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Archaeological research at Sardis in 1977 was conducted during a two and a halt month season (June - September) by a staff of eigh- teen ${ }_{1}$. The season's program included two essentially non - excavation projects which had been initiated in 1976, the Lydian Architectural Ter- racotta Reconstruction Project and the Urban Survey Project, and ex- cavation in several places on the east side of the Pactolus valley. Dis- coveries of major significance were made in connection with a massive and monumental structure of the seventh century B.C., which may be part ofa city wall or city gate ${ }^{2}$.
(1) The 1977 season was made possible and the Expedition's work implemented and assisted in the most fundamental way by the Department of Antiquities and Museums, particularly by its Director General, Bay Hikmet Gürçay; Director, Bay Burhan Tezcan; Deputy Director, Bay Çetin Anlağan; and Director for Excava- tians, Bay Aykut özet. As in previous seasons, the Expedition's programs were accomplished with success and without difficulty because of the vigorous and sympathetic support of the Director of the Manisa Museum, Bay Kubilôy Nayır and the Gavernment Representative to the Expedition, Bay Attila Tulga; and the generous help of many other Turkish officials and private individuals.
The 1977 staff included: C. H. Greenewalt, jr., field director; Teoman Yalçınkaya, administrative officer and agent; D. G. Mitten, associate director; A. Ramage, assistant director and senior archaeologist; C. S. Harward, archaeologist; V. J. Harward, archaealogist; Fikret K. Yegül architect and specialist for the gymna- sium-bath complex; E. L. Sterud, specialist for Urban Survey Project; E. E. Freed- man Specialist tor Urban Survey project; M. L. Clymer, specialist tor Urban Sur- vey Project mapping; E. R. Hostetter, specialist for Lydian Architectural Terra- cotta Reconstruction Project; M. C. Caldwell, assistant for Lydian Architectural Terracotta Reconstruction Project; L. J. Majewski, chief conservator; C. Cleve- land, assistant conservator; A. - K. Sterud, recorder; E. G. wahle, architect cnd draughtsman; -E. C. C. Gombosi, photographer. K. J. Frazer provided invaluable help in administration and architectural drawing at the end of the season. This Report draws substantially on fleld reports of staff members. To ali, warm and hearty thanks.
[2) For previous work on the two projects and for recognition and preliminary inves- tigation of the monumental Lydian structure, see "Sardis, 1976» in an earlier issue of this Journal.

## Lydian Architectural Terracotta Reconstruction Project

The objective of this project is a display of recreated Lydian roof and revetment tiles with painted and molded decoration (whose original visual effect in assemblage is difficult to appreciate from the fragmen- tary remains) in an architectural outdoor context at Sardis.
in 1977, the project (managed by E.R. Hostetter, with the assistance of M.C. Caldwell) concentrated on the perfecting of «glazes» or Slips and on production of (unpainted and unfired) roof tiles and decorative tiles of two types.

Outdoor exposure during the 1976-1977 winter months of (painted and fired) tiles recreated in 1976 indicated that our black and red gla-zes were reasonably weather resistant, but showed that a much more stable white slip is required tor the project. After further experimenta- tion with various primary clays, clay combinations, and firing tempera- tures (documented in more than four hundred «test» tiles fired in a small «home made» kiln operating on propane gas), a fairly stable white slip, made from a primary clay obtained in Kütahya (through the resourceful and sustained efforts of Attila Tulga and the kindness of the öz Çini Kollektif Şirketi), was achieved; but even this slip (Hostetter believed) probably is not capable of withstanding long-term outdoor exposure. A solution to the problem, which would allow long-term outdoor exposure but would deviate from the ancient technique and materials, might be to mix with the Kütahya clay slip some amount of true vitreous (mat) glaze matter.

A number of pan and cover tiles (of the Corinthian type attested at Sardis) were recreated, as well as decorative tiles with «star and scroll» motif and with confronted rampant lions; the latter motif is attes- ted by a single fragment. possibly from a pediment, now in the Metro- politan Museum of Art in New York (FIG. 1) The Metropolitan Museum, the Louvre, and the Istanbul Archaeological Museum kindly Permitted casts to be made of architectural terracottas from Sardis in their col- lections tor use in the Sardis reconstruction project.

