

Papers and Monographs from the Norwegian Institute at Athens  
Volume 4

# TEGEA II

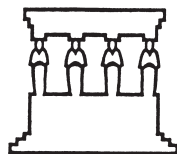
## INVESTIGATIONS IN THE SANCTUARY OF ATHENA ALEA 1990–94 AND 2004

*Authors:*

Hege Bakke-Alisøy, Anne E. Bjune, Nicolas Drocourt, Jonas Eiring,  
Håkon Ingvaldsen, Anne Ingvarsson-Sundström, Mario Iozzo, Harald Klempe,  
Knut Krzywinski, Jean-Marc Luce, Margharet Nicolardi, Anette Overland,  
Jari Pakkanen, Siri Sande, Chiara Tarditi, Mary E. Voyatzis,  
Knut Ødegård, Erik Østby

*General Editor:*

Erik Østby



The Norwegian Institute at Athens  
Athens 2014

**Erik Østby:**  
**ARCHITECTURAL MATERIAL**  
**FROM THE NORTHERN SECTOR**

**Architectural terracottas**

**ArchN-Tc 1**      *Geison tile*      *Figs 1–2*

Large, incompletely preserved tile from the edge of a roof. W 14, L 17, H at the front is 6.3, Th at the rear break is 3.9 cm.

The clay is a deep reddish-brown, with numerous, fairly large white inclusions and fewer, slightly porous black and purple ones. Entirely covered on the lower surface and on the lowest part of the front with a thin, streaky, in some places almost transparent black glaze.

The front connects with the flat and unglazed, upper surface at a slightly blunt angle (94°). The lower surface curves gradually into a concave curve near the rim and is black glazed, the glaze also covers the lower 1.6 cm of the front surface (where it is, however, to a large extent chipped or corroded). Above this line what remains of the front is smooth and carefully finished, but not glazed.

Inv. no. 4407. Location, F. no.: C7/52-11 (layer with marble chips, Late Classical/mixed).

This simply shaped, flat tile with a hanging rim and a streaky, almost transparent black glaze that covers the surface behind the rim is clearly a geison tile of the type which prefigured the projecting part of the later stone geisa in early Doric wooden architecture.<sup>1</sup> It is very similar to the geison tiles which are preserved from the Heraion at Olympia, which provides one of the best examples of this system.<sup>2</sup> At Olympia the transition between the lower surface and the rim is sharper, but the use of the dark slip on the part of the lower surface which is visible below, and on the lowest part of the hanging front, is similar. The dimensions are also similar – 6 to 6.5 cm high front at Olympia, 6.3 cm at Tegea, and at least 22 cm of slipped surface at Olympia, while 17 cm are preserved at Tegea; but at Olympia the black glaze covers more of the front, 5.6 in comparison to 1.6 cm on the Tegean piece. The extraordinary thickness of the tile – it is 50% thicker than the 2.6 cm thick pan-tiles from the temple at Olympia – confirms the impression that this tile must belong to a building of similar size. It could hardly be any building other than the Archaic temple, and the date of the temple, in the late 7th century B.C., coincides nicely with that of the tile.<sup>3</sup>

<sup>1</sup> Winter 1993, *passim*, gives examples of such tiles from all over the Greek mainland. The system is conveniently illustrated on the drawing Mallwitz 1972, 143 fig. 114.

<sup>2</sup> Winter 1993, 137; Heiden 1995, 67, fig. 36.4, pl. 37.4.

<sup>3</sup> This date was kindly confirmed by Dr N. Winter during a visit to the site.

There are several examples of more complicated geison tiles developed from this type from slightly later religious sites in Arcadia. This tile, with its close similarity with the tiles from Olympia, is clearly to be grouped with

|                 |                            |
|-----------------|----------------------------|
| <b>ArchN-TC</b> | Architectural terracottas  |
| <b>ArchN-St</b> | Stone, not from the temple |
| <b>ArchN-MT</b> | Marble, from the temple    |

them in the initial stage of the development.<sup>4</sup> At Olympia, as here, the front is set at a blunt angle to the upper surface approximately corresponding to the inclination of the roof so that it hangs in a vertical position.<sup>5</sup> On the fragment from Tegea the inclination is so modest as to be hardly noticeable (4°); although the inclination of the roof was probably also low for reasons explained elsewhere,<sup>6</sup> it was certainly more pronounced than this. This, and the fact that only a very limited part of the front is glazed, may suggest that this piece is earlier than the tiles from Olympia, and marks the very beginning of this tile type.

**ArchN-Tc 2.a–b**      *Acroterion fragment*      *Fig. 3*

Two fragments from a terracotta acroterion, not joining, but clearly parts of the same piece. Clay: Munsell 10YR 8/3 very pale brown, probably Corinthian, with few inclusions; grey incrustation on the surfaces (also on the breaks), no glaze on the front, but tiny traces of a deep black glaze are preserved on the rear surface of piece **a**.

**a**: fragment of the front, with a part of the conoid-cylindrical support connecting with the upper rim of the front and sloping upwards from it at about a 100° angle. The surface of the front is corroded, but preserves four concentric tori framing the piece under its curved upper outline; under these two more clearly marked grooves meet in a point, probably as part of a star-like pattern with large incised triangles. H of the piece 8.5, W 11.2 cm. The upper zone with the tori is 4.1 cm wide, each torus as well as the depressions separating them are 0.5 cm wide. The preserved part of the rear support is 8 cm long; both parts of the piece are 1.4–1.5 cm thick. What remains of the curved rim permits an approximate reconstruction of the original diameter,

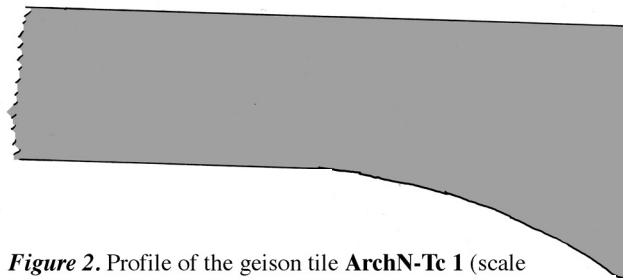
<sup>4</sup> For the development of Arcadian geison tiles, see Winter 1993, 144–6; she inserts the tiles from Olympia here as Type I.

<sup>5</sup> At Olympia the inclination can be measured as 8.5° (98.5° angle to the upper surface) on the small drawing by Heiden 1995, fig. 36.4.

<sup>6</sup> See my contribution to *Tegea I*, section **i**, 43–4.



**Figure 1.** Fragment of a geison tile **ArchN-Tc 1**, probably from the Archaic temple. Left, from below; right, from above. (Photo: C. and M. Mauzy)



**Figure 2.** Profile of the geison tile **ArchN-Tc 1** (scale 1 : 2). (Drawing: Østby)

ca. 65 cm (2 Doric feet?). – The rear surface is completely covered by grey incrustations (also on broken surfaces), but preserves also some vague traces of black glaze. If this glaze also covered the front, it may have had a polychrome decoration.

**b:** approximately triangular piece of the conoid rear support of the front, with fractures on all sides; slightly curved, similar to the other fragment. Thickness of the material 1.7 cm. Greyish incrustation on parts of the underside, something also on the upper surface, and also some vague traces of a stronger black glaze. L 12.5, W 6.8 cm.

Inv. no. 3451 (Tex no. 869). Location, F. no.: C6/112-80 (first pebble floor, Archaic).

These two pieces are the modest remains of an early disc acroterion, of a type attested at Olympia and in Laconia and frequent also in Arcadia in the Archaic period.<sup>7</sup> The

<sup>7</sup> For a general discussions of these acroteria, see Goldberg 1982, 202–3, with a catalogue 215–6, and V. Kästner, “Scheibenförmige Akrotere in Griechenland und Italien,” *Hesperia* 59, 1990, 251–64. Goldberg’s catalogue includes 45 examples from the Greek mainland, Kästner’s has 21. See Winter 1993, 137–40, for the numerous examples of this type from Arcadia, and 101–4 for the Laconian examples. H. Lauter-Bufé, “Entstehung und Entwicklung des lakonischen Akroters,” *AM* 89, 1974, 205–30, deals mostly with later developments of the type.

connection at a blunt angle with the rear support, behind the curved, upper edge of the front, is clearly related to early antefixes from Sparta,<sup>8</sup> but the dimensions exclude the possibility that this could be understood as an antefix.<sup>9</sup> It is not clear, however, how the piece could have been connected with a normal system of ridge tiles, since the abnormal connection between front and support at a blunt angle would seem to indicate a still greater and most unlikely diameter for those.<sup>10</sup> For these reasons, the precise function of the piece on a building remains problematic.

Like the first examples of disc acroteria from the sanctuary of Artemis Orthia at Sparta, from the third

<sup>8</sup> For the terracottas from Sparta, see Winter 1993, 95–109, and the full publication of the material from Artemis Orthia by George and Woodhead 1929. The antefixes: Winter 1993, 106–7, fig. 11 and pl. 31. This acroterion may be the first example outside Sparta of the early type of Laconian disc acroteria, monochrome and without the toothed edge: Winter 1993, 137.

<sup>9</sup> The antefixes from the Heraion at Olympia have a diameter of 40 cm (Winter 1993, 137).

<sup>10</sup> Admittedly a problematic notion, since the diameter of the ridge tiles of the Heraion at Olympia only reaches 43 cm (Winter 1993, 136). Normally Arcadian acroteria seem to have their connection with the rear support at a lower level than was the case in Laconia (*ibid.* 138).



