

THREE-PEAKED ANTEFIXES FROM THE ARGIVE HERAION

(PLATE 12)

AMONG THE EARLIEST ATTESTED SYSTEMS of roof revetment is the primitive horned roof (Hörnerdach), a roofing system characterized by unattached, pitched cover tiles, flat pan tiles, and undecorated, three-peaked antefixes. This type of roof is thus far attested at Nemea, Halieis, Mases (near Halieis), Kombothekra (near Olympia), Delphi, and Aigina (Fig. 1).¹ In this paper I shall present evidence for at least one and perhaps two different roofs of this type at the Argive Heraion. The evidence consists of four fragmentary three-peaked antefixes and the rear portion of one cover tile. Three of the antefixes (1–3) and the single cover tile fragment (4) probably belong to the same roof (Figs. 2, 3, Pl. 12:a, b): they all share similar dimensions, the same tan, gritty fabric, and a reddish brown to black wash painted over the exposed surfaces. The form of these three antefixes is very similar to that of the well-known antefixes of the Early Archaic temple of Aphaia on Aigina, which likewise have a brown to black wash.² The fourth antefix from the Argive Heraion (5, Fig. 4, Pl. 12:c, d) is somewhat narrower than the other three. It is unpainted (at least as it is now preserved), and its fabric is rather more orangish in color. Even more significant is the fact that its underside is not angular like that of the other three antefixes but curved like the underside of later Corinthian cover tiles. A parallel for this apparently advanced feature is provided by an unattributed three-peaked antefix at Nemea.³

All the fragments from the Argive Heraion seem to have been unearthed during the excavations undertaken by Charles Waldstein at the end of the 19th century, but none was ever published.⁴ Unfortunately, there is no record of the exact circumstances of their discovery, hence any attempt to attribute them to a specific building or buildings on the site must depend upon our dating of the antefixes and the chronology of the buildings of the Heraion.

At present, the available evidence for dating these antefixes is meager. With the exception of the Temple of Apollo at Halieis, none of the buildings associated with a primitive horned roof has been scientifically excavated so as to provide a firm stratigraphic date. Even

¹ Nemea: N. Cooper, 1983, p. 64; S. G. Miller, "Excavations at Nemea, 1979," *Hesperia* 49, 1980 (pp. 178–205), p. 185, pl. 39:b (antefixes of more than one roof). Halieis: N. Cooper, 1983, pp. 33–47 (fragments survive of all elements of the roof except the raking sima). Mases: J. Dengage, "The Archaic Doric Temple at Mases," *Abstracts of Papers 76th General Meeting of the Archaeological Institute of America, 1974*, Section IIA, p. 22 (two antefixes). Kombothekra: U. Sinn, "Das Heiligtum der Artemis Limnatis bei Kombothekra," *AM* 96, 1981 (pp. 25–71), p. 50, pls. 15:5, 16:1, 2 (one antefix). Delphi: Le Roy, 1967, pp. 28–31, pl. 5 (one antefix, one corner tile with false antefix on one side and protome on other, one pan tile). Aigina: Schwandner, 1985, pp. 72–85, 126–128, pls. 25–27 (fragments of all elements of the roof).

² Schwandner, 1985, p. 76, pl. 26.

³ Cat. no. AT 78, from Well K14-4, on display in the museum of ancient Nemea; for the well, see S. G. Miller, "Excavations at Nemea, 1978," *Hesperia* 48, 1979 (pp. 73–103), pp. 77–81.

⁴ For the results of the excavations, see C. Waldstein, *The Argive Heraeum I and II*, Boston/New York 1902 and 1905.

