SPON 1678, p. 46; LEAKE 1835, p. 593. The travellers are collected by PORTELANOS 1998, p. 837-838.
7. Dodwell's text (DODWELL 1919, p. 130-131) is still useful: The only remains consist of some foundations, and a long wall with "three courses of large stones, well preserved, and built in the fourth style approaching regular masonry. But the principal part of the town seems to have been on a peninsula a few hundred yards to the east of the village; there are several traces upon it, composed of large blocks; and the rocks have been cut and flattened for the foundations of ancient edifices".
8. "συνέκειτο ἀπὸ τρεῖς περιβόλους ἐκ λίθων τετραγωνικῶν, ὡς ἐπὶ τὸ πολὺ λελαξευμένων καὶ κανονικῶς ἐπιτεθειμένων", SATHAS 1865, p. 179.
9. LERAT 1952, I, p. 198-199.
10. SATHAS 1865, p. 179.
11. THREPSIADES 1972, p. 187, fig. 1.
12. PAPACHATZES 1998, p. 459, fig. 474.
13. PORTELANOS 1998, p. 837-847. For the archaeological research at Galaxidi, cf. SKIADAS 1999, 63-64, 282, n. 6.



Fig. 2 — Lerat's plan (1952).

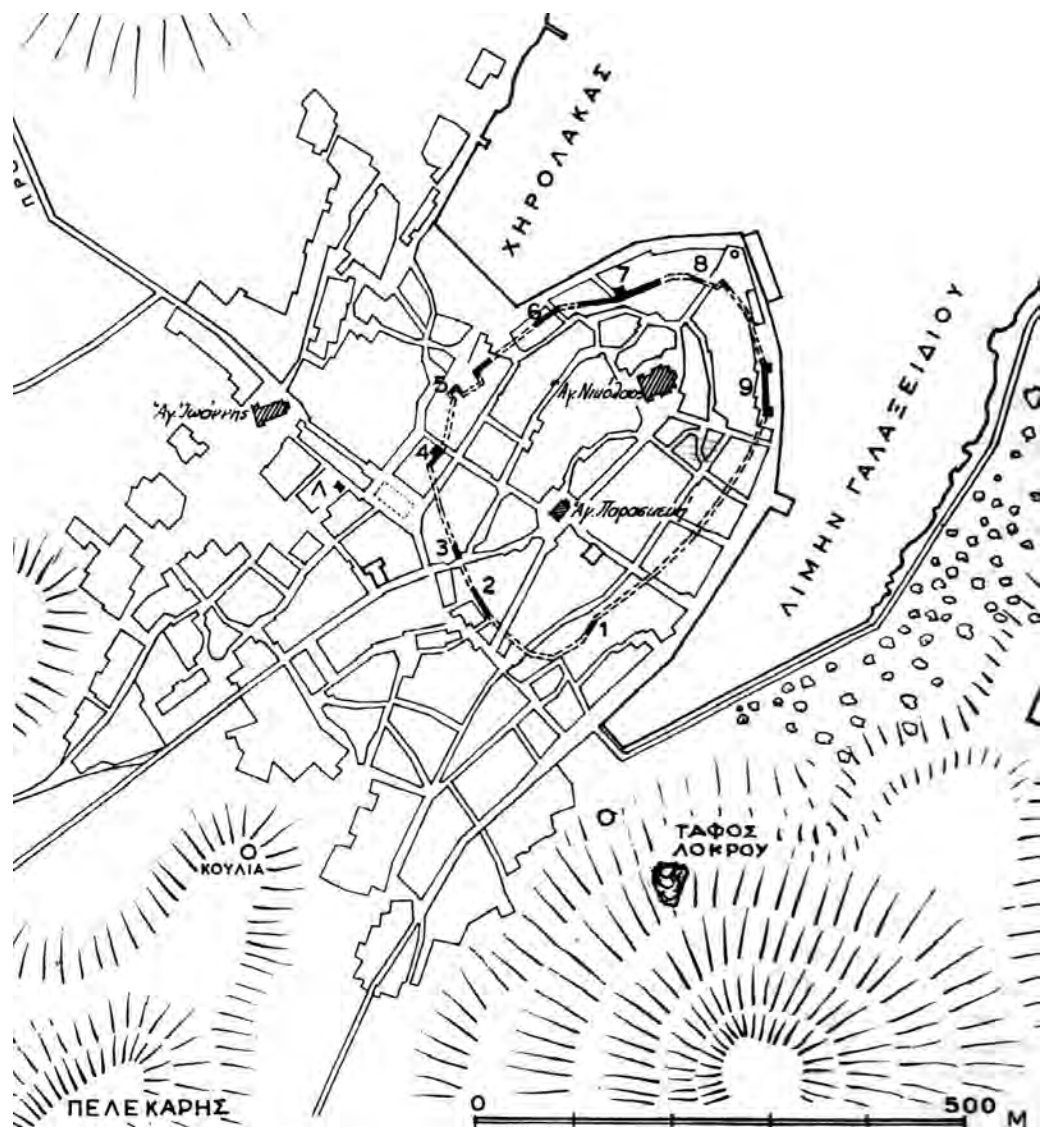


Fig. 3 — Travlos' plan published by Threpsiades (1972).



Fig. 4 — Portelanos' plan (1998).

contribution was offered by Skorda (fig. 5), who in 2003 published a plan of the site¹⁴. Relying on all these earlier studies, we collected all the documentation yielded during the works of the Archaeological Service and here, an updated version of the Chaleion's wall is presented (fig. 6).

