

EXCAVATIONS AT NEMEA, 1981

(PLATES 7–18)

Summary

The foundations of a small, apparently tetrastyle amphiprostyle temple of the late 4th century B.C. were uncovered far north of the Temple of Zeus. Closer to the north side of the temple were found the remains of an enigmatic building of early Classical date and strong evidence of Late Geometric activity. Investigations along the southern fringes of the sanctuary revealed the remains of at least four different buildings, essentially of the 4th century B.C. but with, in some cases, 3rd- and 2nd-century phases. These buildings line, for an east-west distance of more than 140 m., the south side of the principal road into Nemea and appear, because of their architecture and contents, to be domestic in character. Their periods of use and abandonment seem to reflect the history of the Nemean Games with their movements back and forth between Nemea and Argos in the Hellenistic period. Work in the stadium focused on resolving the question of the existence of a retaining wall to support the artificial northern terrace of the track. No evidence was found for such a wall. On the prehistoric hill of Tsoungiza west of the Sanctuary of Zeus, systematic excavations revealed a part of a Middle Helladic house. Salvage work in another field on the hill produced Early Neolithic ceramics and the remains of an Early Helladic apsidal house. See Figure 8.

THE AREAS OF NEMEA which were explored in 1981 were dictated by a number of considerations not always archaeological in nature.¹ Chief among these was a heavy winter rain and snow fall which raised the general water table in the Nemea valley to the level of the 4th-century B.C. Sacred Square surrounding the Temple of Zeus. Work in many areas was thus impossible until very late in the season, and many promising areas from earlier years could not be excavated at all.² Work did take place

¹ The staff consisted of Phyllis Allen of the University of California at Davis, J. Brady Kiesling of the University of California at Berkeley, and Dr. Robert Sutton of the University of North Carolina as excavators; Patricia A. Felch of the University of California at Berkeley as museum technician, cataloguer, and restorer; Craig A. Mauzy of Indiana University as photographer; and Gail Grant of the University of California at Berkeley as house manager. Professor James C. Wright of Bryn Mawr College, Mary Dabney of Columbia University, and Frank DeMita of Haverford College worked for a month on Tsoungiza. Professor Stella G. Miller of Stanford University served once again as Assistant Director. This group, in the face of the most difficult external problems ever encountered at Nemea, worked well and have earned the gratitude of the undersigned.

Thanks for their help go to the American School of Classical Studies at Athens and to its Director, Professor H. R. Immerwahr; to the Greek Archaeological Service and to its Inspector-General, Professor N. Yialouris; to the Director of Archaeological Parks, Ch. Kritzas; and especially to the Nauplion Ephoria of Antiquities and to its Ephor, Dr. Aik. Demakopoulou-Papantoniou. It is a source of considerable satisfaction that the University of California at Berkeley and its Chancellor, I. M. Heyman, have continued to be steadfast in supporting our efforts.

The operating expenses at Nemea in 1981 were supported by a gifts-and-matching grant from the National Endowment for the Humanities and by gifts from 146 private donors. Our work is possible only because of their support, and we are grateful for it.

² For previous work at Nemea see "Excavations at Nemea, 1973–1974," *Hesperia* 44, 1975, pp. 144–172; "Excavations at Nemea, 1975," *Hesperia* 45, 1976, pp. 174–202; "Excavations at Nemea, 1976," *Hesperia* 46, 1977, pp. 1–26; "Excavations at Nemea, 1977," *Hesperia* 47, 1978, pp. 58–88; "Excavations at Nemea, 1978," *Hesperia* 48, 1979, pp. 73–103; "Excavations at Nemea, 1979," *Hesperia* 49, 1980, pp. 178–205; "Excavations at Nemea, 1980," *Hesperia* 50, 1981, pp. 45–67. In the following presentation

a building which survives only in its foundations and at a level very close to the modern surface. These foundations have been damaged both by vine-planting pits whose oblong holes cut, in many instances, right through the soft, yellow poros blocks (Fig. 1, Pl. 7:a, b) and even more severely at the southeast corner of the structure by deep plowing which took place in 1966. Because of the terrain which slopes downward to the north, only one course of foundations is preserved along the north side, while two courses of blocks, each about 0.30 m. high, are preserved along the south except at the damaged southeast corner.

The foundations average nearly two meters in width along the north and south sides, but nearly three meters in width along the shorter east and west ends. They indicate a structure with over-all dimensions of about 7.60×13.00 m., oriented slightly north of east. In addition, in the interior of this structure but near its eastern end there are indications of a cross wall with a doorway. These consist of the two small filler blocks at N/6-5/15 and the rectilinear hole south of them which looks very much like the place of a robbed-out block and of the hard limestone blocks further to the south at N/6-5/18,19.

These structural characteristics, together with the orientation of the building, suggest that it was a small temple, perhaps tetrastyle amphiprostyle, but there is no evidence for its architectural order, nor for the deity to whom this structure might have been dedicated. Nor is there, for the present, any evidence to contradict or refine the very early Hellenistic date which was suggested for this building in 1974.

Sections K 10 and K 11

In 1980 part of two rooms of a building along the immediate north side of the Sanctuary of Zeus was uncovered. Excavations in this region during the 1981 season were devoted to discovering more about this structure and its immediate environs. Toward this end all but the southwest corner of Section K 11 was excavated as was a small (2.00×6.50 m.) trench along the south side of Section K 10 (Fig. 2, Pl. 8:a). It was discovered that the building's east wall lies only some two meters east of the end of the 1980 trench and that the whole eastern half of Section K 11, except for the southernmost area, was disturbed by farming trenches of the Early Christian period.

The extreme shallowness of the fill accounts for the discovery in the modern surface of many ancient artifacts including the head of a terracotta figurine (TC 147; Pl. 8:c) and the leg of a bronze statuette of an animal, perhaps feline (BR 944; Pl. 8:b). So too the farming trenches, although clearly of the 5th or 6th century after Christ,³ contained material of much earlier date. Among this were two lead tablets one of which bears the inscription: --]πῖς: Λυκοφρονίδαι (IL 402; Pl. 8:d). The second tablet was folded and only one of the halves was inscribed; it seems to read: Μ|ε|λανιπίδ|αι|Τελλεῦς (IL 401; Pl. 8:e).⁴ Of the numerous coins from the farming trenches, the six presented here show

³ Pottery lots K 11: 4, 5.

⁴ The upper line is, in part, difficult to read, and I would thank Ch. Kritzas for his suggested restoration. Although the precise purpose of these lead tablets is not yet clear, it is of interest that the two found this year together with two found in 1978 (IL 259, IL 260; *Hesperia* 48, 1979, p. 82) bring to four the number of Argive phratries now attested on such lead strips at Nemea.

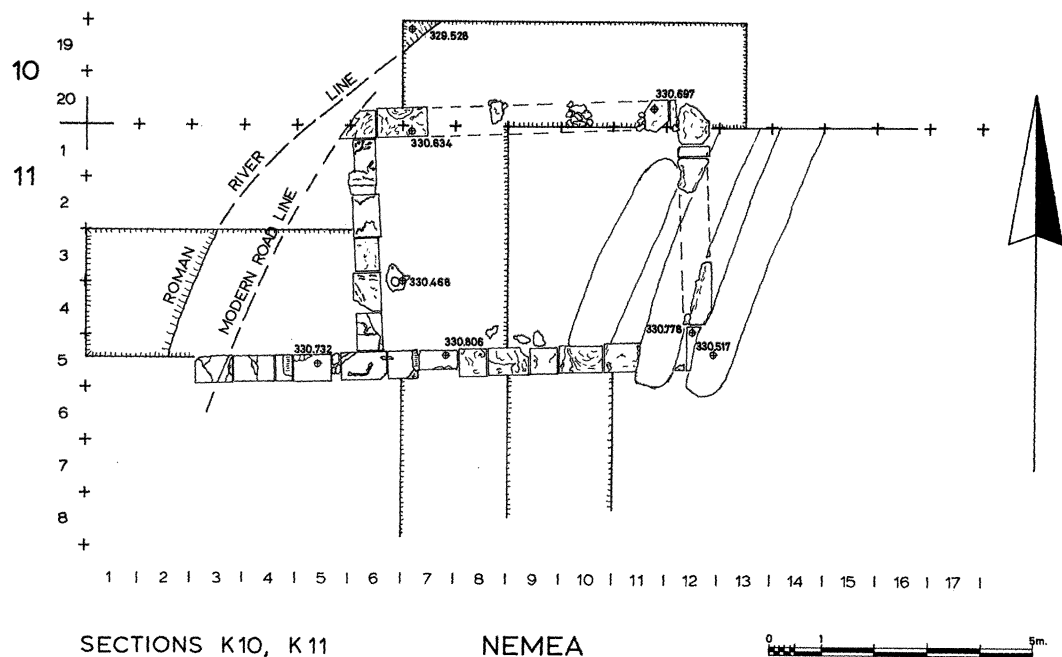


FIG. 2. Actual-state plan of Sections K 10 and K 11

something of the ranges of date and geographical provenience which are represented (Pl. 9:a, b).⁵ The four lead ingots discovered in the southern part of Section K 11 also come from disturbed fill but may have been associated originally with the construction of the 4th-century Temple of Zeus, some debris of which was noted in this area (IL 396, IL 397, IL 398, IL 400; Pl. 9:c). From similar debris came two bronze arrowheads which, together with two others found in the Early Christian farming trenches, may perhaps be associated with the destruction of the Early Temple of Zeus (BR 945, BR 946, BR 954, BR 955; Pl. 9:d).⁶

The structure in the northwestern corner of Section K 11 was badly damaged, as reported last year, not only by modern road work but also by Early Christian activities. Chief among these were, as usual, the oblong shallow farming trenches which cut through nearly all the east wall of the building. The fact that these trenches did not continue through the central and western part of the building, together with the orientation of the trenches, appears to be explained by the presence of the Nemea River which during this period⁷ cut through the western part of the building in a roughly southwest-northeast line (cf. Fig. 2, Pl. 8:a). It is now clear that the western end of the building

⁵ C 1866, Pyrrhos; C 1868, Phlious; C 1869, Corinth/Caligula; C 1888, Corinth (silver); C 1901, Pyrrhos; C 1967, Corinth/Galba.

⁶ BR 945 and BR 946 from pottery lot K 11: 5; BR 954 from lot K 11: 12, and BR 955 from lot K 11: 10.

