ARCHAIC ARCHITECTURAL TERRACOTTAS
FROM CORINTH

(Plates 5–8)

IN DISCUSSING THE ARCHITECTURAL TERRACOTTAS of the Archaic period at Corinth I would like to show the stylistic development of some types originated there and, in addition, indicate some measure of the influence which the Corinthian industry exerted on other areas of Greece.

At the outset we should understand that Corinth cannot be equated with sanctuaries like Delphi and Olympia, nor with a city such as Athens. Corinth was essentially an industrial city. It did have a focal point in the early 7th-century city on the outcropping known as Temple Hill, but apparently an agora was late to crystallize, and public buildings were few and scattered. Instead the city was composed of loosely knit centers combining houses and craft industries.1 While relatively little material of high quality, manufactured at Corinth, has been found, it is clear that Corinth by the end of the 8th century was a flourishing commercial center with an extensive trade in Greece and to the East and West.2

Any discussion of Corinthian tiles must begin with the roof of the Protocorinthian temple, the predecessor of the 6th-century Temple of Apollo.3 This temple was built ca. 680 B.C.4 and remained in use for about a century, when it was destroyed by fire. Both their early date and their unusual form make the tiles important. They were in many ways precursors of later tile systems.

The 7th-century roof (Fig. 1) is made up of combination tiles except for a set of single covers. Both curved and angular elements are used in the tiles. They are undecorated except for a reddish brown or black glaze on some. The clay is coarse with many grits and ranges from greenish or yellowish buff to reddish brown in color. Usually the tiles have a smooth clay slip. In spite of the variations all evidently belong to a single roof, although more than one period in its lifetime, including repairs, is probably represented.


4 Williams, Στήλης, p. 346; Robinson, AM, p. 57. [As pointed out by R. C. S. Felsch (footnote 40, pp. 313–314 below), the date of 680 B.C., provided by the pottery found in the working chip layers, provides only a terminus post quem for the temple and its roof—Editor.]
The roof had a central ridge with hips at one end, probably at both. The slopes were covered with combination pan and cover tiles, both left- and right-handed. The pans are concave in section, the covers convex. Over the junction of the pan tiles at the center were single covers. Combination tiles also covered the hips. These are basically pan and cover tiles bisected diagonally and then joined at an angle to fold over the junction of the tiles from the two slopes. This arrangement resulted in a square, cap-like cover at the lower corner made up of both curved and angular elements. The ridge cover tiles consist of a square cap, convex in form and curved in all directions to fit over the covers from either slope and the adjacent ridge tile. The ridge tile is folded at an angle to cover the ridge and the tops of the pans on the slopes.

At the eaves the pan tiles gradually flatten out to form a flat underside, necessary if the tile is to rest tightly on the wooden framework underneath. An offset on the underside forms a stop against the beam. On its free side the upper surface of the eaves pan tile slopes upward to form a slight peak with the adjacent pan tile and to fit tightly under the cover.
attached to it. The cover, which gradually becomes angular as it nears the edge of the eaves, is set back slightly from the pan section of the tile. There is a slight peak at the center top.

The tiles display an ingenious system of oblique cuttings, notches, thinning, and offsets to hold them together securely and also to lessen the weight. There is evidence, too, of iron pins used to hold the single covers in place.

Clearly we are dealing with a fairly sophisticated roofing system. How long the process of development took we do not know. The temple models suggest that tile roofs were not common for very long before the Corinth roof was constructed. The Ithaca model of the late 8th century with its painted black and white squares on the roof is the only one which may depict a tile roof.\(^5\) But, given the long experience of the Corinthians in working with clay, once the idea of a tile roof was conceived, the actual implementation would not have been difficult.

The Corinth roof, although the earliest, was not the only roof of this type. Others existed at Delphi, Isthmia, and Perachora, possibly also at Olympia.\(^6\) All the tiles are essentially the same. The clay of the tiles from the first three seems to be identical. It corresponds to clay from beds in the Corinthian area. Probably all were made of Corinthian clay and either manufactured at Corinth and exported to the other sites or made from clay and molds shipped to the other sites, more likely the former.

Thus, we find that in the first half of the 7th century Corinth had already established a trade in architectural terracottas.\(^7\) It is interesting that all the sites at which these tiles have been found, apart from Corinth, are sanctuaries. So, presumably, we should regard sanctuaries as significant points of diffusion in tracing stylistic influences of architectural terracottas. Since travel to them was common, their buildings with their new, at the time, roof styles would have become well known and would stimulate a wish to acquire such terracottas from the source or ideas of imitating and adapting them in other towns.

It seems likely as well that both the angular Corinthian and the curved Laconian type of tiles were originally offshoots of this early roofing system. Obviously they developed differently, and some areas preferred one, others the other. As various places experimented, improved, and refined the forms, regional systems were developed. With the addition of


\(^6\) Delphi: Le Roy, 1967, pp. 21–28; Heiden, 1987, p. 22. Isthmia: O. Broneer, Isthmia, I, Temple of Poseidon, Princeton 1971, pp. 40–55; J. J. Coulton, Greek Architects at Work, London [1977], p. 35; Heiden, 1987, pp. 20–21, 23. Perachora: Heiden, 1987, p. 21; Robinson, AM, p. 55, note 1. In the summer of 1937 there were many tile fragments of this type on the site, and others were reportedly among the Perachora material in the National Museum. At this time two pieces were brought to Corinth from Perachora and are now in the Corinth Museum, inventoried as FC 102 and FC 103.