Regarding archaeological research on the site, the results are not much more extensive. In 1940, Threpsiades excavated a rectangular funerary monument to the west of the settlement, as well as a number of cist and tile graves dating to the Hellenistic and Roman periods (fig. 7). Unfortunately, due to the loss of the excavation journals, the context of each grave is not known¹⁵. In 1990 this cemetery was further excavated and six more tile graves were found¹⁶. In addition to the western cemetery, a second burial ground, probably related to one of the roads leading to one of the gates, is located to the south of the settlement. One grave was found in 1972 at a distance of approximately 200 m from the enclosure, but the exact circumstances were not recorded. The grave was lavishly furnished with a bronze folding mirror bearing the head of Aphrodite in relief (Mus. Gal. no. 345), a bronze kantharos (Mus. Gal. no. 346), a handle (Mus. Gal. no. 347), a needle (Mus. Gal. no. 348), an undecorated amphora (Mus. Gal. no. 349), a lid of a pyxis (Mus. Gal. no. 350), a black-glazed lamp (Mus. Gal. no. 351), and an unguentarium (Mus. Gal. no. 352)¹⁷. Other than a small number of engraved and figure tombstones, two more natural caverns, which were converted into burial chambers with sarcophagi, observed and described by early scholars, can be added to these funerary monuments¹⁸.

Turning to the fortification wall, archaeological research has not been very systematic. Galaxidi has not attracted the interest of modern investors wishing to acquire a dwelling in the core zone of the settlement. The Archaeological Service responded to the building requests by undertaking the supervision of the construction, which led to rescue

14. SKORDA 2003, p. 7-8.

15. THREPSIADES 1972. The clay lamps and the glass vessels were studied and presented by ZAPHIROPOULOU 1975.

16. According to SKORDA 2003, p. 8, most important was a jar-burial that contained thirteen vases and eight bronze coins issued in the 2nd and 1st c. BCE.

17. PETRAKOS 1972, p. 375, pl. 317b; PETROCHILOS 2017, p. 41, pl. 2 (the mirror). The mirror, in spite of its poor state of preservation, retains much of the original traces of its decoration. The figure, which is rendered in low profile to right, has wavy, tousled hair, features that find their parallels in the mirror with Pan's head at the Metropolitan Museum; cf. WALTER-KARYDI 1998, p. 274, n. 23, fig. 10.

18. The first chamber is located in the grove south of the harbour; in the interior, that measures 4.15 × 3.20 m and 2.50 m in high, the walls have been shaped in the form of three sarcophagi, above which there are three arcossolia. Another chamber is found to the south-east of the modern settlement; it was carved underground and was accessible through a *dromos* that resembles the corresponding structures of the Mycenaean period. The folk tradition acknowledged the above chamber as the grave of the mythical figure, Lokros; cf. LERAT 1952, I, p. 156-157.



Fig. 5 — Skorda's plan (2003).



Fig. 6 — The restored plan of the fortification wall; in red the visible parts (Ephorate of Antiquities of Phokis).



Fig. 7 — The Hellenistic funerary monument excavated by Threpsiades in 1940 (Ephorate of Antiquities of Phokis).

excavations in several cases, most of which were conducted on plots adjacent to the wall. In spite of the relatively numerous rescue excavations, the material is surprisingly scanty. As mentioned above, the constant occupation of the site caused the destruction of the ancient remains, exacerbated by the erosion of the surface. Most of the moveable finds have been collected from pits opened in the rock, where the material had been discarded: the material is seldom from the same period and the date of the objects can vary within a span of several centuries.

II. THE SITE AND ITS HISTORY

The city's history predates its foundation. An epigraphic testimony dated to the early 5th c. BCE, which is acknowledged as one of the most informative legal texts on the establishment of a city with the initiative of a federated state, bears reference to a group of Chaleians. The latter, under the leadership of a certain Antiphatas, along with other people from Hypoknemidian Locris, were sent to settle Naupactus¹⁹. This early 5th c. BCE testimony serves as a strong argument in favour of the existence of Chaleion as a political community long before the establishment of the city in modern Galaxidi. Where this

19. LERAT 1952, II, p. 29-32; *IG IX.12* 3, 718. DOMÍNGUEZ 2013, p. 457-461; DAVERIO 2015, p. 186-190.

community was settled is a matter of speculation. Nevertheless, there are strong indications in favour of the assumption that the Chaleians occupied the slopes in the mountainous area of Galaxidi, where several Archaic settlements have been located²⁰ at Palaiogalaxido, where a precipitous, fortified acropolis offered safe conditions for the population living in the surrounding plains, and mainly at Ayios Vlassios²¹. The latter is beyond a place where an Archaic settlement²² developed. Two inscribed plaques, currently on display at the British Museum, are reported to have been discovered; one records a treaty between Chaleion and Oeantheia, and the second is the aforementioned inscription with the regulations concerning the colonisation of Naupactus. These epigraphic findings, as well as several bronze vessels that are reported to have been found at the same site and are stored in several museums abroad, point to the religious character of the site²³.

The relocation of the local population²⁴ and the foundation of the city coincide with the occupation of the region by the Aetolians, who must have had an active involvement in these events. The Aetolians – or in any case the authority that conceived the foundation of the urban planning – understood the geographical advantages of the site. The city is located on a low piece of land jutting into the sea; the settlement could be easily protected from the hinterland, and the two natural harbours, the deeper *Limen* (Λιμὴν) and the shallower *Cherolakas* (Χηρόλακας), offered ideal conditions for the safe mooring of boats (fig. 8). This latter feature must have been the most decisive for the Chaleians in choosing their city. A partly preserved wall found underwater in the natural harbour of Cherolakas was probably the foundation of a quay stretching from the land into the sea²⁵.

