

EXCAVATIONS AT CORINTH, 1989

THE TEMENOS OF TEMPLE E

(PLATES 57–68)

The Roman temenos of Temple E is situated on high ground just beyond the west end of the Roman forum.¹ No evidence of a Hellenistic phase exists for the temenos, and the date for the inauguration of the Roman sanctuary is, at the moment, difficult to determine, but at least two or, possibly, as many as four phases of construction can be distinguished for the temple within the sanctuary. The publication of the temple by S. E. Freeman in 1941 focused on the building in its reconstructed podium form with marble superstructure.² A reconstruction of the first Roman temple as Doric in style and poros in fabric has been presented in a more recent article,³ but a still closer examination of all the various remains must be made before the full architectural history of the temple can be correlated with what is known about the phases of the surrounding stoas.⁴

What is now preserved of the stoas that once enclosed the temenos attests, at best, only two building phases. The evidence is most plainly visible in the West Shops, which, in reality, form the stoa that closed the east side; here the phases are especially clear because the monument is still well preserved. Evidence for two phases of construction also can be pointed out for the eastern half of both the north and the south stoa of the temenos, but at the northwest corner only a single phase is evident.

The plan of the initial Roman temenos is quite easy to determine. The preserved portions of its exterior walls suggest that the sanctuary was laid out slightly longer than wide, with its east façade measuring 90.33 m. in width and oriented 13 degrees 12 minutes west of north.⁵ The north and south sides were colonnaded. The east side may have been defined by

¹ Works frequently cited are abbreviated as follows:

Corinth I, ii = R. Stillwell, R. L. Scranton, and S. E. Freeman, *Corinth*, I, ii, *Architecture*, Cambridge, Mass. 1941

Morgan, *Corinth* XI = C. H. Morgan II, *Corinth*, XI, *The Byzantine Pottery*, Cambridge, Mass. 1942

Scranton, *Corinth* I, iii = R. L. Scranton, *Corinth*, I, iii, *The Lower Agora*, Princeton 1951

² *Corinth* I, ii, pp. 166–236, esp. 179–205, 208–230.

³ C. K. Williams, II, “A Re-evaluation of Temple E and the West End of the Roman Forum, Corinth,” paper delivered at the Tenth British Museum Classical Colloquium: The Greek Renaissance in the Roman Empire, December 1986.

⁴ The main axis of the temenos of Temple E is oriented 76 degrees 48 minutes east of north. Although this axis is northeast rather than due east, the following report will use the simple cardinal directions when referring to the axes of temple and temenos. Thus the stoa on the southeast side of the temenos will be called the south stoa, the northeast end of that stoa will simply be called the east end, and the main façade of the stoa on the northwest side of the temenos simply the north façade or north colonnade, etc. (see Fig. 1).

⁵ I thank Dr. D. G. Romano and his team for the work that they have done in the past two years for the Corinth Excavations. The electronic total station for computerized surveying and drafting which this team has introduced has raised noticeably the degree of accuracy of our architectural records. I thank the University Museum of the University of Pennsylvania and its Director, R. Dyson, for making this special facility available to the excavation.



a stoa with a monumental staircase rising up from the west end of the forum, while the back or western limit may have been closed by a simple wall or, as suggested by the width of the foundation, a wall with its face articulated by piers or engaged columns in the mode of the Early Roman court of the fountain house of Peirene. The temple in this phase was large, 23.5 m. north-south by 44 m. east-west, placed with its back against the western enclosing wall of the sanctuary. It should be noted that the axis of the temple was not precisely that of the temenos, implying that the temple and temenos may not have been built together as two parts of a single design; possibly the temple was built first and the enclosure thereafter.

Carefully constructed stonework in large, rectangular poros blocks appears to be a basic indicator for determining the buildings erected during the first phase of the temenos; this rule can be observed in the back wall of the stoa that defines the south side. The coursing is careful, and clamps are used only in a few places to hold the joints tight. The best examples of masonry of the first phase are to be seen in the heavy basement walls at the northeast and southeast corners of the sanctuary. At these points the corner masonry looks as if it were designed to support end towers for the West Shops.

The later phase can be distinguished by the use of rubble-and-mortar masonry and of vaulting formed of rough slivers of poros set radially in mortar, all easily discernible in the chambers of the West Shops. When ashlar blocks were laid, they were carelessly coursed with joints as much as 0.02 m. wide. The heavy "tower" constructions of the first phase were re-used in the alteration and help produce the visual effect of a five-element design for the West Shops complex in its second phase. The five elements are the masonry block at each end, a central unit composed of a monumental entrance with a wide flight of stairs, and a stoa with vaulted chambers on either side of the stairway. The stoas connect the central stepped entrance unit to the end units of solid masonry.

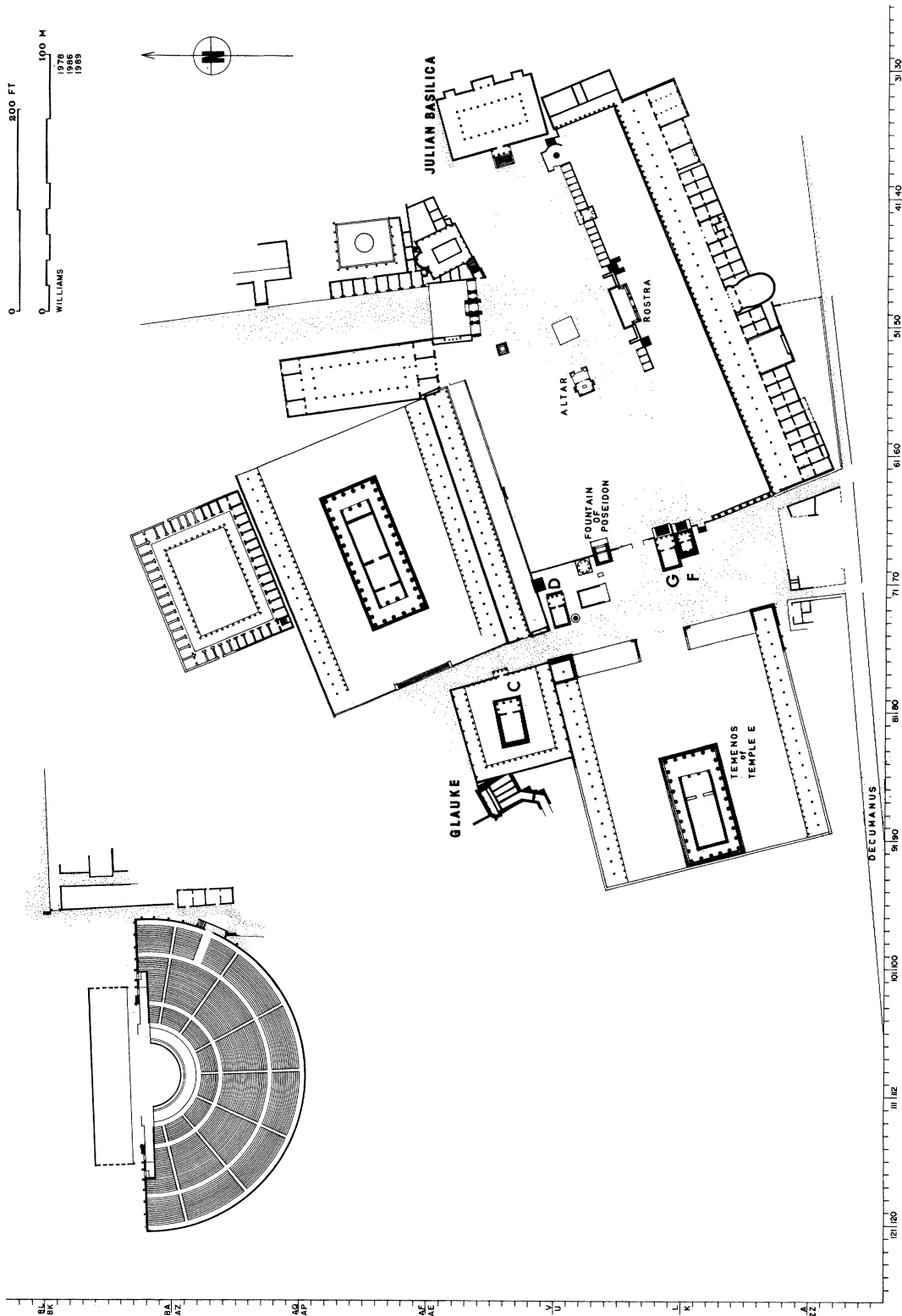
THE TEMENOS OF TEMPLE E

PHASE 1 (Fig. 1)

During the spring of 1989 the Corinth Excavations of the American School of Classical Studies at Athens exposed about 75 square meters of the southeast corner of the temenos of Temple E.⁶ The work done this year was a direct continuation of the campaign of 1975.

⁶ I wish to thank the Greek Archeological Service, which has made possible the continuation of work at Corinth in 1989 by the American School of Classical Studies, and especially I. Tzedakis, the Director of the Greek Archaeological Service, Mrs. P. Pachyianni, the Ephor of Antiquities of the Argolid and the Corinthia, and Mrs. Z. Aslamantzidou, Epimeletria for the Corinthia. Professor W. D. E. Coulson, Director of the American School at Athens, also deserves thanks for his continuous help in and attention to the business of the excavation.

The field staff of the regular excavation season consisted of Miss Martha C. Taylor, Messrs. Keith Dickey, Kevin T. Glowaki, and Jeremy J. McNerney. I owe much to them for their meticulous supervision of the trenches. Miss Nancy L. Klein expended much effort in trying to determine what marble architectural fragments could or could not be associated with the various Roman buildings of the west end of the forum. At the same time Miss Elizabeth M. Langridge supervised the excavation of well 1976-1 that had been discovered in 1976 within the area of the Centaur Bath; for its location see C. K. Williams, II, "Corinth 1976,

FIG. 1. Plan of central area of Ancient Corinth, *ca.* A.D. 50

Despite the need for a full architectural study of the temple and its setting, the following excavation report is largely limited to the archaeological evidence obtained from the 1989 excavation in the area where the south stoa and West Shops joined to form the southeast towerlike corner of the temenos (Pl. 57).⁷ One of the first facts that became evident this year is that the towerlike mass at the south end of the West Shops is, in reality, the substructure for the east end of the south stoa, which projected eastward beyond the ridge upon which the temenos was sited (Pl. 57:a). Here heavy basement walls were needed to support the stoa and the earth fill upon which the floor of the stoa was bedded. As the hillside rose toward the west and there was less difference between the floor level of the stoa and the ground level immediately behind or south of the stoa, less need existed for a massive substructure to retain the interior fill. Thus as the substructure disappeared into the rising ground, the thickness of the foundation walls was reduced. The easternmost 8.15 m. of the foundation for the stoa was about 1.40 m. thick, but west of that stretch the width was reduced by 0.38 m. Apparently a wall one meter thick was considered adequate west of the eight-meter point, if reinforced by buttresses. The first buttress, *ca.* 0.60 m. wide and protruding about 0.50 m. from the face of the wall, was constructed 3.86 m. west of the point where the wall narrowed (Pl. 57:b), and the second buttress 4.20 m. beyond the first.

The south stoa faced north, accessible only by its colonnade inside the temenos of Temple E. The ground level of the temenos is fixed at *ca.* 85.50 m. above sea level, the measurement taken at the southeast corner of the podium of the temple. From this datum one can estimate the elevation of the floor at the midpoint of the stoa as somewhat above 85.50 m., keeping in mind that the stylobate would have sloped downward throughout its length from west to east (see p. 333 below). The stoa was simple in plan, without added rooms against its back wall. No evidence exists at the east end of the stoa which might allow one to restore a stairway and thus to postulate a second story. The interior space had a single row of axially placed columns, attested now only by the three easternmost isolated foundations. These large piers of cut poros blocks measure roughly 1.15 m. to a side and are set 1.1913 m. on center. The third isolated foundation from the east is the best preserved, its top elevation 83.682 above sea level (Pl. 58:c).

Forum Southwest," *Hesperia* 46, 1977, p. 59, fig. 5. By excavation the well was found to be, in reality, a manhole with a feed channel in its south wall and with an entrance in its east wall into a corridorlike reservoir.

As in past seasons, Dr. O. H. Zervos identified the excavation coins and readied the numismatic commentary, published here as an appendix to the 1989 excavation report, while S. Bouzaki, A. Papaioannou, and G. Arberores, with the help of D. Notes, employed their skills on the finds of the excavation. Misses L. Bartzioti and I. Ioannidou handled the photography of finds.

Mr. Christopher Campbell worked during the summer of 1989 on numerous architectural projects, but thanks are due him especially for the work that he accomplished in the past two years on the architecture of the terrace at the west end of the forum; Virginia J. Campbell completed numerous museum projects which will make the records of the Corinth Excavations more readily available. Most of all I owe thanks and gratitude to Dr. N. Bookidis for her part in the smooth running of the excavation and the museum. Without her care and energy the following report, among other things, would have been impossible.

⁷ The West Shops were to be published by W. B. Dinsmoor, but since his death in 1973 the project has been continued by the present author.

None of the first-phase superstructure of the stoa has yet been found *in situ*; indeed, if the floor level of the stoa was designed to be higher than *ca.* 84.74 m. above sea level, then none of the structure is preserved to a greater height than three-fourths of a meter below the estimated level of the floor. The long run of foundation blocks of the north wall of the stoa is preserved 82.708–82.721 m. above sea level, while the foundation for the north façade of the stoa, which originally was designed to carry columns, is completely robbed of its blocks west of the West Shops.

The stoa on the north side of the temenos is assumed to be close to a mirror image of the south stoa. All remains that are known of the north stoa support such a conclusion. The two stoas seem at first glance to be simple and uncomplicated, or so it would appear, considering only the remains of the first phase. The width of the south stoa can be determined with no more than a 10–20 cm. margin of error. The placement and intercolumniation of the row of columns within the stoa can be fixed with even more precision.

One can perhaps assume that the north stoa of the temenos was a close replica of the south stoa because of the similarity of the towerlike foundations at the north and south ends of the West Shops, as well as from the corresponding position of the interior columns of the two stoas where their foundations are exposed and can be compared. In addition, measuring from the east end of the north stoa, the still-preserved foundation of the fifteenth interior column stands at the point where it would be expected if its position were calculated by the intercolumniation in the south stoa. This architectural evidence seems to be at odds with the preserved remains that W. B. Dinsmoor identified as the northwest corner of the temenos. In 1933 the American School uncovered a peristyle court west of the temenos (Fig. 2). A door in its east wall opened into a large space to the east. In 1953 Dinsmoor calculated that this eastern area was the northwest end of the temenos of Temple E. From the visible remains he calculated the size of the stoas enclosing the temenos and the spacing of the columns used in the stoa. This design has been used in all the subsequent American School plans of the excavations of central Corinth. In 1965 excavators from the University of California at Berkeley, under the direction of J. K. Anderson, cleared more of the area initially excavated by Dow and Dinsmoor and then published a plan that records the evidence for the placement of a gutter along the south face of the north stoa.⁸ Rectangular areas of trimmed bedrock inside the north stoa indicate the original position for the interior corner column and two columns to its east. Similarly trimmed bedrock south of the position for the corner column indicates the line and spacing for interior columns of the stoa that defined the west side of the temenos. The west or back wall of this west stoa is preserved where it was cut into rising bedrock; the cutting in bedrock for the gutter that ran along the east façade of the stoa is also easily discernible. None of these measurements, however, resemble the dimensions for the corresponding elements of the south stoa in what is considered to be its first phase, where it has been exposed this year at the southeast corner of the temenos of Temple E.

⁸ J. K. Anderson, "Temple E Northwest, Preliminary Report, 1965," *Hesperia* 36, 1967, fig. 1 on p. 2.

The key to a logical explanation for the variations in plan and dimensions between the west end of the north stoa and the east end of the south stoa perhaps lies in remains that are preserved at the west end of the Temple E itself. Here at the center of the enclosure one sees the foundations of a large temple of the early colony that had been replaced by a podium temple with smaller dimensions. The second temple was built slightly farther to the west than was the original temple. The preserved remains indicate that the first temple was backed against a north–south foundation of cut poros blocks. That foundation, 1.60 m. wide, was not fully understood in the original publication; there it was identified as buttressing for the west end of the first Roman temple.⁹ This so-called buttress runs along the west edge of the krepidoma of the first Roman temple, not into the krepidoma which it is supposed to have strengthened. Cuttings for a continuation of this north–south foundation are visible in the hardpan going north at the northwest corner of the early temple foundation. Here no special buttressing should have been needed. The line of foundation is, in reality, all that survives of the wall that had defined the west side of the first Roman temenos. Apparently when the podium temple was built, perhaps in the reign of Domitian, or at some time thereafter, the sacred area was expanded westward to the point identified by Dinsmoor in 1953.¹⁰

If the early west wall of the temenos is restored on the north–south foundation at the back of the early temple, the result is a nearly square, early colonial sanctuary, 90.33 m. from north to south, slightly longer from east to west, that is, *ca.* 92.10 m.¹¹ The south stoa fits well within these limits. In calculating the intercolumniation of the interior columns of the south stoa, one can use the extant east wall, the three piers that are now exposed at the east end of the stoa, and one extant pier of the interior colonnade of the north stoa preserved at 35.90 m. west of its east façade (Fig. 1). Other preserved remains of the north stoa can be used as well, for it seems generally to mirror the south stoa of the same temenos. The original west end of the south stoa is here restored as the southern extension of the early western temenos wall that abuts the foundations of the first Temple E. By using all the existing remains described above, it can be calculated that the intercolumniation which fits the

⁹ Freeman in *Corinth* I, ii, pp. 175–178, plan on pl. XVIII, esp. fig. 108. Freeman dates the construction of the poros temple “about the middle of the first century after Christ” (p. 232) by a coin found, according to the excavation notebook, on the “buttress” wall she associates with the earlier temple foundations. If, however, this so-called buttressing is a foundation for superstructure of some sort that was removed, then the coin was found in fill that had been dumped over the poros foundation blocks left *in situ* after the removal of the upper courses; the coin thus would provide a *terminus post quem* for the destruction of the first-phase west wall of the temenos, not a *terminus ante quem non* for the construction of the first temple. See footnote 15 below.

¹⁰ The Domitianic date was suggested to Freeman (*Corinth* I, ii, p. 183) by a coin found in a stratum of marble chips, or thereunder, which is associated with the construction of the marble phase of Temple E. For problems associated with the architectural phases, see p. 335 below. At the time of the westward expansion of the temenos, the earlier west wall was dismantled and buried.

¹¹ This is *ca.* 305 Roman feet. The foot used here is between 0.2956 and 0.2960 m. See *RE* XIX, *s.v.* *pes*, cols. 1085–1086 (W. Becher). See also O. A. W. Dilke, *Mathematics and Measurement*, London 1987, pp. 26–27 and F. Hultsch, *Griechische und römische Metrologie*, Berlin 1882, pp. 88–98. One assumes that the plot assembled for the construction of Temenos E was 305 or 306 Roman feet wide and that the exterior limits for the foundation trenches would have been totally within the plot acquired for construction.

evidence is 4.767 m. This unit also fits well the interval from center of column to the face of the east end wall of the stoa as well as that from restored last column at the west to the western end wall of the stoa.

PHASE 2 (Fig. 2)

The building techniques that suggest a second phase of construction for the structures enclosing Temple E are easily discernible in the fabric of the West Shops. The phase is easily isolated, as mentioned above, by its use of rubble and concrete and by the careless laying of ashlar wall blocks. The preserved rubble-and-concrete walls of the West Shops indicate that the structure between the northern and southern corner towers is a complete alteration of the original design; only the poros masonry of the towers appears to be part of the original phase. The altered design was two storied, the lower story of chambers and colonnade facing onto the west end of the forum. Here a central stairway split the line of chambers into halves and rose to the higher level of the temenos as the ceremonial entrance to the sanctuary. The ground level at the west end of the forum, immediately east of the West Shops, is about 80.95 m. above sea level; ground level within the temenos near the temple is *ca.* +85 m. The second or upper story of the West Shops was built as a stoa over the vaulted chambers and faced toward the west, opening onto the temenos of Temple E. What at the level of the forum was the back or west wall of the chambers supported at temenos level the foundation for the stylobate of the stoa facing Temple E.

