

ARCHAIC ARCHITECTURAL TERRACOTTAS FROM SECTOR BYZFORT AT SARDIS

(PLATES 81–88)

TO A TRAVELER approaching Sardis, whether eastward up the valley of the Hermus or westward to Ionia, a dominant natural feature of the lower part of the city is a pair of flat-topped hills that project from the north slope of the acropolis like promontories overlooking the Hermus river plain.¹ Between 1983 and 1991, the Harvard/Cornell Sardis Expedition carried out a series of excavations on the western hill of this pair, which was occupied from the 7th century B.C. to the 6th century after Christ (Fig. 1:23 [grid square E 600–700/S 300–400], Pl. 81:a, arrow). A major result of these excavations was the recovery of a rich and closely datable assemblage of Archaic architectural terracottas.²

Since 1958, the year of the Sardis Expedition's first campaign, the archaeological nickname given to this hill or spur has been the "Byzantine Fortress", so called after the sizeable chunks of Late Antique masonry visible in several places on the slopes of the hill. It has always been clear, however, that the hill was first occupied long before the Byzantine era; the surrounding area is unusually rich in surface finds of Archaic date, and it was long suspected that the evident terracing of the north and east sides of the hill might also belong in its earliest phases to the Archaic period. George Hanfmann, in a speculative article published in 1975, even suggested that the so-called Byzantine Fortress was possibly the site of the palace of Croesus.³

On the basis of a surface survey conducted in 1981,⁴ the northeast corner of the hill, retitled "Sector ByzFort", was chosen as the starting point of a program of excavation, begun in 1983 for the purpose of investigating the early history of this site. Over the course of the next eight years, an area of approximately 650 square meters was exposed across the north end of the hill, and several smaller trenches were dug in various locations to the south and east (Fig. 2). The principal result of these excavations was the discovery of a large terrace wall, built of limestone ashlar masonry, enclosing the hill on its north and east sides

¹ This report is based on research conducted under the auspices of the Sardis Expedition and its sponsors, Harvard and Cornell Universities; I am grateful to the field director, Crawford H. Greenewalt, Jr., both for permission to work on this subject and for his kind advice and encouragement. My thanks are also due to Andrew Ramage and Nancy A. Winter, who gave me many helpful criticisms and suggestions; to Maria Daniels, who took most of the photographs; and to Eliza Proctor and Catherine Alexander, who collaborated on the reconstruction drawings. The arguments offered here were first presented at the Annual Meeting of the Archaeological Institute of America in December, 1992; this report was written while the author was a National Endowment for the Humanities Fellow of the American Research Institute in Turkey.

² Preliminary reports on the excavation of this sector have appeared in *BASOR* or its supplements or in *AASOR* as follows: Greenewalt, Rautman, and Meriç 1986; Greenewalt, Cahill, and Rautman 1987a; Greenewalt, Cahill, and Rautman 1987b; Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990; Greenewalt 1990; Greenewalt, Ratté, and Rautman 1994; Greenewalt, Ratté, and Rautman forthcoming.

³ Hanfmann 1977.

⁴ Greenewalt, Sullivan, Ratté, and Howe 1985, p. 59.

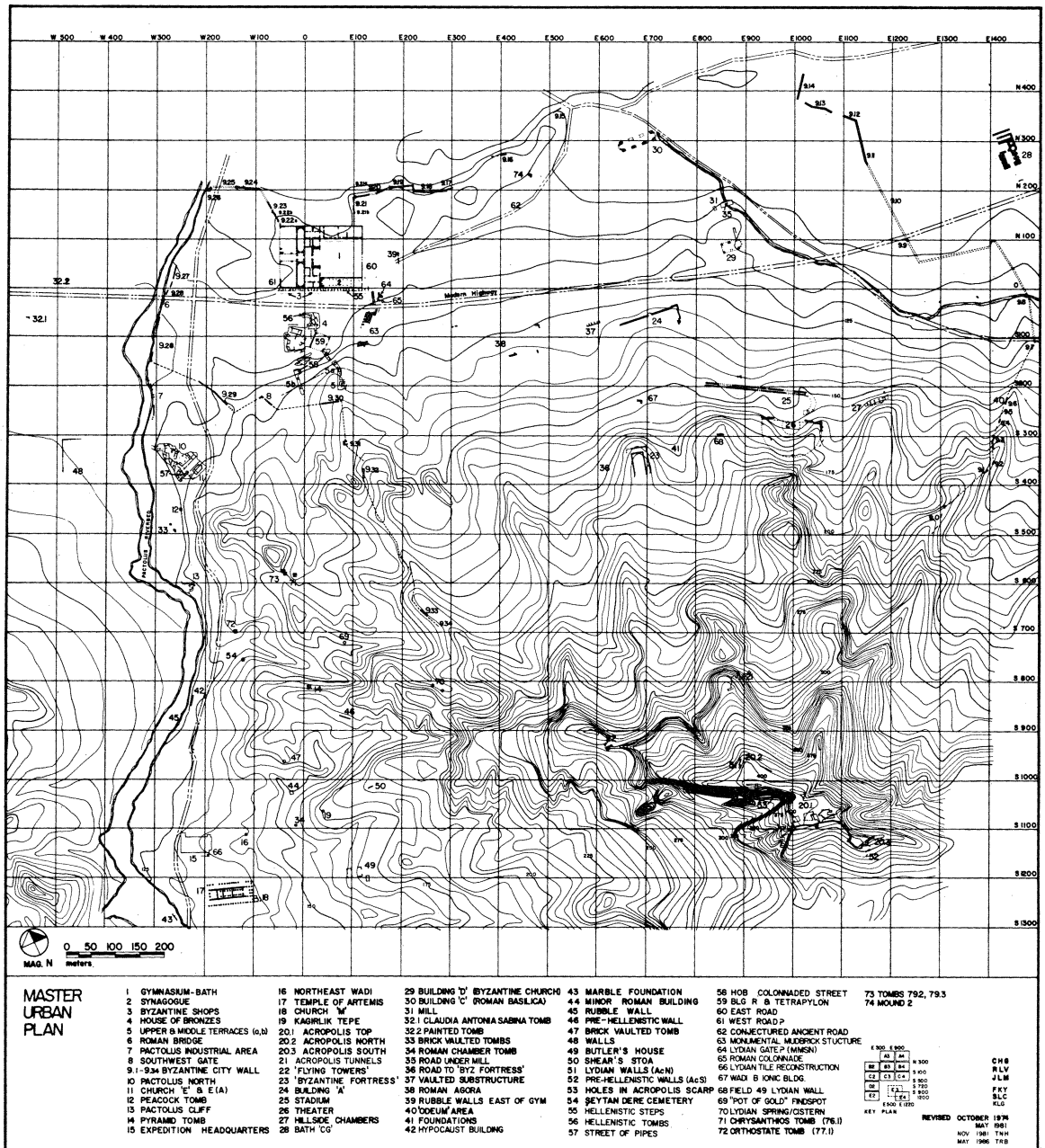


FIG. 1. Plan of urban Sardis

(Pl. 81:b). This terrace, originally at least 10 meters high and 150 meters long on its east side, served, by enlarging and regularizing the flat area on top of the hill, to turn the hill into a platform of monumental proportions. To this end, the spaces between the terrace wall and the natural hillslope were filled with a massive rubble packing; pottery recovered

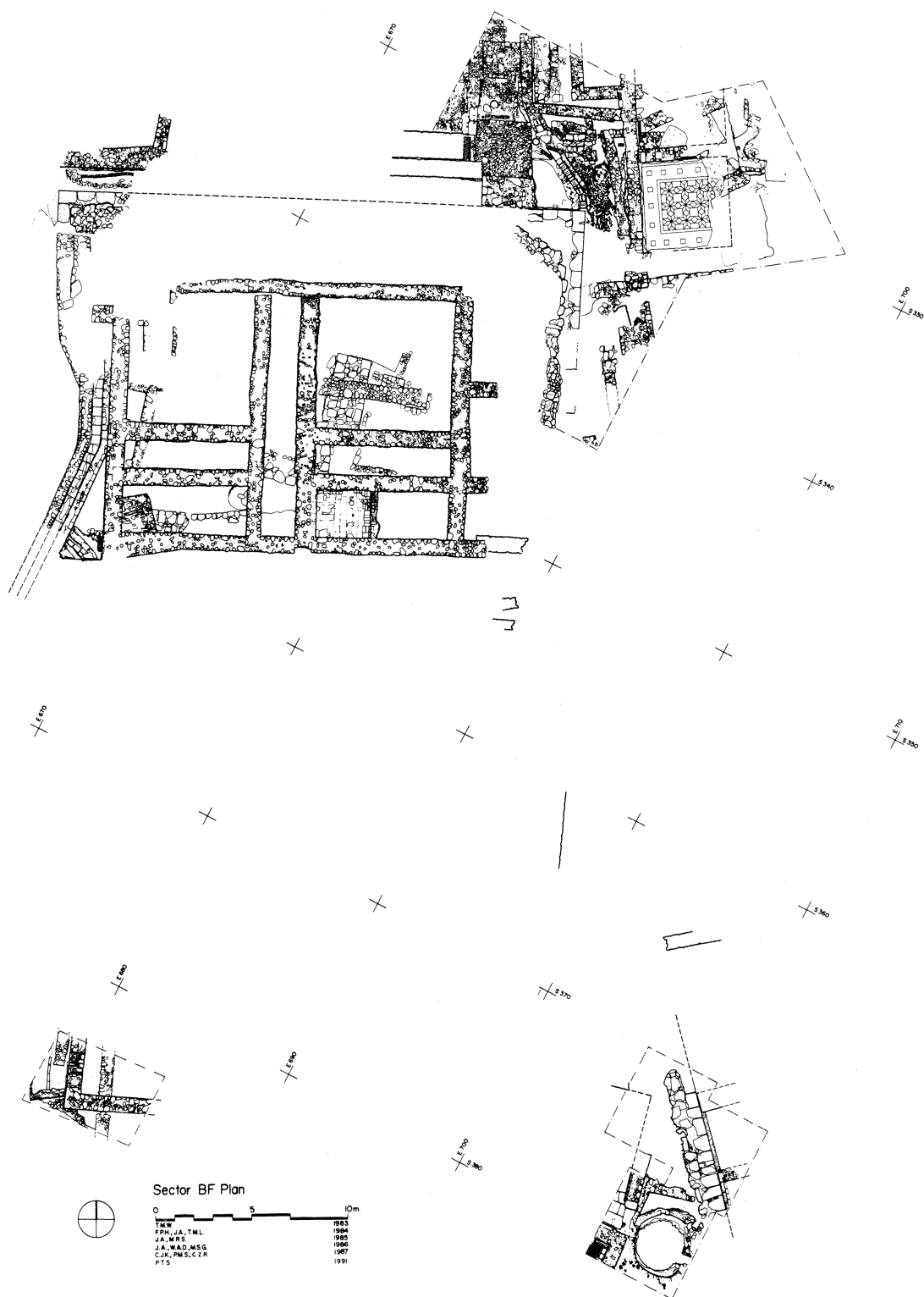


FIG. 2. Plan of Sector ByzFort

from this packing and from the earth piled up against the foundations of the terrace (deposits which also yielded many of the architectural terracottas presented in this report) gives an approximate construction date in the mid-6th century B.C.

In addition to the discovery of this terrace, excavation both on top and along the sides of the hill yielded evidence for more or less continuous occupation of the site from the 7th century B.C. through the 6th century after Christ. The earlier phases of this long sequence, however, were only scantily preserved. Two distinct building phases predating the construction of the monumental terrace were identified from pits containing rich deposits of pottery and from truncated foundations. A later 6th- or earlier 5th-century layer yielded fragments of Achaemenid bowls and other artifacts typical of the Persian period at Sardis. Evidence for the Hellenistic period is somewhat fuller; but in the early first century after Christ new terrace walls were built for a large building complex, perhaps a villa, on the top of the hill, and it is this construction project which is responsible for the poor preservation of the earlier layers.

The effort to reconstruct the nature of the earliest occupation of this site must therefore rely in large part on less direct forms of evidence than actual building remains. The architectural terracottas presented in this report constitute one such form of evidence, but this is not the only or even the primary significance of this material. The finds from Sector ByzFort, including thirty-odd decorative pieces as well as approximately 165 fragments of plain pan and cover tiles, also significantly enlarge our knowledge of the repertory of designs available to Lydian coroplasts; and, most important, they are more securely dated than any other such group of architectural terracottas from Sardis.

As a source of Archaic architectural terracottas, Sardis is among the richest sites in Asia Minor, both for the quantity of tiles it has produced and for the variety of decorative schemes and subjects represented.⁵ Most of the decorated tiles from Sardis apparently belonged to simas or gutters, whose vertical faces were adorned with figural or ornamental designs, modeled in relief and gaily painted. Some fragments of similarly decorated terracotta revetment plaques have also been identified on the basis of nail holes punched through the faces of the plaques. It is often impossible, however, to tell a fragmentary revetment plaque from a fragmentary sima tile, and some of the pieces previously identified as simas may in fact have belonged to revetments. Many pitched antefixes are also known, but these seem in general to be later than the decorated sima tiles. The precise dating of the decorated simas and revetments is controversial, but all agree in placing their heyday sometime in the 6th century B.C.

The publication by Georges Radet in 1909 of a fragmentary tile from Sardis in the Louvre marks the beginning of the study of this subject.⁶ More important was the appearance in 1925 of the report by T. Leslie Shear on the Archaic architectural terracottas recovered by the first Sardis Expedition.⁷ Of the twenty-five pieces (including several complete tiles) presented in that volume, most were found in the fill of a terrace on the west bank of the Pactolus River

⁵ For general discussions, see Åkerström 1966, pp. 216–217; *SardisMon* 5, pp. 38–41; Billot 1980, pp. 291–294; Winter 1993b, pp. 30–31.

⁶ Radet 1909.