The Aetolians had already been gradually expanding since the early 5th c. BCE. Initially, they occupied Molykreion, Makyneia, and the suburbs of Naupactus²⁶, the western part of the region hence named as *Αἰτωλία ἐπίκτητος*. In 338 BCE, Naupactus was also handed over, for a short period, to the Aetolians by Philip²⁷. Only a few years

20. THREPSIADES 1972, p. 201-205; MORGAN 1990, 254-256.

21. PETROCHILOS, forthcoming, p. 44.

22. SATHAS (1865, p. 109) records the narrations of older men who recalled that the humble antiquities seen at his time had been preserved earlier to a considerable height. He also ascertains that in the vicinity of the little church, foundation stones are dispersed and many findings have been discovered, among which a statue, coins, graves, and the two bronze inscriptions now at the British Museum.

23. The inscription on the treaty between the two Locrian cities bears an explicit reference to a harbour situated outside the city “τὰ ξενικά ἐθαλάσσας ἡγάγεν ἐλιμένος ἐκτὸς τὸ κατὰ πόλιν”. Nevertheless, this reference need not be correlated with Chaleion.

24. A suggestion put forward already by SATHAS 1865, p. 109. For the phenomenon of the “*metoikesis*”, cf. DEMAND 1990.

25. SKORDA 2003.

26. GRAINGER 1999, p. 94-95.

27. GRAINGER 1999, p. 94.



Fig. 8 — Aerial view of modern Galaxidi (Google Earth).

later, in 321 BCE, the Aetolians invaded Western Locris and plundered the territory of Amphissa, a city to the east of Chaleion. Soon they withdrew, forced away by the Acarnanians²⁸, but their policy to occupy Western Locris permanently would simply be delayed for a few years. Prior to the struggle against the Celts in 279 BCE, the Aetolians had established themselves over the entire former Hesperia Locris²⁹.

The foundation of Chaleion at the site of modern Galaxidi seems to have sparked an interest in protecting the hinterland. The density of sites in the region and especially the number of towers indicates that Chaleion was not negligible for the territory's sovereign.

28. GRAINGER 1999, p. 96.

29. GRAINGER 1999, p. 95.

At that time, borderline disputes with Tritaea were settled, as indicated by a very detailed and informative decree on the agricultural occupation of the inhabitants³⁰. In brief, in the wider region, eight towers have been traced that could be approximately contemporary to Chaleion. Opposite Chaleion in the Gulf of Kirra, on a rocky island, there is a wide trench bisecting the terrain which has been recognized as a ship shed, probably belonging to the Aetolians³¹.

III. THE FORTIFICATION WALL

Chaleion's fortification wall, which is built of tough local limestone, lies on a limestone promontory with gradual slopes rising up to 50 m above sea level. Clear traces of the circuit's course have been traced on all the sides and located in several parts of the modern city. Following the contours of the hillock and enclosing an area measuring roughly 70,000 m², the wall that was extended to approximately 1000 m was studded with rectangular towers on all sides. The best-preserved parts are those on the NW and NE sides, where the curtain and its towers are visible to a height of approximately 60 and 70 m respectively. The wall's width measures 2.9 m, with only slight variations, and it is double-faced with quadrilateral rectangular (ashlar) blocks on the faces. In order to adapt to the cavities of the bedrock, the first two courses vary in height, but then they are of equal height (fig. 9), forming a neat, trapezoidal isodomic or pseudo-isodomic masonry that resembles the masonry at Ayioi Pantes (Vidavi)³², Eupalion³³, Pendeoria³⁴ and Myonia (Ayia Euthumia)³⁵, all settlements that are located in the region of Western Locris. The fill between the two revetments consists of earth and chipped or unworked piles of stone, into which headers are occasionally inserted (fig. 10). The blocks have quarry faces; their exterior faces received no substantial working besides the one carried out during their extraction at the quarry, or hammer faces, since they are also roughened by means of a blunt implement. Regarding the joints, most are drafted but not bevelled.

30. VATIN 1968, p. 35, dated to the end of the 4th c. BCE (according to Lerat) or the beginning of the 3rd c. BCE (according to Vatin).

31. VALAVANIS 2015, esp. p. 119-120.

32. LERAT 1952, I, p. 138-146, fig. 6, pl. XXXIII-XXXIX; PORTELANOS 1998, p. 725-733, pl. 144-147, plans 192-195

33. LERAT 1952, I, p. 99-101, fig. 2, pl. IX-X; PORTELANOS 1998, p. 629-637, pl. 119-120, plans 161-166.

34. LERAT 1952, I, p. 145-149, fig. 7, pl. XLI-XLIII; PORTELANOS 1998, p. 857-861, pl. 185-186, plan 232.

35. LERAT 1952, I, p. 169-173, fig. 9, pl. LIV-LVIII; PORTELANOS 1998, p. 851-856, pl. 183-184, plan 230.

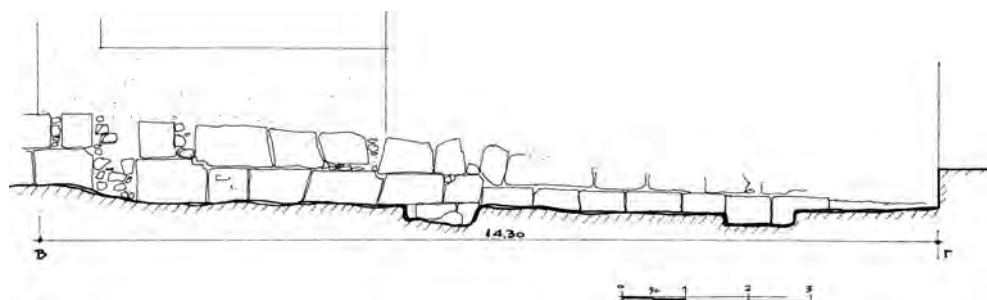


Fig. 9 — Face of the wall (no. 6 in the plan) (Ephorate of Antiquities of Phokis).

