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Chysanthos Kanellopoulos – Erofili Kolia

Ancient Keryneia, Aigialeia. Excavations and architecture in the sanctuary of Profitis Elias
mit einem Anhang von Eleni Psathi

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Geleitwort

Seit dem Erscheinen des ersten Bandes im Jahre 1876 präsentieren die *Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung* in kontinuierlicher Folge einem breiten Fachpublikum aktuelle Forschungsergebnisse aus Griechenland und angrenzenden Gebieten, sodass sie mit Recht zu den traditionsreichsten Publikationsorganen der griechischen Altertumswissenschaft gerechnet werden dürfen.

Mit dem vorliegenden 126. Band der *Athenischen Mitteilungen* erscheint die Zeitschrift in veränderter Gestalt. Ebenso wie bei den Bänden der Reihe *Athenaia* und verschiedenen Druckmedien anderer Abteilungen des Deutschen Archäologischen Instituts wird nun ein Format gewählt, das die Integration von Bildern in den Text erlaubt und gleichzeitig deren Abbildungsgrößen variabel gestalten lässt. Auch der großzügigere Abdruck von Farbabbildungen, maßstäblichen Plänen und Architekturzeichnungen wird so vereinfacht.

Peter Baumeister hat als Redaktionsreferent der Abteilung Athen, mit maßgeblicher Unterstützung durch Joachim von Freeden (wisa-print, Frankfurt am Main), die neue Gestaltung der Hauszeitschrift auf den Weg gebracht, Ulrich Thaler konnte als sein Nachfolger diese Arbeit unter steter Mithilfe von Ulrike Schulz zum Abschluss bringen. Die dabei unter Mitwirkung von Julia Engelhardt entwickelte neue Einbandgestaltung soll gleichermaßen die Kontinuität und Tradition der Reihe als auch die Neuerungen nach außen sichtbar machen. So knüpft sie einerseits in ihrer Farbgebung an das bewährte Grün der vorhergehenden Bände an, während andererseits mit einem bildlichen Ausblick auf Beiträge im Band das neue Gewand sowohl auf die neuen Möglichkeiten der Präsentation archäologischer Ergebnisse verweist als auch noch unmittelbarer auf das, was weiter im Zentrum steht: vielfältige und ertragreiche Beiträge zur modernen archäologischen Erforschung Griechenlands.

Katja Sporn
Reinhard Senff

Ancient Keryneia, Aigialeia

Excavations and architecture in the sanctuary of Profitis Elias

with an appendix by Eleni Psathi

CHRYSANTHOS KANELLOPOULOS – EROFILI KOLIA

Alt-Keryneia in Aigialeia. Ausgrabung und Architektur im Heiligtum auf dem Profitis Elias

ZUSAMMENFASSUNG Die systematische Ausgrabung auf der Anhöhe Profitis Elias bei Mamousia in Achaia legte die Überreste eines Heiligtums frei, das zum Einflussbereich von Alt-Keryneia gehören dürfte. Der archaische Peripteros beherrschte die Anhöhe. Dieser Tempel, der zwischen 500 und 490 v. Chr. datiert, war aus Sandstein erbaut, mit Simen, Akroteren und Giebelskulpturen aus Inselmarmor. Gestalt und Comparanda der Krepis weisen auf ein Pteron mit 14 Säulen an den Längsseiten hin. Bemerkenswert ist, dass die Cella außerordentlich schmal ist, so wie es auch im zeitgleichen Tempel der Athena in Alipheira der Fall ist. Östlich des archaischen peripteralen Tempels befinden sich die Überreste des Altars und eines kleinen Oikos. Das archaische Heiligtum wurde aller Wahrscheinlichkeit nach durch das Erdbeben des Jahres 373 v. Chr. zerstört. Die Ausgrabungen westlich des großen archaischen Tempels brachten die Überreste eines kleineren Tempels mit zwei Säulen in antis und quadratischer Cella ans Licht, der in die Mitte des 4. Jh. v. Chr. datiert werden kann.

Schlagwörter Archaischer Tempel; Keryneia; Voura; Achaia.

ABSTRACT Systematic excavations on the peak Profitis Elias at Mamousia in Achaia have exposed the remains of a sanctuary that may have belonged to the territory of ancient Keryneia. The Archaic peripteros dominated the peak. This temple, which dates between 500 and 490 B.C., was built of sandstone with simas, acroteria and pediment sculptures of insular marble. The shape of the krepis and comparanda suggest a pteron with 14 columns on its flanks. It is striking that the cella is unusually narrow, as is also the case with the contemporary temple of Athena in Alipheira. The remains of an altar and a small oikos are located east of the Archaic peripteral temple. The Archaic sanctuary was, in all likelihood, destroyed by the earthquake of 373 B.C. Excavations west of the large Archaic temple uncovered the remains of a smaller temple with two columns in antis and a square cella, which can be dated to the middle of the 4th century B.C.

Keywords Archaic temple; Keryneia; Voura; Achaea.

Αρχαία Κερύνεια Αιγιαλείας. Ανασκαφή και αρχιτεκτονική ιερού στο ύψωμα του Προφήτη Ηλία

ΠΕΡΙΛΗΨΗ Η συστηματική ανασκαφή στο ύψωμα του Προφήτη Ηλία στην Μαμουσιά Αχαΐας αποκάλυψε τα λείψανα ενός ιερού που θα ανήκε στην επικράτεια της αρχαίας Κερύνειας. Στο ύψωμα κυριαρχεί ο Αρχαϊκός περίπτερος ναός. Ο ναός αυτός, που χρονολογείται μεταξύ των ετών 500 και 490 π. Χ., ήταν οικοδομημένος από πωρόλιθο, με σίμες, ακρωτήρια και αετωματικά γλυπτά από νησιωτικό μάρμαρο. Οι αναλογίες του ορθογωνίου της κρηπίδας προδίδουν πτερό με 14 κίονες στις μακρές πλευρές. Είναι αξιοσημείωτο ότι ο σηκός ήταν εξαιρετικά στενός, όπως συμβαίνει στο σύγχρονο ναό της Αθηνάς στην Αλίφειρα. Ανατολικά του Αρχαϊκού περίπτερου ναού υπάρχουν τα λείψανα του βωμού και ενός μικρού οίκου. Το αρχαϊκό ιερό καταστράφηκε, κατά πάσα πιθανότητα, από τον σεισμό του έτους 373 π. Χ. Οι ανασκαφές δυτικά του μεγάλου Αρχαϊκού ναού αποκάλυψαν τα λείψανα ενός μικρότερου, δίστυλου εν παραστάσι, ναού με τετράγωνο σηκό, που μπορεί να χρονολογηθεί στα μέσα του 4ου αι. π. Χ.

Λέξεις-κλειδιά Αρχαϊκός ναός. Κερύνεια. Βούρα. Αχαΐα.

INTRODUCTION (E.K.)

The ruins of ancient Keryneia, in the municipality of Aigialeia, are located on the summit of Vouni, north of modern Mamousia and between the Kerynites and Vouraikos valleys *(fig. 1)*. The site is at an altitude of 735 m above sea level, facing the bay of Corinth to the north, and is naturally fortified by cliffs to the south, east and west. The mountainous territory of Keryneia is accessed from the south. The identification of the city was definitively confirmed in 1974 after the discovery, by Iphigeneia Dekoulakou, of a clay pan tile incised with the word ΚΑΡΥΝ[ΑΙΩΝ] (= of the Keryneans)[1].

Towards the end of the 4th century or in the early 3rd century B.C., Keryneia – together with other cities of Achaia –, was incorporated in the kingdom of Demetrios Poliorketes until year 276 B.C., when the entire region was freed from Macedonian rule, and the tyrant Iseas left the city[2]. Keryneia enjoyed its greatest expansion during the Hellenistic period, when it joined the second Achaean League. Scanty information is available during the Roman period; most certainly the city was not completely abandoned. Pausanias describes the city as a polisma[3]. In Strabo's days, Keryneia, Elike and the Amarion Alsos, which was dedicated to Zeus, as well as Aigai and a part of Rypike were annexed to Aigion[4].

Pausanias mentions that the road leading to Keryneia starts past (west of) Elike and runs from the sea towards the mountainous countryside[5]. Strabo's account is also significant with regard to the location of the ancient city on a rocky knoll halfway between the shoreline and Voura[6]. Herodotus does not list Keryneia among the 12 Achaean cities[7]. Following Herodotus' account, Keryneia was only a mountainous demos of Elike[8].

The first excavation at Keryneia was carried out in 1951 by Anderson, who investigated the ruins of a Hellenistic house within the city walls[9]. In the 1970s, Dekoulakou excavated the important funerary monument at the site of Agios Konstantinos, west of the city's walls;

We would like to thank Nils Hellner, Georg Ladstätter, Vasso Manidaki, Eleni Psathi, Nikos Petropoulos and Fanis Antonopoulos for all the fruitful discussions and contributions. We are also grateful to the Psycha Foundation for their financial support, without which the excavation of the sanctuary would not have been possible. Systematic excavations on the summit of Profitis Elias have been carried out since 2004 by the Greek Ministry of Culture under the direction of Erofili Kolia.

1 I. Δεκουλάκου, Ταφικό Μνημείο στην Κερύνεια Αχαίας (Ph.D. diss. Aristotle University of Thessaloniki 1994) 21 f. Also, Pol. 2, 10, 5; 41, 9, 14; 43, 2; RE XI (1921) 342 f. s.v. Keryneia (J. Bölte). For inscriptions referring to the city, see A. D. Rizakis, Achaie I. Sources textuelles et histoire regionale, Μελετήματα 15 (Athens 1995) 326 f. nos. 340. 374. 389. 598. 660. 690. 745. On coins from the city, see B. V. Head, Historia Numorum II (Oxford 1911) 417. Leake was the first to hypothesize that the ruins of Vouni belonged to the city of Keryneia. However, a few years later, the same traveler identified these remains as ancient Voura, following Gell (M. W. Leake, Travels in the Morea III [London 1830] 183. 403; W. Gell, Itinerary of the Morea [London 1817] 9; M. W. Leake, Peloponnesiaca. A Supplement to Travels in the Morea [London 1846] 387 f.). In 1836, P. Boblaye (Récherches Géographiques sur les ruines de la Morée [Paris 1836] 25) suggested that the ancient acropolis at the summit of Brouma, above Rizomylo should be identified as Keryneia. This theory prevailed until 1911, before it was questioned by A. Wilhelm (Neue Beiträge I. Zur griechischen Inschriftenkunde [Wien 1911] 37) and later by E. Meyer (Peloponnesische Wanderungen. Reisen und Forschungen zur antiken und mittelalterlichen Topographie von Arkadien und Achaia [Zürich 1939] 127). These two scholars correctly identified the summit of Vouni as ancient Keryneia.

2 Pol. 2, 41, 14. 15.

3 Paus. 2, 25, 5.

4 Strab. geogr. 8, 7, 5.

5 Paus. 2, 25, 5, 8.

6 Strab. geogr. 8, 7, 5.

7 Hdt. 1, 145.

8 Rizakis loc. cit. (n. 1) 206; D. Katsonopoulou, Helike and her Territory in the Light of New Discoveries, in: E. Greco (ed.), Gli Achei e l'identità etnica degli Achei d'Occidente, Atti del Convegno Internazionale di Studi, Paestum 23–25 febbraio 2001 (Paestum 2002) 211. The autonomy of Keryneia is supported by Bölte loc. cit. (n. 1) 343. The city was independent after the earthquake of year 373 B.C., which destroyed Elike.

9 J. K. Anderson, A Topographical and Historical Study of Achaea, BSA 48, 1953, 154–171.

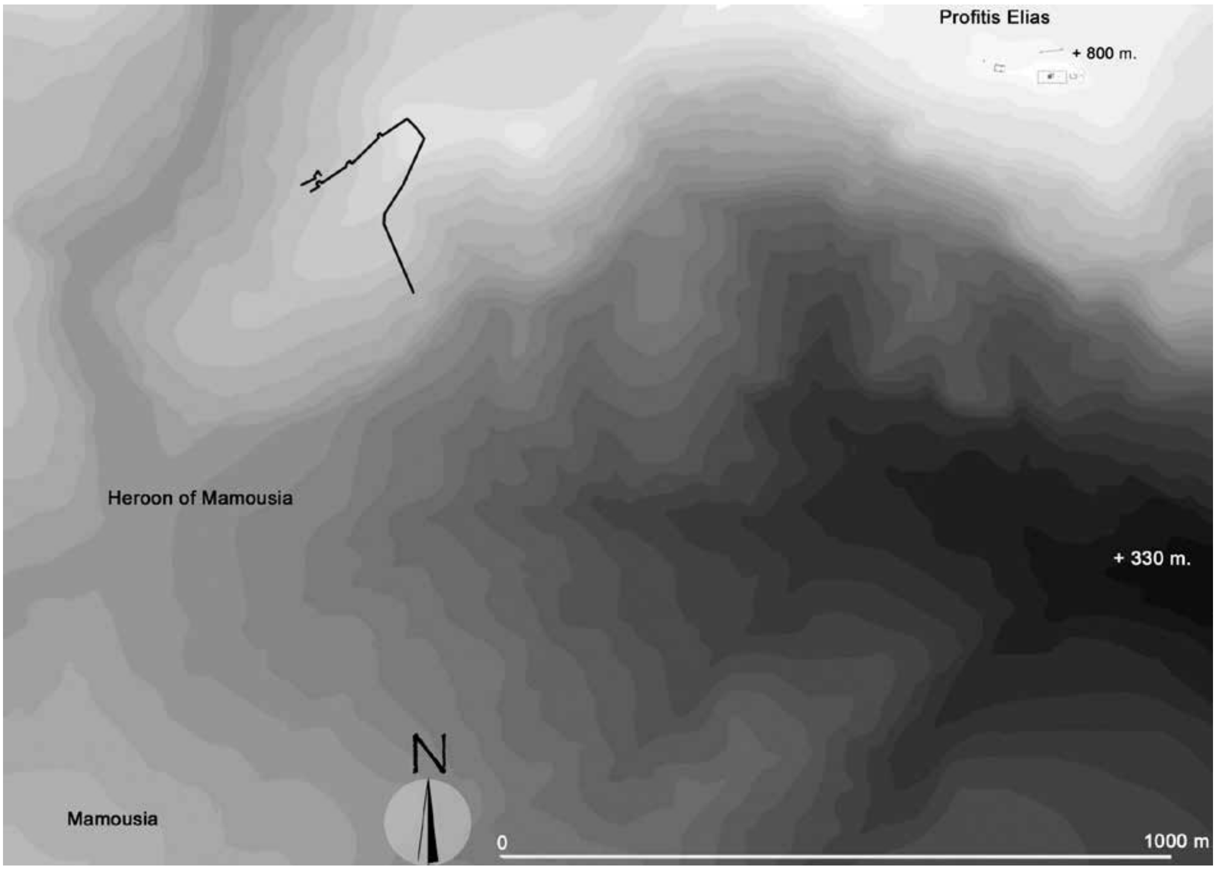

Fig. 1 Topographical map of the Mamousia / Keryneia ridge, the summit of Profitis Elias and surroundings

the structure dates from the 3rd century B.C.[10]. In 2001, the 6th Ephorate of Classical and Prehistoric Antiquities removed the dense vegetation at the archaeological site and also opened trial trenches in the areas of the theatre and the city wall[11]. In this way, many important facts concerning the topography of the city came to light.

The remains of an ancient sanctuary lie on the ridge of Elliniko, at a distance of 900 m northeast of the city *(figs. 2. 3)*. Today, only the Christian chapel of Profitis Elias stands on the top of the ridge, at an absolute altitude of 800 m. A number of architectural features and statuary fragments have been discovered in the past. The remains of an ancient temple-like structure were visible to the west of the chapel of Profitis Elias, and directly beneath the chapel were the ruins of an Archaic temple; the latter was previously identified as the foundation of a stoa[12]. The remains of the Great Temple were discovered just beneath the ground's surface, in the vicinity of the chapel. The foundations of a large altar were also discovered, again near ground level, 14 m east of the Great Temple.

10 Δεκουλάκου loc. cit. (n. 1).

11 Ε. Κόλια, Αρχαία Κερύνεια: Νεότερες Έρευνες, AAA 35–38, 2002–2005, 129–148.

12 Δεκουλάκου loc. cit. (n. 1) 17. 23.