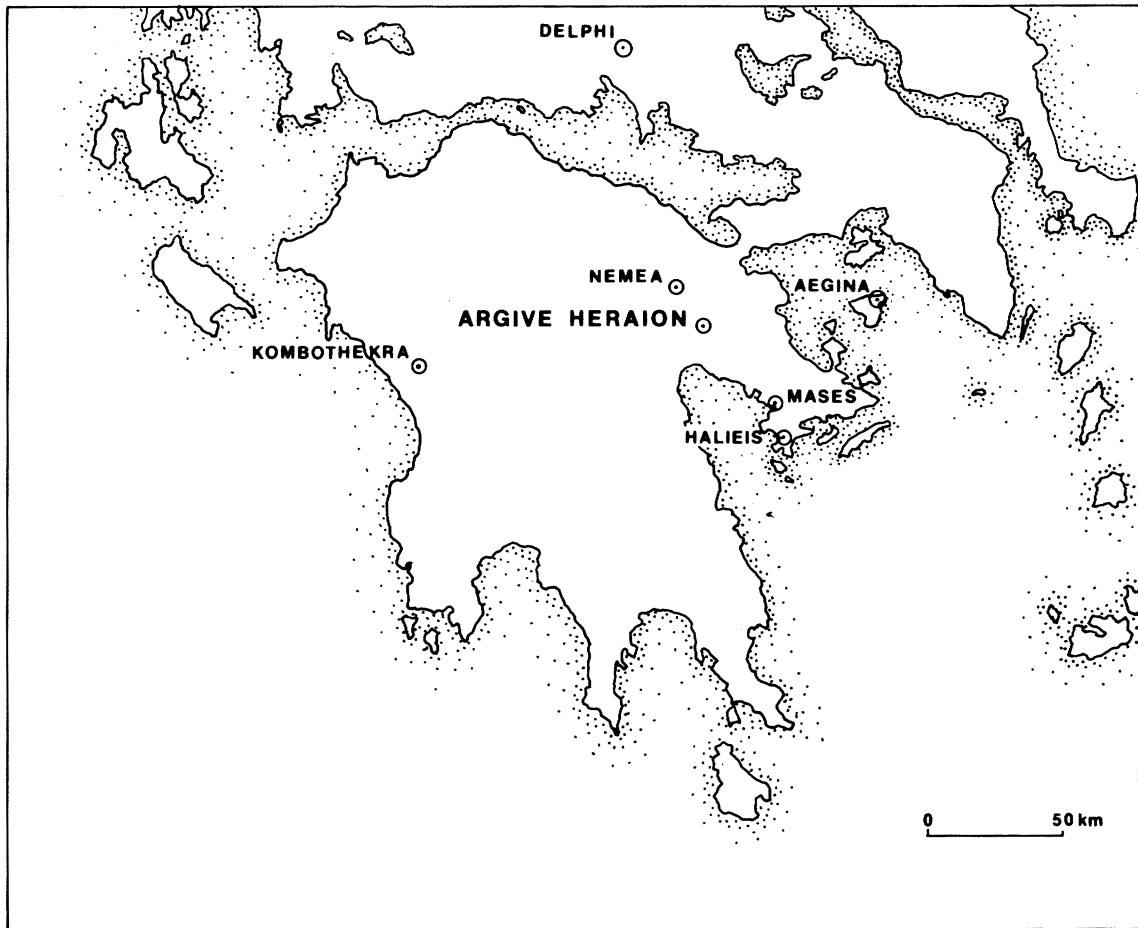


FIG. 1. Map showing distribution of primitive horned roofs

at Halieis the date is not secure owing to the uncertainties inherent in the excavation of a submerged site.⁵ Faced with the dearth of excavation data, we are left to rely upon the evidence of the architectural style of the associated buildings. In fact, the only building well enough preserved to provide a firm basis for stylistic assessment is the early temple of Aphaia on Aigina. The date of *ca.* 580–570 B.C. proposed by Schwandner seems reasonable, allowing as it does for a sensible development of general proportions and of specific details of the Doric order within the first half of the 6th century B.C.⁶ With the degree of caution

⁵ Initially the excavator, M. Jameson, dated the Temple of Apollo, which is the building associated with the horned roof, to *ca.* 675 B.C.: *PECS*, *s.v.* Halieis, p. 375. According to Schwandner (1985, p. 127, note 239) this date has now been lowered to the early 6th century. This later date, however, seems to result not so much from a reappraisal of the stratigraphy as from a re-evaluation of the probable date of the roof revetment.

⁶ Schwandner, 1985, pp. 128–129. The attempt by D. Williams (“Aegina, Aphaia-Tempel IV, The Inscription Commemorating the Construction of the First Limestone Temple and Other Features of the Sixth Century Temenos,” *AA [JdI 97] 1982* [pp. 55–68], pp. 61–64) to lower the date to the middle of the 6th century B.C. is, in my opinion, unconvincing.