Figure 3. Fragments of an Early Archaic disc akroterion, ArchN-Tc 2. (Photo: Østby)

quarter of the 7th century, this piece lacks the typical, saw-toothed upper edge which was never omitted from developed examples of this group, including the monumental akroterion from the Heraion at Olympia; on the other hand it has the somewhat cautious use of the typical torus-motif which is heavily present in the akroterion from Olympia, but absent from the first group at Sparta where the decoration is entirely linear.<sup>11</sup> The surface below the tori, with the incised triangles (for which not only Sparta, but also near-by Vigla has early parallels<sup>12</sup>), still conforms to this linear, two-dimensional pattern, but it might have permitted an additional torus-zone lower down on the front. Since the lack of the toothed edge connects the piece with the earliest Laconian group, dated to the third quarter of the 7th century (no such akroterion has to date been attested from Arcadia), while the introduction of the tori connects with the successive group from the last quarter of the century, it seems reasonable to assign the piece to the same intermediate period earlier than the Heraion: the final quarter of the 7th century, when (for other reasons) the construction of the first monumental temple and the reorganization of the sanctuary at Tegea should be dated.<sup>13</sup>

<sup>11</sup> See note 8 above for the terracottas from Sparta; for the akroterion from the Heraion of Olympia Winter 1993, 135–6 with fig. 14, who sees the roofing of this temple as a hybrid product with strong Arcadian affinities, and the specific study by Yalouris 1972. See Winter 1993, 135–7 with fig. 14, and Heiden 1995, 65–8, pls 35–37 (“Dach 25”), for full presentations of the material from the Heraion. In Kästner’s catalogue (see note 7) only the three first items (two from Sparta, one from Aigina) lack the saw-dented, upper edge.

<sup>12</sup> On the rim of the earliest antefixes from Artemis Orthia (Winter 1993, pl. 31), and another, slightly later one from the Menelaion, which also has tori (*ibid.* 107, dating the piece to ca. 580; George and Woodhead 1929, 122, fig. 95). The antefixes of the early group from Vigla near Pallantion follow the Spartan model with triangles at the rim (Rhomaios 1957, 118 figs 4–5). The triangles also appear on antefixes ascribed to the treasury of Kyrene at Olympia, but clearly of Laconian manufacture (Heiden 1995, 69, fig. 7, pl. 38.1: “Dach 26”).

<sup>13</sup> See *Tegea I*, section i (Østby), 35–8 and 49–50.

The dimensions, although clearly excessive for an antefix, are modest for an akroterion<sup>14</sup> and do not easily permit the otherwise tempting association with the Archaic temple; even if nothing like the enormous discs of the Heraion at Olympia was contemplated here, the early akroterion discs from Bassae, slightly more than 1 m in diameter, would give an idea of the dimensions which would be appropriate for this large temple.<sup>15</sup> It might have decorated a secondary building in the sanctuary, one that was created as part of the same building programme as the temple. The abnormal execution of the connection with the conoid rear support, at a blunt angle which would have increased the diameter of the tiles behind, creates a problem both for the identification of the piece as a modest akroterion rather than an impossibly large antefix – in which case the angle would have an obvious explanation as the transition between the vertical front and the slope of the roof<sup>16</sup> – and for the connection with the temple or any other building. Such ridge tiles are unlikely in any case, and the transition to the ridge must have been made in a special way for which there is no evidence or useful parallels. If the geison tile discussed above is connected with the temple, this piece hardly can be, also because the clay is completely different;<sup>17</sup> priority for the attribution to the temple must probably be given to the geison tile because of its dimensions. The fine clay

<sup>14</sup> Larger, however, than several other disc akroteria from Arcadia, where numerous small examples (30–40 cm diameter) are attested: Winter 1993, 139–40; Rhomaios 1957, 119.

<sup>15</sup> See for these Rhomaios 1933; Winter 1993, 138–9; N. Kelly, “The archaic temple of Apollo at Bassai,” *Hesperia* 64, 1995, 254–61, figs 13–14. These two akroteria are reconstructed with diameters of 1.06 and 1.08 m (Rhomaios 1933, 6 and 9).

<sup>16</sup> This is not seen, however, on the early Spartan antefixes which would have served as models (note 8 above). Tori were apparently rarely used on antefixes, but those from the Heraion at Olympia (Heiden 1995, 66–7, pls 36–37) are an important exception.

<sup>17</sup> Note, however, Winter 1993, 97, stating that in the Laconian system pieces from the same roof are not always made from the same clay.

of probably foreign origin used for this piece indicates that the building it decorated, whatever its function, also had an important status of a religious nature, since these disc acroteria are attested only from temples and treasure houses.<sup>18</sup> Moreover, it usefully demonstrates that the building had at least one pediment.<sup>19</sup>



**Figure 4.** Fragment of an Early Archaic sima, **ArchN-Tc 3**. (Photo: C. and M. Mauzy)

#### ArchN-Tc 3 *Sima fragment*

*Fig. 4*

Fragment of an architectural terracotta, probably a sima, consisting of two flat, joining pieces. Preserved dimensions: H 10.7, W 9.8, Th 1.8 cm. Fine, Corinthian clay (Munsell 2.5YR 8/3 pale yellow), no inclusions. Broken above and below, something preserved of a smooth rim to the left. Greyish incrustations on the rear and side surfaces, also some remains of black glaze on the surface and on the flower.

The rosette is executed in recessed relief, of precise circular shape (compass-drawn), 8.7 cm diameter, 0.9 cm distant from the only preserved edge. Probably this was an upper edge, since there is no bevel or other preparation for a joining piece. A little more than half of the rosette is preserved, with 9 of the originally 16 tongue-shaped petals; they have a convex upper surface. The petals spring from two plain tori surrounding a circular opening through the fabric at the centre of the rosette, 1.9 cm in diameter; the two torus rings have diameters of 2.7 and 3.6 cm.

Inv. no. 4408 (Tex no. 891). Location: C7/123 (group of stones).

The combination of circular, framing tori with a strongly stylized floral ornament connects the piece emphatically with the tradition of early Peloponnesian architectural terracotta decorations, where the large acroterion from the

Heraion at Olympia is the acknowledged masterpiece.<sup>20</sup> The convex rather than concave petals contribute to confirm the connection.<sup>21</sup> Its function is not without problems, but it can hardly be understood as anything else than a sima, typologically close to the early examples of Argive raking simas with a plain, perfectly vertical profile rising at a right angle above the roof surface, normally with a roundel or other small profile on the top which in this case seems to be omitted.<sup>22</sup> Typologically the closest comparison seems to be an early sima (second half of the 7th century) from Delphi as far as the very simple profile is concerned, although the decoration of that piece is completely different.<sup>23</sup> There are, however, interesting, but isolated examples also from the more immediate Peloponnesian environment: an early sima from Sparta,<sup>24</sup> and intriguing pieces from the second roof decoration at Vigla near Pallantion, claimed to be from a horizontal sima.<sup>25</sup> Both have the same simple execution as upright plaques without mouldings above, and are about 9–10 cm high.

The hole in the centre of the rosette is definitely too small and awkwardly positioned for it to be understood as a drainage hole for water in a horizontal sima, which would in any case not be expected in an architectural culture where antefixes were regularly used on the horizontal eaves, with rare exceptions.<sup>26</sup> If part of a raking sima, the hole could have had no function for drainage, but it might possibly have been used for fixing some additional, decorative element in a different material, possibly metal.<sup>27</sup>

The sima was hardly much higher than the preserved 10 cm, since even at this height the rosette is located safely above the horizontal axis of the front. Although

<sup>20</sup> See note 11 above for the acroterion from Olympia, and note 15 for those of similar type from Bassai.

<sup>21</sup> This feature distinguishes the piece from the rosette-decorated terracottas with concave petals from Olympia, dedicated by a city from Southern Italy, probably Metaponto (Heiden 1995, 78–82, figs 8–9, pls 44–45: “Dach 36”).

<sup>22</sup> Winter 1993, 157–60, on the evidence for raking simas in this system, where they are regularly executed as flat plaques rising at right angle from the tile behind. For this, see also M.-Fr. Billot, “Terrescuites architecturales d’Argos et d’Epidaure, notes de typologie et d’histoire,” *Hesperia* 59, 1990, 131–2, with some slightly later examples.

<sup>23</sup> Winter 1993, 158–9, pl. 65 (Argive type, second quarter of the 6th century); Le Roy 1967, 31–2 nos S.3–4, pls 5, 98, 118 (7th century, Corinthian).

<sup>24</sup> Winter 1993, 104–5 (about 600); George and Woodhead 1929, 140–1 (also 11–2 and 132), no. 35.A–D, fig. 101. Maximum preserved height 9 cm.

<sup>25</sup> Rhomaios 1957, 119–22, figs 8–9; height 9.5 cm. If this piece was connected behind with a curved pan-tile, as seems to be stated by Rhomaios 119 (σημαίνει μέτωπον άροσεράμου στρωτήρον κοίλου, ως τούτου όπως διατηρούνται βέβαια ίχνη; unfortunately not documented in his illustrations), it is clear that this must actually be a horizontal and not a raking sima, in spite of the misgivings by Winter 1993, 140. There is also a similar Laconian case: *ibid.* 106. Both examples date to the second quarter of the 6th century.

<sup>26</sup> See last note for the case of Vigla.

