

SARDIS: ARCHAEOLOGICAL RESEARCH AND CONSERVATION PROJECTS IN 2000

*Crawford H. GREENEWALT**

Excavation, topographical recording, conservation, restoration, touristic enhancement, and study projects at Sardis in 2000 (early June to mid-August) were conducted by the Archaeological Exploration of Sardis, or Sardis Expedition, which is co-sponsored by the Harvard University Art Museums and Cornell University. For support, assistance, and trust, as well as for fundamental permissions, the Sardis Expedition is deeply grateful to the General Directorate of Monuments and Museums, particularly to Director general Dr. Alpay Pasinli, Excavations Division Director Melik Ayaz, and to Excavations Division Officer Nurhan Ülgen; and to the Manisa Museum, Director Hasan Dedeoğlu, and, Financial Administrator Celalettin Şentürk. Their support and help throughout the season, and in a particularly difficult situation, is deeply appreciated. The Ministry of Culture Representative was Işıl Aktaş, of the Istanbul Archaeological Museums; for her positive contributions, the Sardis Expedition is very grateful.

Excavation was conducted in several parts of the site, and exposed archaeological materials ranging in date from the Lydian era of the 7th and 6th century BC to the Byzantine and Ottoman eras of the 14th and 15th centuries AD. Results of excavation and related research are here summarized in earlier -to-later chronological sequence.

City defenses of the Lydian era continued to be explored, in several locations. In the place where an earthwork glacis abuts the fortification wall, and where wall and glacis had been sectioned by the modern highway, in 1950 (sector MMS; Figs. 1,2), results of reinvestigation strongly suggest that the staggered west face of the wall (which the glacis abuts) is not a single -phase construction of! indented trace! Design, as had previously been assumed, but a two-phase construction that involved a major design change. The lower, outer face construction belongs to the first phase, and once may have risen to much greater height; the upper, inner face construction, built of smaller bricks and lacking the layers of saplings that occur at 75-90 cm. intervals (between every 6-7 courses) in lower face construction, belongs to the second phase, and should be slightly anterior but essentially contemporaneous with the earthwork glacis. (All those features antedate substantial destruction of the Lydian defenses in the mid 6th century BC, probably when Sardis was captured by the Persians, in the 540s BC.) The roughly horizontal "shelf" between the two faces was evidently never an exposed surface. The reasons for creating it "retreated" upper face are unclear. Might the "self" have been created to secure the glacis, by "keying" it into wall construction?

* Prof. Dr. Crawford H. GREENEWALT, JR., Department of Classics 342 Dwinelle Hall 5 University of California-Berkeley, CA 94720 ABD

Attempts to trace the Lydian defenses to the north, in the locale of the Roman palaestra (sector PA; Figs. 1, 2: D), continued to be inconclusive. Lydian earth construction and stone packing were located under massive Roman fills in the Palaestra and under a Roman street east of the Palaestra; and are possibly but not demonstrably part of the defenses.