\(^7\) For a discussion of trade and the movement of workmen and materials see Salmon (footnote 1 above), pp. 120–126; Le Roy, 1967, pp. 54, 201. Heiden (1987, pp. 49–51) comments on the use of a top dressing of Corinthian clay in the tiles from Thermon and Kalydon and the use of molds in Olympia and Thermon. He concludes that there were Corinthian workshops set up on the sites.
decoration the process was accelerated as elements of design were selected and mingled. The study of forms and decoration seems to reveal the influence of the Corinthian style at the outset over much of the Peloponnesos and West Greece.

Olympia, Bassai, and some other sites using the curved tiles soon developed a system quite independent of the Corinthian. But the use of a black wash on some of the Olympia tiles and on some of those from Thermon may reflect the influence of the early Corinthian roof. Some localities, for example Sicily, Corfu, Thermon, and Kalydon, used various hybrid forms on some of their roofs, combining elements of both systems. The flat pans and angular covers used at the eaves of the early roofs were soon adopted for all the pans and cover tiles in the Corinthian area. Certain features of the early forms continued to be used. The undercutting of the pan tiles at the lower end to form an offset catching on the tile below becomes common practice. Later this offset develops into a trough, although the simpler form also is found in later tiles. The slight curve upward of the upper surface of the pan toward the side is also used in later tiles. The undercutting of the free side of the cover continues in use as well. The notch cut on the upper end of the cover tile appears in the 6th-century Temple of Apollo at Corinth. Here its use has been extended to the other side of the cover. This is a feature which also occurs in Roof B2 (the blassgelben roof) at Kalydon. The oblique cutting of the lower end of the pan and of the upper end of the cover appear in the tiles of the so-called Corinthian roof at Corfu and in single cover tiles at Thermon. The single three-peaked covers at Halieis and Aigina which rest on eaves tiles with raised edges forming a triangle have a surprising resemblance to the tiles of the eaves on the early temple at Corinth (Pl. 5, FT 209). Evidently the flat and angular tiles adopted for the Corinthian system became basic for most of the areas using such tiles. Where there are differences they occur mainly in features such as the semicircular ridge cover tiles and in decorated tiles. There varying influences and differing tastes become apparent. Since elements from different areas may be combined in a number of ways, it is often difficult to trace the origins and dissemination of any given style.

When the tiles were first decorated the system which was developed at Corinth consisted of a cavetto-type raking sima decorated with a painted tongue pattern and single guilloche, eaves tiles with single guilloche, and pentagonal antefixes with a design of

8 GFR, p. 50 for Olympia, p. 66 for Thermon.
9 Examples of this are to be seen in the tiles from Aigina: Schwandner, 1985, pp. 73–74, fig. 46, no. 207. The same is true at Halieis: N. Cooper, 1983, p. 29, pl. 16, no. 97. There are numerous examples at Corinth. It is also found at Kalydon: C. A. Rhomaios, «Ο κέραμος τῶν Λαφραίων τῆς Καλυδώνος», 'Αρχ’Εφ 1937 (pp. 300–315), p. 309, fig. 4.
10 Corinth IV, I, p. 41, fig. 48. A number of pieces have now been inventoried as FP 260, FC 70, FC 74, FC 75, FC 91.
11 Rhomaios, p. 13, fig. 3a, b, p. 15, fig. 4a, b.
13 N. Cooper, 1983, pp. 31, 34; E.-L. Schwandner, “Der Ältere Aphaiatempel auf Aegina,” NFGH (pp. 103–120), p. 113, figs. 9, 10.
14 For example the bunter roof at Kalydon with semicircular ridge covers, Dygge, p. 229, figs. 229, 231; at Corfu, Korkyra I, p. 114, fig. 90 for semicircular ridge cover, p. 115, fig. 91 for a sample of the elaborate decoration; Thermon, GFR, p. 67; Delphi, Le Roy, 1967, pp. 65–84.
palmette leaves and tendrils ending in spirals. The decoration of the eaves tile and antefixes is an obvious application of ornament to the earlier tile forms. The change to a gable necessitated a raking sima. We do not have any examples of the ridge tiles of this type of roof at Corinth. This decorative system was quite widespread in the late 7th and early 6th centuries. Examples have been found at Delphi, Eleusis, Athens, Aigina, Epidauros, Tiryns, Perachora, and Troizen.\textsuperscript{15}

Examples of the cavetto raking sima found at Corinth are limited and do not add significantly to Professor Le Roy's study of the Delphi material.\textsuperscript{16} We are more fortunate in the case of the pentagonal antefixes. The series begins with two examples of the same type,\textsuperscript{17} FA 101 (Pl. 5) and FA 327. At the bottom of the antefix is a triangular area set off from the upper part by a narrow band. This triangle reflects that formed on the early tiles by the curving up of the surface of the eaves tiles at the sides. Initially the free side of the antefix seems to have been cut on a slight diagonal at the bottom to fit on the upward sloping surface of the eaves tile below. This practice was soon abandoned in favor of a straight edge for the bottom of the antefix and a flat surface for the top of the adjacent eaves tile. Where single tiles, rather than combination tiles, were adopted, as for example at Aigina and Halieis,\textsuperscript{18} the upward sloping sides of the eaves tiles may be retained, and the bottom of the antefix is cut out to fit over them.