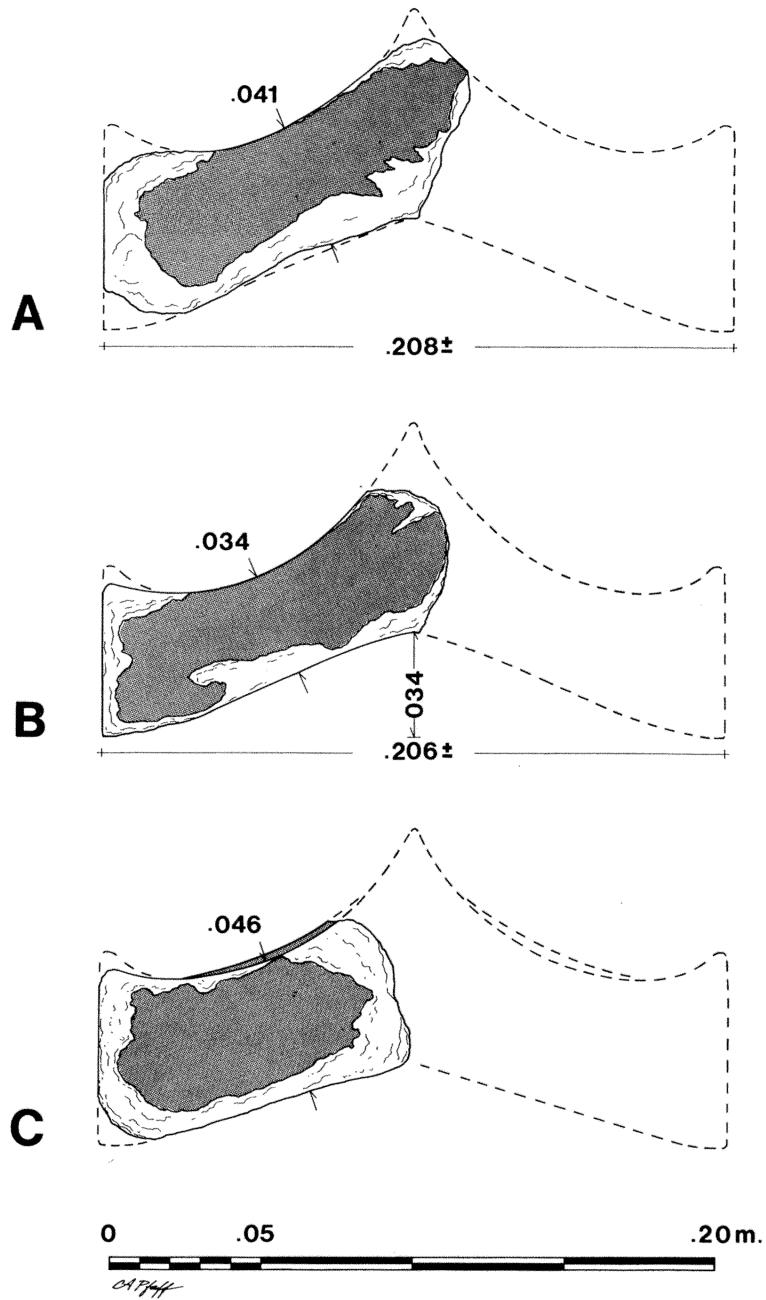


FIG. 2. Argive Heraion: antefixes 1-3

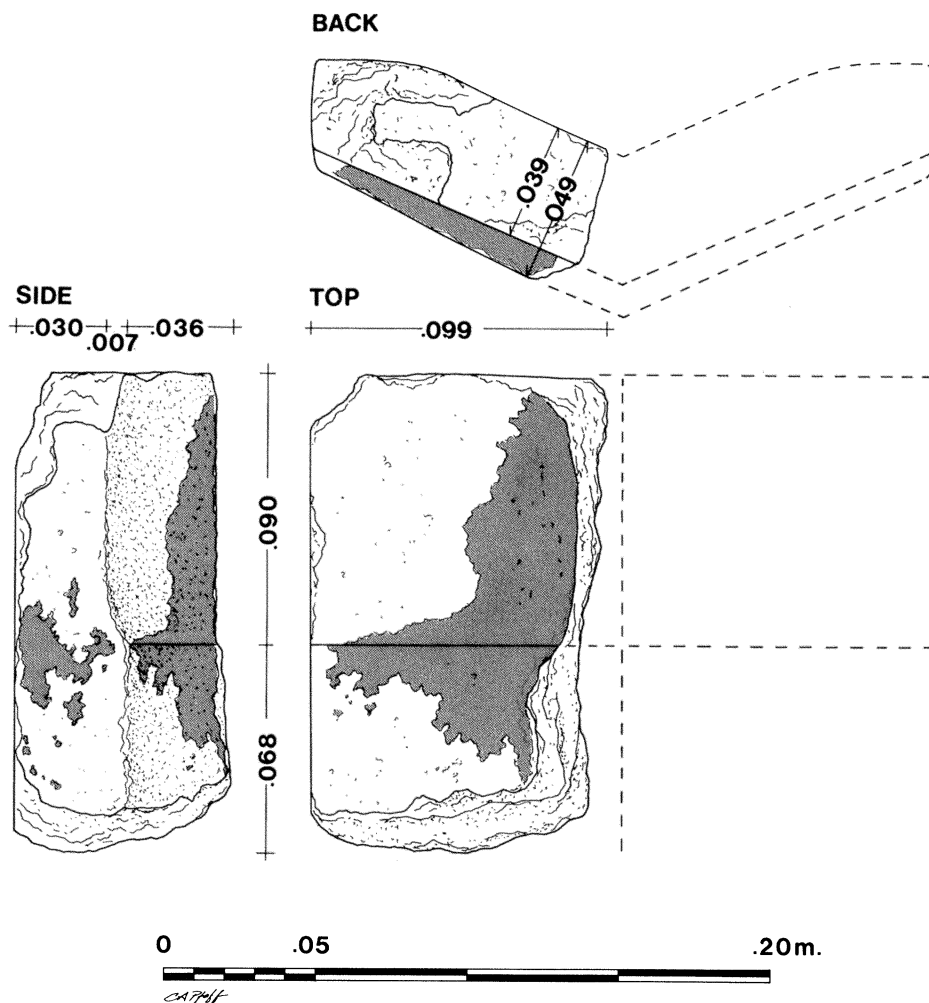


FIG. 3. Argive Heraion: cover tile 4

that must always accompany investigations into the art and architecture of the Early Archaic period, we may, I think, accept that the primitive horned roof was used at Aigina in about the 570's.

With that point fixed, let us examine the more indirect evidence for determining the life-span of this type of roof before and after the Aphaia temple. At present the only evidence pertinent to establishing the date at which the primitive horned roof originated is the fact that on Aigina and in the Argolid and Hermionid, where this type of roof seems most at home, no earlier or more primitive type of roofing system is attested. Therefore we should probably posit its origin at the very beginning of monumental architecture in the area, probably back in the last quarter of the 7th century. As for determining the lower limit of the chronology of the