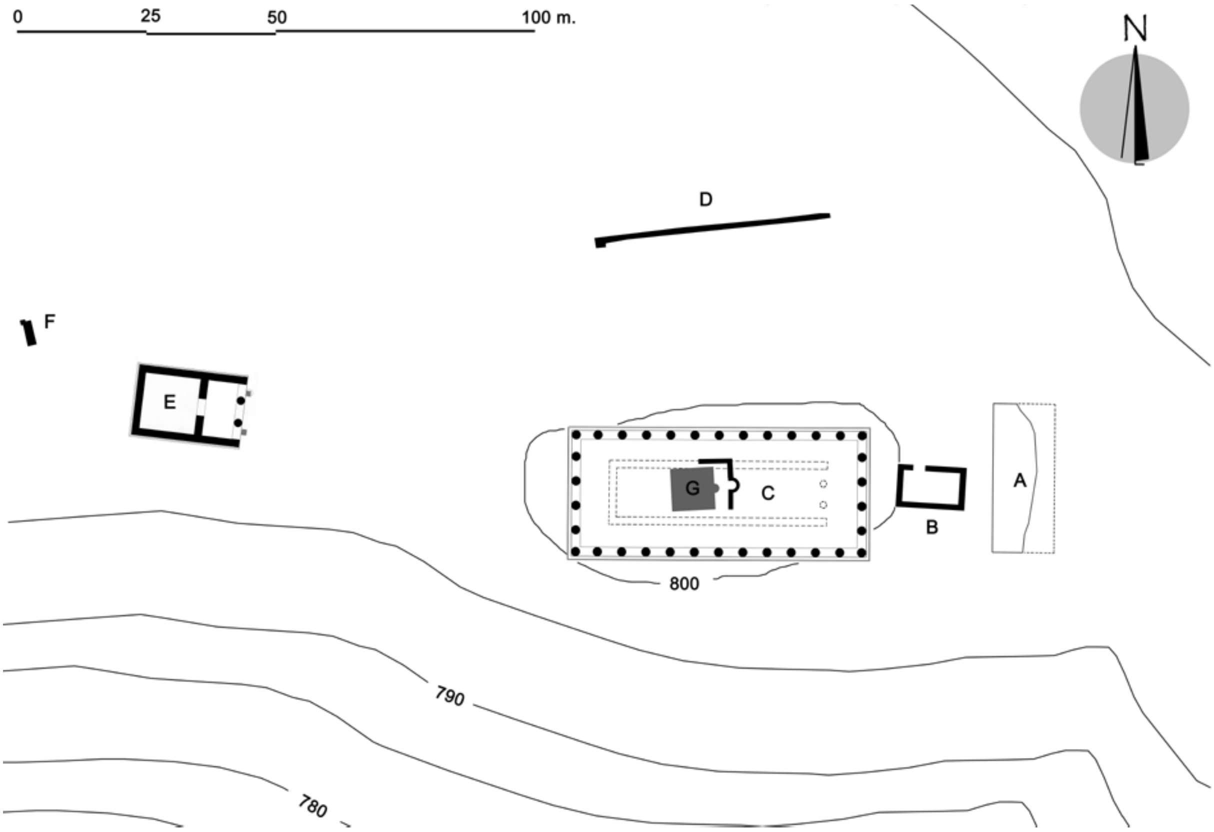

Fig. 2 Site plan of the summit of Profitis Elias. A: Altar; B: Eastern Building; C: Great Temple; D: North Wall Area; E: Small Temple; F: Western Area; G: chapel of Profitis Elias and older church

Fig. 3 Aerial photograph of the site of Profitis Elias. A: Altar; B: Eastern Building; C: Great Temple; E: Small Temple

A. THE ALTAR (E.K.)

Fig. 4 Aerial photograph of the Altar and Eastern Building

Prior to our excavations, remains of the ancient structure were visible on the ground at a distance of 33.80 m to the east of the chapel *(fig. 2, A)*. Clearance of vegetation revealed an oblong platform with a north-south-orientation. Its east side faces the Corinthian bay and the mountains of Phocis on mainland Greece *(fig. 4)*. Its overall length is 17.55 m and the surviving width varies between 3 and 5.15 m. The eastern section of the structure has been damaged by past agricultural activity. The preserved height of the eastern part is between 0.20 and 0.30 m. Two courses of stone blocks are still in situ, however ashlars of a third course stand on the western edge of the construction. The best preserved block has 0.08–0.012 m-wide anathyrosis bands on its sides. The blocks of the lowermost courses are manufactured from the local conglomerate whilst those of the third course are well hewn from brittle sandstone.

Due to its dimensions and location to the east of the temple, this construction has been identified as the foundation of an altar connected with the Archaic temple. A few sherds were discovered during clearance; the most prominent among them is a section from the rim of a Hellenistic unguentarium.

B. THE EASTERN BUILDING (E.K.)

The clearance of topsoil and vegetation in the area between the Archaic temple and the Altar revealed the remains of a rectangular building 8.10 × 4.72 m in size *(fig. 2, B)*. Its interior dimensions are 6.80 × 3.50 m *(figs. 5. 6)*. The wall thickness is 0.60–0.65 m. The double-skinned masonry is built of standing conglomerate orthostates. The space between the latter is filled with soil, small-sized rubble, and stone chips. The soil in the interior of the building is red, hard, and contains very few, non-glazed sherds, possibly from the Hellenistic period. A few fragments of ribbed clay roof tiles indicate that the space was used at a later date. Debris was found packed against the interior and exterior faces of the western wall. Exploration in a further trial trench (dimensions 1.30 × 0.55 m) revealed the foundation of the west wall. The overall height of the foundation is 0.60 m. Sandstone fragments of a small Doric cornice were found on the surface directly south of the Archaic temple and close to the Eastern Building[13].

[13] Infra, I. The Small Entablature.

Fig. 5 The Eastern Building. View from northwest

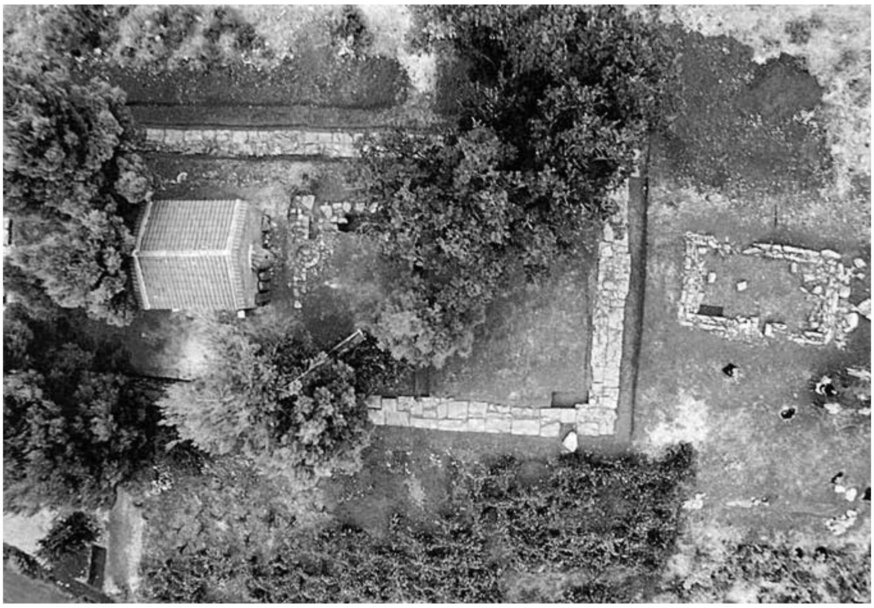

Fig. 6 Aerial photograph of the chapel, Great Temple and Eastern Building

C. THE GREAT TEMPLE (Ch.K. – E.K.)

The Great Temple is peripteral and stands on the topmost part of the ridge. The chapel of Profitis Elias is built directly in the middle of the Archaic structure. The setting is quite dramatic with the cliff dropping some 460 m directly to the south, and the peaks of the surrounding mountains in the background *(fig. 17)*. The architectural material of the temple was systematically removed down to foundation level shortly after its destruction, which was most probably caused by the earthquake of 373/372 B.C. Some of the blocks were reused in the construction of the Small Temple, but the majority of them were transported away from the site, and only a few fragments that could not be used for construction were spread and deposited to the west and north of the sanctuary. It can be postulated that the material of the temple was reused in the theatre or in parts of the fortification walls of Keryneia.

Excavations (E.K.)

The foundation of the eastern wing of the Archaic temple's peristasis was discovered at a distance of 17.60 m to the east of the chapel of Profitis Elias. The stone course constituting the foundation is built of rectangular sandstone blocks (dimensions 1.36 × 0.80 m, 1.20 × 0.75 m, and 0.95 × 0.49 m) laid in two rows. It is 1.54 m wide, and 15.475 m long, and has a fill consisting of compact red soil devoid of pottery *(figs. 6. 7)*.

The eastern section of the peristasis foundation bonds with the southern section of the same foundation; the length of the surviving portion is 31 m. Its western end is destroyed and, as a result, the join with the western section of the foundation is not preserved. A test excavation in this area (dimensions 2.50 × 1.00 m) revealed the surviving height of the south wing of the peristasis foundation; this is two courses tall with a preserved height of 0.53 m. The foundation of the north pteroma survives in its entire length and has a width of 1.35–1.50 m *(fig. 8)*. Two black-glazed handles from drinking vessels were revealed during clearance work in 2004. Pry-holes are present on certain blocks.

The western portion of the peristasis has an extant length of 13.44 m and is 1.35–1.50 m wide. The southernmost end is missing. A trial trench with a width of 1 m was opened along the outer edge of the eastern pteroma with the aim of recovering the entire construction of the foundation. This was found to be two courses or 0.45 m high, but heavily-damaged remains of the third and uppermost course were also discovered in the middle part of this construction. These poorly-preserved remains are now only 0.06–0.11 m high. The second course has a height of 0.14–0.27 m whilst the third, lowermost course (height of 0.10–0.13 m) is not entirely visible, as it is recessed in certain areas and, therefore, obscured by the overlying course. The soil was compact, red, and contained very few non-glazed sherds, a bronze ring, and three fragments of marble, most probably from roof tiles.

Except for the architectural remains near the northeast corner area of the older church[14], no remains of the cella foundations or any other wall remains were discovered in the trial trenches that were opened inside the peristasis. The absolute lack of pottery and finds in the same test trenches is also worth noting. The soil in the interior was red and particularly compact.

Plan and peristasis layout (Ch.K.)

It appears that the Archaic peripteral temple on Profitis Elias *(fig. 2, C)* had a hexastyle peristasis with either 13 or 14 columns along the longitudinal sides. This arrangement can be achieved with columns of a lower average diameter of about 0.95 m, a two-stepped krepis and a reasonable ratio between the width of the stylobate and the lower diameter of the column[15]. The architectural evidence is scarce with only few fragments from the superstructure. The reconstruction is largely based on the euthynteria, the only in situ remains of the krepis *(fig. 10)*.

[14] Infra, G. The chapel of Profitis Elias and the older church.

[15] The dimension of the interaxial column space cannot be given with accuracy, and the lower diameter is only estimated. The spaces can vary greatly, depending on the extent of the angular contraction. The ratio between the two depends on two unknown variables; therefore any relevant statements made here would be imprecise. Instead, the ratio stylobate width : lower diameter is used in order to estimate how densely spaced the columns were. This figure is based on one known and one securely obtained variable and is proportional to the ratio interaxial column space : lower diameter *(tabs. 1 B; 2 B; 3 B; 4 B)*.

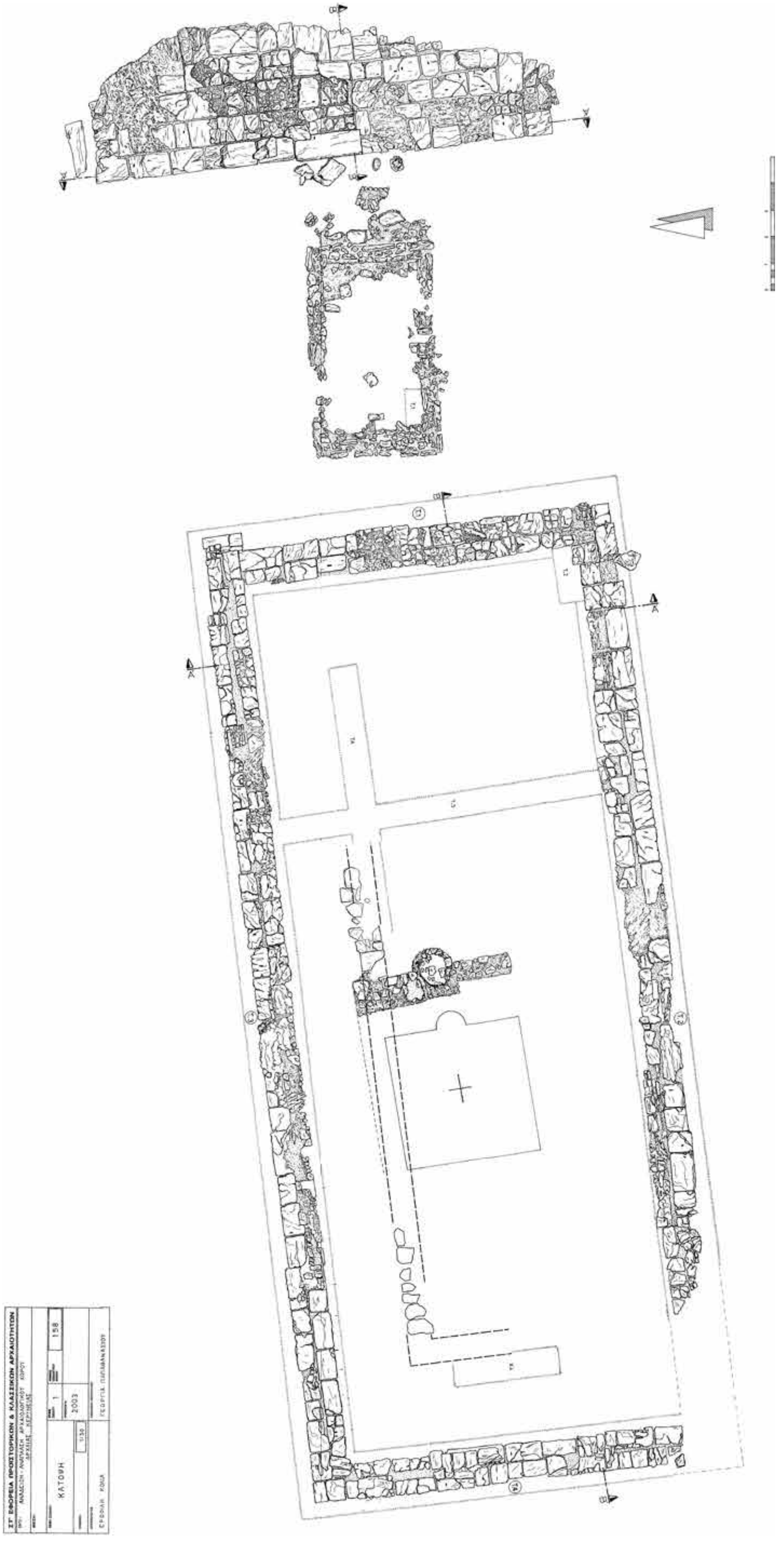

Fig. 7 Plan of the Altar, Eastern Bulding, Great Temple and chapel on Profitis Elias of Mamousia

The overall dimensions of the euthynteria's ground plan are 15.475–15.491 (N-S) and 36.254–36.258 m (E-W) ± 0.05 m and it is oriented 7 degrees west from true north. The width of the first step would therefore be between 15.370 m and 15.391 m and the length approximately 36.155–36.258 m. If the second krepis step had stood at a height of 0.35–0.40 m (average of 0.375 m) on either side, its length would have been 35.415–35.518 m.

The depth of the step on the long side can be greater, as much as 0.41 m, as is common in the Archaic period[16], and therefore the stylobate width would have been approximately 14.55–14.58 m.

A third step would result in a stylobate course with a width of only ± 0.77 m. This width would accommodate a column with a lower diameter no larger than 0.75 m. The proportion stylobate width : lower diameter would therefore be 13.84 : 0.75 or ~ 18.45 : 1, which is unprecedented for hexastyle temples *(tabs. 1 B; 2 B)*. To put this more clearly, the Aphaia temple with a hexastyle front and stylobate width of 13.77 m, has a column diameter of 0.99 m. It is not possible that the Mamousia temple, which has a wider stylobate, would have had a column diameter of only 0.75 m. The lower diameter must be comparable to the diameter of the columns in the Aphaia temple and a three-stepped krepis should, therefore, be ruled out.