⁷ *Sardis* X, i.

across from the Temple of Artemis, and several had been reused in a small tile grave. Many of the tiles published by Shear were casualties of the fighting between Turkish and Greek forces in the area around Sardis in 1922; others, including a number of tiles not included in Shear's catalogue, were sent to the Archaeological Museum in Istanbul or brought back to America, some to the Metropolitan Museum of Art in New York, others to the Princeton University Art Museum. The terracottas found by the first Sardis Expedition were studied and published anew by Åke Åkerström in 1966.⁸ By this time, the Harvard/Cornell Sardis Expedition had begun to unearth more tiles, and those found between 1958 and 1975 were published by Andrew Ramage in 1978.⁹ Ramage's catalogue included 67 sima or revetment tiles (for the most part very fragmentary), 32 antefixes, 1 disk akroterion, 1 ridge tile, and 7 plain pan or cover tiles. Most of these were found in Excavation Sectors HoB, in the Archaic period a commercial and industrial area, and PN, the site of the Archaic Lydian gold refinery and of a small residential neighborhood. They are now kept either in the Sardis Expedition's storage depots at the site or in the Manisa Museum nearby. The terracottas published by Ramage were reexamined in 1980 in a long review article by Marie-Françoise Billot,¹⁰ who will also present a new study of the tile first published by Radet in her forthcoming catalogue of architectural terracottas from Greece and Asia Minor in the Louvre. More recently, Nancy A. Winter has reexamined the role played by Lydia and her last king, Croesus, in "the diffusion of Greek mainland architectural terracottas to Ionia."¹¹ In addition to these purely academic studies, the Sardis Expedition also carried out and completed between 1976 and 1981 a permanent reconstruction project in which reproductions of Lydian tiles are exhibited in an architectural setting in the compound of the excavation house; a monograph on this project is being prepared by Eric Hostetter.¹²

The architectural terracottas from Sector ByzFort were found in several different contexts, of which the most important are the rubble packing of the Archaic terrace and the earth piled up against the foundations of the northeast corner of the terrace wall. Because these contexts can be dated independently (without reference to the terracottas), they will be discussed first, before the presentation of the terracottas themselves.

THE CONTEXTS IN SECTOR BYZFORT

During the excavation of the area below the northeast corner of the terrace, it became apparent that the lower several courses of the terrace wall belonged to the foundations of the terrace and were buried as soon as they were built. The evidence that established this fact was a series of layers of limestone chips incorporated into the earth in front of the terrace and coinciding in several places with the seams between successive courses of the terrace wall; these are probably layers of working chips, deposited during the trimming of the masonry, and are clearly associated with the construction of the wall (Pl. 81:c). The earth beneath

⁸ Åkerström 1966.

⁹ *SardisMon* 5.

¹⁰ Billot 1980.

¹¹ Winter 1993b.

¹² Hostetter 1994.

and between these layers included numerous small finds, most notably, fragments of local and imported pottery and several of the architectural terracottas presented below. The local pottery formed a homogeneous assemblage of types usually dated to the early or mid-6th century B.C. Only a few fragments of imported pottery were found, but these are crucial for the more precise dating of the layer; the latest datable piece is a fragment of an Attic black-figured amphora attributed by Dietrich von Bothmer to the Painter of Louvre F6 and dated to the mid-6th century but not, in the opinion of Güven Bakır, before 560 B.C. (Pl. 82:a, left).¹³

On top of the terrace, the rubble packing retained by the terrace wall was revealed in plan. This packing, which is also visible in section in many places on the east side of the hill, is easily recognizable, and it was sealed, on top of the terrace, beneath layers of limestone chips comparable with the construction layers excavated at the base of the terrace. The packing consists mostly of smallish rocks, fist-sized or slightly larger but seldom bigger than a man's head, and when a portion of it was excavated, it proved to be the richest source of architectural terracottas in the sector. It is interesting to note that the terracottas were almost all preserved only in fragments about the same size as the rocks of the packing, as if they had been deliberately broken up for inclusion in this layer. The rubble packing was less rich in pottery than the construction layers at the base of the hill, but the nature of the assemblage was similar; in this case, the latest precisely datable object is a fragment of an Attic black-figured kylix attributed by Nancy H. Ramage to the Heidelberg Painter and again dated to the mid-6th century B.C. (Pl. 82:a, right).¹⁴

The evidence recovered from the layers associated with the construction of the terrace provides only a *terminus post quem* of about 560 B.C. for the terrace itself. It seems unlikely that the terrace was constructed much later than this *terminus*, for, as noted above, the occupation of the surrounding area appears to have been more or less continuous from the 7th century onward, and if the terrace had been constructed more than a generation or so after the mid-6th century, one would have expected to find at least some artifacts of later 6th-century date in the relatively rich assemblage of objects recovered. Thus the terrace seems to have been constructed in the last decade or so of the Lydian empire or in the first few decades after the Persian conquest. The last kings of Lydia, Alyattes (ca. 610–ca. 560 B.C.) and his son Croesus (ca. 560–ca. 546 B.C.), were notably active builders, and in the absence of evidence suggesting that the same was true of the first Persian satraps, I favor the earlier date, but certainty is out of reach.

The date of the assemblage of material buried during the construction of the terrace, however, is independent of the date of the terrace itself. This assemblage is, as noted above, rich and relatively homogeneous, and it most likely represents the occupation of the hill and surrounding area before the construction of the terrace. The architectural terracottas, which adorned the buildings associated with this occupation phase, are probably not later than the latest datable pottery and could be substantially earlier (how much earlier may be determined by examination of the style of the terracottas, as attempted below). Thus, while several decades may separate the period of occupation represented by this assemblage and the construction of the terrace, it seems likely that the architectural terracottas included

¹³ Sardis Inv. No. P 85.29/9107. Greenewalt, Cahill, and Rautman 1987, p. 78.

¹⁴ Sardis Inv. No. P 86.93/9343. Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990, p. 160.

in this assemblage decorated buildings dating in their latest phases to the reign of Alyattes or to that of his son, Croesus.

But the terracottas found in the construction deposits associated with the terrace or in layers beneath these deposits constitute only part of the assemblage; two-thirds of the decorated architectural terracottas from this sector come from later fills and so could, on purely stratigraphic grounds, be considerably later. It is my opinion that these other fragments form a homogeneous group with the more precisely datable pieces and may be dated by association to the same period. Since this argument rests in part on typological and stylistic considerations, however, it will be postponed until after the presentation of the terracottas themselves.

THE TERRACOTTAS

The basic fabric of the tiles found at Sector ByzFort is the same micaceous “pinkish red” (around Munsell 2.5YR 5/8) clay used in local Lydian pottery and in the architectural terracottas found in other areas of the city site; it is discussed in detail in a contribution by Diana C. Kamilli to Andrew Ramage’s monograph in the Sardis publication series.¹⁵ Ramage also discusses the slips and “glazes” used to decorate Lydian architectural terracottas, and his comments apply equally well to the material from ByzFort: “the range of colors is small, consisting of the usual four, familiar from Archaic Greek pottery: black, white, red, and brown”; the “approximate general” Munsell values given by Ramage also hold good for the ByzFort material: black, N 2.5/0; white, 10YR 8/2; red, 2.5YR 5/8 (i.e., the same as the fabric, but glossier); brown, 2.5YR 2.5/2.¹⁶ Some of the tiles from Sector ByzFort are painted with the “streaky” reddish black glaze also found on Lydian pottery.

COVER AND PAN TILES

Approximately 165 fragments of cover and pan tiles were recovered from the layers associated with the construction of the Archaic terrace. Of these, roughly 35 are fragments of pitched, that is, “Corinthian-style”, cover tiles;¹⁷ 10 are fragments of “combination-hybrid” tiles, combination because they consist of a pan and a cover tile attached to each other, hybrid because they combine flat or Corinthian-style pans with curved or “Laconian-style” covers;¹⁸ 30 are fragments of Laconian-style cover tiles which do not preserve attached pans, although they may also have belonged to combination tiles; and roughly 90 are fragments of flat, that is, Corinthian-style, pan tiles. As noted above, almost all these fragments are relatively small, fist-sized or slightly larger; no complete tiles survive. All these fragments are now housed in the Sardis Expedition’s storage depots on the site.

¹⁵ *SardisMon* 5, pp. 12–14.

¹⁶ *SardisMon* 5, p. 12.

¹⁷ I use here the terminology established by Nancy A. Winter in her handbook on Greek architectural terracottas (Winter 1993a): thus “pitched” instead of “peaked”, “Corinthian-style” and “Laconian-style” instead of “Corinthian” and “Laconian”.

¹⁸ Åkerström 1966, pp. 197–198.

Before these classes of fragments are discussed separately, it should be noted that among the finds from Sector ByzFort there was just one fragment of an antefix, of Laconian style (30 in the catalogue of decorated pieces below). All the antefixes found earlier at Sardis are Corinthian rather than Laconian in style, and none of them predates the 6th century B.C.¹⁹ Thus the absence of Corinthian-style antefixes from the mid-6th-century deposit at Sector ByzFort is not surprising, and it lends new weight to the hypothesis that antefixes were not used on Corinthian-style roofs at Sardis before the late 6th century. The presence, on the other hand, of even just one Laconian-style antefix is noteworthy and should indicate that at least one hybrid roof at Sector ByzFort was decorated with antefixes along the eaves instead of a sima (a couple of decorated pieces which may be fragments of eaves tiles are included in the catalogue below as 25 and 27). It should also be noted that in addition to the decorated sima fragments from Sector ByzFort, at least one fragment of a plain and rather crudely modeled lateral sima was found; this may be a repair to a roof originally supplied with decorated simas, but it is also possible that some of the fragments of pan and cover tiles discussed below may have belonged to plain roofs, distinct from those represented by the decorative pieces.

The Corinthian-style cover tiles (Pl. 82:b) are of a uniform average thickness of 0.02 m., ranging from 0.01 m. at the thinnest part of the tile, usually the bottom edge, to 0.03 m. at the thickest part, usually the peak of the “gable”. On none of the fragments is the full height of the tile preserved, but they all seem roughly equivalent in size to the complete example in Istanbul published by Åkerström, which is 0.19 m. high.²⁰ As far as one can tell, they are all of the same type with a flange projecting from the back of the tile, which was slotted in underneath the next tile up. Almost all the fragments are painted in some way. Most as preserved bear a uniform coat of red or streaky glaze; a few are solid white; and eight are decorated in two colors: four with red diamonds on a white or plain ground, four with white diamonds on a red ground.

As noted above, the 40-odd fragments of Laconian-style cover tiles found at Sector ByzFort include about 10 pieces with attached Corinthian-style pan tiles. Of the roughly 30 other fragments recovered, however, on none do two separate lateral edges survive; thus it is possible that these too belonged to combination tiles. The same is true of all the Laconian-style cover tiles recovered by the first Sardis Expedition and studied by Åkerström and of all those recovered by the current Sardis Expedition and studied by Ramage.²¹ To my knowledge, only one Laconian-style cover tile which clearly did not have an attached pan tile has ever been found at Sardis, in the excavations at the base of the Archaic gate in Sector MMS.²² It should be noted, however, that Corinthian-style cover tiles preserving both lateral edges are equally rare; the only example that I know of is the one already mentioned, found by the first Sardis Expedition and published by Åkerström. Moreover, as Nancy A. Winter has pointed out to me, “even roofs with combination tiles need one row of single cover tiles to cover the seam where the pan elements of the left-hand and right-hand combination

¹⁹ *SardisMon* 5, p. 31.

²⁰ Åkerström 1966, p. 60, pl. 36:1.

²¹ Åkerström 1966, pp. 68–69; *SardisMon* 5, pp. 14–15.

²² Sardis Inv. No. T 88.2/9601. Found in the mid-6th-century Persian destruction level.

tiles meet at the center of the roof. Therefore the existence of a few single cover tiles does not signify a separate roofing system.”²³ Still, it is of course possible that the roof tiles of one or more buildings in this area consisted of separately made Laconian-style covers and Corinthian-style pans.

The Laconian-style cover tiles (Pl. 82:c) are more regular in thickness than their Corinthian-style counterparts; that is, they do not show the same variation in thickness from one part to another of a single tile, and they are also slightly thicker, on average about 0.025 m. rather than 0.02 m. The tiles seem to have a uniform height and diameter of approximately 0.17 m. None of the fragments recovered preserves any trace of a flange or other special feature for fitting successive tiles in the same row together, and it is likely that they simply overlapped. Like the Corinthian-style tiles, almost all the Laconian-style covers are painted but always in solid colors, about evenly divided between red, black (possibly misfired red), streaky reddish black, and white. A couple of the fragments painted white have their front (or back) edges preserved, and in both cases, a band 0.02–0.03 m. thick is painted in glaze at the front of the tile, one red, the other black. Of the fragments that preserve attached pan tiles, about half are painted solid red or black and about half are bichrome, with white covers attached to red or black pans.

The 90-odd fragments of pan tiles found (Pl. 82:d) range in thickness from *ca.* 0.015 m. to *ca.* 0.03 m. About 25 are between 0.015 m. and 0.020 m. thick, the remainder, about 65, between 0.021 m. and 0.03 m. thick. It is tempting, in the absence of much in the way of other criteria, to try to sort the tiles into two separate groups on the basis of thickness and to associate the thinner ones with the Corinthian-style cover tiles, the thicker ones with the Laconian-style cover tiles, but as there is no clear division between the thinner tiles and the thicker tiles, any such division would be essentially arbitrary. Of the tiles whose lateral edges are preserved, most conform to a single standard type. The edges are on average 0.05–0.06 m. high. The top or upper surface of the tile is flat in the middle and curves smoothly up toward the edges; the bottom or underside is also flat in the middle, but the profile of the edge is angular rather than curved, consisting of two roughly equal segments, the lower tilted at about a 45-degree angle to the bottom, the upper vertical. In a few cases, the front end (the end that overlapped the tile below) is preserved. Here, the underside of the tile has been cut back at the lateral edges (or was originally molded) so as to follow the curve of the upper surface, thus creating a projecting flange that overlapped the next tile. Behind this flange, the angular edges of the underside of the tile butted up against the smoothly curving edges of the upper surface of the tile below, preventing the tile from slipping down the roof. There are no examples in the Archaic levels at Sector ByzFort of the other type of pan tile, common in other areas of Sardis and in later layers at Sector ByzFort, which has vertical edges and a considerably more complex system for fitting the tiles together, featuring notches cut in both the front and back edges of the tile and a downturned lip on the front, which overlapped a raised ridge on the back of the tile below.²⁴ The Archaic tiles from Sector ByzFort thus presumably predate the introduction of this type of tile at Sardis.

²³ Personal communication of November 29, 1992.

²⁴ *SardisMon* 5, pp. 35–36.