⁷ Pottery lots K 11: 48; K 10: 7, 8.

was destroyed by the river and that the most that can be said is that the original east-west length of the structure must have been something more than the preserved 9.80 m. Although the north wall of much of the structure was destroyed, apparently by erosion during the Roman period,⁸ enough of that wall remains to establish a north-south width for the building of 5.15 m. There is no evidence for any extension of the building to the north. We are, then, left with an eastern room with interior dimensions of 4.05×5.75 m., and a second western room of the same width but of indeterminable length. It is possible that the western room was similar to the eastern (giving a total length for the building of some 14 meters) and that each room was entered by its own small door near the center of the structure where the soft, yellow poros foundations are replaced by harder limestone blocks at K/5-11/5 and K/7-11/5. It is clear that this building served, at least in some sense, as a northern limit to the Sacred Square around the Temple of Zeus, but the precise function of the building is not immediately obvious.

The state of preservation of the stratigraphy is such that nothing can be said about the date of the earliest destruction of the building. Construction layers and foundation trenches, however, were discerned, but the material from them could be dated only to the later Archaic or earlier Classical periods.⁹ It seems likely that the date suggested last year in the first half of the 5th century B.C. may be correct.

The lower layers both inside and outside the structure produced diverse material including an iron spearpoint and an iron knife blade (IL 407 and IL 411; Pl. 9:f).¹⁰ These layers appeared to be silted fill and no architecture can be associated with them save for the enigmatic rough block of poros with a roughly circular channel carved in its upper surface at K/6-11/3 (just visible in Plate 8:a; cf. Fig. 2). These layers, datable to the 7th and 6th centuries B.C.,¹¹ produced significant quantities of late Geometric pottery including a nearly complete plain skyphos (P 779; Pl. 9:h) and many fragments of more highly decorated but less complete vessels of which five are shown here (P 780, P 781, P 801, P 803, P 805; Pl. 9:e). Only one of these (P 803; Pl. 9:f) preserves a figured scene; it consists of a central human figure flanked by horses of which the left one is relatively clear. The typically crowded scene also preserves a rectangular "window" above and a fish below the horse. Although clearly not coming from habitation levels, this pottery, together with that found in 1975 at the north end of the Altar of Zeus,¹² shows that the 7th and perhaps 8th centuries B.C. did see activity at Nemea and suggests that this activity was restricted to the area immediately north of the Temple of Zeus.

THE TEMPLE OF ZEUS

Although the high water table prevented any archaeological investigations in the immediate vicinity of the temple, it was possible to continue the architectural study of its

⁸ Pottery lot K 10: 17.

⁹ Pottery lots K 11: 30, 40, 49.

¹⁰ The knife blade (IL 411) actually comes from the eroded fill north of the structure. The evidence strongly suggests, however, that this fill had washed down from levels inside and beneath the floor of the structure.

¹¹ Pottery lots K 11: 20, 26, 27, 30, 40, 41.

¹² Cf. *Hesperia* 45, 1976, pp. 178-180.

remains.¹³ As a result of this work, the temple platform is completely cleared, a catalogue has been made of every block of the exterior of the temple, and our understanding of many details of the temple's construction has been greatly increased. This architectural study is not yet complete but important results can already be anticipated, including a possible physical reconstruction of the remains.

THE SECULAR FRINGES ON THE SOUTH SIDE OF THE SANCTUARY

Sections K 20 and L 20

Excavations in 1978 in Section L 20 had revealed the remains of apparently domestic structures lining the south side of a major east-west road through this region. The work in 1981 uncovered more details of the architecture and history of these buildings. To the west, the northern half of Section K 20 revealed the continuation of the line of the stream flowing from east to west toward the Nemea River. This stream had been responsible for cutting through many earlier walls (Fig. 3, Pl. 10:a). The evidence for the date of the stream was not so instructive as that recovered in 1978 although it does show, once again, that the line of the stream had been established before the Early Christian period.¹⁴

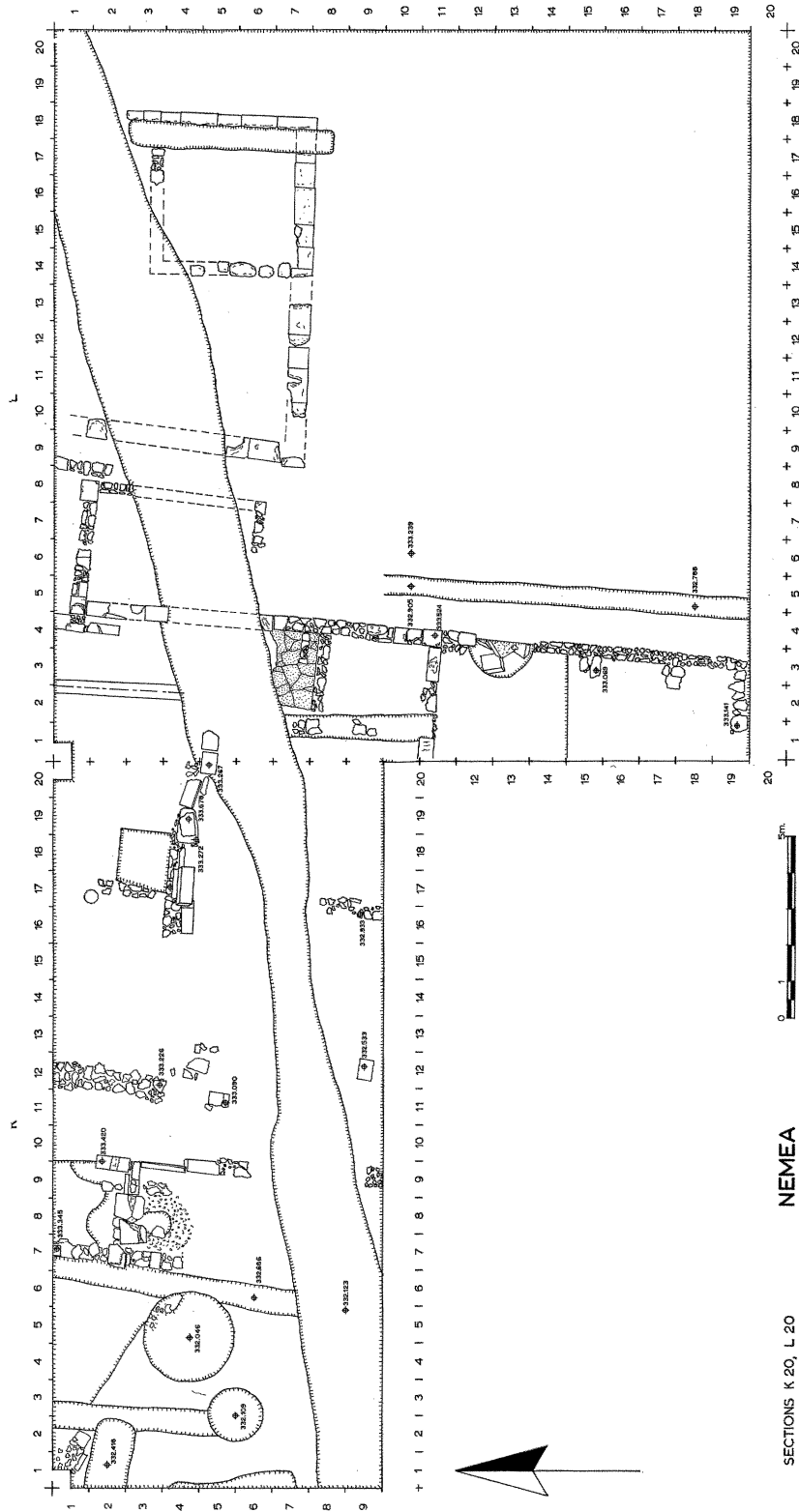
The space between the southern side of the stream and the south scarp of the excavated area of K 20 is so slight that little can be said about it, although the traces of a north-south rubble wall did appear at K/16,17-20/8,9, and a hard limestone base is to be seen at K/12-20/9. North of the stream bed there was evidence of activity from the modern through the Turkish, Byzantine, and Early Christian periods,¹⁵ but not in association with any architectural remains. The only possible exception was at K/8-20/3,4 where fill of the Early Christian period continued downward into the mouth of an earlier well. Because of this year's water problems, it was not possible to excavate this well, and therefore it remains unknown, although likely, that the well was re-used in the Early Christian period. The fragment of an Ionic geison block discovered here (A 182; Pl. 10:b) might have come from such a period of use, although the walls surrounding this well are largely constructed of re-used material.

Throughout the whole of K 20 there was found considerable evidence for activity of the later Hellenistic period. Much of this evidence consists of molded relief bowls one example of which is presented here (P 777; Pl. 10:c). Although some of this activity appears to belong to the second half of the 3rd century B.C., much of it cannot be placed

¹³ This work was once again directed by Professor Frederick A. Cooper of the University of Minnesota, assisted by Robin F. Rhodes of the University of North Carolina. The members of the team included Jane B. Carter of Harvard University, Steven Rapp of the Institute of Fine Arts, Rhys F. Townsend of the University of North Carolina, and several members of the Hoger Architectuur Instituut of Ghent, Belgium: Pieter Broucke, Luc Bulterys, Louis Caron, Ortwin Deroo, Etienne Vancoppenolle, and Pascal Van Rossem. The participation of the Belgian team was made possible by Professor Hendrick Hendrickx. It is a pleasure to acknowledge, with gratitude, the hard work of all these and the continued support of the Friends of Zeus, most notably of Mr. Angelos Tsakopoulos of Sacramento.

¹⁴ Pottery lot K 20: 44.

¹⁵ Pottery lots K 20: 1-7.



earlier than the second half of the 2nd century B.C.¹⁶ It seems clear that the north-south, lightly constructed rubble walls at K/12-20/1,4 and K/17-20/2,3 were built during this period and that the 12-sided faceted column at K/17-20/1,2 was in place at this time. The other walls of Section K 20 have deeper foundations and are more heavily built so that it would appear that they had been constructed at an earlier date, although used again in the later Hellenistic period.

The western area of Section K 20 is a confusion of pits of different sizes and shapes and, at least for the moment, unclear purposes. One of these has the form of a trench entering the section from the northwest at K/1,2-20/2,3 (Fig. 3). It was filled with debris of tiles, charcoal, shells, bones, and much pottery, largely coarse ware, but which included a black-glazed skyphos and a ribbed blisterware aryballos (P 752, P 734, Pl. 10:d). Although these pieces and many of those in the pit belong in the late 4th and early 3rd centuries B.C. the date of the pit as a whole clearly belongs in the second half of the 3rd century.¹⁷ Another pit is rather amorphous at its top but assumes a circular shape at K/2,3-20/5,6. It, too, produced large quantities of coarse ware, pithoi, and amphora fragments, shells and bones, as well as a large lekane (P 799; Pl. 10:e) and finer wares including an echinus bowl (P 761), an askos (P 782), and two saltcellars (P 738, P 760). Once again, despite the obviously earlier date of much of this material, the pit as a whole belongs in the later 3rd century B.C.¹⁸ A large, unlined circular pit, the bottom of which was not reached this year, lies at K/4,5-20/3,5. It also contained large quantities of coarse ware, many roof-tile fragments, but relatively little organic material. Among the fine wares were an amphoriskos (P 783; Pl. 10:f) and an articulated kantharos belonging to the first quarter of the 3rd century B.C. (P 788; Pl. 11:a).¹⁹ Once again, the date for the pit as a whole belongs in the later 3rd century B.C.²⁰ Whatever the original purpose of these pits, their fill would seem to represent debris which was cleaned up and deposited in them in the second half of the 3rd century B.C. at the earliest, although a somewhat later date cannot be excluded.