The euthynteria course is consistently 1.42–1.50 m wide. The hypothetical width of the first krepis course is about 1.40 m and that of the second course / stylobate would be about 1.00 m. This dimension would accommodate a column of 1.00 m in lower diameter, with the column resting on the

Fig. 8 The northern section of the peristasis

Fig. 9 Column drum

16 For example the Trapeza Temple exhibits an euthynteria of 0.15 m and a krepis step of 0.38 m at the front, whereas the euthynteria and krepis at the sides are 0.19 and 0.41 m in depth respectively. N. Hellner, Der spätarchaische Tempel auf der Trapeza Aigiou, in: Neue Forschungen zur Architektur in Heiligtümern der Nordwest-Peleponnes. Festveranstaltung 100 Jahre Institutsgebäude des Österreichischen Archäologischen Institutes Athen am 4.3.2008 (in press). In the temple of Athena at Makistos, which has a stylobate width of 14.18 m, the depth of the second step is 0.402 m. A. Νακάσης, Ο ναός της Αθηνάς Μακίστου (Athens 2004) 185 drawing 7.

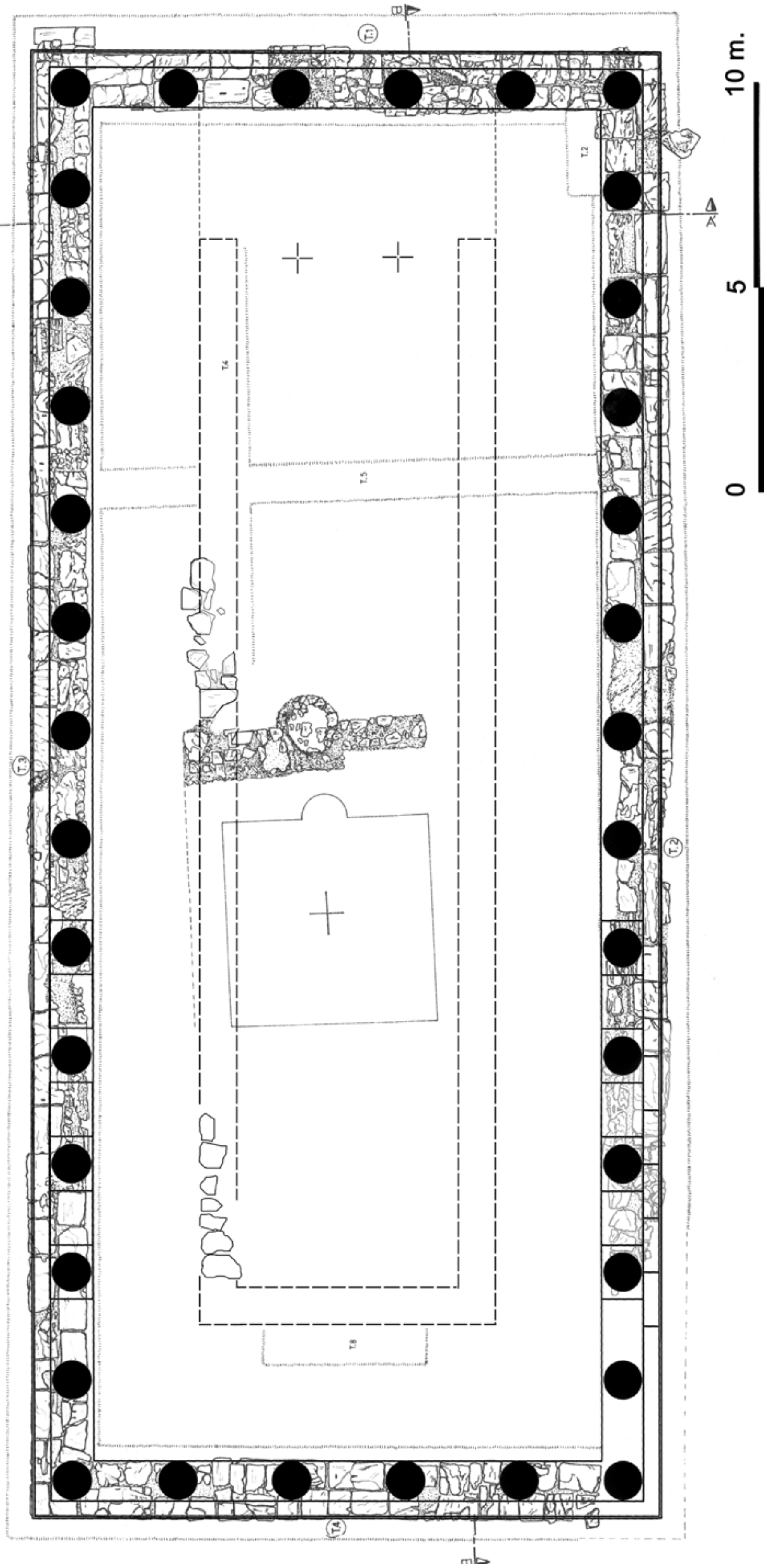

Fig. 10 Reconstructed plan of the Great Temple with in situ remains

stylobate edge. Had the column shaft stood about 0.045 m from the stylobate edge, the lower diameter would have been approximately 0.945–0.955 m[17].

The ratio stylobate length : width (2.429–2.436 : 1) yields interesting results. To summarize, stylobate proportions of temples that are 12 columns long are in the range of 2 : 1. *(tab. 1 A)*. Pteromas that are 13 columns long result in an average stylobate proportion of 2.26–2.315 : 1. This is almost diachronically consistent, regardless of the variation of spaces between the front and the sides *(tab. 2 A)*. In the Mamousia temple, there is a considerable discrepancy between the ratio of 2.315 : 1 and our reconstructed ratio ~ 2.43 : 1[18]. Theoretically, the unusually long peristasis could have been covered with 12 wider interaxial spaces along the sides of the pteroma; however, this phenomenon does not correspond to the general rule in Mainland Greece where shorter intercolumniations along the sides are common. Although highly unusual, this is not unparalleled even in the Peloponnese. The temple of Alipheira in Arcadia is an example with wider intercolumniations along the sides and so are almost all of the Greek temples in Italy [19].

In hexastyle temples with 14 columns along the long sides, the stylobate proportions are significantly larger, in the range of 2.50 : 1. In Mamousia, the proportions of the stylobate rectangle are a maximum of 2.436 : 1; each of the 13 spaces between the columns on the flanks would be about 0.11 m shorter than the corresponding spaces on the front, in order for the 14 columns to fit the stylobate's proportions[20].

Indeed, it was demonstrated systematically that the stylobate proportions of the Mamousia Temple (average ratio 2.43 : 1) range between a thirteen-column-long Greek temple (common ratio of 2.315 : 1) – however with wider spaces on the long sides – and a fourteen-column-long temple (common ratio of 2.50 : 1). The latter layout could only have been achieved with narrower spaces between the columns on the longitudinal sides. The following is worth noting with regard to the krepis layout. In absolute terms, the temple is wider than the temples of Aphaia on Aegina and Athena at Makistos, and about a metre narrower than the Trapeza temple. The two-stepped krepis is common to Achaean temples (Trapeza and Gkremoulias)[21].

The Mamousia temple seems to have proportionally small column diameters, relative to the stylobate width and intercolumniations (Great Temple, Mamousia, A in *tabs. 1 B; 2 B; 3 B*). If the columns had stood at an excessive distance of 0.09–0.14 m from the edge of the stylobate, as in the Trapeza temple, their diameter would have been considerably smaller, thus increasing the relative araeostyle appearance. The two temples of Achaea would then be in marked contrast with the temple of Apollo at Corinth and its densely-spaced columns

17 Νακάσης loc. cit. (n. 16). In the neighbouring temple of Trapeza, the columns stand at an excessive 0.08 m from the stylobate edge. Hellner loc. cit. (n. 16).

18 Discrepancies in our calculated stylobate dimensions should be in the range of a few centimetres.

19 In Alipheira, the intercolumniation is 2.006 m at the front and 2.05 m at the flanks (A. Ορλάνδος, Η Αρκαδική Αλίφειρα και τα μνημεία της, Η Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας 58 [Athens 1967/1968] 91 fig. 63 pl. 4); Selinous, temple D: 4.368 m at the front and 4.491 m at the long sides; Paestum, Basilica: 2.871 and 3.102 m respectively; Selinous, temple GT: 6.53 m and 6.61 m; Acragas, Olympieion: 8.042 m and 8.185 m; Syracuse, Athena: 4.15 m and 4.165 m; Himera, Nike: 4.175 m and 4.198 m; Paestum, Poseidon: 4.471 m and 4.503 m respectively. See also *tab. 3 B*.

20 During the Archaic period, the reduction rate between the intercolumniations of front and flanks gradually decreases from 1.083 % to 1.025 %, and is eliminated in the temples of Athena at Makistos and Zeus in Olympia *(tabs. 1 C; 2 C)*.

21 Two-stepped krepides occur in the temple of Kardaki, the temple DD of ›Athena‹ in Karthaia, Kea (W. B. Dinsmoor, Jr., The Kardaki Temple Re-Examined, AM 88, 1973, 168 pl. 6; Α. Παπανικολάου, Η οικοδομική δραστηριότητα στην Ν. κλιτύ της ακροπόλεως της Καρθαίας κατά τον 6º και 5º π. Χ. αιώνα, in: L. G. Mendoni – A. Mazarakis Ainian [eds.], Kea – Kythnos: History and Archaeology. Proceedings of an International Symposium Kea – Kythnos, Kea 22–25 June 1994, Μελετήματα 27 [Athens 1998] 574 fig. 18. 19) and the temple of Athena at Alipheira (Ορλάνδος loc. cit. [n. 19] pl. 4).

date	temple	A stylobate length : stylobate width	B stylobate width : lower diameter	C interaxial space front : interaxial space flank
530–525	Trapeza	1.950	15.59	1.085
530–519	Peisistratid Temple, Athens	2.025	13.06	1.051
	Archaios Naos		14.05	
Ca. 500	Athena Pronaia, Delphi	2.073	13.18	1.025
	Great Temple, Mamousia	*2.429 (min.)* *2.436 (max.)*	*15.42 (max.)*	
495–485	Aphaia, Aegina	2.09	13.91	1.025

Tab. 1 Ratios of specific building dimenions in temples with a pteroma of 6 × 12 columns

date	temple	A stylobate length : stylobate width	B stylobate width : lower diameter	C interaxial space front : interaxial space flank
ca. 535	D, Selinous	2.367	13.89	0.97
510	Demeter, Paestum	2.26	11.47	
ca. 500	Athena, Makistos	2.323	14.67	1
	Great Temple, Mamousia, A	*2.429 (min.)* *2.436 (max.)*	*15.42 (max.)*	*1.08*
	Great Temple, Mamousia, B	*2.35*	*12.80–13.50*	*0.98*
498	older temple of Poseidon, Sounion	2.312	13.32	
470–460	Zeus, Olympia	2.316	12.30	1.001
	Hephaisteion, Athens	2.318	13.45	1.017
460–450	Hera Lacinia, Acragas	2.253	12.25	1.017

Tab. 2 Ratios of specific building dimenions in temples with a pteroma of 6 × 13 columns

date	temple	A stylobate length : stylobate width	B stylobate width : lower diameter	C interaxial space front : interaxial space flank
ca. 525	FS, Selinous	2.544	16.90	0.97
	Great Temple, Mamousia, A	*2.429 (min.)* *2.436 (max.)*	*15.42 (max.)*	*1.041* *(reconstructed)*
	Great Temple, Mamousia, B	*2.35*	*12.80–13.50*	*1.06* *(reconstructed)*
480	Athena, Syracuse	2.501	11.45	0.99
	Great Temple, Himera	2.48	11.76	0.976–0.977
460	Poseidon, Paestum	2.472	11.49	0.992
460–450	A, Selinous	2.499	12.21	1.00
424–416	Segesta	2.51	11.82	0.994
350s	Athena Alea, Tegea	2.48	12.3	1.008

Tab. 3 Ratios of specific building dimenions in temples with a pteroma of 6 × 14 columns

date	temple	A stylobate length : stylobate width	B stylobate width : lower diameter	C interaxial space front : interaxial space flank
540	Apollo, Corinth	2.50	12.34–13.05	
ca. 500	Athena, Alipheira	2.80	~15.57	0.978

Tab. 4 Ratios of specific building dimenions in temples with a pteroma of 6 × 15 columns

(tab. 3 B). Again, in absolute terms, the ratio stylobate width : lower column diameter in Mamousia matches the spacious proportions of the temples at Alipheira and Trapeza. Only the Basilica in Paestum, temple FS and temple GT in Selinous have considerably araeostyle plans *(tabs. 1 B; 2.B; 3.B)*. It appears that widely-spaced peristases are not uncommon in the western Peloponnese, with the temples of Alipheira, Makistos, Trapeza, and perhaps Mamousia falling between the tastes of the Greek mainland and Italy.

As presented above, only the reconstruction of a peristasis that is between 13 columns and 14 columns long is plausible. In contrast to the offered solutions, the temples of Achaea have a proportionally short plan with 12 columns on the longitudinal side of the pteroma; this, however, can be ruled out in the case of Mamousia. Before the temple of Zeus in Olympia, only the temple of Makistos and the older temple of Poseidon in Sounion are constructed with a ›canonical‹, 6 × 13-column peristasis layout, and before the Tegean temple of Alea in the 350s, no temple has a 6 × 14-column peristasis configuration. The latter type is more common in Italy (Selinus, FS; Syracuse, Athena; Paestum, Poseidon; Selinous, A; Himera, Nike; Segesta). As demonstrated above, the ratio stylobate length : stylobate width in Mamousia appears relatively high for a 6 × 13-column arrangement; accordingly, we favour the solution of 14 columns and 13 shorter intercolumnar spaces along the flanks. The elongated pteroma comes as no surprise in the Peloponnese: the temple of Apollo at Corinth and the temple of Alipheira in Arcadia both have a 6 × 15-column peristasis layout *(tab. 4)*.

Cella (Ch. K.)

Scanty remains of a double-skinned course of stone blocks were discovered during the 2010 excavations in the area of the northeastern corner of the older church *(fig. 10)*. This course is built of tightly-fitted conglomerate boulders and is at a distance of 3.97–4.04 m from the euthynteria's edge. Today some of its blocks are widely strewn, dislocated from their original position and lie loosely on the ground's surface. The original thickness of the course (0.90 m – 0.95 m) only survives in one small section. It is quite possible that this feature is at foundation level, one or two courses below the toichobate of the cella. The thickness of the cella walls could have been considerably smaller[22].

Strangely enough, the outer faces of the cella walls do not correspond to the axes of the 2nd and 5th columns at the front (of the peripteros) – the latter correspondence would conform to a rule that defines the position of the cella in relation to the peristasis. Instead, the cella is much narrower, with the edge of the wall appearing to correspond to the lateral surface of the columns[23]. Before the 4th century, cellas that are narrower than the sum of three interaxial column spaces are mainly known in Italy[24]. Surprisingly, the Archaic temple in neighbouring Alipheira also features a narrow cella and is, thus, the best chronological and geographical parallel[25].

22 In the temple of Makistos, the toichobate course of the cella is 0.90 m wide for a wall thickness of 0.597 m. Νακάσης loc. cit. (n. 16) 47. 168.

23 The same phenomenon occurs in the neighbouring 4th-century temple of Gkremoulias near Kalavryta (personal communication Georg Ladstätter) and the temple of Hera at Argos which dates to the early 4th century (Ch. Pfaff, The Architecture of the Classical Temple of Hera, The Argive Heraion 1 [Princeton 2003] 152 fig. 84).

24 Particularly the Great Temple at Himera. D. Mertens, Der Tempel von Segesta und die dorische Tempelbaukunst des griechischen Westens in klassischer Zeit (Mainz 1984) 69 fig. 23; 164 fig. 77 Beil. 26.

25 Ορλάνδος loc. cit. (n. 19).

Krepis and columns (Ch.K.)

A number of blocks from the krepis have been reused in the krepis of the Small Temple. These can be recognized by the widths of their finely carved anathyrosis bands; these are 0.05, 0.06 and 0.09 m wide and are unlike the characteristic anathyroses of the Small Temple, which are 0.11 m and 0.15 m wide[26]. Moreover, the reused blocks from the Archaic peristasis have been placed upside down in the euthynteria of the Small Temple. Two such blocks have dimensions of 0.975 × 1.386 m and 0.99 × 1.338 m, both with a height of 0.345 m, and could be identified as stylobate blocks in the original krepis of the Archaic Great Temple. Indeed, these large slabs could accommodate columns with a maximum diameter of 0.955 m, as explained above. Moreover, the interaxial column space would have been exactly equal to twice the length of two stylobate slabs with the column standing – according to common practice – in the middle of every other stylobate slab; the interaxial space would then be between 2.67(6) m and 2.77 m long *(fig. 10)*. The former distance corresponds well to the shorter 13 interaxial spaces of a 14-column-long peristasis; the length of 2.77 m would correspond to the interaxial column spaces at the front and rear. Indeed, the distance (2.80 m) between two pry-holes in the western section of the euthynteria corresponds well with a krepis slab that is 2.77 m long and supports our hypothesis.