Above the apex of the triangle on these two antefixes two thick tendrils rise and curve around toward the sides to form upcurving spirals. Set between the tendrils in the center is an elongated heart with three palmette leaves above. Others of this type have been found at Eleusis and Athens.\textsuperscript{19} The coloring may be black on cream as at Corinth and Eleusis or red on cream as at Athens. At this stage red and black seem not to have been used on the same tile. The date of \textit{ca.} 610 B.C. for the pre-Peisistratid Telestereion with which the Eleusis antefixes are associated gives us a dating for this group.

A simple variation of this first type, FA 237 (Pl. 5)\textsuperscript{20} places the heart of the palmette above the tendrils rather than between them and adds a leaf between the spiral and the loop of the tendril. The spiral fills only a part of the side instead of reaching to the top of the upper border. This type also occurs at Delphi.\textsuperscript{21} A more squat form from the Potters' Quarter at Corinth, FA 204 (Pl. 5),\textsuperscript{22} lacks the triangular space. The heart of the palmette is set above

\textsuperscript{15} See GFR, pp. 75–79, 100–103, 128–133 and Le Roy, 1967, pp. 31–62 for some of these.


\textsuperscript{17} Corinth IV, i, FA 101, pp. 57–58 and p. 11, fig. 1; GFR, p. 129, no. 2; Williams, \textit{Στηλη}, p. 347, note 13, pl. 154; H. Payne, \textit{Necrocorinthia, A Study of Corinthian Art in the Archaic Period}, Oxford 1931, pp. 252, 256, fig. 106; Heiden, 1987, pp. 29, 31–32, pl. 2.2. FA 327 is unpublished.

\textsuperscript{18} See footnote 13 above.


\textsuperscript{20} FA 237 is unpublished.


the tendrils, which are very thick. It is difficult to tell whether it is earlier or later. Both red and black paint are used, perhaps an indication of a later rather than an earlier date.

Further variations are found at Aigina, Delphi, Epidauros, and Tiryns. Some are rather squat and the triangular space is missing. Others have added leaves, more palmette leaves or an arc between the palmette and its heart, or even a combination of some of these. Clearly there is a good deal of experimentation with the design, perhaps in an attempt to find a more satisfying form of decoration. Probably these examples belong to the early part of the 6th century.

A series of examples from Corinth shows the continuation of this process. Eventually it led to the development of the palmette type of antefix. Two antefixes from Corinth, FA 543 and FA 553 (Pl. 5), along with one from Aigina and one from Troizen, demonstrate the first stage of the process. The triangular space has disappeared, leaving room for more elaboration of the decoration. The spirals on either side have now been expanded to two on each side. They are held together by a band as before. The rather large center spirals come up through the band, then curve upward and over. Between them in the center is the usual heart with a three-leaved palmette. Below the band the tendrils curve around, then upward and downward once more to form spirals at the outer sides of the tile. Under the band, between the tendrils, a three-leaved palmette hangs from a central heart. Above, between each pair of spirals is another such palmette, while below is a single leaf. One of the Corinth examples, FA 543, is attached to an eaves tile with a single guilloche pattern; the other, FA 553, is broken off at the bottom but was attached. The Aigina and Troizen antefixes are cruder in appearance but the design is the same.

A fragmentary antefix from the Tile Works at Corinth, FA 422 (Pl. 5), which uses the same design, shows how an attempt is being made to break free of the pentagonal form. Only the left quarter of the tile with the downcurving spiral and the palmette above the stem of the tendril is preserved, but here the straight edge across the top has been abandoned. Instead the line follows the contour of the palmette leaves.

A different approach to the problem is found in some other antefixes. The height of the antefix is now substantially increased. Only the original two tendrils and spirals are used. These are held together by a band as before. Within each of the upcurving spirals is an eye. In the space between the tendril and the spiral is a leaf. The palmette has five leaves and usually an arc between the rather triangular heart and palmette leaves. At the side of the band linking the tendrils is an eye. Below the band advantage is now taken of the increased height. The tendrils curve out and down to the base of the tile in the same way as on the


26 FA 422 from the Tile Works is unpublished.
antefixes of the 6th-century Temple of Apollo at Corinth. Between the tendrils is a pendent palmette of three leaves and a heart similar to that in the upper part of the antefix. At first, as we see in one Corinth example, FA 550, the loop of the tendrils does not rise very far above the band. The curve is higher in one from the Gymnasium at Corinth. This trend continues in three other examples from Corinth, FA 559 and FA 446 (Pl. 5), and FA 560. Aside from Corinth the type is found at Perachora without the eye in the spirals, perhaps at Delphi and at Ptoion in a variant form with only three leaves in the palmette above and filling palmettes of three leaves between the spirals and tendrils. As already pointed out, we have in these antefixes the basic design of the palmette antefixes of the Temple of Apollo, but it is still confined to the pentagonal form.