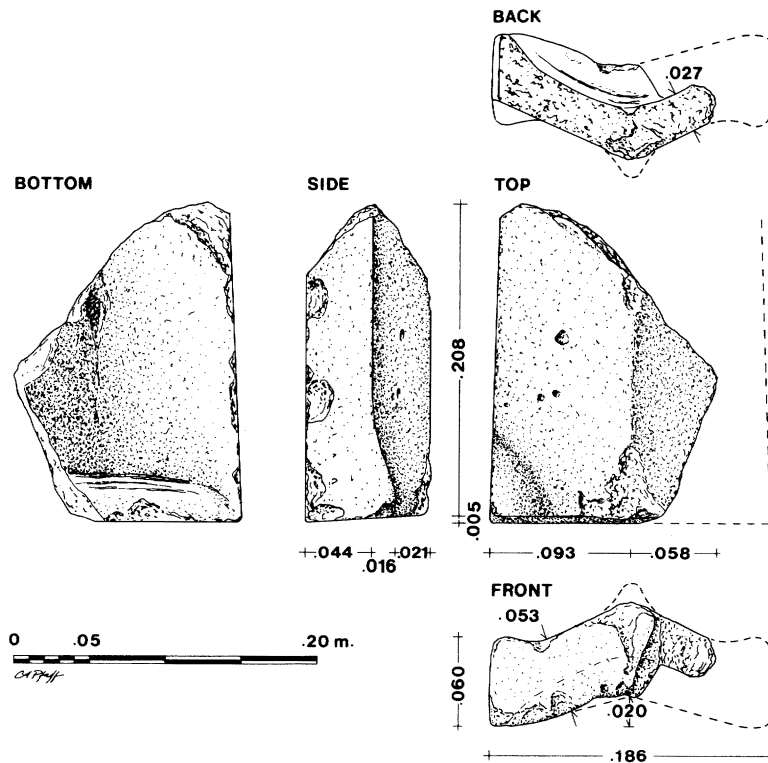


FIG. 4. Argive Heraion: antefix 5

primitive horned roof, recently excavated finds from Kalapodi (Phokis) provide an apparent breakthrough.⁷ The roof associated with the southern, peripteral temple of this site, which is dated stratigraphically by Felsch to 570–560 B.C., clearly follows upon the tradition of the earlier horned roof, the only significant difference being that the central peak of the antefix is enlarged and the face of the antefix is decorated with molded linear patterns. On the basis of this evidence we might hypothesize that as early as the 560's B.C. the plain peaked antefixes of the horned roof were being superseded by decorated ones.

With a general date for plain peaked antefixes from the last quarter of the 7th century to the beginning of the second quarter of the 6th, let us consider which buildings might be associated with the antefixes from the Argive Heraion. The most obvious building is of course the Archaic peripteral temple of Hera, which stood in its commanding position at the top of the site until its destruction by fire in 423 B.C.⁸ Although only part of the stylobate of

⁷ Felsch, 1987, pp. 22–24, 80, figs. 77, 78.

⁸ E. L. Tilton in Waldstein (footnote 4 above), I, pp. 110–111, pl. 8; P. Amandry, "Observations sur les monuments de l'Héraion d'Argos," *Hesperia* 21, 1952 (pp. 222–274), pp. 223–226, fig. 1; A. E. Kalpaxis, *Früharchaische Baukunst in Griechenland und Kleinasien*, Athens 1976, pp. 42–47.

this temple survives, the evidence it provides—most significantly the relationship between the lower diameter of the pteron columns and the interaxial spacing—would seem to indicate that this temple represents a stage of development prior to the Heraion of Olympia, which is dated to about 600 B.C.⁹ Since there is no evidence to indicate that the architecture of Olympia was particularly avant-garde or that that of the Argolid was particularly retardataire, it would seem reasonable to date the early temple at the Argive Heraion to the last quarter of the 7th century. The thesis that the three-peaked antefixes belong to the Archaic temple is perhaps strengthened by the fact that at the two sites where we know which buildings were associated with horned roofs—at Halieis and the Aphaia sanctuary¹⁰—these buildings were temples. At Kombothekra and Mases the buildings were also probably temples, although we cannot be absolutely certain.¹¹

If we allow for the possibility that subsidiary buildings of the early Archaic period might also carry a primitive horned roof, a second building at the Argive Heraion may also

⁹ For the date of the Heraion at Olympia, see A. Mallwitz, *Olympia und seine Bauten*, Munich 1972, p. 138. The following list illustrates to what extent the early temple at the Argive Heraion falls outside the norm of the 6th century in terms of the ratio of lower column diameter to interaxial spacing.

Argive Heraion, Old Temple	4.375
Kalapodi, South peripteral temple	ca. 3.660
Aigina, early Aphaia temple.	3.217
Olympia, Heraion (side, using column N11)	3.176
Corinth, Apollo temple (side)	2.287

Even in the Temple of Apollo at Thermon, which is usually dated back into the 7th century, the ratio is about 3.857; there is, however, the uncertainty here of whether the pteron as rebuilt in Hellenistic times precisely reflects the proportions of the original; see G. Soteriades, «Ἀνασκαφαὶ ἐν Θέρμῳ», Ἐφ' Ἀρχ 1900 (pp. 161–212), p. 174 and Kalpaxis, *op. cit.*, pp. 47–49. Another argument for dating the temple at the Argive Heraion earlier than the Temple of Hera at Olympia is the fact that whereas at Olympia the stylobate is a fully visible step course resting upon a cut-stone euthynteria, at the Argive Heraion the stylobate serves the combined function of euthynteria and stylobate and was originally buried to half its height.