Very few stratigraphic entities of a date earlier than the second half of the 3rd century B.C. were recovered. Indeed, a test trench to virgin soil at K/17,18-20/3,4 yielded scanty material all of which was of the 4th century B.C. or later.²¹ Nonetheless, large quantities of material of the 4th century mixed in with later material indicate that the area saw activity in the late Classical or very early Hellenistic period. Among those artifacts were many coins, a few of which are shown here (C 1950, C 1951, C 1952, C 1970, C 2002; Pl. 11:c, d),²² a Corinthian Type B storage amphora (P 789; Pl. 11:b), a lamp (L 108; Pl. 11:e),²³ and a black-glazed mug with the incised grafitto *τοῦ Διός* (P

¹⁶ Pottery lots K 20: 10–16, 20–25, 28–31, 38.

¹⁷ Pottery lot K 20: 13.

¹⁸ Pottery lot K 20: 10.

¹⁹ Cf. G. R. Edwards, *Corinth*, VII, iii, *Corinthian Hellenistic Pottery*, Princeton 1975, pp. 83–86, nos. 466, 477.

²⁰ Pottery lot K 20: 24.

²¹ Pottery lots K 20: 39–42.

²² C 1950, Thyrraeion; C 1951, Tanagra; C 1952, Sikyon; C 1970, Thyrraeion; C 2002, Arkadian League.

²³ Cf. R. H. Howland, *The Athenian Agora*, IV, *Greek Lamps and Their Survivals*, Princeton 1958, Types 25A and 25B of the first quarter of the 3rd century B.C.

778; Pl. 11:f). Despite such comparative wealth of material, it was not possible to associate it with any architecture or with any layers of similar date in Section K 20.

Only the western five meters of the southern half of Section L 20 were excavated to any depth this year, but several significant features were revealed (Fig. 3, Pl. 12:a). It is here that we encounter for the first time in this report (see below, pp. 28, 30–32) the long, narrow north-south channels which lie about four meters apart.²⁴ These channels are unlined and they cut through earlier walls; their purpose will be discussed more fully below.

The clearing of the southwestern corner of Section L 20 also resulted in the discovery of the original end of a north-south wall first discovered further to the north in 1978. This end is in the form of a corner which turned west at L/4-20/11 and continues westward out of the excavated area. In a later phase, the north-south wall was extended southward, and this extension continues out of the excavated area. The earlier wall is constructed in the typical fashion noted in 1978 further to the north: large, squared, hard limestone blocks, located especially at corners, supplemented by rubble elsewhere. The southern extension wall is much more lightly constructed of rubble, lies at a slight angle to the earlier north-south wall of which it is essentially an extension, and exhibits the stubs of cross walls (or buttresses?) going westward at L/3-20/15, L/3-20/17,18, and L/1,3-20/19. A circular pit (semicircular as exposed) whose bottom was not reached in 1981 cuts through the north-south extension wall at L/3,4-20/12,13 and contains several squared, soft, yellow poros blocks and some Corinthian tiles which were obviously dumped in the pit although their original provenience is not known. Also unknown at present is the original purpose for which the pit was dug.

In Section L 20 no evidence was found for activity of the late Hellenistic period. Indeed, the southern wall extension seems to have been both constructed and destroyed within the 3rd century B.C.,²⁵ and the fill over this wall had a heavy admixture of 4th-century material, as can be discerned in a sample of some of the pottery (e.g. P 753, P 791–P 794, Pl. 12:b and P 808, Pl. 12:c) and coins (C 2008, C 2011–C 2013, C 2016–C 2019, C 2022; Pl. 11:c, d)²⁶ from this layer. So, too, the pit through the wall appears to have been dug during the later 3rd century B.C. It was suggested in 1978 that the more northerly part of the north-south wall was originally constructed in the last third of the 5th century B.C. The earliest use level discovered outside (south of the east-west wall) in 1981 can be dated no earlier than the 4th century B.C. although earlier material was also present in this layer, and the same chronology emerges from a habitation level inside this wall.²⁷

No coherent ground plan for the building or buildings in Sections K 20 and L 20 readily emerges, although further excavation to north and south would clearly be reveal-

²⁴ It now appears that a similar channel is to be recognized in the “north-south trench of Roman date” which was discovered in 1978 to have removed the western side of the soft, yellow poros wall in the northeast corner of Section L 20; cf. *Hesperia* 48, 1979, p. 92.

²⁵ Pottery lots L 20: 61–65.

²⁶ C 2008, Phlious; C 2011, Sikyon; C 2012, Argos (silver); C 2013, Opuntian Lokris (silver); C 2016, Argos; C 2017, Larissa Kremaste; C 2018, Phlious; C 2019, Elis (?); C 2022, Sikyon.

²⁷ Pottery lots L 20: 66 and 68, respectively.

ing. The nature of the architecture and of the ceramics does suggest a domestic character. The clear attempt which was made in the second half of the 3rd century to clean up the area is significant, as is the discovery of relatively large quantities of material of the second half of the 2nd century B.C. Although it has long been thought that the Nemean Games were returned to Nemea from Argos by Mummius,²⁸ there has been little physical evidence to substantiate such an event. The material from K 20 hardly implies, by itself, a great Panhellenic festival center in full operation, but it does at least show that there was some activity at Nemea at the appropriate time.

Section O 19

Another part of the attempt to define the topography and history of the southern fringes of the sanctuary was the excavation of the southeastern quadrant of Section O 19 (Fig. 4, Pl. 13:a). Here, too, was found the essentially east-west line of the stream bed. To the north of the stream lies a succession of hard, gravelly layers which, although not tested, must represent the east-west road which lay south of the Xenon in antiquity and whose line is still followed today by a road bisecting the site (cf. Figs. 6, 8). The latest phase of this road in the excavated area consists of layers of tile paving which are bounded by a crude rubble wall of small stones, perhaps a kind of retaining wall alongside the stream. Although excavation of these surfaces will be necessary to define their chronology more closely, it is clear that both road and stream were still in use in the Byzantine period. Among the evidence for such a date is a silver coin of Guy de la Roche (A.D. 1287–1303; C 1875, Pl. 13:b).²⁹

As in Section L 20, so too in O 19 there were discerned long north-south channels roughly four meters apart, apparently draining out to the south from the stream and cutting through earlier layers and walls. No close date could be recovered for these, but a bronze fibula of early Roman date (GJ 72; Pl. 13:c) gives a rough indication of the time when these channels were filled in.

South of the road and the stream were discovered a number of rubble walls of a structure whose north façade wall was apparently destroyed by the stream. The nature of their construction, their elevations, and orientations make it clear that these walls come from two distinct phases. The later phase consists of light rubble with fragments of tile which in some cases lie over and make use of, to varying degrees, the earlier walls (i.e. the east-west wall at O/10,13-19/18,19 and the north-south wall at O/17-19/15,19). The east-west wall at O/15,16-19/19, however, has no predecessor from the earlier phase. Also to the later phase belong the slabs set on end in a north-south line at O/16-19/17,18 whose purpose was apparently to line a slightly sunken pit at the south-east corner of a room.

The stratigraphy makes clear that this phase was short-lived, being both constructed and destroyed within the last half of the 3rd century B.C. Among the evidence for this

²⁸ See D. W. Bradeen, "Inscriptions from Nemea," *Hesperia* 35, 1966, pp. 328–329, with full discussion and bibliography. The only other area at Nemea which has produced much material of the second half of the 2nd century B.C. is the well in Section N 17; cf. *Hesperia* 45, 1976, pp. 190–191, and note 28.

²⁹ Cf. pottery lots O 19: 2, 3, 22.

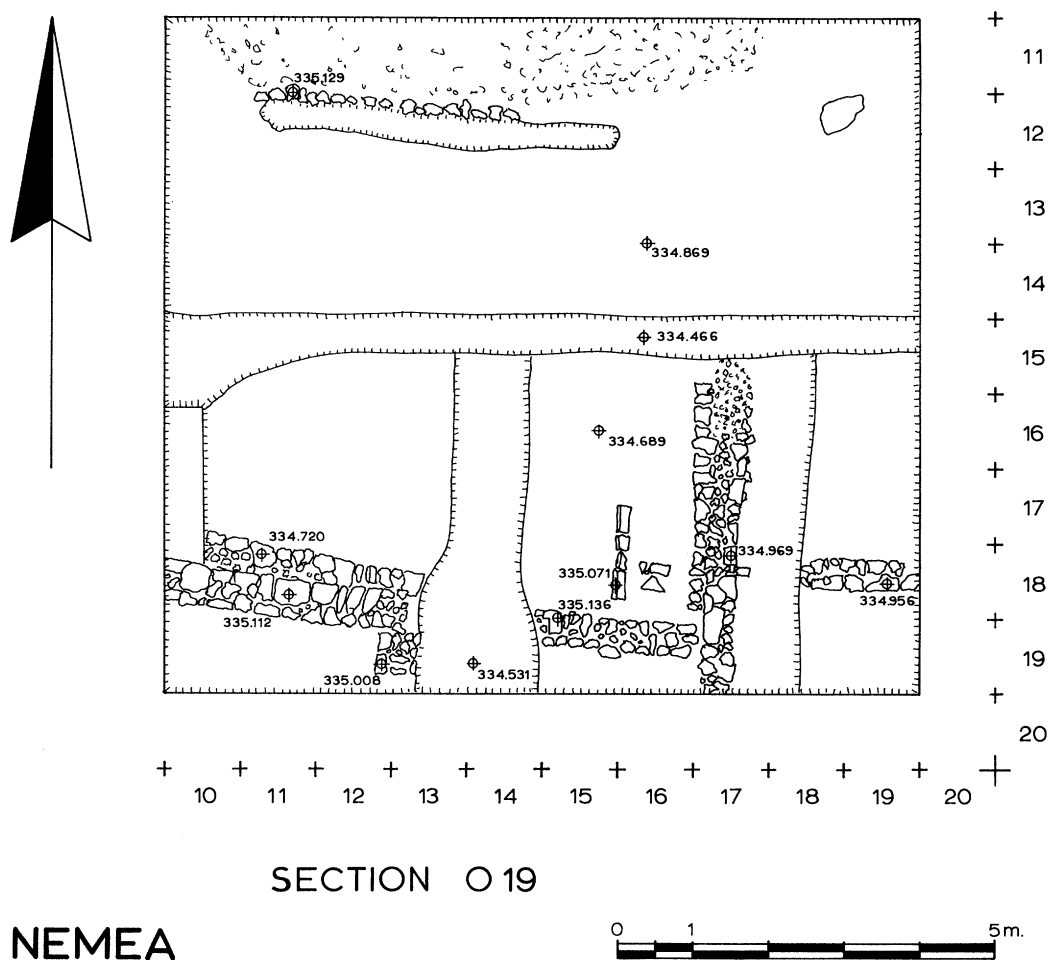


FIG. 4. Actual-state plan of Section O 19

chronology are three lamps which were found clustered together at O/16-19/19 over the top of the east-west wall in this area (L 102-L 104; Pl. 13:d)³⁰ and a bronze coin of Ptolemy III Euergetes (247-222 B.C.; C 1881, Pl. 13:b).³¹ Although found further to the south and in later context, one wonders if the Lakonian tile with the stamped retrograde inscription -]NOMAKPITO[- (AT 143; Pl. 13:e) might not belong to the building of this period.

