# THE SIXTH CAMPAIGN AT SARD'S 1963 

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The sixth campaign at Sardis began on June 13 and continued until September 22, 1963, a somewhat longer season than usual. George M. A. Hanfmann was Field Director, and A. Henry Detweiler was Associate Director. ${ }^{1}$ Excavation centered on three major areas in the city itself (cf. Fig. 1), with separate investigations conducted at the royal Lydian necropolis of Bin Tepe, six miles north of Sardis across the Hermos River.

As in the past, Cornell and Harvard Universities cooperated in conducting the excavations; the American Schools of Oriental Research once again acted as sponsor; and the Corning Museum of Glass, Corning, New York, contiuned its participation. Financial support was again provided by the participating institutions, the Bollingen Foundation of New York city, a grant from the Corning Museum of Glass, and an allocation of Turkish lira funds from the U. S. State Department under the provisions of U. S. Public Law 480.

In addition to the excavation activities, projects in zoology, anthropology,geology, and the study of glass were carried on in cooperation with Turkish and American specialists. Under the training program initiated with stipends from the Department of State grant, four Turkish stu-

[^0]dents took part in the work. Field trips and a series of seminars were arranged to strengthen the educational aspect of the program.

We are again indebted to the Ministry of Education of the Turkish Republic and its Department of Antiquities for their unfailing cooperation and help. Kemal Ziya Polatkan, Director of the Manisa Museum, once again was our energetic and dedicated Commissioner, and Muharrem Tagtekin of the Manisa Museum again acted as Commissioner for the Bin Tepe excavations.

At the «Lydian Trench» (Fig. 2), Dr. Gustavus F. Swift continued to clarify the history of occupation in this area from Lydian through Roman times. A total of 950 square meters to W 35 and S 135 to the south and west of the trench excavated in 1962 was cleared to a depth of from two to four meters, exposing a larger area of the major Lydian level of the sixth century B. C. West of Building C (Fig. 2) the continuation of six Roman terracotia witer pipes was exposed; laid at ca. * 100.50 , they presumably carried water from south to north. Beneath them at * 100.00 , patches of fallen stone and other debris, perhaps from the destruction of Hellenistic buildings, lay on top of beds of sand and gravel. Farther south (S 95-115, W 25-35), more terracotta pipes were uncovered, with a large pithos in situ at ca. * 100.00 . Scattered patches of fallen stone and bits of two isolated foundation walls occurred
at *100.20. Traces of a Lydian earth floor at *99.70 were encountered at W 23-28, S 102-105.

The fill in the southeast and southwest corners (E 10-W 35, S 115-135) was only excavated to ca. *101.00. It contained much late Roman pottery with lamps and glass and many coins of the fourth and early fifth centuries A. D. Surfaces of hardpacked earth detected throughout this area may have been paths, open courtyards, or threshing floors. A rubble wall, perhaps an early Byzantine construction retaining a terrace, ran from east to west between S 130 and 135, at ${ }^{*} 103.00$. Two crude foundation walls, parallel to each other, belonged to what may have been a stable in an area roughly E $10-\mathrm{W} 5$, S 123-130; the northern foundation continued the line of the terrace wall toward the west. The southwest corner of the heavy brick and morter wall forming the eastern boundary of the Lydian Trench for the past several years was located at E 6 , S 123 at ca. ${ }^{*} 102.50$; it had been built over a large Roman water pipe.

The central part of the excavation was overlaid by extensive areas of the Hellenistic stone debris, from * 100.30 at the south to ${ }^{*} 99.90$ at the north. At EO - W5, S 110-115 was found a well, 0.90 m . in diameter and carefully walled with large uncut stone blocks. It was excavated to *80.80, a depth of 18.9 meters, where ground water halted work. The fill contained masses of broken pottery, rooftiles, animal bones and small stones, forming a homogeneous deposit to within one meter of the top of the well. This fill is datable by Attic black-glaze sherds with palmette stamps to the early fourth century B. C. In the area just south of the well (W 2-10, S 117-122, "100.20-99.80), other sherds of Attic black-glaze ware and late black-figure began to appear in association with foundation walls at the end of the season.

The area promises welcome evidence for the Persian era.