## Urban Survey Project

The objective of this project is to record systematically the site's surface remains and geological features (which represent a considerab- le asset of unexploited and readily accessible topographical evidence) and to use the data thereby gained, together with evidence from limited sub surface sampling, to clarify problems of urban topography, parti-
cularly the identification of activity loci and boundaries of Sardis at different periods in history.
in 1977, the field progrnm of the Project (directed by E.L. Sterud and E.E. Freedman, with special assistance from M.L. Clymer) was primarily concerned with mapping certain parts of the city site by me-ans of recently - developed surveying equipment and with reconnais- sance of the city's peripheral zones.

Mapping was performed with an electronic transit, Hewlett-Pac- kard model 3810A (Loaned and operated by Clymer) which automati- cally measures horizontal, vertical, ond slope distances (as well as zenith and horizontal angles) with on accuracy of $\pm 1 \mathrm{~mm}$. ond with a radial ronge of one mile. in less than fifty working hours (during sixteen days), the survey team recorded obout seventy acres of complex terrain in three regions of Sardis (FIG. 2) to produce maps considerably more occurate ond detailed thon those previously availoble to the Ex- pedition. For the lorgest of the three regions, nototions of surface arti- facts located within a two - to - three meter radius of every third or se-cond dotum point (with eoch dotum point separated respectively by intervals of either ten or twenty meters) wos made, in order to add a culturol dimension to the topogrophic information.

Reconnaissance of the city's peripheral zones, undertaken in con- nection with the objective of clarifying the city limits of Sardis, led to $a$ «greater understanding of the nature and extent of remains outside the Late Antique city wall» and showed «both the promise ond prob- lems awaiting a boundary studyı> (Freedman). Major observations may be summarized as follows.
(a) in the flat teı-rain of the Sardian plain, surface artifacts are very sparse or absent; in view of the long history of flooding in this part of the plain by the Hermus River (Directly attested in some places by accumulations of silt, tine grovel, and pebbles). probably because these regions have a surface strotum of post - antique fluvial deposition and not necessarily because they were not occupied in antiquity.
(b) The plain contains severol low mounds which rise above its surface at and even beyond whot has been considered the city's perip- heral zone, and whose surfaces exhibit appreciable numbers of artifacts, including pottery remains of Lydian and Hellenistic as well as Roman periods ${ }^{3}$.
(3) For another low mound with ancient remains in the Sardian plain, at Dede Mezarı, G. M. A. Hanfmann, «The Third Campaign at Sardis (1960]» BASOR 162 (1961J 48-49; «Sardis, 1976» in an earlier issue of this Journal.
(c) Surtace artitacts on the three conspicuous large mounds which extend eastward in alignment from the gymnasium-bath comp-lex (8) against the inner side of the Late Antique city wall include, among predominantly Roman material, unmistakable pottery remains of the Lydian period; one of these is handsomely painted with a lion and filling ornament in Eastern Greek orientalizing style, NoEx 77.14 [FIG 3).

## Tomb of Chrysanthios (grave 76.1)

The Late Roman underground tomb or hypogaeum of Chrysanthios, o high - ranking official, which was discovered in 1976 (see «Sardis, 1976» in an earlier issue of this Journal), was cleaned and excavated in 1977, and a sondage below the tomb's floor was dug to bedrock and sterile soil. A general description of the tomb (rectangular, barrel vaul-ted measuring ca. 3.30 m . by 2.80 m . on a side and ca. 2.00 m . high; with entrance through the ceiling at one end) and its mural painting (displa- ying o dado of imitation stone panelling and various free - field motits: cornucopiae, baskets of fruit, wreaths, flowers, doves, peacocks, wreath with- painted inscription) has been presented in the report to which re-terence is made above. Cleaning, excavation, and Study in 1977 yielded considerable additional intormation, concerning plastering and painting techniques, three painted mural inscriptions not known in 1976, the tomb's floor, and two earlier occupation phases at the site [probably Roman or Hellenistic, and Lydian)

Examination and analysis with the simple means available in the expedition's field laboratory (by L.J. Majewski and C. Cleveland) revealed that the tomb's interior walls and vaulting were covered with two layers of lime plaster, a hard arriccio toundation (containing charcoal and an organic straw - like material as well as stone and pottery) and a fine intonaco surtace layer; that the painting had been applied a secco probably with lime putty as the binding medium; and that most of the paint colours are derived from earth pigments (red, yellow, umber, green; paler tones of the same produced with admixtures of lime whi- te) with the exception of a charcoal black and Egyptian Blue (a solu- tion of crushed frit coloured by copper salt).