The pentagonal antefixes are found in areas which traded with Corinth or in sanctuaries. Those from Delphi are of Corinthian clay, and a number of others as well appear to be. These antefixes must extend in date down into the second quarter of the 6th century.

The three-peaked type of antefix found in the Argolid has a somewhat similar decoration of tendrils ending in spirals and a central palmette. This form may also be an offshoot of the Protocorinthian type of cover. The eaves-tile covers from the early roof do have a slight peak and a slight curve.

Another form of antefix dating in the late 7th and first half of the 6th centuries is found with some variations at Corinth, Athens, Delphi, Argos, and Nemea. It, too, is essentially a three-peaked antefix but with the addition of a small palmette on the center peak and a curved volute on each side peak. In most the profile is accentuated by grooved or grooved and painted lines. It is least apparent in what is probably the earliest piece, that from the Demeter Sanctuary at Corinth, FA 547 (Pl. 5). Two others, more developed, have been found at Corinth, e.g. FA 24 (Pl. 5). The example from Argos, the two from Delphi, and the


32 For example, GFR, p. 131, no. 13, fig. 6, from the Argive Heraion; Hübner, 1975, p. 120, pl. 64:6, no. 17264 in the Nauplia Museum.

seven from Athens are very similar to them. Of these, that from Argos is of Corinthian clay and likewise one of the two from Delphi. The other is evidently of local clay. I do not know whether those from Athens are Attic clay or not. The Nemea antefixes are smaller and badly burned. They may be of local clay. This is another example of the way in which various types of tiles were distributed from area to area and copied locally. Considering the probable date of these antefixes and the sites where they have been found, Corinth may well be their place of origin.

As we have seen, various styles were evolving in the latter part of the 7th century and the early 6th century. Mixtures of different styles are particularly apparent in areas such as Western Greece and the sanctuaries of Olympia and Delphi. The influences move both westward from Greece and eastward from Sicily and, as we shall see later, even Corinth has traces of some of these outside influences.

It is toward the end of the first quarter of the 6th century that we have the first indications of the style of roof decoration which is to become the Corinthian (originally called Megarian) roof system. This is made up of palmette antefixes, a raking sima composed of an astragal or small torus molding combined with a large quarter-round or torus molding and a straight fascia, lion’s head spouts at the corners, and ridge cover tiles with palmettes.

We do not have examples of the palmette antefix at Corinth before those used in the Temple of Apollo. By that time the form is well developed. Probably its absence earlier is to be explained by the lack of evidence for the construction of large-scale buildings in Corinth early in the 6th century. Two other roofs, however, do provide some earlier examples of the palmette antefixes. One is the blassgelben roof (B2) at Kalydon.\(^\text{34}\) This is variously dated first quarter of the 6th century, ca. 580 B.C., and ca. 570 B.C.\(^\text{35}\) Here the design of the latest pentagonal antefixes is used, but the palmette has seven leaves, is completely free from the frame, and rises above it. This roof also has ridge covers with palmettes of seven leaves, similar to those of the Temple of Apollo. The palmettes of both the antefixes and the ridge covers are rather squat and not so fully developed as in the Apollo temple. The Kalydon roof seems to be Corinthian in origin. Slightly more advanced in form is the antefix of Roof 12 at Delphi,\(^\text{36}\) also of Corinthian manufacture. It is combined with a cavetto sima. Le Roy would date it after the end of the Sacred War and before 460 B.C.

We seem to have in these two roofs the beginning of the new style of decoration with palmette antefixes and ridge covers, but, as yet, without the Corinthian type of sima. Understandably the palmette antefixes evolved before the new sima form, for that would have been a major change.

\(^{34}\) Dygge, pp. 164–167, figs. 167, 168; Heiden, 1987, pp. 37, 58; Rhomaios, p. 18, fig. 7; F. Poulsen and K. Rhomaios, "Erster vorläufiger Bericht über die Dänisch-Griechischen Ausgrabungen von Kalydon," Copenhagen 1927, p. 33, pl. XL, fig. 57.

\(^{35}\) Poulsen and Rhomaios (op. cit., p. 33) date it ca. 570; Heiden (1987, p. 37) puts it ca. 575; Dygge (p. 226) says middle of first half of the 6th century; W. B. Dinsmoor (AJA 54, 1950, review of Dygge, p. 278) puts it ca. 580; Rhomaios (pp. 12, 98–99) dates it ca. 570.

The first appearance of the Corinthian sima comes soon after the earliest palmette antefixes. Professor Le Roy has put the earliest of these simas toward 560–550 B.C., beginning with S.30 from Roof 41 at Delphi and a sima from Epidauros. He follows these with the Kalydon lion sima with the inscription, dating it ca. 550–540 B.C., and sima VII–VIII from the Akropolis in Athens of about the same date. Then comes the roof of the Temple of Apollo, Delphi Roof 42, and the Thermon roof. I would like to suggest a somewhat different sequence in view of the earlier date of around 570–560 B.C. now given by Robinson to the Temple of Apollo. I think that 560 B.C. is probably a better date for the roof. It fits the sequence better than Weinberg’s later date of ca. 540 B.C.

