## **EXCAVATIONS AT SARDIS - 1969**

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The twelfth campign of the Harvard-Cornell Archaeological Exploration of Sardis took place from June 22 to early September. Restoration of the "Marble Court" of the Roman gymnasium, supervised by Mehmet Cemal Bolgil took place from May 20 to early October; reconstruction measures in the Synagogue, under Halis Aydıntaşbaş also continued through September.

The campaign was directed by G. M. A. Hanfmann: D. G. Mitten was Assistant Director. Unfortunately, A. Henry Detweiler, Associate Director was unable to participate because of illness. The American Schools of Oriental Research again sponsored the project and the Corning Museum of Glass was again a participant. Funds were received from collaborating institutions and from the Ford Foundation, for student trainees. The program greatly benefitted from a grant of the U.S. National Endowment for the Humanities. The Ministry of National Education again made a grant for materials of the Marble Court restoration project through a Trust Commission. We are happy to note the reiterated determination of the Supreme Monuments Council (T. C. Yüksek Anıt Kurulu, Decision 4978, July 13, 1969) to safeguard the unexcavated as well as excavated ruins of Sardis.

Including visiting specialists, who came to study special classes of materials, the staff with Commissioners numbered 33. Emphasis was on completion of pre-publication work of areas previously excavated. In all our endeavors we were helpfully assisted and advised by Commissi-

oners Güldem Yüğrüm, Istanbul Archaeological Museums, and Muharrem Tağtekin, Manisa Museum.

On the southern shore of the Gygean Lake (Marmara Gölü) north of Sardis, D. G. Mitten, D. H. Finkel, and M. Tağtekin excavated part of an Early Bronze cemetery at Eski Balikhane ("Old Fishery"). One of the five pithos burials contained a bronze dagger, a silver ram pendant, and two golden "ear plugs" (Fig. 1) similar to those found at Karataş in Lycia and at sites in Central Anatolia (M. J. Mellink, AJA 73, 1969, 323, pl. 74: 16). Roman structures and Lydian material was also found on the small promontory.

At Sardis, A. Ramage continued investigation of the installations for refining gold discovered on the eastern bank of the Pactolus in 1968 ("Pactolus North") (Fig. 2). S. M. Goldstein collaborated on the technological aspects. It appears that gold refining operations began as early as 600 - 580 B.C. Throughout the industrial precinct two "floors" of "cupels" (cavities for purifying gold of base metals) were observed. Two sets of small furnaces were cleared. Average measurements were 0.60 by 0.60 m. with a height of ca. 0.60 m. (Fig. 3). Apparently these furnaces served to heat vessels for "cementation" (extraction of silver from gold). Brick slag and pottery with lead oxide from cupellation still adhering, pottery with gold driblets in cracks, tiny fragments of pitted gold foil, and a number of fragments of tuyères (bellows' nozzles) were retrieved.

Some ten meters west of the western boundary wall of the precint, a paved floor with typical dumped gold-refining furnace material suggested that more than one gold-refining shop was active in this vicinity.

South of the sector "Pactolus Cliff" (tested in 1959-60) and more than two meters below the present torrent bed, villagers excavating a canal came upon marble blocks perhaps already re-used in antiquity in a Roman building. Among them was the left side of a pediment, 1.28 m. long and 0.58 m. high (Fig. 4). Recalling in its motif of the funerary meal the "Satrap Sarcophagus" from Sidon and in its pediment the Nereid Monument of Xanthos 1, the high relief depicts a reclining man and three seated women. The sculpture, much washed out, may come from a small mausoleum of the Persian era (430 - 400 B. C. ?).