Like the cover tiles, almost all the pan-tile fragments are painted in some way. Most, about 75, bear a uniform coat of red or streaky glaze on the flat part of the tile; the edges are often unglazed. On two tiles, the glaze is black, perhaps due to misfiring; about ten fragments are white-slipped; and three fragments preserve decoration in two colors: on the first two, the edges of red diamonds painted on a white ground, on the third, apparently the edge of a white diamond on a red ground. More than half of the pan-tile fragments collected are edge tiles, perhaps because these are thicker than fragments from the middle of the tile and thus easier to recognize during excavation. Since the diamond painted in the center of the tile extends to the edges in only four places, the preponderance of tiles painted in solid colors in relation to tiles decorated with painted diamonds may not have been so great as it appears. But of the tiles discussed by Ramage, most decorated with painted diamonds bore red or black diamonds on a white ground.²⁵ Since most of the tiles from Sector ByzFort were painted red or black rather than white at the edges, tiles painted in solid colors do seem to have been more common.²⁶

Ramage believed that tiles decorated with diamonds were generally earlier than tiles painted a uniform color.²⁷ If this theory is correct, then the tiles from Sector ByzFort would for the most part postdate the period when diamonds were in fashion; but this would be surprising, since these tiles are as early as almost all other securely datable examples. As already observed in the discussion of the cover tiles from Sector ByzFort, a painted diamond occurs on approximately one-third of the Corinthian-style cover tiles found but on none of the Laconian-style or hybrid examples. The distinction between these decorative schemes may thus have been typological as well as, or instead of, chronological, hybrid roofs being decorated in solid colors, even though the covers are sometimes a different color from the pans, and Corinthian-style roofs being decorated with diamond patterns. Åkerström and Ramage believed that the hybrid roofing system was earlier than the Corinthian-style system in Asia Minor,²⁸ but it is possible that the two systems coexisted from an early date.

In sum, then, at least two and possibly three different roofing systems are represented: the Corinthian-style, the hybrid with combination pan and cover tiles, and possibly the hybrid with separately made pan and cover tiles. At least one Corinthian-style roof was decorated with a diamond pattern; the decoration of the hybrid roof or roofs, by contrast, was more sober, consisting only in the use of different colors for different rows of tiles. No Corinthian-style antefixes were found, and the Corinthian-style roof or roofs must all have been supplied with both lateral or raking simas, although these were not necessarily decorated. The presence of one Laconian-style antefix indicates that at least one, conceivably the only, hybrid roof was decorated with antefixes rather than simas on the sides. The fact that the Laconian-style cover tiles are on average slightly thicker than the Corinthian-style

²⁵ *SardisMon* 5, pp. 35–36.

²⁶ The 7th-century temple at Corinth offers a very early parallel for the decoration of a roof in at least two and possibly three colors; see Robinson 1976, pp. 233–234; Robinson 1984, pp. 58–59. My thanks are due to one of *Hesperia's* anonymous reviewers for drawing my attention to this parallel.

²⁷ *SardisMon* 5, pp. 35–36.

²⁸ Åkerström 1966, pp. 197–198; *SardisMon* 5, pp. 14–15; but see Winter 1993b, p. 31, for the opposite view.

ones (pp. 368–369 above) may be of significance in the attempt to associate specific roofing systems with specific decorative simas.

DECORATIVE PIECES

The functional type (e.g., sima or revetment) of most of the 33 decorative architectural terracottas listed below is uncertain. For this reason, the first 27 tiles are ordered according to decoration rather than type; every effort is made, however, in the discussion of each fragment, to determine its original function. They were found throughout the sector, in later as well as in Archaic levels. With the exception of **1** and **11**, which are in the Manisa Museum, these pieces are now housed in the Sardis Expedition's storage depots on the site.

CATALOGUE

A. Simas or revetment plaques: pieces preserving figural decoration

1. "Theseus and Minotaur" Pl. 83

Sardis Inv. No. T 85.23/9114. Manisa Museum 6435.

Corner fragment of sima preserving part of raking face (including bottom edge), back, and soffit.

H. 0.125, W. 0.106, Depth (measured along bottom) 0.125, Th. (not including relief) 0.020 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80, fig. 28; Hostetter 1994, pp. 6–7, fig. 22.

On face of tile, human or semihuman figure in low relief, standing right, preserved from just below waist level down. Background white, contours of figure outlined in black. Right thigh and back of knee painted black (with white bands left in reserve at front and back of thigh); traces of red glaze on left thigh, as if painted in same fashion as right thigh but in red rather than black. Traces of red glaze also preserved above right thigh and on right ankle. Behind figure, an object painted in black outlines, perhaps a quiver; in front of him, the foot, in relief, of another figure standing left. Along bottom of tile, a projecting border 0.015 m. high, painted with a simple maeanderlike pattern, outlined in red.

On soffit, two perpendicular bands (one better preserved than the other), each consisting of two rows of lozenges painted in black on white ground, with contours partly incised. Outer edge of better-preserved band outlined in black; space behind bands

painted "streaky" red (W. of better preserved band, 0.094 m.). Band perpendicular to preserved face runs all the way to edge of tile; band parallel to preserved face butts up against the other.

Upper surface (i.e., the actual drain) of sima painted "streaky" red up to about knee level of relief figure; plain above that level.

Parallels between this piece and other Lydian tiles (*Sardis* X, i, no. 1, pp. 9–12, pl. II [Åkerström 1966, no. 1, p. 70, pl. 37] and possibly *SardisMon* 5, no. 5, p. 17, fig. 35 [Billot 1980, p. 283, fig. 6]) suggest a heroic combat between a man and a monster with the head or at least the horn of a bull: the struggle conventionally, though perhaps in a Lydian context improperly, described as that of "Theseus and the Minotaur". If this identification is correct, then the figure shown here would be the monster, falling back as he receives a mortal blow. As noted by Greenewalt in the initial publication of this piece, this is the first example of its type to preserve, at least in part, the bottom of the composition, showing that the monster's legs are bent rather than straight and adding other new details, of which the most enigmatic is the object painted in the background to the monster's left. A quiver makes one think of Herakles, who apparently joined the hero and monster and the "mistress of animals" on the sima represented by two fragments in New York and Paris, respectively (*Sardis* X, i, nos. 1, 2, pp. 9–15, pls. II, III [Åkerström 1966, nos. 1, 2, p. 70, pls. 37, 38:1]; cf. again *SardisMon* 5, no. 5, p. 17, fig. 35 [Billot 1980, p. 283, fig. 6]), but there is hardly enough room on this tile for another figure between the monster and the presumed corner of the sima. Perhaps the quiver belongs to the figure which I have, correctly or incorrectly, identified as

the monster; perhaps it is some other object, either associated with or independent of the monster; or perhaps this tile was cut down to fit the roof for which it was made, truncating a design which did include another figure, such as Herakles, to the left of the monster (for similarly truncated designs, cf. *Sardis* X, i, no. 12, pp. 31–32, pl. IX [Åkerström 1966, no. 7, p. 71, pls. 40:1, 41] and **20** below; this would require that we assume a very crowded composition, but perhaps not any more crowded than that of *SardisMon* 5, no. 5, which also provides a possible parallel for the combination of different figures and figure groups in a single continuous frieze). Also curious is the painting of the monster's legs, which makes him look as if he were wearing either knee-length pants or greaves but which may simply represent the musculature of his thighs.

The decoration of the soffit is the same as that on another, better-preserved corner sima found by the first Sardis Expedition (*Sardis* X, i, no. 12, pp. 31–32, pl. IX [Åkerström 1966, no. 7, p. 71, pls. 40:1, 41]; cf. *SardisMon* 5, no. 33, p. 24, fig. 69 and **26** below). The parallel of this piece, on the underside of which the rows of lozenges of the lateral sima extend all the way to the edge of the tile and are intersected by the rows of lozenges of the raking side, suggests that the face preserved on our fragment belongs to the raking rather than to the lateral sima.

2. "Theseus and Minotaur"

Pl. 83

Sardis Inv. No. T 85.36/9157.

Right edge preserved.

H. 0.07, W. 0.08, Th. at left edge (not including relief) 0.022, Th. at right edge (not including relief) 0.052 m.

From mixed context contemporary with or earlier than Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated); Hostetter 1994, pp. 6–7, fig. 21.

On face of tile, human or semihuman figure in low relief, standing left, only his thighs preserved. Background white, figure's right thigh black, left thigh red. As on preceding piece, white band left in reserve between thighs. Back of fragment plain.

This piece seems to belong to the same figure scene as **1** and may be from the same frieze (though probably from a different tile), in which case this would be the hero, striding forward as he strikes down the monster. The bottom part of the piece

grows considerably thicker toward the right edge. This swelling may suggest that the piece belongs to a corner tile, perhaps from the lower right corner of the same gable to the lower left corner of which **1** belongs. It could, however, also mark the beginning of a flange such as might project from the downslope edge of a raking-sima tile or, on the other hand, the beginning of the raised edge or border of the pan of a lateral-sima tile. But since the parallels for this type of figural composition (i.e., for figure groups arranged either in "metopal" friezes, such as *Sardis* X, i, nos. 1, 2, pp. 9–15, pls. II, III [Åkerström 1966, nos. 1, 2, p. 70, pls. 37, 38:1], or in continuous friezes such as *Sardis* X, i, no. 11, pp. 27–30, frontispiece, fig. 11 and no. 14, p. 33, fig. 16 [Åkerström 1966, nos. 4–6, pp. 70–71, pl. 39:1–3]) all belong to raking simas, so most probably does this piece.

3. Heraldic animal

Fig. 3, Pl. 83

Sardis Inv. No. T 85.25/9116.

No preserved edges.

H. 0.07, W. 0.07, Th. (not including relief) 0.021 m.

From mixed context contemporary with or earlier than Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated).

In center of fragment, raised vertical border; on right side of border, hoof and neck of animal in relief. Background white, vertical border black, as are contours of animal and line, perhaps of shoulder, to right of juncture between neck and leg. Two red spots clearly visible on raised hoof; traces of more spots on leg. Back of fragment plain, except for a horizontal red stripe along bottom as preserved.

His hoof and spots show that this animal is a deer, and the composition is probably a heraldic one, in which the deer raises his hoof to the left while looking back over his shoulder, perhaps toward another deer in the same frieze; see Figure 3 and **4**.

4. Heraldic animal

Fig. 3, Pl. 83

Sardis Inv. No. T 85.26/9117.

Top edge preserved.

H. 0.07, W. 0.05, Th. of upper border 0.027, Th.

below upper border (not including relief) 0.020 m.

From mixed context contemporary with or earlier than Archaic terrace.

In center of fragment, raised vertical border; on right side of border, hoof of animal in relief. Background white, vertical border red, as are contours of hoof.

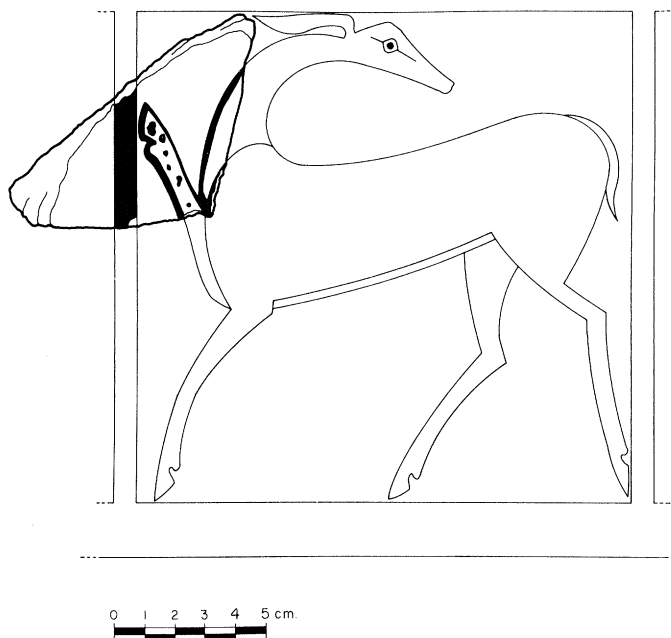


FIG. 3. Conjectural reconstruction of **3** and **4**

Along top of relief, projecting border 0.018 m. high; surface of border abraded, no decoration preserved. Top of fragment painted red; back plain.

This piece is very similar to **3** and probably belongs to the same frieze. The vertical borders suggest that this frieze was “metopal” in arrangement, as was possibly also the case with **1** and **2** above. This arrangement is ill-suited to a lateral sima, and the known parallels come either from raking simas (e.g., the figural pieces noted under **2** above) or from “geison sheaths” (*SardisMon* 5, no. 42, p. 26, fig. 83). The former seems the most likely alternative (**4** could only belong to a corner “geison sheath”; see Greenewalt, Ramage, Sullivan, Nayır, and Tulga 1983, p. 27, fig. 34), but these pieces could also come from revetment plaques, and it might be argued that antithetical compositions, to one of which they must belong, are inappropriate for a raking sima.

The animals of **3** and **4** are examples of a previously unattested figural type, but they join a varied menagerie of heraldic beasts on Lydian terracottas, including horses (*Sardis* X, i, no. 12, pp. 31–32, pl. IX

[Åkerström 1966, no. 7, p. 71, pls. 40:1, 41]), lions (*Sardis* X, i, no. 4, pp. 19–21, pl. V [Åkerström 1966, no. 12, pp. 72–73, pl. 43:1]; cf. also the lions of Åkerström 1966, pls. 61, 62, from Akalan), and griffons (Åkerström 1966, no. 11, p. 72, pl. 42; *SardisMon* 5, no. 28, pp. 22–23, figs. 60, 61; cf. also Åkerström 1966, pl. 16:1, in Boston, possibly from Sardis; for parallels in vase painting, see p. 383 below).

5. Bird

Pl. 83

Sardis Inv. No. T 85.3/9031.

Fragment of face of relief only (i.e., not the complete thickness), with no preserved edges.

H. 0.04, W. 0.05, Th. 0.018 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated); Hostetter 1994, pp. 10–11, fig. 27.

Surface of fragment convex. On right side, scale or feather pattern in black glaze on white ground

with dots in center of each feather. Along bottom of feather pattern, brown band. On left side of feather pattern, two black convex bands (i.e., bands curving in toward feather pattern); issuing horizontally from these bands, three brown stripes in zone bordered on top by black band (joined on right to broader black stripe running upward), on bottom by band extending line of bottom band of feather pattern.

The feather pattern is reminiscent of the pattern on the wings of the birds represented on simas from Mylasa (Åkerström 1966, pl. 59:1) and elsewhere (references in initial publication by Greenewalt; see also Billot 1980, p. 288), and it is to a frieze of this type (at Sardis already attested by *SardisMon* 5, no. 11, p. 18, fig. 42, a revetment plaque) that this fragment probably belongs. It is curious, however, that the border of the feather pattern or wing is convex rather than concave as on the other known examples and as is normal for representations of wings and shoulders. This design, a continuous procession of birds, seems unsuitable for a lateral sima, and the parallels suggest a raking sima or revetment.

6. Human or semihuman figure Pl. 84

Sardis Inv. No. T 86.3/9203.

Left edge preserved.

H. 0.075, W. 0.064, Th. of relief panel (not including relief) 0.031, Th. of lower border 0.034 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990, pp. 160, 171–172, note 37 (mentioned but not illustrated).