We have seen that the early palmette antefixes at Kalydon and Delphi could date around 570 B.C., certainly before 560 B.C. The Kalydon lion sima clearly represents an early use of the Corinthian sima. But the decoration, usual for a cavetto sima, suggests either an early experimentation with the new form before the lotus and palmette pattern was adopted or a conservative attitude, a reluctance to adopt the new style wholeheartedly. Comparison with Roof 13 at Delphi, which Le Roy dates not later than 560, and Series 11 at Delphi of similar date show the Corinthian character of the decoration. Even the treatment of the locks of hair on the lion’s heads is similar. One cannot, I think, rule out any Corinthian connection because the Aitolian alphabet is used for the letters on the individual pieces. Presumably the workmen building the temple would have been natives of Kalydon. The letters indicating the order in which the tiles were to be placed on the building would have been intended for them and hence their alphabet. This does not mean that the design and the direction and possibly the molds used were not Corinthian. In any case the roof is one of the earliest using the Corinthian sima, and the sima profile is very close to that of the Temple of Apollo.

The Temple of Apollo first provides us with examples of all the forms of tiles used on the Corinthian style of roof. The roof is made up of combination tiles. The eaves tile (Pl. 6, FT 231) is decorated with a single guilloche pattern. The antefixes (Pl. 6, FA 16) have a seven-leaved palmette. It rises above tendrils which are held together by a horizontal band. The tendrils curve outward toward the sides to form spirals. Below the band they spread out

42 Le Roy, 1967, pp. 48–49, pl. 8:9, LN.5; Dyggve, fig. 171; Rhomaios, p. 61, fig. 37.
44 Corinth IV, i, pp. 25, 104–105, T41–44, T50, T51, p. 108, T112, fig. 43:b, and others from more recent excavations, including FT 160, FT 205, FT 206, FT 229; GFR, p. 103, no. 20, fig. 71.
45 Corinth IV, i, p. 12, fig. 2, pl. I, pp. 48–49, 58, A12, A16, A20, A102, FA 364; Williams, Στηλή, pp. 347–348, note 13, pl. 156:b; Heiden, 1987, pp. 33, 71, pl. 3:2; GFR, pp. 25, 147, no. 13, fig. 71; Koch, p. 83, fig. 38.
to the lower corners. Between them is a three-leaved palmette hanging from a fourth leaf. The raking sima (Pl. 6, FS 101)\textsuperscript{46} is made up of three parts. At the top is an astragal decorated with vertical bands of red and black on the cream of the slip. Below that is a large torus molding resting on a straight fascia. This is decorated with an alternating and reversed lotus-and-seven-leaved-palmette pattern in red and black on the creamy buff of the slip. The ridge palmettes (Pl. 6, FR 3)\textsuperscript{47} probably had seven leaves. Beside the band are spirals while between the tendrils which spread out below is a teardrop. The painted designs are rather large and heavy in appearance, probably because of the size of the pieces. What remains of corner lion’s heads fits a date shortly before the middle of the 6th century.\textsuperscript{48}

In determining the proper sequence of the various early Corinthian style simas both the decoration and the profiles (Fig. 2) must be taken into consideration.\textsuperscript{49} In the case of the Delphi sima\textsuperscript{50} the decoration is in the same heavy style, but the pattern is different. There are fewer leaves in the palmette, and the lotus calyx is cut out at the outer sides. This could be an early experiment with the design or simply a preference for fewer palmette leaves which is at times found at Delphi. It is difficult to say whether the decoration is earlier or later than that on the Corinth sima. They must be fairly close in date. When the profiles are placed side by side (the Delphi piece is broken at the top) there are differences in the curve of the large torus molding. The Delphi example has a more nearly circular line than the Corinth sima (FS 21, FS 23; Fig. 2) which flattens somewhat toward the base. As nearly as one can tell from the small-scale picture of the Kalydon sima, it is more like the Corinth example.\textsuperscript{51} The sima from Epidauros\textsuperscript{52} seems to be midway between the Delphi and Corinth simas. The Akropolis sima (VII–VIII)\textsuperscript{53} perhaps should be put a little later than these if Buschor’s illustration correctly represents its profile. Both torus moldings make a perfect circle if continued, but the Athens sima extends the circle farther at the bottom. The sima from Thermon\textsuperscript{54} is also close, but the decoration seems somewhat later, more fluid, and the form of the lotus with its diamond-shaped center is normally found after the middle of the century.

\textsuperscript{46} Corin\th IV, i, pp. 19–20, 68–69, 73, 75, fig. 17, pl. IV, S21, S22, S25, S26, S56, S101–103; Robinson, TH, p. 236, note 100, pl. 53:b, FS 1052, FS 1057; there are additional pieces from the more recent excavations; GFR, pp. 25–26, 85, no. 47, figs. 71, 72. Some other pieces of similar style and size, S23, S24, FS 818 (Corinth IV, i, pp. 20, 68–69) probably also belong to the temple; they are perhaps the work of another person. See also Le Roy, 1967, p. 112 and Heiden, 1987, pp. 72, 89.

\textsuperscript{47} Corin\th IV, i, pp. 16–17, fig. 14:a, R3, R13, R28; GFR, pp. 25, 160, no. 3; Koch, p. 83, fig. 38:3; Robinson, TH, p. 236, note 101, pl. 53:c, FR 102 and FR 101:a, b, the latter a later replacement.