On the south side of saitan Dere, a tributary of the Pactolus, the "Stepped Pyramid Tomb" (H. C. Butler, Sardis 1, 1922, 167; Bulletin of the American Schools of Oriental Research - henceforth BASOR 166, 1962, 28) was re-excavated and re-surveyed by S. and B. Kasper (Fig. 5). A few stones of the monument and a bronze fibula were retrieved from trenches dug down the sope and in the brook bed. On the basis of close observation, S. Kasper argues that the monument was a complete stepped pyramid with an entrance to north. The many phases of masonry working display striking resemblances with workmanship of Staircase "B" of the Taht-i -Suleyman, a fortified platform for a palace at Pasargadai (D. Stronach, Iran 1, 1963, 31, pl. 3a). Presumably Lydian masons were carried off by Cyrus to Iran after the Persian king captured Sardis in 547 B.C.

The so-called Lydian Building, probably an altar to Artemis (Sardis 1, 46, 111. 35; 2, Atlas, Pl. I) was re-excavated by D. W. Roller and partly drawn by K. J. Frazer. Built of red sandstone, the Lvdian altar stepped on three sides (Fig. 6) presents a plan surprizingly similar to that of the "Pyramid Tomb." The altar stands on riverine gravel. The scanty finds would not contradict a date in the fifth century B.C. (BASOR 154, 1959, 9. n. 8; cf. Xenophon, Anabasis 1: 6, 7, the Younger Cyrus and Orontas swear oath at the altar of Artemis between 407 and 401 B. C.). It seems that extensions to north and south were added to the altar and the Lydian and Greek stelae re-set around it during a great clean-up of the sanctuary from flood deposits which occurred in the third century A. D. (W. Warfield, Sardis 1, 179, describes the flooding process).

In the Artemis precinct a number of monuments were cleaned and studied. Monument "10" (Sardis 1, Pl. III, east of Temple) shown by pottery to be Late Hellenistic, had water run over its polished stucco floor to imitate a pool, according to observations of L. J. Majewski, Majewski also discovered wall paintings hitherto unknown, possibly Severan, in the so-called "Byzantine Tomb 2."

Two new Lydian inscriptions on stones were noticed and read by R. Gusmani, who studied all Lydian, Carian, and other epichoric inscriptions and graffiti found by the expedition. One may be read *ul/ar* (timul), "wrote to Artemis" (Fig. 7).

At the southeast corner of the Artemis Temple, a test in the outer (eastern) apse of Church "M" (c. 400 - 650 A. D.) was undertaken to assist the architectural study of S. W. Jacobs and M. Darnall. Two graves aligned along the east-west axis appeared but lack of grave goods and excellent preservation of skeletons

<sup>&</sup>lt;sup>1</sup> Satrap sarcophagus: Ch. Picard, Manuel, Ssulpture 2:2 (1939) 888, fig. 361. Nereid monument: Cella frieze, A. H. Smith, British Museum, Catalogue of Greek Sculpture 2 (1900), 31, nos. 902 - 903; East Pediment, Smith, 38, No. 924. A. Michaelis, Annali dell'Instituto (1875) 154, pl. DE I. H. Brunn and F. Bruckmann, Denkmaler griech. und röm. Skulptur (1892) pl. 219. S. Reinach, Repertoire de Reliefs 1 (1909) 485: 8-9, 486:1; cf. also frieze with banquet scene on the tomb of Merehi, Smith, no. 951, pl. 13; Reinach, 1, 487: 1. E. Reisch and G. Niemann, Das Nereidenmonument in Xanthos (Wien, 1921), pl. 1.

oriented to west mark the burials as recent. In the inner apse, painted wall paneling was found on the wall.

About one hundred meters north and uphill from the Artemis Temple, the discovery of a cache of Orientalizing pottery by a village boy led C.H. Greenewalt, Jr. to excavate parts of two Lydian structures (Fig. 8). Dating from late seventh to mid-sixth century B.C. the abundant ceramic yield included several large amphorae decorated with sphinxes and wild goats (Fig. 9). H.C. Butler and T. L. Shear had reported but not published Lydian walls in this brook bed known as "Northeast Wadi" (G. M. A. Hanfmann, Studies D. M. Robinson 1, 1951, 174). While previous tests had to descend from six to eight meters, the 1969 exposure encountered Lydian floors at ca. 2.2 - 2.5 m. below the present surface of the vineyards. It confirms that an important, densely built-up Lydian quarter existed far up the Pactolus valley.