On left edge of fragment, raised vertical border; along bottom, beginning of what seems to be a rounded molding; in figure frame, lower leg and foot of human or semihuman figure. Background white, vertical border black, molding along bottom red. Contours of figure outlined in black. Just above ankle, horizontal black line, unevenly drawn, extending from back of leg to right edge of fragment: the hem of long skirt, or perhaps cord or chain binding ankles. On leg, black spots: decoration of skirt, or perhaps body hair. Traces of red glaze visible on back of fragment.

This figure resembles at first glance the “mistress of animals” represented on the tile from Sardis (*Sardis* X, i, no. 2, pp. 13–15, pl. III [Åkerström 1966, no. 2, p. 70, pl. 38:1]; cf. *SardisMon* 5, no. 4, pp. 16–17, fig. 34 [Billot 1980, p. 277, fig. 2]) in the Louvre, and

it may in fact belong to a similar (though clearly not identical) figure; the molding along the bottom is very close to that of the Louvre fragment. The spots on the figure’s leg, however, are disconcerting. If they are meant to represent the pattern on a garment, why are they found only on the leg? This detail led Greenewalt to suggest that this is the hairy leg of Silenus led before Midas in chains, a figure scene unparalleled on other terracottas but known, for example, from contemporary Laconian vase painting (see Diehl 1964, cols. 575–578, fig. 33; Stibbe 1972, p. 185).

If this fragment comes from a sima, as is most likely (the heavy rounded molding at the bottom seems more appropriate for a sima than for a revetment, and it would also be a normal place for a sima tile to break), then it should belong to a raking sima, for it must come from near the bottom of the face of the sima and there is no trace at the left edge of the fragment of a raised edge or border along the left side of the tile, as a lateral sima would require. The vertical border on this fragment suggests that it, like the preceding two pieces, comes from a “metopal” frieze, and that too calls for a raking rather than a lateral sima.

B. Simas or revetment plaques: pieces preserving ornamental decoration

7. Rounded upper border Fig. 4, Pl. 84

Sardis Inv. No. T 86.5/9126.

Top edge preserved.

H. 0.08, W. 0.048, Th. of upper border 0.06, Th. below upper border (not including relief) 0.03 m.

From mixed context postdating Archaic terrace.

Narrow band at top from which projects rounded upper border decorated in black glaze on white ground. On right side of border, a black oblong with vertical reserved band at its left side, presumably one of series of alternating black (and possibly also red) and white panels. Below upper border, trace of curved ornament, raised in relief and painted black. Back of fragment plain. Front and back faces parallel, but top angled down toward back (so that angle of top to back is slightly obtuse, angle of top to face, slightly acute).

This border is similar to those of *Sardis* X, i, nos. 6, 7, pp. 22–24, pl. VI and fig. 7 (Åkerström 1966, nos. 3 and 2, respectively, pp. 74–75, pl. 45:1). It probably belongs with **8**, *q.v.* for discussion.

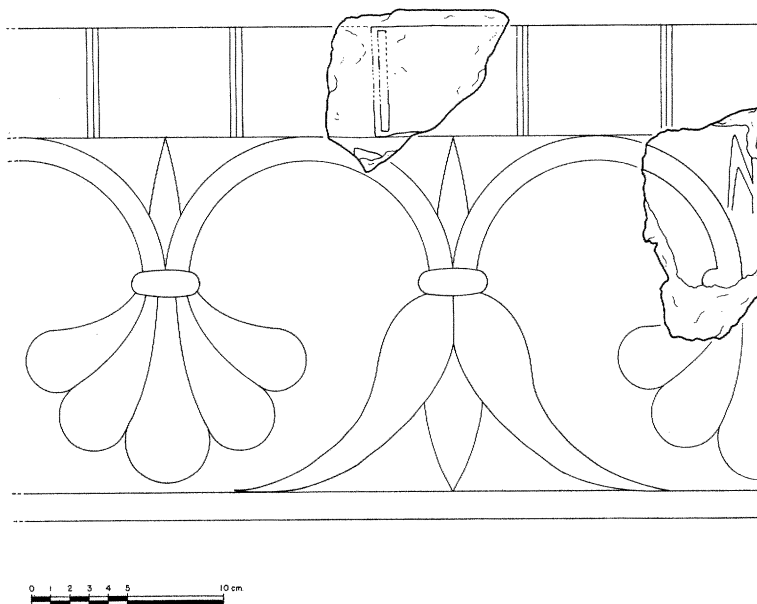


FIG. 4. Conjectural reconstruction of **7** and **8**

8. Lotus and palmette?

Fig. 4, Pl. 84

Sardis Inv. No. T 87.6/9842.

Right edge preserved.

H. 0.201, W. 0.060, Th. 0.036 m.

From mixed context postdating Archaic terrace.

Curving down from upper left-hand part of fragment toward lower right, raised band, 0.011 m. wide, which seems to follow arc of circle almost touching right edge of fragment. At point where curving band approaches this edge, semicircular swelling on left side of band. Just enough preserved below swelling to show that band continued, presumably curving back to left. Background white, band picked out in black glaze. Along right edge of fragment, brown vertical stripe; in angle between curving band and vertical stripe, black point or dart like an upside-down V; along top of fragment as preserved, traces of black horizontal border. Back of fragment plain but marked with one vertical and two intersecting horizontal grooves, perhaps belonging to identifying symbol or perhaps simply left by workman cleaning his tools.

The back of this fragment is rougher than that of the preceding, but in other respects (fabric, thickness, and glaze) these two fragments, **7** and **8**, are very

similar. The traces of a horizontal border running along the top of **8** may belong to a rounded molding like that of **7**; the traces of a curved ornament on **7** may belong to a curving band like that of **8**. The decoration of **8** is reminiscent of a pendent lotus and palmette (Fig. 4); the curving band would belong to one of the tendrils that connect the lotus flowers and the palmettes; the swelling on the left-hand side of the band would belong to the ringlike stem of a lotus or palmette, the upside-down V, to the point or dart that issues from below (or in the case of a pendent chain, from above) the blossom. This would then be a lotus or palmette bisected at the edge of the fragment, as on a pair of simas found by the first Sardis Expedition (*Sardis* X, i, nos. 21, 22, pp. 39–42, pl. XII [Åkerström 1966, nos. 10, 11, p. 76, pl. 46:1, 2]; cf. Åkerström 1966, nos. 12–15, p. 76, pl. 47; *SardisMon* 5, nos. 56, 57, pp. 28–29, fig. 95, and **15** below; for pendent examples, Åkerström 1966, no. 29, p. 78, pl. 50:3; *SardisMon* 5, no. 58, p. 29, fig. 95; cf. also Billot 1980, pp. 268 and 290, on whether the restoration of these pieces as pendent is correct).

The scale of this lotus-and-palmette chain, however, would be twice that of these examples and would presumably thus have to occupy the whole vertical face of the tile, rather than just the upper border

(compare the independent lotus flowers on lateral-sima tiles such as *Sardis* X, i, no. 23, pp. 42–43, fig. 22 [Åkerström 1966, no. 22, p. 77, pl. 49:1]). If the tile in question is a sima, it should therefore be from a raking sima; on a lateral sima, the pattern, really only suitable for a continuous frieze, would be impossibly truncated.

This interpretation of course remains conjectural. The pieces in question may not belong together. If they do, they could belong to a revetment rather than a sima, in which case the lotus-and-palmette pattern might face upward rather than downward (although the obtuse angle of the top of 7 in relation to the back of the fragment seems more suitable for a sima than for a revetment). The dart or point on the right edge of the fragment is troubling, for it should, according to this interpretation, be bisected on its vertical axis, although it may simply have been painted carelessly. And it is possible that the ornament in question is not a lotus-and-palmette chain but perhaps a scroll or lyrelike design like that of the so-called star-and-scroll tiles (see 16–20 below).

9. Wave or “turret” motif

Pl. 84

Sardis Inv. No. T 85.33/9142.

Top edge preserved.

H. 0.090, W. 0.083, Th. (not including relief) 0.031 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated).

Presumably one of row of abstract, rounded, wave-like ornaments in low relief. Background red, “wave” white, further decorated with targetlike design consisting of black circle enclosing concentric red circle with black dot in middle. Below “wave”, narrow horizontal band projecting slightly from planes of “wave” and of surface below. Background of band, like that of “wave”, is white; along top of band, black stripe; below stripe, traces of diamond pattern also painted black on white ground. Bottom of fragment chipped, but band appears to be about 0.015 m. thick. Back of fragment painted red.

The wave ornament of this fragment also occurs on several pieces found by the first Sardis Expedition (*Sardis* X, i, nos. 23–25, pp. 42–44, fig. 22, pl. XIII, pl. XIV:A, B [Åkerström 1966, nos. 22, 28, and 27, respectively, p. 77, pls. 49:1, 50:2]; cf. also Åkerström

1966, nos. 23–26, p. 77, pls. 49:2, 50:1) and one other found by the current Sardis Expedition (*Sardis* Mon 5, no. 67, p. 30, figs. 100, 101). Two of the tiles found by the first Sardis Expedition were almost complete (*Sardis* X, i, no. 23, pp. 42–43, fig. 22 [Åkerström 1966, no. 22, p. 77, pl. 49:1], Åkerström 1966, no. 23, p. 77, pl. 49:2). Both are from lateral simas, with the row of waves or turrets along the top and two large lotus flowers flanking the spout below. On the evidence of these parallels, this piece may then also tentatively be identified as from a lateral sima.

10. Chain of buds

Pl. 84

Sardis Inv. No. T 85.34/9143.

Top edge preserved.

H. 0.066, W. 0.124, Th. of upper border 0.042, Th. below upper border 0.034 m.

From construction layers associated with Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80, fig. 28.

Along top of fragment, projecting border 0.04 m. high. Border decorated with chain of buds painted red and black on white ground; buds outlined in black with red diamonds at their centers; red tendrils connecting buds. Along bottom of projecting border (below chain of buds), red stripe. Below projecting border, traces of what appear to be two tendrils springing in opposite directions from single point, more or less centered between two of buds above. These tendrils similar to those of chain of buds but rendered in low relief, as well as being painted red. To right of right-hand tendril, spot of black paint. Back of fragment, which is slightly concave, painted red.

The decoration of this fragment is without close parallel among known Lydian architectural terracottas (for parallels in vase painting, see p. 384, note 37 below). The combination of painted and relief decoration here, as on 8, is notable. The nature of the ornament below the upper border is uncertain; the surviving traces may belong to a series of pairs of buds similar to those above but arranged in a different pattern. The size of the upper border is comparable with that of simas such as 7, but the meander pattern of the large revetment plaque found by the first Sardis Expedition is similar in scale (*Sardis* X, i, no. 4, pp. 19–21, pl. V [Åkerström 1966, no. 12, pp. 72–73, pl. 43:1]); nevertheless, the apparent presence on this piece of two superimposed vegetal patterns does

seem more appropriate for a sima than for a large revetment plaque.

11. Egg and dart

Pl. 85

Sardis Inv. No. T 85.30/9139. Manisa Museum 6426.

Top edge preserved.

H. 0.092, W. 0.103, Th. of upper border 0.035, Th. below upper border (not including relief) 0.025 m. From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80, fig. 28.

Along top of fragment, projecting border or fascia 0.021 m. high; below, molded egg-and-dart pattern 0.06 m. high and turned upward rather than downward; beneath egg and dart, the beginning of what seems to be narrow half-round molding. Upper border red, eggs white within black borders, darts red on white ground, molding at bottom red. W. of borders around eggs, 0.008 m.; W. of eggs within borders, 0.03 m.; H. of eggs within borders, 0.05 m. Top and back of fragment (latter slightly concave) plain.

This molding is very similar in size and style to the upper borders of a pair of lateral simas found by the first Sardis Expedition (*Sardis* X, i, nos. 9, 10, pp. 24–26, pl. VII and fig. 9, pl. VIII [Åkerström 1966, nos. 17, 18, pp. 76–77, pl. 48:1, 3]), and those parallels suggest that it belongs to the top of a sima, with the egg-and-dart pattern facing upward rather than downward as usual (cf., however, Billot's comments [1980, p. 68] on *SardisMon* 5, nos. 34, 35, p. 24, figs. 70, 71). The three fragments that follow may all belong to the same sima, of the same type as *Sardis* X, i, nos. 9, 10: a lateral sima with an egg and dart facing upward along the top and another egg and dart facing downward along the bottom.

12. Egg and dart

Pl. 85

Sardis Inv. No. T 85.38/9164.

No preserved edges.

H. 0.102, W. 0.085, Th. (not including relief) 0.026–0.027 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated).

On upper(?) part of fragment, section of molded egg-and-dart pattern facing upward, preserving part of egg within raised borders, and to right, traces of border of neighboring egg. Egg white, borders black. W. of egg within borders, 0.03 m. Below egg and dart, a projecting half-round molding painted red; flat white band beneath, bordered along bottom by another red half-round molding. H. of band including moldings, 0.057 m. Below lower molding, traces of black glaze. Back of fragment plain.

This piece is comparable in scale and decoration with the preceding and may come from the same sima. If it is in fact to be oriented as I have suggested, the traces of black paint at the bottom of the fragment may belong to another egg-and-dart pattern, this time facing downward (as on *Sardis* X, i, nos. 9, 10, pp. 24–26, pl. VII and fig. 9, pl. VIII [Åkerström 1966, nos. 17, 18, pp. 76–77, pls. 48:1, 3]). Alternatively, the fragment could be oriented the other way around, with the preserved egg belonging to the lower border either of a sima such as *Sardis* X, i, nos. 9, 10, or of another type of sima with a different pattern on its upper border, such as the lotus and palmette of *Sardis* X, i, nos. 21, 22, pp. 39–42, pl. XII (Åkerström 1966, nos. 10, 11, p. 76, pl. 46:1, 2); cf. 15 below.

13. Egg and dart

Pl. 85

Sardis Inv. No. T 91.7/8963.

Fragment of face of relief only (i.e., not the complete thickness), with no preserved edges.

H 0.036, W. 0.415, Th. 0.143 m.

From mixed context contemporary with or earlier than Archaic terrace.

Fragment of molded egg within raised borders. Egg white, borders black. Traces of black paint along top of egg. W. of egg within borders, 0.029 m.; H. of egg within borders, 0.036 m.

The one preserved egg of this piece is equal in width to the eggs of 11 but 0.01 m. shorter, but they could nonetheless belong to different rows in the same sima.

A similar but even less well preserved fragment from a later context has been omitted from this catalogue.

14. Egg and dart

Pl. 85

Sardis Inv. No. T 89.9/9660.

No preserved edges.

H. 0.078, W. 0.200, Th. (not including relief) 0.026–0.027 m.

From mixed context contemporary with or earlier than Archaic terrace.