Five column drums have been located on the plateau of Profitis Elias. One of them has an estimated diameter of 0.863 m *(fig. 9)*. The column drum, which was reused as a base set against the Small Temple's pronaos[27], has a a reconstructed diameter of 0.884–0.895 m. Another drum lying north of the Small Temple has a diameter of 0.905 m (± 0.005 m) and is unfluted. The maximum lower diameter of the Great Temple's peristasis has been calculated to approximately 0.95 m. Even with an excessive ratio stylobate width : lower diameter of 15.58 : 1, found at the neighbouring Trapeza and Alipheira *(tabs. 1 B; 4 B)*, the lower diameter of the column should have been no smaller than 0.933 m. The tapering rate during the Late Archaic period would result in an upper diameter of 0.697–0.726 m[28]. The extant column drums fit anywhere within the peristasis shafts.

Only the fluted column drums, which were reused in the Small Temple, can definitively be attributed to the Great Temple. Theoretically, the scattered drums could belong to either the Great Temple or the Small Temple or both. The columns of the Small Temple could have been either newly made specifically for this purpose or are reused material taken from the Great Temple. The non-fluted drum could have belonged to an unfinished column (possibly in the pronaos or opisthonaos) in the Great Temple, or possibly in the Small Temple. This drum has one of the largest diameters of all the recorded fragments and it would have been one of the lowermost drums.

Entablature (Ch.K.)

Entablature features are very scarce. Only two architrave pegs have been recovered during excavation. These have a diameter of 0.048–0.050 m and a height of 0.025 m. Normally, the distance between the pegs is longer than the diameter of the peg itself. Even if the pegs were spaced 0.050–0.051 m apart – i.e. only as wide as the diameter of the peg itself –, the added lengths of 6 pegs and 5 spaces and, therefore, the length of the regula and corresponding triglyph would be an average of 0.54(8) m. Only the temple of Egesta has closely-spaced

[26] Infra, E. The Small Temple.
[27] Infra, E. The Small Temple.
[28] H. Bankel, Der Spätarchaische Temple der Aphaia (Berlin 1993) tab. 9.

pegs of 0.075 m, which are on average 0.079 m apart[29]; this ratio at Mamousia would yield triglyphs with a length of 0.563 m. The ratio between the reconstructed lower diameter and the triglyph width would then be 1.75 : 1. Even with an excessive lower diameter of one metre, due to an oversight in our calculations, the same ratio would be 1.83 : 1. The triglyphs – which are normally supposed to be as wide as approximately half the lower diameter – appear excessively large[30]. This is unusual for hexastyle elevations constructed after the temple of Athena at Assos (ratios of 1.6 : 1 and 1.9 : 1), yet not unprecedented in the Peloponnese. In the temple of Makistos, which is notorious for its exceptionally large triglyphs, the ratio in question is 1.78–1.80 : 1, however with a well-proportioned distance of 0.057 m between the 0.039 m-wide pegs[31]. In the temple of Alipheira, the same ratio is an excessive 1.57 : 1, however without pegs in either the regulae or mutules. Therefore, we wonder whether the triglyph and the underlying canon were in fact only 5 pegs long. Each regula and triglyph would then be 0.485 m long or – in accordance with exisiting architectural rules – about half the lower diameter (1 : 1.95), and the pegs would be 0.05 m wide and reasonably well-spaced, i.e. approximately 0.06 m apart. As extraordinary as this arrangement appears, it occurs at the older temple of Aphaia on Aegina and at the temple of Artemis on Corfu, which however both date to the 580s, as well as at Building A from the Acropolis of Athens[32]. The treasury of the Athenians in Delphi also has five pegs in the regulae, though with the usual 6 pegs in the mutulae[33]. The avoidance of many minute elements which would have resulted in a ›miniature‹ aura can be understood in the small-scale architecture of treasuries. The Doric austerity of these small buildings is thus maintained by using fewer, but larger pegs. In summary, neither solution – i.e. large triglyphs and six pegs spaced apart as wide as their diameter, or five, regularly-spaced pegs under the regulae – is satisfactory in terms of the large-scale conservative temple architecture. This is the extent of statements that can be made on the basis of the euthynteria course and two architrave pegs.

The theory of a single-stepped krepis (Ch. K.)

The hypothesis of a single-stepped krepis suggests that the temple was larger and would explain certain deviations from existing rules, such as the unusually large triglyphs, the number of pegs under the regulae as well as the araeostyle appearance of the temple. According to this theory, the peristasis columns would stand on the first and single krepis step

[29] Mertens loc. cit. (n. 24) Beil. 18.

[30] For comparison, the corresponding ratio in the temple of Apollo in Corinth is 2.10 : 1, in the Old Athena Temple 1.98 : 1, in Aphaia, Aegina 1.95 : 1 and in the temple of Zeus in Olympia 2.12 : 1. Within the context of small distyle in antis façades, which favour larger triglyphs in order to widen their narrow intercolumnar openings, the ratio is consistently smaller.

[31] Νακάσης loc. cit. (n. 16) 71. 74 figs. 51. 54. Similarly, in the temple of Aphaia, the pegs have a diameter of 0.039 m for a 0.49 m- and 0.51 m-long regula. The distance between pegs should be between 0.051 m and 0.055 m. A. Furtwängler, Aegina, das Heiligtum der Aphaia (Munich 1906) pls. 40. 41. Only in the 4th century temple of Apollo Ismenios and in the 2nd century temple of Asclepios at Messene, the space between the pegs is considerably narrower than the width of the pegs themselves (A. Κεραμόπουλος, Θηβαϊκά, ADelt A 3, 1917, 45; E. Sioumpara, Der Asklepiostempel von Messene auf der Peloponnes. Untersuchungen zur hellenistischen Tempelarchitektur, Athenaia 1 [Munich 2011] 158–163 pl. 19).

[32] E.-L. Schwandner, Der Ältere Porostempel der Aphaia auf Aegina (Berlin 1985) 33 pl. 35. 1; Th. Wiegand, Die archaische Poros-Architektur der Akropolis zu Athen (Kassel 1904) 148–155, esp. 150 fig. 135 pls. 12. 13, 2.

[33] J. Audiat, Le trésor des Athéniens (Paris 1933) 33. It has been hypothesized that these correspond to the Sicyonian Monopteros, situated directly opposite, which also has 5 pegs in the regulae. W. B. Dinsmoor, The Architecture of Ancient Greece (London 1950) 117.

(~ 15.38 m wide)[34]. The proportions of the stylobate rectangle would be 2.35 : 1, similar to the ratio 2.30 : 1 attested in temple layouts with 13 columns in the longitudinal sides (Great Temple, Mamousia, B in *tabs. 2. 3*). The lower diameter of the columns would then be about 1.15 m *(fig. 11).* Six pegs of 0.049–0.05 m spaced 0.061 m apart would result in triglyphs that are approximately 0.60 m long, i.e. about a canonical 1.9 times the lower diameter. With pegs spaced as densely as those in the temple of Segesta, the triglyphs would be 0.563 m long, or 2.02 times the lower diameter.

The overall length could have accommodated 14 columns, however with a slightly narrower intercolumnar distance on the longitudinal sides. The ratio stylobate width : lower diameter would be between 12.80 : 1 and 13.50 : 1. This more canonically-spaced temple would be in marked contrast with its unusually araeostyle neighbour in Trapeza (with a corresponding ratio of 15.59 : 1, *tabs. 2 A; 3 A*).

Following the theory of a single-stepped, larger temple, the slabs with a width of 0.975 m and 0.99 m that were reused in the Small Temple cannot accommodate a column with a lower diameter of 1.12 m and, thus, they cannot be parts of the stylobate course. It is quite possible that the extant slabs can be attributed to the euthynteria course and, therefore, would have been backed by another course, approximately 0.50 m in width.

Pedimental sculptures (E. K.)

The fragments of marble, most probably pedimental statuary are amongst the most important finds during the recent excavations. Since 2001, at least 20 small- and medium-sized fragments of sculptures have been recovered in the area of Profitis Elias, both as surface finds and in excavations. Most of the latter were found in sections of the North Wall Area and Western Area, northwest of the Small Temple, and north of the Great Temple.

Five fragments from pedimental sculptures made of Parian marble were discovered by local farmers in the 1960s; these finds were delivered to the 6th Ephorate of Classical Antiquities and are now stored in the Aigion Archaeological Museum. One of them is the portion of a helmeted hoplite's head *(fig. 12)*, and a second fragment comes from the lowermost part of a female figure that wears a chiton and is stood on an oval plinth *(fig. 13)*. The three other fragments belong to a foot, a leg, and a thigh of male figures. Euthymios Mastrokostas attributes these finds to pediments and dates them to the early 5th century B.C.[35]

The find spot of these statue fragments, their size, style, and marble provenience are similar to those of recently recovered fragments, thereby suggesting that these also belong to the pediments of the Great Temple on the summit of Profitis Elias. The craftsmanship of the statuary is of very good quality and the style is comparable to known sculptures of the workshop of Attica during the 490s and the pedimental sculptures of Aphaia. Consequently, the statues of Mamousia can be securely dated between 490 and 480 B.C. The subject in one of the pedimental compositions must have been a mythical battle.

It appears that the subject of the other pediment was the hunt for the Calydonian boar. A marble fragment of a wild boar's head found in the layer of stone chips to the south of the great retaining wall[36] supports this hypothesis *(fig. 14)*. This myth would be unique for a pedimental composition within the context of Archaic art[37], though the hunt of the

[34] At least one parallel is known in the Old Athena Temple or Archaios Naos on the Athenian Acropolis (J. Travlos, Pictorial Dictionary of Ancient Athens [London 1971] 145).

[35] Ε. Μαστροκώστας, Αποθραύσματα υστεροαρχαϊκών εναέτιων γλυπτών εκ Κερυνείας Αχαίας, in: Archaische und griechische Plastik, Akten des Internationalen Kolloqiums vom 22.–25. April 1985 in Athen (Mainz 1986) 141. Also, Κόλια loc. cit. (n. 11) 145 f.

[36] Infra, D. North Wall Area.

[37] On the myth of the Calydonian boar in Archaic Greek

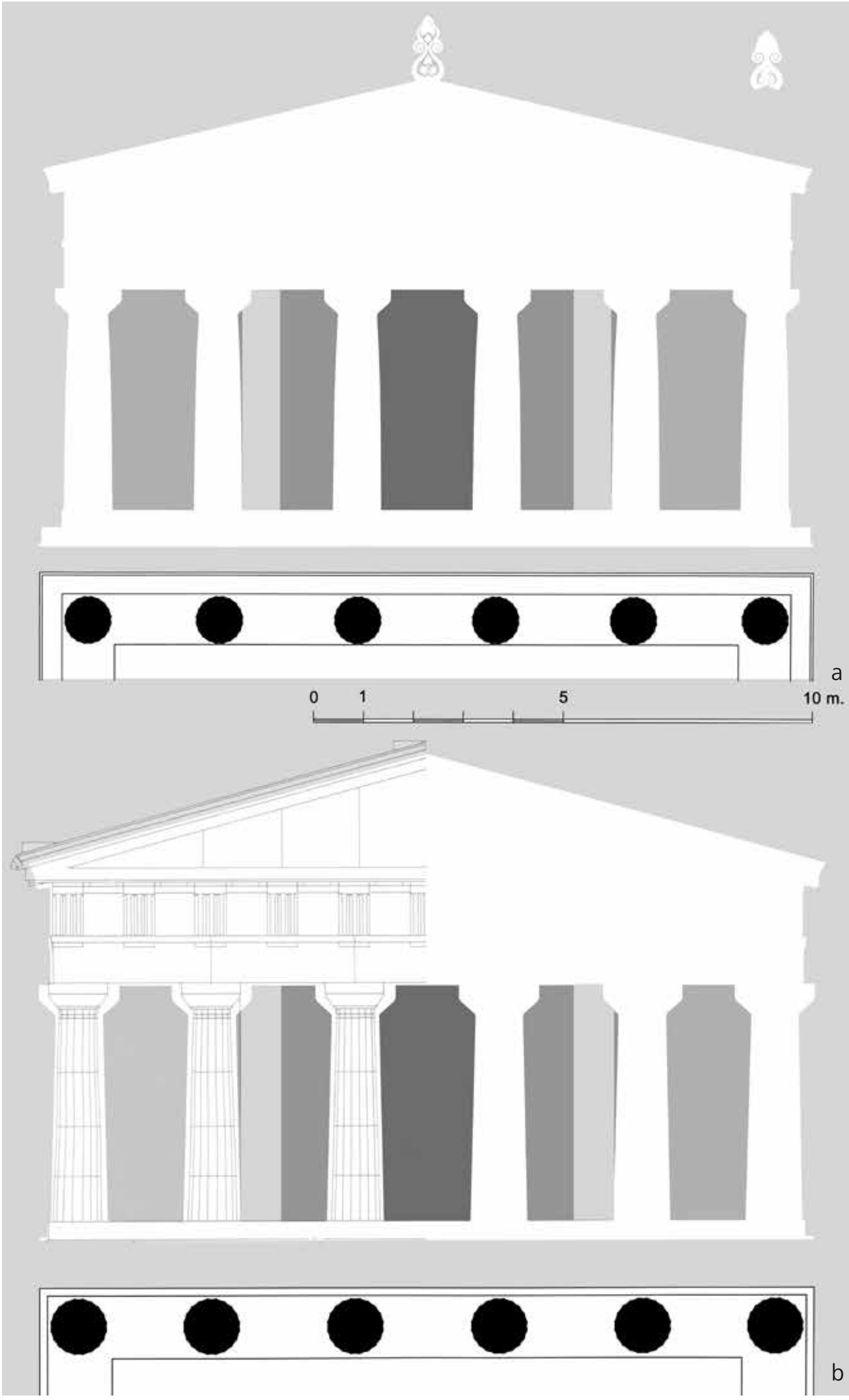

Fig. 11 Hypothetical elevation of the Great Temple. a. With two steps in the krepis. – b. With a single krepis step and a ghost of the Alipheira temple

Calydonian boar is met in one metope of the Sicyonian treasury at Delphi (570–560 B.C.)[38]. Nevertheless, clay fragments of a boar that date to the second half of the 6th century come from Olympia and could have belonged to a pedimental composition[39].

sculpture, see A. Moustaka, Grossplastik aus Ton in Olympia, OF 22 (Berlin 1993) 137.

38 P. de La Coste Messelière, Au Musée de Delphes (Paris 1936) 120 pl. 3; J. Boardman, Greek Sculpture. The Archaic Period. A Handbook (London 1978) 188–190; B. S. Ridgway, The Archaic Style in Greek Sculpture [2](Princeton 1993) 339.

39 Most probably this clay boar belonged to a votive offering. Moustaka, loc. cit. (n. 37) 137–139 N 1–4 pl. 109 a–e; P. Danner, Westgriechische Giebeldekorationen, II. Mythologischen Szenen – sonstige figürliche Motive – nichtfigürliche Ornamente, RM 43, 2002, 59 B30.

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Fig. 12 Marble helmeted head of a hoplite from the pediments of the Great Temple
Fig. 13 Lowermost part of a marble female figure from the pediments of the Great Temple
Fig. 14 Part of the marble head of a boar from the pediments of the Great Temple

Simas (Ch.K.)

Five large fragments of two differently raking simas are made of white Parian marble and have a large cyma recta at the front *(fig. 35 E)*. The simas are 0.223 m in height and have a maximum thickness in the middle of 0.086 m. All corners are right angles. The top surface slopes one degree from its horizontal plane. On one of the fragments, the flat corona at the top is 0.045 m; on the other three fragments, the flat band is 0.049 m high and the cyma recta is slightly different. Taking these dimensions into consideration, the fragments apparently belong to two different pediments of the temple. A striking find is the traces of a painted palmette motif on one of the sima fragments. Though faint, the traces clearly reveal a palmette hanging upside down[40]. It appears that the palmette can be inscribed in a circle with a diameter of 0.010 m.

The profile of the sima is unlike the large ovolo that is crowned by a small astragal and is common to contemporaneous simas of the mainland[41]. In the Late Archaic period,

[40] A rare parallel comes from the palmettes on the regulae of the Parthenon. A. Orlandos, Η αρχιτεκτονική του Παρθενώνος Β΄ (Athens 1977) 206. We would like to thank Professor Manolis Korres for pointing this out.

[41] This is the so-called Megarian sima; cf. Furtwängler loc. cit. (n. 31) pl. 40; L. T. Shoe, Profiles of Greek Mouldings (Cambridge, Mass. 1936) 88–91 pl. XL; Νακάσης loc. cit. (n. 16) drawings 9. 10; Ορλάνδος loc. cit. (n. 19) 78 fig. 51. The large ovolo of the sima also becomes a favourite feature in Periclean architecture, G. Roux, L'architecture de l'Argolide aux IVe et IIIe siécles avant J. C. (Paris 1961) 58–62.