Some 250 meters east of the Roman city, an effort was made by J. C. Waldbaum, D. W. Roller, G. M. A. Hanfmann, and the architects R. H. Penner and K. J. Frazer to obtain by supplementary excavation and close study an intelligible record of the Roman-Byzantine complex "CG" (excavated from 1958 - 1960, BASOR 154, 18 - 22; 157, 38 - 43; 162, 43 - 47). The western niched wall (CGW) of the main hall was outlined and a major arched door in the north wall excavated (Fig. 10). As Penner pointed out, the resultant plan is similar to halls of Roman baths in Hierapolis and Miletus (Faustina Thermae). Two long rubble wall units running east-west were traced in the northern part of the complex. A stratified pit at the southwest corner of main hall proved that the southern wall was preserved at ca. six meters below surface. A series of small industrial hearths and burned, dumped refuse in the northwest corner of main hall (Fig. 11) belong to Middle Byzantine reoccupation. S. M.

Goldstein suggests that the industry involved was "roasting of ores for collection of metallic iron."

About 40 meters south of complex "CG" a wall first observed in 1962 turned out to be a curving rubble wall, 2.5 to 3.35 m. wide, perhaps part of a circular or elipptical cemetery wall. Five oblong (Islamic?) graves were cut into its southern side. One of these was covered with a fragmentary honorary inscription of the Roman period (IN 69. 14) with parts of 17 lines preserved (Fig. 12).

Although much of the city wall of Sardis (5 th century A.D.?) has disappeared since the wall was entered in a simplified way on H. C. Butler's plans in 1913 (Sardis 1, 111. 18, Pl. 1) a team of architects (Darnall, Penner, Frazer, Yalçınkaya), photographers (Gombosi, Hoppin), and archaeologists (Foss, Hanfmann, Waldbaum) was able to record some thirty stretches still visible above ground. The pier of a rectangular tower was observed north of the northeast corner of the gymnasium, a semi-circular tower was discovered some 90 meters east of the Pactolus (Fig. 13, W 120/N 200), and evidence for a possible pentagonal corner tower came to light on the Pactolus. Apparently, there was also a rectangular tower south of the "Upper Terrace" (cf. BASOR 157, p. 22). Parts of the unexcavated complex "A" (possibly the Hellenistic-Roma agora, Sardis, 1, I11. 18) and a Middle Byzantine fort were also recorded.

On the Main Avenue, at the gymnasium complex, J. S. Crawford finished the excavation and study of the long row of Early Byzantine (ca. 400 A. V.) shops and of the public latrine which adjoined them at the southwest corner.

To serve A. R. Seager's detailed architectural study, a dozen pits were dug under the floor of the synagogue taking advantage of the lifting of mosaics undertaken by L. J. Majewski. The pits supply evidence for several changes of plan,

which will be discussed in a forthcoming article by Seager. Of importance for the dating of the later furnishings of the synagogue was the lifting of mosaics along the western side of the Forecourt. Their inscription panels with family name of Aurelii had been previously assigned to the third century A. D. (BASOR 170, 47 f., figs. 32; L. Robert, Nouvelles Inscriptions de Sardes, 1964, 38, nos. 4-6, pl. 4 f., proposed, though with reservations, 212-250 A.D.). The high total of 125 coins found under the mosaics, of which some 90 were legible, suggests that perhaps the coins were placed under the mosaics intentionally, as they still are in some new buildings in Turkey. Plotting of find spots and statistics by D. W. Roller indicate 355 - 383 A. D. as the probable time span when the mosaics were laid.

That wall paintings had preceded marble revetments in the Forecourt of the synagogue was proved by a piece of painted wall observed behind the marble revetments of the north wall at the northeast corner of the court.