Cleaning ot the murals and excavation of debris above the tomb's floor level, which contained tallen plaster fragments, revealed that the tomb had had three painted inscriptions on the ceiling and side walls. at its entrance (north) end; these three, like the lenger inscription fra- med by o wreath in the south lunette, which was seen in 1976, are in

Greek and record that Chrysanthios was the builder of the tomb. Only a few letters survive from the inscription on the ceiling, but the two from the side walls are essentially complete. One of these [four lines, four words) designates the tomb a heroon (rather than letteika, i. e., ekteika, as in the inscriptions of the south lunette and the other side wall). The other side wall inscription (six lines, eight words) designates Chrysanthios not only as doukenarios (high - salaried official) and fabrikesios (armourer) but as zographos which, according to L. Robert. should have the literal meaning «painter from life," i.e., artist (in this case presumably an amateur, since the lowly status of a salaried professional would be incompatible with the high rank indicated for Chrysanthios by his two other titles) and suggests that he himself may have executed the painted decoration of his tomb. Stylistic features in the painting together with the christian invocation th (e) e boethei in the painted inscription of the south lunette have suggested to L. J. Ma- jewski that Chrysanthios had his tomb built in the latter part of the fourth century A.D.

The floor of the tomb either had been thoroughly disturbed at some time well before our excavation or originally had been very simple: a few random tiles, field stones, and traces of lime in the soil marked the level indicated tor a floor by the termination of wall plaster (which see- med to correspond to the wall footings). At this level, against the east side wall, rested a small heap of disintegrated bones. The only artifact recovered above floor level was a plain terracotta lamp. There was no evidence that the tomb had had cist graves below floor level.

Experiments and attempts with several techniques to lift the pain- ting, with and without the plaster intonaco, from the tomb walls (for display in the Manisa Museum) showed that removal would severely damage the painted surfaces. Most of the painting, therefore. was left in situ, and after it had been further consolidated and strengthened, the tomb was closed and reburied; visitation remains possible by speciaf arrangement and permission. The painted decoration is well recorded in black - and -white and colour photographs (by E. Gombosi) and wa-ter - colour facsimiles (by L.J. Majewski; FIGS. 4 and 5).

To investigat the possibility of earlier occupation at the tomb site, a sondage was dug below floor level in the southern part of the tomb (measuring the tomb's full interior width and a little more than half its interior length; FIG. 8\}. Earthy debris immediately below floor level ancf further below contained pottery remains of almost exclusively Lydian
types. About. 45 m . below floor level appeared (the top of) a partly ,destroyed cist grave. oriented quite differently trom the Tomb of Chrysanthios, formed of pan tiles set on edge, and containing the right oower arm and right leg bones of a mature person (estimated as over twenty years old by V.J Harward). Three lamp fragments recovered wit- hin the cist grave space belong to Hellenistic and Roman types; they might be intrusive. but the grave form and tiles are perhaps most com- patible with a date in the late Hellenistic or Roman Period (FIGS. 6,7).

The cist grave intruded on the rubble stone sockle of a wall of the Lydian period, founded on bed rock or sterile soil. The flat upper surface of the sockle which had not been disturbed by the grave indicated that there the sockle was preserved to its full original height, 74 m . (FIG 7). Nearby (below the southwest corner of the Tomb of Chrysanthios). parts of a pottery brazier rested upright in ashy debris, evidently in situ to one side, at approximately the same level as the brazier foot. rested numerous fragments of «bread pans,» one nearly two - thirds complete.