Excavation has cleared enough of the south end of the West Shops to show that an east-west foundation of the second period was bonded into the back wall of the chambers of the West Shops. This foundation apparently supported a superstructure that served as the second-phase façade for the south side of the temenos. It was the westward continuation of the east colonnade of the temenos built above the chambers of the West Shops. This later foundation for the south stoa apparently was constructed of poros blocks rather than rubble, for the impression of blocks is preserved in the western face of the rubble mass of the West Shops. The robbed-out foundation trench was explored this year for no more than a three-meter length, but its minimum width here has been established as 1.70 m.; its northern edge is about 3.20 m. north of the corresponding edge of the earlier stylobate of the south stoa.¹² The expanded stoa is about eleven meters wide from the inside of the back (south) wall to the front exterior edge of the foundation of the stylobate. To understand the full implication of the widened stoa one must now turn to the Roman remains at the northwest corner of the temenos, as determined by W. B. Dinsmoor.¹³

¹² The same pattern, with two parallel foundation trenches *ca.* 3.20 m. on center, is recorded in a plan of the area north of Temple E, immediately west of the present archaeological museum. See S. S. Weinberg, "Excavation at Corinth, 1938-39," *AJA* 43, 1939, p. 595, fig. 4. The more southern of the two east-west trenches corresponds to the northernmost east-west trench excavated in 1989; the foundation in it supported the later façade of the north stoa of the temenos. The trench is about 1.70 m. wide, and its bottom still contains a course of large, re-used architectural blocks, many with moldings, laid in cement.

¹³ Anderson (footnote 8 above), pp. 1-12.

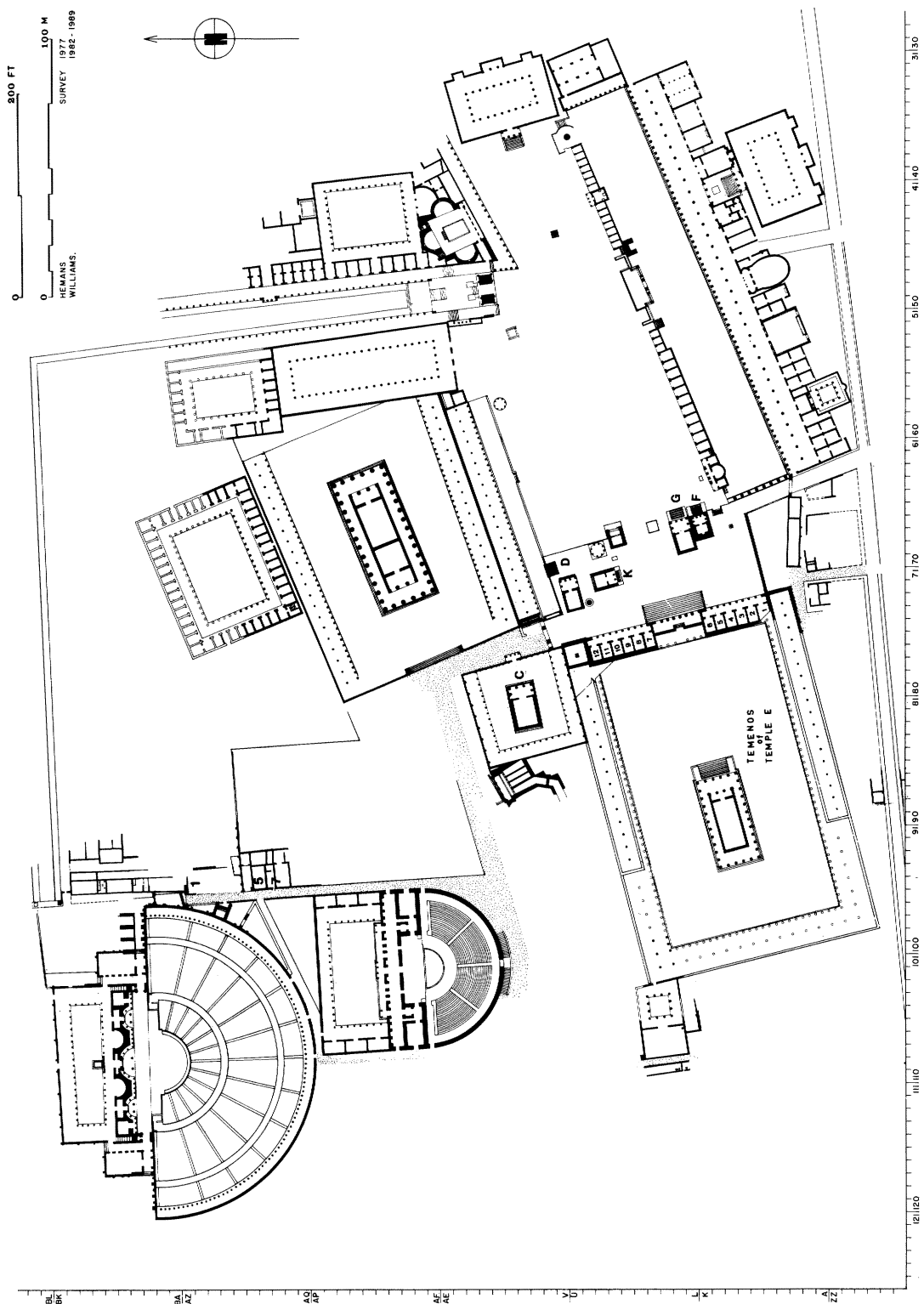


FIG. 2. Plan of central area of Ancient Corinth, ca. A.D. 150

The living rock at the northwest corner of the peribolos, into which the north stoa was cut, preserves rectangularly trimmed beddings for the foundations of a line of interior stoa columns. The beddings measure about 0.90 m. on a side, placed about 5.40 m. on center. One bedding is *ca.* 86.15 m. above sea level. The trimmed bedrock within the stoa thus is here over half a meter higher than the top of the toichobate of Temple E in its second phase. This, however, should not be considered as evidence by which to restore a discontinuous floor level within either the north or the south stoa of the temenos and, perhaps, thereby suggest some division at the point where the temenos was expanded in its second phase. One must remember that a drain carried water along the whole length of the façade of both the north and south stoas and that such drains would have been given an adequate slope; the stylobate of both flank stoas would have had to conform to the slope of the drains so that their stylobate steps would not have had risers increasing in height as they stretched eastward.

The distance between the axis of the interior columns and the inside edge of the gutter in front of the north stoa is 5.75 m. The west stoa apparently was designed to have the same breadth as the north stoa. Its west (back) wall, carved from the bedrock, is still preserved near the northwest corner of the temenos to a height of 0.88 m. above the bedrock floor level. A distance of 11.80 m. separates the eastern face of the back wall from the exterior edge of the cutting in bedrock that once held the drain at the front of the west stoa. This same interval was used for the redesigned stoa at the southeast corner of the temenos, measuring from the north side of the south foundation of the stoa to the north side of the trench for the later stylobate of the stoa. No cutting in bedrock exists, nor did such cuttings ever exist, in the northwest corner of the temenos which might suggest that a stylobate had been erected here with measurements equivalent to those of the early south stoa at the east end of the temenos.

CHRONOLOGY

Up to the present moment evidence for the chronological development of the temenos of Temple E has proved to be both tenuous and confusing. In 1940, excavation was conducted in the area immediately west of the northern half of the West Shops. Although the fill that was brought in to establish the Roman level of the temenos there did have Roman sherds in it, not nearly enough such sherds were recovered to provide a precise date for the filling operation. The most conclusive material that gives a date of construction for the buildings that enclosed the sanctuary comes from the fill of a foundation trench that was excavated in 1976 against the south flank wall of the "south tower" of the West Shops. This trench contained a large sample of thin-walled cups of the Augustan period.¹⁴

¹⁴ S. S. Weinberg, "A Cross-section of Corinthian Antiquities (Excavations of 1940)," *Hesperia* 17, 1948 (pp. 197–241), p. 240; C. K. Williams, II, "Corinth, 1974: Forum Southwest," *Hesperia* 44, 1975 (pp. 1–50), p. 75. The south "tower" of the West Shops was considered in 1974 to have been a construction that perhaps postdated the earthquake of A.D. 77. This date was reached by a study of the complex but logical relationships between the various ground levels in the area. But see, thereafter, C. K. Williams, II, "Corinth 1976: Forum Southwest," *Hesperia* 46, 1977 (pp. 40–81), p. 62. The "tower" here is dated within the Augustan period by the finds recovered from a foundation trench along the south face of the south wall of the "tower"; the finds in that trench were largely Roman brittle wares.

It was hoped that the material from the packing used under the earliest Roman floor of the south stoa of the temenos could give more precision to the Augustan date obtained at the "south tower". That material, however, has proved to be not simply reticent but almost totally inarticulate when its chronological significance is considered. This deficiency is understandable for two reasons. First, constructing their complex in the Augustan period, the Romans apparently were doing so on land that had either no Roman overbuilding to disturb, or very little. Secondly, they established the floor level of the stoa over the fills that they had removed from the deep foundation trenches which they had excavated while building their new complex. The artifacts from the dumped fills have proved to be almost one hundred percent pre-Roman in date. In fact, the material was largely Archaic and Classical, with less Early Helladic but some Neolithic. Much smaller amounts of Geometric and Hellenistic, and no Middle or Late Helladic pottery, and very few figurines were found in this fill.

One of the most interesting fragments recovered from the great mass of pottery was a tripod bowl:

1. Archaic stamped tripod bowl Pl. 61
C-1989-45. H. 0.10; est. max. rim diam. 0.25 m.
Fine, local, tan clay with air holes; large and small mudstone inclusions, no lime, very fine sparkling inclusions. 7.5YR 7/4.5.

Shallow bowl with rectangular, vertical supports, one of which is preserved; originally probably three in all. Support *ca.* 0.125 m. wide, applied to bowl under rim, has slightly concave face, beveled on front edge of resting surface. Three ribs above bevel. Undersurface of bowl has straight wall that flares at about 30 degrees to vertical, squared rim with corded

rib at bottom, two offsets above; on middle of horizontal top surface of rim, another corded rib. Interior surface of bowl has many mudstone grits.

Front face of preserved support is stamped just below corded band of rim with six tongues hanging downward, separated into two groups of three by an eight-petal rosette in relief. Rosette framed by delicate circular ribbed frame. Stamped tongues delineated by single fine rib.

For rosette, see S. S. Weinberg, "Corinthian Relief Ware: Pre-Hellenistic Period," *Hesperia* 23, 1954 (pp. 109–137), pl. 30:c (KP 1415). For tongues, see *ibid.*, pl. 30:l (from Perachora).

One date in the chronology of the temenos of Temple E put forward by the original excavator of the temple itself is that of the construction of the so-called "buttress wall" at the west end of the foundation of the early Roman temple. Its Claudian date was suggested by a late coin of Caligula found in the foundation trench dug to bed the "buttress".¹⁵ The foundation and the significance of the findspot of the coin have been discussed above (footnote 9). If the conclusion there is right, the coin may only supply general evidence for the date of destruction of the early west wall (the so-called "buttress") of the temenos before the sanctuary was expanded westward to its maximum length.

¹⁵ Freeman in *Corinth* I, ii, pp. 175–178, coin of Caligula, minted *ca.* A.D. 41; for type, see K. M. Edwards, *Corinth*, VI, *Coins 1896–1929*, p. 21, no. 47, P. Vipsanius Agrippa and M. Bellius Proculus. The coin was found associated with the lowest course of the foundation, apparently in fill dumped into the trench after the foundation there had been dismantled. See M. Amandry, *BCH*, Suppl. XV, *Le monnayage des duovirs corinthiens*, Paris 1988, p. 76, where he dates the coin to A.D. 37/38.

A third chronological point that can be used in the history of the temenos is the construction date of Temple E in its podium form. The date is suggested by a coin, the style of the architectural elements used in the later temple, and the pedimental statuary. The coin, issued during Domitian's reign, was found either below or in the stratum of marble-chip construction debris deposited during the erection of the podium temple.¹⁶ Because of this coin Freeman dates the podium temple to the Domitianic period. The marble capitals that have been assigned to the peristyle of the temple, however, are much later in style than Domitian. In fact, late Hadrianic seems to be the earliest possible date for a capital with extensive use of the running drill and leaves cut in a loose style with bent-over lobes and long, tear-shaped spaces in between, as well as for the high degree of variation in the execution, even on a single capital. An even later date might be suggested from a study of the type of marble used in the temple. Except for three poros capitals set up at the west end of the podium, all are carved of a white marble that weathers dark gray. It is composed of medium-sized crystals, except for the larger ones in veins that run through the stone. This type of marble is used at Corinth only in Temple E and in the capitals and epistyle blocks of the West Shops (Pl. 59). It seems possible that the marble, unique in Corinth to those two monuments of the same complex, was imported as part of a single building project. The architecture of the West Shops that is fashioned from this marble, however, seems to date by style to the later 2nd century after Christ, at the very earliest.¹⁷

The fourth chronological point that must be considered in the history of the temenos of Temple E is the date of the alteration of the West Shops. The capitals of the east façade, carved in their singular marble, are decorated on their axes with heads rather than with leaves or flowers. As stated above, a date in the very late 2nd or early 3rd century has been suggested by the style of those capitals, even though the schema itself is to be found in a capital from the Mahdia shipwreck and others at Pompeii. Note, however, the variations in the axial decorative motif on the various capitals at Corinth and the differences in "drawing" of the various wings of the figures (Pl. 59). The West Shops complex in its altered form, the later façade of the south stoa, and probably also the later façade of the north stoa and the expanded western part of the temenos are all integrated architecturally; they appear to be parts of a single building program, perhaps of the second half of the 2nd or early 3rd century.

The preceding points definitely do not include all the chronological possibilities that bear upon the history of the temenos. Others, such as a poros phase for Temple E in its podium form, must be considered. The hypothesis, presented by Freeman in *Corinth* I, ii, that poros was used at the back of the podium temple in its first phase as a device of economy may be true, but those poros capitals assigned to the podium in its marble phase may have

¹⁶ For the coin see Freeman in *Corinth* I, ii, p. 183 with note 16, and p. 233. The sculpture is published on pp. 211–230; the Classicism of the pieces is emphasized, but no precise date of execution is suggested.

¹⁷ E. von Mercklin, *Antiken Figural kapitelle*, Berlin 1962, nos. 549 a–g, p. 144, fig. 1160. A range but no precise date of execution is offered.

been scavenged from an earlier temple that was largely or completely poros.¹⁸ Although preserved only in weathered condition and largely stripped of their plaster surface, the capitals do not correspond closely in style to their marble counterparts.

It is hoped that all the chronologically related facts listed above will be elaborated upon in the course of the new excavations around Temple E. Unfortunately, none of the problems hinted at above has been resolved by excavation during this past season.

POST-STOA OCCUPATION

The West Shops complex appears to have survived intact down to the earthquake of A.D. 365; the earthquake apparently was not so damaging to the fabric that the structure could not be repaired and re-used. The shops were reconstructed; damaged capitals were clamped securely back into place (Pl. 59:a). The restoration project was recorded on the epistyle of the colonnade.¹⁹ Temple E at the center of the complex apparently was shaken by the same quake, but thereafter it was not so gently treated as was the stoa. In fact, it appears to have become, immediately, the site for an active marble-quarrying operation.²⁰ Investigations along the north side of the podium of Temple E have shown that the Roman floor level of the temenos here has been badly disturbed, in one place to nearly two meters below the preserved base of the podium. In a pit that descended to an elevation of 83.09 m. above sea level was found a column capital discarded from the temple, and at a higher level a poorly constructed late Roman wall, the top of which protruded to 85.71 m. above sea level. The fills associated with the deep intrusions below the temenos floor are datable within the late 4th and early 5th centuries after Christ.²¹

Some of the fills associated with the disturbance were mixed with large amounts of tiles and marble chips. In a few cases the marble shows signs of having been calcined. Numerous fragments still preserve worked surfaces, a few of which can be identified as moldings for column bases. The amount of chips discarded in certain strata on this side of the temple, left lying there without being gathered for lime burning in a kiln, implies that the marble architectural members that had fallen or were removed from the temple were not shipped to the lime kilns but rather recut on the site for new uses in the Early Christian period.

The south stoa appears to have been mutilated and the site re-used at the time that the West Shops were repaired and that the temple was abandoned. After the 360's, interior columns two and three of the south stoa were removed, and the floor level was drastically lowered (Pl. 60:b). A wall with a doorway in its midsection was built across the width of the stoa where column two earlier had stood. Blocks of the foundation for column two were

¹⁸ The poros capitals are published by Freeman in *Corinth* I, ii, pp. 187–188, fig. 131, nos. 23–25, where she says that “their possible re-use from an earlier building is extremely doubtful.”

¹⁹ J. H. Kent, *Corinth*, VIII, iii, *The Inscriptions, 1926–1950*, Princeton 1966, no. 504 a–e, pp. 165–166, pl. 43.

²⁰ Freeman in *Corinth* I, ii, pp. 172–173. For later excavation along the north side of the temple, see Notebook 784, lot 1986-14.

²¹ For deep intrusions of the 4th and 5th centuries, see Corinth pottery lots 1986-13, 1986-14, 1986-15.

removed down to the bottom course of the pier, and a threshold block, its top 83.29 m. above sea level, was laid over the remaining blocks. The new floor level was established at least one and a half meters below what previously had been the floor of the stoa.

A second north-south wall was constructed 1.60 m. west of the one with the door. A heavy fall of roof tiles was cleared immediately west of the second wall; under the tiles were found three superimposed earth floors. The lowest of the three was found 83.59 to 83.72 m. above sea level, the highest between + 83.73 and + 83.85 m. The builders, in order to obtain an unencumbered space for the room, had to dismantle the third interior column of the south stoa and its foundation blocks down to an elevation of + 83.68 m. (Pl. 60:a, b). Red clay was found covering the last floor in a band extending westward just south of the foundation for the third stoa column. Although the remains were found in poor condition they probably should be considered as evidence for an east-west partition wall of clay.

Both the foundation that had originally supported the back (south) wall of the stoa and the foundation for the original north stylobate of the stoa apparently were incorporated within the new structure and served as the base for the east-west walls of the new complex. Evidence for this hypothesis exists in the facts that the foundation for the back wall of the stoa was not robbed of its blocks until sometime in the 6th century and the foundation of the earlier façade of the stoa not until the mid-11th century.

There may have been access to this new complex through the east wall at what had been the end of the south stoa, but most likely the main access was from the south, at the south end of the corridor formed by the two north-south walls discussed above. A threshold might have been expected at this point in the foundation for the back wall of the stoa, but excavation has revealed only that the foundation here had been cut down to a level of + 83.70 m. so that a drain could be laid directly over it (Pl. 58:b). The drain declined toward the southeast and passed under the roadway along the back wall of the stoa. The road surface in this area was 83.78 m. above sea level.

The drain was no mean hydraulic installation. On either side of the point where the drain passed over the foundation of the stoa the water line was built of U-shaped terracotta tiles. Each tile is 0.58 m. long, *ca.* 0.20 m. wide, and 0.26 m. deep, enough to accommodate the flow of a large volume of water (Pl. 58:a).²² The drain was leveled in a bed of cement and sealed with flat cover tiles.

The north end of the corridor appears to have terminated against the foundation blocks of the early stylobate of the south stoa, and against that face the inhabitants of the new structure built a simple hearth at an elevation of *ca.* + 83.74 m.