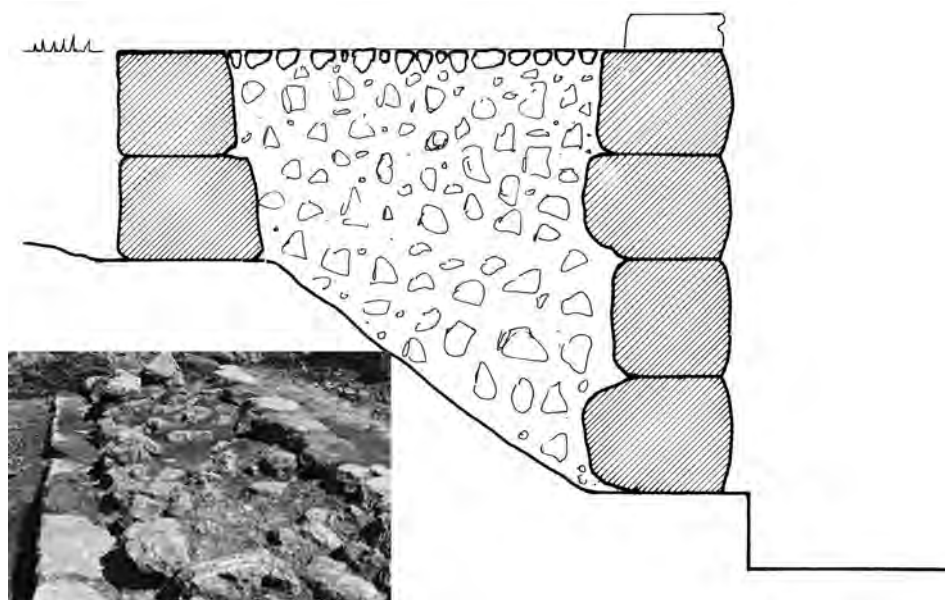


Fig. 10 — Section of the wall (Ephorate of Antiquities of Phokis).

Ten towers have been traced so far, either entirely or partially documented. Their placement does not follow a stable rule and the length of the curtain between them varies considerably. As expected, the towers do not reinforce the points where the stretches of the wall join inwards, thus shaping a kind of recession. None of the extant towers have been excavated so only preliminary remarks can be made on their size. The most modest is tower *a* on the eastern side, whereas the most extensive is tower *b*. It seems that their

bases were solid and floored with compressed earth and rough stones, as was the case of the towers at Plevron³⁶. There are some indications that partition walls were used to enhance the construction's massiveness, as well as to prevent the outward thrust of the fill, especially in tower *a*. Only one gate has been found so far on the south side of the wall. It is an axial gate with one tower flanking to the left, lacking any courtyard.

Lerat recognized a possible trace of a tower on the eastern side of the circuit, of which nothing is visible nowadays³⁷. The most conspicuous part of the curtain is approximately 60 m long and 2.90 m wide, with two rectangular towers; tower *a* is 7.4 m long and protrudes 4.20 m from the curtain; tower *b* that was excavated in 2018 is of the same dimensions as the latter (fig. 11). The curtain is preserved up to four courses (two metres) in height. One of the plinths bears a relief in a frame resembling a shrine that contains two arched symbols; Lerat interpreted them as Dioscuri³⁸. Between parts [1] and [2] a considerable



Fig. 11 — View of the NE part at the wall (no. 1 on the plan) (Ephorate of Antiquities of Phokis).

36. ADAM 1982, p. 48, fig. 17; PORTELANOS 1998, p. 175-192, pl. 16-21, plans 25-28.

37. LERAT 1952, I, p. 153.

38. Cf. LERAT 1952, I, p. 153-154, fig. 8, no. 2, pl. XLV, 4 and XLVI, nos 1 and 3; THREPSIADES 1972, p. 201, fig. 1, no. 9. THEMELIS 1978.

portion of the circuit is missing, approximately 75 m long. Travlos acknowledged traces of the wall towards the tip of the promontory³⁹. On the other hand, along the circuit's N course Lerat found some remnants at three spots (his number 3), which are not visible today. These indications suggest that following the tower *b*, the wall turned abruptly to the NE towards tower *c*, at a distance of 110 m. Travlos was probably carried away by some rock-cuttings and ruins of walls preserved towards the edge of the promontory, next to the modern pier. These were also noticed by Lerat, who attributed them to a detached bastion. Since there are no more traces of the structure to confirm this suggestion, one need not discard it. Of the expected 110 m long N side, where one would expect a tower, 13 m of the curtain wall have been revealed and are still visible at the foundation level of a modern building. This part of the enclosure was reinforced by tower *c* that measures 5 m in length and projects from the curtain 2.80 m⁴⁰. The retreat of the precinct's outline from the perimeter of the promontory, contrary to the reconstruction put forward by Travlos, would leave a flat, quite extensive area in front of the N side, empty, an observation that needs further discussion. This part of the promontory is, on account of its tight contours, the least accessible from the sea, so it would be rather difficult to attack this side. On the other hand, a courtyard in front of the wall could facilitate an unhindered approach to a gate. A small staircase carved on the SE side could lead to an open terrace, in close proximity to tower *b*. Indeed, it seems that in the middle of the north side, there had been an opening, part of which was revealed during the excavation at Psychogiou's plot (fig. 12). Nowadays only the western part of the threshold, as well as the pilaster of the same side, is visible. It is worth mentioning that in the contemporary town planning, there is a path whose course coincides with the ancient opening at the circuit. The NW corner of the fortification perimeter was buttered by the rectangular tower *d*, which has not been fully excavated. There then follow 29 m of curtain measuring 2.90 m in width [3] and after an interval of 18 m there is another tower, *e*, measuring 6.10 m in length and 4.20 m in width. From its NW side almost 40 m of curtain extend [4] that after an interval bents abruptly to the east towards the harbour [5]⁴¹. Then the curtain follows a course almost parallel to the shore for approximately 55 m, of which 23 m are preserved to foundation level [6]. Upon the latter there were subsequent additions built of quadrilateral rectangular blocks and plinths. At the middle of the north side of the circuit the exterior face of the wall was founded in a groove that was carved into the rock for more than 9 m, whereas the interior fill was based on the rock that was almost untouched, other than some slight configurations.