## Limestone Blocks and Tumulus Tomb (grave 77.1)

Two groups of limestone blocks, located on a hillslope north of the 'Kekliksuyu torrent and just east of the road connecting the Artemis Temple with the İzmir - Ankara highway (at W 134-140/S. 695-701 on the «B» grid) and noticed for the first time by Expedition members in 1976, were investigated in 1977 (by V.J and C.S. HarwardJ. One group belongs to a platform or paving. it has a lower course which consists of nine blocks of irregular shapes and sizes, occupies a space ca. 2.60
m . by 3 m . on a side, has two straight sides meeting in a right - angle corner, and rests at least partly on a thin stratum of debris containing pottery remains of Lydian type and overlying bed rock; and an upper course which consists of a single block.

The other group of blocks, located ca. 10 m . south of the first, belongs to an incomplete tumulus tomb complex (FIGS. 9-12). Although the tumulus mound no longer is apparent, its one - time existence is indicated by the absence of outside faces on the tomb walls and the presence of rubble packing outside them. The tomb complex consists of a single chamber and dromos: the latter constructed of roughly trimmed blocks, mostly sandstone and conglomerate, laid in irregular courses; the former of precisely jointed and evenly trimmed limestone blocks. some displaying pry holes and joined by metal clamps (of iron and rectilinear-C form; bedded in lead within swallow - tail sockets). The Chamber is nearly square in plan (2.22 m. by 2.23 m .) and orien-
ted with its axis to the compass points. The floor is paved with rather thick slabs. The south and west walls are only one course high, the north and east walls preserve two courses which stand to a height of ca. 1.60 m . above floor surface. No ceiling blocks were recognized, and the rough finish of the north wall's top and evidently original surface indicates that the chamber never had a stone roof of the conventionar tumulus tomb kind. The doorway, in the middle of the west wall had a door in the form of a single block, with thick outside tlange on sides and top. Against the side walls are two couches, each consisting of a thick slab of limestone, slightly dished out in its upper surface, tor the bed, and two upright slabs below at either end, tor the feet.

Features of design (form of couches) and crudities of workmanship (surface finish of blocks, irregular form of door block) distinguish this tomb from the usual tumulus tombs of Sardis and Bin Tepe. The foun- dation of the tomb alsa is unusual in being a thick stratum of earthy occupation debris (further, infra) rather than bed rock.

Evidence tor the date of construction may be provided by pottery remains recovered from a lens of limestone chips, located at and just below the floor level of chamber and dromos and presumably deposited when the tomb was being built (as V.J. Harward saw). The shapes and decorative systems of the pottery from this lens are characteristic Lydian ones (skyphoi; wavy - line and streaky - glaze decoration) which sug- gests that the tomb would have been built sometime between the later seventh and earlier fifth centuries B.C.

No identifiable remains from that period were recovered in the tomb itseit; perhaps not surprisingly, since the situation ot the door block, tilted backwards in the dromos, and of a tloor block, extracted trom the floor and resting on end against one ot the benches (FIG. 12, above) shows that the tomb had been aggressively violated. Both Chamber and dromos did yield human bones and near - complete ceramic items, however, which evidently attest secondary use of the tomb; tor the bones were recovered underneath the benches as well as on them and in the dromos besides, and the ceramic items ali belong to a period or periods appreciably later than the Lydian. These items may have a chronological span of three centuries or more and should represent at least two different deposits; perhaps one in the third or second cen- tury B.C. (e.g., o lagynoid vessel, several globular unguentaria, terra-
-cotta figurines of a zebu and a herm4, FIGS. 13, 15, 16) a molded relief bowl. two lamps) and another in the first century B.C. or AD. (e.g., several bowls, jars, and fusiform unguentaria, four lamps, FIG. 14; Se-veral closed vessel and dish fragments with painted and incised ins- criptions which presumably are funeral texts ${ }^{5}$ ). To the later period should belong part of a limestone funerary chest, recovered on one of the benches in the chamber.