Four bays of the late antique "craterand-bird" frieze were reconstituted by S. M. Goldstein, L. J. Majewski and H. Aydintaşbaş and installed on the north wall of the Forecourt (Fig. 14; cf. Dergi 16:2, 1967, 81, fig. 16). Under supervision of architect Aydıntaşbaş, the central area of the Forecourt was put in order and a replica of the beautiful crater-fountain set up (Fig. 14). In the Main Hall, the North Shrine attached to the entrance wall was completed. A bay of the decorative system of the north wall with four pilasters was recomposed. including the important donor's inscription "(I, Hipp) asios the Second, a citizen of Sardis, gave the marble revetments for the ornament of the House" (eis ton kosmon tou oikou) (Fig. 15). The three benches of the apse were revetted with marble and the monumental "Eagle Table" (cf. BASOR 174, 36 fig. 19) wasrecomps-sed and rè.-erected in front of the apse (Fig. 16).

The large project of restoring the Severan entrance unit to the Roman gymnasium ("Marble Court") made great progress under M. C. Bolgil assisted by T. Yalçınkaya. Pavilions and the arcuated pediment of the second story on the west side were re-erected to a height of 60 feet (Fig. 17; cf. Dergi 16:2, 1967, 83, Figs. 17, 19 - 21). Several columns of the "screen colonnade" which constituted the eastern entrance side have been put up. Yet to be done are the pavilions of the second story on the south and north sides. During the clearance of the eastern "screen" stylobate a small statue of a Muse (or Apollo? S 69, 10, height 0.372 m.) with kithara was found (Fig. 18)2. Another sculptural find of interest, from the Pactolus, was the stele of an athlete inscribed "Nympheros" (No.Ex 69. 17, height 0.95 m.) (Fig. 19).

Topography and road system around Sardis as well as monuments of Byzantine and Islamic eras were studied by C. Foss on a fellowship of the American Research Institute in Turkey.

Research on wall paintings and mosaics (Majewski), sculpture (N. H. Ramage), technical materials (S. M. Goldstein), and pottery (C. H. Greenewalt, Jr., I. Hanfmann) was carried on at Sardis and in the Manisa Museum. The wall paintings of the Early Byzantine "Peacock Tomb" and several fifth century A.D. mosaics from "Pactolus North" were transferred to Manisa.

<sup>&</sup>lt;sup>2</sup> (S. 69, 10 - 8031); Although the figure looks as if it might have a bosom, the typology favors an Apollo Musagetes, in a simplified version of the Vatican type: G. Lippold, Die griechische Plastik (1950) 311, pl. 110: 3 (around 300 B. C., non-Scopasian) or a type like that on the relief of Archelaos of Priene, Lippold, pl. 131:3, D. Pinkwart, Das Relief des Archelaos von Priene und die Musen des Philiskos (Kallmünz, 1965). There is, however, a type of a Muse with kithara (possibly Erato) which shows a similar kithara band but the posture of left and right leg would have to be reversed, M. Bieber, The Sculpture of the Hellenistic Age, (1961) 100, 128 (calling the type Polyhymnia) fig. 406, Muse with kithara, from Alexandria (terracotta ) which she believes to be of the type represented on Archelaos relief.

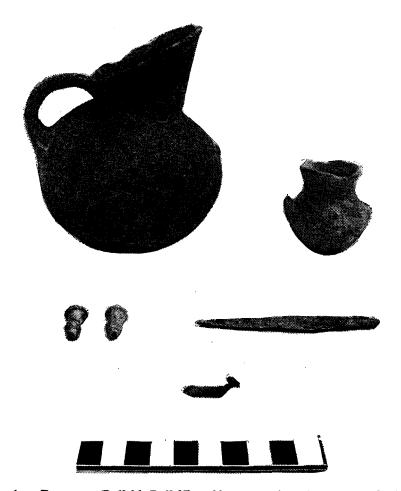


Fig. 1 — Two vases (P 69.36, P 69.37), golden ear studs (M 69.7, M 69.8), bronze dagger (M 69.5), silver pendant (M 69.6) from pithos burial EB 69.3.

