

## EXCAVATIONS AND RESTORATION AT SARDIS—1970

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The thirteenth campaign of the Harvard-Cornell Expedition to Sardis was directed by G. M. A. Hanfmann, assisted by C. H. Greenewalt, Jr. The Corning Museum of Glass continued its participation. The program was supported by grants from the National Endowment for the Humanities (U.S.A.), the Ford Foundation, and the participant institutions. The National Ministry of Education continued its grant to a Trust Commission (Emanet Komisyonu) for the Marble Court (Roman Gymnasium) restoration project. We were greatly aided by the help and advice of our Commissioner Güldem Yügrüm, Archaeological Museums, Istanbul, and Assistant Commissioner Erol Çakır, Archaeological Museum, Izmir. As representative of Trust Commission, K.Z. Polatkan maintained close liaison with Supervising Architect Mehmet Cemal Bolgil. Director General of Antiquities Hikmet Gürçay and Associate Director in charge of excavations Burhan Tezcan were most helpful in many ways. The expedition had suffered a grievous loss by the death on January 30, 1970 of the Associate Director of the Expedition, Albert Henry Detweiler, who had a share in the project since 1956. He was succeeded as Associate Director by Professor Stephen W. Jacobs, Cornell University.

### *Artemis Precinct:*

Work at the Artemis precinct (Fig. 1: No. 17) centered on the altar ('LA') of Artemis. Under the guidance of K. J. Frazer, with C. H. Greenewalt, Jr. as archaeologist and D. Van Zanten as

architect, important new insights were gained. For the archaic inner altar (LA I, Figs. 2-4), the trimming of a base course (*euthynteria*), which originally reached farther east, and the cutting back of one of the steps have suggested to Frazer the possibility that the altar was originally approached by a staircase from the east. Priest and goddess would have faced west toward the Lydian cemeteries across the Pactolus. It is known from Lydian inscriptions that these graves were protected by Artemis (R. Gusmani, *Lydisches Wörterbuch*, 1964, No. 1). The later, expanded altar (LA II, Figs. 2, 3) was closely aligned with the axis of the Hellenistic temple. Contrary to the opinion expressed in the 1969 report, the scant sherd finds indicate, according to Greenewalt, that the altar was enlarged and turned eastward already in the Achaemenian period (5th to 4th century B. C.). Investigation and description of Hellenistic, Roman, and Byzantine monuments and structures of the Artemis precinct were continued and results of previous excavations (1910-1914; 1958-1961) checked by Hanfmann, Van Zanten, and M. Darnall.

### *Pactolus North:*

The south side of the sector "Pactolus North" (Fig. 1: No. 10) was re-examined by A. Ramage who unravelled the sequence of Lydian and Persian structures under the Roman "Street of the Pipes" (Fig. 7, W 225-255/S 363-380; cf., *BASOR* 170 (April 1963) 24). Cleaning of Lydian basements (one of which is seen in center of Fig. 5) yielded Chiote (Fig.

6, P70. 2) and Corinthian pottery. Four Lydian pots, an iron knife, and burned animal bones, constituting a so-called "puppy burial" (P70.7; cf., *BASORs* 166 (April 1962) 8-9 and 170 (April 1963) 10-11), were found under the eastern end of the southern apsidal building (W 248/S 371, \*86.40), which perhaps has some connection with the water supply. A major wall, traced in the eastern part of the sector (at ca. W 240/S 360), appears to have bordered a precinct adjacent to the now-famous Gold Refinery area. Together with architects S. L. Carter and L. Satkowski, Ramage prepared overall plans of the Lydian phase (Fig. 7).

*Lydian Trench and "House of Bronzes" Area:*

At the Lydian market sector ("Lydian Trench" south of the modern highway, Fig. 1: No. 4) G. F. Swift expanded and completed work on Lydian strata, especially in the center and along the western side. In building 'O', a hearth and a storage jar found; next to building 'K' (7th century B.C.) there came to light (at W 29/S 99, \*98.00, Level 2) a large double axe of iron. Swift now distinguishes Lydian Level 1, ca. \*99.00, end of 7th century and early 6th century B.C. (small, scattered shops, a well); Lydian Level 2, ca. \*98.00 - \*97.50 (Fig. 8; four shops forming an enclosure on west side; fragmentary structures in the east); and Lydian Level 3, ca. \*97.50 - \*96.50, early to mid-7th century B.C., violently destroyed by the Kimmerians. Samples of pottery are the Geometric Lydian "fruit bowl" (Fig. 9, P70.18) from Level 3, and the Lydian Orientalizing sherd depicting a boar (Fig. 10, P70.4) from Level 2.

A fine, half-life size head of Zeus (Fig. 11, S70.1), late Hellenistic or early Roman, was an unstratified find in the HOB area.

Among the sculptural finds is a relief displaying two horned and "bearded" serpents flanking a sacrificial bowl (Fig.

12, NoEx 70.7), apparently re-used in a late wall below a steep slope with Lydian burials on the west bank of the Pactolus. Possibly alluding to heroized dead (cf., J. Harrison *Prolegomena*, 325 ff., fig. 98), the relief is the first of this subject found at Sardis. Dr. N. H. Ramage suggests that technical parallels point to early Roman period.

Other chance finds of sculpture included a piece with an Early Imperial inscription in Greek on one side (IN 70.10) and, on the other, a relief with a recumbent youth in Persian (?) attire and a standing cloaked male figure (Fig. 14, NoEx 70.13). The fragment of a small "Hermes Propylaios" herm (Fig. 13, NoEx 70.15) with drapery thrown over it raises interesting problems of attribution as several famous Classical groups (Kephisodotos' *Hermes Dionysophoros*; Praxiteles' *Dionysos*; Lysippos' *Sisyphos II*) had similar herms.

*'HOB' Colonnaded Street:*

In the eastern part of the "House of Bronzes" area, adjacent to the "Lydian Market" (Fig. 1: between Nos. 4 and 5, E 49-63/S 99-109; *BASOR* 199 [Oct. 1970] 29, fig. 16), a trench was dug across the Roman street (now officially designated "HOB' Colonnaded Street") at the findspot of an Early Byzantine inscription recording building operations and mentioning a "tetrapylon". A two-storied facade was found thrown (by earthquake?) into the street; its major brick arch displayed a cross of 5th or 6th century A. D. form carved on the marble keystone (Fig. 15).

*Southwest Gate:*

This gate (Fig. 1: No. 8) was first excavated in 1966 and promptly covered again by torrent deposits. Additional investigations indicated that a small guard room flanked the gate on the west (Fig. 16). It may have been destroyed in

616 A.D.; an *ampulla* (small flask) with crosses (Fig. 17, P70. 33) was among the objects found under the floor of the room.

The "Flying or Hanging Towers" (Fig. 1: No. 22; cf., *Sardis I* [1922] p. 17, fig. 6) perilously balanced on the southwestern ridge of the citadel were studied and mapped for the first time by Greenewalt and Carter (Fig. 18) and photographed by E. Gombosi. "These two segments of probably Early Byzantine fortifications rest on pillars of eroded conglomerate. The larger segment contains two arched entryways at right angles to each other; the smaller segment is triangular in plan" (Greenewalt). The purpose and relation to citadel defenses and to the city wall are yet to be worked out. The final study of the upper citadel remains to be done.

#### *Main Avenue and Synagogue:*

North of the modern highway TC 68, part of the intersection of the two ancient roads at the southeast corner of the Synagogue was excavated under the direction of A. R. Seager, architect in charge of Synagogue research (Fig. 1: No. 2; Figs. 19-21). The juncture of the colonnades was emphasized by a two-step high platform projecting from the northern sidewalk into the east-west avenue (Figs. 19, 20). The platform supported four piers, perhaps the remains of an arch. In the lower course of the platform was a re-used inscription honoring, according to L. Robert's kind advice, Germanicus, nephew of Tiberius (IN 65.14, *Germanikon Theon*), who came to Asia Minor in 17 A. D. Another inscription (IN 70.4) honored Antoninus Pius as *Olympios*. The vehicular part of the east-west avenue rose as a ramp toward the intersection, preserved only in a later repaving. Built into the roadway was a late Roman inscription in verse for someone who restored a building (*krepeida krateren*, IN 70.7). A large architectural piece (part of pier) found in 1965 (IN 65.15) had an inscription in a wreath, now deciphered through L. J.