<sup>27</sup> See Winter 1993, 102, and also Yalouris 1972, 86, for other examples of such holes for added decorations on early Peloponnesian architectural terracottas. Similar holes appear also in the centre of the antefixes of the earliest group from the Heraion at Olympia (Heiden 1995, 66, pls 36–37), and in the centre of acroterion B from Bassae (Rhomaios 1933, 8 fig. 3.a), surrounded as here by tori.

<sup>18</sup> According to Goldberg 1982, 202.

<sup>19</sup> According to Winter 1993, 95, there is no evidence for hipped roofs with Laconian tiles.

the piece is probably too small to be directly connected with the Archaic temple, it usefully confirms the close connections between the architectural traditions of Tegea and Olympia at the end of the 7th and the beginning of the 6th century, as they are more clearly evidenced by the remains of the large, Archaic temple, and also by the disc acroterion **ArchN-Tc 2**. Like this, the sima fragment adds to the evidence for building activity in the sanctuary other than the temple in the period when this was built.



**Figure 5.** Fragments of a large terracotta sima, **ArchN-Tc 4**, seen from above. (Photo: Østby)

#### **ArchN-Tc 4**      *Tile with sima*

*Fig. 5*

Fragmentary terracotta tile with a sima front attached. Deep red clay with numerous and fairly large purple inclusions; white inclusions are rarer and smaller. Considerable porosity. A very thin layer of greyish incrustations on the underside and the front of the piece (also on broken surfaces! not a slip); considerable remains of a thicker yellowish slip on the upper side, including the rear and the upper surface of the raised rim.

Front part of an incompletely preserved, large terracotta tile worked with a raised sima front, broken in two joining pieces; it is broken on the right side, and the tenon (not completely preserved) joins with the neighbouring block on the left. Maximum length at the front is 33 cm (7 cm for the tenon). The tile part is 4.4–4.5 cm thick. The front rim rises with a rear surface 5.0 cm high and at a 90° angle from the upper surface of the tile, 10.0 cm above the lower surface. The front slants outwards at 105° at the joint to the left, but the angle increases to 122° towards the right; it reaches a maximum thickness of 6.5 cm at the broken surface of the indefinable moulding on the top of the front, which has left a slight projection only at the centre of the piece. The vertical height of the slanted front under the moulding is about 5.6 cm, leaving about 4.4 cm for the moulding. The tenon to the left has a curved lower surface raised above the lower surface only from 1.2 cm at the back to a maximum of 2.5 cm at the front (equal to the thickness of the supporting part of the adjoining piece); at the front it almost connects with the slanted front of the piece. Consequently the front could not have been covered at all by the adjoining piece; only the tenon could be supported from below by a thin, concave ledge projecting from the next piece. The joint slants at a slightly blunt angle to the left from the bottom edge (95°); the lateral edge of the lower surface slants at a similar, but pointed angle (85°) to the front.

Inv. no. 4409. Location, F. no.: C6/101-5 (layers with bronze objects, Archaic).

This piece is an impressive fragment from a roof tile of considerable dimensions, rising in the front to a very simple raking sima. The transition at a right angle from the upper surface of the tile to the rear surface of the sima may indicate a vague connection with the Argive roofing system, but otherwise the irregular and imprecise angles, the strange and clumsy execution of the join with the next piece, and the complete lack of decoration other than the yellow slip, point to tentative and not very confident workmanship, although the piece is of substantial dimensions. The omission of a vertical surface below the sloping and moulded parts of the front is definitely unusual, since this is all but compulsory in all kinds of simas elsewhere. The piece seems isolated and was probably a local product, for a building of considerable size, but without particular prestige – hardly the early temple.

Two other tile fragments, from another context (the stratigraphical unit E7/19 – D7/13, layer with marble chips), have the same thickness (4.6 and 4.2–4.3 cm) and similar fabric, with large inclusions, but a slightly different colour of the clay (light reddish yellow and yellowish grey respectively). The piece from D7 has slipped surfaces that cover the inclusions; the piece from E7 has one greyish surface probably caused by exposure to fire. Another tile fragment, from the same context (unit E6/12), has a brownish red clay with streaks of yellow clay in it; it is thicker than the sima tile (incomplete, 6.1 cm preserved), but it has the same yellowish slip as that piece.

#### **ArchN-Tc 5**      *Sima fragment*

*Fig. 6*

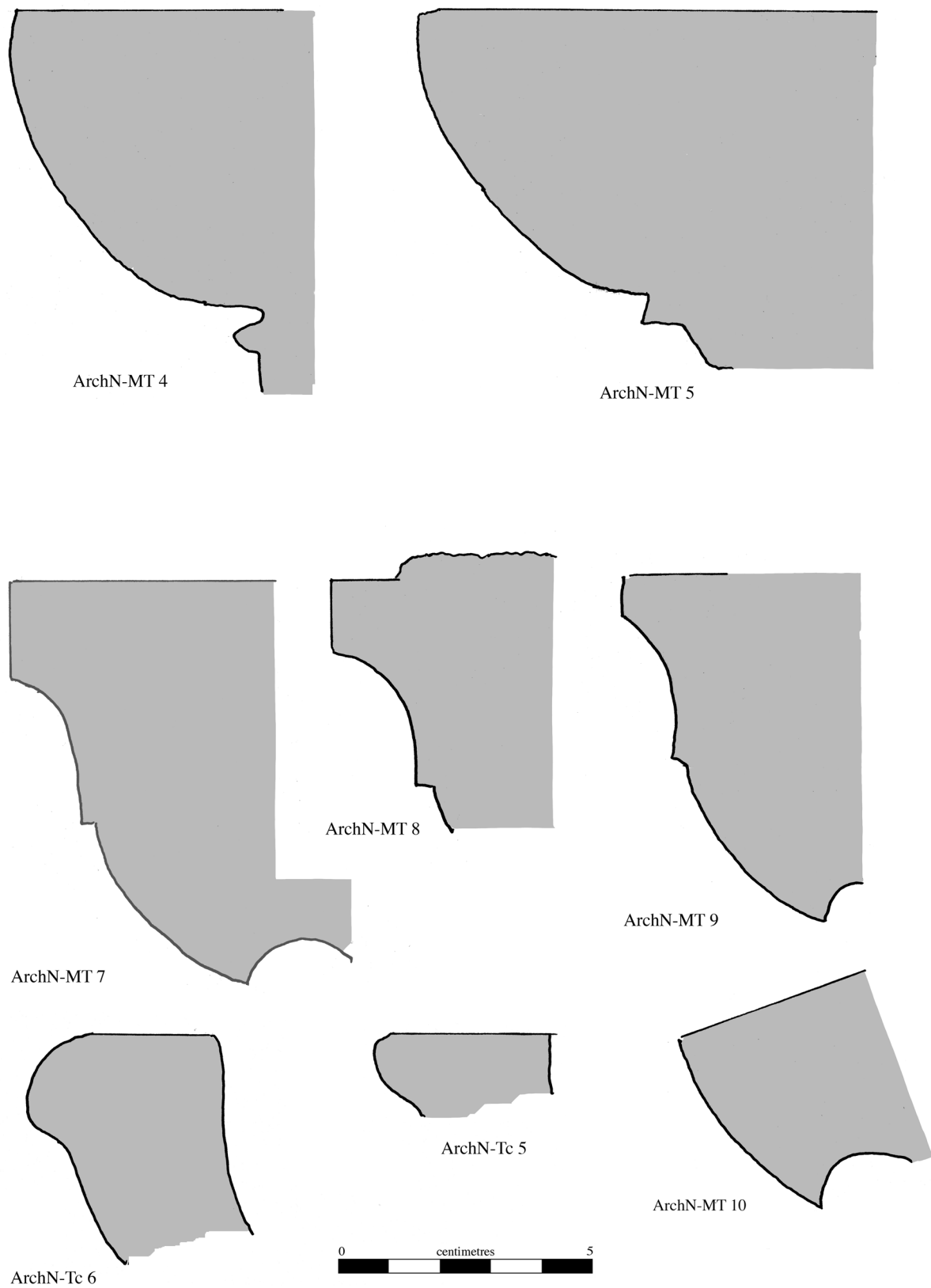
Fragment from the top of a small raking sima of Corinthian type. H 4.6 (2.7 for the upper roundel), W 5.4, Th above 3.5 cm (including 0.65 cm for the projection of the roundel), below 2.8 cm. Light reddish fabric, with white and purple inclusions; fabric very similar to the tile **ArchN-Tc 1**. The front has a greyish colour, probably from exposure to fire. No traces of slip or decoration.

Inv. no. 4410. Location: E7/19 (layer with marble chips, Late Classical/mixed).

Simple sima of early Corinthian type, decorated with a half-roundel on the top of the backwards curving front below; the rear surface is also curved and concave, in the regular manner of Corinthian simas. There is no trace of painted decoration. The piece probably decorated the roof of a fairly small building.