Beneath the dromos and chamber (in the space from which the floor slab had been extracted), sondages were made to bedrock and sterile soil, which lay ca. 2.40-2.70 m. below the tomb's floor level \{FIG. 12, below; a level change of some five meters in a ten meter distance from the bedrock over which the limestone «platform» blocks to the north rest). in the dromos sondage, two rubble wall foundations resting on bedrock or sterile soil (one preserved to a maximum height of 1.65 m ., FIGS. 12, 17) and ceramic wares of characteristic Lydian domestic types, including many fragments of «bread pan,» indicated that the site had been a habitation zone in the Lydian period before the tomb was built (as considerable Lydian pottery remains scattered on the grn- und surface in the general vicinity of the tomb also suggest).

Excavations at the tumulus tomb and the Tomb of Chrysanthios yielded explicit evidence tor the history and nature of occupation in re-gions of Sardis archaeologically unexplored before 1976. Both the hill- slope of the former and the small valley of the latter were habitation zones in Lydian times; the hillslope became a burial ground well before Roman, perhaps as early as Lydian, times, and may have formed part of the same cemetery zone to which the chamber tombs and Pyramid Tomb on the opposite side of Kekliksuyu torrent belong6. the valley became a burial ground by Hellenistic or Roman times and remained one as late as the fourth century AD.
(4) A herm closely similar to ours occurs in a figurine (representing a herm being crowned by an Aphrodite) from Myrina, tor which R. A. Hlggins has suggested a date in the last quarter of the second century 8. C.; Greek Terracottas («Methuen's Handbooks of Archaeology» London 1967) XXXVIII, 115, pi, 53E (8ritish Museum C528). For o bronze statuette of o zebu from Smyrna, F.E. Zeuner, A History of Domesticated Animals (New Vork 1963) 243 fig. 8:42.
(5) One of the texts evidently begins with the word epi like the dated funerary texts on urns (most if not all, apparently, belonging to the first century 8. C.) recovered from chamber tombs in the necropolis hills by H.C. 8utier, w. H. 8uckler, D. M. Robinson, Greek and Latin Inscrlptions; Sardis VII (Leyden 1932) 107-108, 111, 115-117.
(6) H. C. 8utler, The Excavatlons Part 1 1910-1914; Sardis 1 (Leyden 1922) 167 170 Hanfmann (Suprcı, n. ) 31..

## Northeast Wadi

The excavation sector known as Northeast Wadi, or NEW, was emptied of fluvial debris (from Acropolis torrents, which had completely filled earlier trenches) and expanded slightly to the south and by some twelve meters to the northwest; tor the purpose of (a) testing HC. Butler's report indicating that early Iron Age and perhaps Bronza Age material survived in stratified deposits in than region ${ }^{7}$, and $\cdot(b)$ finding more of the rich Lydian occupation material which had been exposed there in 1969 and $1914^{8}$.

The expanded part of the trench was dug in most places to a level just below that of Lydian occupation floors and building foundations, but in its northwestern extremity only to the surface of an ancient tor- rent bed (of Hellenistic or Roman date?) just above the Lydian stra- tum. in the 1969 trench, a sounding, measuring ca. 3.20 m . by. 3.85 m . on a side, was dug to bedrock and sterile soil.

The deep sounding exposed only a few pottery remains, none of them recognizably earlier than the seventh century B.C. This evidence, taken together with Butler's explicit reference to stratified material be- neath a Lydian occupation level in his trench, probably located only twelve - to fifteen meters further up the torrent bed, indicates that earlier occupation material is not evenly distributed in the Northeast Wadi region, and may exist only in the deeper hollows and dales of the ancient landscape.

The Lydian stratum in the expanded part of the sector exhibited remains of several walls and wall foundations built of fieldstones. Of these architectural remains the best preserved and most intelligible is o small ,quadrilateral cellar, ca. 2 m . on a side and ca. 1.50 m . deep; the cellar walls are one stone thick, and some courses are laid in «herring-
bone" arrangement (the floor was earthen). This Lydian stratum yiel<:led pottery remains of considerable quantity and variety, including «Achaemenid» bowls, a handsome marbled lydion, small fragments of large closed vessels decorated in a Wild Goat or similar Orientalizing style, such as had been recovered in 1969, and one small fragment of the uni,que «Horse_man Vase,» other fragments of which had been re-covered in 1914 and which is noteworthy for its exotic bichromy and

[^0]relief decoration and combination of Geometric and Orientalizing stylistic elements?