Little pottery was found sealed between the tile debris and the floor, but enough was recovered to hypothesize that the end of the complex came in the late 5th century. Eleven coins were recovered from the various earth floors of the western room. The latest datable coin is, unfortunately, from the earliest floor; it is a minimus and datable only generally between the years 395 and 450. Two other minimi, coins 1989-190 and 1989-191, were recovered from the floors, but their condition makes it impossible to identify them precisely.

²² Terracotta water-conduit tile, FM-1989-1.

They can be dated only generally within the 5th and 6th centuries after Christ.²³ On the uppermost floor was found a broken but complete coarse basin (Pl. 60:a) with an incised configuration on its base: when turned over, the basin could serve as a gaming board.

2. Coarse basin with incised gaming design Pl. 60

C-1989-27. H. 0.127; diam. (approximately) 0.308–0.30; L. through handles 0.346 m.

Local buff clay, slightly pink in places; small, white inclusions, chaff impressions. Between 7.5YR 7/3 and 10YR 7/4.

Hand-thrown, round basin with flat bottom, nearly vertical body; wall squared at top without articulation, flat top sloping slightly downward toward the exterior. Two horizontal lug handles at lip; top of

rim decorated with single row of six punctures at the midpoints between handles; double row of punctures on top of handles. Resting surface: gaming board incised with circle after firing, subdivided into eight wedge-shaped sections, each containing one letter. Although letters five and seven might be interpreted as gammas, more likely they are lunate sigmas. With such an interpretation all letters can be considered to have been written to be read from the same vantage point. Reading clockwise:

H A I A C E C E

A heavy stratum of fallen roof tiles of Lakonian form, broken but largely undisturbed, was found on the top floor of the room west of the corridor. No Early Christian stratum separated this debris from the later Byzantine levels above the tiles. No attempt appears to have been made to rebuild the complex after the roof fell, nor does it appear that the tile debris had been scattered in an attempt by looters to search the ruins after the collapse. One simple grave, however, had been dug through the tile debris of the room. The skeleton was extended, head to the west with its left arm to the side, the right hand on its pelvis. The burial was without grave goods. The tiles that sealed the grave may have been gathered from the ruins into which the burial had been sunk, for those that covered the grave are very close in style, size, and fabric to those in the building debris. It appears that the grave was made shortly after the collapse of the structure.

3. Lakonian pan tile Pl. 61

FP-1989-2. Max. L. 0.851; W. at top of tile 0.371; W. at bottom of tile 0.326 m.

Local buff clay, some lime; small tan inclusions. 7.5YR 7.5/4.

Locally made pan tile with concave upper surface. Max. H. of cord is 0.035 m. at upper end. Convex

undersurface slightly gouged by round-ended tool; strokes run lengthwise on tile. Undersurface slightly flaked from lower edge of tile inward for up to 0.14 m. Top surface is smooth, unslipped, with three finger-marks traced in arc at upper end by potter. Edges of tile slightly rounded, not knife cut or moldmade.

²³ Coins from the lowest floor: 1989-198 (Appendix, No. 5); 1989-202 (Appendix, No. 42); pottery lot 1989-68.

Coins from intermediate floors: 1989-182 and 1989-183 (Appendix, No. 42), 1989-190 through 1989-193 (Appendix, No. 19); pottery lot 1989-69.

Coins from the top floor: 1989-178, 1989-179 (Appendix, No. 37); pottery lot 1989-70.

4. Lakonian cover tile Pl. 60

FC-1989-1. Max. L. 0.622; W. (upper end) 0.199; W. (lower end) 0.243 m.

Poorly refined, local Corinthian, greenish buff clay, with sandy and lime inclusions; no slip. 5Y 8/3.

Cover tile with widely flaring, V-shaped profile, shaped over rough formwork, probably wood, leaving undersurface rough and striated. Top surface of tile smoother but not without fabrication markings.

The potter has dragged two fingers in a wavy course along the ridge of the tile, starting 0.23 m. from one end and running down to the other. Edges of tile are slightly rounded, not straight or precisely cut or shaped.

Compare this cover tile with examples from the tile debris found in room 4 of Building 7, East of the Theater, e.g. FC-1988-2 (Pl. 60), dated at the end of the 2nd or early in the 3rd century after Christ. Note their more polished form and more circular section.

A building of date and history similar to that just discussed was excavated this year on the south side of the Roman road which paralleled the back wall of the south stoa. Roof tiles had also collapsed over the last floor of this structure; Byzantine strata immediately overlay the debris. The destruction debris consisted of roof tiles of Lakonian form, paving tiles, and bricks, all together weighing 101.94 kilograms. The cover tiles were about 0.61 m. long. The pan tiles were between 0.375 and 0.41 m. wide. The bricks were incised diagonally from corner to corner to facilitate subdivision into triangular elements.

Two pots can be identified as coming from this complex, the first a red-ware plate with stamped floor, probably of northeastern Peloponnesian provenance, the second a fractional amphora.

5. Roman Red Ware plate with stamped floor Pl. 61

C-1989-11. H. 0.047; diam. of base 0.094; diam. of lip 0.191 m.

Fine, reddish tan to reddish orange clay; a few voids. A few sparkling inclusions in fabric, more in slip. 2.5YR 6/6.

Bowl with flat base, body flaring at *ca.* 40 degrees to slightly inset, flaring rim with rounded lip. In center of floor a stamp with relief outline framing a Greek cross with flaring ends; field in each arm decorated with single pellet. At center of cross, X in square. Thin, metallic red slip on all of interior; on exterior, double dipping of slip evident, with parts of exterior wall reserved but also with casual slip drippings.

6. Fractional amphora Pl. 61

C-1989-32. Diam. of body 0.144; diam. of rim 0.054 m.

Fine buff clay, inner half of body wall much pinker. White inclusions; voids. Outside surface 7.5YR 7.3/4.

Fractional amphora with ovoid body, maximum diameter at shoulder, sharp articulation of shoulder which rises at *ca.* 30 degrees to tall, narrow neck and outward thickened, vertical rim, 0.016 m. tall. Two vertical ribbed handles, attached near edge of shoulder and at midneck. Lightly wheel-ridged body, spiraling ridges on neck, possibly from throwing.

BYZANTINE LEVELS

The southeast quarter of the temenos of Temple E seems to have been reoccupied in the Byzantine period only after the Roman and Early Christian ruins of the area were mined and the foundation trenches of the south stoa and the west wall of the West Shops behind

shops four, five, and six were back-filled with tiles, stones, and discarded pottery. The trench that had held the foundation blocks for the north façade of the south stoa in its first phase, once mined, was used as a dumping ground for over fifty and up to eighty years; the activity started within the last quarter or perhaps as early as the later third quarter of the 11th century.

In general the fills recovered from the trench that had been dug for the original façade of the south stoa all were similarly dark in color but with differences in texture, resulting from the varying quantities of rocks, rubble, ash, and tiles. The dumped strata also varied in thickness and configurations, apparently the result of haphazard deposition of cartloads or bucketloads of earth in the trench. Despite the fact that the soils all appear to be dumped debris, the pottery from the eastern grid sections definitely is earliest in date. Because of the ceramics and the way the tipped fills settled into the foundation trench it appears that the dumping operation was started at the east end, that is, at the point where the poros blocks of the West Shops are still *in situ*.

The various fills of this trench, although excavated in discrete baskets, have been divided for this report into seven separate lots, largely in order to present large enough samples for statistical analysis. The seven different pottery lots are somewhat arbitrary subdivisions of the whole stratigraphic sequence within the two distinct sections of the foundation trench. Each pottery lot is composed of a group of sequential strata isolated at the time of excavation in accordance with the volume of pottery recovered and because of some significant changes in texture between strata. All earth from this trench was sieved.

Lot 1989-62 contains the pottery from the fill that overlapped and descended into the robbed-out foundation trench immediately west of the point where the West Shops meet the stoa at the southeast corner of the temenos; this is the grid area between 74:D-74:E and 75:D-75:E (see Fig. 2). Lot 1989-62 did not produce enough pottery to provide a sample for statistical analysis. Of about 20 kilograms of pottery that was recovered, only 0.273 kg. was glazed. The styles are among the earliest glazed wares recovered from anywhere within the trench and include green-painted White Ware, Brown Glazed Ware, Slip Painted (light on dark) Ware, Spatter Ware cup 15 (Pl. 65), local green-painted ware, Green and Brown Painted Ware, and a ware that is clear glazed on unslipped light clay. Pottery lot 1989-63 contains a sample that was totally contained within this segment of the trench, directly beneath lot 1989-62, down to an undisturbed, pre-Roman level that forms the floor of the trench.

The second sequence comes from grid squares 77:C, 77:D, and the southern part of grid square 77:E (Pl. 62:a). This fill, which overlapped the foundation trench and descended into the trench itself, is represented in lot 1989-8. The lot is especially large because it includes a fill which spread beyond the confines of the foundation trench. As such it is the fill over which the Byzantine buildings were then constructed, obliterating all memory of the size and direction of the underlying foundation trench. This fill corresponds, in stratigraphic sequence, to that of lot 1989-62 farther east, but the pottery of lot 1989-62 is much earlier in date. This may be explained by the theory that the foundation trench was filled from east to west in a process that lasted for a period of years. Thus the pottery dumps should be later

as they proceed toward the west. The stratigraphy, as excavated, does indicate that the several earths were dumped from east to west. Lots 1989-15 and 1989-16 were the strata excavated in levels below lot 1989-8 and were totally contained within the walls of the foundation trench.

TABLE 1: Byzantine Sherds

LOT	1989-73	1989-8	1989-15	1989-16	1989-63
<i>Weight</i>					
TOTAL SHERDS	42.675 kg.	126.36 kg.	96.353 kg.	49.75 kg.	99.63 kg.
GLAZED SHERDS	2.655 kg.	7.322 kg.	1.428 kg.	1.726 kg.	1.429 kg.
(% of whole)	(6.22%)	(5.7%)	(1.5%)	(3.45%)	(1.43%)
<i>Percentage</i>					
WHITE WARES	0.0376	0.0143	0.0035	0.0139	0.1978
WHITE WARE, SPATTER	—	—	0.0560	—	0.0029
DARK ON LIGHT	0.0527	0.0322	0.0805	0.0011	—
LIGHT ON DARK	—	0.033	0.0259	0.2390	0.49222
SPATTER, RED CLAY	—	0.0076	—	0.0695	0.0074
BROWN GLAZED	0.0037	0.0259	0.0392	0.0706	0.08068
PLAIN GLAZED	0.2335	0.0494	0.0210	0.0362	0.01110
GREEN GLAZED	0.0941	0.0846	0.1960	0.1402	0.1148
GREEN/BROWN	0.1996	0.033	0.4271	0.3974	0.0370
MEASLES	0.233	0.4411	0.0266	0.0028	—
GREEN-GLAZED MEASLES	0.01332	0.0163	—	—	—
SGRAFFITO	0.1393	0.2293	0.0560	0.0220	0.02220
GREEN-GLAZED SGRAFFITO	0.01937	0.0214	0.0280	0.0023	—
PAINTED SGRAFFITO	0.0056	—	0.0329	0.0086	—
INCISED	—	—	—	—	—
OTHER	—	0.0116	0.0035	—	—

Warnings must be made to anyone using the pottery statistics in Table 1. First, in lot 1989-15 the Spatter Ware fragments all come from one imported White Ware plate (11; Pl. 63) and are of a type that is extremely rare in Corinth. Two fragments from the rim of a cup, similar to the plate in fabric and technique, were identified this year in lot 1989-63. All are entered under a separate category, qualifying both as White Ware and as Spatter Ware. The Light on Dark Ware of lot 1989-63 is related in technique to that from the Frankish bothros of lot 1989-20, but the style varies radically enough between the two distinct periods to imply that a Frankish revival of the technique occurred after a period of disuse. Lot 1989-16 contains an almost complete, heavy-walled bowl in Green and Brown Painted technique; all other glazed material in the lot is relatively fragmentary. Because of this happenstance the percentage of the Green and Brown Painted Wares in the lot probably is higher than it should be. Lot 1989-8 contains an extremely high percentage by weight of Measles and Sgraffito Wares. One can see that both techniques were becoming popular after the light-on-dark style ran its course. Of special interest in this lot is an almost

complete plate of Measles Ware that had been discarded before it had had its second firing. This slipped but unglazed specimen is of local clay and is the only misfired or failed pot that as yet has been recovered from the east-west foundation trench.

Lot 1989-73 (Pl. 62:b-d)

Coins: 1989-243 (Appendix, No. 59). Manuel I?

Lot 1989-8 (Pl. 63:a-d)

Coins: 1989-53 (Appendix, No. 10); 1989-250 through 1989-257 (Appendix, Nos. 53-55); the latest coin is of Alexius I, A.D. 1092-1118.

7. Green Glazed goblet Pl. 62

C-1989-2. H. 0.063; diam. of foot 0.047; diam. of rim 0.072 m.

Half of body missing.

Local cream clay, not well compacted; a few small, white and brown inclusions. 10YR 8/4 to slightly pinker.

Stemmed goblet: stemmed foot with flat undersurface, beveled edge; foot tapers to narrow, solid stem with rib; echinoid body rises to outward and inward thickened, squared rim.

8. Glazed lamp with central bowl, Pl. 62
Broneer type XXXV²⁴

L-1989-1. H. to rim 0.032; H. to handle 0.044; diam. of foot 0.046; diam. of body 0.038 m.

Local buff to pink clay; sandy inclusions. Slightly paler than 2.5YR 6/7, to 7.5YR 7/4.

Wheelmade lamp with disk foot and shallow saucer. Wall rises to rounded, almost vertical lip. In center of floor, three-quarters spherical reservoir 0.037 m. in diameter, filling-hole in top and wick-hole in side above saucer floor. Handle, opposite wick-hole, rises from upper outside of saucer to lip of reservoir. Totally white slipped and clear glazed with brown spatter.

Lot 1989-15 (Pl. 64:a-d)

Lot-1989-15 is stratigraphically later than lot 1989-16, which it seals.

Coins: 1989-125 through 1989-129 (Appendix, Nos. 12, 18, 20, 42); 1989-136 through 1989-139

(Appendix, No. 53). Latest coin, Alexius I, A.D. 1092-1118.

9. Green Glazed cup Pl. 64

C-1989-6. H. 0.053-0.059; diam. of foot 0.035; diam. of rim 0.095 m.

Complete profile, missing about one-fourth of wall.

Medium-fine clay fired pinkish buff with a few small, sandy inclusions. 7.5YR 7/4.

Ring-handled cup with disk foot, low ovoid body. Concave rim slightly carinated at top of body, rising to slightly flaring lip. Vertical grooved handle attached to rim. Cup completely green glazed over white slip.

Shape near Morgan, *Corinth* XI, no. 406, fig. 51:c, late 10th or 11th century.

10. Green and Brown Painted bowl Pl. 63

C-1989-13. H. 0.075; diam. of foot 0.065; diam. of rim 0.201 m.

Complete foot, body about three-quarters complete. Light-red clay turning to tan in places at the exterior, some white and red inclusions. Between 2.5YR 5.5/6 and 2.5YR 6/6.

Ring foot with concave side, flat resting surface. Wide, globular body with upper wall flaring to slightly tapered, rounded lip. Foot pierced horizontally for suspension. Interior white slipped, over which alternating strokes of green and brown radiate from center to lip. Paint covered by glaze on interior, exterior, and undersurface, slightly mottled, turning to olive or mustard where glaze is heavier on interior wall of bowl under lip. Finger marks in glaze on exterior wall.

Profile near Morgan, *Corinth* XI, no. 481, p. 222, fig. 56:c, there dated in the second quarter of the 12th century.

11. Blue-spattered White Ware plate Pl. 63

C-1989-33 a-f. a: diam. of foot 0.10 m.

²⁴ O. Broneer, *Corinth*, IV, ii, *Terracotta Lamps*, Cambridge, Mass. 1930.

a: fragment of floor with one-fifth of ring foot.
f: small part of lip.

Hard, compact, white clay, rough at break, with a few red, some fine black inclusions, pebble.

Vertical ring foot with rounded resting surface (a); straight flaring wall, rounded nicked lip (f). Intense blue and slight bit of red spatter over foot, interior and exterior, denser on interior. Transparent glaze on foot, interior and exterior wall.

Rare in Corinth; cf. Morgan, *Corinth* XI, no. 556, p. 84, but with gold leaf.

Lot 1989-16 (Pls. 64:e, f and 65:a-d)

Coins: 1989-142 through 1989-144 (Appendix, Nos. 50, 54); 1989-146 through 1989-149 (Appendix, No. 44). Latest coin, Alexius I, A.D. 1092-1118.

12. Slip Painted plate, light on dark Pl. 65

C-1989-12. Max. pres. diam. 0.111; diam. of foot 0.072 m.

Single sherd from floor of plate.

Moderately fine red fabric, fired hard; white inclusions. 10R 6/6 to 10R 5/6.

Ring foot 0.01 m. high supports plate with decoration on floor in white slip. Central medallion with bird in profile to right, head and eye in outline, solid body, outlined wing. Medallion surrounded by chain pattern between two lines; trace of decorated zone beyond. Clear glaze inside and out, making slip yellow, background light brown; undersurface unglazed.

Cf. Morgan, *Corinth* XI, no. 715, p. 243, fig. 189, 11th century.

Lot contains Green Glazed lamp similar to **8**; disk foot has smaller diameter, wider filling-hole.

Lot 1989-63 (Pl. 66:a, b)

Coins: 1989-157 through 1989-159 (Appendix, Nos. 41, 44); 1989-165 through 1989-170 (Appendix, Nos. 34, 44, 49, 52); 1989-219 and 1989-220 (Appendix, No. 52). Latest coins, Nikephoros III to A.D. 1081; follis H, A.D. 1070-1075.

13. Slip Painted bowl, light on dark Pl. 65

C-1989-35 a, b. Restored diam. 0.26 m.

Two non-joining fragments of bowl rim; in all, ca. one-sixth of rim.

Gritty, dark gray cooking fabric turning reddish brown at core; some white particles. 2.5YR 3.5/3 (core).

Wide echinoid bowl with upper wall becoming almost vertical as it rises; slightly thickened, squared rim, slightly concave and sloping inward. White slip painted: concentric diamond pattern in horizontal band on interior of body under rim, framed by horizontal chain above and below. Diagonal slip-painted strokes on rim. Transparent, slightly greenish glaze over interior, top, and outside wall, greener on rim.

14. Slip Painted plate, light on dark Pl. 65

C-1989-36 a-c. a, b: rim diam. 0.123 m.

a and b: rim fragments. c: center of plate.

Gritty, dark reddish brown cooking fabric turning gray at core; white particles. Slightly more orange than 2.5YR 4/6.

Floor of plate rises slightly to rim that turns sharply to vertical and tapers to thin, rounded lip. White slip decoration on interior of bowl and rim. Zone 0.032-0.033 m. wide around outside edge of plate floor is decorated with concentric, contiguous diamonds and framed on both sides with single chain; outer chain along vertical face of rim. Central medallion framed by line; in medallion a bird in white slip, feet preserved (c). Glaze on interior and exterior, clear but heavier and slightly greenish at rim, dripping over upper exterior wall. Scar of kiln support 0.05 m. below rim on exterior wall (a).

Lot 1989-62

15. Spatter Painted cup, red biscuit Pl. 65

C-1989-4. H. 0.064; diam. of foot 0.038 m.

Half of upper body and three-quarters of rim missing.

Reddish brown body with sparkling inclusions, white particles, little sand; clay not compacted. Between 2.5YR 5/8 and 5YR 5/7. Cup with flat disk foot, vertical ring handle. Globular body contracts slightly below flaring thin lip. Spattered brown paint over totally white-slipped cup, most heavily spattered on floor.