The walls of the earlier period in Section O 19 consist of relatively well-built rubble, four sections of which have been exposed: an east-west segment at O/10,13-19/18 which forms a corner with a north-south segment at O/13-19/19, and the lower, eastern, part

³⁰ Cf. Howland, *op. cit.* (footnote 23 above), Type 28B of the mid-3rd century B.C.

³¹ Pottery lots O 19: 4-7.

of the north-south wall at O/17-19/15,19 which intersects with an east-west wall, parts of which, although interrupted by later activities, can be seen in the area O/16,19-19/18. A pre-construction level of the late 5th century B.C. and use levels of the late 4th century B.C. indicate that the latter is the date for the earlier phase.³²

In the absence of the north façade wall, and with walls extending out of the excavated area in all other directions, a complete plan for this structure is not yet clearly discernible. The construction technique and the quantities of cooking pottery, loomweights, etc., however, suggest that the structure is domestic in character. Also of importance is the absence of evidence for late Hellenistic activity (as opposed to the situation in K 20, above), the evidence for a short-lived period of activity in the second half of the 3rd century B.C. which might be connected with the re-establishment of the Nemean Games by Aratos in *ca.* 235 B.C.,³³ and the evidence for a more substantial period of activity in the late 4th century at a time when the Games clearly were at Nemea.

Sections Q 19 and Q 20

The southern half of Section Q 19 (with an extension to the northeast) and the eastern half of Section Q 20 were excavated in 1981 (Fig. 5). The results were both similar to and different from those obtained further west in K 20, L 20, and O 19.

In Section Q 19 the east-west stream was discovered once again, together with evidence that its existence had continued through the Byzantine into the Turkish period.³⁴ As in O 19, so too here the northern edge of the stream was bordered by a road with a lightly constructed wall preserved along its southern edge toward the east at Q/16,19-19/9 (Pl. 14:a). A test through the accumulated layers of road metal at Q/13,15-19/6,13 yielded little datable material although the road was clearly functioning along a line further to the south by the 4th century B.C. and continued, with its southern edge gradually shifting northward, into the Byzantine period at least.³⁵

South of the road and of the stream, a series of the now increasingly familiar, long, narrow trenches was found. They were once again about four meters apart, and they run in lines from slightly east of north to slightly west of south and extend southward from the stream for a distance of some 28 meters before disappearing into the unexcavated fill south of Section Q 20 (Fig. 5; Pl. 15:a). They clearly run downward to the south and cut through earlier walls and layers, although at two places (Q/10-19/17,18 and Q/14-19/13) they fail to cut through blocks of earlier construction. These channels are difficult to explain but they would appear to have been intended as drainage or irrigation ditches to siphon off the water from the stream. On the other hand, none of them, including those further to the west in L 20 and O 19, shows signs of erosion or of silted sand or clay in their bottoms. That fact, plus the existence of the two blocked areas mentioned above, would imply that they were never used for water movement even if

³² Pottery lots O 19: 16 and 20, 21, respectively.

³³ For the evidence of Aratos' Games at Nemea, see *Hesperia* 45, 1976, pp. 190-192 and notes 28 and 32; cf. *Hesperia* 48, 1979, p. 80.

³⁴ Pottery lots Q 19: 1, 2.

³⁵ Pottery lots Q 19: 52-72.

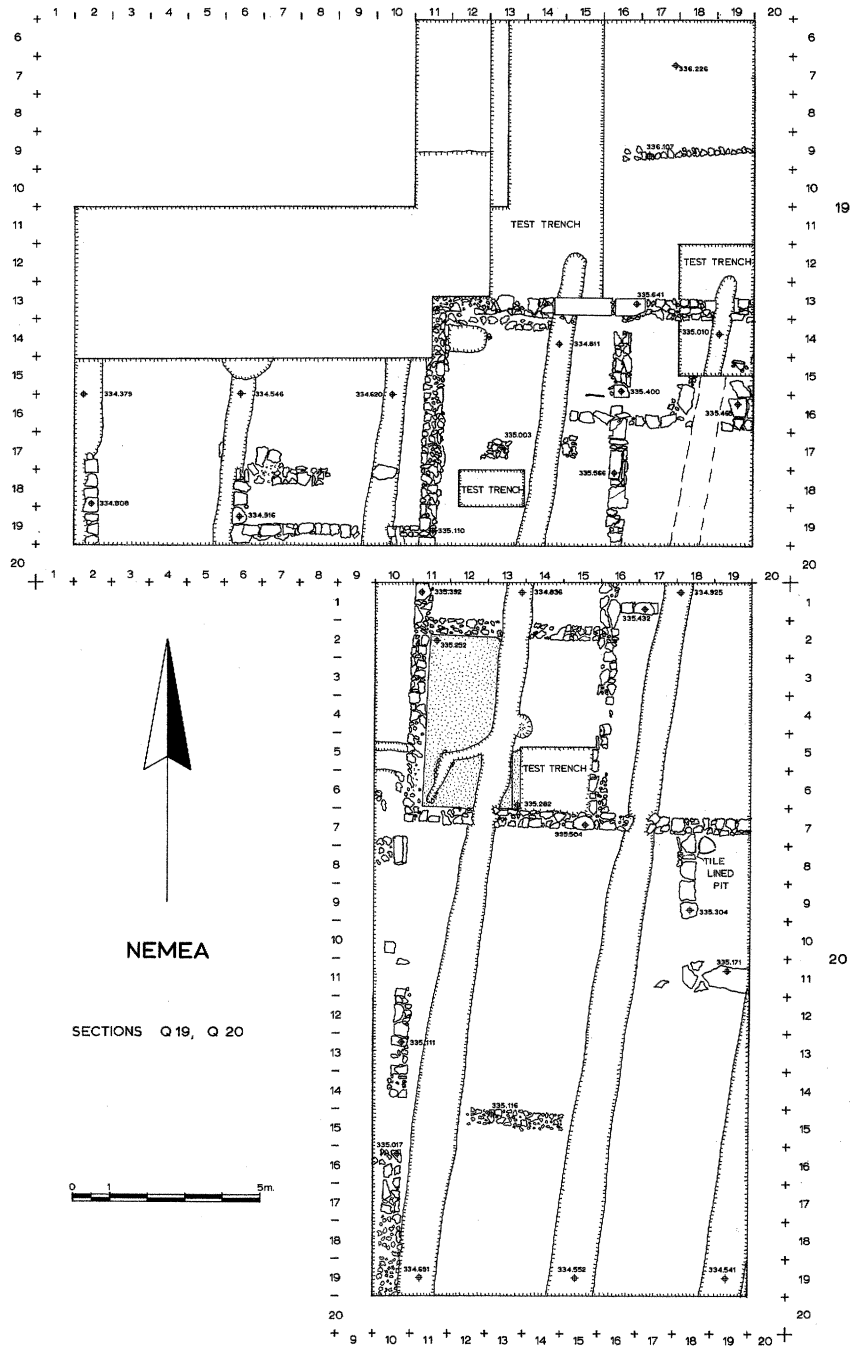


FIG. 5. Actual-state plan of Sections Q 19 and Q 20

that had been their original purpose. Perhaps a full explanation awaits excavation further to the south.

The chronology of these channels is difficult to define with precision. That they were clearly out of use by the later Roman Imperial period is clear from the fill over them which included a bronze coin of Probus (A.D. 276–282; C 1943, Pl. 15:b). The fill from the channels seems, in fact, to belong to the Early Roman period, although it contains earlier material including a bronze “snaffle bit” (BR 970; Pl. 14:b).³⁶ The Early Roman material includes pottery of the 1st century B.C.³⁷ and the mouth, neck, and handles of a glass jug (GL 23; Pl. 14:c). A date for the installation of these channels is not so easily derived, even though they are clearly later than the early Hellenistic structure through which they cut. If the thesis offered above about their short lives is correct, however, then it might be suggested that these channels were cut and filled within the 1st century B.C.

The major feature which fills the southern half of the excavated area of Q 19 and all the excavated area of Q 20 is a building which faces northward onto the road. The picture of this building is, at present, necessarily incomplete, for its walls continue in all directions into unexcavated areas (Fig. 5, Pls. 14:a, 15:a). The north façade wall and the eastern of the two major north-south walls are constructed of large re-used blocks with rubble packing. The other major north-south wall and the two east-west cross walls which connect it with the eastern major north-south wall are built almost exclusively of rubble. The north-south walls at Q/2-19/17,19, at Q/6-19/18,19, and at Q/18-20/7,9 are constructed of large, rough stones in a rough rubble masonry. The southern extension of the western major north-south wall in the area Q/11,19-20/10 with its apparent turn to the west at Q/10-20/16, the spur of an east-west wall at Q/16,17-20/1, and the east-west wall at Q/6,10-19/19 are built of roughly squared slabs of stone which give a brick-like texture to their surfaces (cf. Pl. 14:a, right). The same stone slabs appear at Q/6,8-19/17,18, Q/15,19-19/15,16, and Q/18,19-20/11, although apparently in these three places as paving rather than as walls. Finally, a crude east-west wall at Q/12,14-20/15 is constructed of tiny bits of stone and tile.