39. THREPSIADES 1972, p. 186.

40. The plot was excavated in 1976; 32 m of curtain preserved up to 2 m high (two courses) and 3 m wide were revealed, as well as part of a tower 5 m long, which protrudes 2.80 m. The wall was penetrated by a conduit; in a subsequent, undeterminable period, part of the tower was turned into a tank, from which the plastered walls are preserved. ZAFIROPOULOU 1976, p. 161, figs. 1 and 2, pl. 112.

41. SKORDA 1998, plan 1, pl. 153γ.



Fig. 12 — View at the N. part at the wall (Ephorate of Antiquities of Phokis).

Thereafter the circuit follows a southern almost straight course for more than 100 m that must have been strengthened with at least two towers. From one of them, tower *f*, the remains, merged into the cavities of a rock, are preserved (fig. 13). This part should not be identified as a buttress since the preserved stretches of the circuit show no evidence for others. Only the northern face of the tower is preserved, whereas the other sides are dismantled. Almost in the middle of the western stretch, the fortification wall is penetrated by a gate 2.30 m wide[8] (fig. 14). At both ends, there are pivot sockets for the door leaves, measuring 0.20 m × 0.10 m. The threshold consisted of three slabs, of which the central one is missing. An alternative explanation is that the middle slab was never placed, to help drain water from the city. North of the gate, on the left-hand side for the person approaching, tower *g* measures 7.20 m long and 3.25 m wide. From the western face of the circuit two more parts [9-10] are preserved. At this point, Travlos assumed that the wall's course ran further down the slope to the west of the extant remains, where he also reconstructed a recession penetrated by a gate (his number 5). Nevertheless, there are no indications of the fortification at this location. Tower *h*, being 12.40 m long but rather narrow



Fig. 13 — View of the N face of tower f. (Ephorate of Antiquities of Phokis).

(4.70 m on the southern and 2.50 m on the northern face, an asymmetry owed to the oblique direction of the south-western course of the wall) was the most extensive tower. On the southern face, three parts of the wall are preserved along with tower *i*, which is 7 m long and 4.20 m wide. The south-eastern corner of the circuit is reinforced by tower *j*⁴². Two stretches of the wall are preserved, one between towers *i* and *j* [17], and a second [18] to the north of the latter.

In several cases, the ancient circuit was demolished down to foundation level. The deconstruction advanced most rapidly on the most accessible sides. In the middle of the western side, only the lowest course is preserved, whereas stone plinths from the second course of the dismantled ancient construction have been re-used in a mixed technique with stone, bricks, and mud, probably dating to the early Byzantine period. Similar additions are visible in several places around the wall. In the interior, there was some difference in height between the lower areas along the wall and higher-lying

42. SKORDA 2003.

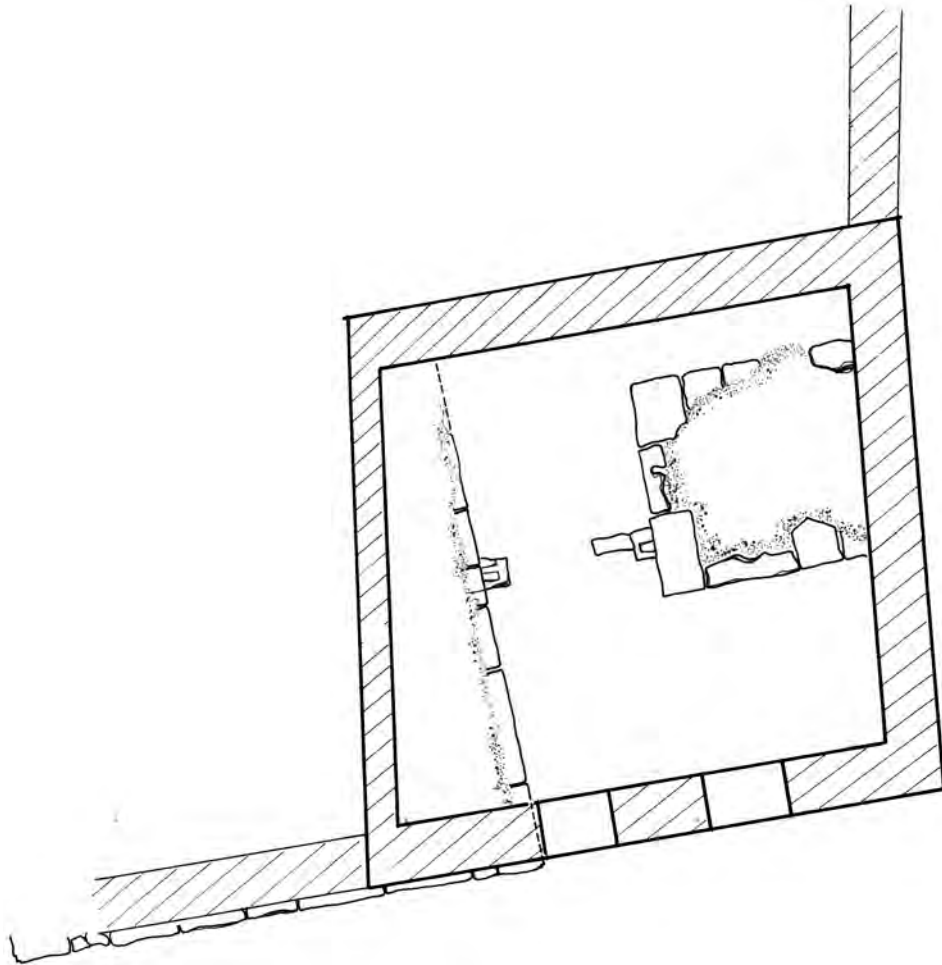


Fig. 14 — Plan at the gate and at the adjacent tower (Ephorate of Antiquities of Phokis).

areas towards the centre of the settlement. The communication between these areas was facilitated by means of steps carved in the rock. In a plot at the north-western side [5], a 2.5 m drop was observed between the endpoints, whereas a flight of steps was uncovered next to the wall, through which it was accessible (fig. 15).