Byzantine coarse and cooking sherds comprising the various lots within the foundation trench produced when mended at least one or two complete or nearly complete shapes. Those from the lowest level, lot 1989-63, produced the largely intact or nearly complete mended pots. One elongated ovoid amphora with the maximum diameter close to the shoulder and with high-swung handles attached at the lip lacks only the very low neck, lip, and part of one handle (Pl. 66:b). Fragments of other such amphoras are in the lot.²⁵

About a third of a second, more globular amphora in local greenish cream clay illustrates the type of storage jar with strap handles and combed wave pattern in the handle band; the bottom is noticeably concave, with a button.²⁶ Fragments of amphoras with cylindrical necks and squared rims are more common in this lot but do not mend into large fragments. Their strap handles are applied just below the rim. Also popular is a type of amphora that is decorated with broad matt-painted strokes and dabs, sometimes fired red, on its shoulder and upper body. Matt painting, although rare, is also used on pared and polish-burnished pitchers. One is decorated with a slip-painted motif that also is found on a certain type of Imitation Luster Ware, where a central dot is surrounded by a row of smaller dots. Unglazed deep cups are represented by three tall examples, each displaying an everted rim, contracted neck, and high ovoid body. The most complete example is now mended into two-thirds of a whole shape. At least four low basins, all with a maximum diameter of *ca.* 0.26 m., have slightly flaring walls and vertical strap handles; none mends into as much as a fifth of a complete shape.²⁷ In higher levels it is the cooking wares that mend into complete shapes. Lots 1989-15 and 1989-16 each produced one complete globular, two-handled cooking bowl with low, triangular rim, grooved on its exterior vertical face; no coarse wares, however, could be mended into anything approaching a fifth or a sixth part of a pot.²⁸

Lot 1989-8 contains enough matt-painted coarse wares in the form of amphoras to suggest that by the later years of the reign of Alexius I, Byzantine potters were becoming familiar with the use of matt decoration. One amphora from this lot shows spirals rising vertically from mid-body to shoulder; matt-painted strokes have been added across the rim and on the handles. A second amphora has spirals going right, above a horizontal matt-painted band at mid-body: no matt paint, however, is used elsewhere on the jar (Pl. 63:c). Both amphoras are of the type that has a cylindrical neck with squared rim and a distinct groove articulating the rim from the neck; broad handles are attached just below the groove.

²⁵ This form of amphora lasts well into the Frankish period. For the more globular Frankish form, see C. K. Williams, II, "Corinth, 1987, South of Temple E and East of the Theater," *Hesperia* 57, 1988 (pp. 95-146), pp. 105-107, fig. 12, pl. 36, no. 19.

²⁶ Cf. T. Stillwell MacKay, "More Byzantine and Frankish Pottery from Corinth," *Hesperia* 36, 1967 (pp. 249-320), p. 274, no. 34, first half to middle of the 10th century.

²⁷ The same shape in the same condition appears in lot 1989-16 (Pl. 65:b). A matt-painted example, later in form, appears in a Frankish context of the second half of the 13th century. See G. D. R. Sanders, "An Assemblage of Frankish Pottery at Corinth," *Hesperia* 56, 1987 (pp. 159-195), pp. 184-185, no. 29, fig. 7. The Byzantine basins, whether tall or short walled, appear to have had broader bases, the bearing surface generally being *ca.* 0.19 m. in diameter.

²⁸ For this type of cooking pot, see Stillwell MacKay, *op. cit.* (footnote 26 above), pp. 294-295, fig. 3, no. 112, dated to the second and third quarters of the 12th century, and no. 116, dated within the last quarter of the 12th century.

The most interesting observation to be made about lots 1989-8 and 1989-73 centers not on coarse or cooking wares but on the glazed pottery, where a marked rise in the use of Measles Ware and of Sgraffito Ware can be seen. It appears, however, that the incised style has yet to be developed. Despite this, apparently the period of Alexius I saw a great amount of experimentation in pottery decoration and interest in new styles.

Strangely enough, the Byzantines erected their structures over soft soil that they had used to back-fill the trenches from which they had just robbed blocks. In a few places they built over portions of Roman wall that they had not removed, but in general no consideration seems to have been given to the danger of erecting a wall on an underpinning of soft, recently dumped fill. Thus this new suburb of the Byzantine city took on the orientation that the Roman city had previously had but at a slightly higher elevation. The door was blocked up in the late Roman cross wall that had made the east end of the south stoa into a special rectangular unit. That wall itself was reconstructed and put back into use. New walls also were erected on the line of the Roman walls that had abutted the earlier and later stylobates of the Roman stoa; they were carried across the Byzantine fill in the foundation trenches of both stylobates of the south stoa.

Although poorly preserved in this area, the Byzantine rebuilding appears to have been made in two phases. In the walls at the north corner of the excavation, i.e., in grid squares 75:E-F, one sees a floor level and associated door with threshold at an elevation of + 84.37 m. In this same complex a built opening interrupts the adjacent east-west wall, allowing waste or rain water to flow out at an elevation of 84.52 m. above sea level. Both door and drain aperture were subsequently blocked and the ground level was raised to an elevation of + 84.96 to 85.10 m. No material was recovered that gives a precise date for this rather extensive alteration, but at the southeast section of the excavation a similar two-phase Byzantine occupation is attested. Here the walls of the first Byzantine phase were removed, and the trench was filled with a large amount of pottery, now stored in Corinth lots 1989-42 through 1989-45. The fill contained fragments of Measles Ware plates, dark-on-light slipped wares (Imitation Lustre Ware), and large portions of two local Sgraffito plates, the better example illustrated here (C-1989-26 a, b; Pl. 67).²⁹ The material from the debris appears mostly to be from early in the 12th century, with the latest probably stopping before the second quarter.

At the end of the second phase the upper Byzantine floor level generally was covered over and became all but indistinguishable from the lowest Frankish court or plateia surface that later covered the area.

FRANKISH OCCUPATION

The Byzantine structures appear to have been used by the Franks, altered and repaired as need dictated, for as much as half a century during which time the occupants discarded their waste in newly dug bothroi. In some cases they robbed for re-use the stone fabric of the earlier walls. All this activity is best attested in the southern grids of the area dug this year

²⁹ Three coins, 1989-184 (Appendix, No. 42), 1989-185, and 1989-187 (Appendix, No. 42), were found within the fill; they are Roman in date.

(Fig. 3). One deep bothros (1989-1) produced a large amount of early Frankish glazed wares (Table 2).³⁰

TABLE 2: Bothros 1989-1

<i>Weight of Frankish Glazed Sherds</i>	2.873 kg.	<i>Percentage</i>
LIGHT ON DARK (drip slip-painted)		0.1869
SLIP PAINTED/GREEN GLAZED		0.0145
BROWN GLAZED (incl. chafing dishes)		0.0738
PLAIN GLAZED		0.2937
GREEN GLAZED		0.0417
GREEN AND BROWN		0.1496
SGRAFFITO		0.0973
INCISED		0.1026
PAINTED SGRAFFITO (brown)		0.0034
DRIP GLAZED		0.0139

If the weight of the glazed wares from this bothros is anything close to representative for this sample, the statistics suggest that dripped glazing was only just coming into fashion. In addition, the technique of carefully applying light slip to a dark cooking fabric, a decorative device used in the time of Alexius I, now was changed into a carelessly dripped slip on a lighter background. Although the style seems, possibly, to be a re-use of the earlier light-on-dark technique, the Franks applied their slip directly to the blond or pinkish Corinthian clay, not to cooking fabric. From bothros 1989-1 comes one such sherd of drip-slipped style on a pink Corinthian clay (2.5YR 6/8); the pot was broken and apparently rejected before its final glazing and second firing. Plain Glazed, Green and Brown, and, especially, Incised and Sgraffito are the other popular wares of the first half of the 13th century.

Aside from the bothros, trenches robbed of wall blocks yielded independent evidence for the Frankish destruction date of the structures that had originally been Byzantine.

Probably in the third quarter of the 13th century, or, possibly, slightly later, the Byzantine—early Frankish structures were cut down and then sealed, in the western part of the 1989 excavation, under two to three compacted gravel surfaces; on the eastern side of the excavation the walls were sealed under the remains of a very long shed or stoa of the humblest sort (Fig. 3; Pl. 67:b, c).

One cannot be sure of the plan of this later Frankish stoa. Its back or east wall meandered slightly, for where the builders could they took advantage of the visible stubs of existing walls in order to bed their new wall on something more solid than packed earth. The blocks of the back wall were found this year to have been robbed out completely in some areas; either earlier excavators did not observe or modern plowing had already damaged most of this late

³⁰ The pottery is stored in Corinth pottery lot 1989-20. The coins from this pit are 1989-46 (Latin imitative), 1989-244, and 1989-245 (Appendix, Nos. 58, 59, 63).

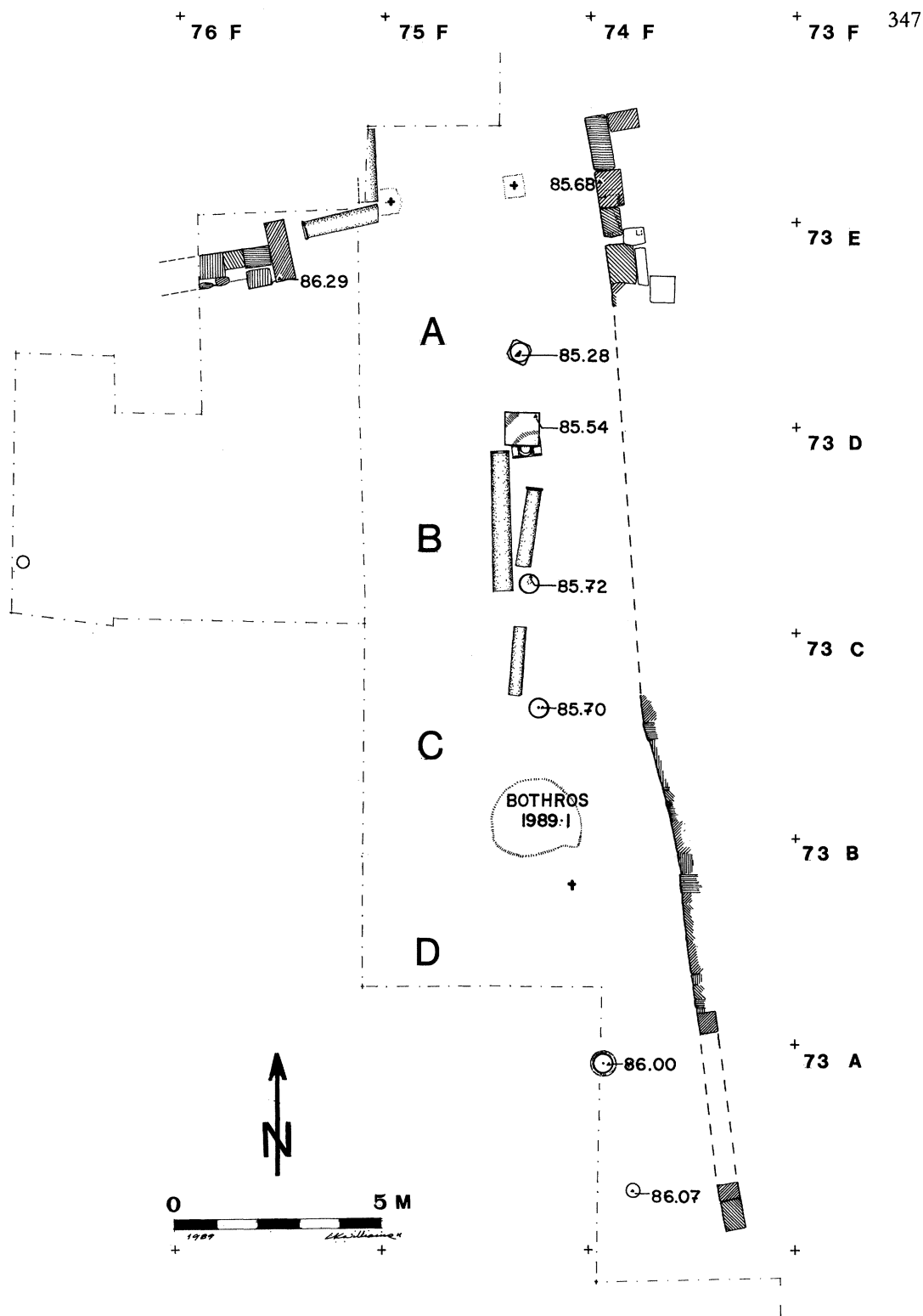


FIG. 3. Plan of excavation area, 1989; remains from second half of 13th century after Christ

Frankish level east of that wall. Thus one cannot be sure if the stoa had been backed by rooms. A few blocks that were found *in situ* against the east face of the wall, however, suggest that the stoa may have been the porch for a long, north–south line of rooms.

The columns that formed the west façade of this porch or stoa exhibit their dependence on the irregular position of the back wall more than on the design principles of straight lines and uniform intervals (see Fig. 3). The stoa or porch was open to the west with the roof supported at irregular points by columns. The roof apparently was tiled, for within the stoa or porch an earthen floor that can be equated with the final packed-gravel surface outside the stoa was found covered with a stratum containing many badly broken roof tiles; there is no reason to think that this debris did not come from the roof of the stoa. Six bases for the façade colonnade have been found thus far; at the north end of the stoa two column bases may be missing (their positions are restored on the plan by small crosses). The gravel of the hard road metal in front of the stoa accumulated against the marble bases and sealed all the trenches into which the bases were set. Thus we can deduce that the stoa was built immediately before any gravel crust had started to accumulate.

The supports of the west façade, six of which were found preserved *in situ*, are spolia of various sorts; the northernmost five elements are four re-used marble capitals and one marble Ionic base. Associated with these elements are fallen monolithic shafts, some granite, some white marble, of varying sizes and heights. The marbles all had been gathered from elsewhere for re-use by the Franks. The southernmost preserved support of the series, marked with the elevation 86.07 in Figure 3, is a monolithic column shaft that was partially buried in the ground. The upper part of the shaft protrudes vertically, but its top is now broken off. The base of the second support from the south is made from a canonical Corinthian capital of the late first or early 2nd century after Christ, set in the ground by the Franks probably to support the column shaft that was found fallen close by.³¹ Support number 3 of the series (Pl. 67:b and c) is the most interesting, for it has dolphins carved in its upper zone over a bottom tier of leaves. It can be dated to the late 2nd or, perhaps, at the beginning of the 3rd century after Christ.

16. Marble column capital with dolphins Pl. 66

A-1989-2. H. 0.65; diam. of bottom resting surface 0.42; min. width of top of abacus *ca.* 0.65 m.

White marble.

Variant Corinthian capital; lower zone decorated by a ring of eight nine-petal palmettelike leaves; these are superimposed on eight larger leaves. In each of the spaces separating the nine-petal leaves rises a central vein of a background leaf, each producing a heart-shaped flower on its tip. On each of the four faces of the capital the central flower supports a bowl

from which dolphins drink(?). From the center of the bowl a stem rises to support a flower resembling a scallop shell, with heavy pistil. Each of the four intermediate heart-shaped flowers is backed by a long, featherlike leaf rising to the tail of a dolphin. Pairs of antithetic dolphins (two bodies preserved) in upper zone, heads down, face the center of the capital; the dolphins have been given menacing countenances. Their teeth are articulated by a series of small drill holes; a frowning expression is achieved by the projecting forehead over the deep eye socket.

³¹ This capital was uncovered in the excavation season of 1976 and was then identified as having been re-used by the Franks as a column base for a large hall. Williams, *Hesperia* 46, 1977 (footnote 14 above), p. 67.

Profile of the abacus: cavetto with ovolo.

Bearing surface incised with E, 0.10 m. high.

Extensive use of drill.

For parallels, see Von Mercklin (footnote 17 above), pp. 207–221. The use of dolphins on a Corinthian type of capital is not uncommon in Roman architecture but is most used in the Italic peninsula. The first such capital known is from Pompeii; examples can be cited from before A.D. 79 down into the Late Antique. The design feature that puts the

Corinth example into a special group is the cup or krater from which the dolphin drinks; in most cases this object is a shell. For the Corinth type, see Von Mercklin, nos. 510, 512, 514 and 525 (not especially close), 528, and 540. Capital 512, now in the garden of the Villa Albani and unassigned to any ancient monument, is perhaps the closest in style to the one from Corinth. Unfortunately, the closest parallels are undated.

The special iconographic significance of the decorative elements used in the dolphin capital suggests that it may have been carved to embellish, specifically, the temple that replaced the Fountain of Poseidon at the west end of the forum or the Temple of Dionysos which Pausanias saw. Because the Temple of Poseidon was built only after the visit of Pausanias to Corinth in the second half of the 2nd century and because the capital found this year seems to be of style and execution appropriate to the late 2nd century, it seems best to assign the capital to the Temple of Poseidon, which was apparently built at some time within the reign of Commodus. Because the undersurface of the capital is marked with an “E”, it should be the fifth of a series. Six columns can be restored to the prostyle porch of the Temple of Poseidon. Therefore the capital has been restored, on paper, to that building, where its dimensions fit and demand no modification of the architectural design already suggested for the temple. The soffit of the epistyle assigned to the Temple of Poseidon is 0.47 m. wide.

Although the sanctuary of Dionysos could, possibly, have been designed to carry capitals decorated with dolphins, the technique of execution of the capital in question seems too late for a temple already existing at the time of Pausanias and mentioned by him.

The next preserved base toward the north, support number 4, is a Corinthian capital that would be canonical in style for a structure erected perhaps as late as in the 3rd century after Christ (Pl. 67:a). Support number 5 is a slightly recut, marble impost block with a cross carved in low relief on each of its opposing faces. It rests on a second impost block. North of it was found one more support, a Roman Ionic base with double torus and plinth that had been partially buried in the ground and re-used again as a base. The top of this base can be seen in the foreground of Plate 67:b.

The stoa may have collapsed in an earthquake. Very little evidence of fire exists east of the façade columns in the stratum of roof tiles that collapsed when the stoa was destroyed. The column shafts from the stoa have fallen each near a base *in situ*, and, except one, all stretched north–south along the line of the façade, resting not on the top hard surface but in uncompacted gravel. They do not appear to have fallen in the position expected of columns toppled from the outward thrust of collapsing roof beams. It might, however, be the fall line expected of columns supporting a north–south epistyle or line of wooden beams when jarred toward the north and south during a quake.

The limit for the open area is clearly marked on the east by the stoa. The limit is also clear on the north; unfortunately excavation has exposed only a small part of the poros-block wall that defines that side. The open area has two or more definite hard gravel surfaces associated with it and above them an uncompacted gravel surface. Activity conducted on the packed surfaces can be attested into the middle of the first quarter of the 14th century, judging by the large number of Frankish coins and counterfeits which was found scattered along the eastern edge of the hard-packed gravelly surface (areas A, B, C, and D of Fig. 3). The latest coins found in this level are issues of Isabella and Philip of Tarentum. On the last packed gravel surface was found, along with Frankish coins, a cast-bronze bowl-shaped weight.

17. Cast-bronze weight Pl. 67

MF-1989-10. Max. diam. 0.133 m. at rim; weight 59.53 g.

Cast bronze, bowl-shaped weight with flaring sides; smooth, horizontal rim without incisions or marks. Centering point for milling visible in floor of bowl.

Similar nesting weights: MF-2831 (12.87 g.); MF-4762 (49.93 g.); MF-5602 (50.73 g.); MF-7660 (76.57 g.); MF-2044 (149.9 g.). By using only these particular weights from the Corinth collection, all of which are very similar in design, a system of measurements can be developed which ex-

cludes none of the other similar weights. On the basis of the weights of this group, one might be inclined to postulate a one nomisma weight of 5 grams. If this is so, then MF-2831 equals 2½ nomismata; MF-4762 and MF-5602 each equals 10; MF-7660 15, and MF-2044 30 nomismata, all fitting the proposed five-gram system with only slight variations.