The shape of the sima, with the upper roundel and the ovolo curving backwards immediately below it, is very close to the profile of the sima from the Archaic temple of Apollo at Corinth, which apparently introduced the type.<sup>28</sup> Another quite close parallel to the backwards curving main part of the profile can be found on the sima from the treasury of the Megareans at Olympia, of the late 6th century, and the upper roundel was still used in other simae

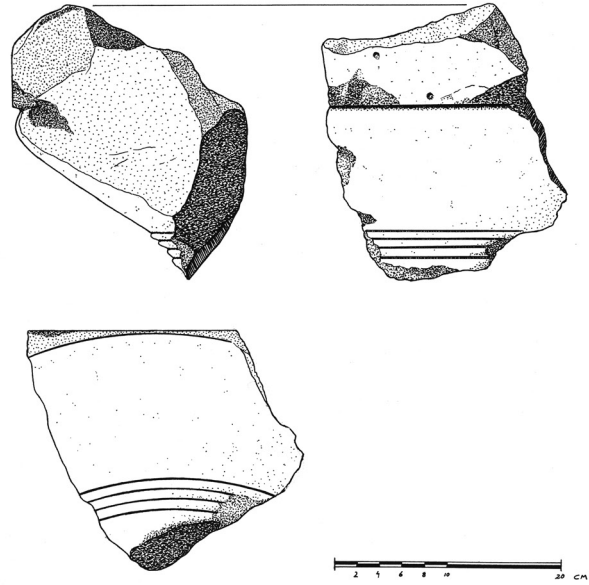
<sup>28</sup> See Winter 1993, 35–7, Type III, with the profile chart fig. 6.4.1, and the thorough discussion of the Corinth roof by J. Heiden, *Korinthische Dachziegel*, Frankfurt a.M., Bern, New York and Paris 1987, 70–80.



**Figure 6.** Profiles of architectural fragments of stone and terracotta, from the northern sector. (Drawing: Østby)



**Figure 7.** The fragment of a Doric capital ArchN-St 1. (Photo: C. and M. Mauzy)



**Figure 8.** Doric capital from the northern sector, cat. no. ArchN-St 1. (Drawing: A. Klynne)

from the same period at Olympia.<sup>29</sup> The piece should for that reason be dated some time in the late 6th century.

#### ArchN-Tc 6 *Sima fragment*

Fig. 6

Fragment from the top of a small sima probably of Corinthian type. H 2.1, W 5.2, Th 3.5 cm above (fully preserved), 2.5 cm below the moulding. Light reddish clay, with small purple inclusions; thin and streaky black glaze only on the moulding, grey incrustations on the upper and rear surfaces.

Inv. no. 4411. Location: E7/19 (layer with marble chips, Late Classical/mixed).

The upper moulding is of a more developed Corinthian type, curving backwards from a maximum projection at the top. There is nothing left below the transition to the front below the moulding, or of the rear surface. The glaze recalls the geison tile ArchN-Tc 1. The closest parallel to this shape of the upper moulding in the material from Olympia is doubtless the sima from the Megarian treasury,<sup>30</sup> suggesting a date about 500 B.C. for the piece.

#### *Stone, not from the temple*

#### ArchN-St 1 *Fragment of an Early Classical Doric capital*

Figs 7–8

Fragment of a Doric capital, of Doliana marble, with a well-preserved surface. The fragment includes a part of the abacus (preserved only to a maximum height of ca. 8.5 cm, slightly

less on the surface of the front), and a piece of the echinus, with a full profile including the four anuli, but only a vague suggestion of the transition to the column shaft. The echinus rises in a straight line, at a 33° angle, from the anuli to the shoulder, which is about 3 cm high, strongly curved and retreats slightly under the abacus. The anuli, 3 cm high (on a vertical line), rise at a somewhat steeper angle, about 48.5°; they are simply executed as slanted ribbons with a rounded edge. Calculated diameter of the upper anulus is 42 cm, of the lower 35.5 cm. The projection from the upper anulus to the abacus rim is 12.7 cm, from the rim of the hypotrachelion 14.4 cm. Echinus height 11.3 / 13.9 cm without / with the anuli. The abacus width can be calculated as 67 cm.

Inv. no. 4887. Sporadic, from the northern sector.

The profile conforms with the regular type of Doric capitals from the early 5th century. Since so many important dimensions are either unknown – such as the abacus height – or based on calculations, a full proportional analysis is futile here.<sup>31</sup> But since the proportion 1 : 1.76 (or 4 : 7) between the calculated upper diameter and the abacus width comes close to the similar proportions in capitals from the porches and the inner colonnades in the temple at Aphaia (1 : 1.78, 1.77, 1.75) and from the temple at Alipheira (1 : 1.71),<sup>32</sup> and the

<sup>31</sup> For such studies, see the basic work by J.J. Coulton, “Doric capitals: proportional analysis,” *BSA* 74, 1979, 81–153, and the tabular surveys Østby 1990–91, tabs I–IV, for Archaic and Early Classical capitals. Observe, however, also J. Pakkanen, “Accuracy and proportional rules in Greek Doric temples,” *OpAth* 20, 1994, 143–56, for a salutary warning against excessive confidence in such numerical values.

<sup>32</sup> See Østby 1990–91, tabs III–IV, for these values. Observe also the isolated capital C from Tegea (tab. IV), published by K. Herrmann, “Zum Dekor dorischer Kapitelle,” *Architektura* 13, 1983, 5–6, fig. 8, where the value is also 1 : 1.74.

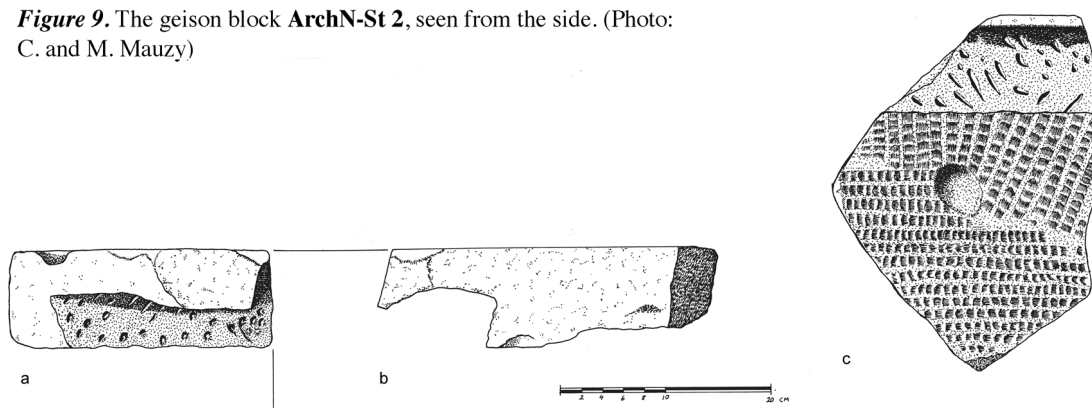
<sup>29</sup> For the Megarian roof, see Heiden 1995, fig. 31.1 and the discussion 23–5; and *ibid.* 27–9 and 31–5, fig. 31.2, 4, for other simae with a similar upper roundel dated to about 500.

<sup>30</sup> See last note.





**Figure 9.** The geison block **ArchN-St 2**, seen from the side. (Photo: C. and M. Mauzy)



**Figure 10.** Geison block from the northern sector, cat. no. **ArchN-St 2**: **a**, from the front; **b**, from the side; **c**, from below. (Drawing: A. Klynne)

proportion 1 : 2.73 / 3.36 between the upper diameter and the height of the echinus without/with the anuli is again closely reflected at Alipheira (1 : 2.73 / 3.38; less closely in the late Archaic temple of Apollo at Delphi, 1 : 2.88 / 3.35),<sup>33</sup> a date in the early years of the 5th century seems certain. The close connection with the well documented capital from the temple at Alipheira suggests that a regional standard for Doric capitals may have existed in those years.<sup>34</sup>

Although the piece cannot be connected with any known building, it provides valuable evidence for the existence of modest buildings, made of good material and with properly executed Doric formal details in the sanctuary or in its immediate neighbourhood in the period in question.

#### **ArchN-St 2**      *Geison block*

*Figs 9–10*

Geison block of Doliana marble. Broken on the rear and at the sides, only 10 cm width is preserved of the front surface. W 27.5, depth 33.9; H of the geison front 6.2, max H of the block 9.7, reduced to 8.2 cm at the rear break. The projecting part of the geison block is 11 cm deep. The fronts of the nose and of the

vertical surface behind the nose both slant at 102° angle to the parallel surfaces of top and bottom.

Smooth, but somewhat cursorily worked surface above and on the front. Clear traces from a pointed chisel on the concave lower surface of the projecting part and the rear front of the piece; the surface resting on the next shift is precisely worked with a toothed chisel, but not levigated. There is a smoothed rim on the underside of the “nose”, 1.1–1.2 cm wide.

Inv. no. 4388. Location: C-D 8-10, sporadic.

Although the stone material does not necessarily imply that the entire building was of marble or even of stone, it was probably significant in spite of the rather rough workmanship of this piece. It connects in a very general way with the repertoire of the Doric order, more precisely with the type of raking geison above pediments; but the slanted fronts demonstrate that it was located at the lower end of a sloped roof, at an angle of 12°. There is, however, no indication of how the block was connected with the roof, which we must presume was tiled, and it remains unexplained why the lower surface of the block was not cut horizontally, so as to rest safely on the wall which must be presumed beneath. The very coarse finish of the surface under the projection raises the question whether it may have been covered by terracotta or wooden sheeting; it does not in its present shape give any indication that the piece was connected with a Doric formal system underneath.

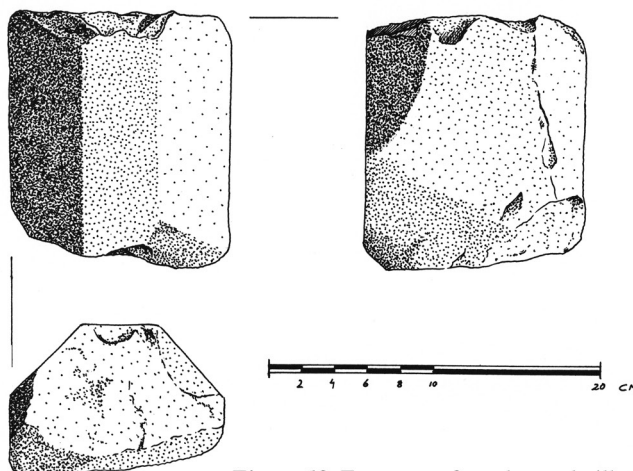
Beyond the general likelihood that the piece is Archaic or Classical, no precise date can be proposed for such a piece.