In addition to the well, three other small buildings, D, E, and F (cf. plan, Fig. 2) were discovered in the central area between E5-W25, S 97-115. Building D is a fragmentary rectangular structure with portions of three walls preserved. The western wall, ca. 10 m . long, is carefully made of small stones, with two masonry facings filled with rubble. Its north end disappears under the heavy south wall of another structure, which in turn is overlaid by the Hellenistic Building C; hence Building D appears to be two building phases earlier than Building C. When removed, the upper of two well-preserved floors at *99.30 was found to contain sherds assignable to the carly 6th century B. C. Building D also contained two hearths, a semicircular ring of small stones and a pit for refuse or storage. Building E (W 20-24, S 110-113), a roughly circular foundation ca. 2. 25 m . in diameter, contained a floor at ca. *99.40. Its purpose is unknown, but its shape suggests a kiln or furnace. Several used Lydian lamps were found inside and to the east of its walls. Building $F$ is the fragmentary foundation of another small rectangular structure; again, the sherds from its floor at *99.40 were datable in the first half of the sixch century B. C.

Contemporary with these three foundations was a refuse deposit (W 11-13, S 103-104) also at *99.50-99.20 which yielded a rich assortment of Lydian terracotta products and pottery. The head and one foot of a painted terracotta figure of a bearded Lydian man was mended with numerous fragments of the body recovered nearby at the same level, to form a terracotta statue 0.35 m .high (P 63. 307, cf. Fig. 3). A large hole at the base of the neck reveals this as an unusual plastic vase. The figure wears a white tunic diagonally hatched
with black lines and decorated with a meander - bordered red bib on the breast. Based on the style of curls and modelling, it may be dated in the early sixth century B. C. The largest part of a Lydian bichrome deinos (P 63. 366, Fig. 4) decorated with two friezes of marching lions, deer and goats, probably dates in the late 7 th century B. C. Also found in this deposit were the forlegs, with base, of a large terracotta animal figurine, possibly a camel (T 63. 48, Fig. 5), and over thirty pieces of intact or mendable Lydian pottery, as well as numerous Greek sherds. The refuse deposit apparently was formed not later than the end of the 6th century; nothing indicating a later date was recovered. A sherd from a krater in the upper floor of Building D matched other pieces in the refuse pile, suggesting that the deposit is contemporary with these adjacent structures.

Beneath this sixth century level, sloping from ca. ${ }^{*} 100.00$ in the west to ca. *99.00 in the east, appeared a heavy bed of water-laid sand and gravel, perhaps deposited by a mouth of the Pactolus flowing through this area nutil the seventh century B. C. Beneath this gravel, at ca. ${ }^{*} 97.60$, was found a layer of fine earth within which occurs a hard floor, burned in places, a large section of which was cleared in the eastern part of the trench in 1962. It may be associated with one of the Kimmerian inroads on Sardis, in the early 7th century. In 1963 this floor was detected farther to the west; pottery associated with it, including sherds of Lydian geometric bowls and plates, an early Lydian bichrome hydria and large fragments of Protocorinthian skyphoi, suggest a date in the early 7th century B. C.

The main hall of the Roman synagogue, discovered and iclentified in 1962 north of the Roman highway (Fig. 2), was cleared and the southeastern corner
if its forecourt freed. Excavation was supervised by Dr. David Gordon Mitten, assisdet by Fikret Yegül. In addition, five shops lying outside the south and east walls of the synagogue were excavated. The top of a curving brick consruction opening east and containing two smaller hemicircular niches, thought when first encountered in 1960 to be a small nymphaeum, proved to be a large apse 12 m . wide closing the western end of the main hall (Fig. 6). Two short passages, 1 m . wide, leading diagonally into the apse from either side, had been blocked un and covered with a thick layer of coarse red plaster as a bedding for sheet marble revetment; a finer coat of tan stucco on the west wall of the northern passage bore numerous incised graffiti of horses, egales, and human figures, as well as inseriptions. Three heavily damaged concentric brick benches, averaging 0.75 m . in windth, line the apse; the top surface of the uppermost bench lies at *97.54, 1.20 m . above the mosaic. This mosaic (Fig. 7) 7.50 m . wide by 2.25 m . deep, features two symmetrically arranged vines growing out of a large volute-handled krater; a peacock, now defaced, sat in the branches to either side. A colorful wreath above the krater contains a partly damaged dedicatory inscripition, dated by Prof. Louis Robert in the 4th century A. D. The mosaic was slightly above the floor of the main hall and was separated from it by a marble sill ca, 0.25 m . wide; cuttings in this curb indicate that it supported a balustrade or screen. To the south of the apse appeared a small room 6.10 m . long, opening into the main hall at its eastern end through a doorway with marble jambs.