Molded egg-and-dart pattern. Traces of paint on eggs suggest that they were painted white within black borders. W. of egg within borders, 0.043 m.; H. of egg within borders, 0.046 m. Back of fragment plain.

The eggs of this fragment seem more rounded and squat than those of **11**, suggesting that this fragment may belong to a different frieze (see notes on **12** above for some possibilities).

15. Lotus and palmette

Pl. 85

Not inventoried. 1984, Tr. 8, surface find.

No preserved edges.

H. 0.065, W. 0.065, Th. (not including relief) 0.025 m.

Surface find.

Palmette enclosed by lotus petals in relief. Background white, central leaf of palmette red, flanking leaves black, lotus petals red. Above, horizontal raised band or fascia painted red. Above this band, no decoration preserved.

This pattern resembles in scale the lotus-and-palmette chains of the pair of lateral simas already mentioned in connection with **8** and may belong to the same type of tile (*Sardis X*, i, nos. 21, 22, pp. 40–42, pl. XII [Åkerström 1966, nos. 10, 11, p. 76, pl. 46:1, 2]; cf. also *SardisMon* 5, nos. 56–58, pp. 28–29, fig. 95). The area preserved above the raised band that runs along the tops of the flowers raises the possibility that the decoration faced downward rather than upward, as was apparently the case with *SardisMon* 5, no. 58 (but compare again Billot's objections to Ramage's interpretation of this fragment [Billot 1980, pp. 268, 290]). Alternatively, the pattern may have run along the bottom rather than the top of the tile.

On the tiles published in *Sardis X*, i (nos. 21, 22), the lotus-and-palmette pattern is combined with the egg-and-dart pattern, and that may have been true of this fragment as well, in which case this fragment could conceivably have been combined either on a sima or on a revetment with any of the egg-and-dart fragments listed above (**11–14**).

16. Scroll

Pl. 85

Sardis Inv. No. T 85.32/9141.

Fragment of lateral sima as shown by traces of spout; no preserved edges.

H. 0.091, W. 0.080, Th. (not including relief) 0.021 m.

From construction layers associated with Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80, fig. 28.

On left(?) side of fragment, the edge of a spout; to right, a scroll pattern in relief. Background white, edge of spout and scroll picked out in black. Below scroll, a trace of black paint, perhaps from bottom border of tile. Back of fragment plain.

The fragment of the spout shows that this piece belongs to a lateral sima. The scroll could be an independent element or one half of a lyre pattern, like that of the star-and-scroll pattern occurring on both "geison sheaths" and raking simas (*Sardis X*, i, nos. 16–20, pp. 34–39, figs. 18–20, pl. XI [Åkerström 1966, nos. 4–8, pp. 75–76, pls. 44, 45]; *SardisMon* 5, nos. 42–50, pp. 26–27, figs. 83–93). An analogy for the use of this pattern in a lateral sima is found in two simas published in *Sardis X*, i (nos. 6, 7, pp. 22–24, pl. VI, fig. 7 [Åkerström 1966, nos. 3 and 2, respectively, pp. 74–75, pl. 45:1]), in which the spout is flanked by stars similar to those of the star-and-scroll pattern. Tiles whose spouts are flanked by stars could in fact have been used in alternation in the same façade with tiles whose spouts are flanked by scrolls. *Sardis X*, i, nos. 6 and 7 have upper borders of the same type as **7** (rounded moldings with alternating black, white, and [at least in the case of the former examples] red panels), but other patterns are possible, such as the meander found on a sima decorated with a row of stars (*Sardis X*, i, no. 8, pp. 23–24, fig. 8 [Åkerström 1966, no. 1, pp. 73–74, pl. 44:1]), the "wave" design of *Sardis X*, i, no. 23, pp. 42–43, fig. 22 (Åkerström 1966, no. 22, p. 77, pl. 49:1) and **9** above, or perhaps even an egg and dart.

17. Scroll

Pl. 86

Sardis Inv. No. T 86.10/9268.

No preserved edges.

H. 0.061, W. 0.066, Th. (not including relief) 0.022 m.

From construction layers associated with Archaic terrace.

Published: Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990, pp. 160, 171–172, note 37 (mentioned but not illustrated).

The top or bottom of two opposing scrolls in relief. Background white, scrolls black.

These scrolls resemble those of the star-and-scroll frieze (see references listed under **16** above), except that they are not joined, as is usual, by a ringlike band from which one or a series of buds emanates both upward and downward. In this respect, the fragment in question is similar to the lateral sima fragment, **16**, and so may belong to a tile exhibiting scroll or lyre designs on either side of a central spout, instead of a continuous star-and-scroll pattern.

18. Scroll

Pl. 86

Sardis Inv. No. T 85.31/9140.

Top(?) and left edges preserved.

H. 0.065, W. 0.05, Th. of upper border 0.026, Th. below upper border (not including relief) 0.018 m. From construction layers associated with Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated).

Part of scroll in relief below projecting upper border or fascia. Entire face of fragment black. Top also black; back plain except for black stripe.

This fragment could belong to a scroll of the same type as those of two of the star-and-scroll tiles published in *SardisMon* 5 (nos. 42 and 44, pp. 26–27, figs. 83, 86 [the latter incorrectly labeled as no. 43]), which are more complex than the scrolls most closely resembling **17**; if it is like no. 42, it should come from the lower right rather than the upper left-hand corner of the tile and thus belong to a revetment plaque rather than a sima. The solid black glaze is surprising and may be the result of misfiring (the fabric of this piece is burned grey).

19. Star

Pl. 86

Sardis Inv. No. T 83.5/8744.

No preserved edges.

H. 0.07, W. 0.07, Th. (not including relief) 0.020 m. From mixed context postdating Archaic terrace.

Published: Greenewalt, Rautman, and Meriç 1986, pp. 13–17, fig. 24.

Inner (rounded) end of ray or point of star, of star-and-scroll type, and part of palmette design from which points of stars originate, all in relief. Background white, point of star black, palmette design red. Back of fragment plain.

20. Star?

Pl. 86

Not inventoried. 9-VII-85, northeast corner, Basket 107.

Top(?) and left edges preserved.

H. 0.061, W. 0.036, Th. of upper border 0.034, Th. below upper border (not including relief) 0.019 m.

From Hellenistic context.

On left edge of upper border, black rectangular panel; to right, area painted white, presumably one of series of alternating white and black panels. Immediately below upper border, thin stripe of red glaze; below this, white background with what looks like tip of star in relief, painted red and pointing toward upper right-hand corner of fragment. Back of fragment plain except for red stripe.

As preserved, the decoration of this fragment resembles in scale and design one of the stars either of the star-and-scroll pattern or of the row of stars on a raking sima published in *Sardis* X, i (no. 8, pp. 23–24, fig. 8 [Åkerström 1966, no. 1, pp. 73–74, pl. 44:1]). What survives, however, is only the upper right corner of such a star, only 0.03 m. from the left edge of the fragment. Thus we would have to assume that the tile has been cut and the design truncated in such a way that approximately four-fifths of the leftmost star of the tile was removed. This is entirely possible, however, as is dramatically shown by the truncated horse of a sima found by the first Sardis Expedition (*Sardis* X, i, no. 12, pp. 31–32, pl. IX [Åkerström 1966, no. 7, p. 71, pls. 40:1, 41]; cf. **1** above). This example suggests that this kind of truncation is (as seems logical) more likely to occur at the end than in the middle of a frieze, which might indicate in turn that the fragment in question, whose vertical edge is clearly not the corner of a sima, should belong to a “geison sheath” or other type of revetment tile. For a reconstruction of the sheathing of the corner of a geison, see Greenewalt, Ramage, Sullivan, Nayır, and Tulga 1983, p. 27, fig. 34.

21. Maeander

Pl. 86

Not inventoried. 21-VI-84, Tr. 8, Basket 63.

Top(?) and right edges preserved.

H. 0.062, W. 0.066, Th. (not including relief) 0.025 m.

From mixed context postdating Archaic terrace.

In low relief, hook-maeander pattern within continuous upper and lower borders. Background white, maeander red.

For this and the following two pieces, cf. *Sardis* X, i, no. 4, pp. 19–21, pl. V (Åkerström 1966, no. 12, pp. 72–73, pl. 43:1); *SardisMon* 5, nos. 1, 3, 9, 13, 23,

27, 59–62, pp. 15–16, 18–19, 21–22, 29, figs. 30, 40, 45, 54, 59, 96; Billot 1980, pp. 279–280, figs. 3, 5.

22. Maeander Pl. 86

Sardis Inv. No. T 85.28/9129.

Top(?) edge preserved.

H. 0.054, W. 0.096, Th. (not including relief) 0.024 m.

From mixed context postdating Archaic terrace.

In low relief, hook-maeander pattern within continuous upper and lower borders. Background white, no glaze preserved on maeander. Back of fragment plain.

This piece and **21** are very similar in scale and decoration, but their respective maeanders are going in opposite directions. They could belong to the upper and lower borders of a single large revetment plaque; in scale they are comparable with the lower borders of *Sardis* X, i, no. 4, pp. 19–21, pl. V (Åkerström 1966, no. 12, pp. 72–73, pl. 43:1) and of *SardisMon* 5, no. 27, pp. 22–23, fig. 59, both revetment plaques, and these are the closest parallels. But maeander patterns are also found on simas such as *Sardis* X, i, no. 8, pp. 23–24, fig. 8 (Åkerström 1966, no. 1, pp. 73–74, pl. 44:1), and the upper borders of *SardisMon* 5, nos. 1 and 3, pp. 15–16, fig. 30, possibly also simas, are similar in scale and design.

23. Maeander Pl. 86

Sardis Inv. No. T 85.24/9115.

Top(?) edge preserved.

H. 0.066, W. 0.100, Th. of upper border 0.029, Th. below upper border 0.022 m.

From mixed context contemporary with or earlier than Archaic terrace.

Published: Greenewalt, Cahill, and Rautman 1987b, p. 80 (mentioned but not illustrated: mistakenly identified as T 85.28/9129 [22]).

In low relief on projecting upper border of fragment, maeander pattern of different type from **21** and **22**, without continuous upper and lower borders (i.e., double broken maeander). Background white, maeander red. On right side of fragment, crude incisions in background following pattern of maeander. Back of fragment plain.

The maeander of this fragment is of a type without exact parallel among known Lydian architectural terracottas. Like **21** and **22**, it could belong equally well to a sima or to a revetment plaque. For comparanda, see **21** above.

24. Top(?) border of sima or revetment plaque?

Not inventoried. 12-VI-84, Tr. 1, Basket 44.

Top (or bottom) edge preserved.

H. 0.012, W. 0.06, Th. 0.031 m.

From mixed context postdating Archaic terrace.

On face, black petals on white ground; on top of fragment, “streaky” reddish black glaze.

This fragment could come from the top of a sima or revetment plaque or from the bottom of the latter.

25. Soffit of sima or eaves tile Pl. 87

Not inventoried. 1984, Tr. 1, Basket 49.

No preserved edges.

W. 0.17, Depth 0.123, Th. 0.020 m.

From mixed context postdating Archaic terrace.

On underside, diamond pattern in black glaze on white ground, bordered by red stripe 0.028 m. thick; plain surface behind red stripe. Top of fragment painted red.

The decoration of this piece is very similar to that of three lateral-sima tiles published in *SardisMon* 5 (nos. 21, 22, p. 21; no. 66, p. 30, fig. 99).

26. Soffit of sima Pl. 87

Sardis Inv. No. T 87.3/9432.

Fragment of face of soffit only (i.e., not complete thickness); right edge preserved.

W. 0.05, Depth 0.11, Th. 0.018 m.

From mixed context postdating Archaic terrace.

On preserved surface, parts of two black lozenges (outlines incised) on broad white band, bordered at bottom by black line, with area on other side of black line painted red.

This pattern is identical in scale and design with the ornament of the soffit of the sima fragment **1** (*q.v.*, for references) and may come either from a raking or from a lateral sima.

27. Soffit of sima or eaves tile Pl. 87
(or possibly bottom border of revetment?)

Sardis Inv. No. T 86.16/9353.

Front, top, and bottom surfaces preserved, broken on both sides and at back.

W. 0.078, Depth 0.040, Th. 0.028 m.

From mixed context postdating Archaic terrace (not from Archaic context as indicated in initial publication).

Published: Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990, pp. 160, 171–172, note 37 (mentioned but not illustrated: mistakenly identified as T 86.39/9265).

On front surface, two rows of petals, painted black on white ground within black upper and lower borders. Petals of upper row point toward upper left, those of bottom row toward bottom left; combined, they are like row of chevrons pointing to right. On underside, diamond pattern in black on white ground; upper surface painted white.

The orientation of this fragment is uncertain, but I identify the surface decorated with a diamond pattern as the underside on the basis of the similarity between this pattern and that painted on the soffits of numerous *sima* tiles (*SardisMon* 5, nos. 21, 22, p. 21; no. 66, p. 30, fig. 99; see **25** above). The decoration of the surface I identify as the front is similar to that of **24**, and in its resemblance to a chevron pattern it is also reminiscent of the decoration of the horizontal borders of many other tiles (e.g., *Sardis* X, i, nos. 1–3, 10, pp. 9–17, 26, pls. II, III, V, VIII [Åkerström 1966, nos. 1–3, p. 70, no. 18, p. 77, pls. 37, 38:1, 2, 48:3]; *SardisMon* 5, nos. 43 and 44, pp. 26–27, figs. 87 and 86, respectively). This fragment seems then to belong to the lower border of a *sima*, but the depth of the fragment is surprising: 0.040 m., with no sign of the vertical face of a *sima* preserved. The normal projection of the horizontal borders of a *sima* or revetment plaque is 0.01–0.02 m., although the maximum projection of the molding of *sima* **7** is 0.03 m. Thus it remains possible that this fragment belongs to an eaves tile rather than a *sima* or that it was oriented differently (i.e., with the diamond pattern on the face) and belongs to a revetment.

C. Revetment plaque

28. Volute ornament

Pl. 87

Sardis Inv. No. T 86.11/9269.

Bottom edge preserved.

H. 0.126, W. 0.096, Th. 0.036 m.

From construction layers associated with Archaic terrace.

Published: Greenewalt, Cahill, Dedeoğlu, and Herrmann 1990, pp. 160, 171–172, note 37 (mentioned but not illustrated).

Preserved: edges of two adjacent volutes (defined by narrow raised bands or ridges), oblong bar connecting

them at their juncture, dart projecting downward from bar, and part of separate diamond in interstice above juncture of volutes. Background white, relief parts black, except for diamond above volutes, which may be red. Back of fragment plain.