<sup>33</sup> Østby 1990-91, tab. IV.

<sup>34</sup> The capital from Alipheira is presented and discussed in Østby 1990-91, 369–71, fig. 206; the proposed date is about 480. A capital from the somewhat earlier temple at Hagios Elias near Asea, recently documented, is less close: the proportional values are here 1 : 1.68 and 1 : 2.82 / 3.35: J. Forsén, B. Forsén and E. Østby, “The sanctuary of Agios Elias – its significance and its relations to surrounding sanctuaries and settlements,” in Th. Heine Nielsen and J. Roy (eds), *Defining ancient Arcadia* (Acts of the Copenhagen Polis Centre 6), Copenhagen 1999, 176 fig. d (drawing with dimensions) and 176–7 (dated about 500–490).



**Figure 11.** Fragment of polygonal support ArchN-St 3 from the northern sector. (Photo: C. and M. Mauzy)



**Figure 12.** Fragment of a polygonal pillar, cat.no. ArchN-St 3. (Drawing: A. Klynne)

**ArchN-St 3** *Fragment of octagonal pillar* Figs 11–12  
Fragment of an octagonal pillar, of Doliana marble. D 13, H 14.5, depth of the preserved piece 9 cm.

Three surfaces are fully and two partially preserved; the fully preserved ones are 6, 4.5 and 6 cm W. (The piece is too fragmentary to judge whether the alternation is casual or deliberate.) The surfaces are smoothly, though somewhat cursorily worked.

Inv. no. 4389. Location: C-D 8-10, sporadic.

Part of a polygonal pillar from an unidentified structure. Similar polygonal supports are known from the Roman altar for the imperial cult at Episkopi, from Corinth, Megara, and elsewhere;<sup>35</sup> they may have represented a less ambitious alternative to columns of well-defined orders, perhaps remnants of an early phase of development before the introduction of columns with concave fluting.

<sup>35</sup> See E. Østby, "The Archaic temple of Athena Alea at Tegea," *OpAth* 16, 1986, 85 n. 35, for some more or less certainly established cases of polygonal columns from the Heraion at Argos and from Corinth; for the temple at Tegea the polygonal columns were suggested previously in W. Dörpfeld and H. Schleif, *Alt-Olympia I*, Berlin 1935, 182. A.C. Brookes, "Stoneworking in the Geometric period at Corinth," *Hesperia* 50, 1981, 286–9, pl. 75.d–e, presents two early fragments of engaged, polygonal columns with five and seven sides. The pieces from Episkopi are to date unpublished; a marble capital of Doric type, but with a polygonal echinus, is preserved in the mosaic basilica at Episkopi. It is probably of Roman date. Octagonal columns in the Archaic cistern at Megara: G. Gruben, "Griechische Un-Ordnungen," in E.-L. Schwandner (ed.), *Säule und Gebälk* (Diskussionen zur archäologischen Bauforschung 6), Mainz 1996, 76–7, fig. 20; M.-Chr. Hellmann, *L'architecture grecque 1. Les principes de construction*, Paris 2002, 144–5, fig. 188. See also W. Hoepfner, "Stützentypen im Nord-West-Griechenland," *Φηγός (Τμητικός τόμος για τον καθηγητή Σωτήρη Λαζάρη)*, Ioannina 1994, 435–41.

**ArchN-St 4** *Supporting block* Figs 13–14  
Supporting block for a wooden pole, of approximately square shape. Doliana marble. H 13.5, W 22, depth 23.5 cm.

The lower and upper surfaces as well as the front are reasonably well preserved, the lower surface better. The piece is broken on the left and the rear, in clear and straight lines. The right-hand surface is coarsely worked, but joins the upper surface in a curve that is clearly original.

The upper surface has a rectangular depression for supporting a vertical wooden pole; the modest dimensions (7 × 8 cm, depth 1.6 cm) would probably be more appropriate for the tenon of such a pole, rather than for the pole itself. The surface in the bottom is coarsely worked.

The bottom of the front is decorated with a poorly preserved, convex moulding, 4 cm high.

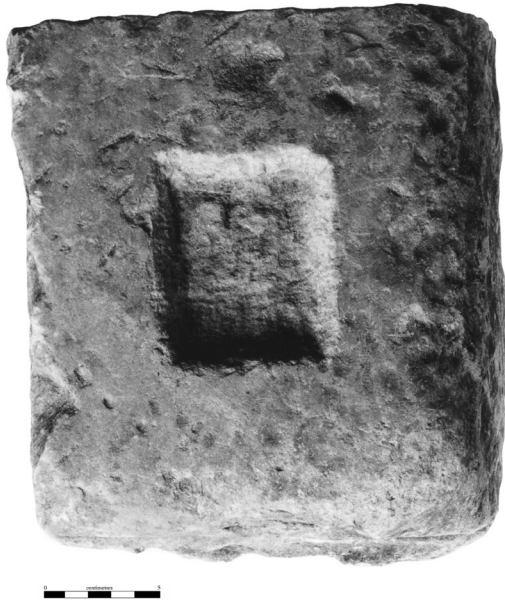
Inv. no. 4390. Location: C9, sporadic.

**ArchN-St 5** *Supporting block* Figs 15–16  
Supporting block for a wooden pole, of approximately square shape. Doliana marble. H 12, W 29, depth 30 cm.

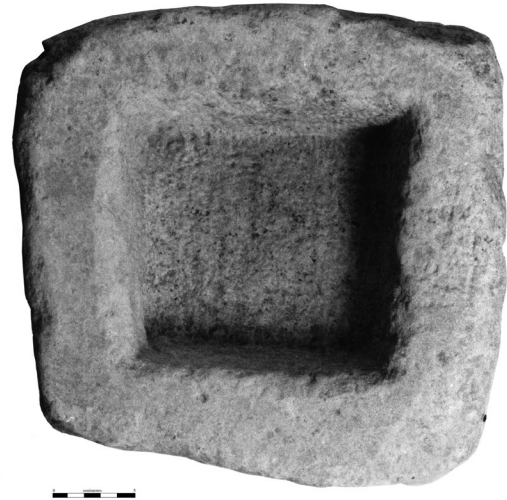
The depression on the surface is approximately square, but slightly irregular; depth 6, opening 16–17 × 15.5–17.5 cm. The surrounding rim is smoothly worked; in the depression there are clear traces of a tooth chisel. The lateral surfaces are all coarse and irregular. The bottom is irregular, except for a slanted part covering almost half of the lower surface which has a nicely and smoothly worked surface; the rest is convex. For this reason the block could not have stood with the upper surface in a horizontal position unless it was embedded in the soil.

Inv. no. 4390. Sporadic, from the northern sector.

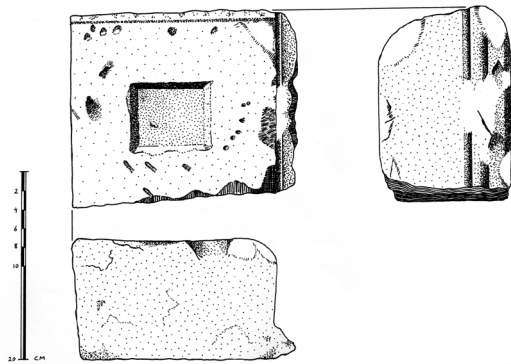
These two supporting blocks for simple wooden poles are so different from one another that they are clearly not from the same context or building, although they were based on the same basic idea and had a similar function.



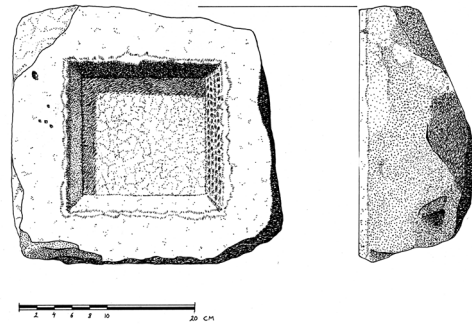
**Figure 13.** Block supporting a pole **ArchN-St 4**, from the northern sector. (Photo: C. and M. Mauzy)



**Figure 15.** Block supporting a pole **ArchN-St 5**, from the northern sector. (Photo: C. and M. Mauzy)



**Figure 14.** Pole basis (?) from the northern sector, cat. no. **ArchN-St 4**. (Drawing: A. Klynne)



**Figure 16.** Pole basis (?) from the northern sector, cat. no. **ArchN-St 5**. (Drawing: A. Klynne)

The significantly larger rectangular opening in **ArchN-St 5** may in the latter piece have supported the pole itself, axed to a rectangular cross-section, rather than only a tenon as seems likely for the other piece. This plain system was clearly used repeatedly for less ambitious, secondary structures in the sanctuary, perhaps in the form of simple stoas; but it is of some interest to observe that the prestigious Doliana marble was also used for such modest pieces.

Similar blocks with square or rectangular depressions for supporting wooden poles, or for the insertion of tenons, have been identified from an early stoa in the Heraion at Samos, and from a circular building (“tholos”) from Lathouresa in Attica, both of Archaic date.<sup>36</sup> This seems a likely date also for our two pieces.