¹⁰ At Halieis, the remains of the roof were found right on the site of the long rectangular building that is identified as the Temple of Apollo: M. Jameson, “Excavations at Halieis, Final Report,” *Δελτ* 27, 1972, B' 1 (1976), pp. 233–236. At the Aphaia sanctuary a large quantity of fragments of the horned roof were found in the fill that contained the debris of the superstructure of the temple. As Schwandner (1985, p. 72, note 70) argues, the quantity of tiles is so great that statistically they must be associated with that building. The fact that the visible length of the two best-preserved pan and cover tiles of the horned roof from Aigina (nos. 207 and 224) does not correspond to the visible length of the segment of the raking sima of the temple (no. 236/237) might be taken as evidence that the horned roof is incompatible with the sima and therefore does not belong to the temple. A careful review of the surviving elements of the apex of the sima and horned roof shows, however, that tiles 207 and 224 are in fact compatible with the sima, so long as they are restored to the first series of tiles below the ridge pan and cover tiles. For scholars bothered by the discrepancy between the fabric of the sima and the other elements of the horned roof or by the greater sophistication of the sima, there remains still the possibility of interpreting the sima as a later addition to the roof. This possibility, however, in no way alters the fact that the horned roof belongs to the original design of the temple.

¹¹ The antefix from Kombothekra probably represents the original roof of the Temple of Artemis Limnatis, for the simple ground plan and mud-brick walls of this temple seem sufficiently early for the antefix, which is the earliest extant roofing element from the site: see Sinn (footnote 1 above), pp. 47–52. The antefixes from Mases were found together with fragments of early Doric capitals on or near a long, narrow terrace which Dengate believes supported a temple: Dengate, *loc. cit.* (footnote 1 above).

be proposed as a candidate to receive our antefixes. This is the so-called North Stoa, an impressive two-aisled portico that runs along the north side of the later, Classical temple.¹² Its early date has been questioned on occasion,¹³ but a re-examination of its remains *in situ* suggests that it was probably the next significant building to be constructed after the temple. Although the association of architectural elements with specific buildings at the Heraion is difficult, I am convinced that the earliest Doric capitals now lying in the stoa do in fact belong to it.¹⁴ These capitals, if accepted, would date the stoa within the first half of the 6th century.¹⁵

In light of the probable chronology of the plain peaked antefixes and the probable dates for the early temple and stoa, an association of these buildings with the antefixes is quite possible. Given the fact that we have both a painted and an unpainted series of antefixes, it is tempting to suggest that the temple received the former and the stoa the latter. With so few fragments, however, and with such an incomplete knowledge of the chronology and development of the primitive horned roof, we must, at least for the present, remain cautious in making such associations. It is, after all, possible that the unpainted antefix, with its more developed underside, is much later than the other examples and that it is a replacement piece made for the repair of an earlier horned roof. In that case we should have to consider whether the other, painted antefixes belonged originally to only one building, either the temple or the stoa, or perhaps to both.

In conclusion, it should be noted that despite the uncertainties that remain with regard to the exact chronology and attribution of the three-peaked antefixes from the Argive Heraion, the mere fact that we can now document their existence in the sanctuary should improve considerably our ability to assess the later, more developed roofing systems of the site, for it is now clear that the earliest antefixes previously published need not be associated with the earliest buildings. In addition, the evidence of a primitive horned roof or roofs at the Argive Heraion should help us better understand the distribution of this type of roofing system in Greece and perhaps even focus upon a center of production.

¹² Tilton (footnote 8 above), p. 112, pl. 12; Amandry (footnote 8 above), pp. 226–235; J. J. Coulton, *The Architectural Development of the Greek Stoa*, Oxford 1976, pp. 27–29, 215.