## Monumental Lydian Structure

By far the most significant monument investigated in the 1977 season is a massive structure of the Lydian period (probably seventh cen- tury B.C.), constructed of mud brick on a stone sockle: the brick cons- truction survives to a maximum height of six meters and displays some forty courses; the sockle has a stepped face of rough ashlar masonry crowning a glacis of roughly - trimmed, stones. The construction appe- ars to extend tor at least fifteen meters as a solid mass. The purpose which it served is not yet clear; a fortification wall or gate seem likely possibilities (FIGS. 18 -21).

The structure is located in, and is the substance of, a hillock situated close to the İzmir - Ankara highway and directly south of the an- cient synagogue entrance (at ca. E. 116.8-138.5/S. 51-58.5 on the «B» grid). When the hillock was partially bulldozed away in the 1950's to make space tor the highway, the mud brick was exposed in section in the scarp of the surviving part; but the brick's identity and antiquity were not recognized until 1976 (by A. Ramage; see «Sardis, 1976» in an earlier issue of this Journal).

The upper parts of the hillock scarp show clear traces of post - Ly-dian occupation above and intruding into the Lydian structure (pits, Roman water pipes, walls with mortar; although the surface of the hil- lock exhibits some Lydian as well as later pottery remains). A cons- picuous feature of the hillock scarp which we do not yet understand is the series of parallel strata which slope down diagonally from the highest preserved part of the Lydian structure towards the West (FIG. 18). The lowest of these strata rests on a similarly inclioed surface of what evidently is collapsed and partly disintegrated mud brick; that stratum, at least, contains burnt matter and remains of Lydian pottery types.

The Lydian structure is understood at present solely from remains which are exposed in the hillock scarp and in two trenches which were dug at the foot of the scarp in a roughly east - west alignment. it sho- uld be borne in mind that only one face of the structure has been de- tected, and of that only its stone parts. Ali mud brick vertical planes are the result of arbitrary excavation into the interior of the structure.
(9) G. M. A. Hanfrnann, «Horsernen frorn Sordis,» AJA 49 (1945) 570•581.

Mud brick. The mud brick is preserved to a height of six meters and evidently comprises obout forty courses of brick. Throughout most of the mud brick mass some mud brick forms are clearly revealed by colour or texture, while adjacent expanses show no sign of individual bricks. Mud mortar also is not easy to recognize. The bricks oppear to vary considerably in size, but to have an average dimension of 50 m . by 30 m . by. 12 m . and to have a uniform, or neorly uniform orientation, oblique to the line of the trench scarps. in several adjacent courses, vertical joints appear to coincide.

The lower scorps of both trenches exhibited a series of two or three very norrow horizontal lenses of fibrous matter, often carbonized, sometimes white in colour, which are spaced. 70.-80. m. apart and the same distance above the stone sockle. These !er.ses may tentati- vely be identified as the remains of matting or rushes, laid at certain intervals between courses of brick in order to re-establish an even overall surface or «to ensure quick drying and to assist in preventing longitudinal cracking» as in Egypt ${ }^{10}$.

Stone sockle. The surface of the stone sockle inclines gently to the west at an angle of. $05^{\circ}$ (an altitude difference of ca. 65 m . in a distance of 12 m .). At the top of the sockle is a layer of small field stones which frame and sometimes cap a series of narrow parallel channels, ca.. 06 m . wide, containing woody remains. These channels presumably are the hollows left by timbers which have disintigrated. Directly be- neath the small stones and timber hollows is an even surface of larger stones which represent the top of the sockle proper, a platform ca.. 50 m . thick -made of lorge unworked stones (as determined by a sondoge in the east trench).

To the west, the sockle terminates in a face, which consists of stepped construction in rough ashlar masonry above a sloping glacis of roughly - trimmed stones. The stepped portion, ca. 1.25 m . high, con- sists of eight courses and as many steps of modest height (.12-19m.)