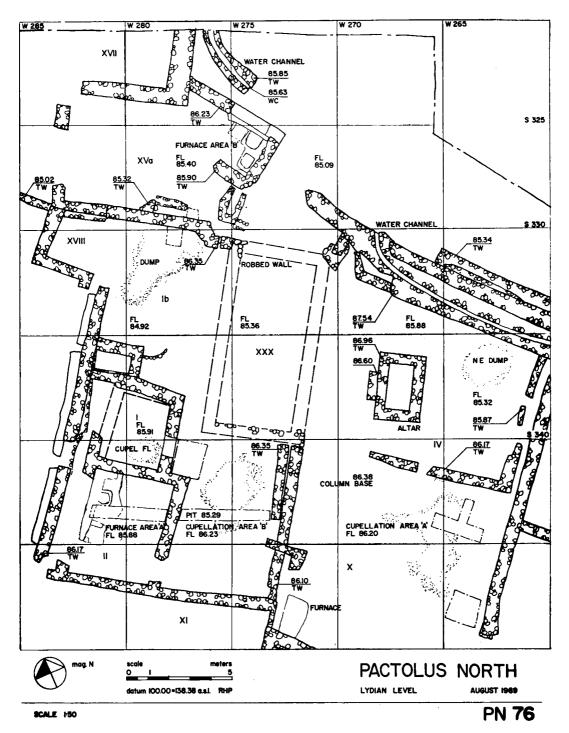


Fig. 2 — Pactolus North, Plan.

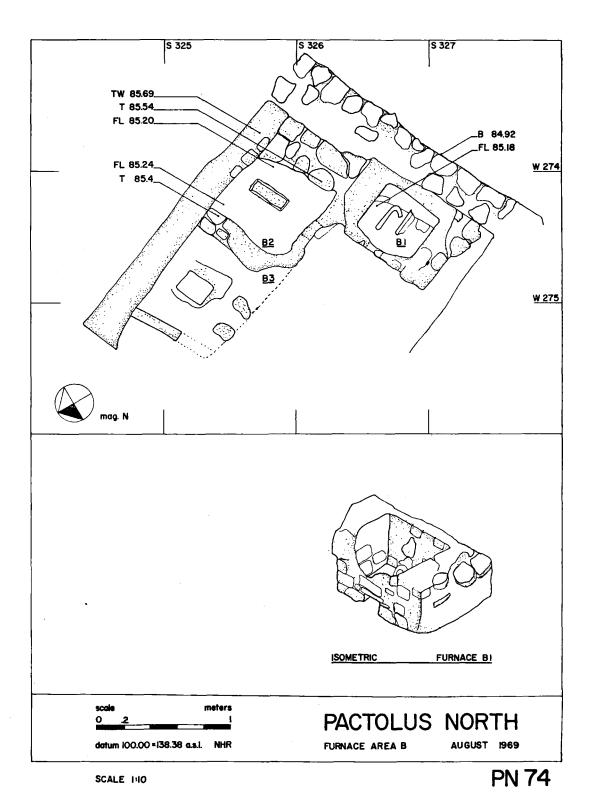


Fig. 3 — Plan and Isometric of furnaces.

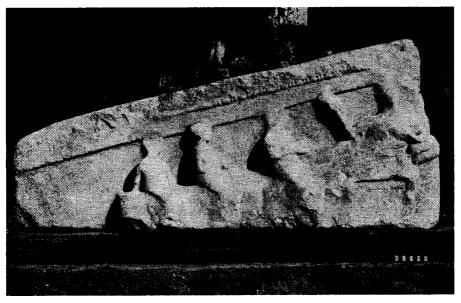


Fig. 4 — Half of Pediment with Funerary Meal.

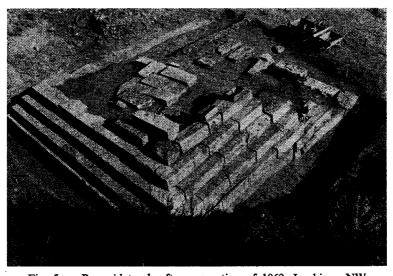


Fig. 5 — Pyramid tomb ofter excavation of 1969. Looking NW.