¹³ B. Bergquist (*The Archaic Greek Temenos*, Lund 1967, pp. 21–22) dates the building to the late 5th century B.C., making it contemporary with the Classical Temple of Hera.

¹⁴ These capitals (two fragments preserving part of the echinus and abacus) correspond to capitals B and M illustrated by Tilton (footnote 8 above), p. 113, fig. 51. Whether these capitals are identical with those illustrated by Tilton (but now more poorly preserved) or whether they are others of the same series is not absolutely certain. As I hope to demonstrate elsewhere, Tilton's capital C, which now lies in the North Stoa and which is generally taken to be one of the earliest attested Doric capitals, does not belong to the original phase of the stoa; in fact, it is not Archaic at all.

¹⁵ The date of these capitals is no easier to determine than the date of the peaked antefixes. The fact that the echinus of these capitals is appreciably broader and flatter than the echinus of the capitals of the early Aphaia temple might be taken as evidence that they are earlier. If, however, the depth of the curve below the annulets is taken as a more decisive criterion, as Schwandner argues (1985, pp. 113–117), the Heraion capitals should be placed after those of the Aphaia temple. It is hard to imagine, however, that these capitals could date after ca. 560 B.C.

CATALOGUE¹⁶

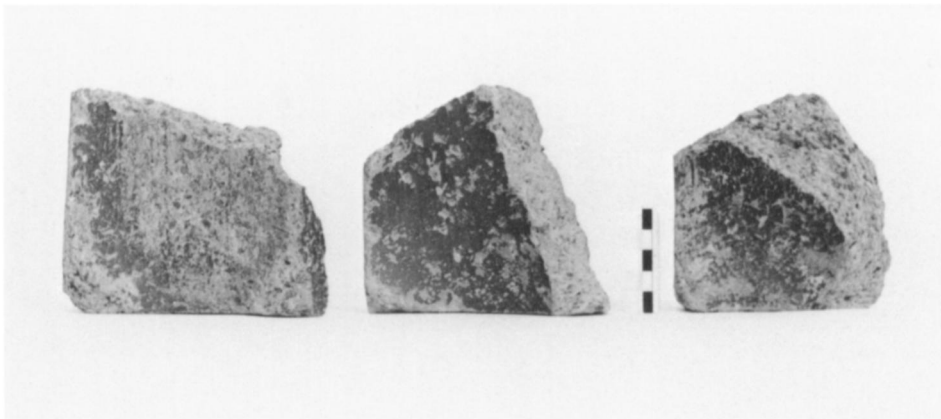
1. Three-peaked antefix Fig. 2:A, Pl. 12:a, b
 Pres. H. 0.091; pres. L. 0.110; pres. W. 0.121; restored W. 0.208; Th. of cover tile 0.041 m.
 Fabric: pinkish buff clay (5YR 8/4) with many large reddish brown inclusions. Surfaces unslipped. Dark red (10R 4/4) to brownish black (2.5YR 4/2) wash on front, top, and side.
 Preserved: left side of antefix and small portion of cover tile. Peaks of antefix largely broken away.
 Pitched cover tile terminating at lower end in plain, three-peaked antefix. Angular underside of antefix follows line of underside of cover tile. Front face slopes backward 0.003 m. from bottom to top. Peaks of antefix curve gradually into top of cover tile behind; their original heights cannot be determined precisely.
2. Three-peaked antefix Fig. 2:B, Pl. 12:a, b
 Pres. H. 0.082; pres. L. 0.110; pres. W. 0.115; restored W. 0.206; Th. of cover tile 0.034 m.
 Fabric: Pinkish buff clay (between 5YR 8/4 and 5YR 7/6) with many large reddish brown inclusions. Surfaces unslipped. Dark red (between 10R 5/4 and 10R 4/6) to brown (2.5YR 5/4) wash on front, top, and side.
 Preserved: left side of antefix with small portion of cover tile. Peaks of antefix largely broken away.
 Form similar to preceding.
3. Three-peaked antefix Fig. 2:C, Pl. 12:a, b
 Pres. H. 0.071; pres. L. 0.103; pres. W. 0.103; Th. of cover tile 0.048 m.
 Fabric: same as 2. Dark red (10R 5/4 to 10R 4/6) to black wash.
 Preserved: most of the left side of antefix with small portion of cover tile. Left peak largely broken away.
 Form similar to 1 and 2.
4. Cover tile Fig. 3
 Pres. L. 0.158; pres. W. 0.099; Th. 0.039–0.049 m.
 Fabric: buff clay (7.5YR 8/4) with many large reddish brown to dark gray inclusions. Surfaces unslipped. Brown (5YR 4/4) to black wash on top and side.
 Preserved: small portion of left, rear part of tile.
 Pitched cover tile with flat underside. Area of upper surface originally overlapped by next cover tile in the series is 0.090 m. wide (front to back) and recessed 0.007–0.010 m. Back edge rather rough.
5. Three-peaked antefix Fig. 4, Pl. 12:c, d
 Pres. H. 0.081; pres. L. 0.213; pres. W. 0.147; restored W. 0.186; Th. of cover tile 0.027 m.
 Fabric: rather soft clay with many large reddish brown inclusions, fired buff to yellowish buff (7.5YR 8/6 to 10YR 8/6) at surface, orangish tan (5YR 7/6) below. No slip or wash on surfaces. Front face of antefix perhaps self-slipped.
 Preserved: left side of antefix with left, forward portion of cover tile. Left peak of antefix slightly worn; central peak broken away.
 Pitched cover tile with rounded underside fronted by three-peaked antefix with angular underside. The transition from rounded underside of cover tile to angular underside of antefix is effected by a lip of clay projecting downward from bottom of cover tile. Face of antefix slopes backward *ca.* 0.005 m. from bottom to top. Preserved lateral peak rather low and rounded; it merges gradually with top of cover tile *ca.* 0.055 m. from front of antefix. Central peak (now missing) originally merged with central ridge of cover tile *ca.* 0.048 m. from front face.