In 1999, Lydian defenses Figs. 1, 2: B located some 200 m. To the south (i.e., of the intensively explored, 150 m.-long stretch, in sectors MMS/N, MMS, MMS/S; Figs. 1, 2: A seemed to resolve a major question about the orientation of Lydian defenses so far located and identified, and to show that, in this part of Sardis, they faced west and protected territory to the east. If so, and if the chain of low mounds on the north side of the site (Figs. 1, 2) marks the north line of Lydian defense, the east line of Lydian defense should be east of the mounds. Since Lydian defenses seem to coincide with Late Roman defenses on west and north sides of the site, the east line of Late Roman city wall presented a logical place to search for the Lydian wall; rather to research for it, because in that location pre-Roman defenses had been unsuccessfully sought thirty years ago. Since then, however, Lydian defenses discovered on the west side of the site (in sectors MMS/N, MMS, MMS/S) have shown what to search for; and less than an hour of searching on the east side last summer located remains of the Lydian fortification wall, which were then explored in excavation. Where the Late Roman city wall rises above the alluvium of the plain on an east ridge of the Acropolis, (sector CW6), it rests directly on remains of the Lydian wall, which in places is more than 16 m. thick, stands more than 11 m. high, and may be traced for a distance of 350 m. (Figs. 2-4). As on the west side of the site, here the Lydian wall has a stone socle and upper parts of coursed mudbrick: the socle (of roughly trimmed or untrimmed fieldstones) has a stepped face (Fig. 4) and where the ground is inclined, was built in a series of stepped horizontal surfaces, which provided stable support for coursed mudbrick above; the latter contains layers of saplings at regular intervals of 1.-1.10 m. in three "Areas" that were excavated only one segment of wall face was located; but that face could be traced at ground level for a distance of 150 m. to the south (Fig. 3, area 3). In another "area", extra thick construction presumably represents a combination of wall and tower or bastion; a feature unattested in previous exposures of the Lydian wall (Fig. 3, area 2). In the third "area," a concentration of baked and vitrified mudbrick attests intense firing of a narrow space within the mudbrick construction; and can only be explained by further excavation Fig. 3, area 1).

These Lydian city wall remains on the east side of Sardis are major evidence for city topography. Together with Lydian city wall remains in other parts of the site they show that the core of Lydian Sardis was on the north side of the Acropolis; and, if the locations of Lydian and Late Roman city walls generally coincide, as they seem to (apart from a Late Roman extension to the west; Figs. 1, 2), that the Lydian city core had an area of about 125 hectares, and that the city core of Sardis remained constant for the next thousand years (during Persian, Hellenistic, and Roman eras).

At the end of the 1999 season, limited excavation below the floor of a Late Roman house had exposed the corner of a Lydian house, which had been destroyed by fire, presumably in the mid 6th century BC and in connection with the Persian capture of Sardis in the 540s BC. In 2000, excavation continued inside the house corner, where half of the exposed space of ca. 3.6 square meters is occupied by a clay bench (of undetermined function). The two small spaces on either side of the bench, which together have an area of 1.8 m. contained nearly 50 artifacts, in the 50-60 m.-high stratum of house destruction debris. In the destruction, some artifacts had been resting on the floor of the house; others had fallen from above (from shelving or the like). Artifacts were mostly household items, and the majority are kinds known from other Lydian houses, located nearby (sector MMS) and also destroyed in the mid 6th century BC: two iron brackets (perhaps for shelves), pottery vessels of standard shapes and decorative conventions (table amphora, dinos, wavy-line hydria, oinochoai, skyphoi, cooking

pots, "yogurt bowls," and a Lydion); also ceramic "bread trays," loom weights (21; of two varieties), and a lamp. ("Yogurt bowls" are plain containers made in shallow and deep forms; they are distinguished by unfinished interiors, which retain the finger ridges made when the bowls were thrown on the wheel, and by lopsided forms and elliptical rims. They are common in Lydian household artifact assemblages; and are perhaps an ancient equivalent of modern "throw-away" plastic containers) One of the cooking pots contained chickpeas, and one of the skyphoi contained pine nuts (identifications by C. Hastorf). Artifacts previously unattested in Lydian houses at Sardis that were destroyed in the mid 6th century BC include a wooden comb, four bronze pins of U-shape, an ivory "toggle" (perhaps part of a horse harness or fastening for a gorytos; and two iron hoops for a wooden barrel or bucket (Fig. 5). Each has a diameter of ca. 70 cm. and a 3.8 cm.-wide band, which is perforated by iron nails and carries pseudomorphs of wood (some identified as oak, by P.I. Kuniholm).

The Temple of Artemis continued to be studied, by F. K. Yegül. Precise measurements of the Hellenistic naos (i.e., within the Roman peripteral colonnade foundations), taken by Yegül and architect P.T. Stinson, conclusively showed that it has a horizontal curvature (as previously had been deduced from less precise measurements, by T.N. Howe).