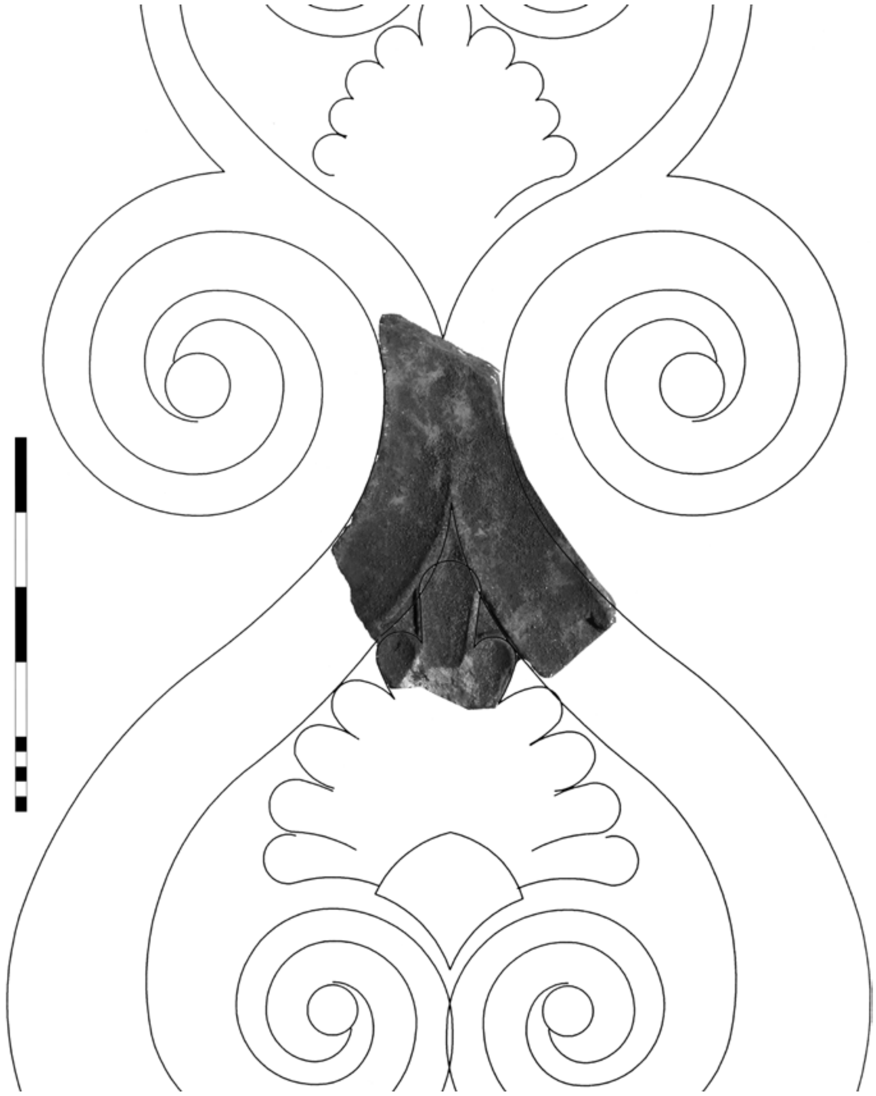

Fig. 15 Acroterion fragment of the Great Temple

simas with a cyma recta are only found on Delos, in the Thesmophorion (490–479 B.C.), the temple of Anios, and an unknown Late Archaic building[42]. Except for the aforementioned Archaic examples from Delos, simas with a cyma recta profile only appear after the Mnesiclean Propylaea, during the 5th and 4th centuries[43].

Acroteria (Ch. K.)

One fragment of Parian marble comes from a lyre-shaped central acroterion (Acroterion A). This is executed in shallow relief with two stalks meeting in what appears to be palmette leaves. The section of the shaft is rectangular. As in the Aphaia temple, the top of the

[42] Shoe loc. cit. (n. 41) pls. XIX. XVIII; A. Ohnesorg, Inselionische Marmordächer (Berlin 1993) 33–35 pl. 19. In Italy, the only S-shaped sima, found in the temple of Athena at Paestum (ca. 500 B.C.), »fand keine Nachfolge«. Mertens loc. cit. (n. 24) 143. Beil. 33.c. 18.

[43] The southwest wing of the Mnesicelan Propylaea, the temple at Bassae, the temple of Athenians on Delos (426–416 B.C.), and the Argive Heraion are some of the earliest examples. Shoe loc. cit. (n. 41) 92–94 pl. XLI.

palmette supports the lyre; more palmettes must have sprung from and above it[44]. The thickness of the fragment is 0.085 m in the lower part and 0.072 m in the upper part. The rear is plain *(fig. 15)*.

Three fragments of Parian marble, found in the Western Area[45], have been identified as parts of a large acroterion (Acroterion B). Two of them adjoin, and indicate curving ribbed and fluted stalks that spring from two opposite acanthus calyci. The overall width in this part is 0.12 m. The treatment of the acanthi with angular leaves is unlike the flat or shallow relief seen in Archaic and Late Archaic acroteria and resembles examples of the Classical period[46]. Yet, the leaves are more angular than on the acroteria at Samothrace. It therefore appears that either one of the two central acroteria was installed during the Classical period, sometime between year 450 and the destruction of year 373/372 B.C. Similarly, in the Archaic temple of Athena at Makistos, the acroteria together with the sculptures were added to the pediments during the 4th century B.C.

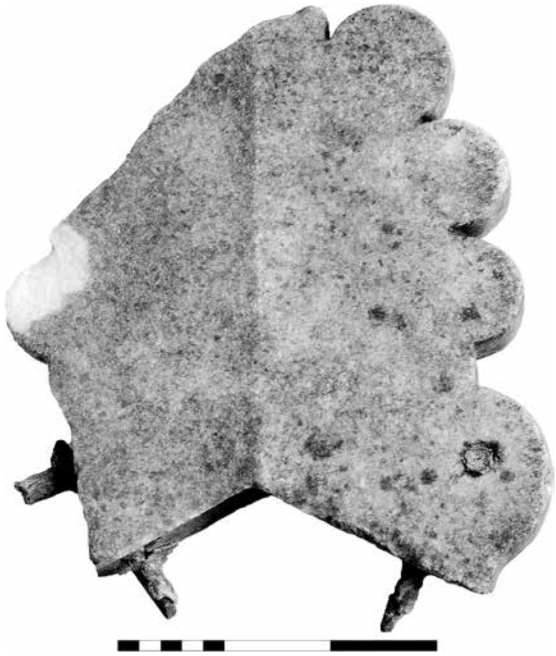

Fig. 16 Marble palmette from an antefix of the Great Temple

Roof tiles (Ch. K.)

Numerous fragments of Corinthian roof, pan, and cover tiles have been recovered during excavation. A plain marble antefix with 9 lobes is 0.21 m wide[47]. This was fastened to the roof tile with two iron pegs *(fig. 16)*.

D. THE NORTH WALL AREA (E. K.)

Prior to excavation, a few ashlars were visible at a distance of 23.50 m north of the Archaic temple. Excavations in this location revealed a wall with an east-west orientation *(fig. 18)*. This wall runs almost parallel to the longitudinal sides of the temple. Its total length is 29.50 m, the overall height is 0.55 m and it was hastily constructed with roughly-hewn conglomerate

[44] Furtwängler loc. cit. (n. 31) pl. 49–53. Similar acroteria can be found in the Artemis temple of Paros (M. Schuller, Der Artemistempel im Delion auf Paros [Berlin 1991] pl. 97) and in the temple at Sangri, Naxos (Ohnesorg loc. cit. [n. 42] pl. 8).

[45] Infra, F. The Western Area.

[46] Cf. the well-documented central acroteria from the Parthenon (C. Praschniker, Die Akroterien des Parthenon, ÖJh 13, 1910, 14 f. fig. 13. 14; I. S. Mark, New Fragments of the Parthenon Acroteria, Hesperia 46, 3, 1977, pl. 56), the Argive Heraion (Pfaff loc. cit. [n. 23] 142 fig. 82), the Thymele at Epidauros (Roux loc. cit. [n. 41] 166 f.) and the Hieron on Samothrace (P. Lehmann, The Hieron I, Samothrace 3 [Princeton 1969] 329–357, esp. 345. 352 fig. 302).

[47] Similar antefixes were published in Νακάσης loc. cit. (n. 16) 125–127. 135–137.

Fig. 17 Reconstruction of the Great Temple projected in actual landscape setting

Fig. 18 Aerial photograph of the North Wall Area

blocks. Two or three courses were found in situ; the width varies between 0.65 and 0.85 m. Small fragments of sandstone, most probably from the Archaic temple, were incorporated in the uppermost courses together with two statuary fragments: these are sections of drapes and the leg of a male figure that must have belonged to the pedimental sculptures of the Archaic temple. The western portion of the wall is meticulously constructed with a sort of orthostate at its end. Its upper part is made of a large capping block across the entire width of the masonry (height: 0.45–0.47 m, width: 1.19–1.25 m, thickness: 0.25 m). This feature sits on roughly treated foundation blocks that project approximately 0.05 m from the masonry face. The overall height of the construction in this area is 0.65–0.70 m *(fig. 19)*.

The incorporated sculptures suggest that the excavated wall was built after the destruction of the Archaic peripteral temple. It appears that this was a retaining wall and its purpose was to hold the ground and even out the area north of the temple which slopes to the north. This hypothesis is supported by the location of the fill to the south and immediately against the wall. This fill consisted of a great quantity of sandstone chips, broken roof tiles (mostly marble), broken architectural elements, and a few fragments of sculptures that must have belonged to the pediments of the Archaic temple *(fig. 14)*. The upper surface of this layer slopes gently from the temple and towards the wall and reaches the level of its uppermost course *(fig. 20)*.

The fact that some of the contents of this fill (mainly roof tiles and sandstone fragments) are packed into the gaping joints of the retaining wall strongly indicates that the masonry and the abutting fill are contemporaneous. The same layer of stone chips also included

Fig. 19 The western part of the North Wall

Fig. 20 The layer with sandstone chips, broken roof tiles, broken architectural members and fragments of sculptures south of the North Wall

numerous bones, a few miniature pots, and a number of metal objects (mostly tools and a few pieces of jewellery).

A layer with burnt material and finds from the first half of the 6th century B.C. was found southwest of this wall, beneath the layer of sandstone chips. The finds are mostly broken aryballoi *(fig. 21 a. b)*, figurines *(fig. 22)*, and metal objects, among which an iron spearhead is worth noting *(fig. 23)*. A lion-headed water spout made of clay was also discovered, together with clay roof tiles and large fragments of burnt sandstone *(fig. 35 C)*. Excavation in this area will be resumed in the following years and it is hoped that it will yield better results; however, at present it appears that these finds belong to a building – perhaps a temple – that is older than the Archaic peripteral temple. A Corinthian, black-figured aryballos with hoplites that carry shields is a most important find that can date the contents of the fill. This aryballos belongs to the ›Warrior Group‹, which dates from the Early to the Late Corinthian I period *(fig. 21 c)*. The specific vessel from Mamousia can be dated to the first quarter of the 6th century B.C. [48]

E. THE SMALL TEMPLE (Ch. K. – E. K.)

The Small Temple is located approximately 67 m west of the chapel of Mamousia and is oriented east-west, facing east *(fig. 24)*. This was the first monument to be excavated on the summit of Profitis Elias. The east and southeast sections of the structure were partially visible at surface level. Excavation started in the year 2001 and was resumed in 2003. Stratigraphy in most areas is absent due to the shallow fill; the latter has been disturbed over the years by agricultural activity. The building is constructed from the local brittle and grainy sandstone, and its blocks are worn due to exposure to weather conditions. Its overall dimensions are 8.50 × 13.20 m.

The foundations in the south stand at a height of 0.63–0.68 m. Three severely eroded stylobate blocks stand in situ on the eastern section of the building. Pry-holes and cuttings for H- and Z-shaped clamps are present on the toichobate blocks. Masons' marks are visible on the

[48] H. G. G. Payne, Necrocorinthia. A Study of Corinthian Art in the Archaic Period (Oxford 1931) 320. Parallels of the specific aryballos in P. N. Ure, Aryballoi and Figurines from Rhitsona in Boeotia (Cambridge 1934) 22–25. 38–40 pl. VIII; Ν. Σταμπολίδης (ed.), Πλόες… Από τη Σιδώνα στη Χουέλβα. Σχέσεις λαών της Μεσογείου 16ος–6ος αι. π. Χ. (Athens 2003) 337 no. 411; 340 no. 423.

Fig. 21 a. b. Aryballoi from the layer with burnt material – c. Aryballos of the ›Warrior group‹ from the layer with burnt material

surface of certain blocks: in the eastern section of the euthynteria, on the second block from the north: *N*, and on the sixth block: *IN*; in the southern section of the foundation, on the second block from the west: *A* and *Λ*; in the western section of the toichobate, third block from the north: *T*; in the northern section of the toichobate: *M*, and on the toichobate of the doorwall, first block from the north: *H*.

A rectangular pit, built of rather small, irregular slabs, is located in the northwest corner of the pronaos, against the walls. The slabs in the mouth of the pit are between 0.04 and 0.10 m high and are situated 0.23 m below the level of the toichobate. The dimensions of the pit are 0.82 × 0.70 m. The masonry is humble, using only rubble and slabs *(fig. 25)*.

The interior dimensions of the pit are 0.40 × 0.25 m. The pit was excavated to a depth of 0.56 m. The soil fill in the pit is yellowish, sandy, with sandstone chips and ash, and did not include pottery. Below this fill lies the local, compact, sterile reddish soil. This feature must have had a ritual use, most probably for liquid offerings related to the cult of chthonian deities, and, most probably, associated with nature. Fragments of marble roof tiles were discovered around the pit construction.

Fig. 22 a. Female figurine from the layer with burnt material. – b. Head of a female figurine from the layer with burnt material

Fig. 23 An iron spear head from the layer with burnt material

Fig. 24 Small Temple.
View from the east

Fig. 25 The rectangular
pit in the northwest corner
of the Small Temple.
View from the southeast

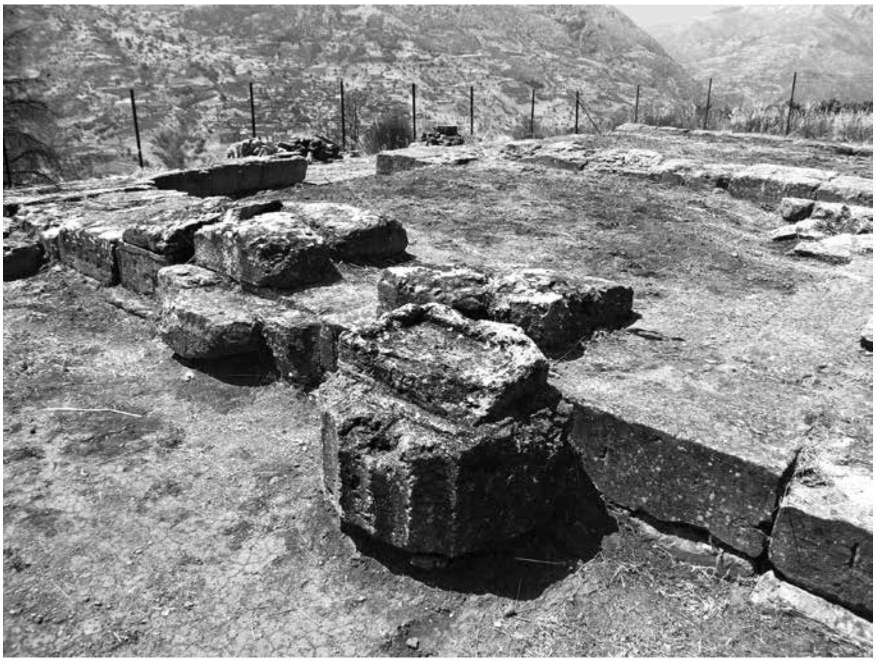

Fig. 26 Base set against
the euthynteria and stylobate
of the Small Temple.
View from east

Rectangular, integrated altars with bothroi in their core are quite rare and mainly date to the second half of the 8th century B.C.[49] These are considerably earlier than the pit in the Small Temple of Mamousia, which appears to have been added during a later phase of the building. The bothros in the Small Temple must have been used for χοές, which involved the pouring of a considerable amount of liquids onto the ground and not onto an altar[50]. A similar architectural feature is the round bothros in the atrium of the Asclepieion at Messene. As is the case in Mamousia, the bothros of Messene is also built with simple means, using only two courses of rubble and directly on ground level[51]. The fill that covered the bothros of Messene contained finds dating to the Archaic and Classical periods. The two marble, hollow, cylindrical altars from the sanctuary of Herakles and the Samothraceion on Delos display a more sophisticated construction, with heights of 0.635 m and 1.78 m respectively. These date to the Hellenistic period and they must have been related to a chthonic or heroic cult[52].