The main hall of the Synagogue (Fig. 6) proved to be a huge rectangular chamber oriented east-west, 59.65 m . long and 18.00 m . wide. Six pairs of square bases, measuring ca. 1.50 by 1.25 m . arranged opposite each other along the north and
south walls, supported piers which in turn must have held the cross beams of the roof. The portions of the mosaic floor so far uncovered, lying at an average level of *96.40, consist of rectangular panels of interlocking circles, four-pointed stars and the like. A monumental marble table, 1.225 m . ligh by 1.225 m . wide by 2.43 m . long, stood at E 48 N 10-12, in line with the axis of the central doors into the main hall and forecourt. Its two upright supports are decorated with eagles in high relief (Fig. 8) clutching thunderbolts in their talons, perhaps recut from some earlier Roman monument. The top slab, shattered by falling masonry from the walls and piers, is trimmed with a massive egg-anddart molding. A pavement of marble slabs lay on the west side of the table, facing the apse. Many fragments of large marble lions were found nearby; these were meinded to form two pairs of seated lions, back to back (Fig. 9). These figures may have been re-used as guardian animals on either side of the table. Their date will need to be determined by close study; $G$. M. A. Hanfmann considers them archaie, while D. G. Mitten favors a fourth century B. C. date.

The piers, averaging 6.25 m . apart, were connected with the side walls by low platforms 1.10 m . wide. They contained much material re-used from earlier structures. Most of the bases included stone benches with concave profiles in the lowest course, facing toward the center of the hall. In Base S 4, this was a well-preserved travertine bench 0.43 m . high with a lion-footed leg al one corner. Fallen from atop this bench was an orthostate block inscribed with thirteen lines of text (IN 63.141, Fig. 10); it contains several letters not hitherto attested in Lydian inscriptions. The block, measuring 0.68 m . in height, 1.12 m . long, and 0.37 m . wide, is framed by drafted edges and a roundel molding at the base; two iron dowels
set in lead protrude from the bottom of the block. Also fallen from the westernmost pair of piers were a number of finely dressed marble blocks with carefully finished anathyrosis; four of these (IN 63.118-121) bore long texts in Greek with linely carved small lettering. Two of these four belong to a letter from Antiochus IIl to Sardis directing rehabilitation measures in the city after the capture of Achaeus and dating in 213 B . C. The other texts describe honors voted to Heliodorus, son of Diodoros, and order a letter of Laodikeia, queen of Antiochus III, to be inscribed on the parastades (the antae) of the Metroon of Sardis.

The first major examples of archaic Lydian sculpture recovered by the current excavations were found among the collapsed blocks of the synagogue walls. The buttom half of a small kore (Fig. 11; S $63.30) 0.39 \mathrm{~m}$. high, was found built into a piece of the north wall that had fallets into the main hall. The parallel abraded folds are suggestive of Samian influence; the roughly finished base and back may have been set into an architectural niche. A date around $600 \mathrm{~B} . \mathrm{C}$. appears possible.

At E 73.5, N 17.20-17.70, *97.25-96.75 lay a reused block in the form of a miniature temple (S 63.51, Fig. 12) with three fluted Ionic columns on sides and rear. The roof, probably pedimental, had been hacked away, taking with it the head of a large relief of a goddess, dressed in an Ionian kore, standing between columns in the porch of the temple. Smaller reliefs, placed between the columns in three registers, adorn the sides and back. The monument is preserved to a height of 0.62 m. ; it is 0.0 m . wide, and 0.343 m . deep from front to back. Although battered, the figure on the front still retains many of the delicately carved details of drapery and jewelry; when found, heavy traces of mortar still adhered to the ankles and feet. The kore wears the stan-
dard double garment of Ionia, the chiton covered by himation, and grasps the hem of her skirt with her right hand. She clasps a small animal, probably a lion, against her breast with her left hand. She also wears a bead-and-reel necklace. Traces of drapery at the base of her neck indicate that her head was covered. Two raised, wavy ridges flank her on either side. The smaller reliefs on the sides face, or march, forward; they include korai (e. g. Fig. 13), lions rearing on volutes, and satyrs or komasts holding drinking cups. Six panels on the back depict sometimes enigmatic mythological scenes; two birds attacking a treed animal, a lion confronting a boar across a tree, a robed figure driving a twohorse chariot, a hero killing a lion with a club (probably Heracles slaying the Nemean lion), a much-effaced horseman (?), and a slaying with three figures, perhaps the slaying of Aegisthus by Orestes. The lower part of another kore (S 63.41) was split from the front of a similar columned shrine. This figure, of which only the lower half is preserved, stands to a height of 0.39 m . She also stood between columns, one of which is preserved; this, however, is unfluted and stands on a small pedestal. A sinuous rope-like object hangs from her right hand to her ankle. These sculptures reveal a court school of sculptors working at Sardis in the first half of the 6th century B. C., strongly influenced by Ionian schools such as Samos and Miletus, but preserving an individualistic style.