[^1]m.) and depth (. 06 m .). The top of the uppermost step is flush with the surface of the sockle behind. At the foot of the stepped construc- tion. the masonry continues downward in the form of a glacis, which has an incline of ca. $35^{\circ}$ and was excavated to a depth of ca.. 65 m . (at which level excavation was suspended for the season).

Older stone structure (s). Underneath the sockle (as exposed in a sondage in the east trench) are the remains of one or two older structures. built of large stone blocks (Some more than. 70 m . long). roughly dressed, and laid in courses. Directly underneath the bottom stones of the sockle is an outside corner, three courses and ca. 1.20
m . high, with northwest and southwest faces which disappear into the scarps. Below and supporting the corner construction is a similar cons- truction of which only one face. parallel to and slightly outside the north- west face of the corner above. is exposed (FIGS. 19-22). Whether these constructions belong to a single structure or to two is not yet clear. Immediately west of the northwest faces of the corner and struc- ture below and «running up to» them were approximately» eight layers of alternating dark (greenish) «occupation» and lighter (yellow) sandy strata» (Ramage).

Date. Evidence for the date of the structure is provided by pottery remains recovered frnm intact mud brick construction, from what ap- pears to be collapsed and partly disintigrated mud brick resting against the west side of the structure, and from debris underneath (and «sealed» by) the stone sockle. Fragments of Lydian bichrome and Orientalizing wares and of an Ionian cup and Protocorinthian skyphos (the last from debris underneath the sockle FIG. 23). Suggest a date in the last quar- ter of the seventh century for the monumental mud brick and stone structure.

Identity. Too little of the structure as yet has been exposed to establish its identity. Several features, in combination or alone. suggest that it might belong to a fortification system. perhaps a tower - gate complex: size and solidity of construction; location plausible for intersection with the city of an east - west thoroughfare and where east - west routes existed in Roman, Byzantine, and Ottoman times and in the present day; parallels to construction and design features, particularly the stepped
face and glacis of the stone sockle ${ }^{11}$. it is also conceivable, however, that the structure might be an artificial terrace or platform for a monumental building (such as may be attested for this part of Sardis by the remains of substantial Lydian stone sculpture and architecture reused nearby in the Late Roman synagogue ${ }^{12}$ ).

## Miscellaneous Antiquities

Several antiquities were acquired by the Expedition in 1977 from local villagers.