The brown, compact soil fill inside the pronaos was 0.30 m deep and contained sherds, fragments of marble and clay roof tiles, and a few small finds. Inside the cella, the colour of the fill was orange and softer, and in areas along the walls, it also contained stone chips. The thickness of this layer was 0.20 m, with the red and compact sterile soil underneath. The sherds date from the Classical through to the Roman era, thereby suggesting a long-term use of the building. A few architectural elements were also recovered. Among these is the large fragment of a clay sima, a large marble pan tile found directly to the south of the rectangular pit in the pronaos, a fragment of an architrave with a section of a regula and one peg, fragments of marble and clay roof tiles. The few small finds include a portion of a bronze object with a spiral motif, the bronze leg of a miniature tripod, and clay figurines. Among the latter, the most prominent is the head of a female figure *(fig. 27 a)*.

Two small oinochoai were found together in the northwest corner of the cella. These date to the late Classical period, most probably in the middle 4th century or slightly later, though exact parallels of the two vessels have not yet been ascertained. In one of these oinochoai *(fig. 27 b)*, the compressed cylindrical body is painted with black glaze on a pale tan surface, and has a repeated tongue motif on its shoulder. This is a common decoration of the Corinthian workshop and dates from the 6th century through to the second half of the 4th century B.C.[53] The closest known parallels of this motif date to the mid 4th century B.C. or slightly later[54].

[49] D. W. Rupp, The Altars of Southern Greece: A Typological Analysis, in: R. Etienne – M.-Th. Le Dinahet (eds.), L'espace sacrificiel dans les civilisations méditerranénnes de l'Antiquité, Publications de la Bibliotèque Salomon-Reinach 5 (Paris 1991) 304 f.; D. W. Rupp, Reflections on the Development of Altars in the Eighth Century B.C., in R. Hägg (ed.), The Greek Renaissance of the Eighth Century B.C.: Tradition and Innovation. Proceedings of the Second International Symposium at the Swedish Institute in Athens, 1–5 June 1981 (Stockholm 1983) 104.

[50] S. Huber, L'aire sacrificielle au nord du Sanctuaire d'Apollon Daphnéphoros. Un rituel des époques géometrique et archaique, Eretria 14 (Gollion 2003) 143.

[51] Π. Θέμελης, Ανασκαφή Μεσσήνης, Prakt 151, 1996, 144 fig. 2 pl. 58 α. γ; 59 α–ε.

[52] R. Etienne, Espaces sacrificiels et autels Deliens, in: R. Etienne – M.-Th. Le Dinahet (eds.), L'espace sacrificiel dans les civilisations méditerranénnes de l'Antiquité, Publications de la Bibliothèque Salomon-Reinach 5 (Paris 1991) 78. 82 pl. X d.

[53] This group of the Corinthian workshop is called Corinthian Conventionalizing, see E. G. Pemberton, The Vrysoula Classical Deposit from Ancient Corinth, Hesperia 39, 1970, 277–280; E. G. Pemberton The Sanctuary of Demeter and Kore. The Greek Pottery, Corinth 18, 1 (Princeton 1989) 126; M. K. Risser, Corinthian Conventionalizing Pottery, Corinth 7, 5 (Princeton 2001).

[54] Risser loc. cit. (n. 53) 111 no. 460 pl. 27; 111 no. 463 pl. 28.

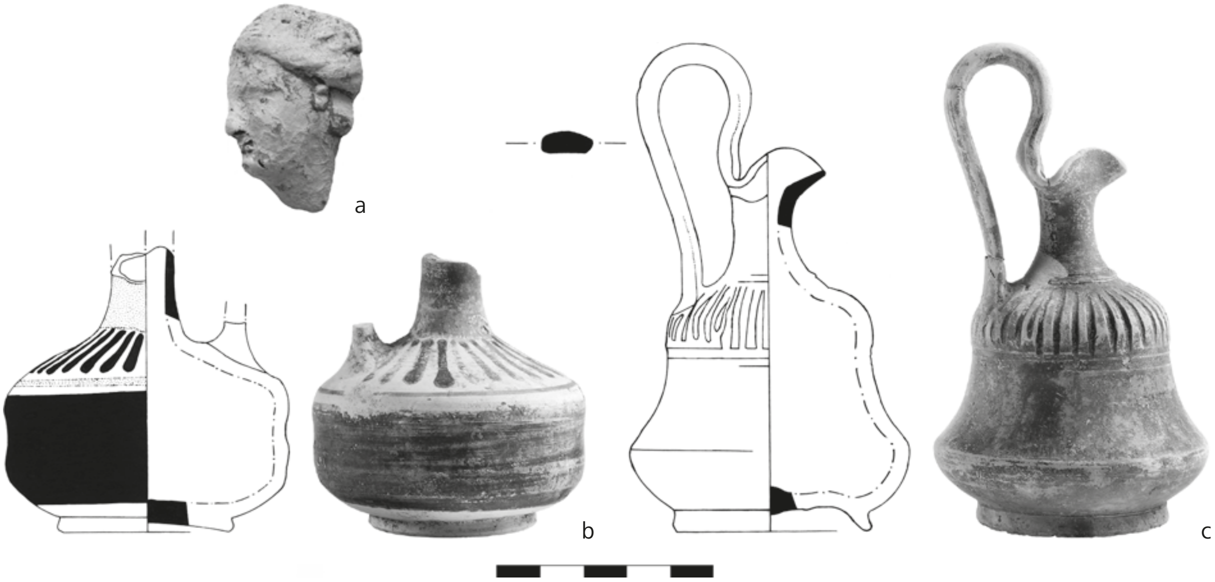

Fig. 27 a. Head of a female figurine from the Small Temple – b. c. Oinochoae from the Small Temple

The second oinochoe is plainly painted with black glaze *(fig. 27 c);* this vessel, with the characteristic S-shaped profile of its body, its narrow neck, and elevated flat handle that ends in a trefoil spout, can generally be dated to the second half of the 4th century B.C.[55]

The finds suggest that the temple was in use for at least five centuries, i.e. between the 4th century B.C. and the 1st or 2nd century A.D. Our excavations did not recover any floor remains; however, the evidence suggests that there were at least two levels of usage. The initial floor level must have been at the same level as the stylobate. This floor did not survive the subsequent phases of use. During a later stage of development, the original floor material was removed and a new floor was laid about 0.20 m deeper, as the rectangular pit / bothros and the pan tile next to it indicate. The exact date of this alteration is unknown; however, it is plausible that it took place during the Hellenistic period. It is noteworthy that most of the marble roof tile fragments were found in the pronaos, on the same level as the pit and the complete pan tile, and scattered around them. It is possible that, during this second phase, the roof was covered with marble tiles, and that the clay tiles and clay sima belong instead to the original phase of construction, which dates to the late Classical period. The pottery found in the cella suggests that the temple was probably founded around the mid 4th century B.C.

It appears that the Small Temple was built with material taken from the Archaic peripteral Great Temple, after the latter had been extensively damaged during the disastrous earthquake of the year 373/372. Reused blocks below the toichobate layer were not treated to fit the construction of the Small Temple. These retain the original features of the Great Temple, i.e. the dimensions, anathyroses, the Archaic cuttings for clamps and original surface treatment.

[55] The closest parallel is dated to the second quarter of the 4th century and quite possibly slightly later than the vessel from Mamousia: Β. Αδρύμη-Σισμάνη, Ταφικά σύνολα από το δυτικό νεκροταφείο των Φθιώτιδων Θηβών, in: Σ. Δρούγου (ed.), Ελληνιστική Κεραμική από τη Θεσσαλία (Volos 2000) 142 f. BE 11031 figs. 12. XI. Also, J. W. Hayes, Greek and Italian Black-Gloss Wares in the Royal Ontario Museum (Toronto 1984) 147.

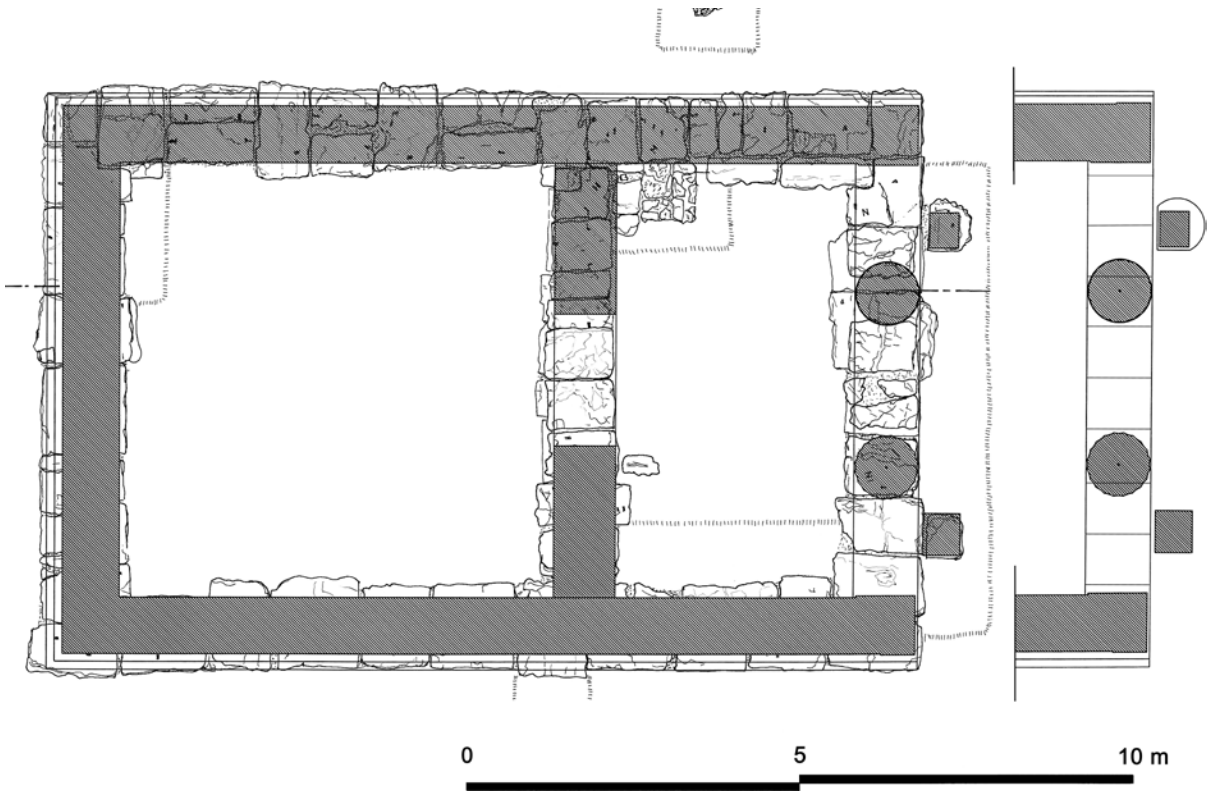

Fig. 28 Reconstructed plan of the Small Temple with in situ remains

Bands in the anathyroses of the Small Temple are distinctively 0.11 m wide on the sides and 0.15 m wide along the top. Z-type clamps, each approximately 0.22 m long, were used for the connection of the blocks above the euthynteria level. Such clamps generally appear in the Archaic period, before H-shaped clamps; however, they survive sporadically after the mid-5th century B.C.[56] As Z-shaped clamp cuttings also appear in one of the reused Archaic blocks, it is tempting to postulate that even clamps of the peripteral Great Temple were removed systematically and were readily reused in the Small Temple, thus saving expense for metalworking.

The building should be approximately 8.50 m ± 0.04 m wide and 12.95 m long across the level of the euthynteria and about 8.34 m ± 0.02 m and 12.83 m on the toichobate-stylobate course respectively *(fig. 28).*

The foundation consists of at least two courses. The width of the euthynteria course varies between 0.96 m (front) and 1.15 m (rear), and its height is variably 0.330 m (S), 0.334 m (SE), 0.345 m (W) and 0.352 m (E). The toichobate / stylobate layer is 0.93 m, 0.956 (N) and 0.967 m (E, stylobate) wide. The toichobate of the doorwall is between 0.920 and 0.965 m wide. The same course is between 0.253 m (N), 0.257 m (E, stylobate), and 0.273 m (doorwall) tall. The length of the toichobate / stylobate blocks is quite consistent and on average 0.75 m in three out of four preserved areas: lengths of 0.757 and 0.76 m have been recorded

[56] During the 4th century, only three such clamps in combination with T-shaped ends appear in the temple of Apollo at Delphi (P. Amandry – E. Hansen, Le temple d'Apollon du IVe siècle [Paris 2010] 134. 136), and in the Didymaion at Miletus (Th. Wiegand – H. Knackfuss, Didyma I. Die Baubeschreibung [Berlin 1941] 83). Surprisingly, such Z-type clamps were also employed in the neighbouring 4th-century temple of Gkremoulias, near Kalavryta (personal communication Georg Ladstätter).

for four blocks of the eastern portion, while distances between six pry-holes in the west section of the euthynteria have an average length of 0.735 m. Block lengths of 0.749, 0.748, 0.743, and 0.757 m were measured for the toichobate of the doorwall, with two shorter blocks placed next to each other (lengths of 0.405 and 0.392 m), resulting in a combined length of 0.797 m. Block lengths vary to a great extent in the northern section. The toichobate / stylobate blocks should, therefore, be reconstructed in most areas of the building with an average width of 0.95 m and a length of 0.75 m. Most probably, the wall ashlars had the same length and conformed to the pattern of 0.75 m between joints.

The internal length of the cella across the toichobate is between 6.34 and 6.43 m (an average of 6.38 m), according to measurements taken between extant dislocated blocks and pry-holes. The interior width of the cella across the toichobate level should be about 6.40 m, resulting in a perfectly square cella[57]. With an estimated wall thickness of approximately 0.85 m, the outer width of the cella can be reconstructed as being ± 8.10 m. The ratio of the building's dimensions in terms of length and width is between 1.53 : 1 and 1.55 : 1 or, in integer figures, 20 : 13 or 40 : 26. The length of 26 podes, each 0.322 m, is 8.37 m, and is exactly equal to the building's overall width at toichobate level. The length of 40 such podes equals 12.88 m, which is relatively close to the calculated length of the building at toichobate level (± 12.95 m)[58].

The clear east-west length of the pronaos is 3.97 m. No traces of floor underlayment have been identified at a depth of 0.30 m below the threshold level. This space was, perhaps, covered instead with a layer of compact dirt.

None of the wall ashlars has been found either in situ or scattered around the site. Judging by the pry-holes on the toichobate course, the wall width should be estimated at 0.85 m ± 0.02 m with a doorwall thickness closer to 0.92 m. It can be postulated that the wall ashlars of the Archaic peripteral temple were reused in the smaller building after the destruction of 373/372 B.C. In many ways, the dimensions of the Archaic peripteral temple would have dictated the architecture of the later, smaller building.

Two bases were found abutting the façade of the building. These had been manufactured from reused drums, apparently taken from the Archaic Great Temple after the latter's destruction during the earthquake of year 373/372. The height of one column drum is 0.55 m. A rectangular cavity in the upper surface is 0.58 × 0.46 m in size[59]. The portion of the drum that emerges at an average height of 0.094 m (0.083 m S and 0.104 m N) above the euthynteria level is carved as a rectangular support. The part that was set into the ground and, therefore, not visible retains the original fluting of the shaft *(fig. 26)*. On the basis of this evidence, it appears that the original ground level was slightly above the euthynteria course, and that the toichobate / stylobate emerged only some 0.165 m out of the ground.

The two bases located directly against the façade deny access to the temple's interior via the corner intercolumnar openings. Quite possibly, screens between columns and antae would have (originally) prevented access via the corner openings, which then became practically obsolete; hence the presence of the two features in these positions[60]. Similar

[57] Square cellas are not uncommon in tetrastyle buildings after the 4th century B.C., see e.g. the treasury of Cyreneans at Delphi (J. Bousquet, Le trésor de Cyrène [Paris 1952] pl. 30), the temple of Eileithyia at Ithome, (Β. Πετράκος, Ναός Ειλειθυίας, Ergon 57, 2010, 33), the 3rd–2nd century temple in Minoa, Amorgos (Λ. Μαραγκού, Ανασκαφή Μινώας Αμοργού, Prakt 136, 1981, 310–313), the Doric temple of the Upper Agora, the Temple of Asklepios, and the temple of the Middle Gymnasium in Pergamon, which date to the second half of the 2nd century B.C. (E. Akurgal, Griechische und Römische Kunst in der Türkei [Munich 1987]).