Fig. 15 — View at the west side at the wall (no. 5 on the plan) (Ephorate of Antiquities of Phokis).

IV. THE DATE OF THE WALL

Dating a fortification wall is an arduous task, especially when the excavation finds related to it are not recovered from undisturbed contexts. The lack of safe documentation is not compensated by morphological evidence or the type of masonry⁴³. As for the date of the Chaleion's wall, the majority⁴⁴ of scholars who have studied it postulate a late 4th or early 3rd c. BCE date. Lerat, following Pappadakis⁴⁵, assumed that it was erected after the Aetolian occupation of the region. In 1978, Themelis, while removing the fill from the cavities in front of the wall in the southeastern part of the wall (former

43. This method of dating the fortifications was formulated mainly by WREDE 1933 and Scranton 1941. Their typological classification, based on a number of criteria, among which the most evident was the masonry, is considered as unreliable and has not been used for many decades. Among others, McNICOLL 1997, p. 3.

44. A notable exception is LAWRENCE 1979, p. 438, n. 4, who justifies his assumption that the absence of natural defenses necessitated the construction of a fortification wall. In this aspect he is followed by PORTELANOS 1998, p. 902-903.

45. PAPPADAKIS 1923, p. 147. LERAT, CHAMOIX 1947/8, p. 56-57; PAPACHATZES 1998, p. 458-459.

Chatzis' plot), recovered fragmented pottery dated to the late 4th or early 3rd c. BCE (320-290 BCE)⁴⁶. This dating has been accepted in the few ensuing references⁴⁷.

Generally speaking, the size and the features of the Chaleion's wall indicate that its date in the 3rd c. BCE needs to be excluded since this does not take into account the developments that had already taken place in the 4th c. BCE. At that time, the introduction of the mechanical siege-craft techniques caused the re-appraisal of the hitherto defensive strategy⁴⁸. Until that time, the principles set in the Archaic period were still valid and the fortification walls continued to employ the concept of the simple, vertical barrier that dated back to the prehistoric period and frequently protected only the acropolis of the settlement. Probably in the 6th BCE, the addition of the tower as a means to enhance the defenders' ability to counterattack was introduced. In the 5th c. BCE, the defensive wall surrounded the entire settlement and later in the 4th c. BCE even more extended constructions were built to enclose the non-inhabited areas or the pasture land pertinent to the city's sustenance. This so-called *Geländemauer* type of circuit was considered in the Classical period an adequate defense against the contemporary siege-craft method⁴⁹.

In addition to that, the principles on which the defense systems of the Classical period were structured were reviewed, when in the early 4th c. BCE Dionysios of Syracuse employed effective catapults that eventually brought about revolutionary changes in war tactics and the concept of defense. Walls that were built until Dionysios' time were thenceforth deemed obsolete (*ἀρχαία* is the term applied by Philo when he refers to the defense systems prior to the Hellenistic period, which consisted of continuous walls that were interrupted only by projecting towers)⁵⁰ since they could not accommodate the mechanical implements his engineers had invented. At Syracuse, he also assigned his architects to construct a larger wall that would be defended by higher towers with windows on the upper level, from where the warriors could light catapults against the assailing foes⁵¹. The catapult's power was directly proportional to the size of their bows and eventually to the available space on the tower⁵². These new standards were soon to be followed in the newly founded cities, a demand put forward already by Aristoteles in his *Politics* (1330 B-1331 A), who advocated in favour of erecting more secure walls in view of

46. THEMELIS 1978, p. 147 and 1984, p. 232.

47. PORTELANOS 1998, p. 846; SKORDA 2003, p. 8; Valavanis 2015, p. 120.

48. GARLAN 1974, p. 19-86; McNICOLL 1986.

49. GARLAN 1974, p. 82.

50. WINTER 1971, 123; LAWRENCE 1979, p. 39.

51. MARSDEN 1969, p. 48-56; WINTER 1963; OBER 1987; GARLAN 1974, p. 156-168.

52. OBER 1987, p. 579.

the advances made in the field of military artillery; from the transition to the 3rd c. BCE the towers became sturdier, larger, and heavier⁵³.

The wall at Chaleion does not conform to the developments recorded so far regarding military architecture, and in this sense, it seems to have been structured on rather obsolete principles. The circuit surrounds a rather restricted area and does not enclose non-inhabited arable areas or pasture. Besides that, the towers' size does not correspond to an advanced military strategy, in which the machines employed tend to become larger. The first generation of circuits, after the invention of torsion artillery and related equipment, was small scale and the chambers inside the towers were correspondingly of modest scale. The torsion artillery would not have demanded a space larger than 3.5 m deep beyond the curtain wall, other than the wall itself, making an area of 25 m² in total⁵⁴. Chambers of that size could have accommodated 1 ½ – mina stone-throwers⁵⁵ that required a clear space of 3.3 to 3.4 m both for the machine and the operator. Later on, as bigger and more powerful artillery was built, the former towers would have been considered as inadequate⁵⁶. Towers large enough to accommodate torsion stone-throwers are rare before the end of the 4th c. BCE. The aforementioned remarks are not necessarily conducive to the dating of the wall, since smaller towers were employed even in the Hellenistic period⁵⁷. In any case, the size of the towers alone is not an adequate indication for the date of a fortification. Nevertheless, the small size of the towers suggests an earlier date. Furthermore, the gate without courtyard or overlapping curtains that would force the enemy to crowd into a very limited space while approaching, is the simplest form of gate that illustrates the most rudimental principles of defense found in many places from the prehistoric (as in the case of Troy's VI phase) to the late Classical period, as in the case of Phyle's fort⁵⁸ or that at Eleutherai (Gyphtokastro)⁵⁹. In general, similar features, such as those of Chaleion, can be seen at the fortification circuit at Kallipolis or Kallion, which was probably erected towards the end of the 4th c. BCE⁶⁰. Finally, probably due to the terrain formation, where there were no inaccessible places large enough to shelter the population in times of danger, the founders were obliged to obviate the construction