This piece has no close parallel among known Lydian architectural terracottas (for parallels from other sites and in other media, see p. 384 below). It may, as Greenewalt suggested, come from a large star-and-scroll pattern; it could also be from the bottom of an anthemion design, perhaps to be combined with **29**, *q.v.*

29. Palmette ornament?

Pl. 88

Sardis Inv. No. T 89.10/9665.

No preserved edges.

H. 0.155, W. 0.149, Th. 0.036 m.

From mixed context contemporary with or earlier than Archaic terrace.

In upper left corner of fragment, oblong bar in relief. Extending upward and downward from center of bar, narrow raised bands or ridges (like ridges that define edges of volutes on preceding piece). Trace of upper ridge preserved; lower ridge splits into two separate ridges, curving down to right and left, respectively. Trace of left-hand ridge preserved. (In area just left of right-hand ridge, slight swelling, possibly trace of relief decoration but also possibly trace of blister or other flaw that developed during firing of piece.) To right of right-hand ridge, more or less parallel curving ridge, meeting lower right corner of oblong bar in upper left corner of fragment. Still further to right, third more or less parallel ridge, broken off at level of bottom of oblong bar. At this point, third ridge seems to be growing thicker, right side apparently curving back to right, left side to left. Between this ridge and oblong bar, nail hole extending through full thickness of fragment.

Background white, relief parts black, except for oblong bar, which bears traces of diamond pattern painted in black on white ground. Visible in many places on background of fragment: lines lightly incised by point of tool used to touch up tile after removal from mold but before firing. Back of fragment plain.

The pattern of the decoration of this fragment is uncertain. The curving ridges to the right of the oblong bar may define the edges of the leaves of a palmette, the tip of whose leftmost leaf is defined

by the right half of the bottom of the oblong bar. By this interpretation, there would presumably have been another palmette to the left, divided from this one by the space directly below the oblong bar. This interpretation does not explain the ridge that projects from the top of the oblong bar, and the treatment of the curving ridge on the right side of the fragment is also problematic. As noted above, the right side of this ridge seems to be curving back to the right, the left side to the left; appearances may be deceiving, however, especially on a tile that, like this one, has apparently been extensively touched up.

At any rate, this fragment is very close in scale, style, and fabric to the preceding one; combined, the two fragments may have formed part of a large anthemion design, the volute-palmette ornament that was the standard decoration of Corinthian-style antefixes of the second half of the 6th and 5th centuries at Sardis (Åkerström 1966, nos. 1–4, pp. 69–70, pl. 36:2–5; *SardisMon* 5, nos. 68–99, pp. 31–34, figs. 102–118).

D. Miscellanea

30. Laconian-style antefix? Pl. 88

Not inventoried. 27-VII-85, Tr. 11, Basket 30.

Bottom and right edges preserved.

H. 0.093, W. 0.058, Th. at bottom 0.033, Th. at top 0.045 m.

From construction layers associated with Archaic terrace.

Face of fragment white with black borders 0.018 m. wide along bottom, 0.022 m. wide along side. Trace of red visible where black glaze of bottom border has flaked away. Bottom and side of fragment red. Back of fragment plain and unevenly but smoothly finished. Angle of face of fragment to bottom slightly acute. Fragment grows thicker toward top.

The estimated diameter of this fragment is approximately 0.25 m., thus 0.07–0.08 m. greater than the standard external diameter (0.17–0.18 m.) of the “Laconian-style” cover tiles from Sector ByzFort.

31. Bottom of spout? Pl. 88

Not inventoried. 1989, Tr. 11/12, Basket 33.

No preserved edges.

W. 0.035, Depth 0.05, Th. 0.015 m.

From mixed context contemporary with or earlier than Archaic terrace.

On bottom surface, spiral or volute ornament in brown glaze on white ground; diagonal line extending from upper right corner of volute toward upper left; traces of another diagonal line or band extending toward upper right. Top surface of fragment painted brown.

The scale and curvature of this fragment seem appropriate for a spout, but the fragment is not necessarily architectural and could belong, for example, to the neck or spout of a large vessel.

32. Volute Pl. 88

Sardis Inv. No. T 87.9/9492.

Fragment of face of relief only (i.e., not the complete thickness); no preserved edges.

H. 0.07, W. 0.04, Th. 0.020 m.

From mixed context postdating Archaic terrace.

Surface of volute with concave channels; background white, edges of channels red.

This fragment could belong to a tile or akroterion, but it is not necessarily either architectural or Archaic.

33. Molding Pl. 88

Sardis Inv. No. T 89.11/9667.

Front, top, and bottom surfaces preserved, broken on both sides and at back.

H. 0.056, W. 0.098, Depth 0.075, Th. at back 0.031 m.

From mixed context contemporary with or earlier than Archaic terrace.

Molding like hawksbeak on edge of flat terracotta slab, similar to pan tile. On front face of molding, row of teardrop-shaped petals in relief, pendent from plain horizontal border or fascia (H. of horizontal border, 0.011 m.; distance between centers of petals, 0.025 m.). Toward bottom of molding, a few flecks of what may be black glaze. Top surface of piece and bottom of slab behind molding both painted red. Back of molding, as seen in profile, for the most part very cleanly rounded, as if shaped over thick dowel or rod.

This piece could conceivably have fitted over the geison, or perhaps an exposed timber, of a small building, but it may equally well, and perhaps more likely, belong to a still smaller structure, such as an altar.

STYLE, DATE, AND FUNCTION

Shear dated the tiles found by the first Sardis Expedition on the "Lydian terrace" to the first half of the 6th century B.C., partly on the basis of the pottery found in association with the terracottas, partly on the basis of the style of the terracottas themselves.²⁹ Åkerström disputed Shear's dating of the associated pottery and redated the tiles to the second half of the 6th century on the basis of a new evaluation of their style.³⁰ As Ramage has already noted, the work of the current Sardis Expedition seems to corroborate Shear's earlier dating of the pottery found on the Lydian terrace,³¹ but this is perhaps a moot point, since the purity of the deposit in which the tiles and pottery were found is uncertain. In his publication of the terracottas found at Sardis between 1958 and 1975, Ramage in his turn disputed Åkerström's stylistic analyses and, on largely stratigraphic grounds, redated the heyday of Lydian architectural terracotta production to the first half of the 6th century B.C.³² A slightly different chronology was proposed by Billot, on the basis of her long and detailed stylistic analysis of some of the more diagnostic pieces published by Ramage. In Billot's view, the production of architectural terracottas at Sardis did not begin before the decade 570–560 B.C. but then continued for roughly half a century, apparently unaffected by the Persian conquest, until about 520 B.C.³³

The fragmentary condition of the decorative pieces from Sector ByzFort makes stylistic analysis difficult. The most telling parts of the figural scenes, such as the heads of the figures, are lost, and some of the decorative patterns, such as the maeander, are for our purposes timeless. It is nevertheless possible to make some useful observations. With the exception of two sima fragments, **9** and **10**, which seem more provincial when compared to the others, perhaps more Archaic, the terracottas from Sector ByzFort are, in terms of style, relatively homogeneous. The monster and hero figures, **1** and **2**, are comparable, both in the rendering of details such as their stout thighs (and in the case of **2**, equally stout buttocks) and in their overall posture and composition, with the corresponding figures on the "Theseus and Minotaur" tile in New York, dated by Billot to *ca.* 550 B.C.;³⁴ the only other human figure, **6**, is similar to the "mistress of animals" in the Louvre, from the same frieze as the hero and monster in New York. The deer of **3** and **4** and the bird of **5** are comparable with deer and birds on mid-6th-century East Greek pottery and terracottas.³⁵ Of the ornamental pieces, **7**

²⁹ *Sardis* X, i, pp. 4–7.

³⁰ Åkerström 1966, pp. 82–96.

³¹ *SardisMon* 5, p. 39.

³² *SardisMon* 5, pp. 38–41.

³³ Billot 1980, pp. 292–293.

³⁴ *Sardis* X, i, no. 1, pp. 9–12 (Åkerström 1966, no. 1, p. 70); Billot 1980, p. 285. For an earlier dating, see Winter 1993b, p. 30.

³⁵ Deer: *Samos* VI, i, "Samos": no. 187, pl. 23; no. 515, pl. 62; no. 523, pl. 63; no. 562a, pl. 66; "Miletos": no. 598, pl. 78; no. 616, pl. 83; "Thasos": no. 862, pl. 101; no. 874, pl. 63; no. 877, pl. 105; "North Ionia": cf. goats of no. 938, pl. 114. Compare also the earlier Orientalizing deer illustrated *passim* in *Samos* V, e.g., pls. 115–123.

Birds: see references in Billot 1980, p. 288.

and **8** are too poorly preserved to be of much use³⁶ and **9** and **10** are by virtue of their provincialism unusually difficult to date.³⁷ More diagnostic are the pieces that exhibit the more thoroughly Hellenized patterns: the egg and dart (**11–14**), the lotus and palmette (**15**), and the star and scroll (**16–20**); the parallels for these too, in architectural terracottas from other sites as well as in pottery, relief sculpture, and coins, indicate a date in the second quarter or middle of the 6th century B.C.³⁸ For the star-and-scroll pieces, the additional evidence of the archaeological context of an example published by Ramage also points to a date of 550 or before.³⁹ Of the remaining pieces, the maeander fragments, **21–23**, and the border and soffit fragments, **24–27**, are too generic for close dating.⁴⁰ The volute ornament of the large revetment plaque, **28**, however, may be compared with the volutes of mid-6th-century Lydian anthemion stelai,⁴¹ and **29**, though not itself diagnostic, may be dated by association to the same era. None of the remaining, miscellaneous fragments (**30–33**) is closely datable.

Thus, while the archaeological context would allow an earlier date for the terracottas found in or beneath the construction layers associated with the Archaic terrace, stylistic analysis of the more diagnostic pieces from Sector ByzFort seems to corroborate the *terminus post quem* of ca. 570 suggested by Billot for the terracottas from other parts of the site.⁴² At the same time, none of the stylistically datable terracottas from Sector ByzFort, whatever their context, contradicts the *terminus ante quem* of the middle of the century indicated by the archaeological context of the pieces from the Archaic construction layers. As already noted (p. 367 above), only one-third of the decorative pieces are from contexts contemporary

³⁶ It may, however, be worthwhile again to note the similarity between the upper border of **7** (probably from the same frieze as **8**) and that of the lateral-sima tiles *Sardis* X, i, nos. 6 and 7, pp. 22–24 (Åkerström 1966, nos. 3 and 2, respectively, pp. 74–75), which may be dated to the mid-6th century on the basis of the stars flanking their spouts (see Billot 1980, p. 290).

³⁷ For **10**, however, cf. *Samos* VI, i, no. 135, pl. 16; no. 363a, pl. 45; no. 452, pl. 54. This pattern is much more common in Laconian vase painting (cf., in particular, Stibbe 1972, pp. 56 [type 5], 61 [types 1–3], and pl. 33:2 [no. 104]) and may attest a direct link between Laconia and Lydia. For the suggestion that the Spartans may have sent a terracotta roof to Sardis in exchange for the gifts presented to them by Croesus, see Winter 1993b, p. 31.

³⁸ Egg and dart: the broad, almost rectangular shape of the eggs, the pronounced borders, the minimal darts, and the relatively flat profile of the egg-and-dart fragments from Sector ByzFort seem earlier rather than later (cf., e.g., Shoe 1936, pl. A:1–5), although these kinds of characteristics are difficult to date; compare, at any rate, the similar patterns on terracottas from Larisa (Åkerström 1966, pls. 19:1; 20:3; 28:1; 30:2) and Didyma (Åkerström 1966, pl. 58:1). For discussion, see Simantoni-Bournias 1990, pp. 198–199; Cook 1981, pp. 86–88.

Lotus and palmette: for discussion, see Åkerström 1966, pp. 26–27, 97, 131; Simantoni-Bournias 1990, p. 200. For parallels (at least for the shapes of the blossoms, if not for the chain) in pottery, cf. *Samos* VI, i, “Samos”: no. 48, pl. 6; no. 107, pl. 11; “Miletos”: no. 659, pl. 79; no. 613, pl. 84.

Star and scroll: see references in Billot 1980, p. 290.

³⁹ *SardisMon* 5, no. 42, p. 26, fig. 83.

⁴⁰ Although one might at least compare the petals of **24** with the vines very common on East Greek pottery, e.g., *Samos* VI, i, no. 470, pl. 41.

⁴¹ *SardisRep* 2, nos. 45 and 46, pp. 73–75; on the dating, see Ratté forthcoming. For examples of the kinds of complex ornamental patterns to one of which these fragments probably belong, cf. also Åkerström 1966, pl. 32:4, from Larisa; the East Greek pottery designs illustrated in *Samos* VI, i, pp. 42–43, figs. 56–61; and the architectural fragments from Delphi and Erythrai illustrated in Langlotz 1975, p. 7.

⁴² Billot 1980, pp. 292–293.

with or earlier than the construction of the Archaic terrace. These are **10** (chain of buds), **16** and **18** (scroll), and **28** (volute ornament), all from the construction layers, and **2** ("Theseus and Minotaur"), **3** and **4** (heraldic animals), **13** and **14** (egg and dart), **23** (maeander), **30** (Laconian-style antefix), and **33** (molding), all from contemporary or earlier Archaic contexts. Of the pieces from later contexts, however, several are of types that are also represented by fragments from Archaic layers: the "Theseus and Minotaur" fragment, **1**, and by association the soffit fragment, **26**; three of the star-and-scroll fragments (**17**, **19**, and **20**); two of the egg-and-dart fragments (**11** and **12**); and two of the maeander fragments (**21** and **22**). Most of these pieces are also independently datable on the basis of style to the middle of the 6th century or before (pp. 383–384 above); the same is probably true of the figural pieces, **5** and **6**, and the lotus-and-palmette chain, **15** (which may also be associated with the egg-and-dart fragments, **11–14**). Of the remaining fragments, **7–9**, **24**, **25**, **27**, and **32** (which may or may not be architectural), all are difficult to date on stylistic grounds, but none need at any rate be later than the mid-6th century.

Considerations of style and typology thus seem to unite in a single group the fragments from later deposits with the fragments found in or beneath the Archaic construction layers. It may also be noted that, as a group, the terracottas from Sector ByzFort resemble those found by the first Sardis Expedition at the Lydian terrace more closely than do the terracottas published by Ramage.⁴³ Since the terracottas from the Lydian terrace, like those from ByzFort but unlike those from other sectors, were all found in one place and are likely to have belonged to a relatively restricted group of buildings, this similarity reinforces the integrity of the assemblage from Sector ByzFort. It therefore seems reasonable to regard the terracottas under consideration, on the grounds of what we know (while we will never know for certain), as a coherent assemblage and to inquire on that basis how many and what kinds of buildings they adorned.