[58] I. Dekoulakou-Sideris, A Metrological Relief from Salamis, AJA 94, 1990, 445–451, esp. 450.

[59] A similar base stands before the Hellenistic temple D, north of the theatre at Aigeira.

[60] One altar and one omphalos (?) are similarly located in front of the corner intercolumniations of the small Ionic temple adjacent to the portico of Philipp V on

metal grills are reconstructed in the corner openings of the temple of Apollo at Falasarna of Cos[61].

Pry-holes on the surface of the north toichobate suggest that the lateral walls extended to the ends of the façade, thus precluding a prostyle type. Blocks in the eastern section can be identified as stylobate features as they lack the Z-type clamps found in the toichobate part of the same course. Indeed, the symmetry of these blocks in relation to the axis of the façade confirms their identification as stylobate slabs *(fig. 28).*

If the façade had incorporated a distyle in antis portico – appropriate for the size of the structure –, the columns' lower diameter should have been slightly wider than the width of the antae, following a general rule of Greek Classical architecture. In fact, it is the antae that were designed narrower, in order to increase the corner intercolumnar openings; for in a small building the latter tend to become inconveniently narrow due to the angular contraction of the Doric order. With a calculated wall width of 0.85 m, an anta width of approximately 0.89–0.90 m, and in accordance with the above factors, the lower diameter would have been 0.94 m at most. A lower diameter of 0.94 m would be perfectly accommodated on top of the stylobate, which has a width of 0.967 m.

As a result, the entire order and columns of the façade would have stood on the first and single krepis step. This is unprecedented since the Early Archaic period, and would be exceptional for 4th-century schemes, which conform to the rules of the Classical period. These determine that porticoes stand on a canonical three-step krepis. However, a hypothetical second step that would have stood about 0.35 m deeper would have only been 0.60 m wide, allowing for columns of a similar lower diameter. In a Greek distyle in antis portico it is impossible that the antae and walls were both 0.85 m wide, while the columns were only 0.60 m wide. The columns should be at least as thick as the wall antae, and are in most cases thicker, as exhibited above. Therefore, a two-stepped krepis should be ruled out.

No entablature features were recovered at the site during the excavations, though it is possible that these had been completely removed from the site, together with the wall ashlars.

As explained above, it appears that the Small Temple was built shortly after the destruction of the Archaic Great Temple, which was perhaps caused by the earthquake of the year 373 B.C. Following this hypothesis, the Small Temple was built hastily using recycled material from the Archaic temple. The fact that the bases to the east of the Small Temple are manufactured from recycled column drums, suggests that at least a number of columns from the Great Temple – together with the entablature above them – had collapsed. Supposedly, the new, smaller structure would house valuable objects originally stored inside the Archaic cella. The presence of the two features located directly against the Small Temple's façade supports the hypothesis that the structure was used as a site for the storage and display of significant items collected after the natural destruction of year 373. It is somewhat puzzling that the 4th-century Small Temple was not built directly over the site of the destroyed Great Temple, and was instead constructed further to the west, away from the Altar and cult practice. It is therefore also possible that the structure termed as the ›Small Temple‹ was in fact a treasury, albeit a large one for the distyle in antis type. A number of features that deviate from canonical, conservative temple architecture such as the single-step krepis can then be explained by this hypothesis. Possibly, the Archaic peripteral temple stood in a ruined state for quite some time before the systematic removal of its material; hence the Small Temple

Delos; access to these openings is blocked by screens. R. Vallois, Le portique de Philippe (Paris 1923) pl. 7.

61 G. Kokkorou-Alevras – S. Kalopissi-Verti – M. Panayotidi-Kesisoglou, The Sanctuary of Apollo and Early Christian Settlement at Kardamaina on the Island of Kos (Athens 2006) 33 fig. 13.

of the 4th century was not erected directly over the Great Temple's foundations, but was, instead, constructed about 60 m to the west. This could be compared to the case of the Old Athena Temple (Archaios Naos) on the Athenian Acropolis, which stood in a ruined state for several decades even after the construction of its successor, the Erechtheion, next to it[62].

If the above suggestions are accepted, the Small Temple appears to be the substitute for a canonical cella. Quite possibly, this was due to the fact that the cult statue of the destroyed Archaic temple would have to be housed within a space of similar dimensions[63]. According well with this hypothesis, the unusual single-stepped stylobate covering the ground directly at floor level is a feature found exclusively in cellas. Indeed, the size of the façade is comparable to the general dimensions found in cellas of peripteral temples (for example, the cella in the temple of Zeus at Stratos is 8.495 m wide) and unlike free-standing distyle in antis constructions[64]. A width of 8.30 m is only to be found in a few prominent distyle in antis temples, such as the famous Ionic temple of Asclepios on Cos, which is 8.78 m wide, and the Doric temple of Apollo at Falasarna on Cos, which is 8.20 m wide at stylobate level.

F. THE WESTERN AREA (E.K.)

A layer of clay roof tiles and rubble was excavated in an area 9 m northwest of the Small Temple *(fig. 29).* The shape of this debris feature was oblong and irregular; oriented north-south, it was 2.5 m long, with a maximum width of 0,90 m, and a maximum depth of 0.46 m. The feature was found 0.24 m below ground level. The finds suggest that the debris must have been deposited during the Hellenistic period and may possibly relate to the alterations in the Small Temple and the replacement of its roofing material. A portion of a clay opaion from a roof is among the finds. A bronze coin of Ptolemy III Euergetes (246–221 B.C.) is important for the date of this deposit[65]. The latter object must have been discarded in the Western Area *(fig. 2, F)* during the last quarter of the 3rd century B.C.

A layer of stone chips and roof tiles was discovered 0.35 m further to the west; this layer of debris is much larger than the former deposit and it extends beyond the western, southern and northern boundaries of the excavation trench *(fig. 30)*. In total, 12 m^2 were excavated. The layer was between 0.06 and 0.58 m deep and consisted of dense clusters of sandstone

62 The Old Athena Temple was repaired and part of it was used as a treasury for at least 27 years after the arson of 480 B.C. until it was finally destroyed by a second fire in 406/405 B.C., i.e. the same year that the Erechtheion was finished. Xen. hell. 1, 6, 1. According to other classical authors, the opisthodomos of the temple remained in use until the mid 4th century B.C. Travlos loc. cit. (n. 34) 143.

63 The naos was frequently understood to be the cella alone. For example, in the great Periclean building only the adyton and opisthodomos are described as the Parthenon, while the cella was identified with the naos, J. M. Hurwit, The Acropolis in the Age of Pericles (Cambridge 2004) 106–110.

64 Further comparisons are the treasury of Athenians in Delphi with a width of 6.57 m, the Doric Treasury in Marmaria (6.60 m wide), the Treasuries of Sicyonians and Cyrenaeans in Delphi (each ± 5.95 m wide), the treasury of Megarians in Olympia (6.00 m wide), the Delion on Paros (5.82 m wide), the Themis temple at Rhamnous (6.18 m wide), the temple of Aphrodite at Argos (6.20 m wide; M. Piérart – G. Touchais, Argos, une ville grecque de 6000 ans [Paris 1996] 53), the Archilocheion on Paros (7.11 m wide; A. Ohnesorg, Der dorische Prostylos des Archilocheion auf Paros, AA 1982, 173. 275), the Hellenistic temple of Asclepios in Lissos (6.58 m wide), the Pamisos temple in Heleia (5.425 m wide; M. N. Valmin, The Swedish Messenia Excavations [Lund 1938] 464 f.), the 3rd–2nd-century B.C. temple at Minoa, Amorgos, (+ 5.00 m wide; Μαραγκού loc. cit. [n. 57] 310–313), the Ionic temple at Ithome, Messene (some 5 m wide), and the Ionic temple adjacent to the Stoa of Philipp V (4.16 m wide; Vallois loc. cit. [n. 60]), to mention a few, well-known distyle in antis / tetrastyle monuments.

65 SNG Italia, Civiche Raccolte Numismatiche, XIII Aegyptus, 1. Ptolemaei, 48 no. 192.

Fig. 29 Western Area. Layer of clay roof tiles and rubble in the northeastern corner of the trench. View from the southwest

Fig. 30 Western Area. Layer of stone chips and broken roof tiles. View from the northeast

chips, large quantities of animal bones, many large fragments of clay and marble roof tiles, and traces of fire. The chips are in areas mixed with reddish-brown hard soil that contained a few sherds and roof tiles. In certain areas, a layer of burnt material (thickness 0.10–0.12 m) was discovered underneath the stone chips. Among the numerous finds are miniature vessels, a black-ware oinochoe with a compressed spherical body and a trefoil spout that dates to the mid 4th century[66] *(fig. 31 a)*, a lamp with an open body that dates to the end of the 5th century or the beginning of the 4th century B.C.[67] *(fig. 31 b)*, loom weights, parts of metal pots, mainly cauldrons, and iron tools. Among the latter group of finds, an iron knife is the most prominent find. In addition, bronze rings – one with an engraved female figure on its hoop –, the silver lid of a pyxis, clay figurines of animals, male ithyphallic and female figurines *(fig. 31 c)*, and sandstone architectural fragments from the Archaic Great Temple (including column flutes and architrave pegs) were also recovered. Marble fragments are mainly the remains of roof tiles and other architectural components, for example a palmette that must have originally been attached to an antefix with bronze nails coated with lead *(fig. 16)*, acanthuses, and stalks[68]. There are also fragments from marble sculptures (clothing and legs) from the pediments of the Archaic temple. The pottery dates from the 6th century through to the middle of the 4th century B.C. It therefore becomes obvious that this material originated from the Archaic temple and the altar area, and was spread in the Western Area *(fig. 2, F)* after the destruction of the temple. The Altar must be the source of the burnt soil, animal bones, iron tools (knives), and metal pots; the latter would have been used for cooking ritual meals after the sacrifice of animals *(fig. 32)*.

A short wall built of ashlars and irregular stone slabs was found beneath this layer, at approximately 0.40–0.43 m below ground level *(fig. 33)*. The wall is oriented north-south, is 3.08 m in length, 0.97 m wide, and no more than 0.15–0.10 m high, and is founded on a layer of soil that contains no cultural material. A dense layer of clay roof tiles, bones, and traces of fire were found directly on top of this wall. The purpose of this wall is unknown;

[66] On the shape of this vessel, see Risser loc. cit. (n. 53) 111 f. nos. 463–466 pl. 28.

[67] The closest parallels can be found in: R. H. Howland, Greek Lamps and Their Survivals, The Athenian Agora 4 (1958) 48 no. 171 pl. 6, 34 (type HT 21 C, last quarter of the 5th century); I. Scheibler, Griechische Lampen, Kerameikos 11 (Berlin 1976) 24 nos. 62. 63 pls. 14. 15 (type RSL 1, end of the 5th century); Σ. Δρούγου, Ανασκαφή Πέλλας 1957–1964, Οι πήλινοι λύχνοι (Athens 1992) 35 f. no. 31 fig. 2 pl. 8 (type ΠΛ 1, end of the 5th to early 4th centuries B.C).

[68] Supra, C. The Great Temple: Acroteria (Acroterion B).

Fig. 31 Oinochoe, lamp and figurine from the layer of stone chips and broken roof tiles

Fig. 32 Bronze handle of a lebes (?) from the layer of stone chips and broken roof tiles

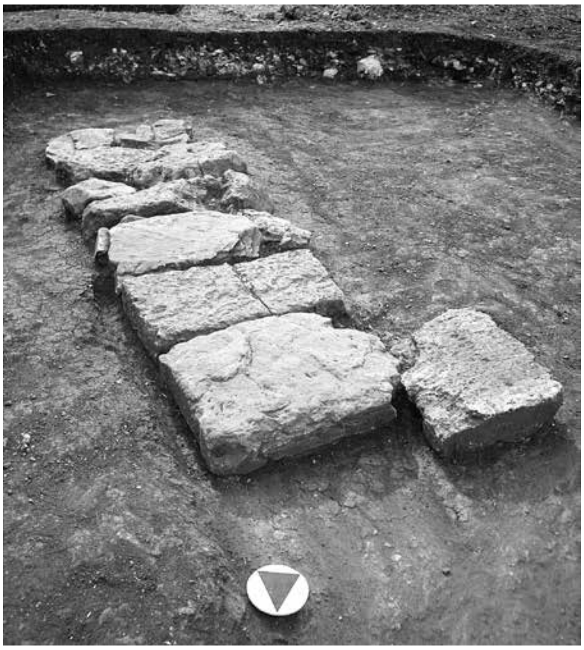

Fig. 33 Short wall of ashlars and irregular stone slabs found under the layer of stone chips and broken roof tiles

it is postulated that it is part of an unfinished structure, and does not belong to a building or other construction. The wall must have been contemporaneous with the Archaic temple, and was covered by the deposited material from this building. Apparently, at some time during the 4th century B.C., this mound of debris was spread evenly in order to level this area of the sanctuary and make space for the erection of the Small Temple.

Fig. 34 Apse of an older church east of the chapel of Profitis Elias. View from the northeast

G. THE CHAPEL OF PROFITIS ELIAS AND THE OLDER CHURCH

(E.K.)

The remains of an apsidal structure were located 1.65 m to the east of the chapel of Profitis Elias *(fig. 34)*. These remains have been identified as the apse of an older church. The eastern wall of the latter is built of rubble and roughly hewn slabs, together with ancient blocks in secondary use. It has a width of 0.70 m and is preserved at a length of 5.38 m. The orientation of the wall is north-south. The apse of the older church (interior diameter 0.85 m) is incorporated into the eastern wall and is 2.20 m from the northeast corner. Quite a few blocks of the apse and eastern wall were found collapsed in the area to the east and west of the eastern wall.

A course built of large, rough-hewn conglomerate blocks is visible against the northern wall of the chapel. These blocks most probably belong to the Archaic temple and were laid at a later phase roughly on top of the northern foundation of the Archaic cella.

The dimensions of the extant chapel of Profitis Elias are 5 m (N-S) by 5.50 m (E-W).

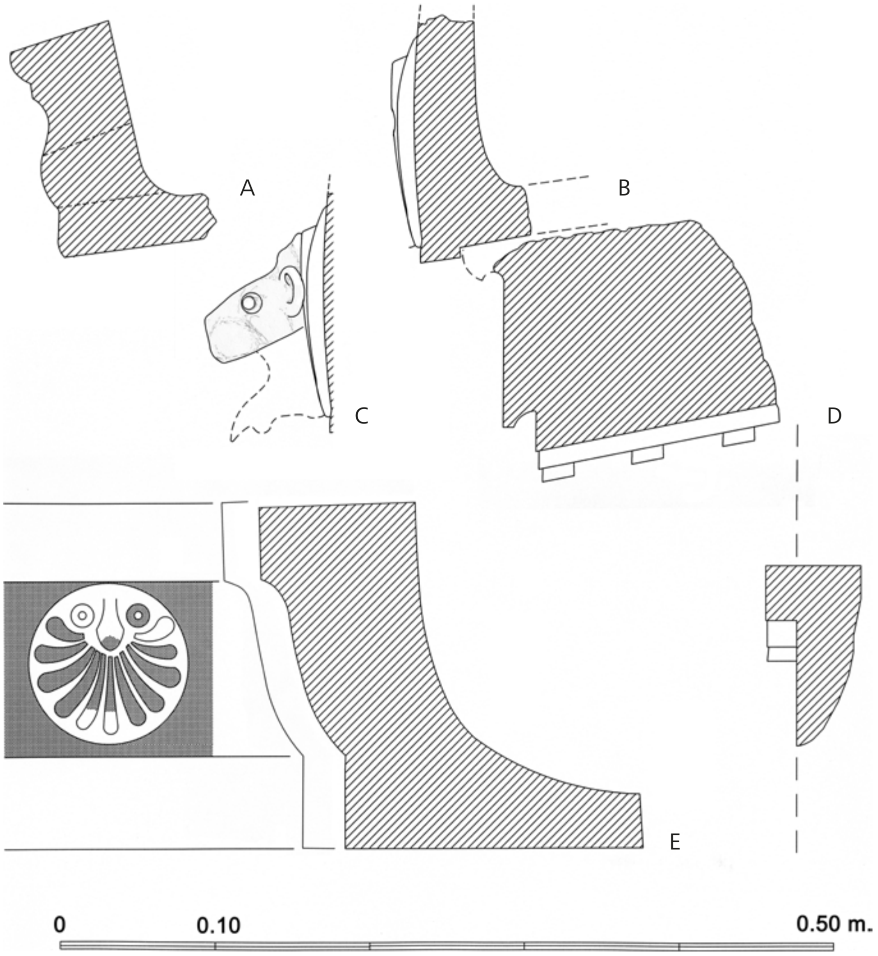

Fig. 35 Simae from Profitis Elias.
A. Clay sima 3 found in the Small Temple;
B. Clay sima 2 reconstructed in the Small Entablature;
C. Lionheaded water spout from a clay sima;
D. Small entablature;
E. Marble sima from the Great Temple

H. CLAY SIMAS (Ch.K.)

Clay sima 1

This fragment of a lion-headed water spout preserves the nozzle and the lion's cheek *(fig. 35 C)*.