Majewski's copy by L. Robert: *Auxei Tyche Sardeon*.

North of the platform, at the east end of the line of Byzantine shops, a small makeshift room with brick walls and packed with column shafts yielded more than 400 bronze coins (Fig. 21, PCA). They, and an earlier lot found in 1963, may have come from metal containers, traces of which were still visible on a brick platform along the west wall. According to A. Ramage, the bulk of the small bronzes dates from 330-350 and 380-420 A. D.; the latest coins date to the 7th century A.D.

Several pits were dug in the main hall of the Synagogue to study foundations and other architectural features; and the lifting of mosaics of the first three bays (counted from the west) enabled R. L. Vann to study the conditions in and under the mosaic bedding (Figs. 22, 25). Of importance was the coin of Claudius Gothicus (268-270 A.D.) found under the bedding of the third bay, which contained one of the earlier mosaics with the inscription of Aurelius Alexandros (*BASOR* 187 [Oct. 1967] 29, 36, fig. 46). Some mosaics of the main hall may have been laid earlier than the fourth-century mosaics of the Forecourt. A piece of a marble floor, earlier than the mosaic pavement, was found under the first bay. Seager continued his researches into the architectural history of the building; at least four major phases may be distinguished (Fig. 23). In stage 1, the building, divided into three rooms, was open toward the palaestra; in stage 2, it became a long hall with a short entrance room and colonnade on the east. A. H. Detweiler conjectured that it was then a civic basilica. These stages 1 and 2 fall between 17 A.D. and the late second century. In stage 3, during the late second and third century, the building became a synagogue. The earlier mosaics belong to this phase. Stage 4 shows the plan after renovation in the fourth century.

The stylobate of the eastern entrance to the Synagogue was cleared. Two pieces of the curious platform, which at a late phase rose 1 m. above the Synagogue porch, have been consolidated and preserved, and parts of three columns were put in place in the entrance colonnade (visible in Fig. 19). All mosaics of the Forecourt were set back in place under the direction of L. J. Majewski, who, together with architect T. Yalçınkaya, supervised the lifting and resetting of three bays of mosaics in the main hall (Figs. 22, 25). The missing parts of the mosaics were filled with a mixture of marble chips and cement which approximated in visual effect the texture of the original mosaics. Structural consolidation of the apse of the main hall and building up of the south and north walls to even height were finished. Partial marble revetment of the apse was completed (Fig. 24). Gates with iron bars were provided for the eastern (Fig. 26) and southern entrances and for a small door at the west end of the Synagogue. Numerous architectural decorations and furnishings were recomposed (Fig. 27, No. ARS 2).

Four bays of mosaics in the main hall remain to be lifted and reset; clearance and consolidation need to be done in the entrance area, in the Byzantine Shops adjacent to the Synagogue, and in the adjoining part of the palaestra.

#### *"Marble Court":*

In the restoration, begun in 1964, of the "Marble Court" of the Roman gymnasium (Fig. 1: No. 1), Supervising Architect M. C. Bolgil, assisted by T. Yalçınkaya, completed the north and south wings and closed the tops of all three sides. The stage virtually reached at the end of September is seen in the perspective restoration drawing by Bolgil (Fig. 28). Two piers and six columns of the screen colonnade were erected (Fig. 29) including some casts of the fine head capitals (Fig.

30). Much finishing remains to be done (placing of pilasters; revetment of podiums and walls; marble floors) as well as cleaning and landscaping of the palaestra area, but with the exception of one feature in the end walls of the top story (Figs. 28, 31), major structural work has finished. In addition to the Marble Court proper, the immediately adjacent entrances of the units known as North (Fig. 31) and South Halls were also restored. These form a continuous design with the facade of the Marble Court (Fig. 28). Together with the Synagogue, the gymnasium entrance makes a striking and impressive complex (Fig. 32).

Recording of unexcavated ruins which are much endangered by agriculture and construction has made good progress with R. L. Vann in charge. Work was done on the so-called "Odeum," the theatre, the stadium, a Byzantine fort, as well as structures "A" (probably the Roman Agora, Figs. 1: No. 24 and 32), "D" (Fig. 1: No. 29), and "C" (Roman basilica, Fig. 1: No. 30). Special attention was paid to techniques of construction (Fig. 33, parodos of theatre, showing unusual masonry and cemented rubble combination). M. Darnall completed detailed drawings of church "M" near the Artemis Temple (Fig. 1: No. 18), which S. W. Jacobs will publish.

L. J. Majewski continued intensive study of the wall paintings and mosaics; S. M. Goldstein investigated various technological and metallurgical problems, partly in collaboration with Dr. Erol Izdar, Department of Geology, Ege University, Izmir. J. A. Scott studied lamps and N. H. Ramage stone sculpture. Among the epigraphic finds was a dipinto in Lydian (Fig. 34, from the HOB area, P70. 22-IN 70.12). R. Gusmani, by letter, reads the signs as ..xās; - ś being a nominative ending.

A number of major pieces of sculpture and the majority of mosaics hitherto

kept at the Sardis camp were transferred from Sardis to the Manisa Museum.

G. W. Olson, Department of Agronomy, Cornell University, collaborated with M. Özüygür, Director, Soils and Fertilizer Research Institute, Ankara, and with Soils Conservation (Topraksu) officers in Ankara and Manisa in a study of Sardis soils. Soils in alluvial and colluvial

materials were dated by correlation with archaeological data. Soil structure in some soils provided a record of past soil movement, and indicated directions likely to be taken by future landslides. Thus, in addition to the major objective of helping to understand the environment of past cultures at Sardis, soil information may be useful to help preserve the standing and restored ruins and landscape the site.

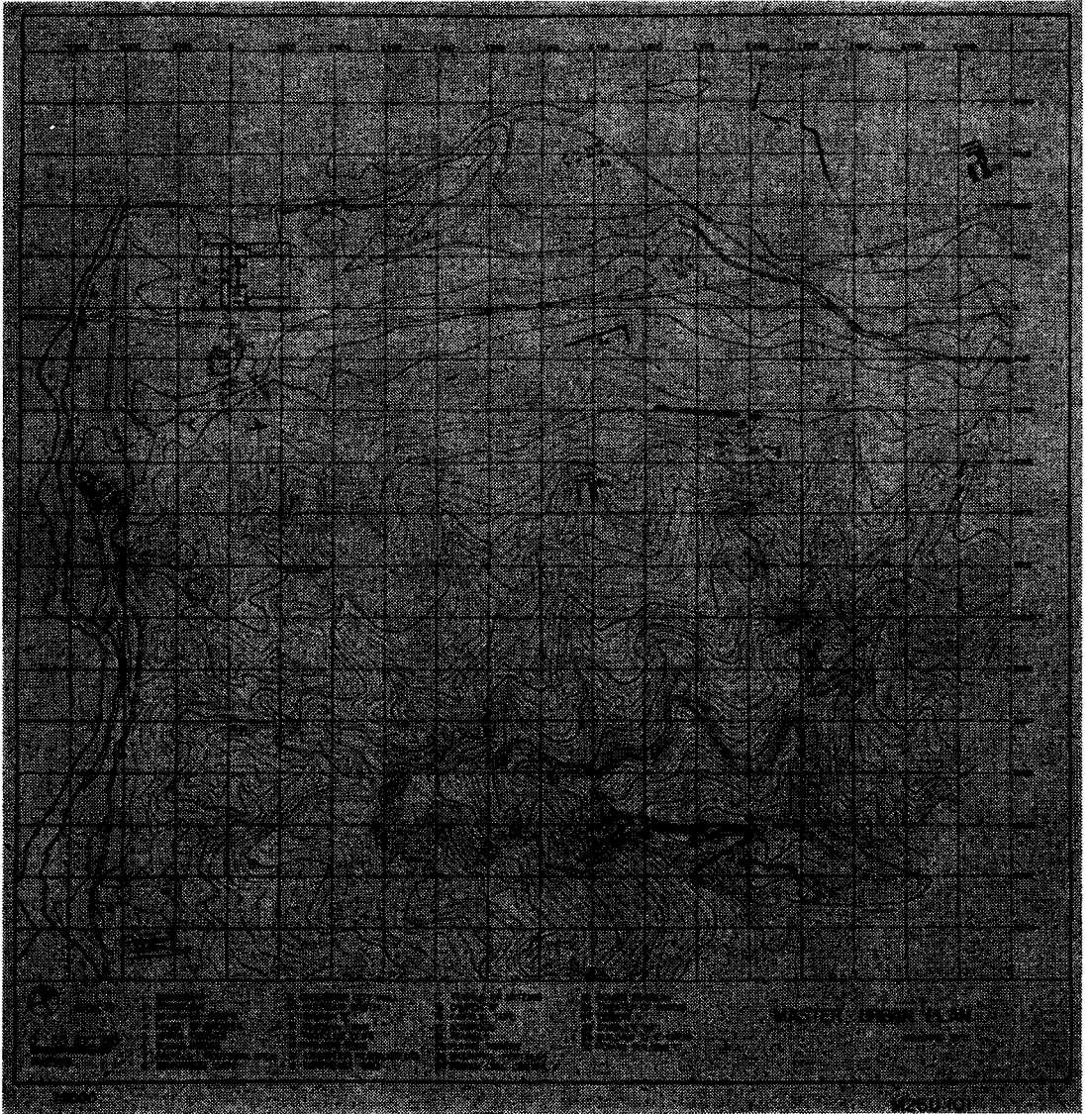


Fig. 1 — Sardis. Urban Plan.