53. LAWRENCE 1979, p. 223.

54. WINTER 1989, p. 191.

55. WINTER 1989, p. 156, 165-7, 323-4 on defensive artillery.

56. OBER 1987; but also the reservations and amendments of RIHLL 2006.

57. WINTER 1989, p. 192, n. 8.

58. KRAUSE 1972, p. 72; ADAM 1982, p. 206, fig. 120.

59. ADAM 1982, p. 216, fig. 126, and Idem 1992, p. 14, fig. 1.6.

60. THEMELIS 1984, p. 237; PANTOS 1985, p. 462-463, based on historical grounds and on the account that the city was located on a very important location that Kallipolis was fortified at the end of the 4th c. BCE. In c. 289 BCE the city honoured King Pyrrhus *JG IX,1² 1:154*. On the 4th c. BCE coins found in KALLIPULIS KRAVARTOYANNOS 1981, esp. p. 1315. Cf. also MPAZIOTOPOULOU, VALAVANIS 1994.

of an acropolis. This feature is observed in contemporary settlements in the region, as is the case of Makyneia⁶¹, Eupalion⁶², Pendeoria⁶³, Ayioi Pantes (Vidavi)⁶⁴, to name just a few⁶⁵.

Apart from the aforementioned general observations that rely on the military advances in the Classical and Hellenistic periods, the moveable finds from the site corroborate the date proposed by earlier scholars. It is questionable if a stray find that was delivered to the Museum of Galaxidi, a bronze coin of Aegina bearing two dolphins on the obverse and the refined skew pattern in the incuse square on the reverse, dated to the second quarter of the 4th c. BCE⁶⁶, was actually found at the site. As already noted, the earliest tomb found at Galaxidi and published by Petrakos in 1972⁶⁷, is dated to the second half of the 4th c. BCE.

Additionally, the re-examination of the pottery and the other small finds recovered from the foundation level of the fortification enclosure helps to narrow down the date. Thus, the tapering stem from a kantharos that was found in the foundation trench [no. 2 on the plan] is probably dated to ca. 325 BCE⁶⁸ (fig. 16), whereas the partly preserved black-glazed plate with palmette impressions within rouletting from the same place is also dated to the last quarter



Fig. 16 — Fragment of kantharos (Ephorate of Antiquities of Phokis).

61. LERAT 1952, I, p. 189-191, fig. 1, pl. I, II; PORTELANOS 1998, p. 304-319, pl. 46-48, plan 80.

62. *Ibid.* n. 33.

63. *Ibid.* n. 34.

64. *Ibid.* n. 32.

65. The fortification structures running around small settlements (*kômai*) in Portelanos 1998, p. 1457-1458.

66. Galaxidi Museum no. 544. SNG Cop. 533.

67. *Ibid.* n. 17.

68. ROTROFF 1997, p. 247 no. 52, fig. 7, pl. 6 (ca 325 BCE).

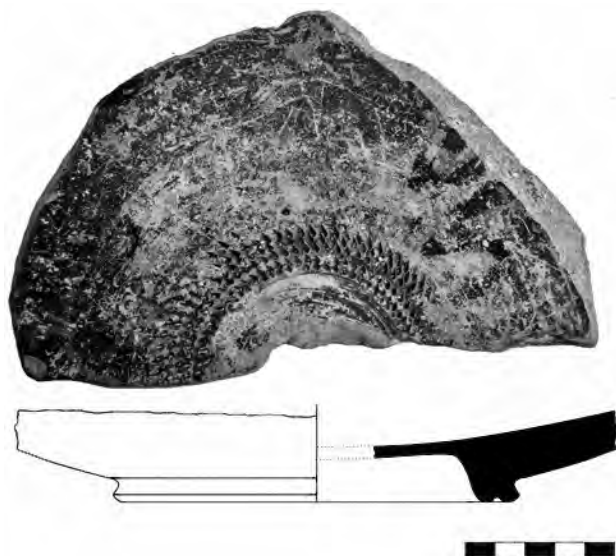


Fig. 17 — Fragment of glazed plate with palmette impressions (Ephorate of Antiquities of Phokis).

of the 4th c. BCE⁶⁹ (fig. 17). Much more abundant is the middle and late Hellenistic material, as well as that of the Roman imperial period; e.g. the fragment of a relief bowl⁷⁰ (fig. 18), the base of a pyxis⁷¹ (fig. 19), the base of a small bowl⁷² (fig. 20), the small Attic-type glazed skyphos⁷³ (fig. 21). Taking into account the archaeological documentation, the Chaleion's wall was probably founded towards the earlier years of the last quarter of the 4th c. BCE.



Fig. 18 — Fragment of relief bowl (Ephorate of Antiquities of Phokis).