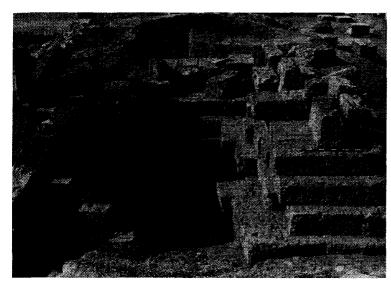


Fig. 6 — Lydian Altar west of Artemis Temple. Looking South.

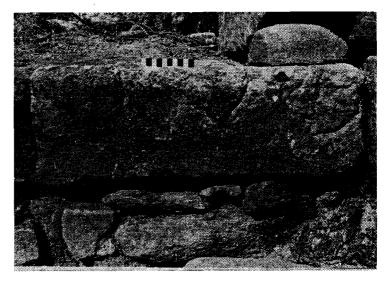


Fig. 7 — Lydian inscription (IN 69.22).



Fig. 8 — North East wadi excavation. Looking East.



Fig. 9 — Amphora Frogments with two sphinxes.



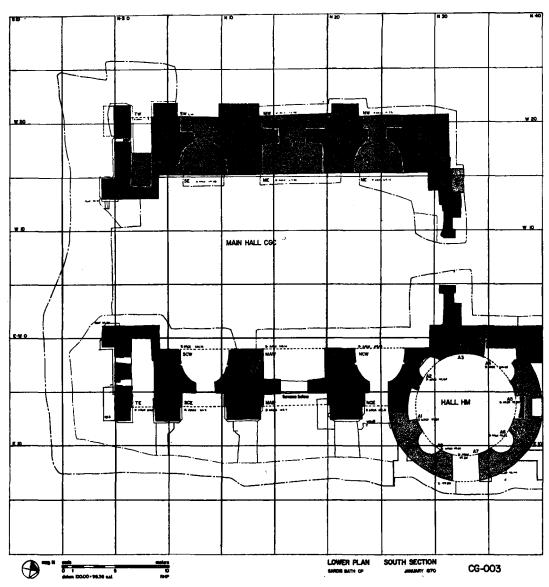


Fig. 10 — Plan of Southern part of "Cg", 1969.

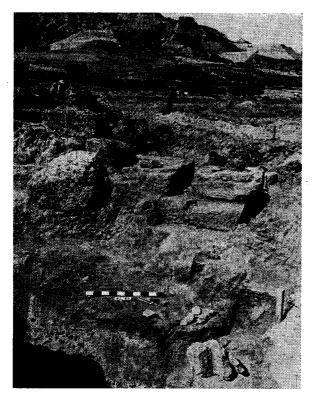


Fig. 11 — Photo in the industrial hearth in Cgw. Looking SW.

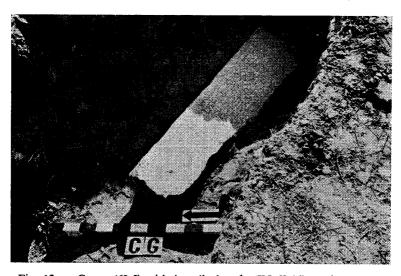


Fig. 12 — Grave (69.5) with inscribed stele (IN 69.14) used as cover.