\textsuperscript{48} I am indebted to Professor Robinson for telling me about these unpublished pieces from his excavations on Temple Hill.

\textsuperscript{49} J. Heiden, as well as Le Roy, has studied the chronological sequence of the Corinthian simas. They are covered in pp. 70–97 of his publication (Heiden, 1987). His work has only now become available to me, and it has not been possible to add all the pertinent references.


\textsuperscript{51} Rhomaios, p. 79, fig. 37.

\textsuperscript{52} GM, pl. 18:6 from Epidauros; Le Roy, 1967, p. 112.

\textsuperscript{53} Le Roy, 1967, p. 112; TdA I, pp. 16–17, sima VII–VIII.

Fig. 2. Sima profiles (Corinth). Scale 1:2
As we have observed, the torus of the Corinth sima flattens toward the base to form more of a tulip shape. But the simas of the third quarter of the 6th century tend to lengthen the curve somewhat. Considering these facts, along with the decoration and the present evidence for the date of the Temple of Apollo, I would suggest that Corinth should be put at the beginning of the series, not much if any later than 560 B.C. The Kalydon sima would be close in date, also the Epidauros sima and Delphi S.30, none after 550 B.C. The Akropolis sima is perhaps slightly after 550; Thermon might be put ca. 540. Similar to it in profile is one in the Nauplia Museum. It is necessary to adjust the drawing of the profile of this last sima to the same plane for the resemblance to be clear.

The period from ca. 540 to about 510 B.C. provides us with a number of examples of the Corinthian type of sima. They come from a variety of sites, among them the Argive Heraion, the Nauplia Museum, Delphi, Olympia, and Argos, as well as Corinth itself. That from the Argive Heraion and that from the Byzantine Treasury at Olympia both show a full curve in the torus molding, but the circle is beginning to lengthen at the bottom. The decoration is close to that on the Thermon sima. A date around 540–530 B.C. seems possible. Very close are the one in the Nauplia Museum and Delphi Roof 42. The curve of the torus has lengthened a little more in them. The palmettes on the Delphi sima have only five leaves, another instance of the apparent preference for fewer leaves. They might be dated around 530 B.C.

Three examples from Corinth show the circle elongating further. FS 44 (Fig. 2, Pl. 6) is closest to the previous simas. It and one from Olympia might be grouped together. They are very similar in design. The center of the lotus is diamond-shaped. The calyx of the lotus has an added short leaf on each side in the Olympia example. On the Corinth piece the extra leaves have merged with the rest of the calyx, but the general outline has remained. The palmette leaves are now thinner and more tapered, giving a lighter impression. The other two, FS 862 and FS 901 (Fig. 2, Pl. 6), flatten out rather more toward the bottom of the torus molding. The palmette leaves are quite tapered and more curved, the center of the lotus again diamond shaped. A new feature appears on FS 862. The tendrils are no longer continuous but end in upturned spirals under the lotus flowers of the upper register. This is also found on another fragment, a lower fascia section. In addition it has dots between the palmette leaves and the palmette heart. It is a little later in date. This design of tendrils

55 Hübner, 1975, p. 123, fig. 4:a, pl. 66:3, 4, no. 17263.
57 Le Roy, 1967, p. 112; Olympia II, p. 195, pl. 119:2; GM, pl. 18:5.
61 Both FS 862 from the Tile Works and FS 901 are unpublished.
62 Corinth IV, i, pp. 21, 23, fig. 19:b, p. 72, S45; GFR, p. 88, no. 61; Heiden, 1987, pp. 94–95.
ending in spirals is developed further in the light-on-dark simas. I would suggest a date of about 520 B.C. for FS 44 and the Olympia piece, about 520–510 for FS 862 and FS 901. The profile of the marble Telestereion sima at Eleusis is also close to these.

Two other simas from Corinth, FS 426 and FS 921, fit into this date range as well. The upper moldings on FS 426 (Fig. 2, Pl. 6) are similar to those on Delphi Roof 42. Like the Delphi sima its palmettes have only five leaves. What remains of the lotus seems similar also, but the design is straighter and stiffer. Judging from the profile, however, I think this may be a case of poorer drawing rather than difference in date. The other, FS 921 (Fig. 2, Pl. 7), is of interest for several reasons. Instead of the usual double alternating lotus-and-palmette pattern, it has only a single band of lotus and palmette which covers the torus and extends part way down over the fascia below. The tendrils are curved up into spirals under the palmettes. The lower portion of the fascia is decorated with a single stopped maenander. In this sima we have an early indication of the direction the ornament is to take in the Classical period, as for example in the Lesche of the Knidians at Delphi65 dated ca. 475–460 B.C. The calyx of the lotus on FS 921 is closed at the bottom, a form found also on the early cyma-reversa light-on-dark simas. But the profile indicates a date not far from 510 B.C. Roof 43 at Delphi66 also seems to fit here. Another piece from Delphi, series 46,67 has the same upcurved tendrils under the palmettes, but the lotus and the profile are different. The lower part is missing. Perhaps it too had only a single band of lotus and palmette. It must date close to 500 B.C.