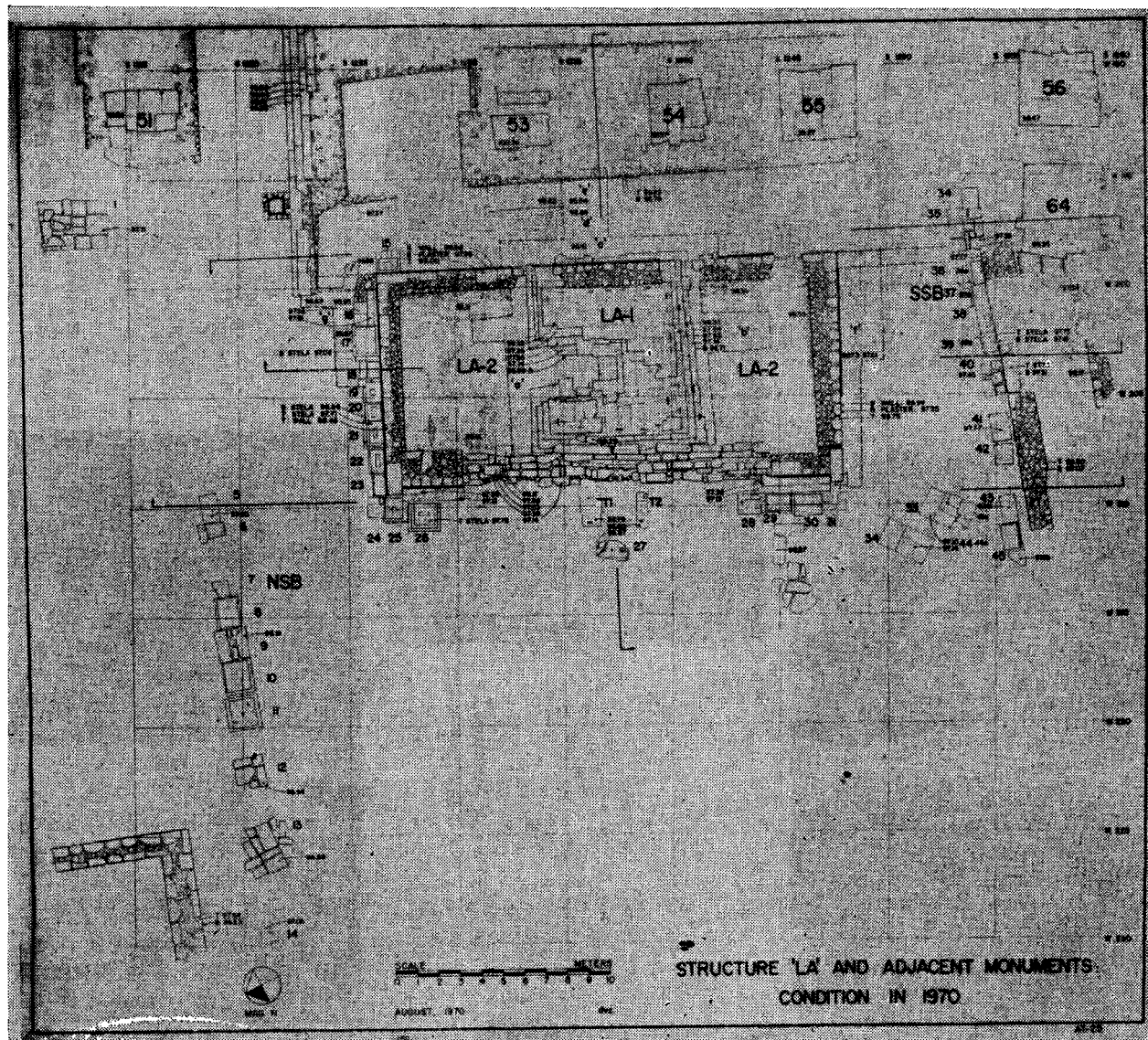


Fig. 2 — Plan of structures LA I and II and western part of Artemis Temple.



Fig. 3 — View of Structures LA II and I, Looking South West.



Fig. 4 — View of Structure La I, Looking North.

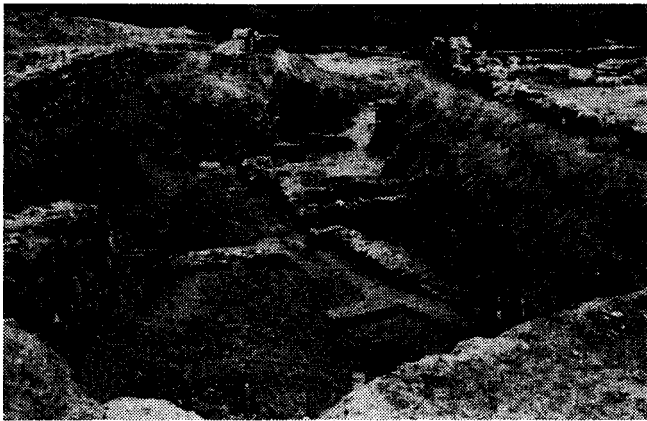


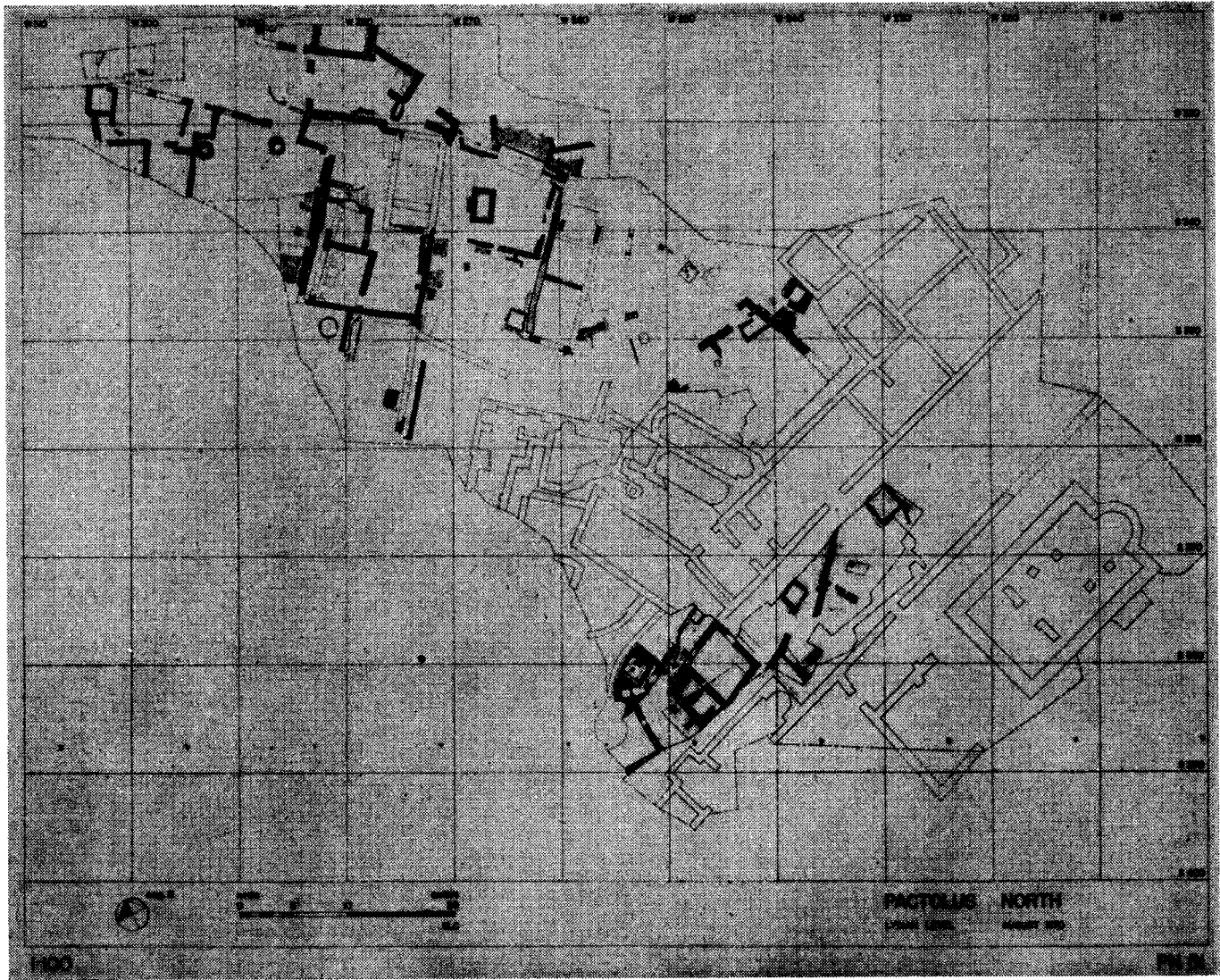
Fig. 5 — Southern Part of Sector "Pactolus North". Lydian and Persian Structures.