On the east side of the Palaestra of the Roman Bath Gymnasium complex (sector PA), a small part of the Roman street was excavated, in connection with tracing the Lydian defenses. It is one of only four or five streets that are known at Sardis. Excavation revealed a drain on the west side; concrete and stone bedding for paving and stone paving, which are dated by a coin of the House of Constantine (AD 335-337) no earlier than the second quarter of the 4th century A.D. and which were damaged, from wear or possibly earthquake; repairs of an undetermined later date; and evidence of demolition activity in the early Byzantine era. Excavation showed no evidence of a street or streets earlier than the 4th century A.D., but features of same might have been removed when the 4th century bedding and paving were created.

In Middle Byzantine Church "E," of the 13th century (at sector PN; Fig. 1, no. 10), limited excavation aimed to clarify the later history of the Church and a hypothesis that colored window glass from church E, or its predecessor, Church EA, had been reused to make glass bracelets and other jewelry in the 14th -17th century Ottoman village, which grew up nearby; but apart from some colored and gold-glass tesserae, fallen from the ceiling, and a stone trough, added when the Church became a workshop or stable, there were no significant gains in information to add to evidence of previous excavation in the Church (1962-1963, 1972).

Of a few inscriptions recovered in 2000 the more noteworthy include two epic-horic graffiti on skyphos fragments of the 6th or 5th century BC, one a graffito in Carian (IN 00.6), the other possibly in Lydian or Phrygian (IN 00.5), according to R. Gusmani; a marble stele dedication of AD 98-99 to a mother goddess, Meter (Mo)tyllene (IN 00.1), recovered near the Synagogue (where sculpture and inscriptions associated with a mother goddess and a metroon had been reused; and thus providing slight additional evidenced that a sanctuary of the Mother had been located in that part of Sardis); the base of a statue for Emperor Hadrian, perhaps made to commemorate his visit to Sardis in AD 124 (IN 00.4); and a large building inscription of Emperor Arkadios, dated 398 by consul names (Hono)rius and Eut(ychianus). The Arcadius inscription was recovered in a Late Roman or Byzantine building, possible a church, called Building D, during cleaning of one of its piers; the inscription is probably a reused spoil from an older building (and not the dedicatory inscription of Building D).

Conservation, restoration, and reconstruction efforts focused on objects and monuments of various materials. Routine treatment and monitoring of objects included consolidation of four wooden pyxides and a wooden corn, all probably Hellenistic, which were recovered in excavations of the Manisa Museum from a tumulus chamber

located east of Salihli. Sections of Late Roman Mosaic paving (ten sections, with a total area of about 20 square meters), which had been lifted from the portico of a colonnaded avenue (in sector MMS/N) were backed with materials developed and tested by conservator K.J. Severson; they consisted of (1) an "intervention" layer of white cement and lime (for reversibility) and (2) a layer of glass fiber reinforced cement, which is strong and relatively light-weight (GFRC; Fig. 6). Twenty-odd marble inscriptions and sculpture fragments, which had become covered with potentially damaging organic growth and other accretions, were cleaned with mild detergents and water rinses applied with a pressure sprayer. A marble votive menorah, excavated in the Synagogue in 1963, was restored (by K.J. Severson; Fig. 7). The floor of a peristyle court in a Late Roman House (sector MMS, room I) was partially restored. The original floor had been paved with colored stone in opus sectile technique. The restored floor is made of concrete containing marble chips, which, while still wet, was impressed with templates made in appropriate opus sectile shapes.

Of great concern to the Sardis Expedition is the mining activity associated with the Pomza Export firm in the Nekropolis hill, on the west side of the Pactolus stream. Large parts of the hill have been removed; in their place are large gashes that are unsightly and conspicuous. This devastation is ruining the historic and beautiful setting of Sardis, one of the great cities of ancient Anatolia and of the Ancient World; and the ruin is irreversible.