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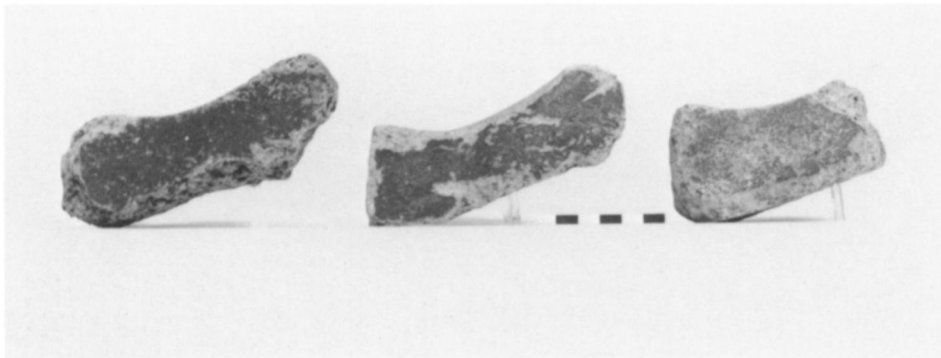
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¹⁶ The antefixes catalogued here (1–3, 5) are now stored in the museum of Ancient Corinth; the cover tile is still in the tile pile at the Argive Heraion. The colors of the fabrics and washes of the pieces are assigned the notations of the *Munsell Soil Color Charts*, Baltimore 1975.

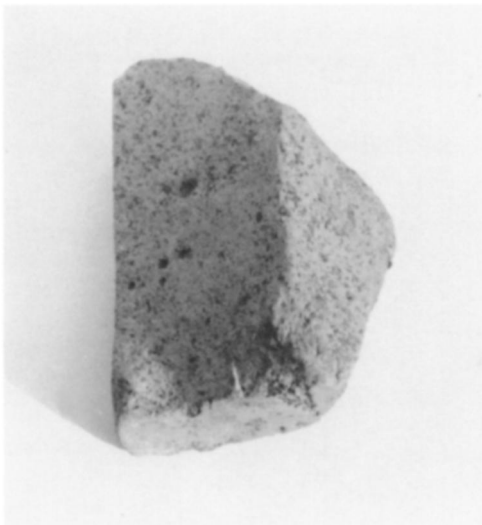
PLATE 12



a. 1 2 3, top view



b. 1 2 3, front view



c. 5, top view



d. 5, front view