With the next group of simas68 we find the torus molding beginning to curve in more toward the top again, but the whole curve is shallower than in earlier examples. In this period of ca. 510–500 might be placed the Heraion of Argos, the Megarian Treasury at Olympia, the marble Alkmaionid Temple at Delphi, Roof 54 at Delphi (the Tufa Temple in Marmaria), the Poros temple at Corinth, Corinth FS 1078 and FS 1010 (Fig. 2, Pl. 7), and Delphi Series 44. The Megarian Treasury and Corinth FS 1078 are, as nearly as can be determined from the fragmentary condition of the latter, fairly similar in decoration. The palmettes of Delphi Roof 45, Corinth FS 1010, and perhaps FS 1078 have only five leaves. There are some stylistic differences within this group, but all seem to belong to the end of the dark-on-light series.

At Corinth we have several fragments of Corinthian-type simas with light-on-dark decoration. The design is usually quite neat with regularly curved palmette leaves forming a

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64 FS 426 and FS 921 are unpublished, but see GM, pl. 18:3 and Le Roy, 1967, p. 112 for FS 426.
65 Le Roy, 1967, pp. 128–132, 139, pls. 1, 46, 103, 110; GFR, p. 94, no. 92, fig. 90.
half circle. The lotus in all the preserved examples is divided at the base and has a diamond-shaped center petal. The most complete piece is FS 28 (Fig. 2, Pl. 7).69 Its torus is flattening again and is elongated toward the fascia. Close to it is FS 858 (Fig. 2),70 only the upper part of which is preserved. Both have seven-leaved palmettes. I would suggest a date of 500–490 for them. Another fragment, FS 886 (Fig. 2, Pl. 7),71 has an even flatter curve. It is possible that it belongs to a cyma reversa, but its curve does not seem quite right for that. It is close to another piece from Corinth, FS 27 (Pl. 7).72 This is close in decoration but not in profile to Delphi Roof 50.73 They should date around 490 B.C.

This brings us to an interesting problem. The light-on-dark sima pieces from Corinth have a markedly different sort of profile from those of the roofs of the same period at Delphi. Professor Le Roy has already noted this fact.74 With the Delphi examples can also be grouped the sima from the temple at Halai,75 which is still in the dark-on-light style. The excavational evidence suggests a date of ca. 500 B.C. or a little later for the Halai temple, since the earlier building was razed and buried sometime after 510 B.C.

The decoration of the Halai raking sima shows some affinities to those at Delphi of about 500 B.C. and also to that of Delphi Roof 50 which Le Roy puts 490–480 B.C.76 But the profile is more like that of the Byzantine Treasury at Olympia. If it were not for the excavational evidence and the design one would be inclined to place it in the same general period. Or one might argue that it is archaizing. I think, however, that there is another possible explanation. The profiles of the dark-on-light simas of the period 510–500 B.C. still have a definite outward curve. This lessens in those of the light-on-dark type from Corinth itself. But at Delphi, in contrast, the curve has increased on the light-on-dark simas, although the decoration is close to that of the Corinthian simas. The latest of them are in a sense very close in profile to the early cyma-reversa form. Comparison with some of the cyma-reversa simas shows the resemblance. This is, I think, what the Delphi roofs and the Halai roof are tending toward. At Corinth there are many simas with variations of the cyma reversa with a decided curve. At the same time there are many others of the same period with a much shallower curve, more like the profiles of the Corinth light-on-dark simas. I think that we are dealing with a period of experimentation again as the tile manufacturers develop the sima of the Classical period.

A brief look at some of the other tiles of the second half of the 6th century. Two types of antefix occur at Corinth around the middle of the century. We have already seen one type

69 Corinth IV, i, S28, pp. 22, 69, fig. 19; GFR, p. 91, no. 77; Le Roy, 1967, p. 126, note 3.
70 FS 858 from the Tile Works is unpublished.
71 FS 886, also from the Tile Works, is unpublished.
72 Corinth IV, i, S27, pp. 22, 69, fig. 21. Another is FS 52, p. 22, notes 2, 3, p. 73; GFR, p. 90, no. 76; Le Roy, 1967, p. 126 (here read S.52 for S.25).
76 See footnote 73 above, in particular p. 127.
used on the Temple of Apollo (above, pp. 55–56). There is another of similar size which may also have been used on the temple (Pl. 7). Instead of the spreading stems or tendrils with a three-leaved palmette in the lower part of the antefix, there is a lotus with a three-petaled flower. The two types show a similar development of the upper palmette, the leaves becoming less stiff, more curved. The height of the lower part increases with time. Above the band the tendrils rise higher. Eyes alongside the band, added leaves, and a bar between the palmette heart and leaves are variations found. The first type is less popular, perhaps because it allows for less enhancement. It is eventually superseded by the other, which is found in much the same areas as the earlier pentagonal antefixes. The latter becomes the type commonly used in the light-on-dark antefixes. The two types in more developed form are seen respectively in FA 15 (Pl. 7), of the same type as FA 16 (Pl. 6), and FA 19 (Pl. 8), of the same type as FA 3 (Pl. 6), from Corinth. Another Corinth antefix, FA 430 (Pl. 8), is a flatter, stiffer, but well-developed example of the second type. Among the later examples is one from the Demeter Sanctuary, FA 452 (Pl. 8). It differs somewhat from the others in having an angular, rather than rounded arc between the palmette heart and leaves and a rather pointed center palmette leaf. A combination eaves and cover tile with a palmette antefix from the Tile Works, FA 581 (Pl. 8), is a good example of the type which evolves into the light-on-dark form used with the cyma-reversa simas. It is very similar to a group of light-on-dark antefixes with nine-leaved palmettes found in the area to the north of Temple Hill. One of the indications of its late date is the height of the curve of the tendrils under the lowest palmette leaves. Probably this piece from the Tile Works should be dated around 490 B.C.