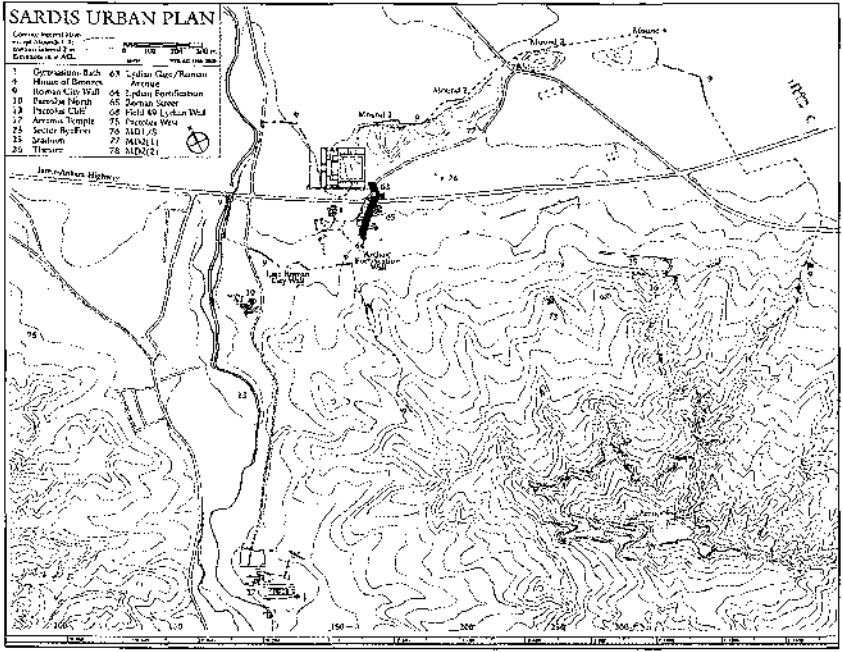


Fig. 1: Sardis, site plan

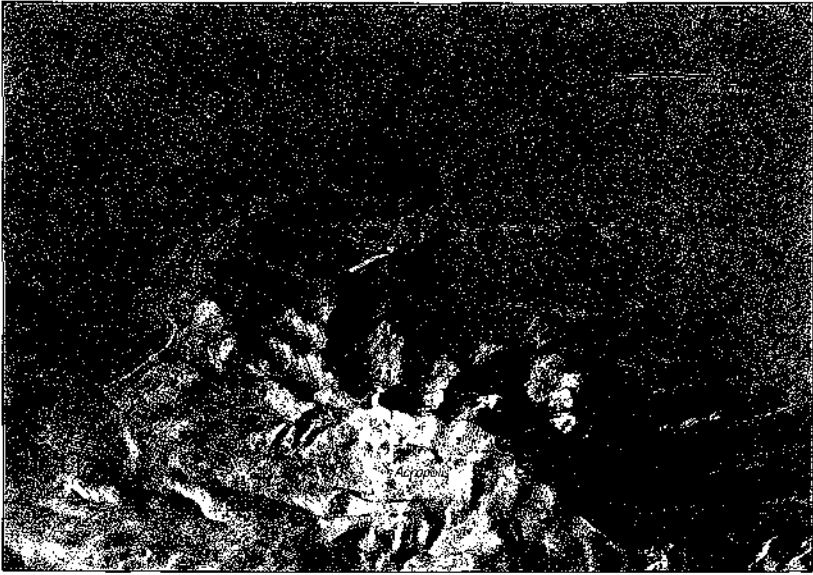


Fig. 2: Sardis, computer generated "birds'-eye view" of the site, looking north: A, Lydian city defenses excavated in 1977-2000 at sectors MMS/N, MMS, MMS/S; B, Lydian city wall excavated in 1999, at sector CW32; C, Lydian city wall excavated in eastern Sardis, sector CW6; D, Palaestra of the Roman Bath-Gymnasium Complex and street to the east of the Palaestra