See commentary by G. Davidson, *Corinth*, XII, *The Minor Objects*, Princeton 1952, pp. 206–207, 212, no. 1632 (MF-2044), where the weight is published as 148.30 g.

Frankish context.

VENETIAN OCCUPATION

A red, almost sterile soil covered the uncompacted gravel. Because of the heavy occupation of Corinth over the centuries, it is extremely rare to find in close proximity to the ancient city and modern village such a homogeneous mass of soil of a single color and texture and yet almost aceramic. It must be assumed, therefore, that this pebbleless, sherdless red soil was brought in as part of a project from some outlying district. It may have been deposited in the Venetian period and have something to do with earthwork fortifications that the Venetians are known to have built at Corinth.³²

A number of modern graves have been dug into this red fill. All faced eastward; few had grave gifts, and only rarely, apparently, was the deceased buried in a wooden coffin. Indeed, some definitely had been buried directly in the earth, perhaps in a winding sheet, for at least five skeletons were found to have had their heads propped into position with rough poros fist-sized stones or discarded marble fragments. Nothing more elaborate than a silver belt buckle, MF-1989-1 from grave 1989-3, and a pair of gold-washed earrings, MF-1989-22 a, b from grave 1989-26, were recovered. Modern plow soil covered the red.

³² Coin 1989-2 (Venetian, 1486–1501) was found in the bottommost level of this sterile soil (Appendix, No. 66).

THE TEMPLES OF THE WEST TERRACE: RECENT OBSERVATIONS

The architectural monuments that define the west side of the Corinthian forum were first published as a group by R. Scranton in 1951.³³ Further excavation and continuing research have revealed that more architectural elements can be assigned to the various monuments of this area, some new stratigraphic observations have been made, and some of the initial conclusions concerning the chronology of the buildings have been altered or changed. The following commentary is offered to alert interested persons that recent research connected with the temples and the west terrace of the forum suggests that a number of the original conclusions should be re-examined. Since the initial phasing of the monuments of the west end of the forum was first put forth by Scranton, three of them have either been redated radically or have been assigned more precise construction dates. These are the Northwest Stoa, the Archaic Doric colonnade at the west end of the South Stoa, and the Fountain of Poseidon (Fig. 4).

The Northwest Stoa was published originally as a colonnaded building 101 m. long, of Hellenistic date, which was extensively repaired in the first years of the Roman colony.³⁴ Excavation in 1969 at the east end of this stoa, however, showed that only the eastern section of the whole structure, 18.45 m. in length, was built in the Greek period.³⁵ Excavation in the 1960's made within the western portion of the stoa indicated that all fills there that directly covered bedrock contained a certain amount of Arretine pottery. The west end of the Northwest Stoa in its extended form thus must be dated to the Augustan period or slightly later. It is completely possible that the sunken terrace along the south façade of this stoa, the steps that led down into that terrace along the façade, and the low terrace wall that defined the sunken area were integrated with the raised terrace at the west end of the forum; all may be part of one building program. It is upon this raised west terrace that the Imperial temples of the forum sat.

The temple terrace does not define the whole of the west side of the forum; rather, it stops at about mid-point, where the floor of the two-level forum rises. From this point southward the level of the terrace is about equal to that of the raised or southern side of the forum. The division between the temple terrace and the forum is maintained here, however, by a colonnade of Archaic Doric columns re-used from the Temple of Apollo. They must have been removed from the cella when the Roman colonists first started their reconstruction program on Temple Hill. Evidence suggests that the columns were set in their place of secondary use in the Julio-Claudian period, probably before the reign of Claudius (Fig. 1).³⁶

³³ Scranton, *Corinth* I, iii, pp. 6–73.

³⁴ Stillwell in *Corinth* I, ii, pp. 89–119, 128–130.

³⁵ C. K. Williams, II, "Excavations at Corinth, 1968," *Hesperia* 38, 1969, pp. 52–55; for plan, see C. K. Williams, II, "Corinth, 1969: Forum Area," *Hesperia* 39, 1970, fig. 12 on p. 36.

³⁶ H. S. Robinson, "Temple Hill, Corinth," in *Neue Forschungen in griechischen Heiligtümern*, Tübingen 1976 (pp. 239–260), p. 254. Robinson dates the filling of the quarries around the temple no later than the later part of the first quarter of the 1st century after Christ. This fact suggests that the temple was being repaired or had been repaired and that the temenos was being put into order for ritual use at that time.

A date in the 5th century after Christ for the columns used for an aqueduct is suggested by R. L. Scranton (*Corinth*, XVI, *Mediaeval Architecture*, Princeton 1957, pp. 2, 24). Earlier, however, Scranton suggested

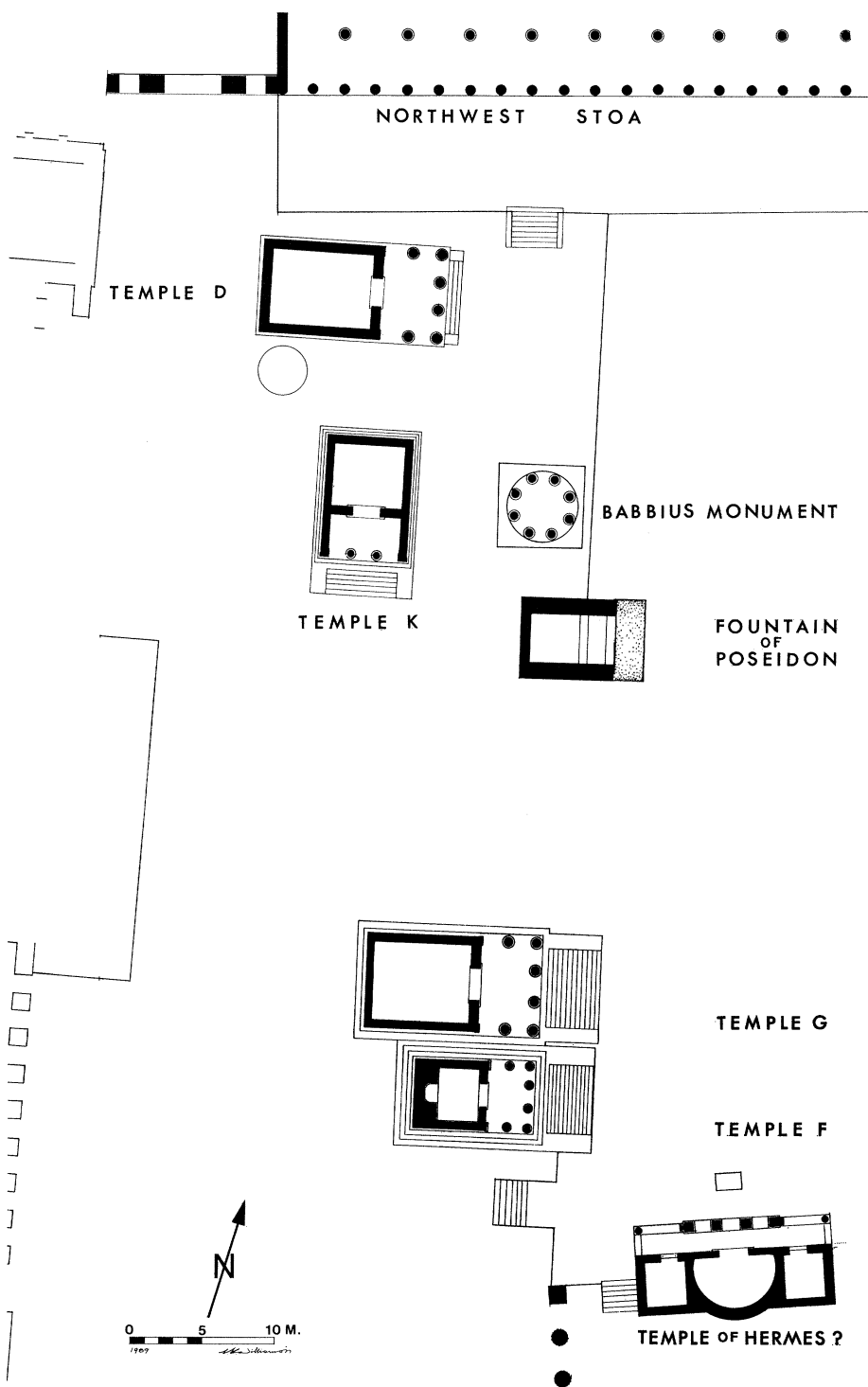


FIG. 4. Plan of west end of Forum, before earthquake of A.D. 77

The third monument, the Roman fountain or nymphaeum which Pausanias, on his walk around the forum of Corinth, described as the Fountain of Poseidon, has been restudied recently. As a result, a set of architectural blocks completely different from those originally published has been assigned to the building.³⁷ From a newly assigned inscribed epistyle, the donor can be identified as G. Babbius Philinus, and the building as a gift that probably was made early in his career, that is, in the reign of Augustus. The fountain predates the marble aedícula that also was donated by the same Babbius, the foundations of which stand immediately north of the fountain. The fountain has precedence of place. Because of its utilitarian function and primary position, as well as the poros building material used, it probably should be thought of as the earliest of the Roman buildings at the west end of the forum and perhaps as constructed even before the retaining wall for the west terrace was planned.

Temple G (the Pantheon) was presented by Scranton as one of the earliest of the terrace temples and definitely earlier than Temple F immediately to its south.³⁸ This argument was suggested by the roughed-in vertical face of the epistyle-frieze blocks that were assigned at that time to the north flank wall of Temple F.³⁹ The epistyle-frieze face is in an unfinished state, it was reasoned, because it would be unseen in its place close beside the already completed Temple G. This argument now seems untenable. First, the epistyle-frieze fragments that Scranton assigned to the north wall of the cella of Temple F decorated an interior surface, for the angle of the diagonal mitering of the vertical joint of one preserved block and the associated diagonal clamp cutting in its top surface demand the placement of this block at an interior corner. Secondly, the combination blocks are cut from a grayish marble like that used in some of the architrave blocks of the West Shops but unlike any of the marble of the other elements identified as belonging to Temple F. Finally, the architrave blocks in question have the largest overall depth of any epistyle-frieze combination that has been assigned to any of the temples of the west end. In fact, the height of the epistyle-frieze is exactly the same as that of the epistyle-frieze blocks of the portico of the West Shops, demonstrably larger in scale than that of any of the temples. The scale of the epistyle-frieze blocks is highly inappropriate for the smallest temple on the west terrace. Because of their

(*Corinth* I, iii, p. 36) that the aqueduct may have supplied water in the Julio-Claudian period to the fountain that was erected by Babbius on the west temple terrace; but see the three plans (*ibid.*, fig. 45), of which only that of about A.D. 200 shows the colonnade of Archaic columns.

A Hadrianic date for the construction of an aqueduct supported by these columns is suggested by O. Broecker (*Corinth*, I, iv, *The South Stoa*, Princeton 1954, p. 155). Such a date may have been deduced from the fact that Hadrian is known to have supplied Corinth with water imported from Lake Stymphalos by an aqueduct that he had erected.

For the colonnade, be it for an aqueduct or a columned entrance into the forum from the southwest, see C. K. Williams, II and Joan E. Fisher, "Corinth, 1975: Forum Southwest," *Hesperia* 45, 1976 (pp. 99–162), pp. 131–137, and pl. 16, top. A date *ante quem* for the erection in the reign of Nero is derived from the stratigraphy in the area and from the sequence of architectural constructions.

³⁷ For the original publication, see Scranton, *Corinth* I, iii, pp. 32–36, esp. fig. 19. For the new study, see footnote 3 above.

³⁸ *Corinth* I, iii, p. 64.

³⁹ Scranton, *Corinth* I, iii, pp. 60–61, fig. 41.

size, cuttings, and material, these blocks are better assigned to a position on an interior wall of the West Shops.⁴⁰

The geison assigned to Temple G by Scranton probably also should not be associated with any of the temples of the west terrace. One fragment of the geison in question preserves a corner and part of both its front and flank moldings and dentilation.⁴¹ This member has a totally horizontal and well-preserved top surface; that surface shows no evidence of the canonical triangular corner of the pediment with its raking geison, which is a construction technique *de rigueur* for Roman buildings with pediments.⁴² The geison series assigned by Scranton to Temple G thus must belong either to the lower order of a two-storied structure or to a building with a flat roof, such as might be restored to the Central Shops. Assignment to the Central Shops seems most likely if one takes into consideration the findspot of one of the largest fragments of the series. With this geison eliminated from the restoration of Temple G, little remains of certain pedigree for the superstructure of Temple G by which the building can be dated.

Temple D must also be re-examined. Scranton suggests that this building most likely was constructed within the first generation of the Roman colony. His evidence for the early date comes from a Tuscan capital and a base that he tentatively assigns to the temple.⁴³ Scranton hypothesizes that the specific Tuscan style of the capital and base would not have been employed at Corinth after the initial years of the colony. These two Tuscan elements, however, are his evidence for the very early date for the construction of Temple D. The rarely used, steep cyma-recta base molding of this order, as well as the general design of the capital, are to be found in the Tuscan (Roman Doric) half-columns of the lowest tier of the Colosseum in Rome, datable to the reign of Vespasian. Such an early Flavian date would not be surprising for this style of construction in Corinth, considering the apparently extensive repairs undertaken in Corinth after the earthquake of A.D. 77.

Perhaps the most significant change in the chronological framework of constructions associated with the west terrace is the new restoration of the Fountain of Poseidon as a nymphaeum with vault and inscribed poros epistyle frieze (Fig. 5). This structure had been restored previously as a large, hypaethral monument enclosed by a low balustrade. If the new reconstruction is accepted, using the poros architectural elements now in the foundations of the later stairway immediately northeast of Temple D, then the destruction of the

⁴⁰ I again thank Miss Nancy L. Klein for her work on the various elements of the west-end temples and for her study of their proportions.

⁴¹ Scranton, *Corinth* I, iii, p. 55, fig. 35.

⁴² For examples in the forum, cf. Scranton, *Corinth* I, iii, fig. 4 on p. 13 (Temple D); fig. 27 on p. 44 (Temple H); fig. 31 on p. 48 (Temple J); and fig. 42 on p. 61 (Temple F).

⁴³ Scranton, *Corinth* I, iii, p. 10, fig. 2. This type of capital appears to have been relatively popular in Corinth; at least three different examples are now attested. Tuscan, or Roman Doric, is a style that was much used in the early Empire for retaining walls, porticoes, and bottom stories of multi-storied buildings but almost never on temples. The one notable exception is the temple at Cori, built in the early 1st century B.C. A temple in that style, however, should be expected to have sat on a high podium. As restored by Scranton, probably correctly, Temple D had no high podium. It seems likely that the Tuscan elements in question should be restored to a gate, portico, or other secular building, not to Temple D, even in a reconstruction of that temple after A.D. 77.

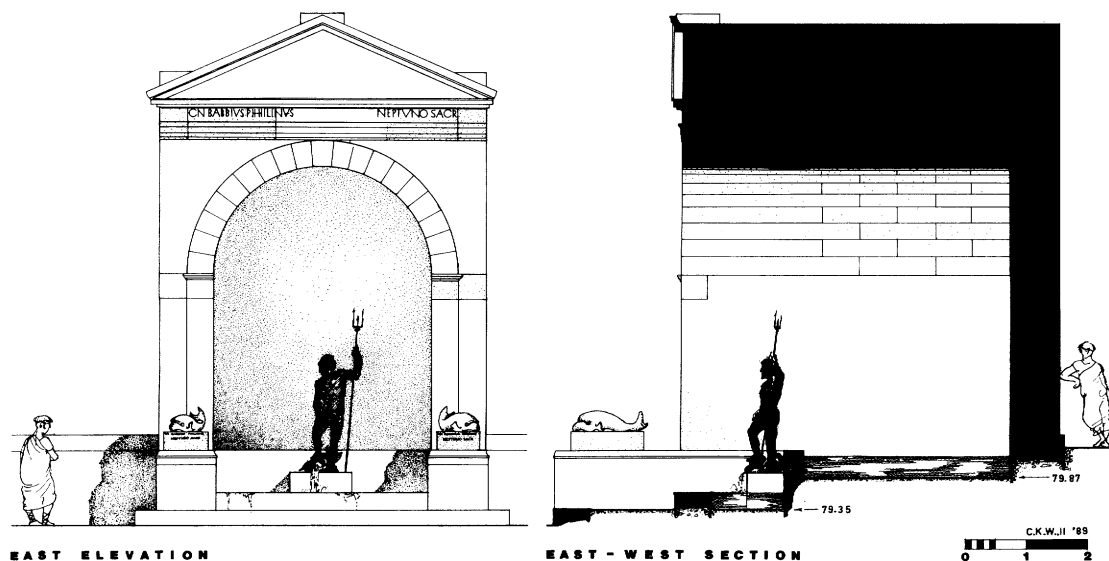


FIG. 5. Elevation and section of the Fountain of Poseidon, new restoration

Poseidon Fountain must be contemporaneous, or almost contemporaneous, with the construction of that stairway. The stairs could have been built only while the ground-raising operation resulted in earth dumped between the stairs, the north side of Temple D, and the façade of the Northwest Stoa. That operation probably was contained on the east by the west wall of the Northwest Shops, a building which may also have been constructed in conjunction with this program. In fact, the earth from the foundation trenches of the Northwest Shops may have been the source of that fill.

If this hypothesis is valid, then the whole project that consisted of the dismantling of the fountain, the construction of a temple over it, and the land-fill operation north of Temple D must be dated after the visit of Pausanias to the forum of Corinth, where he saw the Fountain of Poseidon still in working condition.⁴⁴

⁴⁴ The numismatic evidence suggests that the deposition of the deep fill north of Temple D must have taken place sometime within the reign of Hadrian; see O. Broneer in R. Stillwell, *Corinth* I, ii, fill 4 on p. 110. The evidence, in fact, could be interpreted to suggest that the mosaic and its bedding were laid on top of the deep fill during the reign of Hadrian (or later), but that the deep underlying fill itself was deposited earlier. Such an argument is untenable, however, if one accepts the hypothesis that the blocks which support the stairway up to the mosaic and which help to hold the deep fill in place are from the dismantled Fountain of Poseidon.

Stillwell suggests in *Corinth* I, ii, p. 129, that the Northwest Shops should be dated after the earthquake of A.D. 77 and that "[the building] may in all probability be assigned to the same general building period as the Basilica in its second phase, and thus be given a date early in the second century, a time when much of Roman Corinth, as it was to last through the remainder of the Imperial period, took form." This conclusion now appears to be too great a simplification of the chronology of this area.

One other general change that has been made in the present revised plan (Fig. 4) of the western temple terrace should be noted here. All temples, except for Temple K, in this new scheme, have been given pseudo-dipteral prostyle porches, in two cases because of architectural evidence, in the other instance because this type of porch design is by far the commonest in Roman architecture of the 1st and 2nd centuries after Christ for a prostyle temple on a podium. The plan of Temple K has not been altered from the restored form it was originally given because no architectural elements have as yet been identified for that building. Even its restoration as a podium temple cannot be substantiated from the remains *in situ*.

CHARLES K. WILLIAMS, II

CORINTH EXCAVATIONS

AMERICAN SCHOOL OF CLASSICAL STUDIES

APPENDIX: COINS

(PLATE 68)

This year's excavations in the area southeast of Temple E produced 250 coins, most of them bronze, of which it has been possible to identify 200 pieces. These coins come from relatively young strata, Late Roman to Modern, which probably explains the better than average ratio of legible coins to the total number recovered (80 percent). Even so, few coins are well enough preserved to qualify as museum pieces. Thanks are due to my colleagues A. P. Tzamalīs and J. P. C. Kent for their help and advice in dealing with some of the later finds.