Fig. 6 — Chiote Cup P 70.2, from "Pactolus North."



Fig. 7 — Plan of Lydian Level, "Pactolus North" (Black Walls).



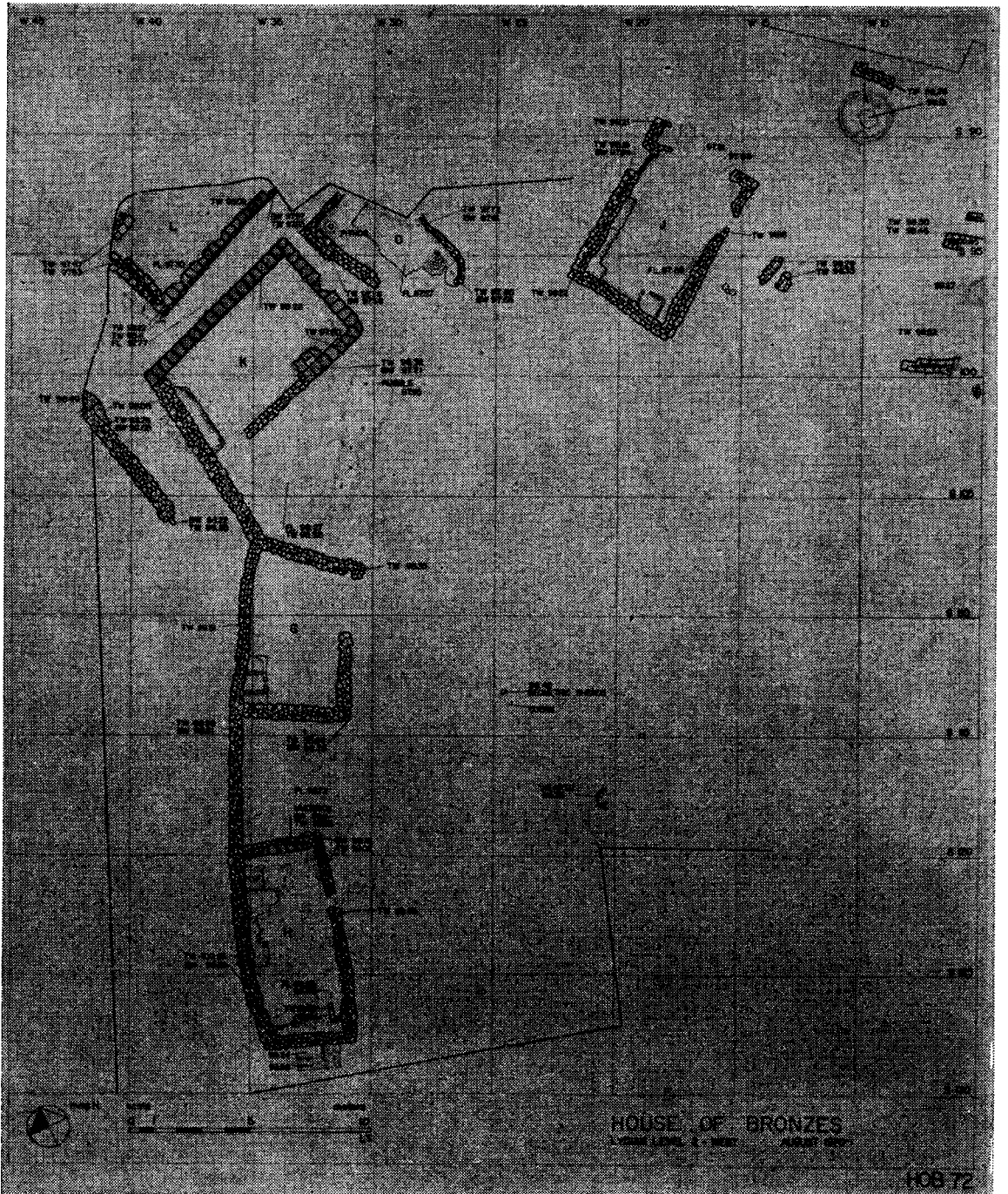


Fig. 8 — Plan of Lydian Level 2, "Lydian Trench, "House of Bronzes" Area.



Fig. 9 — Lydian stemmed "Fruit Bowl." P. 70.18, from Lydian Level 3.

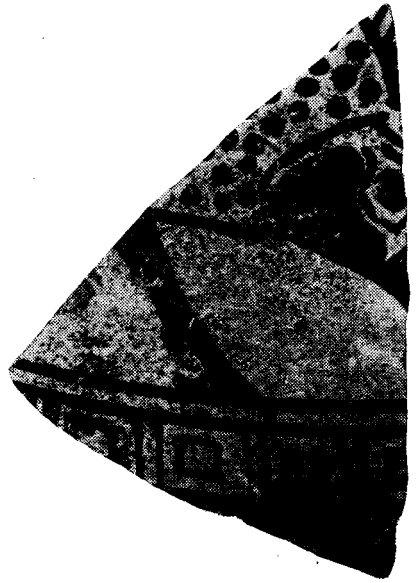


Fig. 10 — Lydian Orientalizing Fragment showing a boar. P. 70.4, from Lydian Level 2.



Fig. 11 — Marble Head of Zeus. From "House of Bronzes" Area, unstratified.



Fig. 12 — Marble Relief with serpents flanking a bowl. From West Bank of Pactolus.



Fig. 13 — Marble Herm with Piece of Garment.



Fig. 14 — Marble Relief with Reclining (left) and Standing (right) Figures.

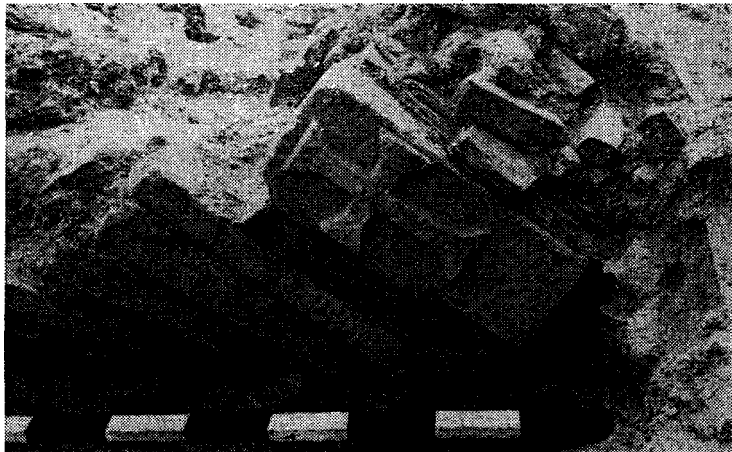


Fig. 15 — 'HOB' Colonnaded Street. Fallen Arch with Cross on Keystone.