Within this building are several features which should be mentioned. At Q/10-19/17,19 is a very large stone which, as already mentioned, blocks one of the Early Roman channels. The stratigraphy shows clearly, however, that this stone was in place before the channel was dug, although its function within the building is not clear. At Q/13-19/17 and at Q/15-19/17 are clusters of rubble which may have served as the foundation for interior roof supports. They are, however, slightly north of the center of their room and of relatively light construction. In this context mention should perhaps be made of the octagonal, faceted column of hard limestone which was discovered lying over the top of the south wall of this room at Q/14-20/2,3 (A 181; Pl. 14:d). The western half of the room to the south (Area Q/11,13-20/2,6) is paved with hydraulic cement

³⁶ For other examples from Nemea see *Hesperia* 47, 1978, pp. 73–75 (BR 456, BR 457) with bibliography, and *Hesperia* 48, 1979, p. 75 (BR 544).

³⁷ Pottery lots Q 20: 17–19.

which, although largely broken through by an Early Roman channel, still preserves along its eastern edge the southern end of a raised "curb" of hydraulic cement 0.20 m. wide (Pl. 16:a). The absence of a drain from this paving is puzzling, and its precise function within the structure is not clear although it recalls the similar paving found in the northern half of Section L 20.³⁸ Finally, tucked into the corner of two walls at Q/18-20/7,8 is a vertical cylinder of rounded triangular plan which was formed by setting three Lakonian tiles on edge (Pl. 16:a, lower right). The discovery of soft, black, decomposed organic material near the bottom of this cylinder suggests that it was used as a planting box.

The differences in construction technique in various parts of the building would suggest different phases in its history, as would the stretch of wall uncovered at Q/12,14-19/13, parallel to but south of and beneath the north wall of the building. The stratigraphy is not, however, so clear. It does appear that the whole building was out of use by the second half of the 3rd century B.C., for some of the layers covering some of the walls can be so dated.³⁹ It must be stated, on the other hand, that there is very little material of the 3rd century and practically none of the 2nd century throughout the whole area. The levels of use in the building, and especially in the north-central room (Q/11,16-19/13,20 and Q/11,16-20/1,2), produced large quantities of pottery which belong in the second half of the 4th and the very early 3rd centuries B.C. Among this pottery were a molded blisterware jug with impressed ivy-leaf decoration on the shoulder (P 697; Pl. 14:e); the neck and shoulder of a Corinthian Type B storage amphora (P 812; Pl. 16:f); a casserole (P 756; Pl. 16:b); two shallow bowls (P 687, P 696; Pl. 16:d); two saltcellars (P 743, P 693; Pl. 16:d); a miniature bowl (P 692; Pl. 16:d); a one-handled, ribbed, black-glazed kantharos (P 690; Pl. 16:d); a "medicine pot" (P 691; Pl. 16:d); a black-glazed pyxis lid (P 695; Pl. 16:d); a small trefoil oinochoe (P 689; Pl. 16:d); and a tall trefoil oinochoe or olpe (P 688; Pl. 16:d).⁴⁰ Other items from the use layers of the north-central room included a clay "pestle" (P 694; Pl. 16:c), a bronze nail (BR 948; Pl. 16:g), a small bronze spatula with twisted handle (BR 961; Pl. 16:g), an iron spike (IL 406; Pl. 16:g), and an iron knife blade (IL 409; Pl. 16:g). The coins from these same levels, both in the north-central room and elsewhere in the building, tend to confirm a date in the late 4th or very early 3rd century B.C. for the use of the structure. A few examples are presented here (Pl. 15:b, c).⁴¹ A test trench at Q/18,19-19/12,15 yielded material from the foundation trench of the north wall which, although clearly of 4th-century date, could not establish more precisely the construction date of the building.⁴² Fur-

³⁸ Cf. *Hesperia* 48, 1979, p. 93.

³⁹ Pottery lots Q 19: 3, 45, 46, and Q 20: 3, 8.

⁴⁰ Pottery lots Q 19: 17, 18, 28, 29, 32; Q 20: 5. There appears to be some confusion over the proper nomenclature for the tall trefoil shape (P 688); contrast C. W. Blegen, H. Palmer, and R. S. Young, *Corinth, XIII, The North Cemetery*, Princeton 1964, p. 133, with Edwards, *op. cit.* (footnote 19 above), p. 50 and note 38.

⁴¹ C 1933, Aigina; C 1935, Corinth; C 1936, Phlious; C 1937, Tanagra (silver); C 1977, Troizen; C 1982, Chalkis; C 1984, Chalkis; C 1985, Arkadian League (from a post-use level in the southern part of the area at Q/15-20/14); and C 1987, Oeta.

⁴² Pottery lots Q 19: 12, 13.

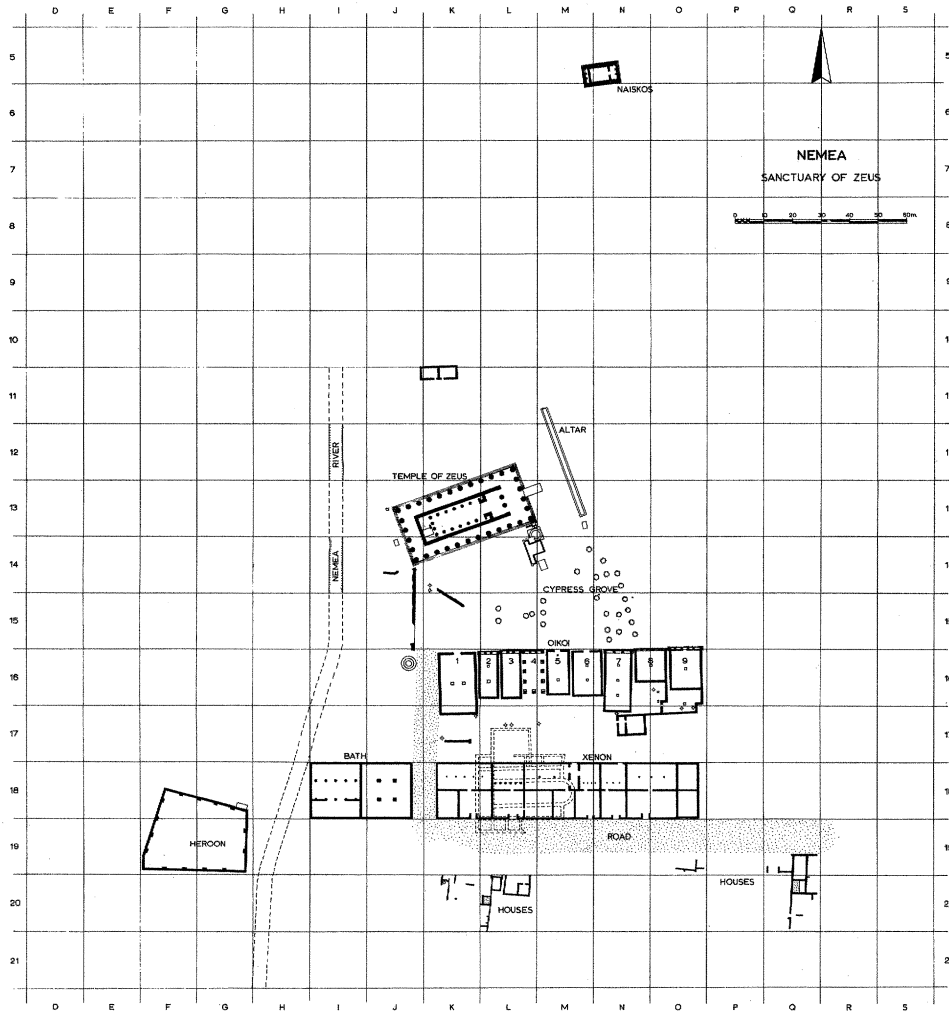


FIG. 6. Restored plan of Sanctuary of Zeus, Archaic to Hellenistic periods

thermore, that same test trench, plus another at Q/12,13-19/18, showed that although there are a few objects of the 5th century B.C. within the building, such as a saltcellar (P 742; Pl. 16:e), there is no discernible evidence of habitation nor of architecture of any period earlier than the late 4th century B.C.⁴³ Virgin soil appeared very quickly below late 4th-century levels.

Sections Q 19 and Q 20 have, then, produced the remains of part of a very large and fairly substantially constructed building which was used for only a generation or so during the late 4th and early 3rd centuries B.C. The nature of the material found within this building strongly suggests that the building was domestic in character, and the

⁴³ Pottery lots Q 19: 14, 15, 43.

absence of earlier or later habitation levels suggests that it is located on the outermost fringes of the Sanctuary of Zeus. It seems likely that this region was used as an appendage to the sanctuary only during the sanctuary's period of greatest expansion, that is, at the time of the late 4th-century building program which saw the construction of the Temple of Zeus, the Xenon, the monuments at the southeast corner of the temple, the Stadium, the small temple to the north (above, pp. 20–21), and perhaps the Bath, the reconstruction of many of the Oikoi, and the use of the kiln complex north of the Xenon for the manufacture of the roof tiles of the buildings of that program. With the shift of the Games to Argos in the first half of the 3rd century B.C.⁴⁴ this region at the southeast fringe of the sanctuary fell once again into disuse.

Summary for Sections K 20, L 20, O 19, Q 19, Q 20

The excavations this year in these sections have revealed a series of domestic buildings which line the road along the south side of the Xenon (Fig. 6). This thoroughfare can now be said to have had a maximum north-south width of between twelve and thirteen meters, although the traveled surface in the Early Hellenistic period was perhaps three or four meters narrower than that total.⁴⁵ The history of these structures is varied owing, apparently, to their topographical position vis-à-vis the sanctuary as a whole. Their purpose is, in general terms, domestic but the question of their specific use cannot be fully answered. Were they used only during the times of the Games for the transient population of athletes, spectators, etc.? Or were they used by a small permanent population of priests and caretakers who lived year round at Nemea during those periods when the Games were located here? The inscribed mug (P 778; Pl. 11:f) might support the latter hypothesis.

There is one further shred of evidence which concerns the relationship of Phlious with Nemea. Phlious is as close to Nemea as is Kleonai and, to judge from Pausanias' description of the two cities,⁴⁶ the Phlious valley supported in antiquity, as it does today, a much larger population than did the valley of Kleonai. It has, then, long been a source of puzzlement that, whereas Argos, Kleonai, and, at least in some sources, Corinth⁴⁷ all disputed control of the Nemean Games, Phlious seems to have taken no more interest in Nemea than did cities at a much greater remove.⁴⁸ The evidence which may now be brought to bear is numismatic. As curious as the silence of our ancient sources about any connection between Nemea and Phlious has been the relative sparsity of Phliasian coins from the excavations. Other factors, such as relative productivity of mints, may be at work here, but Phlious has provided only some 6.5% of the coins discovered in the

⁴⁴ Cf. *Hesperia* 48, 1979, p. 81, and *Hesperia* 45, 1976, p. 190 and note 28.