The coins included in the Catalogue fall into the following categories:

Greek	
Corinth	16 (3 imperial)
Other States	3
Uncertain	3 (1 imperial)
Roman	41
Byzantine	52 (4 Latin, 1 "Bulgarian")
Frankish	81 (65 counterfeits)
French	2
Venetian	1
Serbian	1
<hr/>	
TOTAL	200

The earliest coin in this aggregate is an Athenian bronze of the 4th century B.C., and the latest, a Venetian tornesello struck for Agostino Barbarigo (A.D. 1486–1501; no. 66).

A word about the Stratigraphic List given below. The coins listed came from the road metal of the Frankish court and from fills directly above and directly beneath the road metal, i.e. grid squares 75:B, 75:C, 75:D, 75:E (trenches A, B, C, D, in the Stratigraphic List), at the eastern end of the excavation. The road metal consisted of several layers of packed gravel. For a plan of the excavated area, see Williams' report above, p. 347, Fig. 3.

The extent of the four grid squares increases the difficulty of separating consistently the various layers of road metal from the fills above them. I distinguish three main levels in the Stratigraphic List, which I designate as follows: 1) Upper fills and road metals, 2) bottom road metal, and 3) underlying fills. The coin-bearing fills within each of these major levels are listed in no particular order. The top level (1) contains, besides the upper road metals, all the debris and other accumulated matter that covered the court after the collapse of the surrounding stoa or shed. The coins within this level are almost exclusively Frankish. Fills above Level 1 have been left out, as they contain very few coins. As usual, the Stratigraphic List notes pottery lots and excavation baskets to facilitate reference to the Corinth records. Letters A, B, C, D, prefixing basket numbers and designating trenches, correspond to field notebooks, Nos. 813, 812, 811, 815, respectively. The coin numbers are given in short form, e.g. 89-17 rather than 1989-17.

STRATIGRAPHIC LIST

Chronology: 13th century to 14th century after Christ

TRENCH A (GRID 75:E)		89-6	(imitat.) uncert. Frankish	82
UPPER FILLS AND ROAD METALS		89-10	(imitat.) Isabelle	75
<i>Pocket (Basket A14)</i>		89-14	(imitat.) Philip of Tarentum	80
89-17	(imitat.) uncert. Frankish No. 82	89-21	W. or Guy II de la Roche	79
89-39	(imitat.) 82	<i>Pocket (Basket B16)</i>		
<i>Pocket (Basket A22)</i>		89-13	Philip of Savoy	No. 77
89-33	Byz. or Roman (by fabric) No. —	<i>Pocket (Basket B25)</i>		
89-34	(imitat.) Isabelle 75	89-24	W. Villehardouin	No. 71
89-35	W. Villehardouin 71	89-25	(imitat.) Philip of Tarentum	80
89-36	(imitat.) uncert. Frankish 82	89-26	Charles I or II of Anjou	72
89-37	(imitat.) Philip of Tarentum 80	89-27	Stefan Uroš I or II	67
<i>Lot 1989-21 (Basket A23)</i>		89-28	(imitat.) uncert. Frankish	82
89-38	W. Villehardouin No. 69	89-29	" " "	82
<i>Pocket (Basket A45)</i>		<i>Pocket (Basket B45)</i>		
89-94	(imitat.) Isabelle No. 75	89-57	(imitat.) uncert. Frankish No. 82	
<i>Pocket (Basket A46)</i>		89-58	(imitat.) Philip of Tarentum	80
89-93	(imitat.) Isabelle No. 75	89-59	" " "	80
<i>Pocket (Basket A48)</i>		89-60	(imitat.) uncert. Frankish	81
89-97	(imitat.) uncert. Frankish No. 82	89-61	(imitat.) Philip of Tarentum	80
89-107	" " " 82	<i>Pocket (Basket B46)</i>		
<i>Pocket (Basket A89)</i>		89-95	(imitat.) uncert. Frankish No. 82	
89-175	(imitat.) Philip of Tarentum No. 80	UNDERLYING FILLS		
BOTTOM ROAD METAL		<i>Pocket (Basket B28)</i>		
<i>Pocket (Basket A26)</i>		89-30	Greek imperial	No. 16
89-40	W. Villehardouin No. 68	<i>Pocket (Basket B30)</i>		
UNDERLYING FILLS		89-42	(imitat.) Philip of Tarentum	No. 80
<i>Lot 1989-59 (Basket A106)</i>		89-43	Anon. follis, K	53
89-180	Anon. follis, A2 No. 46	89-44	Latin imitative	62
TRENCH B (GRID 75:D)		89-45	Manuel I	56
UPPER FILLS AND ROAD METALS		<i>Pocket (Basket B48)</i>		
<i>Lot 1989-9A (Baskets B7, B9)</i>		89-96	Nicephorus III	No. 44
89-1	(imitat.) Philip of Tarentum No. 80	TRENCH C (GRID 75:C)		
89-3	" " " 80	UPPER FILLS AND ROAD METALS		
<i>Lot 1989-9B (Basket B12)</i>		<i>Pocket (Basket —)</i>		
89-4	(imitat.) uncert. Frankish No. 82	89-235	(imitat.) uncert. Frankish ⁴⁵	No. 82
89-5	(imitat.) Isabelle 75	<i>Pocket (Basket C5)</i>		
		89-11	(imitat.) uncert. Frankish No. 82	

⁴⁵ This coin was recovered from the baulk situated between trenches C and D.

	<i>Pocket (Basket C8)</i>		89-81	"	"	"	80
89-8	(imitat.) Philip of Tarentum	No. 80	89-82	"	"	"	80
89-9	(imitat.-mule) uncert. Frankish	83	89-83	Guy II de la Roche			78
			89-84	(imitat.) uncert. Frankish			82
			89-85	(imitat.) Philip of Tarentum			80
	<i>Pocket (Basket C34)</i>		89-86	(imitat.) uncert. Frankish			82
89-56	(imitat.) Philip of Tarentum	No. 80	89-87	"	"	"	82
			89-88	"	"	"	82
			89-117	(imitat.) Philip of Tarentum			80
	<i>Pocket (Basket C40)</i>			<i>Pocket (Basket D5)</i>			
89-92	Uncertain Roman (minimus)	No. —	89-62	(imitat.) Philip of Tarentum		No. 80	
89-111	(imitat.) Philip of Tarentum	80	89-63	(imitat.) uncert. Frankish			82
			89-64	Philip of Savoy			77
			89-65	(imitat.) Charles I or II of Anjou			74
	<i>Pocket (Basket C11)</i> ⁴⁶		89-66	(imitat.) uncert. Frankish			81
89-18	Constantius II	No. 30	89-67	(imitat.) Isabelle			75
	<i>Pocket (Basket C41)</i>			<i>Pocket (Basket D6)</i>			
89-106	Uncertain Roman (minimus?)	No. —	89-98	(imitat.) Philip of Tarentum		No. 80	
			89-99	"	"	"	80
				<i>Pocket (Basket D49)</i>			
			89-153	(imitat.) uncert. Frankish		No. 81	
				<i>Pocket (Basket D8)</i>			
			89-100	Late Roman		No. 42	
			89-101	Late Byzantine			58
				<i>Pocket (Basket D51)</i>			
			89-154	Quarter of coin (Frank.?)		No. —	
				<i>Pocket (Basket D10)</i>			
			89-103	Late Roman		No. 42	
			89-104	Alexius I			54
			89-105	"			55
				<i>Pocket (Basket D11)</i>			
			89-132	Late Byzantine		No. 59	
				<i>Lot 1989-36 (Basket D17)</i>			
			89-115	W. Villehardouin		No. 69	
				<i>Pocket (Basket D63)</i>			
			89-164	Louis VIII or IX		No. 64	

⁴⁶ Basket C11 is equated with Lot 1989-18 in the excavation records. The top portion of this fill, from which coin 89-18 derives, is a road metal and thus harder and more compact than the rest of Basket C11.

Stratification of the Frankish Imitations. The numerous imitations of Frankish coins collected this year occur almost in their totality within the level termed in the Stratigraphic List "upper fills and road metals". Only two counterfeits, coins 89-42 and 89-102 (trenches B and D), came from fills lower down, but these pieces were situated so close to the undersurface of the road metal as to make it probable that they were contained in soil packed in preparation for the laying of the road metal. Accordingly, it seems that the deposition of the first counterfeit coins is approximately contemporaneous with the construction of the road surface.

CATALOGUE

The following conventions are used in this catalogue: (1) silver and billon coins are indicated by numbers in *italic type*; (2) an asterisk (*) means that commentary follows at the end; (3) a double dagger (‡) means that the piece is illustrated on Plate 68.

The following abbreviations are used in this catalogue:

- Agora II* = M. Thompson, *The Athenian Agora, II, Coins. From the Roman Through the Venetian Period*, Princeton 1954
- Am.* = M. Amandry, *BCH*, Suppl. XV, *Le monnayage des duovirs corinthiens*, Paris 1988
- BMC* = *A Catalogue of Coins in the British Museum*, 1873–
Greek Coins
Roman Imperial Coins
- Carthage 1976* = T. V. Buttrey and R. B. Hitchner, "The Coins—1976" (chap. 4), in *Excavations at Carthage 1976, Conducted by the University of Michigan IV*, J. H. Humphrey, ed., Ann Arbor 1978, pp. 99–168
- Carthage 1977* = W. E. Metcalf and R. B. Hitchner, "The Coins—1977" (chap. 3), in *Excavations at Carthage 1977, Conducted by the University of Michigan V*, J. H. Humphrey, ed., New Delhi 1980, pp. 185–270
- DOC* = *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, A. R. Bellinger and P. Grierson, edd., Washington, D.C. 1966–
- Ed.* = K. M. Edwards, *Corinth, VI, Coins 1896–1929*, Cambridge, Mass. 1933
- Hendy* = M. F. Hendy, *Coinage and Money in the Byzantine Empire, 1081–1261*, Washington, D.C. 1969
- LRBC* = R. A. G. Carson *et al.*, *Late Roman Bronze Coinage, A.D. 324–498*, London 1960
- M.* = D. M. Metcalf, *Coinage in South-Eastern Europe, 820–1396*, London 1979
- RIC* = *The Roman Imperial Coinage*, H. Mattingly *et al.*, edd., London 1923–
- Wroth* = W. Wroth, *Catalogue of the Coins of the Vandals, Ostrogoths and Lombards and of the Empires of Thessalonica, Nicaea and Trebizond in the British Museum*, London 1911

CORINTH (16)

1.	12–11 mm.	to 146 B.C.	Pegasus flying l./Trident. Standing figure l. (Zeus?)	cf. <i>Hesperia</i> 36, 1967, p. 370	89-197
2.	"	"	Same. Race torch	<i>BMC</i> 441	89-130
3.	"	"	Same. ΔI–Trophy	cf. <i>Ed.</i> 11	89-218
4.	"	"	Same. Σ–Palm branch	<i>Hesperia</i> 36, 1967, p. 371	‡89-133
5.	"	"	Same. . . .–Dolphin	<i>BMC</i> 440	89-198
6.	"	"	Same. . . .–Ω	cf. <i>Ed.</i> 11	89-209
7.	13–11 mm.	"	Illegible or Pegasus l./Trident. Uncertain controls	89-201 89-203 89-204	89-206 89-222 89-233 89-242

DUOVIRI

8. 16 mm.	<i>Aebutius-Pamphilus</i> 17 B.C.	Pegasos flying r./Inscription in wreath	Am. IX (Ed. 33)	89-221
9. 21 mm.	<i>Pollio-Priscus</i> A.D. 4	Agrippa head r./Inscription in wreath	Am. XIII (Ed. 36)	89-213
10. 20 mm.	<i>Optatus-Polyaenus</i> A.D. 57-58	Nero head l./Bellerophon, Pegasos	Am. XXI (Ed. 61)	89-53

OTHER GREEK STATES (6)

ATTICA AND PELOPONNESOS

11. 12 mm.	<i>Athens</i> 350-330 B.C.	Athena head r./Double-bodied owl	<i>BMC</i> 221	89-210
12. 17 mm.	<i>Argos</i> 350-228 B.C.	Athena head r./Tyche l.	<i>BMC</i> 109	89-125

TROAS

13. 11 mm.	<i>Assos</i> 400-241 B.C.	Athena head r./Griffin lying l.	<i>BMC</i> 13	89-122
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UNCERTAIN GREEK MINTS

14. 13 mm.	to 31 B.C.	Effaced/Figure standing l.		89-31
15. 16 mm.	"	Effaced/Standing figure, staff in r. hand (?)		89-113
16. — mm.	Imperial	Effaced/Pegasos flying r., . . . (Corinth?)		89-30

ROMAN COINAGE (41)

TRAJAN, A.D. 98-117

*17. Ses.	<i>Rome</i> A.D. 104-111	SPQR OPTIMO PRINCIPI SC in wreath	<i>BMC</i> III, 867	89-226 (Pl. 67:d, e)
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JULIA DOMNA

*18. Ses.	<i>Rome</i> A.D. 196-209	(VENVS FELIX) SC Venus l.	<i>BMC</i> V, 776	89-128
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GALLIENUS, A.D. 253-268

19. Ant.	<i>Asiatic mint</i> A.D. 226-268	VENERI VICTRICI Venus l.	<i>RIC</i> V, i, 621A or 660A	†89-193
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AURELIAN, A.D. 270–275				
	<i>Uncertain mint</i>			
20. Ant. (holed)	A.D. 270–275	ORIENS AVG Sol moving l. (<i>Officina S</i>)	cf. <i>RIC</i> V, i, 62	89-126
LICINIUS I, A.D. 307–323				
	<i>Thessalonica</i>			
21. 23 mm.	A.D. 311–313	IOVI CONSERVATORI AVGG NN Jupiter l. (<i>Officina Γ</i>)	<i>RIC</i> VI, 60	89-131
CONSTANTINE I, A.D. 307–337				
	<i>Constantinople</i>			
22. 16 mm.	A.D. 336–337	GLORIA EXERCITVS Soldiers, one standard (<i>Officina H</i>)	<i>RIC</i> VII, 137	89-248
*23. 14 mm.	A.D. 337–340	No legend. Quadriga r.	<i>RIC</i> VIII, 39	89-163
	<i>Constantinople (?)</i>			
24. — mm.	A.D. 342	VN MR Emperor r.	<i>RIC</i> VIII, 68, etc.	89-145
	<i>Nicomedia</i>			
25. 16 mm.	A.D. 330–335	GLORIA EXERCITVS Soldiers, two standards (<i>Officina Ε</i>)	<i>RIC</i> VII, 188	89-228
	<i>Uncertain</i>			
26. 14 mm.		VN MR Emperor r.	Cf. <i>LRBC</i> I, 1063	89-50
CONSTANTINOPOLIS				
	<i>Cyzicus</i>			
27. 17 mm.	A.D. 331–334	No legend. Victory l. (<i>Officina Ε</i>)	<i>RIC</i> VII, 92	‡89-114
		CRISPUS (CAESAR), A.D. 317–326		
	<i>Heraclea</i>			
28. 18 mm.	A.D. 324	DOMINOR NOSTROR CAESS Wreath with VOT X (<i>Officina Γ</i> , series star)	<i>RIC</i> VII, 61	89-156
		CONSTANTIUS II, A.D. 337–361		
	<i>Thessalonica</i>			
29. 17 mm.	A.D. 351–354	FEL TEMP REPARATIO <i>FH</i> ⁴⁷ (<i>Officina Γ?</i>)	<i>RIC</i> VIII, 192	89-216
30. 17 mm.	A.D. 355–361	FEL TEMP REPARATIO <i>FH3</i> (<i>Officina Δ</i> , series M)	<i>RIC</i> VIII, 208	89-18
	<i>Alexandria</i>			
31. 16 mm.	A.D. 351–355	Same (<i>Officina Γ</i>)	<i>RIC</i> VIII, 80	89-176
	<i>Uncertain</i>			
32. 16 mm.		FEL TEMP REPARATIO <i>FH</i>	cf. <i>LRBC</i> II, 2039	89-20
33. 15 mm.		SPES REIPVBLICE Virtus l.	cf. <i>LRBC</i> II, 2053	89-47

⁴⁷ *FH* = Fallen Horseman. The number refers to the principal varieties (1–4) of the Fallen Horseman type described in *LRBC*, p. 108 and in *RIC* VIII, p. 38. If the type is unclear, there is no number.

VALENS, A.D. 364–378

Constantinople

*34. 16 mm.	A.D. 364–365	SECVRITAS REIPVBLICAE Victory I. (<i>Officina</i> B)	RIC IX, 21c.5	89-165
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Cyzicus

35. 17 mm.	A.D. 364-367 <i>Uncertain</i>	Same (<i>Officina</i> A or Δ)	<i>RIC</i> IX, 11b	89-286
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36. 18 mm.	GLORIA ROMANORVM Emperor, captive	cf. <i>LRBC</i> II, 2518	89-217
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GRATIAN, A.D. 367–383

Cyzicus

37. 13 mm.	A.D. 378–383	VOT XX MVLT XXX in wreath (<i>Officina A?</i>)	RIC IX, 22a	89-179
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VALENTINIAN II, A.D. 375–392

Heraclea

*38. 14 mm.	A.D. 388–392	SALVS REIPVBLICAE Victory, captive (<i>manus dei</i> for trophy)	RIC IX, 26a	‡89-247
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Alexandria

*39. 12 mm.	A.D. 388-392	Same (<i>Officina</i> A or Δ , series ∇)	RIC IX, 20a	±89-224
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THEODOSIUS I, A.D. 379-395

Thessalonica

40. 16 mm.	A.D. 383-388	VIRTVS AVGGG Prince on ship (<i>Officina</i> Δ)	LRBC II, 1854	89-194
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ARCADIUS, A.D. 383–402

Nicomedia

41.	11 mm.	A.D. 388–392	SALVS REIPVBLICAE Victory, captive	<i>RIC IX</i> , 45c	89-157
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LEO I, A.D. 457-474

Constantinople

41a. 11 mm.	A.D. 457-474	Lion crouching l.	<i>LRBC</i> II, 2260	±89-208
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UNCERTAIN EMPEROR

Uncertain mint

*42. 15-10 mm.	FEL TEMP REPARATIO	89-100	Cross potent	†89-202
	SALVS REIPUBLICAE	89-134	(in dot circle)	
	(or REIPUBLICAE)		Uncertain type	89-103
	Victory, captive (P)		Same	89-127
	Same (P)	89-205	Same	89-129
	Same (symbol?)	†89-184	Same	89-152
	SPES REIPUBLICAE	89-140	Same	89-171
	Prince l.		Same	89-181
	VOT XX MVLT XXX	89-240	Same	89-187
	in wreath		Same	89-183

MISCELLANEOUS COINS OF SMALL MODULE, 11 mm. OR LESS (7)

BYZANTINE COINAGE (52)

THEOPHILUS, A.D. 829-842

Constantinople

- | | | | | |
|------------|--------------|-----------------------------|----------------|--------|
| 43. 21 mm. | A.D. 830-842 | Theophilus bust/Inscription | DOC III, i, 16 | 89-227 |
|------------|--------------|-----------------------------|----------------|--------|

NICEPHORUS III, A.D. 1078-1081

Constantinople

- | | | | | |
|---------------|----------------|--|--------|--------|
| 44. 25-22 mm. | A.D. 1078-1081 | Christ figure (between stars)/ | 89-96 | 89-149 |
| (1, overstr.) | | Cross and circle with $\begin{smallmatrix} \text{C} & \Phi \\ \text{N} & \Delta \end{smallmatrix}$ | 89-147 | 89-159 |
| | | (DOC III, ii, 9) | | 89-169 |