Many new dedications inscribed on marble plaques, similar to inscriptions found in 1962, were recovered from the synagogue; one of them (IN 63.49) records
 lampstand, probably the traditional menorah. In addition, two outer arms of a large marble representation of the menorah (S 63.50), carved completely in the round (Fig. 14) were recovered. The space
between was filled with a screen of delicately carved tendrils. The crossbar connecting the ends of the arms was inscribed on both sides with EnKPathe The width of the intact menorah must have been over 1 meter. A smaller inenorah (M 63. 55) 0.18 m . high, cut from sheet bronze, was fastened through small holes in its stem to a larger object, perhaps a piece of furniture.

In the large rectangular entrance court to the gymnasium (Marble Court, cf. plan, Fig. 1), Prof. Stephen W. Jacobs of Cornell completed the recording and removal of all major blocks into the open space to the cast, except for a few architrave blocks and sections of the large spirally-fluted columns from the main gateway, which were left in situ along the western side of the enclosure. Sections of the well-preserved marble floor of opus sectile panels in the southeast, northeast, and northwest corners of the court were cleared. The two-stored screen building now appears to have been walled shut during the early Byzantine restoration except for the three central intercolumniations. A tentative restoration of the court during its various phases is nearing completion, preparatory to possible restoration of part of the facades around the court.

At the sector Pactolus North (PN on plan, Fig. 1), William C. Kohler, John G. Pedley, Noel Robertson and George M. A. Hanfmann cleared additional portions of the Islamic, Byzantine, and Roman settlements north of the area explored in previous seasons. Work continued from June 21 to August 24. Immediately below the surface, in squares W 235-249, S 351-361, appeared crude rubble walls of an Islamic village which appears to have occupied the site from the late 14 th through the late 18 th centuries A. D. or later. W. C. Kohler distinguished two major levels of occupation separated by a heavy burned la-
yer. Somewhat irregular rectangular units, incorporating much re-used material, occurred in both levels. Floors in the upper level occur at ca. *90.4. The lower level, from *89.00-89.6, featured three stone bases, perhaps for wooden interior supports or porch posts, and contained greenglazed wares and grotesque spouted pots. The tubular spout of a red-burnished vessel (P 63.59) built into an Islamic wall resembles Hittite and related wares of the first half of the second millenium B. C. in the Anatolian plateau.

Beneath the Islamic village lay early Byzantine continuations of the «Mosaic Suite» discovered in 1962. Two large stuccoed tanks were filled in, perhaps as part of a great rebuilding ca. 400 A . D., forming the northern part of the impressive large hall 18.5 by 5.7 m . which contained the "Eagle Mosaic». A later rebuilding of the upper walls was noted here, as well as at W 223-227, S 349-354, where an irregularly shaped area is bounded on the east by a curving rubble wall 1.5 m . thick, whose top lies at *90.42. A gold solidus of Justin I (518-527 A. D.), (Fig. 15, C. 63.175), built into this wall just above the base course, suggests that this phase of construction was undertaken in the mid-6th century A. D..

Earlier constructions were incorporated into these buildings. Two marble steps at W 220.6-223.4, A 340-345, supporling the lower part of a monument with simple base profile, perhaps of the late lirst century B. C. or carly first century A. D., were built over by a stuccoed chamber, perhaps a vaulted tomb. Five Romanbuilt sarcophagi and tile graves lay nearby; they appear to form a kind of small funerary precinct of enclosure of the second and third century A. D. The richest of these graves, 1963.1, contained three skeletons of adults extended full length, their heads toward the west. The grave offerings of glass and terracotta objects,
included a piriform glass unguentarium, a terracotta rooster and a dramatic mask (T 63.35, Fig. 16).

Walls and a well-defined floor of the Persian level, perhaps related to the apsidal buildings farther south, occurred at W 236-248, S 342-348. The associated pottery, including Lydian wares and Attic black-glaze sherds, supports the strong probability that there was no marked break in life at Sardis to indicate the transition from Persian to Macedoniais rule in the late fourth century B . C.