<sup>36</sup> Samos: G. Gruben, “Die Südhalle,” *AM* 72, 1957, 56–7, fig. 1. Lathouresa: F. Seiler, *Die griechische Tholos*, Mainz 1986, 12–3, figs 7–9; H. Lauter, *Lathouresa. Beiträge zur Architektur und Siedlungsgeschichte in spätgeometrischer Zeit*, Mainz 1985, 46–7, pl. 11.b.

#### **ArchN-St 6 Schist slab**

*Fig. 17*

Large, thick slab with a hole in the upper part, worked from an irregular piece of schist. H 39, W 20, Th 6–8 cm. Slightly oval hole, D 7–7.5 cm.

Inv. no. 4392. Location, F. no.: C6/79b-4 (fill of the Byzantine pit).

The general shape of this object might coincide with two possible functions: as a ship’s anchor, or as a stone weight from an olive press. Good parallels can be found for both uses.<sup>37</sup>

Neither identification, however, seems appropriate for the setting on a plain at almost 700 m above sea level, distant from the sea, and today above the maximum altitude for olive cultivation. But since olive pollen has been identified in the pollen samples taken from the site

<sup>37</sup> Anchor: L. Casson, *Ships and seamanship in the ancient world*, Baltimore and London 1995, 252–6. Olive press: O. Borowski, *Agriculture in Iron Age Israel*, Winona Lake 1987, 122, fig. 20. (I thank Mr T. Refvem, who participated in the 1994 season of the excavation, for these references.)



**Figure 17.** Schist slab **ArchN-St 6** of uncertain function, from the northern sector. (Photo: C. and M. Mauzy)

and indicates that olive trees were grown in the area in antiquity,<sup>38</sup> the latter explanation may be considered more likely. This does not exclude the possibility that the object was initially made as an anchor and served as one before it was put to a different use, or that it was for some reason brought to the sanctuary as a votive gift.

The context is late, probably Byzantine,<sup>39</sup> and it is impossible to decide whether the object is contemporaneous with that context or has come into it from an earlier one.

### **Marble, from the temple**

This list includes fragments of modest dimensions from the temple architecture which were discovered in stratigraphical contexts during the excavation in the northern sector. For other recently discovered temple blocks, see sections **xvii** and **xix** (Pakkanen).

**ArchN-MT 1** *Ionic column fragment* *Fig. 18*  
Piece of a marble column of Ionic style, with the remains of two deep flutes meeting in a fillet. W 4.0, H 10.8, W of fillet between the flutes 0.85 cm.

Inv. no. 4393. Location, F. no.: C6/60-2 (the Byzantine pit).

This may be a fragment from the half-columns of Ionic

<sup>38</sup> See section **xxiii** (Bjune, Krzywinski and Overland), 447.

<sup>39</sup> See section **iii** (Luce), 50–2 for the context, with the excavation photo *Fig. 19*.

order which decorated the interior of the cella walls. These columns had a lower diameter of 77 cm, and the width of the fillets separating the flutes was 1 cm at the bottom and 0.9 cm at the top, according to the plates of the French publication.<sup>40</sup> This piece should consequently come from a position near the top of the column. However, the close relation with the next piece, whose connection with the temple is less clear, should be noted. The ellipsoid curve of the flutes does not allow an easy calculation of the flute-width from the preserved part of the curve on this fragment.

These half-columns were crowned by the famous Corinthian capitals, for which the excavation has provided no further evidence.<sup>41</sup>

### **ArchN-MT 2** *Ionic column fragment*

Fragment of Doliana marble, with two partially preserved, concave surfaces (column flutes) meeting in a narrow fillet; fragment of an Ionic column. H 7.0, W 5.1, depth 2.8 cm; the fillet is 0.35 cm wide.

Inv. no. 4394. Location, F. no.: C6/121-2 (Medieval sediments).

In comparison with the former piece, the width of the fillet on this fragment is so reduced that it cannot possibly be connected with the same half-columns. If the reconstruction with a second tier of smaller half-columns with Ionic capitals above the Corinthian ones were to be accepted, the piece might belong there, but this reconstruction has now been rejected for good reasons.<sup>42</sup> It cannot easily be connected with the Classical temple, but is listed here because of its close connection with **ArchN-MT 1**.

### **ArchN-MT 3** *Block from the pteron ceiling* *Fig. 19*

Large fragment of a marble block; broken above and on both sides, but a small part of the lower surface is preserved. H 25, max W 11.4, depth 7.5 cm.

Two astragals divide the surface into three parts, 10.0 cm high below and 9.7 cm high in the middle, measured between the axes of the astragals; the upper part (broken) is 4.9 cm high. The astragals are 2.1 cm high. The lower, 5.65 cm long, preserves one pearl and two discs, the pearl being 3.0 cm and the two discs 2.1 cm long; the upper astragal has two pearls, 3.1 and 3.5 cm long, with one disc in front of the first one and two discs between them.

Inv. no. 4396. Location, F. no.: C5-C6/75b-11.

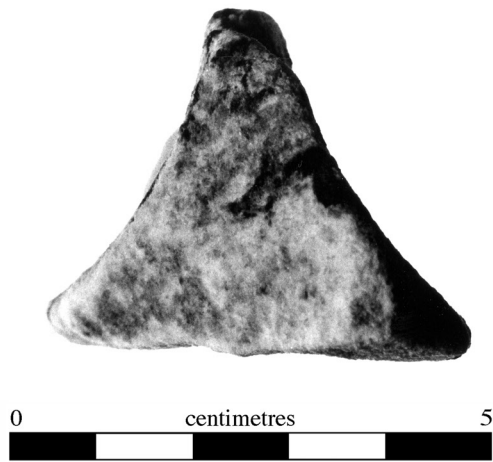
This is a fragment from the marble blocks that covered the pteron of the Classical temple with a coffered ceiling.<sup>43</sup> It is probably one of the larger of these pieces to have been preserved, but since it has no trace of the coffering

<sup>40</sup> Dugas *et al.*, *Tégée*, 47–8, and pls 75 and 76.B.

<sup>41</sup> See for the Corinthian capitals the discussion section **xvi** (Østby), 330–2.

<sup>42</sup> See Norman, *Temple*, 179–80, for the two-tiered reconstruction; and J. Pakkanen, “The height and reconstruction of the interior Corinthian columns in Greek Classical buildings,” *Arctos* 30, 1996, 153–64, for the reasons why this proposal should be rejected. See section **xvii** (Pakkanen), 357, and *id.*, *Temple*, 5 n. 19, for some later revisions, and section **xvi** (Østby), 332–4 for a discussion.

<sup>43</sup> Dugas *et al.*, *Tégée*, 31–2, pls 55–56.



**Figure 18.** Fragment of Ionic marble column **ArchN-MT 1**.  
(Photo: C. and M. Mauzy)



**Figure 19.** Fragment from the pteron ceiling **ArchN-MT 3**.  
(Photo: C. and M. Mauzy)



**Figure 21.** Fragment of a Lesbian kymation **ArchN-MT 6**.  
(Photo: C. and M. Mauzy)



**Figure 20.** Fragments of ovolo ornaments, **ArchN-MT 4** (left) and **5** (right). (Photo: C. and M. Mauzy)

itself, it is impossible to establish whether it is of the type with shallow coffers, placed on the flanks, or the type with deep coffers above the front ptera. Only the find-spot, off the central axis of the northern flank, suggests that the former identification may be more probable.

No trace of preparations for a painted meander between the astragaloi can be seen on this piece, such as the French team could observe on some of these fragments.<sup>44</sup>

**ArchN-MT 4** *Ovolo fragment* *Figs 6, 20*

Fragment of an ovolo moulding, preserving one complete egg framed by a broken ridge and one complete dart to the right; broken below, joint surface above. The fragment is H 6.4, W 12.1, depth 8.2 cm (with the egg). The egg projects 2.7 cm, it is 5.2 cm wide and 5.8 cm high; the unit of the ornament rhythm is 10.1 cm.

Inv. no. 4397. Location, F. no.: C7/60-1 (the Byzantine pit).

**ArchN-MT 5** *Ovolo fragment* *Figs 6, 20*

Fragment of an ovolo moulding, with one complete egg framed by a strong, almost perfectly preserved ridge (separated from the egg by a deep groove made by a running drill) and the descending ridge from the next dart to the right. Broken surface below, above there is a joint surface with chisel marks. The fragment is W 8.8, H 7.4, depth 9.3 cm; the egg is W 4.35, H 5.8, projecting 3.0 cm. The ornament rhythm cannot be established.

Inv. no. 4398. Location, F. no.: C6/60-7 (the Byzantine pit).

These two fragments come from similar positions, as indicated by the equal height and curve of the eggs; in addition, they both end in a horizontal surface, a joint, above the ovolo. But the egg is narrower on **ArchN-MT 5**, and this seems to be the case also for the dart, although it is not sufficiently preserved for its width to be calculated on this piece. The two fragments consequently have different ornament rhythms and cannot come from exactly the same positions. The same difference between a narrow and a wider ornament rhythm can be noted in the drawings of two different blocks on the plates of the French publication, although unfortunately no precise information is given about the ornament rhythm of these ovoli. While **ArchN-MT 4** can be connected with the transverse beams that supported the coffered ceiling slabs across the front ptera, **ArchN-MT 5** should be connected with the blocks that carried the ceiling slabs behind the frieze.<sup>45</sup> They were both completed with an astragal below, which is broken on both fragments.