Clay sima 2

This clay sima with a lion-headed water spout *(fig. 35 B)* is ca. 0.165 m in height. The front section preserves the ear and part of the cheek of the lion as well as parts of a stylized, shallow mane. A large fragment was found in a small trial trench northeast of the Altar *(fig. 2, A)*. Sima 2 can be attributed to the Eastern Building *(fig. 2, B)*.

Clay sima 3

This is a clay sima with an elaborate S-shaped profile and crowned by an ovolo *(fig. 35 A)*. The clay has inclusions. The top slopes 9 degrees from the bottom surface. Its overall height is 0.146 m. The front preserves remains of a fine lime coat painted in black and yellow with traces of a water spout on its left-hand side. This sima was discovered during excavations in the interior of the Small Temple and most probably originates from this building.

I. SMALL ENTABLATURE (Ch.K.)

Features of a small Doric order were recovered scattered in the areas to the east of the Altar, of the Small Temple, and to the north of the Great Temple *(fig. 35 D)*. These are sandstone fragments of a Doric architrave and a lateral cornice with mutulae and pegs. The height of the architrave's taenia is 0.035 m, with a regula height of 0.017–0.018 m. These measurements were ascertained on the basis of a small architrave fragment. The length of the mutulae and, therefore, the length of the triglyphs, should be approximately 0.285 m. The height of the corona in the cornice is 0.114 m. The upper surface of the lateral cornice is roughly finished, and slopes about 8 degrees from its horizontal plane.

The reconstructed length of the metope should be approximately 0.43 m, thereby producing an interaxial column space of ± 1.44 m[69]. Intercolumnar distance would therefore be between 0.82 m and 0.87 m, assuming the lower diameter of the columns was between 0.57 m and 0.62 m or between two and 2.2 times the triglyph length[70]. The following points should be noted: Column shafts with a diameter of approximately 0.60 m have not been recorded on the summit of Profitis Elias. The intercolumnar openings of about 0.82 m are inconveniently narrow for a hypothetical propylon in the sanctuary. These are comparable to the intercolumnar spaces of the Artemis temple at Epidauros (0.86 m) and the smallest known openings found in the temple of Asclepios Maleatas at Epidauros (ca. 0.70 m)[71]. The date is inconclusive due to the few extant features. Clay sima 2[72] could possibly be restored on top of the Small Entablature. This is displayed tentatively in *fig. 35 B* and *fig. 35 D*. The height of the sima is only slightly taller than the corona of the cornice – as it should be –, and therefore matches the general size of the entablature.

Hypothetically, the Small Entablature could have belonged to the Eastern Building[73]. Indeed, the building's width of 4.72 m is very close to the total length of 7 triglyphs and 6 metopes in the Small Entablature (each of the metopes would be 0.44 m long). The attribution of the small Doric entablature to the upper section of the Eastern Building would not involve columns and, as such, the problem of narrow intercolumnar spaces would be immaterial. The length of the Eastern Building (8.10 m) can accommodate 12 triglyphs, each with a length of 0.285 m, and 11 metopes, each with a hypothetical length of 0.425 m.

[69] The temple of Artemis at Epidauros displays an interaxial column space of 1.56 m with slightly larger triglyphs; the latter are 0.315 m long. Roux loc. cit. (n. 41) 209–211.

[70] The corresponding ratio is 2.015 : 1 in the Argive Heraion, 2.15 : 1 in the temple of Asclepios at Epidauros, 2.18 : 1 in the temple of Athena Alea at Tegea, 2.1 : 1 in the Zeus temple of Stratos, 2.05 : 1 in the temple of Apollo Ptoos, 2.23 : 1 in the temple of Zeus at Nemea, 1.99 : 1 in the Nikias monument at Athens, and 2.2 : 1 in the Propylon of Zeus Kynthios on Delos; however, a ratio of only 1.77 : 1 is found in the temple of Artemis at Epidauros.

[71] Β. Κ. Λαμπρινουδάκης, Ανασκαφή στο ιερό του Απόλλωνος Μαλεάτα, Prakt 131, 1976, 202–209, esp. 204. Β. Κ. Λαμπρινουδάκης, Ανασκαφή στο ιερό του Απόλλωνος Μαλεάτα, Prakt 133, 1978, 111–121, esp. 115.

[72] Supra, H. Clay simas: Clay sima 2.

[73] Supra, B. The Eastern Building.

CONCLUSIONS (E.K.)

Despite the poor state of preservation of the architectural remains, especially in the case of the Great Temple, and despite the fact that the sanctuary at Profitis Elias is not cited in ancient sources, it becomes clear that this site was an important shrine, where cult was practiced for over 700 years. Obviously, this is not an urban shrine, as it is situated 900 m away from the city of Keryneia at Kato Vouni, in a marginal, perhaps borderline location. It is noteworthy that the peripteral Great Temple has certain features in common with the architecture of temples in Magna Graecia, Alipheira, and Kalavryta.

The significant number of bovines – valuable animals for work in the fields and, therefore, quite costly to sacrifice –, the chthonian character of the cult, as indicated by the bothros in the Small Temple, the location of the shrine on top of a ridge 800 m high overlooking the Corinthian bay, as well as the size and luxurious construction of the Great Temple with roof tiling and pedimental sculptures made of Parian marble suggest the cult of a major Olympian deity, perhaps Zeus or Hera[74]. Moreover, the above evidence indicates the economic wealth of the city that owned the shrine; supposedly this could not have been a small rural community of the mountainous hinterland of Aigialeia, as Keryneia is known to have been. Taking into consideration that Keryneia may have been a demos of Helike in the Archaic period[75], it could, therefore, be presumed that the sanctuary belonged to Helike until its destruction by the earthquake of 373/372 B.C. Helike was one of the most significant cities of Achaea, and participated actively in the colonization of southern Italy. The sanctuary at Profitis Elias was possibly a ›border shrine‹, as the site is not far from the territory of Voura; the latter extends across and along the western bank of the Vouraikos River (ancient Erasinos)[76].

In addition, it is clear that monumental temples, such as the Great Temple at Profitis Elias, the Archaic temples at Trapeza and Graika, near Aigion and also at Erimo Chorio, south of Akrata, constitute essential evidence for the expansion of temple architecture in Aigialeia from the 6th to the beginning of the 5th century B.C., and consequently of the wealth of the cities of eastern Achaea.

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[74] On the possible identity of the god, cf. infra, Appendix.

[75] Paus. 2, 25, 5.

[76] E. Kolia, Η τοπογραφία της Βούρας και της χώρας της: νεότερες έρευνες, ASAtene 85, 2007, 219–225.

APPENDIX: THE FAUNAL REMAINS FROM THE EXCAVATIONS AT PROFITIS ELIAS OF MAMOUSIA – PRELIMINARY DATA

Introduction

A significant amount of animal bone material has been collected during the excavation of two specific sectors: the Western Area and the North Wall Area. According to the excavation data (including the architectural and pottery finds in association with the fauna), the bulk of both cultural and faunal remains have been found in a secondary position in these sectors, presumably transported from the area of the Great Temple. However, two small samples appear to have a different origin: a. the lower layer of the North Wall Area, dating to the first half of the 6th century B.C., which has been found in situ. This layer must be older than the Archaic temple, it is in primary position and displays intense traces of burning; b. a layer of clay roof tiles and rubble from the above-mentioned short wall of the Western Area, which contains material of the Hellenistic period, and probably belongs to the Small Temple. Both samples will not be considered in this appendix.

The faunal material was recovered using two methods: hand sorting in the trenches during excavation, and dry-sieving. Although the recovery was systematic, it should be emphasized that part of the original faunal assemblage, including mostly small-sized remains, has been lost. These remains could have been yielded by wet-sieving. The preservation of the bone material is poor. Most of the remains display advanced stages of physico-chemical alteration of the bone cortex (weathering and root etching), indicating prolonged exposure near to or on the soil's surface, and also extensive vegetation cover. This is a common phenomenon in open-air cult sites. Additionally, a few samples with carnivore marks (crushing, gnawing marks, and tooth pits), apparently made by small canids (dogs, foxes) have been recorded.

The faunal study is still ongoing. The following is a brief synthesis of the data obtained from approximately 70 % of the total number of remains.

Quantification of the faunal assemblage: Burnt versus unburnt remains

2112 bone (and tooth) remains have been recorded so far. About half of them (947) are unidentified bone fragments equal to or greater than 2 cm in length. The number of identified specimens (NISP) is almost equally distributed in the two main sectors of the sanctuary (North Wall Area and Western Area, *tab. 5*). The faunal assemblage is practically unburnt. Only a few burnt or calcined unidentified fragments have been recorded, mostly in the lot from the Western Area.

	North Wall Area, lower layer	North Wall Area, upper layer	Western Area	total
NISP	88	486	591	1165
burnt	0	0	1	1
calcined	0	0	0	0
unidentified	43	280	624	947
burnt	1	3	10	14
calcined	0	5	12	17

Tab. 5 General quantification and distribution of the bone material

	Bos	Sus	Ovis + Capra	Canis
North Wall Area, upper layer + Western Area	43.6	22	34.4	0.8
North Wall Area, lower layer	54.4	12.6	32.9	0
total	44.1	21.2	34	0.7

Tab. 6 Species frequency (as % of NISP) per chronological unit and in general

Animal species, meat processing, and age of culling

The faunal assemblage comprises only the common domestic mammals: bovines (*Bos taurus*), sheep (*Ovis aries*), goats (*Capra hircus*), suids (*Sus domesticus*) and dogs (*Canis familiaris*). The latter are represented only by 8 specimens and it cannot be ascertained whether this animal was sacrificed or perhaps even consumed. Sheep and goats are equally abundant. In *tab. 6*, the percentage of the above-mentioned species has been calculated by grouping together the two sectors and by comparing them with the lower layer of the North Wall Area[77]. It is important to note that the bovines dominate in both general, i.e. with regard to the whole assemblage, as well as in particular terms, i.e. in both lots[78]. Moreover, a development in the frequency of bovines and suids between the two chronological groups can be observed: in the deposit following the destruction of the Archaic temple, a sharp rise of pig remains stands out against those of bovines. Before any attempt is made to interpret these observations, it is necessary to revise the ratio between the two species once the faunal study has been completed.

Skeletal preservation displays the same pattern for all the main species (bovines, ovicaprids and suids): all the anatomical segments are present suggesting the treatment of entire carcasses in the area of the sanctuary. Nearly all the meat-bearing bones are more or less well represented, with the exception of the femur and, to a lesser degree, the pelvis and vertebrae. The fragmentation of the bone material is pronounced. Breakage patterns point to a systematic fragmentation during the butchery process with the aim of producing meat portions that could be cooked in pots, and obtaining also the nutritive bone marrow: besides spiral fractures and notches formed by the direct percussion of the bone surface, ›diaphysis cylinders‹, created by the transverse chopping (or even sawing) of the limb bones, occur regularly. Ribs as well as some vertebrae and mandibles also display the latter type of breakage. In addition to the above-mentioned butchery marks and in spite of the poor bone surface preservation, a significant percentage of cutmarks has also been recorded in the material of both sectors. Most of them are filleting marks, followed by dismembering / disarticulation marks and finally a few skinning marks. Together with the breakage marks listed above, they occur on 5.5 % of suid, 8.6 % of ovicaprid, and 9 % of bovine bone remains.

Until the final results of the faunal study are available, the following aging data should be treated with caution: in each species, animals of different ages have been slaughtered without any particular preference towards a specific age group. Fetuses / newborns are completely absent. Only one very young animal is recorded for both bovines and pigs, while animals between 6 months and 1 year are in the minority in all species. Better represented

[77] In this preliminary presentation, and because no differences in the material from the two sectors of the Western Area were observed, the whole assemblage has been grouped into two lots: one from the lower part of the North Wall Area, which dates to the first half of the 6th century B.C., and a second one that includes the rest of the material, which dates from the end of the 6th century B.C. to at least the Hellenistic period.

[78] Infra, Discussion.

are adults between 2 and 7 years for bovines, 2 and 6 years for sheep and goats, and older than 2 years for pigs. Very old animals are also present in all species. In the case of pigs, female adult animals are relatively common. The rarity or absence of osteologically very immature and, therefore, fragile specimens could be explained in part by the generally poor preservation of the bone material, as described above.

Discussion

With regard to the discard of bone remains, further locations or pits with deposited bone material (both in primary position and / or accumulated diachronically) in the sacrificial area or in locations identified as dining rooms or cooking installation (*mageirion)* have not yet been identified. Nevertheless, the available bone sample displays all the typical aspects of systematic butchery and food preparation. Also, given that nearly all the remains are unburnt, it can be suggested that the faunal material represents the debris of communal meals. This suggestion is reinforced by the presence of metal tools and pots in the same context; these were most probably employed in the butchery of animals and the cooking of the meat. However, the sediments from which the fauna was recovered also contained evidence of fire in the form of burnt earth and clay lumps, some charcoal, and very rare burnt bone fragments (especially in the Western Area). Although burning can also be produced in hearths during cooking or by a fire not related to sacrifices or cooking, the possibility that some of the bone remains are the remnants of sacrifices cannot totally be ruled out. The excavator considers that this part of the material could have originated from the altar area of the Archaic temple.

The significant number of bovines (cattle or oxen) represented at this site, i.e. animal power valuable for agriculture and heavy transportation and, therefore, costly to sacrifice, suggests the cult of a major Olympian deity, and apparently the economic wealth of a neighboring city or broader area[79]. Until now, we do not have any concrete evidence on the deity housed in the Great Temple. However, the bothros in the interior of the Small Temple (or treasury) should, according to the sacred norms, be devoted to the cult of a chtonian deity or hero. The zooarchaeological data recovered thus far from sanctuaries or temples has only revealed few cases from the Archaic to the Hellenistic period where bovines prevail among other domestic species, both in terms of the quantity of the remains and of the minimal number of animals: the Archaic sample from the Heraion at Samos, where cattle account for 70 % of the bone material[80], the burnt lot from the Long Altar in the sanctuary of Poseidon and Melikertes-Palaimon at Isthmia[81] (mid 7th century B.C., cult of Poseidon), with 66 % cattle remains, and the material from Sector III (located in the vicinity of the stoa and the monumental altar), dated to the 3rd and 2nd centuries B.C., in the sanctuary of Poseidon and Amphitrite at Tenos (material from sacrifices to Poseidon), with 65 % cattle remains[82].

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79 For the value of cattle / oxen, see the analysis in M. H. Jameson, Sacrifice and Animal Husbandry in Classical Greece, in: C. R. Whittaker (ed.), Pastoral Economies in Classical Antiquity, ProcCambrPhilSoc Suppl.14 (Cambridge 1988) 87–119.

80 J. Boessneck – A. von den Driesch, Knochenabfall von Opfermahlen und Weihgaben aus dem Heraion von Samos (Munich 1988).

81 E. Gebhard – D. S. Reese, Sacrifices for Poseidon and Melikertes-Palaimon at Isthmia, in: R. Hägg – B. Alroth (eds.), Greek Sacrificial Ritual, Olympian and Chthonian. Proceedings of the 6th International Seminar on Ancient Greek Cult, Department of Classical Archaeology and Ancient History-Göteborg University, 25–27 April 1997, ActaAth 8° 18 (Stockholm 2005) 125–154.

82 M. Leguilloux, Sacrifices et repas publics dans le sanctuaire de Poséidon à Ténos. Les analyses archéozoologiques, BCH 23/2, 1999, 423–455.

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Sources of illustrations: *Fig. 1:* Map by Ch. Kanellopoulos and K. Marinopoulou. – *Fig. 2:* Plan by Ch. Kanellopoulos. – *Figs. 3. 4. 6:* Aerial photographs by P. Konstadopoulos. – *Figs. 5. 9. 26:* Photographs by Ch. Kanellopoulos. – *Fig. 7:* Plan by G. Papathanasiou. – *Figs. 8. 12–14. 16. 18–21 a. b; 22–25. 27. 29–34:* Photographs by E. Kolia. – *Figs. 10. 28:* Plans by Ch. Kanellopoulos and G. Papathanasiou. – *Figs. 11. 35:* Drawings by Ch. Kanellopoulos. – *Figs. 15. 17:* Photographs and reconstructions by Ch. Kanellopoulos. – *Figs. 21 c; 27 b. c:* Drawings by Ou. Malopoulou.