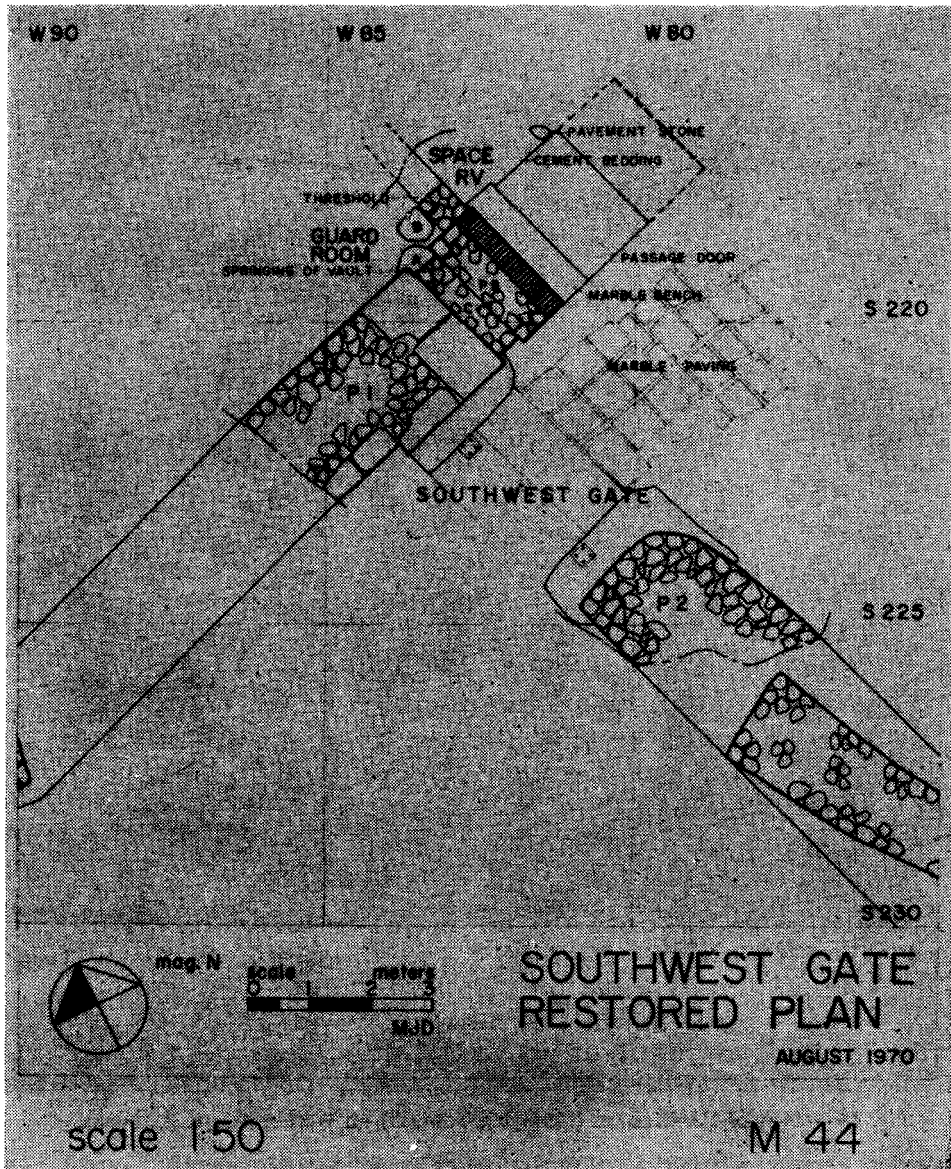


Fig. 16 — Southwest Gate. Restored Plan.

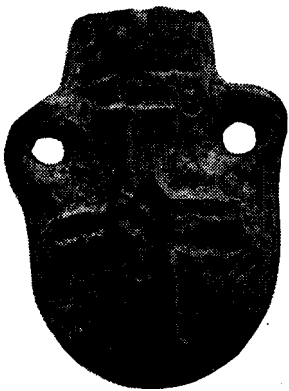


Fig. 17 — Early Byzantine Ampulla, P. 70.33, from Southwest Gate.



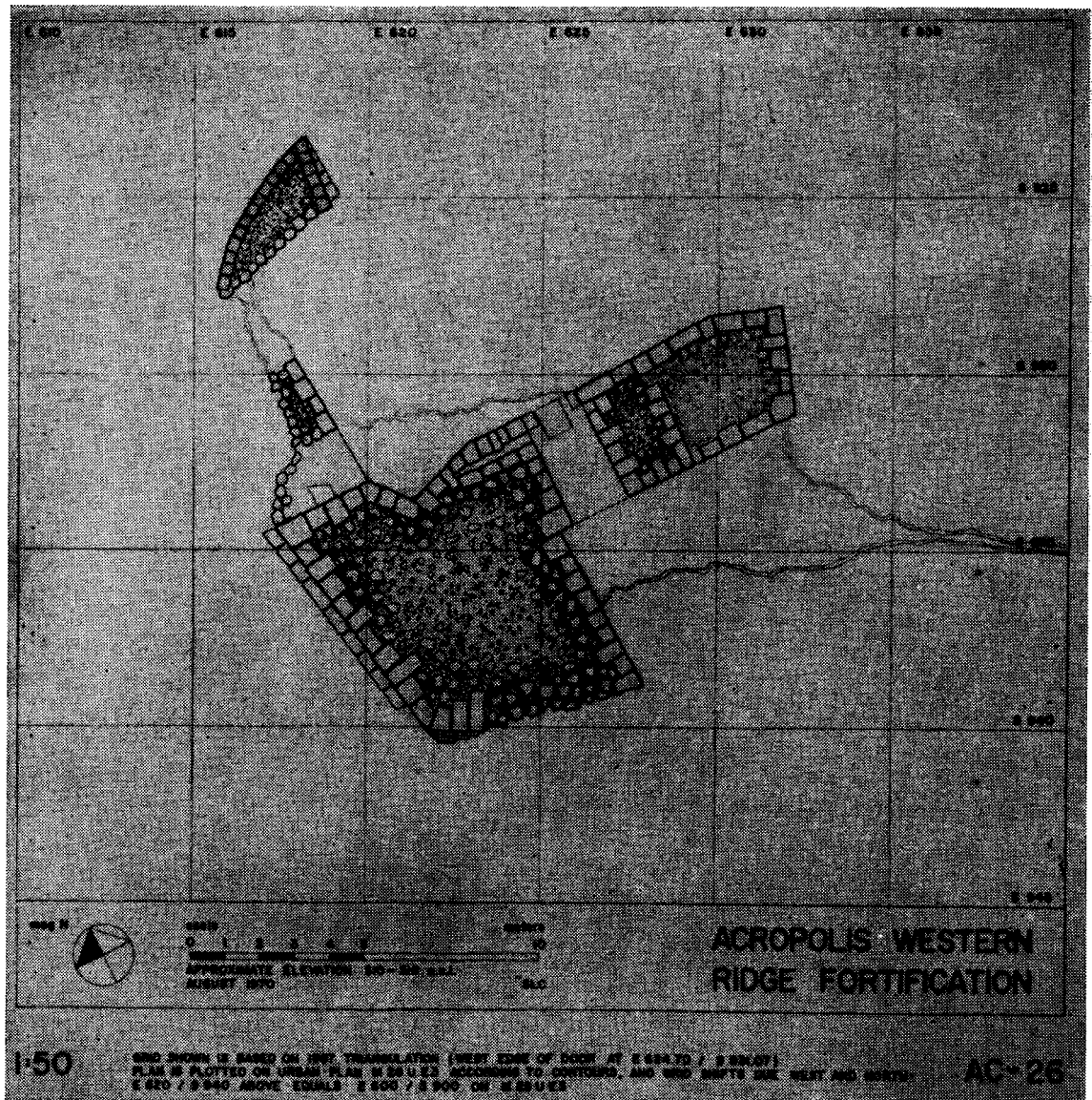
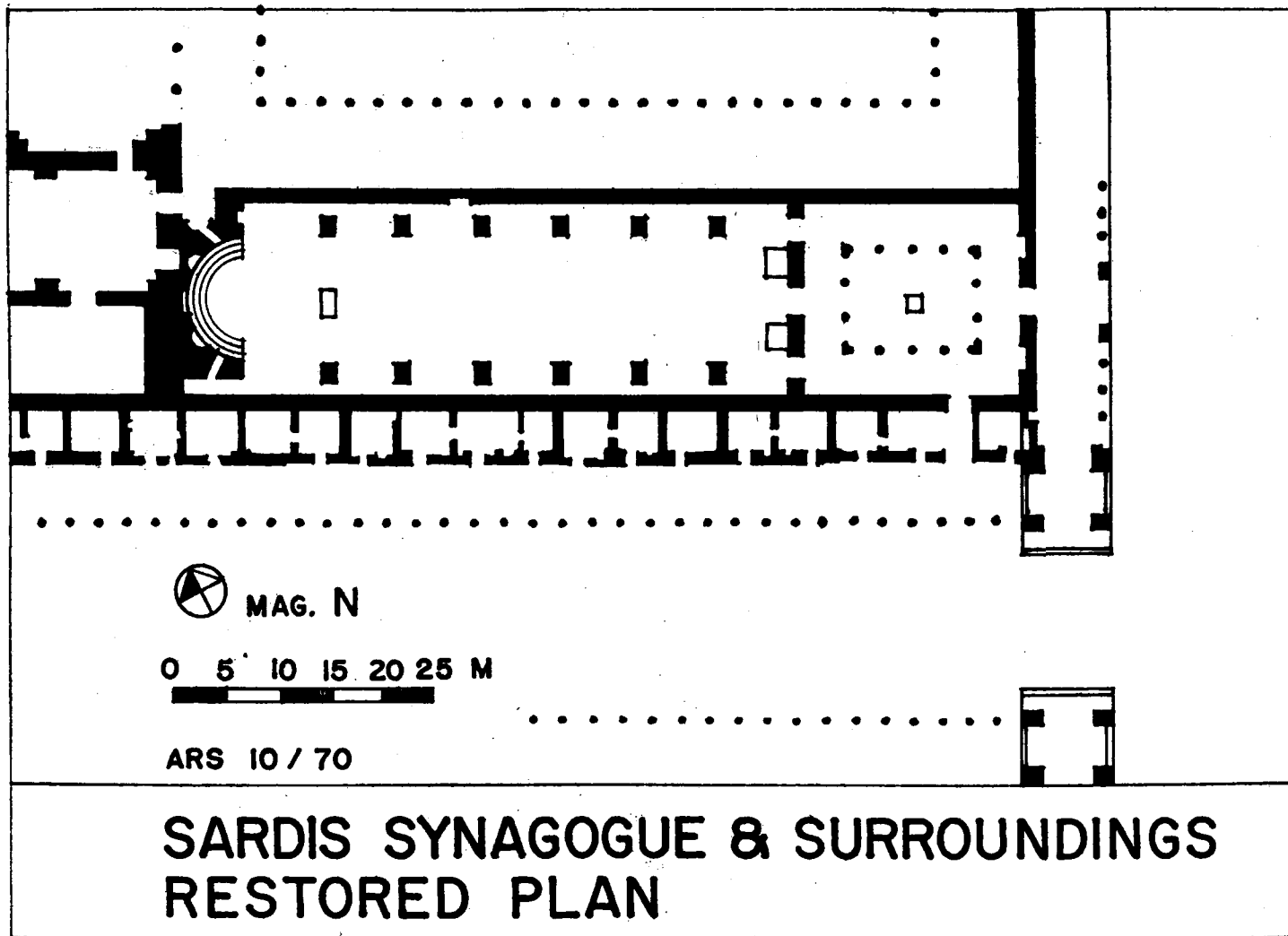