**ArchN-MT 6** *Lesbian kymation* *Fig. 21*

Fragmentary marble piece with a Lesbian kymation. H 4.2, depth 4.1 (3.1 for the projection of the ornament), W 12.2 cm; broken below and behind, intact surfaces above and in front. Two leaves of the ornament are almost fully preserved, with one complete separating dart between them and a large part of another to the right. The unit of the ornament rhythm is 5.4 cm.

The ornament starts behind a 1 cm deep horizontal surface, and connects with the 2.05 cm high front surface. Both are smooth without tool traces, so also the upper surface.

Inv. no. 4399. Location, F. no.: C6/60-3 (the Byzantine pit).

Lesbian kymatia occur in several positions in the interior of the temple (toichobate and crown of the inner cella walls, also on a pilaster capital and on an architrave from the inner order<sup>46</sup>). Their ornamental execution coincides precisely with this piece, but most of them are larger, except for the small kymation on top of the inside of the cella wall; its dimensions coincide quite precisely with this piece, as does the execution with a smooth surface above. If completely preserved, the ornament would have been 3.4 cm high, and projected 3.8 cm.<sup>47</sup>

**ArchN-MT 7** *Hawksbeak fragment* *Figs 6, 22*

Comparatively large fragment of Doliana marble with the sequence taenia – cavetto – hawksbeak. The fragment is 8.3 cm H, 12.2 cm W, 6.7 cm deep. The taenia is 1.9 cm high, the cavetto 2.9 cm high and 1.4 cm deep, the hawksbeak front 3.1 cm high and 2.9 cm deep. It is broken below and at the rear, but has a levigated surface for the joint above.

Inv. no. 4400. Location, F. no.: C6-C7/129-1 (= C6/09; Medieval sediments).

**ArchN-MT 8** *Cavetto fragment* *Figs 6, 23*

Small fragment of Doliana marble, with a deep cavetto under a projecting fillet, and the beginning of a convex moulding, probably a hawksbeak, under this. Broken behind and below; W 5.9, H 5.3, depth 5.2 cm. The upper surface of the fillet, behind its 1.2 cm high front, is worked smoothly for the first 1.3 cm, behind which it rises 0.4–0.5 cm as a coarsely worked lump. Including the height of this lump the fillet is 1.6 cm high, equally high as the fillet part of block **ArchN-MT 7**.

Inv. no. 4401. Location, F. no.: C6/121-1 (Medieval sediments).

**ArchN-MT 9** *Hawksbeak fragment* *Figs 6, 24*

This marble fragment is very similar to **ArchN-MT 7**, but smaller. White, slightly porous Doliana marble. Broken on both sides, behind and below, but the upper joint surface is preserved. The hawksbeak is entirely preserved with a short stretch also behind the tip; the taenia is corroded, but the cavetto and hawksbeak are intact. Taenia and cavetto together are 4.4 cm high (about 1.5 cm for the taenia), the entire fragment with the hawksbeak 8.0 cm. W 7.1, depth 5.4 cm.

Inv. no. 4402. Location, F. no.: C6/53b-1 (the Byzantine pit).

These three pieces all have the same sequence of fillet, cavetto and hawksbeak, and the profiles and heights of cavetto and hawksbeak are practically identical. As the profile drawings in *Fig. 6* demonstrate, they differ in the execution of the upper fillet, in three heights (1.9, 1.5 and

<sup>44</sup> Dugas *et al.*, *Tégée*, 31–2, and pl. 90.D.

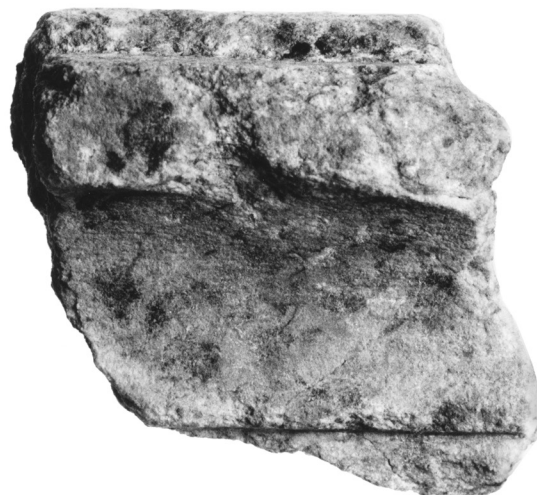
<sup>45</sup> See Dugas *et al.*, *Tégée*, 31, pl. 54.Aa–b for the former piece, and pl. 52.Ba–b, for the latter. Shoe 1936, 28, pl. XV.18, gives an identical profile for an “upper epikranitis block from the peristyle/pronaos”.

<sup>46</sup> Reported by Dugas *et al.*, *Tégée*, pls 64–65, 74, 77, 78.Ba–b, 79. Dimensions and curve coincide with the piece in Shoe 1936, 61, pl. XXVIII.4 (an epikranitis, on top of a group of mouldings).

<sup>47</sup> Dugas *et al.*, *Tégée*, 53, pl. 79.a–b.



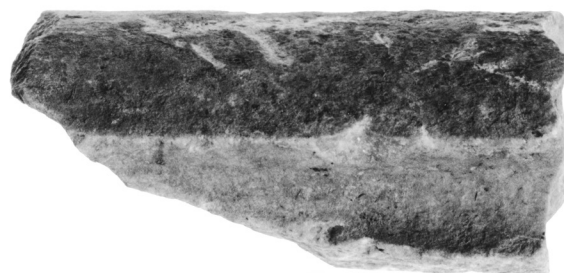
**Figure 22.** Fragment of a hawksbeak moulding **ArchN-MT 7**.  
(Photo: C. and M. Mauzy)



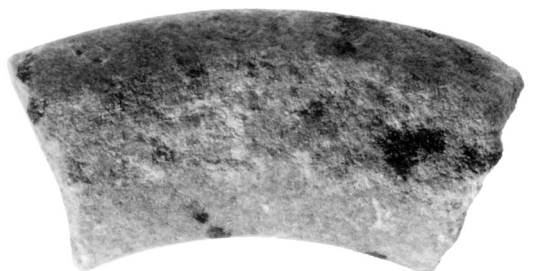
**Figure 23.** Fragment of a cavetto moulding **ArchN-MT 8**.  
(Photo: C. and M. Mauzy)



**Figure 24.** Hawksbeak fragment **ArchN-MT 9**. (Photo: C. and M. Mauzy)



**Figure 25.** Hawksbeak fragment **ArchN-MT 10**. (Photo: C. and M. Mauzy)



**Figure 26.** Fragment probably from the acroterion of the temple, **ArchN-MT 11**. (Photo: C. and M. Mauzy)



**Figure 27.** Fragment probably from the acroterion of the temple, **ArchN-MT 12**. (Photo: C. and M. Mauzy)

1.2 cm) that are sufficiently different to indicate different locations and functions. There are also small differences in the height and the curve of the cavetto. On one of these blocks, **ArchN-MT 8**, the coarse, slightly raised mass which replaces the smooth joint surface only 1.3 cm behind the front demonstrates that only the foremost part of the upper surface was connected with another block. The three fragments come from closely related, but not identical positions in the structure.

In the French publication, mouldings of this kind are attested in the following positions: on the anta capital,<sup>48</sup> on the blocks supporting the coffered ceiling in the lateral pteron (serving as an epikranitis moulding above the cella wall), and on both sides of the transverse beams which separate the lateral from the frontal pteron. They also appear on the blocks that carried the ornament around the frontal pteron at the same level as in the lateral pteron, and supported not the blocks of the ceiling, but another set of blocks supplied with an ovolo ornament (**ArchN-MT 4–5**) that carried the slabs of the ceiling at a higher level.<sup>49</sup>

The profiles on the anta capital reach a depth of 8.8 cm, with the point of the beak at 6.3 cm behind the front. This is substantially more than on any of our blocks: they have the points of their beaks at 4.6 cm (**ArchN-MT 7**) or 3.9 cm (**ArchN-MT 9**) behind the front. For this reason the anta capital can be ruled out for our fragments. They should consequently be connected with the ornamental embellishments above the pteron. The French publication includes only one block where this profile was preserved, on a beam separating the lateral and the frontal pteron, and gives only one measurement for the depth of these profiles, on the side turned towards the lateral pteron: 6.7 cm. This might coincide with the block **ArchN-MT 7**, which also has a precise parallel in L.T. Shoe's collection of moulding profiles.<sup>50</sup>

It is, however, clear from our material that there were considerable variations in the execution of these hawksbeak mouldings and in the attachment to other block shifts above them, variations which neither publication has managed to cover. They give no clue to the position of the block which could have supported another only on the foremost part of the upper surface.

**ArchN-MT 10 Hawksbeak fragment** *Figs 6, 25*  
Marble fragment from a hawksbeak: its height and profile coincide with **ArchN-MT 9**, but it has the smooth surface of a joint above the profile instead of continuing with the cavetto and taenia. Broken 2 cm behind the tip of the hawksbeak; H 4.1, W 9.6, depth 4.7 cm.

Inv. no. 4403. Location: D5.

<sup>48</sup> Dugas *et al.*, *Tégée*, 35, pl. 58; Shoe 1936, 122, pl. LVIII.15.

<sup>49</sup> Dugas *et al.*, *Tégée*, 30–1, pls 52.Aa–b (where the moulding is broken) and 53.d (with the only documented example). For the arrangements, see the drawing *ibid.* 39 fig. 14, and pl. 21–26. Shoe 1936 has three slightly different profiles of this type, defining them as epikranitis mouldings: 129, pl. LXI.15–17.