The results of excavation on top of the ByzFort hill unfortunately tell us very little about the buildings that crowned the hill before the construction of the mid-6th-century terrace. Of the two building phases that apparently predate the terrace, the later, to which the terracottas must belong, is represented only by isolated stone foundations that seem to have belonged either to self-contained monuments (e.g., an altar) or to retaining walls. The buildings decorated with the terracottas we have found presumably stood further south, not surprising, considering the narrow width of the terrace at its north end. The function or functions of these buildings remain unknown, but the prominence of the site and its distance from the center of the lower city does suggest it was a preserve of some sort, such as a sanctuary or possibly a royal or aristocratic residence. If the size of the terracottas is any indication, the buildings they decorated were modest, at least in size:⁴⁴ treasuries, perhaps, or pavilions of some kind.

The attempt to assign specific terracottas in this group to individual structures is of necessity extremely speculative. In many cases we cannot be sure whether the decorative

⁴³ Of the ten decorative schemes found in the corpus of tiles published by Shear in *Sardis X*, i, five are represented among the fragments from Sector ByzFort, while only seven are represented in the corpus, twice as large, of pieces published by Ramage in *SardisMon* 5.

⁴⁴ Like most architectural terracottas from Sardis, those from Sector ByzFort are unusually small in comparison to Greek terracottas; see *SardisMon* 5, p. 40.

TABLE

	Roof 1	Roof 2	Roof 3 thicker tiles	Roof 4 hybrid roof with antefixes, thicker tiles
Raking simas 1–5	?	?		
6–8			?	?
Lateral simas 9–10			x	
11–15	x			
16		x		
Simas or revetments 17–27	?	?		
Revetment 28–29	?	?		
Laconian-style antefix 30				x
Miscellanea 31–33	?	?		

pieces belonged to simas or revetment plaques and, if to the former, whether to raking or to lateral simas. We cannot arrange them by height, since no fragment preserves its full height, and the heights of the parallels vary. There are some notable differences in thickness, but the significance of this, if any, is hard to determine. With a few possible exceptions, the fragments are stylistically homogeneous. Nevertheless, the exercise seems worthwhile, if only in order to try to determine the minimum number of buildings represented (see Table).

In the discussion that follows, it is assumed that as many as, but obviously no more than, four different simas (two lateral, two raking) could be used on a single building. It is possible, however, that some of the fragments here identified as simas may have belonged to revetments, in which case, since a single building could conceivably have carried several different revetment friezes superimposed on each side, the total number of buildings represented may be fewer than I have suggested below. The Laconian-style antefix (30) clearly belonged to a building with a hybrid roof; apart from this, I do not know of any criteria by which individual decorative fragments might be assigned to roofs of one type or another, Corinthian-style or hybrid, except perhaps the thickness of the tiles (see p. 387 below and Table).

The pieces preserving figural decoration, **1–6**, may all belong to simas. If this is in fact the case, they should all belong to raking simas, for **1** and **2** (“Theseus and Minotaur”) presumably belong either to a metopal frieze, like that of **3**, **4** (heraldic animals), and **6** (figure in skirt?), or to a continuous frieze, like that of **5** (bird), and neither scheme is suitable for a lateral sima (**1**, at least, is almost surely from a raking sima; **2** is a somewhat more ambiguous fragment). If these are indeed all raking simas, they should belong to at least three different façades: **1** and **6** cannot go together because of the difference between their base moldings; **5** must stand alone because of its format (a continuous frieze rather than a metopal arrangement) and subject (which would be ridiculous combined with the heroic combat of **1** and **2**; these two may also belong to a continuous rather than a metopal frieze). But only **1** and **2** are certainly from simas; the others may all have belonged to revetment plaques.

Of the pieces preserving only ornamental decoration, the parallels for **9** (row of waves), **11–14** (egg and dart), and **15** (lotus and palmette) suggest lateral simas. **16** (scroll) must also belong to a lateral sima but does not seem to fit with the preceding ones. **7** and **8** (lotus and palmette?) and **10** (chain of buds) could belong either to simas or to revetments, but, for various reasons (see discussions in catalogue entries), the former seems the likelier alternative; **7** and **8** I would put on a raking sima, **10** on a lateral sima. If these ten pieces are in fact all simas, they should therefore belong to at least five different façades. **7–10** seem unusually thick, and this, too, differentiates them from the other fragments (and possibly from **1–5**; **6** is comparable in thickness).

The fragments preserving star-and-scroll patterns, **17–20**, could all belong together, although **17** and **20** seem of different types, and the former may go better with the sima, **16**. The parallels for the star-and-scroll design admit of both simas and revetment plaques, and the scale of these fragments would suit either. The maeander patterns, **21–23**, could also belong either to simas or to revetment plaques. If they did belong to simas, they could go with several of the preceding, such as **5**, **15**, or **16**. The same is true of the border and soffit fragments, **24**, **25**, and **27**; **26** probably goes with **1**. As for the remaining fragments, we know that **28** and, by association, **29** (anthemion?) belong to a revetment plaque because of the nail hole in **28**; **30** (Laconian-style antefix) belongs to a building without lateral simas; **31**, if correctly identified, belongs to a lateral sima; the identification of **32** (akroterion) and **33** (geison plaque) is uncertain.

In sum (see Table), **1–4** (“Theseus and Minotaur”) and **5** (bird) could form the raking simas of a single building, **11–14** (egg and dart) and **15** (lotus and palmette), its lateral simas. **6** (figure in skirt?), combined with **7** and **8** (lotus and palmette), could form the raking simas of another building, **9** (row of waves) and **10** (chain of buds), its lateral simas; all are comparable in thickness, and **9** and **10** share a common provincial aspect (note also the combination of relief and painted design on **8** and **10**). Alternatively, **6**, **7**, and **8** could be the raking simas of a building roofed with hybrid tiles,⁴⁵ whose flanks were decorated with antefixes such as **30**, rather than with lateral simas. The thickness of these simas, and their Archaic flavor, which correspond to the unusual thickness and provincial quality of the Laconian-style cover tiles in relation to their Corinthian-style counterparts, may reinforce this association.

16 (scroll) does not seem to fit any of the preceding lateral simas and so should belong to a separate building, perhaps combined with **17–20** (scroll, star, or star-and-scroll ornaments). The maeander borders, **21–23**, could belong to revetments of some sort or to two or more of the simas already mentioned; the border and soffit fragments, **24–27**, could go with several of the preceding simas. **28** and **29** (anthemion?) belong to a revetment plaque that might come from one of the buildings already mentioned. The Laconian-style antefix, **30**, should belong to a building without lateral simas but presumably supplied with raking simas (perhaps **6**, **7**, and **8**, as suggested above). The spout, **31**, could go with one of the preceding lateral simas. **32** (akroterion?) and **33** (geison molding?) might also come from one of the roofs already mentioned, if they are in fact architectural.

⁴⁵ The parallels given for **9** (*q.v.*) are lateral-sima tiles, but there is no obvious reason why this “wave” pattern could not have been used on raking simas as well.

Thus these thirty-odd fragments represent perhaps four or more buildings, whose richly decorated roofs would have been visible for miles around on a clear day.

CONCLUSIONS

The Archaic architectural terracottas from Sector ByzFort add new details and new color to a picture of Lydian architecture that is coming more and more clearly into focus with every new campaign at Sardis. The pan and cover tiles from the sector add valuable new information about Lydian roofing systems; the thirty-odd decorative pieces, including many that are unusually well dated by archaeological context or by style, lend new support to Andrew Ramage's view that the manufacture of architectural terracottas at Sardis began before rather than after the fall of Croesus.⁴⁶ At the same time, they also corroborate Marie-Françoise Billot's contention that this new form of architectural decoration was not introduced into Lydia until the second quarter of the 6th century B.C., as a result of Alyattes' and Croesus' growing involvement with the Greek cities of Ionia.⁴⁷ Once established at Sardis, however, the new industry grew quickly, and the finds from Sector ByzFort also testify anew to the richness of the Lydian coroplastic repertory, giving new information about two well-known figural types ("Theseus and Minotaur", **1** and **2**; procession of birds, **5**), as well as contributing at least one and possibly two new figural types (heraldic deer, **3** and **4**, and perhaps the skirted figure, **6**) and at least five new ornamental types (the lotus and palmette, **7** and **8**; the chain of buds, **10**; the scroll, **16**; the maeander, **23**; the anthemion?, **28** and **29**), in addition to the first Laconian-style antefix found at Sardis and several other enigmatic but interesting fragments (the akroterion?, **32**, and geison molding?, **33**).⁴⁸

Some of the same patterns apparent in the development of architectural terracotta production at Sardis are also apparent in other areas of Lydian architecture, such as stonemasonry. Here, too, new architectural techniques were introduced into Lydia beginning in the reign of Alyattes, perhaps after that king's return from the war with Media in or shortly after 585 B.C., and, as was apparently the case also with terracotta manufacture,⁴⁹ the development of Lydian construction techniques continued apace through the first generation of Persian rule, if not longer.⁵⁰ The parallelism between terracotta production and stonemasonry can be found in detail as well as in general. In the case of the terracottas, for example, Billot has shown that Greek Miletos was an important early influence on Lydian coroplasts, and the finds from Sector ByzFort bear out her contention,⁵¹ the literary evidence for Lydian involvement in monumental Greek architecture also attests the connection

⁴⁶ *Sardis Mon* 5, pp. 38–41.

⁴⁷ Billot 1980, pp. 292–293.

⁴⁸ The terracottas from Sector ByzFort thus bear out the speculative assumption that lies behind the "Lydian Building Reconstruction" (Hostetter 1994, *passim*), that is, that the decorative types used in this display (including several also represented at ByzFort, such as the "Theseus and Minotaur", procession of birds, and star and scroll) were all contemporary.

⁴⁹ Billot 1980, pp. 292–294.

⁵⁰ On early Lydian stonemasonry, see Ratté 1993.

⁵¹ Billot 1980, pp. 277–278, note 58.

between Sardis and Miletos, for before Croesus made his famous contributions to the construction of the Temple of Artemis at Ephesos, Alyattes had apparently already built not one but two temples for Athena at Assessus near Miletos.⁵² And, both in the production of architectural terracottas and in stonemasonry, the new technologies developed under Greek tutelage were immediately adapted to Lydian needs: terracottas being produced in a smaller module than was normal for Greek cities, presumably reflecting their exclusive use on smaller building types;⁵³ ashlar masonry being used for tombs and terrace walls rather than, as in Greece, almost exclusively for freestanding buildings.

For coroplasts and stonemasons alike (for Lydian architecture in general) the last decades of the Lydian empire were an especially fertile and productive period, exhibiting a profusion of new types and new ideas. Indeed, the archaeological context of the terracottas from Sector ByzFort itself bears witness to this lively activity. For it was the construction of a great new terrace supported by a fine limestone masonry wall that brought about not only the destruction of the buildings (themselves not more than a quarter of a century old), so gaily decorated with the terracottas presented in this report, but also the preservation of those same terracottas in the shattered but still brilliant condition in which they have come to us today.

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⁵² Ephesos: Herodotos 1.92; Assessus: Herodotos 1.19–22. For the suggestion that Croesus may also have commissioned a treasury, complete with tile roof, to house his offerings at Didyma, see Winter 1993b, p. 33.

⁵³ *SardisMon* 5, p. 40.

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a. View of the acropolis of Sardis



b. View of the Archaic terrace



c. View of construction layers associated with the Archaic terrace



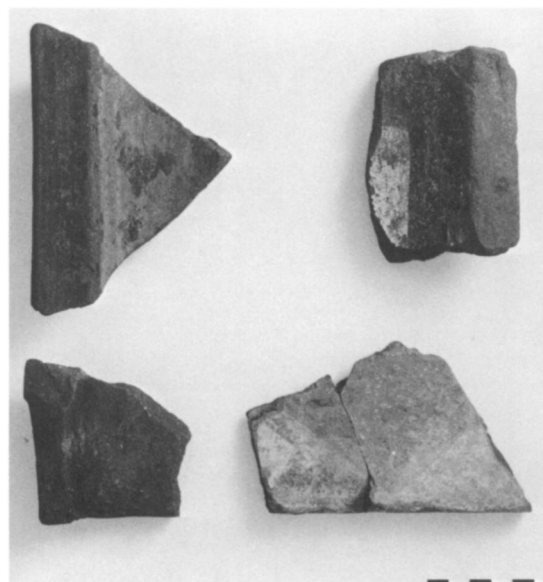
a. Attic black-figured fragments: amphora (left) and kylix (right)