⁴⁵ Note, for example, the space used along the north side of the road for the terracotta aqueduct; cf. *Hesperia* 50, 1981, pp. 57–58 and fig. 5.

⁴⁶ Contrast Pausanias II.12.3–14.4 with II.15.1.

⁴⁷ Scholia C and D to Pindar, *Nem. Hypoth.*; cf. *Hesperia* 44, 1975, p. 149 and note 18.

⁴⁸ I know of only one reference which shows any but the most fleeting connection between Nemea and Phlious, and that is Pindar's obviously poetic and topographic allusion to Nemea lying "under the shadeless primeval ridge of Phlious," in *Nem.* 6.45.

excavations as a whole. Corinth, Sikyon, and Argos, on the other hand, have provided 30%, 20%, and 14% respectively. In the domestic buildings of Sections K 20, L 20, O 19, Q 19, and Q 20, however, the percentage of coins from Phlious jumps markedly to 24%, as compared to a steady 30% from Corinth, and a reduced 15% and 8% from Sikyon and Argos, respectively.⁴⁹ One wonders if this does not imply an increased commerce with Phlious for the inhabitants of these structures. If so, then those inhabitants might well have been a more permanent population depending for at least some of their supplies on Phlious. Just so today the inhabitants of the village of Archaia Nemea depend upon Nea Nemea (in the ancient Phlious valley) for their day-to-day needs but call upon Argos and Corinth for more specialized items. The tenuousness of the suggestion is obvious but it would explain the numismatic phenomenon which has now been observed. To characterize these domestic structures along the southern fringes of the Sanctuary of Zeus as for a small permanent population at Nemea will, then, serve as a working hypothesis.

THE STADIUM

Section EE 22

Although progress has been made by the Greek State upon the construction of the new road which will allow the removal of the asphalt road that now bisects the stadium and which will, in turn, allow the further excavation of the northern half of the race track, that new road is not yet complete. The work in 1981 in the stadium was therefore limited to an investigation of the extreme north end of the track. The purpose of this investigation was to answer the question about the existence of a retaining wall for the artificial terrace at this end of the track.⁵⁰ Toward this end a north-south trench, 2 × 12 m., was opened at the extreme southwest corner of Section EE 22 (cf. Fig. 8). This trench crossed, at about its midpoint, the sharp rise which marks the modern limit of the artificial terrace. The trench was, therefore, necessarily at two different levels because of the difference in elevation of the modern surface, which was a maximum of some 3.30 m. at the extremities of the trench.

In the higher, southern, part of the trench dug bedrock was encountered immediately below the modern plowed surface. Although this was clearly a part of the artificial fill of the stadium track, its elevation (+349.000 average) is well below the elevation (*ca.*

⁴⁹ These percentages are based upon a sampling of 443 identified bronze and silver coins of the Classical and Hellenistic periods from the sanctuary and the stadium. The total number of such coins from the "domestic sections" (not included in the 443) is 99.

⁵⁰ The question is a long standing one: "... there is even a part of the wall remaining which supported the rectilinear extremity towards the plain: I measured 650 feet from this wall to the circular end . . .," W. M. Leake, *Travels in the Morea*, III, London 1830, p. 330; "... there are traces of masonry supporting a cross-wall at a distance of something more than two hundred yards from the semi-circle . . .," W. G. Clark, *Peloponnesus*, London 1858, p. 63; "nondescript wall built of boulders appeared at 3.80 m. from S. end of trench," J. Day, Nemea Notebook #5, December 8, 1925, p. 6; "The end of the running course was on this tongue. The same method of building a stadium may be seen at Sikyon, where, however, the projecting tongue was supported by a great retaining wall. Here at Nemea, where everything is simplicity itself, there was no stone construction whatever, so far as one may judge from the evidence today," C. W. Blegen, "Excavations at Nemea, 1926," *AJA* 31, 1927, p. 436. "We prefer to believe that a wall did exist and will be found preserved at a lower level," *Hesperia* 45, 1976, p. 193, note 36.

+353.00) which can be projected as the original level at this point, based upon the slope of the water channels in the southern half of the stadium. This is further confirmation that the original ancient surface at the north end of the track has long since disappeared.⁵¹

In the lower, northern, part of the trench and immediately beneath the modern plowed earth was discovered an east-west line of rough blocks which is almost certainly the same as that mentioned in the 1925 notebook (footnote 50 above). These blocks were, however, only one course deep, and it was possible to date their placement conclusively to the Middle Byzantine period.⁵² Below these blocks was encountered an eroded fill of mixed dug bedrock and decomposed, soft, sandy red limestone. The removal of this eroded fill revealed, in the steeply sloping scarp, layers of the same sort of earth, clearly artificial fill, which came to an end on red, sterile, virgin soil. The point at which the preserved scarp of artificial fill ended is approximately 190 meters north of the starting line at the south end of the stadium and at a depth of some 8.25 m. below the projected original surface of the race track at this point. Neither the eroded fill nor the layers of terracing produced a fragment of pottery or any other artifact. At no place in this trench was there found a hint of a wall, of a worked block, or of a robbing trench.

The conclusion seems inevitable that the northern end of the race track was created by dumping fill some eight meters in height without a wall to hold it. Because the foot length employed in the Nemea race track was 0.296+ m., it can be estimated that the maximum overrun space at the north end of the track was no more than eleven or twelve meters and probably rather less because of the slope back to the south necessary in an unsupported terrace of such height.

TSOUNGIZA

The field on the Tsoungiza Hill which saw preliminary work in 1979 saw more intensive excavations in 1981.⁵³ These were located in the five-meter square at the extreme southeast corner of Section EEE 19. In this area one room of a larger building was uncovered with a doorway to the west and a central hearth (Pl. 17:a). The last phase of occupation in this structure was clearly the latter part of the Middle Helladic period as is attested by the various ceramics found in its destruction debris (P 685, P 708, P 716, P 722–P 724, P 740; Pl. 18:a).

Late during the excavation season the owner of a property on the eastern slopes of Tsoungiza (Figs. 7, 8) began to deep-plow his field. Thanks to the alert actions of the chief guard at Nemea, Mr. Andreas Vakrinakes, this was stopped before the field could be totally plowed. Our salvage work was limited to the area already damaged (Pl. 17:b) within which three distinct areas of antiquities were discerned, all sunk into the bedrock

⁵¹ Cf. *Hesperia* 50, 1981, p. 67.

⁵² Pottery lot STAD: 147.

⁵³ Cf. *Hesperia* 49, 1980, pp. 203–205. These excavations were carried out under the direction of Professor James C. Wright of Bryn Mawr College who is preparing a thorough presentation of his results. Only a brief outline will, therefore, be given here.

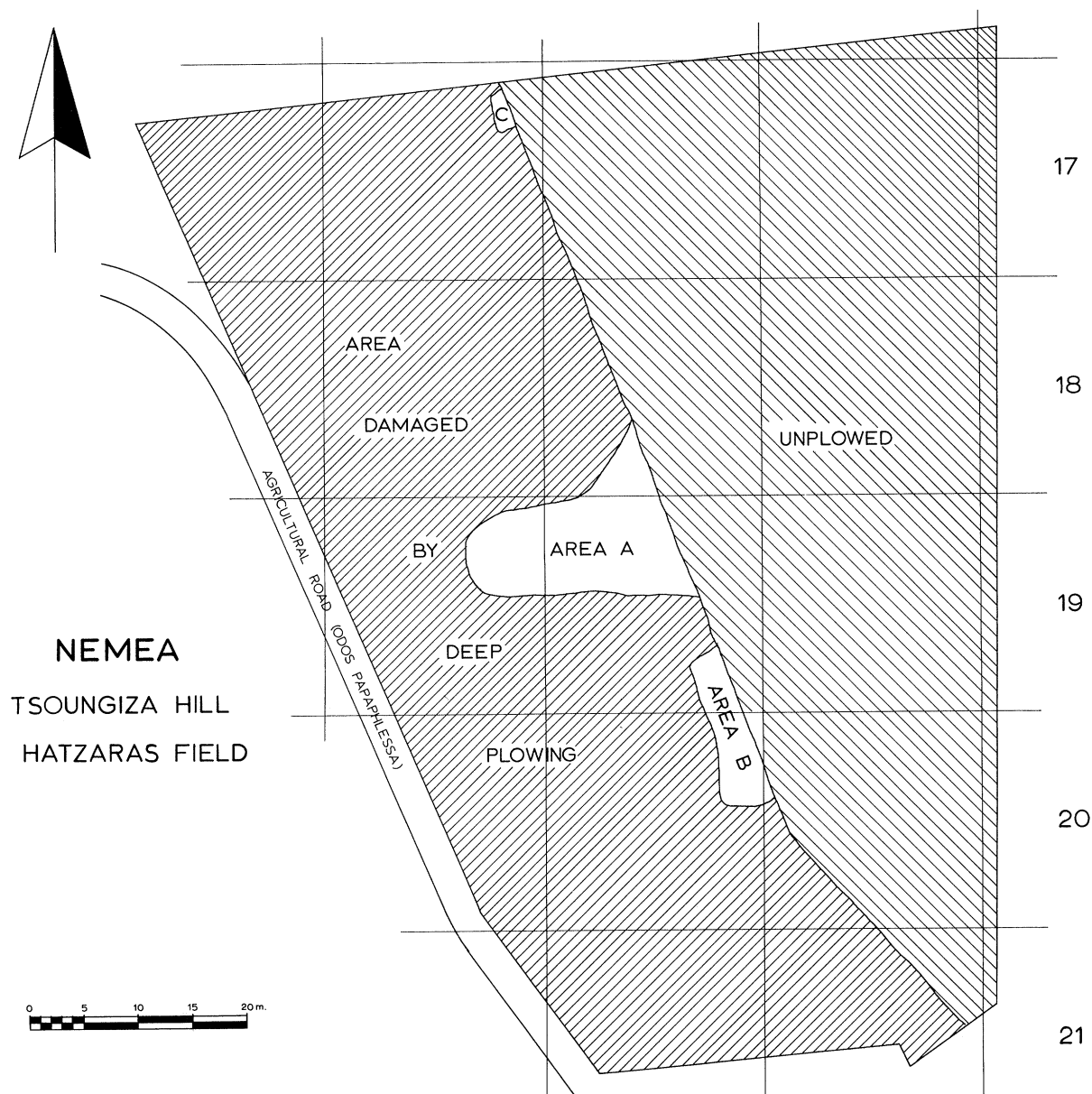


FIG. 7. Plan of the deep-plowed field on the eastern slope of Tsoungiza

which was otherwise revealed throughout the field. In Area C (Fig. 7) a small pocket of Early Helladic material was found. As preserved, this is a simple pit. In Area B (Fig. 7; Pl. 18:b) a relatively heavy deposit of Early Helladic material was found, apparently also in a large pit which continues into the unplowed area to the east. More excavation will be required to determine the precise nature of this deposit. In Area A (Fig. 7; Pl. 18:c) removal of the plowed fill yielded massive ceramic and lithic remains of Early Helladic II date. The earth which was not disturbed by the plow seems to show an