Part of a lion's head spout from the Tile Works, FS 883 (Pl. 8), is an interesting piece. It has a very fine, smooth, cream slip and is very carefully modeled. In addition to more routine pieces the Tile Works has produced a few very fine fragments, an indication of the quality of work of which Corinth was capable. Only the upper part of the head is preserved, none of the face. The locks of hair of the mane are in three tiers. The front row is grooved and is painted dark purplish red and black on cream. The two other rows are dark purplish red. The closest analogy seems to be the Peisistratid temple on the Akropolis. I would put the piece from the Tile Works about the same date.

78 Corinth IV, i, FA 15, pp. 12, 48–49, fig. 3; FA 19, pp. 12, note 5, 49; for FA 15, see also GFR, p. 148, no. 18.
79 FA 430 is unpublished.
81 FA 581 is unpublished.
82 FS 883 is unpublished.
As is the case with the antefixes, the ridge tiles of the second half of the 6th century\textsuperscript{84} show less stiffness and a few added features such as a palmette of three leaves between the tendrils below, on one example, and added eyes and leaves.

As has already been noted, the late 7th and much of the 6th century was a period of considerable activity in building and in the development of the ornamentation of the buildings. It was also a period when there was constant movement between areas, the result of both trade with and travel to and from sanctuaries and communities. The distances were not great. Consequently, people were exposed to a variety of styles and ideas, which exerted influences in many ways. In conclusion I would like to show two tile fragments found at Corinth which illustrate some of this.

The first piece is a small fragment, FS 659 (Pl. 8),\textsuperscript{85} with a small torus molding below which is a straight fascia. The upper molding is decorated with vertical bands of alternating purplish red and cream. Below them is a narrow black horizontal line and then three wide bands, two cream and one purplish red. Finally at the bottom of the fragment there is just a trace of a guilloche with incised outlines in dark purplish red on the cream background. The fabric, while undoubtedly Corinthian, has a hard, very smooth, rather polished surface. This type of surface is found on the terracotta pedimental sculpture of the Archaic period at Corinth.\textsuperscript{86} It is also seen on other pieces of tile such as the lion’s head spout, FS 883, from the Tile Works discussed above and on some 6th-century pottery.\textsuperscript{87} One is struck with the resemblance to two pieces from Delphi which Le Roy has put with a group of tiles he connects with Sicily.\textsuperscript{88} One has alternating horizontal bands of cream and red, the other similar bands but cream, red, and black. The first also has a double torus molding (a Sicilian feature) decorated with vertical cream and either red or black bands, which is not stated. The fabric of one is described as shiny. There is no reason to suppose that these pieces are Corinthian, but the similarities with the piece from Corinth suggests the flow of ideas and designs back and forth.

The second piece, FA 432 (Pl. 8),\textsuperscript{89} probably an eaves tile with part of an antefix, also shows outside connections. The lower part is made up of a fascia decorated with a single stopped-maeander pattern in black and dark red on a light background. Above this and set back slightly is another section with one finished side. Its upper part is missing. On the lower portion is a design which resembles a running spiral with palmettes set in the free spaces. It is not quite a running spiral since each of the two sections ends in a curve around a dot. While the parallel clearly is not exact, the impression of the whole design is reminiscent

\textsuperscript{84} For example, \textit{Corinth} IV, i, p. 16, note 9, and p. 62, R12; \textit{GFR}, p. 161, no. 4; and ridge tiles like FR 47, unpublished.

\textsuperscript{85} FS 659 is unpublished.

\textsuperscript{86} S. S. Weinberg, “Terracotta Sculpture at Corinth,” \textit{Hesperia} 26, 1957 (pp. 289–319), pp. 293–294, for the smooth polished surface.

\textsuperscript{87} M. T. Campbell, “A Well of the Black-Figured Period,” \textit{Hesperia} 7, 1938 (pp. 557–611), no. 151, pp. 592, fig. 18, 596.


\textsuperscript{89} FA 432 is unpublished.
of that used on the lateral sima of the Olympia building now identified as the Treasury of Epidamnos III and dated ca. 525 B.C.\textsuperscript{90} It has a running spiral with a single-maeander fret pattern below. The antefix assigned to this building is a typical Corinthian palmette antefix of that period. Obviously ideas are being borrowed.

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MARY C. ROEBUCK: ARCHAIC ARCHITECTURAL TERRACOTTAS FROM CORINTH
PLATE 6

FT 231

FA 16

FS 101

FR 3

FS 44

FS 862

FS 901

FS 426

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