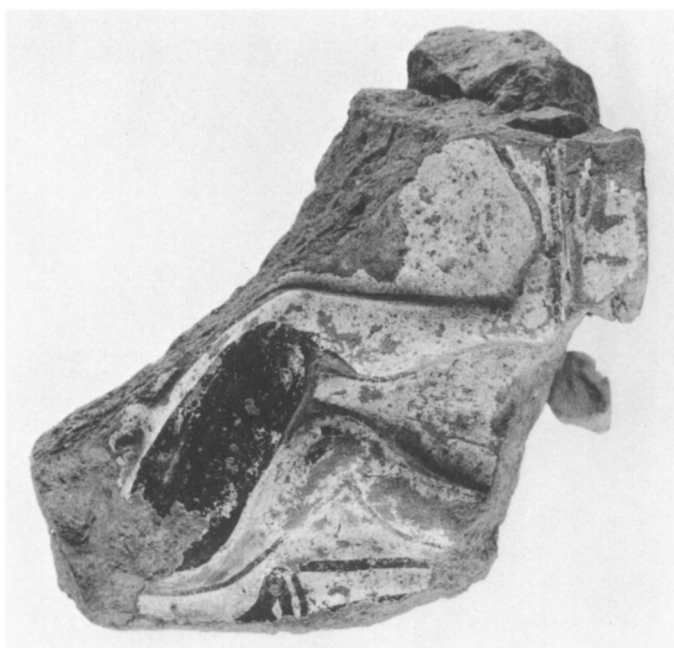
b. Corinthian-style cover tiles



c. Laconian-style cover tiles



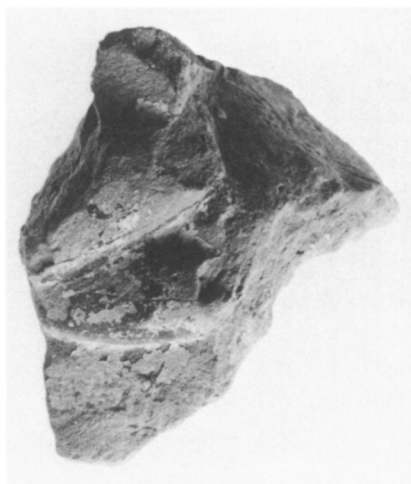
d. Pan tiles



1, face

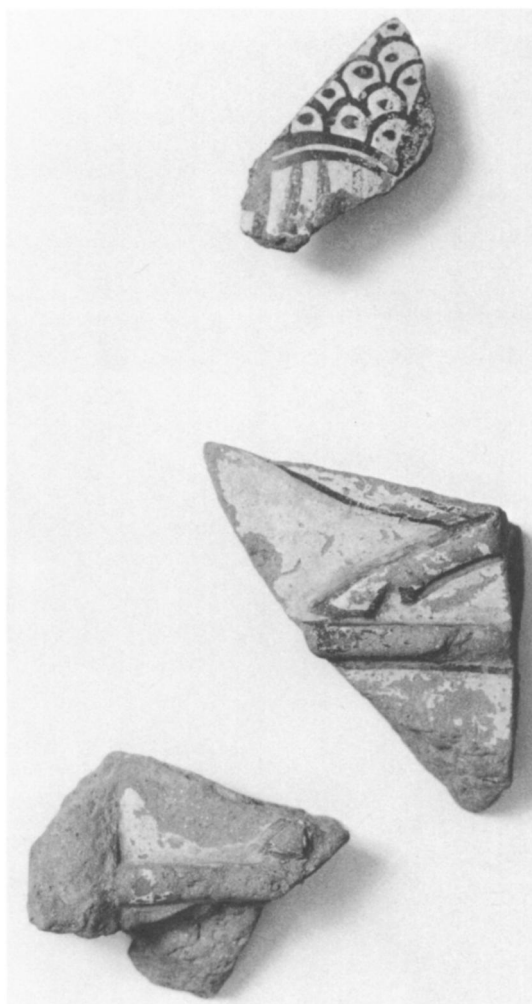


1, soffit



2

Scale 2:3



4, 3, and 5

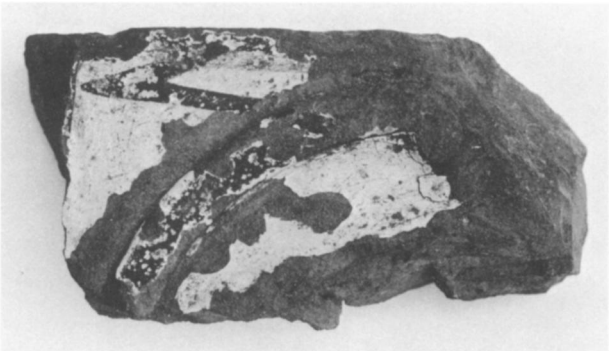
CHRISTOPHER RATTÉ: ARCHAIC ARCHITECTURAL TERRACOTTAS FROM SECTOR BYZFORT AT SARDIS



6



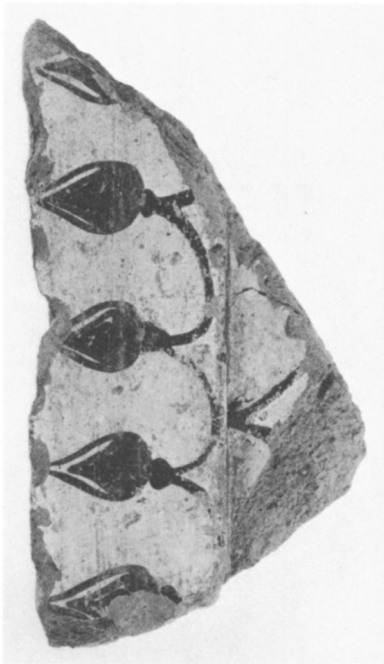
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8

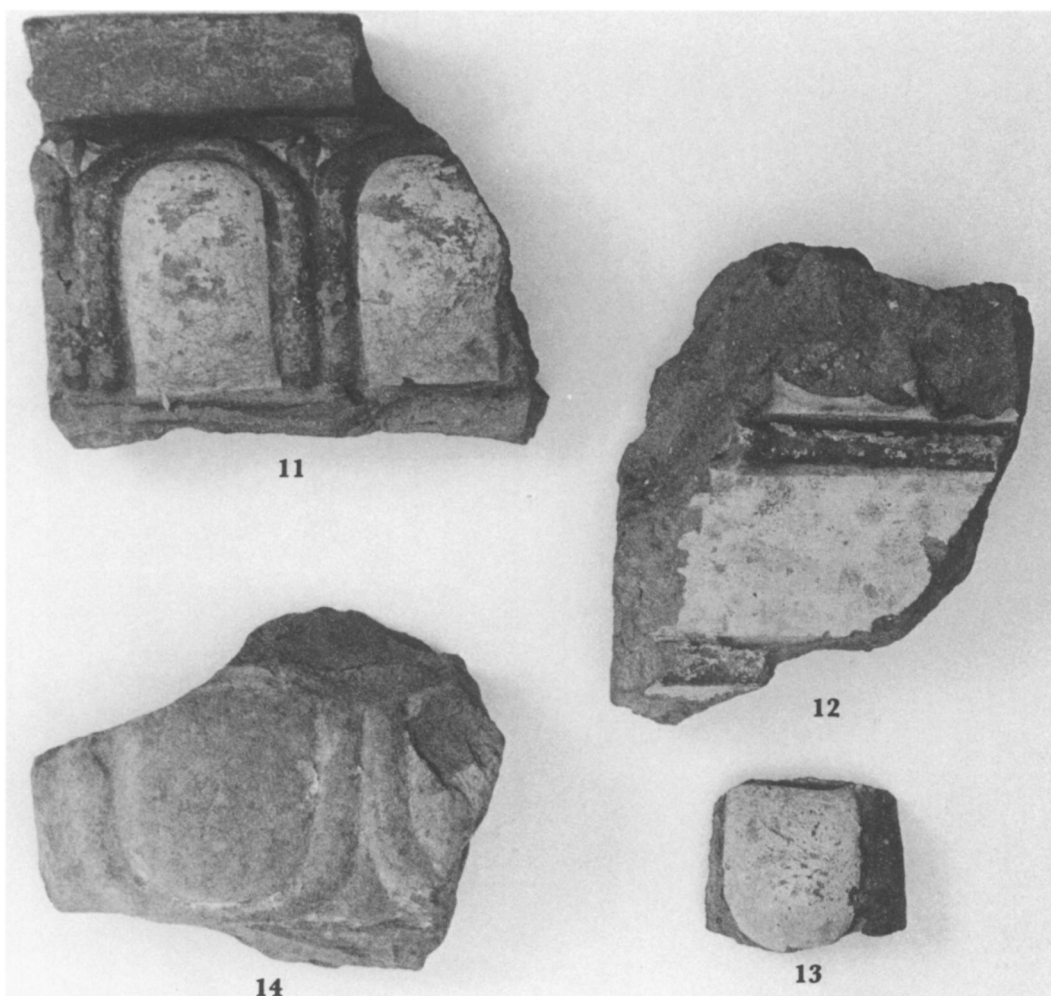


9



10

Scale 2:3



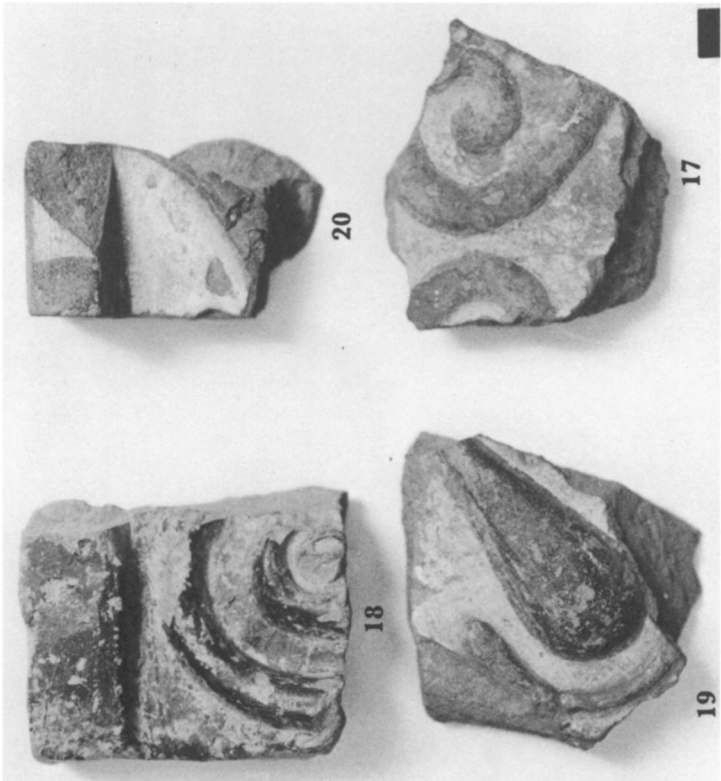
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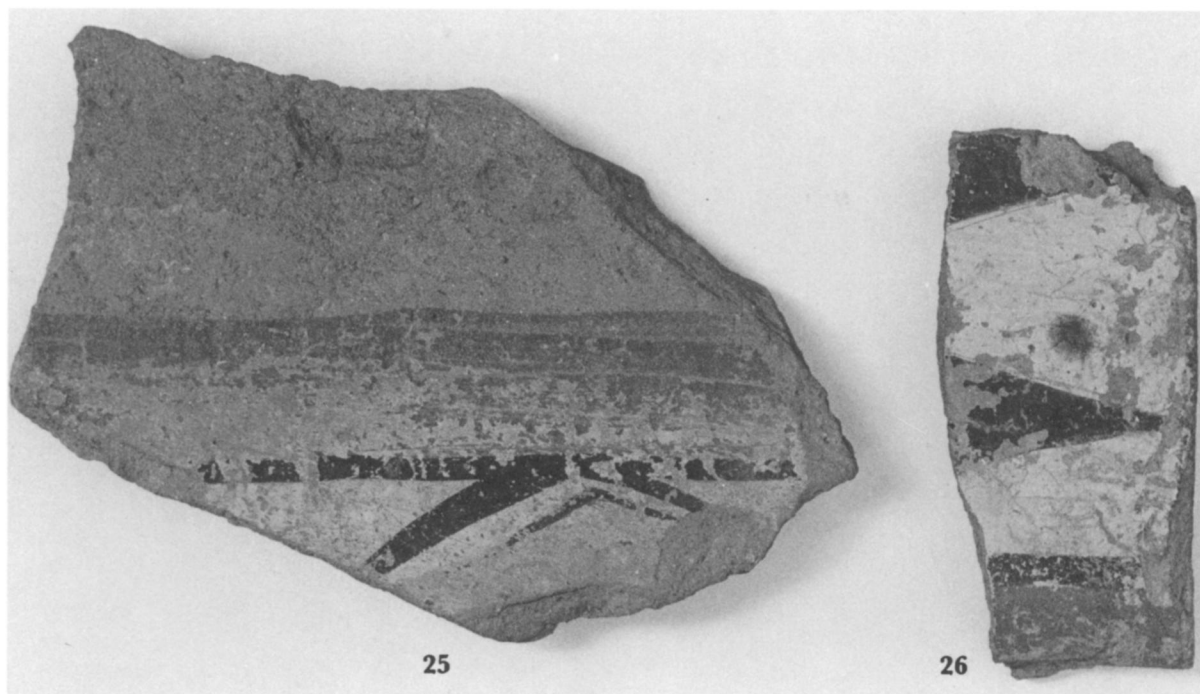
22 and 21



23

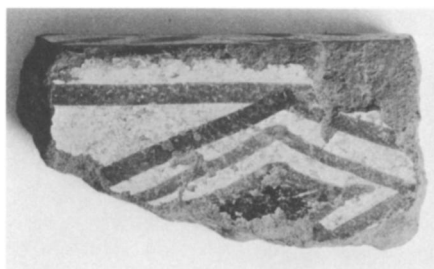


Scale 2:3, except 23, 4:5

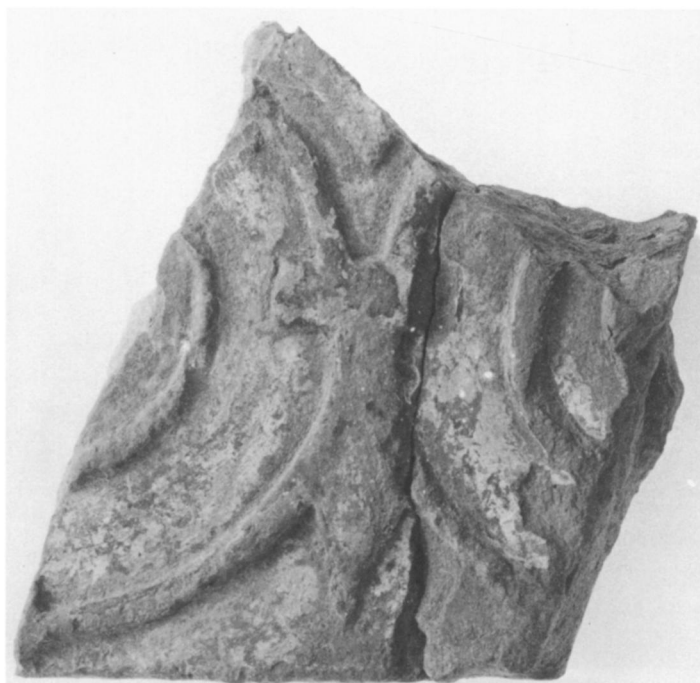


25

26



27, underside



28

Scale 2:3



29



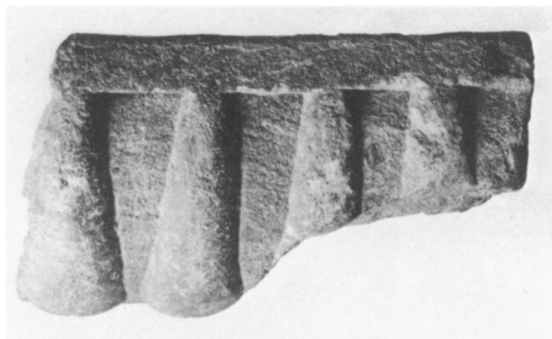
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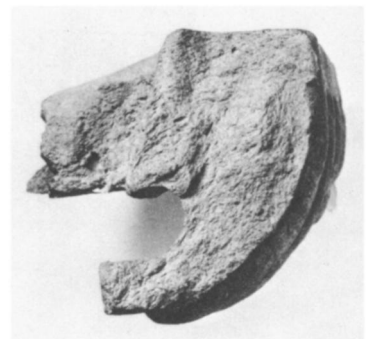
31



32



33, face



33, profile

Scale 2:3