Between August 5 and 24, Prof. A. Henry Detweiler, assisted by Ralph Iler and Mehmet Ergenc, completely cleared the small Middle Byzantine church «E» (Fig. 1), whose identification had been suspected by Howard Crosby Butler, director of the Princeton excavations at Sardis from 1910 through 1914. The church is oriented roughly east-west, measuring 18.48 m . long by 11.49 m . wicle, and contains three small masonry apses at the eastern end; the central apse is slightly larger than the two at either side. A large brick dome stood over the center of the church at the intersection of two barrelvaults; a smaller dome rose above each of the four arms thus formed. The entrance was through a narthex at the west. The structure stood on a solid raised masonry platform which incorporated much heavy masonry from Roman and earlier structures. Parallel rows of channels laid under the floor of the building probably contained a framework of timbers bolted logether 10 reinforce the church against carthquakes, a variation of the age-olst «hall-timbering» technique common in this part of Asia Minor. A rectangular tank-like cavity 1.71 m . long by 1.26 m . wide was sunken below the floor on the right side of the church. A steep flight of stairs leading into it makes it likely that this was a baptistery. Traces of three layers of painted plaster adhere to the
south wall; of the outermost coat, portions of a geometric band of diamonds in black, red, and green with tiny white crosses in their lower apices survive. The church remained in use only a short time after its construction probably in the twelfth century A. D. Heavy burning over the floor, associated with quantities of pottery, glass, etc., show that Islamic shops and furnaces were active in the building before its final destruction by earthquake.

At the Lydian royal necropolis of Bin Tepe, preliminary investigations were begun at Karnyarik Tepe, the central of the three largest Tumuli in the cemetery. Trenching was begun on the south face of the mound to locate the crepis or retaining wall around its outer periphery, and if possible the dromos. The major trench, excavated in a series of five large platforms running vertically up the slope of the mound, was 18 m . wide and 4.50 m . deep. Dr. David Greenewalt of the Massachusetts Institute of Technology conducted tests with electronic equipment in an attempt to detect buried walls or structures immediately beneath the surface of the mound; his observations were further investigated with the aid of a water-cooled oil drilling rig kindly loaned by the University of Pennsylvania Gordion excavations. A major effort to reach the main tomb chamber, perhaps involving tunne.
ling, is planned for the summer of 1964.
Work on Karnyarik Tepe was suspended August 9. Attention turned to investigation of a smaller mound, BT 63.2, a short distance to the east, where geophysical testing had revealed the possible presence of a tomb chamber. Work began with the sinking of a pit into the center of the mound where the ground level was highest. At a depth of 2.60 m . from the surface a heavy layer of large, loosely packed limestone fragments appeared in the western part of the pit. At a depth of 4.95 m ., the roof of a small tomb chamber appeared, consisting of four roughly-dressed limestone slabs plastered with clay. Ancient robbers had forced an entrance through the two central slabs into the tomb beneath; traces of an additional robber tunnel from the south were discovered. The tomb chamber measures 2.87 m . in lenght by 1.35 m . in width and is 1.36 m . high; it is oriented east-west. The floor is constructed of five flagstones. The walls are formed by three courses of carefully finished ashlar masonry with drafted edges, cut from local limestone. Fraitments of two sides of a wooden funeral couch lay on the floor of the chamber; a streaked skyphos, two squat lekythoi, part of a gray monochrome lydion, and a waveline hydria, and two small iron plates bearing the imprint of textile were also recovered from the tomb.

## SARDIS EXCAVATIONS



Fig. 1 - Map of Excavations.


Fig. 2 - Sector Plan.

Fig. 3 -
Terracotia figure of a bearded man (P6.3.307),

House of Bronzes, early sixth century B.C.

Fig. 4 -Orientalizing deinos, (P63.366), Lydian,
late seventh century B.C.



Fig. 5 - Forelegs of a terracotta animal, perhaps a camel (T63.48), Lydiart, sixth century B.C. from House of Bronzes.

Fig. 6 - View of synagogue area (showing apse), looking west.



Fig. 7 - Mosaic in apse of synagogue (vines growing out of krater), fourih century A.D.


Fig. 8 - View of western part of synagogue, looking south, with eagle relief of marble table in the foreground.


Fig. 9 - Pair of marble lions (S63.37) from the synagogue.

Fig. 10 - Inscription in Lydian (1N63.141) from the synagogue.



Fig. 11 - Small kore (S63.30), from the synagogue, ca. 600 B.C.

Fig. 12 - Monument in the form of a temple, with standung goddess (S63.51), ca. 550 B.C., reused in synagogue.

Fig. 13 - Relief of a kore on the side of the monument in the form of a temple (S63.51). Detail of Fig. 12.

Fig. 14 - Marble Menorah from synagogue
(S63.50, IN63.130), inscribed.



Fig. 16 - Terrocolta mask (T63.35), luird century A.D from Pactolus Norih.


[^0]:    ${ }^{1}$ As Prof. Hanfmann was on sabbatical leave during the academic year 1963-1964, his share of this report was preparet by Dr. David G. Mitten, Assistant to the Directors.