ANONYMOUS ISSUES


- | | | | | |
|----------------|----------------|---|---|---------|
| 45. 25 mm. | A.D. 969-1030 | Christ bust/Four-line inscription | DOC III, ii, p. 648, Class A1 | 89-229 |
| (overstr.) | | | | |
| 46. 27 mm. | " | Similar/Similar (ornament 32) | DOC III, ii, p. 649, Class A2 | 89-180 |
| *47. 18 mm. | " | Christ bust/Four-line inscription | DOC III, ii, pp. 648 f., Class A1 or A2 | ‡89-215 |
| (cut down) | | | | |
| 48. 26 mm. | A.D. 1042-1050 | Christ figure/Cross inscription in angles | DOC III, ii, p. 681, Class C | 89-257 |
| *49. 27-18 mm. | A.D. 1060-1065 | Christ enthroned/Three-line inscription | DOC III, ii, p. 690, Class F | ‡89-110 |
| (1, cut down) | | | | 89-167 |
| *50. 21 mm. | A.D. 1065-1070 | Christ bust/Virgin bust | DOC III, ii, p. 692, Class G | 89-144 |
| | | | | |
| 51. 25 mm. | A.D. 1075-1080 | Similar/Latin cross | DOC III, ii, p. 696, Class I | 89-223 |
| (overstr.?) | | | | |
| 52. 27-22 mm. | A.D. 1070-1075 | Similar/Patriarchal cross | 89-135 | 89-195 |
| (3, overstr.) | | (DOC III, ii, p. 694, Class H) | 89-148 | 89-199 |
| | | | 89-168 | 89-220 |
| *53. 27-21 mm. | A.D. 1085-1092 | Similar/Virgin figure | 89-23 | 89-137 |
| (3, overstr.) | | (DOC III, ii, p. 702, Class K) | 89-43 | 89-200 |
| | | | 89-112 | 89-246 |
| | | | | 89-256 |

ALEXIS I, A.D. 1081-1118

Thessalonica

- | | | | | |
|----------------|----------------|---|---------|--------|
| *54. Tetart. | A.D. 1092-1118 | Christ bust/Alexius bust | ‡89-104 | 89-142 |
| (4.13-1.69 g.) | | (Hendy, pl. 8:7) | ‡89-138 | 89-250 |
| | | | | 89-255 |
| 55. Tetart. | " | Cross $\begin{smallmatrix} \text{C} & \Phi \\ \text{A} & \Delta \end{smallmatrix}$ /Similar | 89-105 | 89-238 |
| (2.93-1.84 g.) | | | 89-120 | 89-253 |
| | | (Hendy, pl. 8:10) | | 89-254 |

MANUEL I, A.D. 1143–1180

56. Half-tetart. (1.75–1.16 g.)	<i>Unattributed</i> A.D. 1143–1180	 /Manuel bust	Hendy, pl. 18:1	89-45 89-55 89-161
*57. Half-tetart. (1.70–1.60 g.)	"	Illegible or St. George bust/ Similar	Hendy, pl. 18:3	89-116 ‡89-177

UNCERTAIN LATE EMPEROR

58. Half-tetart.	<i>Uncertain</i> after A.D. 1092	Bust (of saint?)/Emperor bust		89-101 ‡89-245
59. —	"	Emperor bust/Effaced		89-132 ‡89-243 89-244

"BULGARIAN IMITATIVE"

60. Trachy	<i>Unattributed</i> after A.D. 1195	Christ seated (between stars)/ Emperor crowned by Virgin	Hendy, pl. 24:1	‡89-109
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LATIN IMITATIVE

61. Trachy	<i>Unattributed</i> after A.D. 1204	Virgin with Christ, seated/ Emperor (chlamys)	Hendy, pl. 29:1	89-19 89-151
62. Trachy	"	Christ, seated/Emperor (loros)	Hendy, pl. 29:10	89-44
63. Trachy	"	Mule: obv., Hendy, pl. 29:1/ rev., Hendy, pl. 29:13		‡89-46

FRENCH COINAGE (2)

LOUIS VIII or IX, A.D. 1223–1270

64. Den.	A.D. 1223–1270	+ LVDOVICVS REX Cross/ + TVRONVS CIVI Castle Tournois	Ed. 32	89-164
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ST. MARTIN OF TOURS, 13th Century

65. Den.		+ TVRONVS CIVI Cross/ + SCS MARTINVS Castle Tournois	Ed. 33	89-155
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VENETIAN COINAGE (1)

AGOSTINO BARBARIGO, A.D. 1486–1501

66. Bi (Tornesello)	A.D. 1486–1501	+ AVG BARBARIGO DVX Cross/ + S MARCVS VENETI Lion of St. Mark	Ed. 59	89-2
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SERBIAN COINAGE (1)

STEFAN UROŠ I or II, A.D. 1243–1276, 1282–1321

- | | | | | |
|-------------------------------|----------------|---|----------------|-------|
| 67. \mathcal{A}
(Grosso) | A.D. 1243–1321 | $\overline{\text{IC}} \overline{\text{XC}}$ Christ seated/
S STEFAN VROSIVS REX
Doge, St. Mark (flag) | cf. M. pl. 7:2 | 89-27 |
|-------------------------------|----------------|---|----------------|-------|

FRANKISH COINAGE (81)

PRINCES OF ACHAIA (14; 9 imitations)

WILLIAM VILLEHARDOUIN, A.D. 1245–1278

- | | | | | |
|----------------------------|----------------|--|------------|------------------------------------|
| <i>Corinth</i> | | | | |
| *68. \mathcal{A}
unit | A.D. 1250–1278 | G. P. ACCAIE. Long cross/
.CORINTVM. Acrocorinth castle | Ed. 2 | 89-15
89-40
89-118
89-172 |
| 69. \mathcal{A}
unit | " | cGcPc ACCAIE Cross/
c + c CORINTI Genoese gate | Ed. 4 | 89-38
89-115 |
| <i>Clarenza</i> | | | | |
| 70. Den. | A.D. 1262–1278 | : + : G : PRINCE ACh Cross/
D + 'CLARENTIA Castle Tournois | Ed. 7 | 89-108 |
| *71. Den.
(cut) | " | + G PRINCEPS or G PRINCE ACh
Cross/ + CLARENTIA Castle Tournois | Ed. 6 or 7 | 89-24
89-35 |

CHARLES I or II OF ANJOU, A.D. 1278–1289

- | | | | | |
|-----------------|----------------|---|--------|-------|
| <i>Clarenza</i> | | | | |
| 72. Den. | A.D. 1278–1289 | . + . K. R. PRINC' ACh Cross/
$\begin{smallmatrix} x & x \\ x & x \end{smallmatrix}$ + xDCxCLARENTIA Castle Tournois | Ed. 11 | 89-26 |

CHARLES I or II OF ANJOU (imitations)


- | | | | | |
|-------------------------------|-----------------|--|-------|--------|
| <i>Uncertain</i> | | | | |
| 73. Den.
(cut; doublestr.) | after A.D. 1278 | + K R PRINCE' ACh (blundered)
Cross/ + CLARENTIA
(blundered) Castle Tournois | Ed. — | 89-102 |
| 74. Den.
(cut) | | + K R PRINC' ACh (blundered)
Cross/ + DE CLARENTIA
(blundered) Castle Tournois | Ed. — | 89-65 |

ISABELLE VILLEHARDOUIN (imitations)

- | | | | | |
|-------------------------------|-----------------|--|-------------------------|-----------------------------------|
| <i>Uncertain</i> | | | | |
| *75. Den.
(6, cut or bent) | after A.D. 1297 | + YSABELLA P ACh (blundered) Cross/
+ DE CLARENCIA (blundered)
Castle Tournois
(cf. Ed. 14) | 89-5
‡89-10
89-34 | 89-67
89-93
89-94
89-234 |

PHILIP OF SAVOY, A.D. 1301–1307

- | | | | | |
|-----------------|----------------|---|--------|-------|
| <i>Clarenza</i> | | | | |
| *76. Den. | A.D. 1301–1307 | . + . PhS D' . SAB. P. AChE Cross/
+ + + DE CLARENCIA Castle Tournois
(lis, dots) | Ed. 17 | 89-68 |

*77. Bi	"	+ PhS.D' .SAB.P.ACh' Cross	 /	Ed. 15	‡89-13
Fraction		. + .DE CLARENCEIA Castle Tournois			89-64
(cut)		(star, crescents)			‡89-69

DUKES OF ATHENS (2)

GUY II DE LA ROCHE, A.D. 1287-1308

78. Den.	<i>Thebes</i>				
(cut)	A.D. 1287-1308	+ GVI.DVX	 AT N S Cross/	Ed. 24	‡89-83
		+ ThEBANI CIVIS Castle Tournois			

WILLIAM or GUY II DE LA ROCHE

79. Den.	<i>Thebes</i>				
(cut)	A.D. 1280-1308	+ G (or GVI) DVX ATENES Cross/		Ed. 23 or 24	89-21
		+ ThEBE CIVIS or var. Castle Tournois			

DESPOT OF EPIRUS (28 imitations)

PHILIP OF TARENTUM (imitations)

	<i>Uncertain</i>				
*80. Den.	after A.D. 1294	+ PhS TAR DESP or var.	‡89-1	89-58	89-80
(26, cut or bent)		(blundered) Cross/	89-3	89-59	89-81
		+ NEPANTI CIVIS	89-8	89-61	89-82
		(blundered) Castle Tournois	89-14	89-62	89-85
		(Ed. 27 or 28)	89-22	89-71	89-98
			89-25	89-72	89-99
			89-37	89-74	89-111
			89-42	89-77	89-117
			89-56	‡89-79	89-175
					89-236

UNCERTAIN RULERS (28 imitations)

	<i>Uncertain</i>				
81. Den.	after A.D. 1262	Legend (blundered) Cross/		Ed. 14, etc.	89-60
(cut)		+ DE CLARENCEIA or var. (blundered)			89-66
		Castle Tournois			89-69a
					89-73
					89-153
*82. Den.	"	Legend (blundered)	89-4	89-39	89-84
(cut or bent)		Cross/	89-6	89-57	89-86
		+ NEPANTI CIVIS or	89-11	89-63	89-87
		uncertain (blundered)	89-17	89-70	89-88
		Castle Tournois	89-28	‡89-75	89-95
		(Ed. 27, etc.)	89-29	89-76	89-97
			89-36	89-78	89-107
					89-235
83. Den.	after A.D. 1294	(+)G PRHCE() Cross/(+ NEP)ANTI CIV(IS)			‡89-9
(cut)		Castle Tournois			
		Mule: obv. W. Villehardouin/obv. Philip of Tarentum			

NOTES

- (17) The obverse legend is only partly preserved and may be restored: IMP CAES (NERVA)E TRAIANO AVG GER DAC P(M) TRP (COS V PP).
- (18) Extreme wear has erased all legends except for SC on the reverse and accounts for the coin's very light weight, 14.86 g.
- (23) The bust type (D6) in *RIC* VIII, p. 450 is incorrect and should be changed to H6.
- (34) The obverse legend on this very damaged coin is hard to read but can probably be restored: (DN VALEN)S—PF AVG.
- (38) For the use of *manus dei* in this coin type, see also my note in an earlier report, *Hesperia* 58, 1989, p. 49, note on no. 61, and J. D. Mac Isaac, "The Hand of God: A Numismatic Study," *Traditio* 31, 1975, pp. 319–328. (Pl. 68.)
- (39) The lettering on this Alexandrian coin is peculiar. Save for the oversized S, the individual letters are small, squarish, and often formed of undifferentiated wedges or I-elements (Pl. 68, enlargement).
- (42) Coin 89-184 (Pl. 68; *weight* 1.07 g.). The style of this coin is barbaric and its legends are undecipherable.
Coin 89-202 (Pl. 68; *weight* 1.42 g.). This *minimus* seems to be of the same type as in Wroth, p. 39, nos. 179–181, a seemingly rare variety. For other examples, see *Agora* II, no. 1725 (3 sps.); *Carthage* 1976, nos. 268, 269 (2 sps.); *Carthage* 1977, no. 382 (1 sp.).
- (47, 49) Coin 89-110 (*weight* 3.30 g.) and coin 89-215 (*weight* 3.95 g.) come from folles extensively trimmed (Pl. 68). For other examples of cut-down folles, see *DOC* III, ii, p. 660, A2.24.28, note; and *Hesperia* 57, 1988, p. 145, note 81. Coin 89-167 (*weight* —) is overstruck on a follis of Class D or E.
- (50, 53) Coins 89-43, 89-200, 89-256, all folles of Class K, are overstruck on old flans of Class J. Coin 89-137 (Class K; *weight* 1.52 g.) and coin 89-144 (Class G; *weight* 1.62 g.) share several peculiarities: abnormally thin flans, irregular die positions (→) and barbaric inscriptions (•• for M—P, XC, etc.). Both pieces are probably counterfeits.
- (54) The five coins here listed all belong to Hendy's first type (First Coinage) of Thessalonican tetartera, but their weight range is far wider than Hendy supposes (Hendy, p. 100). I have made a similar remark about Hendy's second type (Second Coinage) of Thessalonican tetartera in a previous report, *Hesperia* 57, 1988, p. 145, note 82. (Pl. 68.)
- (57) Coin 89-177 is unusual for both the crude style of St. George's bust and the large letters of the reverse legend (Pl. 68).
- (68) Coin 89-15 is slightly bent.
- (71) The status of these two coins is made uncertain by slight irregularities of the lettering (uneven size of letters, etc.) and of course by the mutilation of the flans. In all other respects the coins appear normal and can thus be provisionally considered genuine.
- (75) Coin 89-10 (Pl. 68). The "broken S" (reversed) in Isabelle's name in this piece is closer to the S used at Thebes and Lepanto than it is to the one used at Clarenza; it is thus possible to suggest a non-Peloponnesian origin for this forgery.
- (76) This coin is slightly bent.
- (77) The coins of Philip of Savoy with slashed *cross ancrée* are very rare and seem to derive mainly from Corinth. Since A. R. Bellinger first published the type in *Catalogue of the Coins Found at Corinth*, 1925, New Haven 1930, p. 76, pl. II:7, at least five more examples have turned up

in the excavations, including the three mutilated pieces unearthed this year. None are reported in *Agora* II. These coins are readily distinguishable from the main run of Philip's deniers by the cross on their obverse as well as by their small diameters (15–17 mm.), generally light weight (0.50–0.90 g.), and the yellow metal of their flans. They apparently passed as regular billon coins, as traces of a silver wash are occasionally found on their surfaces (e.g., coins 89-13, 89-64). Even so they cannot have been deniers, as Edwards thought (Ed., p. 153, 15), but some fraction of the denier. (*Note*. Pl. 68:A illustrates an older unpublished find: *Agora* SC, 11.xi.1937; *weight* 0.50 g.)

- (80) Counterfeit 89-1 (Pl. 68) is noteworthy for its retrograde obverse and reverse legends. Counterfeits 88-99 (mutilated) and 89-236 (intact), read PhS P TAR DESPA and seem to copy a rare variety of Philip with PhS P TAR DESPO. The last issue is discussed by D. M. Metcalf in "The Pylia Hoard: Deniers Tournois in Frankish Greece," *ANSMN* 17, 1971 (pp. 173–227), p. 193.
- (82) Counterfeit 89-235 has been left in the shape in which it was found—folded into a slightly flattened cylinder—and therefore remains read only in part.

Note on the Frankish Imitations. The counterfeit coins listed in the Catalogue, Nos. 73, 74, 75, 80–83, might be briefly treated as a group. Workmanship of the dies ranges from barbaric to neat. Legends might contain minor irregularities in lettering or spelling or might be totally incomprehensible. In all these respects the coins present a familiar aspect. What is startling, though not unexplainable, is the abuse which practically all coins have suffered. The flans have been cut into halves, quarters, eighths, or some other irregular shape (here designated "cut") or have been twisted, folded, rolled, or pounded into a rough shape ("bent"). Evidently, the forgeries were called in by the authorities to be destroyed or canceled. It is less obvious why a handful of seemingly genuine pieces (Nos. 71, 77–79) were also mutilated. The forgeries recovered this year are without exception made of copper or very base billon, but as some of the better-preserved pieces clearly show (coins 89-1, 89-6, 89-22, 89-42, etc.), the brown color of the metal was originally disguised by a thin coat of silver wash.

ORESTES H. ZERVOS



a. South (back) wall of south stoa of temenos. From southwest



b. Buttress no. 1 of south wall. From south



a. Water-conduit tile FM-1989-1



b. South wall of south stoa and late water channel



c. Eastern side of 1989 excavations: newly uncovered portion of south stoa with foundation for third interior column. From south



a. Repaired capital: clamp cutting under winged head

Capitals from the West Shops



b. Capital



c. Capital

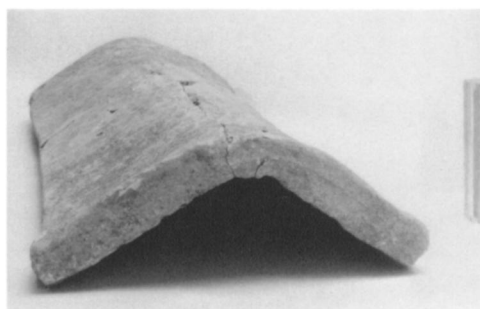


d. Capital

PLATE 60



a. Room in area of south stoa: basin 2 in southeast corner. From southwest



4 (FC-1989-1). Lakonian cover tile



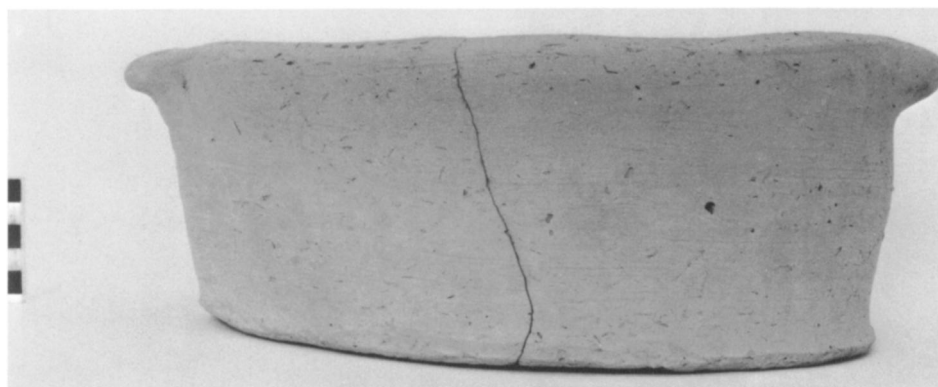
FC-1988-2. Lakonian cover tile from East of Theater



b. Room in area of south stoa: floor with pier, corridor at right



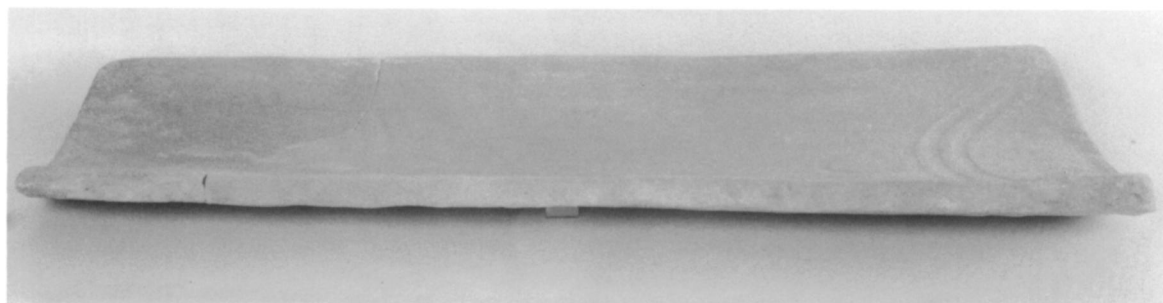
2. Detail of resting surface



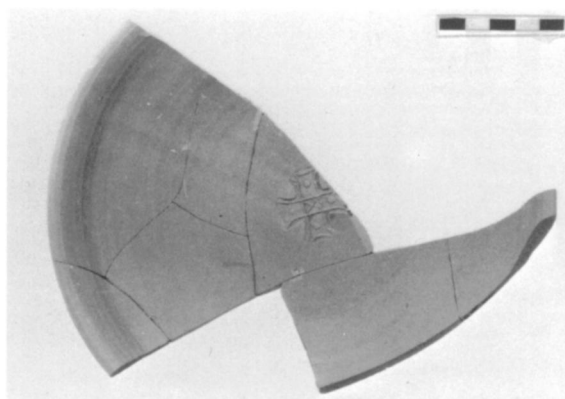
2 (C-1989-27). Basin with gaming board on resting surface