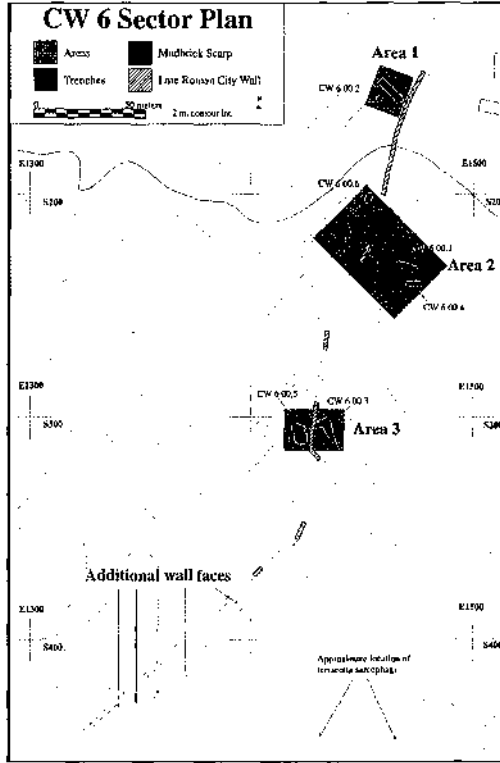


Fig. 3: Late Roman and Lydian city walls remains on the east side of Sardis, sector CW6, plan



Fig. 4: Late Roman and Lydian city walls on the east side of Sardis, view looking south. The Late Roman wall (about 2 m. thick, standing to a height of 7 m.; built of mortared fieldstones) is bedded on remains of the Lydian wall, which is at least 16 m. thick. The east face of the stone socle appears at far left; the west face is somewhere to the left of the man in the white shirt at far right (sector CW6, area 3)

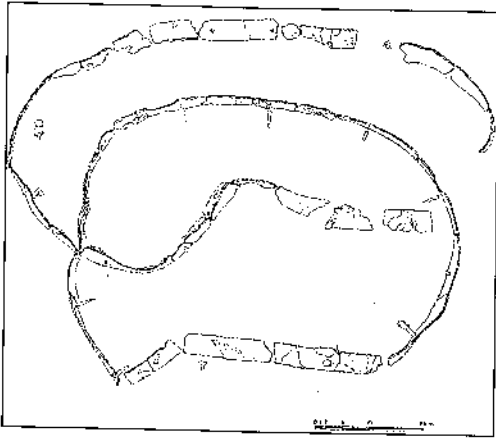


Fig. 5: From the corner of the Lydian house: iron hoops from a wooden keg or barrel, drawn as exposed in excavation (by C.S. Alexander)



Fig. 6: Late Roman Mosaic paving, upside down and ready for backing (by conservators C. Riccardelli, K.J. Severson, and M. McNamara)

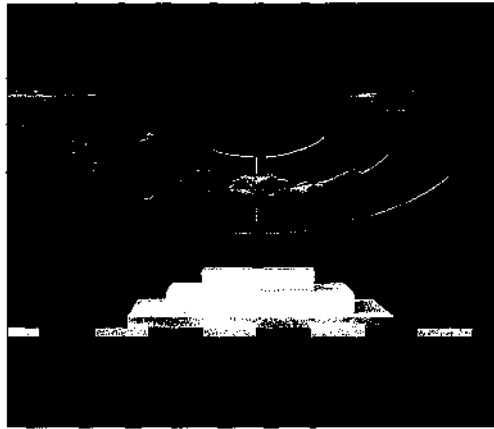


Fig. 7: Votive 7-branch candlestick or menorah, excavated in the Synagogue in 1963; restored in 2000 (by K.J. Severson)