69. ROTROFF 1997, p. 309-310, no. 641, fig. 46, pl. 60 (325-300 BCE).

70. ROTROFF 1982, p. 88, no. 373, pl. 66, 87 (middle of the 2nd c. BCE).

71. ROTROFF 1997, p. 362, no. 234, fig. 75, pl. 90 (200-175 BCE).

72. ROTROFF 1997, p. 334, no. 918, fig. 60, pl. 73 (225-175 BCE).

73. ROTROFF 1997, p. 258, no. 154, fig. 12, pl. 14 (300-275 BCE).



Fig. 19 — Fragment of pyxis (Ephorate of Antiquities of Phokis).



Fig. 20 — Fragment of small bowl (Ephorate of Antiquities of Phokis).



Fig. 21 — Fragment of Attic-type skyphos (Ephorate of Antiquities of Phokis).

v. THE SETTLEMENT

The ground relief with its steep slopes forced the inhabitants to adapt their construction methods when building their dwellings. As already mentioned, Leake observed in the early 19th c. two more courses besides the fortification wall, to which he also attributed a defensive character. Part of one such wall is preserved towards the middle of the south side at a distance of approximately 70 m from the hypothetical course of the fortification circuit on that side (I). This interior wall, which is preserved up to 2 m high and 13 m long, has one face and therefore was not a two-faced wall similar to the defensive ones but rather a retaining wall (fig. 22). By means of two or three rows of such walls, the site could easily have been shaped into terraces wide enough to sustain private and public edifices and roads. Another retaining wall is preserved on the northern fringes of the settlement (II). It was founded on the rock at a distance of approximately 7.80 m from the inner face of the wall and it is preserved solely up to one course of roughly hewn stones. The placement of these walls brings the settlement's spatial organisation into focus. By means of three or four retaining walls, the rocky slopes could be shaped into convenient flat berms, wide enough to accommodate buildings and paths.

As already mentioned, the uninterrupted habitation of the site resulted in the almost complete elimination of the earlier constructions. This observation accounts for the preservation of only a handful of inscribed gravestones and even less sculptural works. None of them predates the early 3rd c. BCE and most are dated to the 3rd and 2nd c.



Fig. 22 — Retaining wall (no I on the plan) (Ephorate of Antiquities of Phokis).

BCE⁷⁴. The earliest funerary inscription is the one for Harmoxenos, whose stele was erected by his father and mother as a memorial of their child to their descendants, as we learn from the epigram inscribed on the base of the monument⁷⁵. The shape of the letters, especially the alphas with the broken vertical bars and the sigmas with slightly divergent horizontal bars, finds parallels to inscriptions of the early 3rd c. BCE from Delphi. Besides Threpsiades' and Skorda's excavations in 1940 and 1990 respectively, which brought to light Hellenistic finds, the random findings of that period are scarce. Objects dated to the Roman period are more frequent. Apart from the Roman tile graves excavated by Threpsiades in 1940, vessels from Galaxidi have been delivered to the Archaeological Service since before the middle of the 20th c.⁷⁶ Only two sculptural works have been found so far at Galaxidi, the funerary stele of a girl, probably

74. *IG IX,1² 3:724; 725; 726; 729* (3rd c. BCE); *727; 728; 732; 733* (2nd c. BCE); *730; 731; 734; 735; 736; 737* (3rd-1st c. BCE)

75. *IG IX,1² 3, 723.*

76. Undecorated jug, inv. no. 95 (from Kavos).



Fig. 23 — Funerary stele, Mus. Gal. no. 421 (H. 44 cm, W. 24 cm. Th. 3,5 cm) (Ephorate of Antiquities of Phokis).

tification walls were founded at the time when the Aetolians emerged. These contemporary events are rightfully connected since such an evolution corresponds to the intervening character of the Aetolians. This applies also to Chaleion, which was probably founded after the arrival of the Aetolians in the last decades of the 4th c. BCE. This date and the Aetolian initiative explain the features of the Chaleion wall, its restricted size, the gate, the size and the shape of its towers, and in general the low potential endurance of the defensive system against a siege where advanced military means could have been employed. It seems that Chalieis

dated at the late 2nd c. CE⁷⁷ (fig. 23) and the lower leg of a life-sized statue of a man, also dated to the Roman period.

VI. FINAL REMARKS

Chalieis were a political community that thrived in the wider region of modern Galaxidi during the Archaic and Classical periods. Their presence is recorded not only by the epigraphic testimonies regarding the colonisation of Naupactus and the treaty between Chaleion and Oeantheia but also by the preserved remains of contemporary settlements in the region. The trigger for a change in the settlement pattern of the region towards the end of the 4th c. BCE was the occupation of the land by the Aetolians. The latter, who had evolved from a tribal to a federal state, with a high degree of efficiency, developed an urbanisation system that went in tandem with their expansion. In eastern Aetolia and Western Locris, many for-

77. Unpublished. Plain slab without border. Missing the left bottom corner with the lower left part of the body from knee-height. The dead man is depicted in a frontal position, the weight of the figure is carried by, whereas the left leg bears the relaxed right leg is bent at the knee. He is wearing a chiton and a himation that cover his body entirely and grasspiny sandals on his feet. The right hand hangs stiffly in the middle of his chest. The folds running down from the left shoulder. The left hand is hanging at the side and gathering up some of the lower folds of the mantle. Cf. VON MOOCK 1998, no. 260.

did not put much effort to meet the challenges brought about by advances in military technology during the early 3rd c. BCE. But was this necessary? The city had been recently founded and as it was not located on the fringes of the mighty Aetolian state, there was no imminent danger. Indeed, the walls did not betray the dwellers, since they remained safe for a long time until they were dismantled.

This paper has collected all the available material from recent and earlier works on the walls of Chaleion. In this aspect, the study was mainly archival, since it entailed much research into archaeological reports, published or unpublished. An updated presentation of the material will hopefully encourage further studies on the subject so that Chaleion might earn its place in works on ancient fortifications.

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