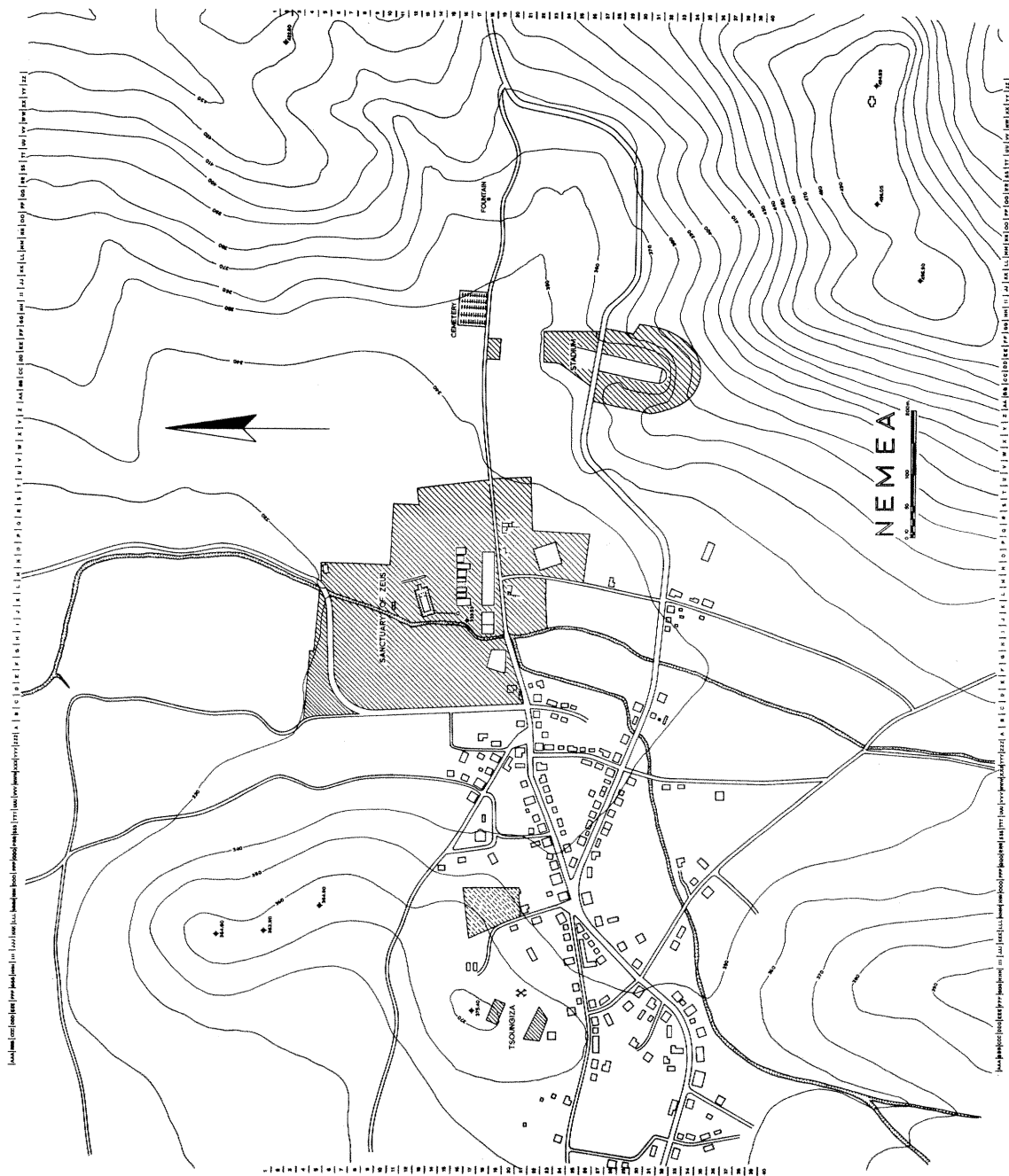


FIG. 8. Plan of the valley of Nemea showing areas under excavation

apsidal house embedded in the bedrock of the hill. Once again, the precise definition of the outlines of this structure and of its date require further excavation.

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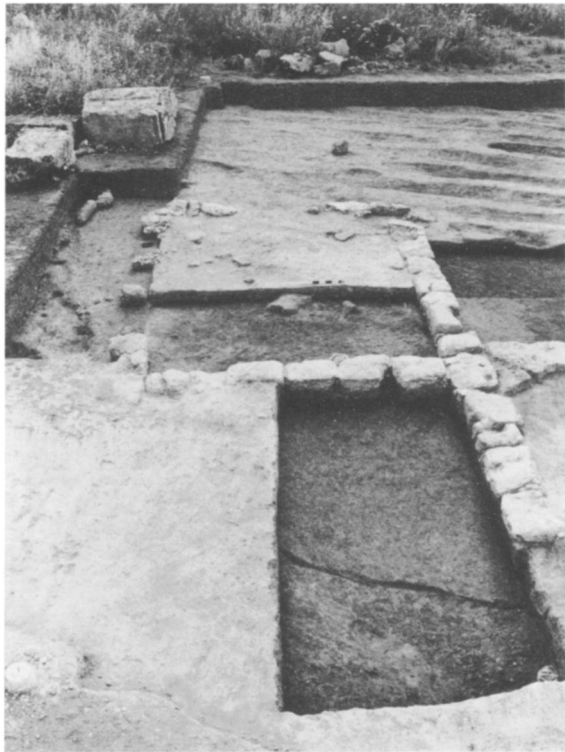
a. Foundations from the east



b. Foundations from the west

Small temple in Sections M 5, M 6, N 5, N 6

STEPHEN G. MILLER: EXCAVATIONS AT NEMEA, 1981



a. Sections K 10, K 11, from the west



b. BR 944



d. IL 402



c. TC 147



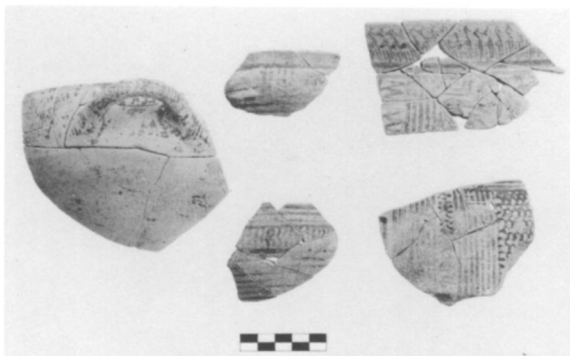
e. IL 401a and IL 401b



a. C 1866 C 1868 C 1869
C 1888 C 1901 C 1967



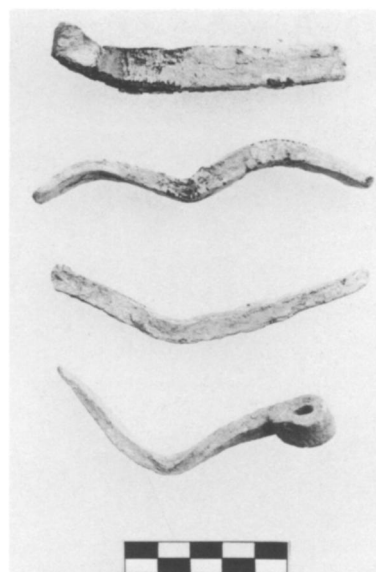
b. Reverses of a



e. P 780 P 801 P 803
P 805 P 781



g. P 803



c. Lead ingots
IL 396
IL 397
IL 398
IL 400



d. BR 955
BR 954
BR 946
BR 945



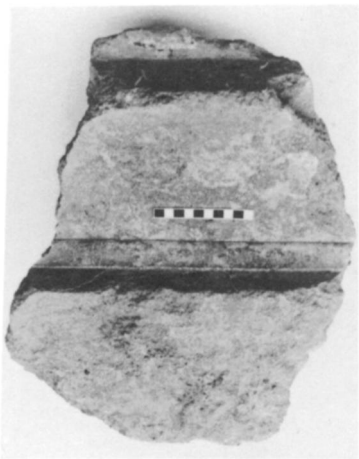
f. Iron knife blade and spearpoint
IL 411
IL 407



h. P 779



a. North half of Section K 20 from the west



b. Ionic geison block A 182



c. P 777



d.

P 752

P 734



e.

P 761

P 738

P 799

P 760

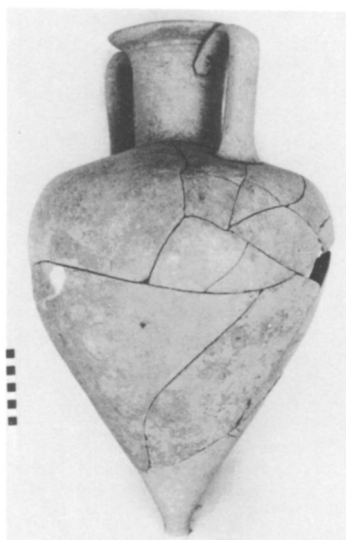
P 782



f. P 783



a. P 788



b. P 789



e. L 108



f. P 778

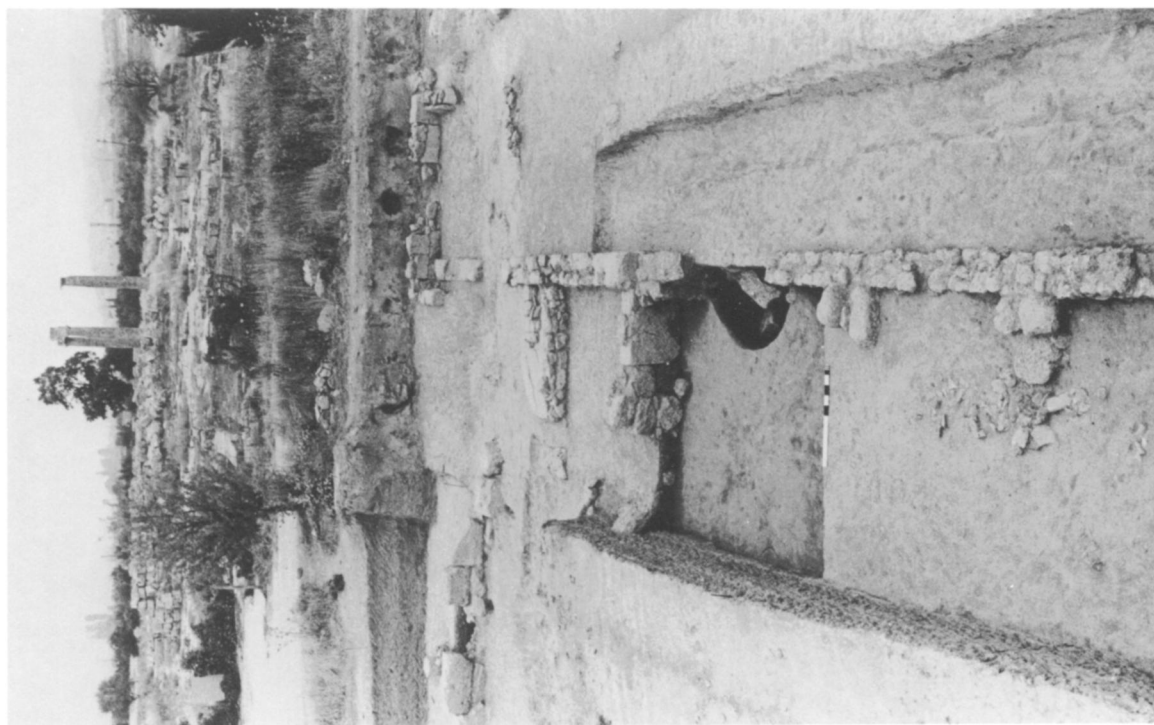


c.