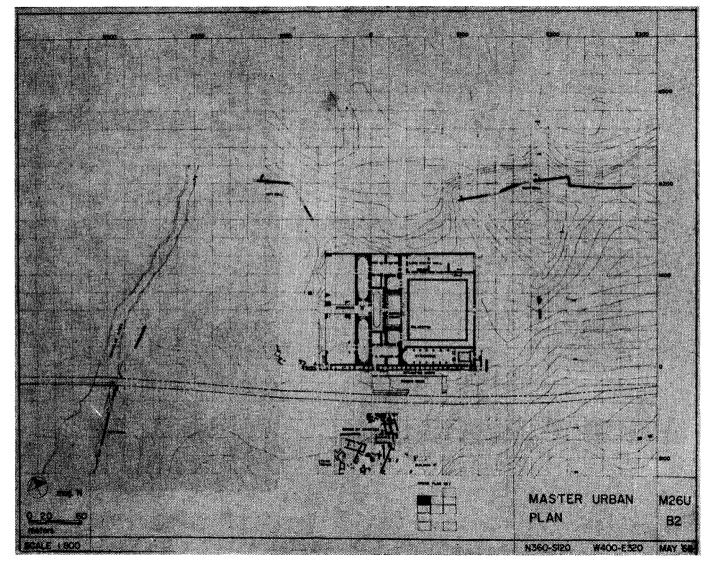


Fig. 13 — Sardis, part of urban plan showing Gymnasium with Synagogue and pats of city wall.

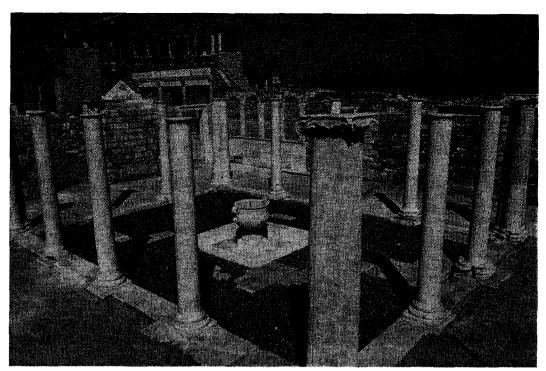


Fig. 14 — View of Synagogue forecourt with Bird Frieze. Looking North.

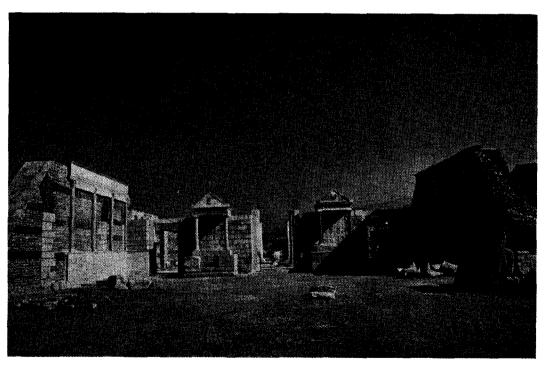


Fig. 15 — Synagogue, main hall. Looking East. On the left, reconstructed bay of north wall.

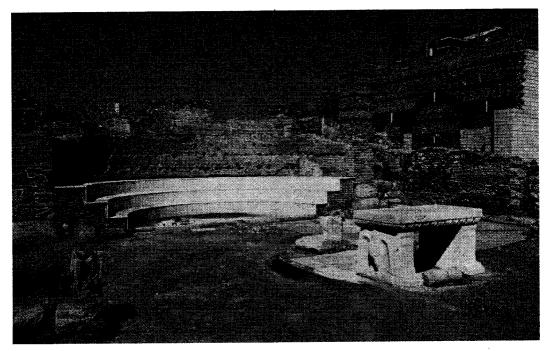


Fig. 16 — Synagogue: apse and marble table. Looking West.

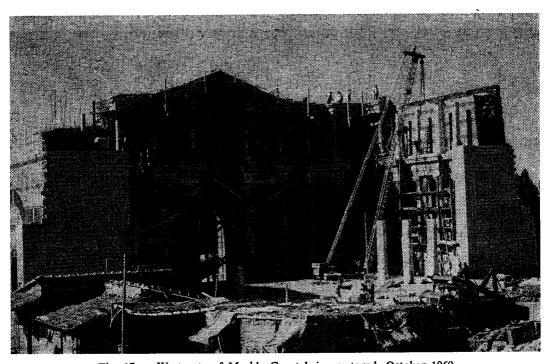


Fig. 17 — West gate of Marble Court being restored. October 1969.



Fig. 18 — Muse with kithara, Roman, 3rd Cent. A. D.



Fig. 19 — Relief found in Pactolus, 1969. Nympheros and Servant.