<sup>50</sup> *Ibid.*, pl. LXI.17.

This piece, which has the smooth surface of a joint on top and is not worked together with other ornaments on one block (although the profile of the hawksbeak coincides so closely with the blocks **ArchN-MT 7–9**), is problematical. It does not come from the crown of the horizontal geison (on the flank); it is higher than the 3.7 cm of the French documentation, and does not coincide with the profile given for that moulding in Shoe's collection.<sup>51</sup> Neither publication has a satisfactory alternative to offer, unless this piece is also in some ways connected with the epikranitis ornaments of the inner epistyle since the profile of the hawksbeak is so similar in shape and dimension to the hawksbeak on those blocks. But any attempt to insert this piece into the structure must then account not only for the joint surface above instead of the upper profiles, but also for the angle of that surface, about 20°, against the horizontal line as indicated by the upper surfaces of **ArchN-MT 7–9** if the hawksbeak profile is turned to coincide with the profile of those blocks.

**ArchN-MT 11 Acroterion fragment?** *Fig. 26*  
Marble fragment of a curved stalk, most likely from a floral acroterion or similar ornament; rough, heavily weathered surface, but appears worked in shallow, wide grooves. Oval tending to hexagonal section. D 1.65 / 2.15, H 4.75 cm.

Inv. no. 4404. Location, F. no.: C7/44-4 (destruction of the temple, Late Antique).

The shape and curve of this piece indicate that it had a sculptural rather than architectural function. Although no comparable piece seems to have been recovered earlier, it may tentatively be connected with one of the large floral acroteria on the top of the pediments.<sup>52</sup>

**ArchN-MT 12 Acroterion fragment** *Fig. 27*  
Conical marble object of sculptural character, with oval cross-section and vertical ridges on the surface running downwards from the top. 3.8 cm H, 5.5 × 3.9 cm section on the broken area below.

Inv. no. 4405. Location, F. no.: C7/57-1 (the Byzantine pit).

This piece certainly comes from one of the floral acroteria crowning the tops of the two pediments.<sup>53</sup> The reconstruction drawings do not allow for a precise identification of the position, but similar pieces can be noted on one of the photographs in the French publication where the fragments from these ornaments are collected.<sup>54</sup>

<sup>51</sup> Dugas *et al.*, *Tégée*, pl. 44.Ad (the horizontal geison). The raking geison, and the geison under the pediment, have hawksbeak crowns of only 3 cm height (*ibid.* pl. 45.B). Shoe 1936 has a very different profile for the crown (111, pl. LIV.17).

<sup>52</sup> See Dugas *et al.*, *Tégée*, pl. 89.C, for a collection of pieces connected with the acroteria, and 29, fig. 10, for his reconstruction of them. A more precise study with a slightly different reconstruction has been undertaken by H. Gropengiesser, *Die pflanzlichen Akrotere klassischer Tempel*, Mainz 1961, 29–42 and 47–8, pls 23–29.

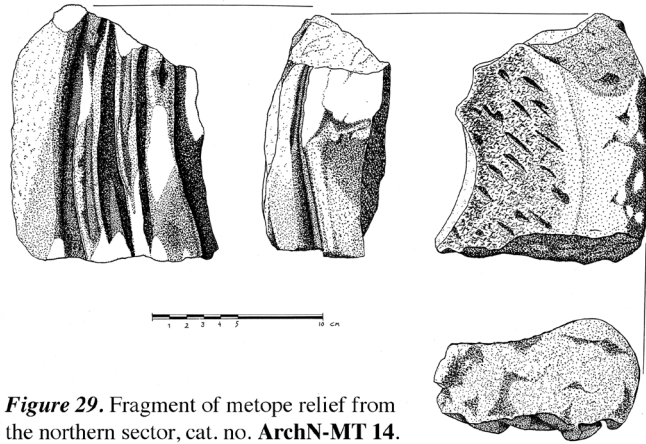
<sup>53</sup> See last note.

<sup>54</sup> Dugas *et al.*, *Tégée*, pl. 89.C (below, left).





**Figure 28.** Fragment from a metope relief, ArchN-MT 14. (Photo: C. and M. Mauzy)



**Figure 29.** Fragment of metope relief from the northern sector, cat. no. ArchN-MT 14. (Drawing: A. Klynne)

#### ArchN-MT 13 *Rim of a marble tile*

Fragment from the edge of a marble tile, with a raised rim above a concave surface and a rounded transition to a convex surface behind. Doliana marble. Traces of tool marks on the upper surface. W 8.35, L 12.3 cm; Th 9.3 at the rim, 6–8 cm at the break below. The rim is 3.2 cm wide.

Inv. no. 4395. Location, F. no.: C6-C7/60-6 (the Byzantine pit).

This is certainly a fragment from the rim of a marble tile, of appropriate size for the Classical temple.<sup>55</sup> The suggestion of a curve behind may connect the piece with a special type of tile with a slanted cut of the rear angle, but that type of tile also had an unusually wide, raised rim (8.4 cm) which does not recur on our piece. The particular function of this special type of tiles is not explained in the French publication.<sup>56</sup>

**ArchN-MT 14** *Fragment of metope relief* Figs 28–29  
Fragment of greyish marble, apparently Doliana. H 15, W 14, Th 8.2 cm.

Fragment of a draped figure, with four slightly curved, fairly deep and approximately parallel grooves separated by raised areas carrying secondary, shallower grooves. The curves straighten from left to right. The right-hand surface has a convex curve, without surface details or patterns; the left one is concave, and more coarsely worked. The rear surface has coarse tool marks from a pointed chisel, like an anathyrosis.

Inv. no. 4406. Location: C9-C10/04 (modern village).

Fragment of an appliqué relief of a heavily draped, human figure. The figure, at slightly less than life-size, appears to be standing in a relaxed position; but the maximum height of the relief, about 0.88 m below the

taenia of the porch metopes,<sup>57</sup> would seem limited for this figure if it stood vertically, and may indicate a more moved posture. The piece is too small for further details to be made out; the sex of the figure cannot be determined.

This fragment of a relief figure was once attached to a rear surface, and thus certainly decorated one of the metopes with mythological subjects connected with Tegean traditions which decorated the porches of the temple, and where this technique was used. The particular technique, with figures carved in relief and glued and/or dowelled to the vertical surface of the metopes, is safely attested from other fragments.<sup>58</sup> The new fragment is among the larger ones from this limited group, but it adds nothing toward the identification or interpretation of the subjects. The position where it was found, aligned with the central platform on the northern flank, would equally easily admit an assignation to the pronaos as to the opisthodom.

<sup>57</sup> 0.993 m is the full height of the porch frieze recorded by Dugas *et al.*, *Tégée*, 39 fig. 14, and pl. 59 showing blocks with the full height preserved. The metope taenia was 0.112 m of the height, approximately 1/9.

<sup>58</sup> On the metopes: Dugas *et al.*, *Tégée*, 35–6 and 102–4 nos 90–96, pl. 111.B; A.F. Stewart, *Skopas of Paros*, Park Ridge 1977, 30–2, 46, 57–8 (where the Erechtheion frieze and the reliefs on the base for the cult statue in the Hephaisteion are mentioned as the only clear parallels for the technique), and 62–4 (the subjects). See also J. Marcadé, “Tegeatika,” *BCH* 110, 1986, 320–2; and observe the suggestion by H. Svenson-Evers, *Die griechischen Architekten archaischer und klassischer Zeit*, Frankfurt a.M. etc. 1996, 404, that the relief decoration (and the inscriptions on the architrave blocks) may have been a secondary addition to originally plain metopes.

<sup>55</sup> Compare Dugas *et al.*, *Tégée*, 25–6, fig. 8, pl. 48.Ab–c.

<sup>56</sup> Illustrated Dugas *et al.*, *Tégée*, pl. 48.C.

**Literature:**

- George and Woodhead 1929 = W.S. George and A.M. Woodhead, "Architectural terracottas," in R.M. Dawkins (ed.), *The sanctuary of Artemis Orthia at Sparta (JHS Suppl. 5)*, London 1929, 117–44.
- Goldberg 1982 = M.Y. Goldberg, "Archaic Greek acroteria," *AJA* 86, 1982, 193–217.
- Heiden 1995 = J. Heiden, *Die Tondächer von Olympia (OIForsch 24)*, Berlin and New York 1995.
- Le Roy 1967 = Chr. Le Roy, *FdD II.12, Les terres cuites architecturales*, Paris 1967.
- Østby 1990-91 = E. Østby, "Templi di Pallantion e dell' Arcadia: confronti e sviluppi," *ASAtene* 68-69, 1990-91, 285–391.
- Rhomaïos 1933 = K.A. Rhomaïos, "Ἐκ τοῦ ἀρχαιοτέρου ναοῦ τῆς Φιγαλείας," *ArchEph* 1933, 1–25.
- Rhomaïos 1957 = K.A. Rhomaïos, "Ἱερὸν Ἀθηνᾶς Σωτείρας καὶ Ποσειδῶνος κατὰ τὴν ἀρκαδικὴν Ἀσέαν," *ArchEph* 1957, 114–63.
- Shoe 1936 = L.T. Shoe, *Profiles of Greek mouldings*, Cambridge Mass. 1936.
- Winter 1993 = N. Winter, *Greek architectural terracottas from the prehistoric to the end of the Archaic period*, Oxford 1993.
- Yalouris 1972 = N. Yalouris, "Das Akroter des Heraions in Olympia," *AM* 87, 1972, 85–98.