	C 2012		C 2013
C 1950	C 1951	C 1952	C 1970
C 2002	C 2008	C 2011	C 2016
C 2017	C 2018	C 2019	C 2022



d. Reverses of c



a. West side of Section L 20 from the south



b. P 792

P 753

P 791

P 793

P 794



c. P 808

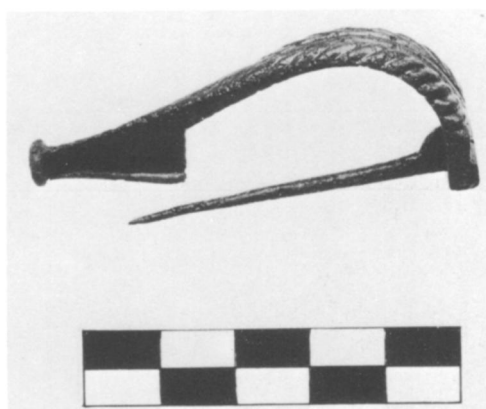


a. Southeast quadrant of Section O 19 from the east



b. C 1875

C 1881



c. GJ 72



d. L 102

L 103

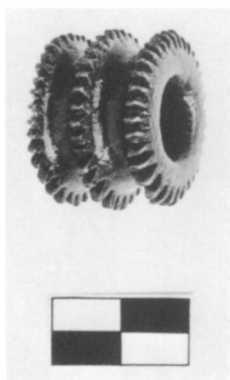
L 104



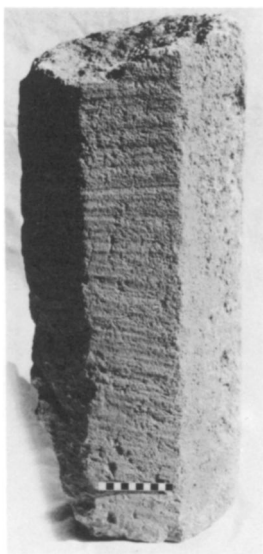
e. AT 143



a. South half of Section Q 19 from the west



b. BR 970



d. A 181



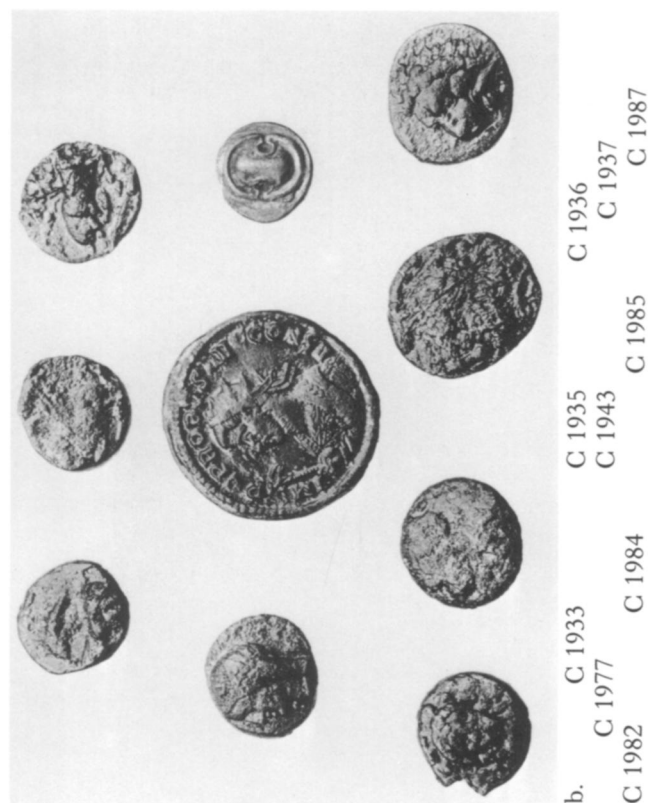
c. GL 23



e. P 697



a. East half of Section Q 20 from the south



b. C 1933 C 1935 C 1936 C 1937
C 1943 C 1982 C 1977 C 1984 C 1985 C 1987



c. Reverse of b



b. P 756



c. P 694



d. P 696 P 691 P 695 P 687
P 690 P 688 P 689
P 693 P 692 P 743



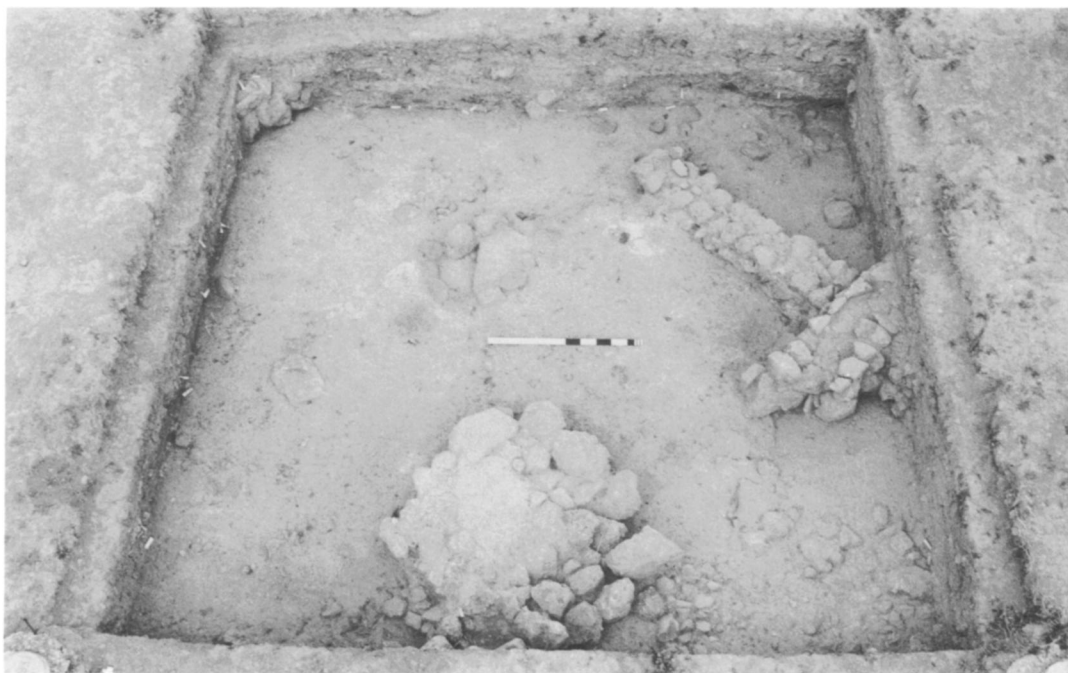
e. P 742



f. P 812



g.
BR 948
BR 961
IL 406
IL 409

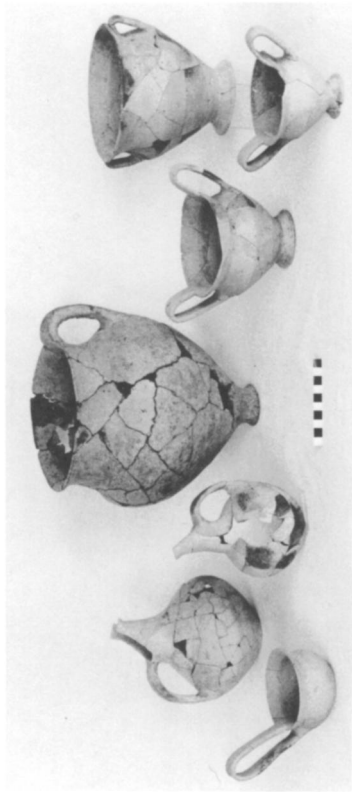


a. Southeast quadrant of Section EEE 19 from the east



b. Deep-plowed field from the north

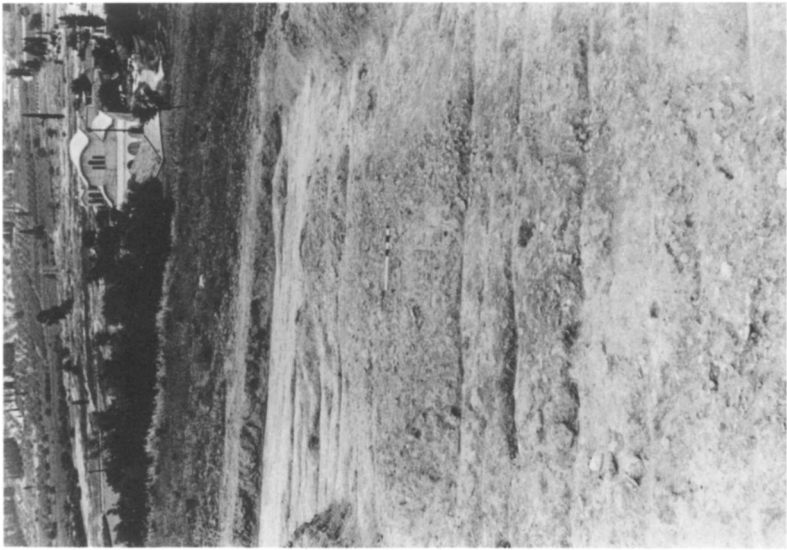
Tsougiza



a. P 723 P 740 P 708 P 716
P 724 P 722
P 685



c. Deep-plowed field, Area A, from the west



b. Deep-plowed field, Area B, from the south

Tsougiza