Fig. 18 — Plan of Fortification (“Hanging Towers”) on Western Ridge, Acropolis.



Fig. 19 — View of excavated part of Main Avenue at southeast corner of synagogue. “Marble Court” of Gymnasium in background.



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Fig. 20 — Restored plan of Synagogue and surroundings, by A.R. Seager.

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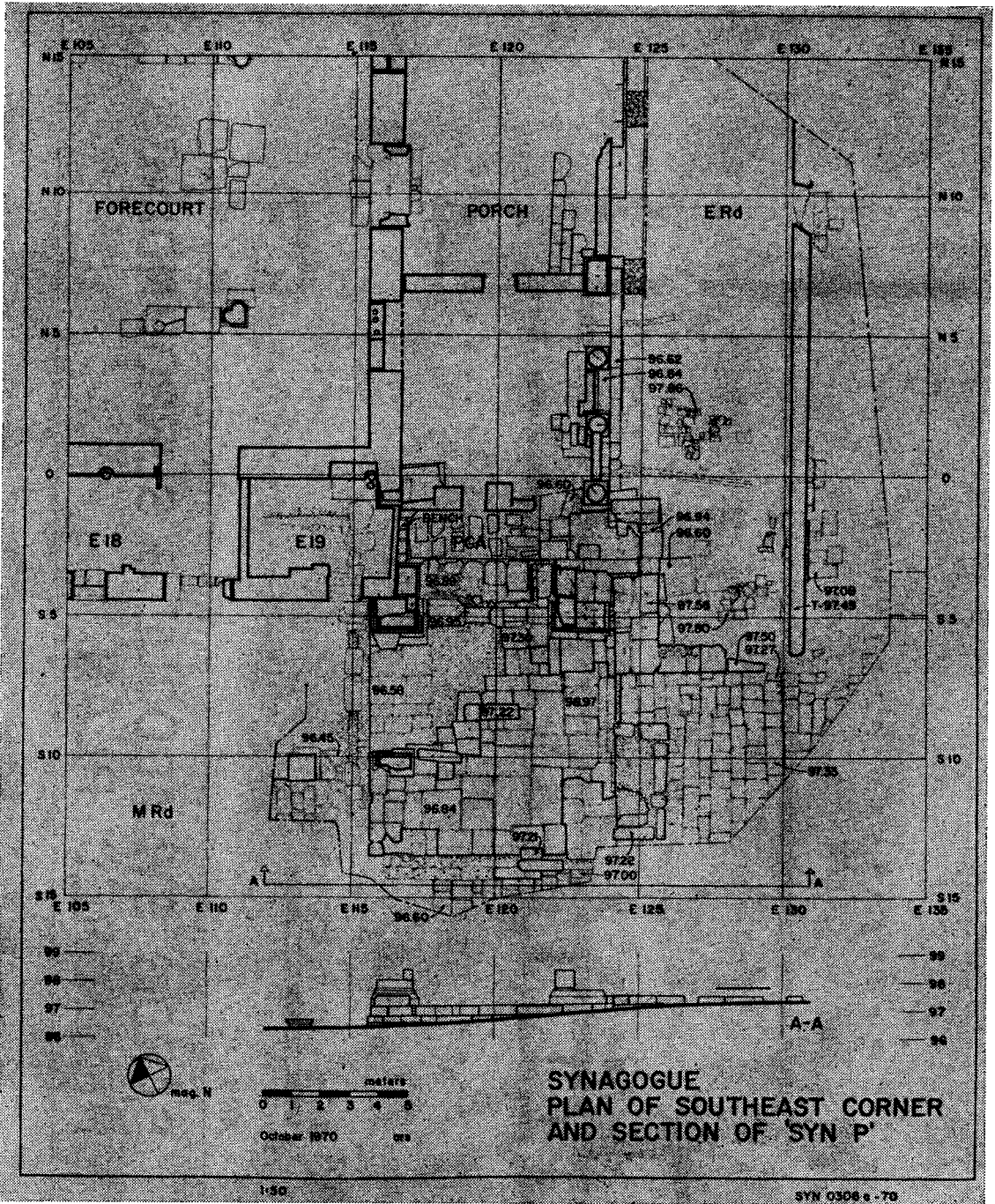
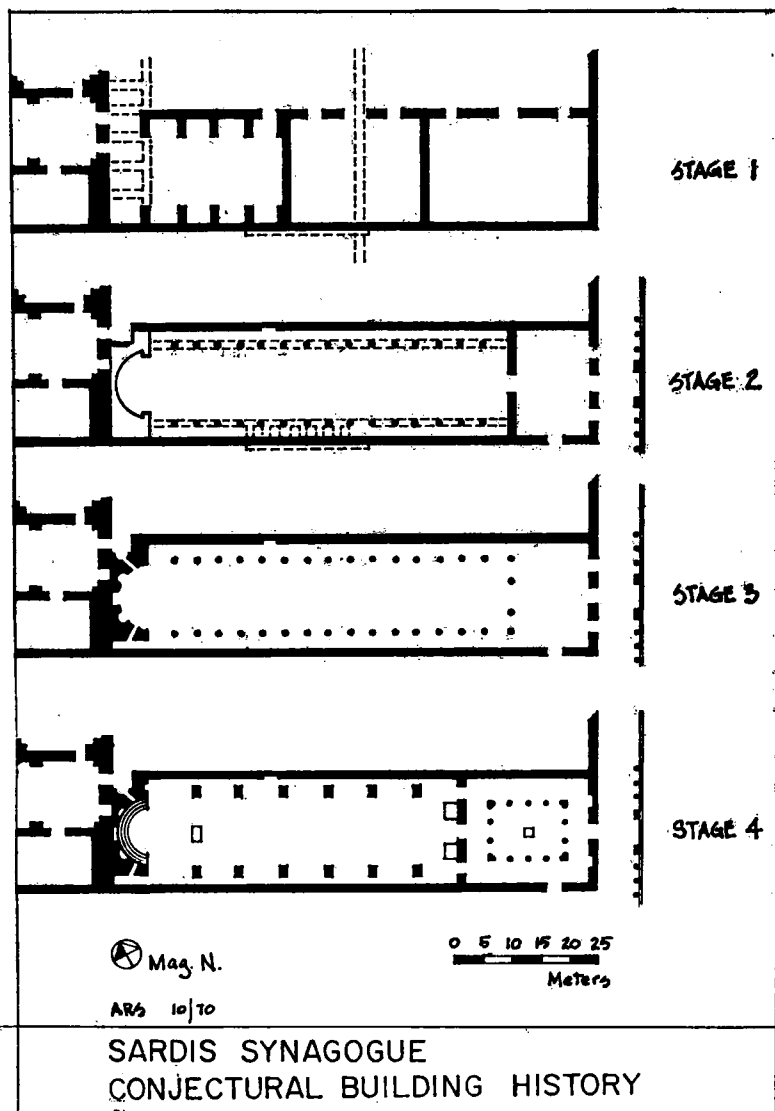
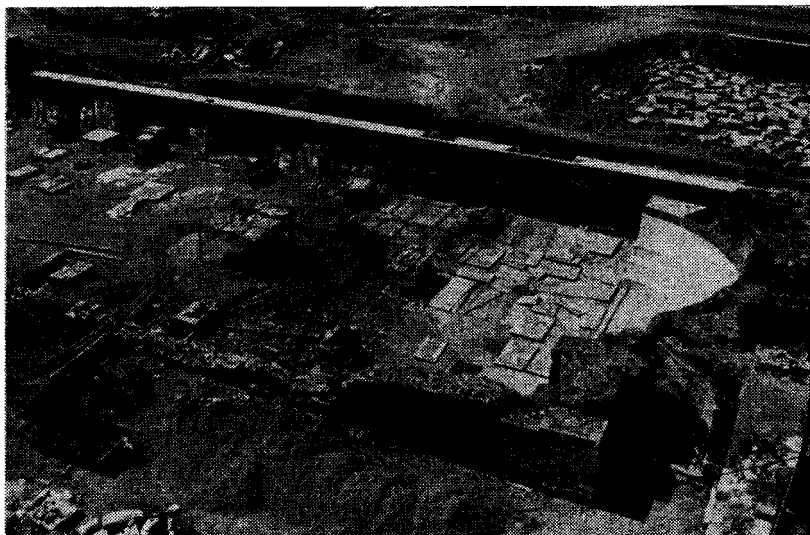