The most significant of these is a tragmentary grave stele of marble which preserves part of an inscription in Lydian and a relief illustrating a funeral banquet, NoEx 77.15, iN 77.8 (FIG. 24). The stele reportedly was tound on the east bank of the Pactolus stream, slightly to the south
(11) Stone sockles with stepped faces appeor in the fortifications of Zincirli (inside face) ond Gordion (outside) R. Koldewey in F. von Luschan, Ausgrabungsbericht und Architektur; Ausgrabungen in Sendschirli il («Mitteilungen aus den Orientalischen Sammlungen.» XII, Berlin 1898) 132 and fig. 40; ij. S. Young. «The Campaign of 1955 ot Gordion: Preliminary Report, AJA 60 (1956) 253-254, pi. 83. A «stepped glacis construction» is associated with the fortifications of Old Smyrna, R. V. Nichols, «Old Smyrna: the Iron Age Fortifications ond Associated Remains on the City Perimeter," BSA 53-54 (1958-59) 87, fig. 24. pis. 9, 19. Glocis and stone sockles with bottered outside foces oppeor in the fortificotions of mony settlements in Asio Minor ond Polestine, R. Noumonn, Architektur Kleinasiens von ihren Anföngen bis zum Ende der hethitischen Zeit (Tübingen 1955) 226ff. (Troy), 258, 283 (Boğazköy), 245-246 (Zincirli). 248 (Teli Halat), 122 fig. 111. 283 (Ros Shomro); T. Mocridy, «Une Citodelle Archoi"que du Pont. Fouilles du Musee Imperiol Ottomon,» Mitteilungen der Vorderasiatischen Gesellschaft 12 (1907) 3-4 (Ak Alon); A. Conze, Stadt und Landschaft; Altertümer von Pergamon 1 (Berlin 1912) 103-104 (Yonıkköy-Neonteichos); Y. Vadin, «Hyksos Fo.rtlfications ond the Bat.terino Rom.»BASOR 137 (1955) 23-32 (various Settlements in Palestine); M. Dothan, «Akko : inlerim Excovotion Report; First Seoson 1973-4it BASOR 224 (1976) 5-8 (Akko-Acre).
Wooden beams loid in parallel rows between stone sockle ond mud brick superstructure appear in the fortifications of Zincirli, Naumann, supra. 88; cf. similer placement of «o coating of straw and mud» in fortifications of Tarsus, H . Goldman, The Iron Age; Excavations at Gözlü Kule, Tarsus 111 (Princetı.n 1963). 11 Coincidence of vertical joints in adjocent courses of mud brick appeors in the fortifications of_Carchemish. C. L. Woolley, T. E. Lawrence, Carchemish; Report on the Excavations at Djerabis on Behalf of the British Museum (Landon 1914) il 90-91.
(12) For these Lydion remains, G. M. A. Hanfmann, «The Sixth Campaign at Sardis (1963)» BASOR 17,4 (1964) 34- 35, 38- 44, 50-51; G. Neumann. «Zur epichorischen Inschrift aus der Synagoge von Sardeis,» Kadmos 4 (1965) 158-164; Hanfmonn, «The Sixteenth Compoign ot Sardis (1973).» BASOR 215 (1974) 52, 54 fig. 22.
of sector PC (at ca. W. 150-250/S. 650 on the «B" grid), a region wit- hin the cemetery zene of Sardis but one where stone antiquities have been recovered in secondary contexts. The inscription consists of the left - hand ends of two lines; R. Gusmani has read in the upper line the male name Manes in the genitive, in the lower line tlie verb «has made.» preceded by the terminal letter of another work, perhaps another male name in the genitive. The banquet scene is one of conventional type ${ }^{13}$ and shows a man reclining on a covered kline and holding a rhyton, a woman sitting on the foot of the kline, and a young girl standing at the foot. The faces of both mature figures are lost; the girl, with her long dress and long hair and winsome visage, is o figure of special charm. R. Gusmani and N. H. R mage Plan a detai!ed publication.

Another marble slab with inscription and relief decoration. repor- tedly merely as found «at Sardis,» is a curious memorial evidently dating from Roman times. NoEx 77.16, iN 77.9 (FIG. 25). The slab is a thin panel, now nearly square but broken along one side. On the face is carved a figure within a border frame, and in the picture field is inscri- bed a single word (with red paint surviving in the letter channels). hero, i.e., «to the here,» or «to the deceased.» The figure is a crude image of a man, with frontal face, carved in flat relief. What does he hold in his hand (s) at the upper right? Is the L - shaped form at the lower left his leg and foot or something else? Is the slab a votive offering for a hero proper, or merely a grave stele?

Noteworthy among the other acquired antiquities are a grave stele of a gladiator a retiarius, NoEx 77.2 (FIG. 26) ${ }^{14}$ and a ceramic mold tor a spur handle of a cup or bowl, NoEx 77.6 (FIG. 27).

[^2]
[^0]:    (7) Butlar (supra, n. 6) 151-152.
    (8) G. M. A. Honfmonn, J. C. Woldboum, A Survey of Sardis and the Major Monuments Outside the City walls: Sardis Rei:,ort 1 (Combrldge, Masa. 1975) 118-125.

[^1]:    (10) S. Clarke. R. Engelbach, Ancient Egyptian Masonry; the Building Craft (London 1930) 210.

[^2]:    (13) For the use of klinai in dining and kline scenes, H. Kyrieleis, Throne und Klinen; Studien zur formgeschlchte altorientalischer und griechischer Sit-zu"d Liegemöbel vorhellenistischer Zeit ( «Jdl Erg.,» 24; Beriin 1969); B. Fehr, Orlentalische und Griechische Gelage (Bonn 1971); J. M. Dentzer, Aux Origines de I•Iconographie du Banquet Couche,» RA (1971) 215-258.
    (14) cf L. Robert, Les Gladiateurs dans I' Orient Grec ( Bibliotheque de ••Ecole des Hautes Etudes," 278; Paris 1940).