1 (C-1989-45). Tripod bowl



3 (FP-1989-2). Lakonian pan tile



5 (C-1989-11). Stamped Roman Red Ware plate



5. Detail of stamp

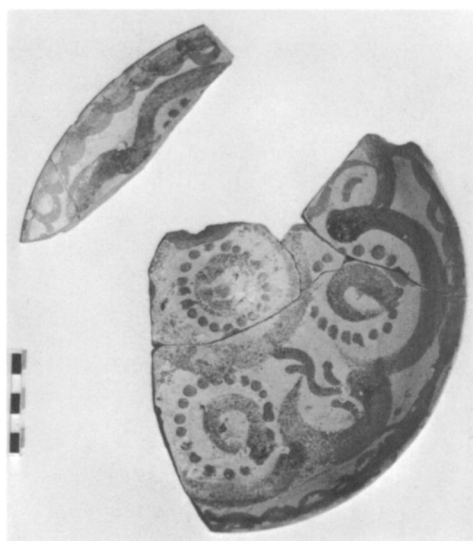


6 (C-1989-32). Fractional amphora

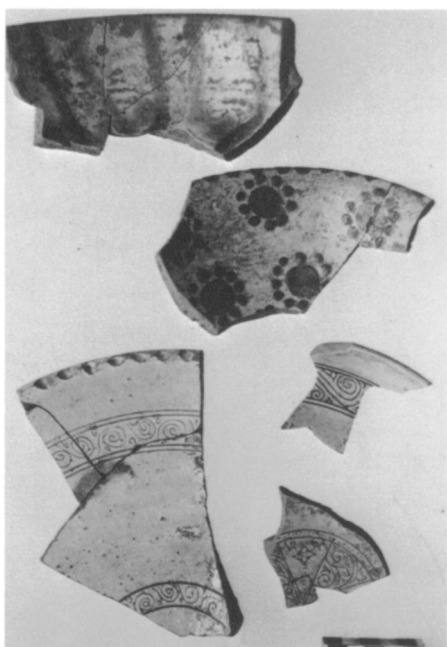
PLATE 62



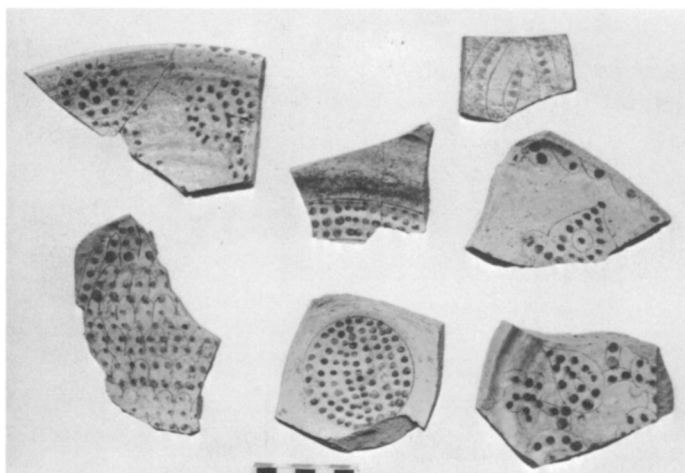
a. Trench for stylobate of south stoa. From west



b. Lot 1989-73: Slip Painted (dark-on-light) plate



c. Lot 1989-73: Green and Brown (dark-on-light) and Sgraffito sherds



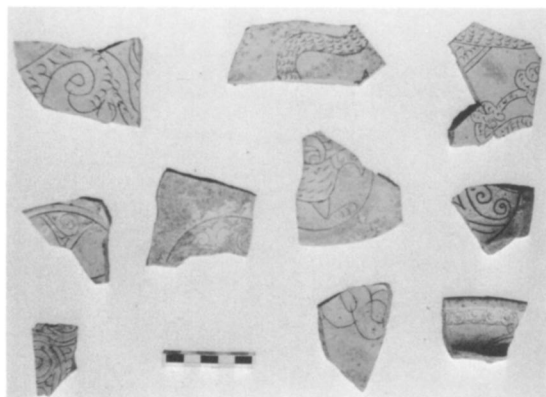
d. Lot 1989-73: Measles Ware



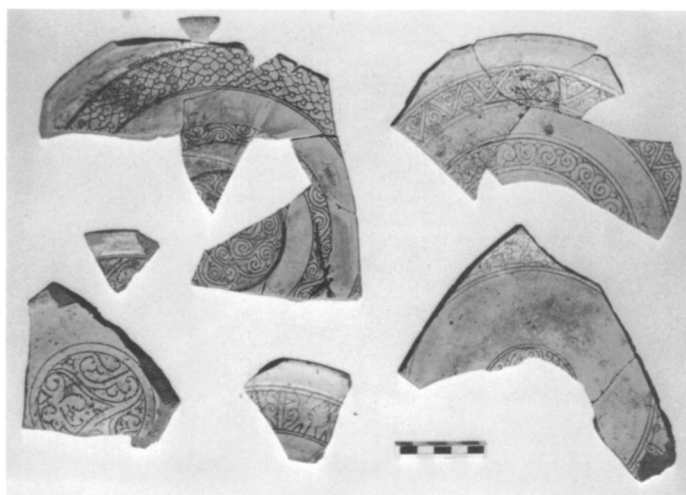
7 (C-1989-2). Green Glazed goblet



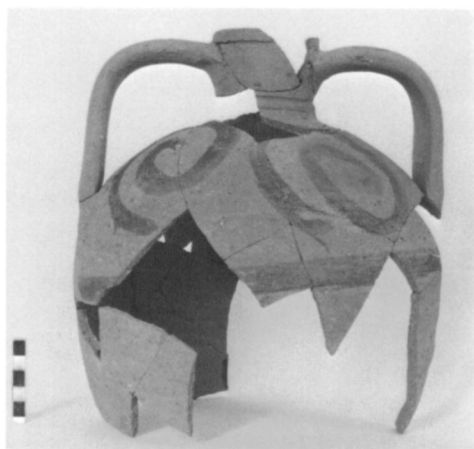
8 (L-1989-1). Glazed lamp



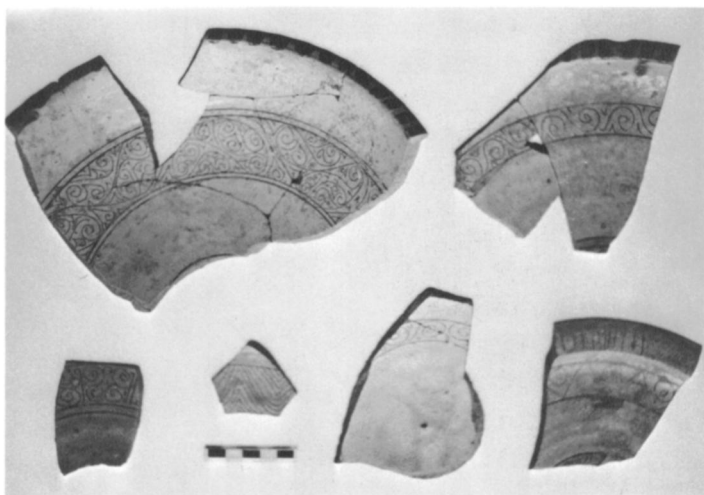
a. Lot 1989-8: Sgraffito sherds



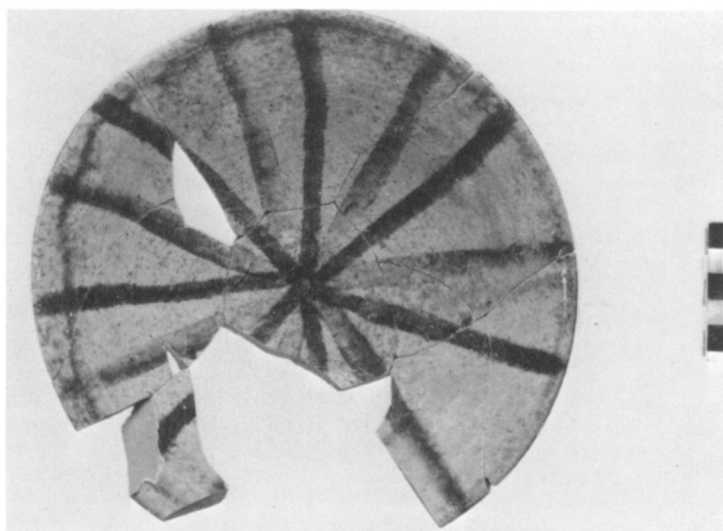
b. Lot 1989-8: Sgraffito sherds



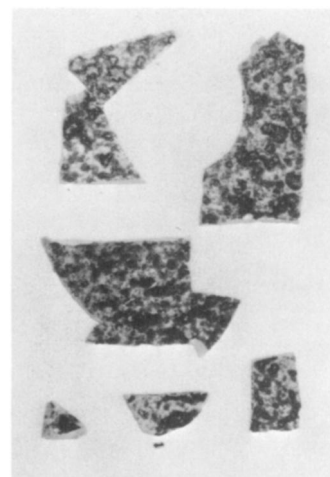
c. Lot 1989-8: Matt-painted amphora



d. Lot 1989-8: Sgraffito sherds



10 (C-1989-13). Green and Brown Painted bowl

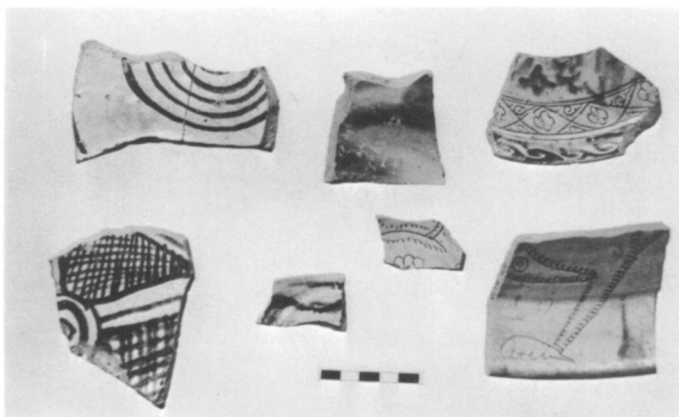


11 (C-1989-33). White Ware plate

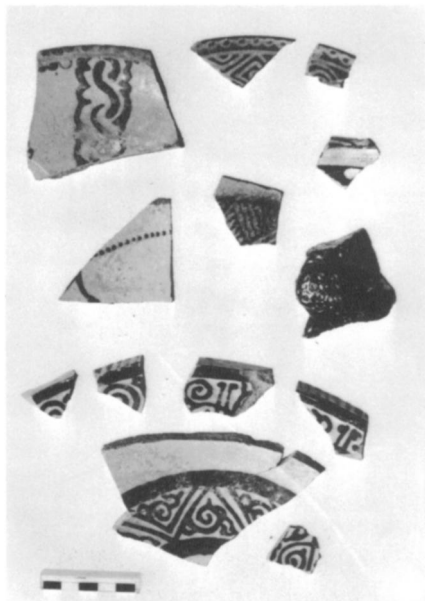
PLATE 64



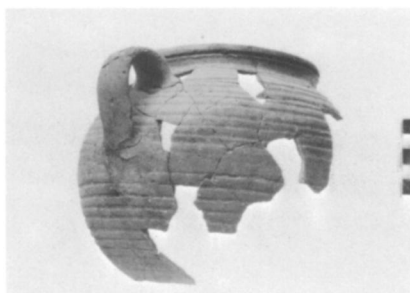
9 (C-1989-6). Green Glazed cup



a. Lot 1989-15: Green and Brown, Sgraffito, and Painted Sgraffito sherds



b. Lot 1989-15: Slip Painted (dark-on-light) sherds



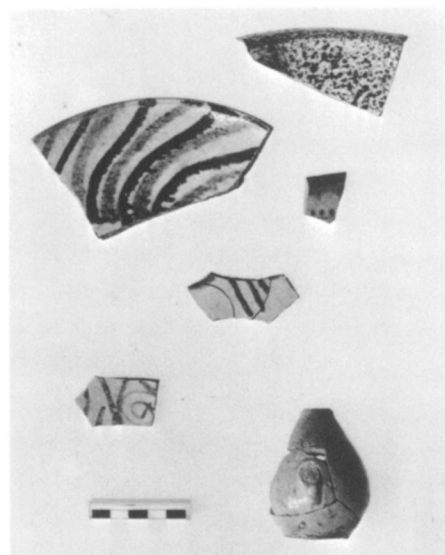
c. Lot 1989-15: cooking pot



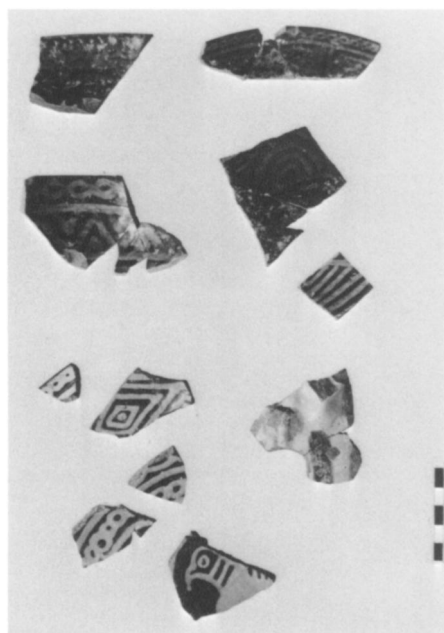
d. Lot 1989-15: cooking pot



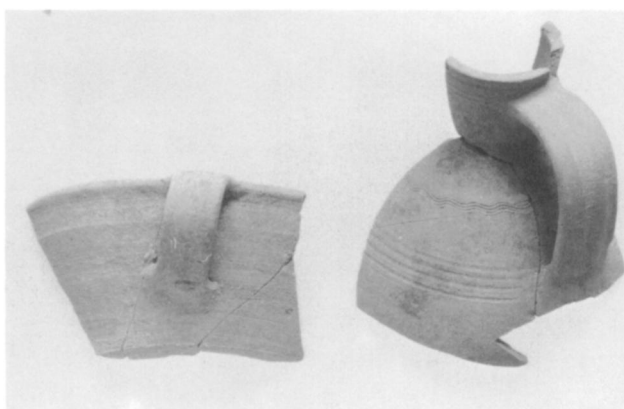
e. Lot 1989-16: Measles Ware, Green and Brown, and Sgraffito sherds



f. Lot 1989-16: juglet and Green and Brown, Spatter Painted, and Painted Sgraffito sherds



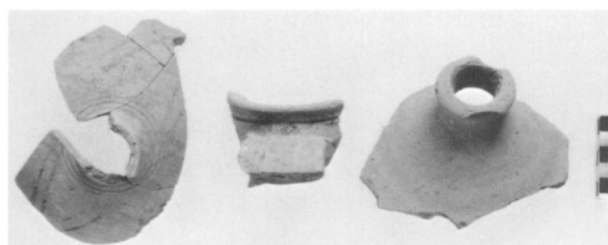
a. Lot 1989-16: Slip Painted (light-on-dark) sherds



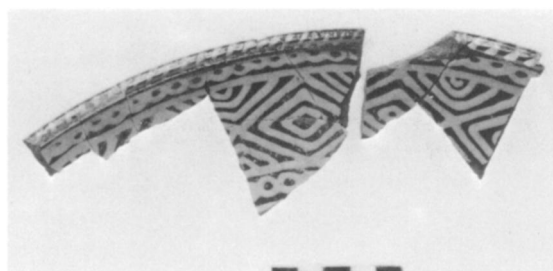
b. Lot 1989-16: coarse wares



c. Lot 1989-16: Slip Painted (light-on-dark) sherds



d. Lot 1989-16: coarse wares



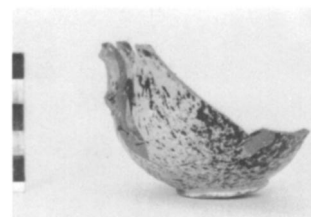
13 (C-1989-35). Slip Painted (light-on-dark) bowl



12 (C-1989-12). Slip Painted (light-on-dark) plate

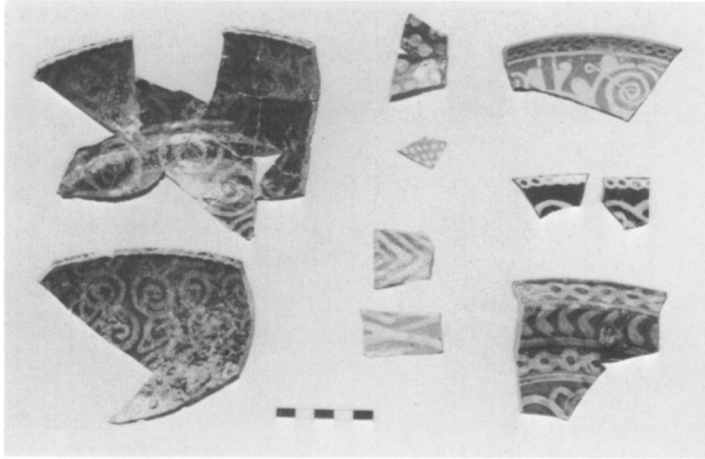


14 (C-1989-36). Slip Painted (light-on-dark) plate



15 (C-1989-4). Spatter Ware cup

PLATE 66



a. Lot 1989-63: Slip Painted (light-on-dark) sherds



b. Lot 1989-63: amphora with high-swung handles



16 (A-1989-2). Capital used as support no. 3



a. Corinthian capital used as support no. 4



b. Frankish level from north. Front to rear: Ionic base, post capital, supports nos. 2 and 3



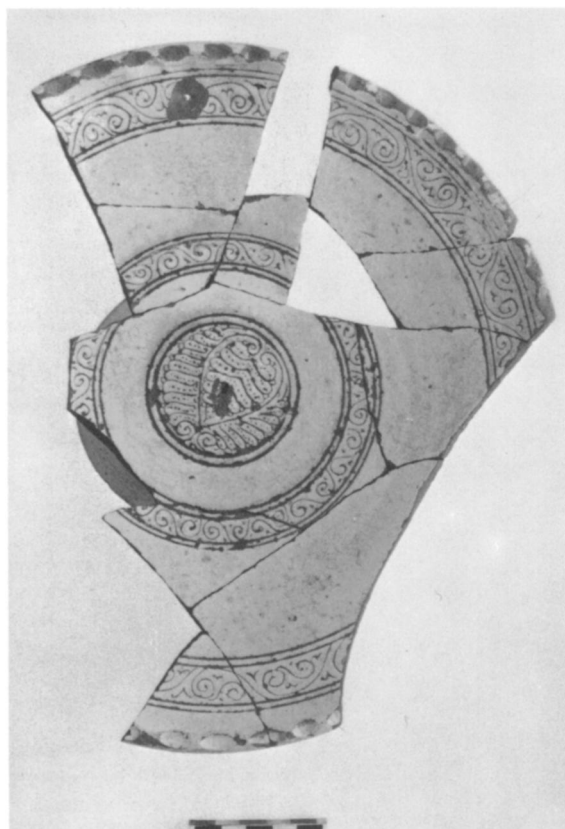
c. Frankish level from south: half-buried capital 16 in middle ground



d, e. Coin of Trajan (189-226), obverse and reverse



17 (MF-1989-10). Bronze weight



C-1989-26 a, b. Local Sgraffito plate

PLATE 68