Fig. 21 — Plan of Southeast Corner of Synagogue and Section of the Main Avenue at 'Syn P.'



Fig. 22 — Western Part of Main Hall of the Synagogue during Lifting and Resetting of Mosaics, July 1970. Looking South.



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Fig. 23 — Four Stages in the Conjectural Building History of Synagogue, by A. R. Seager.

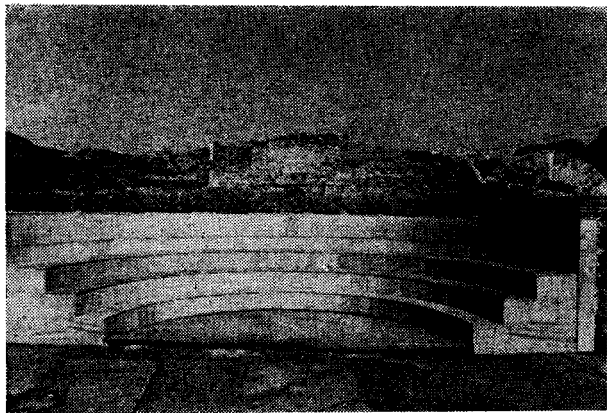


Fig. 24 — Restored marble revetment in the Apse and on benches of Synagogue, looking west.

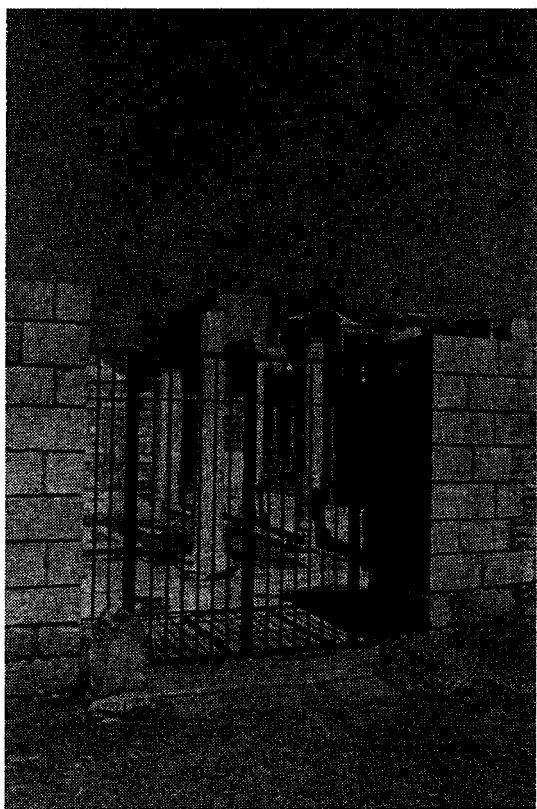


Fig. 26 — East Gate into the forecourt of the Synagogue, Looking northwest. In the background, 'Marble Court' of the Gymnasium.

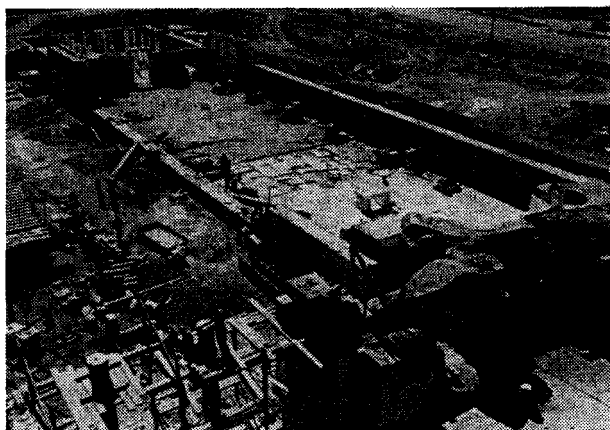


Fig. 25 — Main Hall and Forecourt of Synagogue after structural repairs, September 1970. Looking east.



Fig. 27 — Marble revetment plaque from Synagogue.

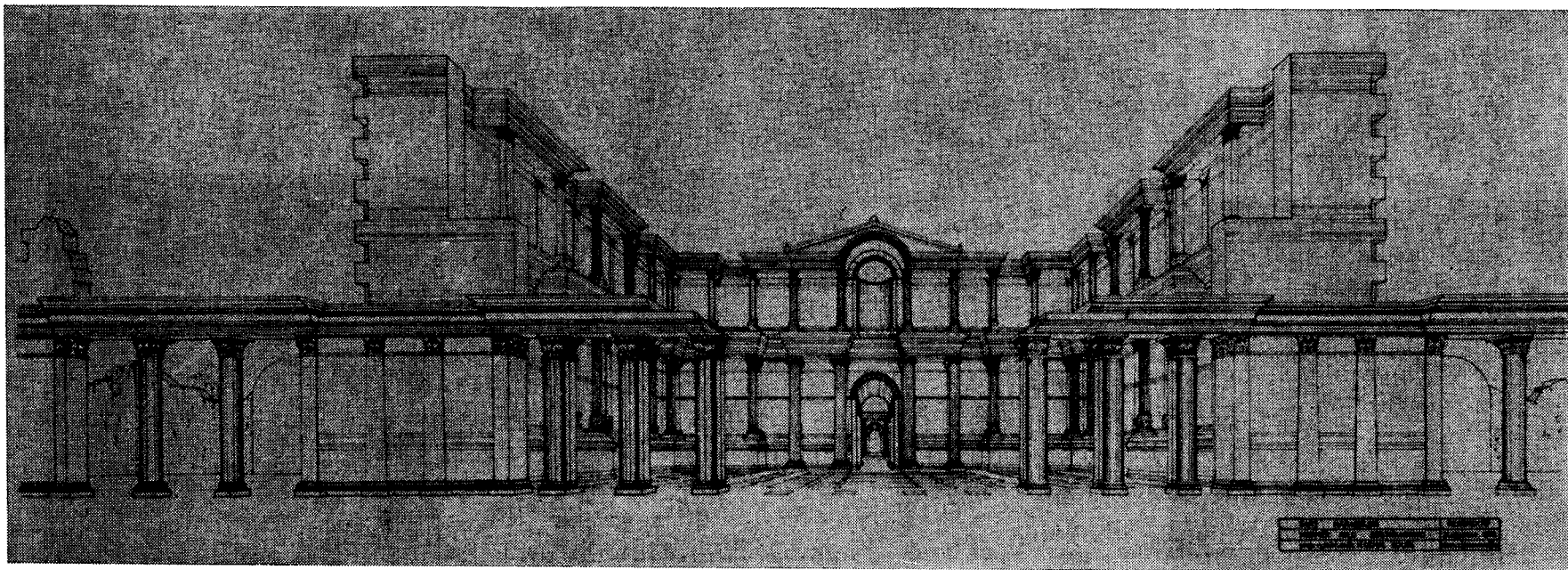


Fig. 28 — Perspective of Restoration of "Marble Court" and Adjacent Halls, by M. C. Bolgil.

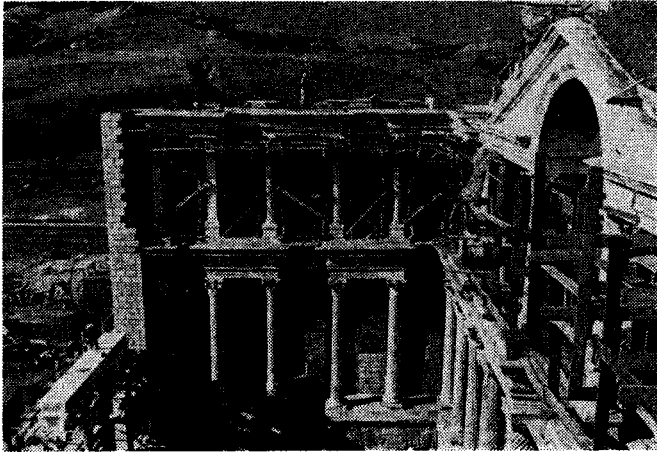


Fig. 29 — "Marble Court". South Wing and Central Part Prior to Completion of Top, August 1970.

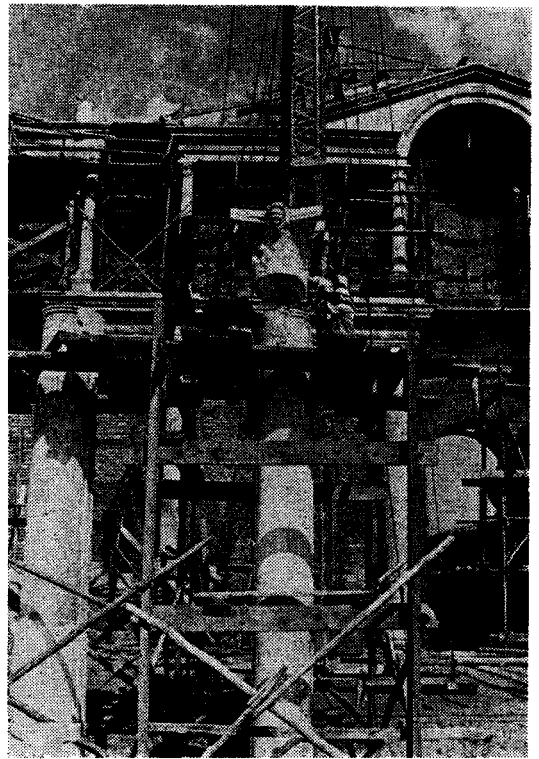


Fig. 30 — Lifting of Cement Cast of Capital with the Head of Laughing Satyr, Screen Colonnaded "Marble Court."



Fig. 31 — Entrance to North Hall (Hall 'BEN') in Process of Reconstruction.

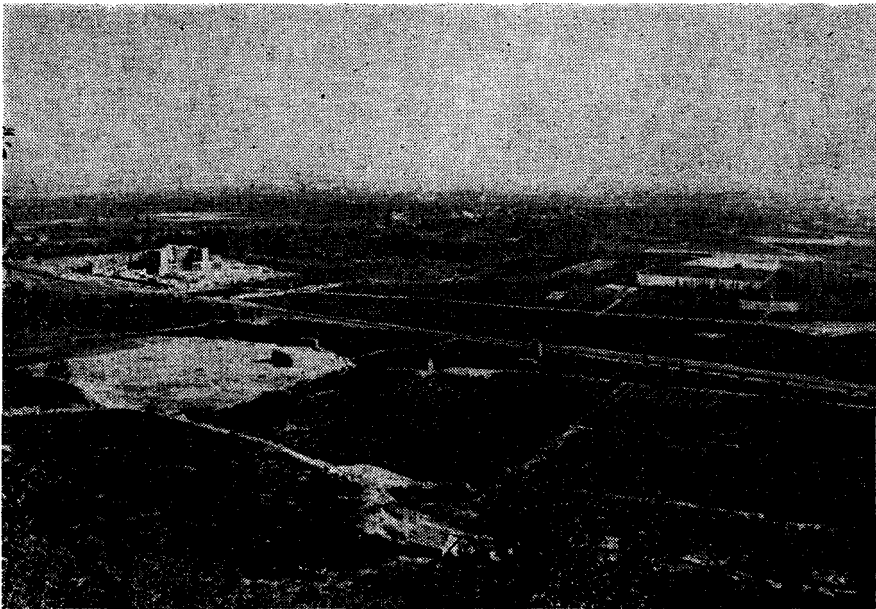


Fig. 32 — Gymnasium and Synagogue Complex Seen from 'Byzantine Fort'.  
Ruins of Hellenistic?-Roman Agora Area in Middle Ground.

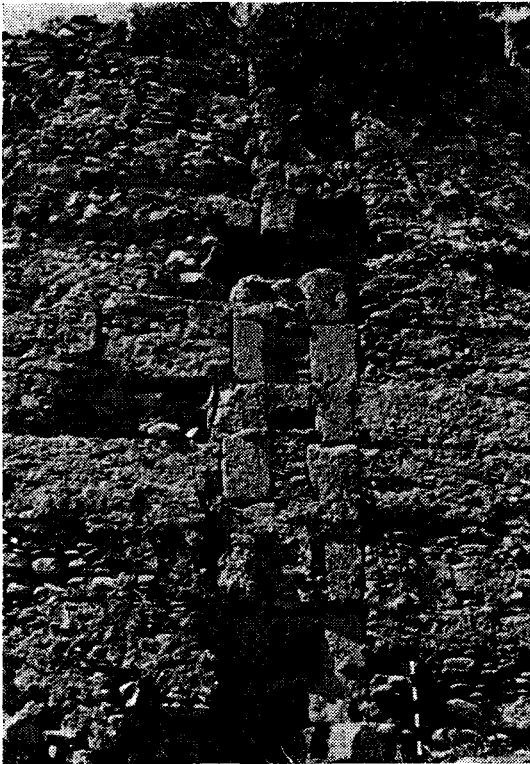


Fig. 33 — Detail of Mixed Masonry and  
Cemented Rubble Construction. Theatre,  
Western Parodos Wall, Pier 6.



Fig. 34 — Dipinto with Three Lydian Signs, from  
"Lydian Trench"-Area, P.70. 22.

