

SARDIS: ARCHAEOLOGICAL RESEARCH AND CONSERVATION PROJECTS IN 2003

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Excavation, conservation, restoration, touristic enhancement, and study projects at the city site of Sardis (Fig. 1) were conducted for two months in 2003 (early June to mid-August) 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 former General Directorate of Cultural Resources and Museums, particularly to Director General Dr. Alpay Pasinli, Deputy Director General Aykut Özet, Excavations Division Director Melik Ayaz, and to Excavations Division Officer Nurhan Ülgen; and to the Manisa Museum, Director Müyesser Tosunbaş and Assistants Emin Torunlar and Sevgi Soyaker. The Ministry of Culture and Tourism Representative was M. Tevfik Göktürk (Ankara, Museum of Anatolian Civilizations), whose considerable excavation experience, numismatic experience, perceptive and rational ideas, and supportive attitude towards research and scholarship greatly improved all aspects of the 2003 season programs.

Excavation was conducted at four Locations, three in the City Site and a Tomb in the Pactolus Valley (Fig. 1,) and exposed archaeological material ranging in date from the Archaic or Lydian era of the 7th and 6th centuries B.C. to Late Roman in the 4th-7th centuries A.D.

At the Lydian city defenses, on the west side of the city site (Sector MMS), excavation concentrated on the locale of the large recess in the west side of the fortification wall; specifically on occupation remains below the mid-6th century B.C. floor of that recess. One of several questions posed by those features is the construction date of the Early Archaic defenses: a fair amount of diagnostic pottery evidence shows that they were destroyed in the mid 6th century B.C. (presumably when Sardis was taken by the Persians under their king, Cyrus the Great); but when were they built? In previous excavation below the recess floor of the mid 6th century B.C., a fragment of Wild Goat-style pottery had been recovered under an earlier cobbled floor surface (called Lot 31 in 2003) that passes under the fortification wall foundations; and thus antedates them. The decoration of the pottery fragment includes incision, which is generally understood to indicate for Wild Goat-style pottery a date no earlier than ca. 610 B.C. In excavation - by Nicholas Cahill - in 2003, the same (early; Lot 31) cobble floor also was found to pass beneath sandstone blocks of a substantial building that antedates the fortification wall (its stones appear at far right in Fig. 2). That building - the function of

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which is unclear - may have had a short existence; but it represents another intermediate building phase (in addition to that of the Lot 31 cobbled floor) between the stratum with the Wild Goat-style pottery fragment and fortification wall foundations. If this analysis is correct, construction of the fortification wall can hardly have begun before ca. 600 B.C., and might well be a decade or more later; its massive dimensions (20 m. thick here and in other places; at least 15 m. high; and presumably its full circuit around the city site of three and a half kilometers) was completed, and it underwent a series of major design and construction changes, all within half a century: in archaeological terms, "the blink of an eye"; in human terms, however, not an unreasonable period of time for an episode in monumental construction.

Excavation in 2002 immediately below the mid 6th century B.C. floor surface of the recess had produced three small coins, each of them one-twelfth of a stater: a gold croeseid, with obverse device of confronted lion and bull protomes; a silver coin of Miletus, with obverse device of lion foreparts, its head reversed; and a corroded silver coin, the obverse device of which was assumed - in 2002 - to be damaged beyond identification. Mechanical cleaning of the corroded silver coin (by conservator Kent Severson) in 2003, however, revealed its obverse device: another croeseid lion and bull (Fig. 3). These coins from a context that antedates the mid 6th century destruction, and thus presumably the beginning of Persian rule in Anatolia, provide the evidence of silver as well as of gold for the bimetallic currency that is commonly associated with King Croesus. (The three coins are the subject of an article written by excavator Nicholas Cahill and numismatist John Kroll, and recently submitted for publication to the *American Journal of Archaeology*).

Limited excavation and cleaning took place in buildings and occupation strata of Late Roman times: at the west side of the Roman Bath-Gymnasium Complex (around a doorway connecting the Bath Complex with a Byzantine Latrine; Fig. 1 no. 1), in sectors MMS and MMS/S (Fig. 1, no.64), and around a large unexcavated Late Roman and Medieval building in the central part of the city site called building A (Fig. 1, no. 24). From a Late Roman dump in sector MMS was recovered a small ceramic ampulla, with molded relief decoration on both sides; the image on one side, according to Professor Marcus Rautman, shows a stylite Saint, on a column, flanked by a devotee and a cross (Fig. 4). In one wall of Building A, reused as construction material, is a column drum, lightly inscribed with a cross and a text in Greek (partly in Ligatures) reading "IE(sus) CH(ristos) NEKA," ("Jesus Christ is Victorious," or "MAY Jesus Christ be Victorious").

The tomb in the Pactolus valley (Fig. 1, far left) belongs to a large cemetery that was excavated extensively by the Butler Expedition between 1910 and 1914, sporadically by the Harvard-Cornell Expedition since 1959. The tomb (03.1) is located near the stream, on its west side, just across from the Expedition camp; reportedly, it had been discovered by chance, during agricultural activity in 2002. Like many tombs in the Pactolus valley, it is a chamber tomb; unlike the majority of excavated chamber tombs in the Pactolus valley cemetery, which had been thoroughly pillaged before excavation, this one appears to have been little disturbed - and perhaps undisturbed - since its last interment evidently in the late 5th or early 4th century B.C.

Typically, the tomb has a vertical façade, an entrance corridor (or *dromos*), and a rectilinear chamber with benches against side and back walls, all cut from conglomerate bedrock (Fig. 5). The dromos was blocked with earth and fieldstones, the latter in upper and lower piles that probably belong to two post-interment blockages (Figs. 6, 7).

Upper parts of the chamber contained earthy debris mixed with sand and gravel, much of which probably is conglomerate ceiling collapse. (A hole, penetrating the chamber from modern ground surface above, had led to the discovery of the tomb.) Roughly rectangular (2.70-3. m. long, 2.10-2.35 m. wide), the chamber had three conglomerate-cut benches, two at the sides, one at the back. All three supported human skeletal remains, mostly in fragile condition (Figs. 5, 8) On the bench at the back of the tomb, remains of only a few bones survived. Each of the side benches supported an

articulated skeletal assemblage, laid out in an extended position with head at the entrance end of the chamber. The leg bones of one were bent outward, in a "bow-legged" position (bench C; Figs. 5, 8); perhaps because the legs originally had been placed flexed upward (possibly due to inadequate leg-room on the bench), and after decay of soft parts, had fallen outward(- as has been proposed for similarly positioned leg bones in one of the Shaft Graves of Circle 'B' at Mycenae). The bones remain to be studied. Field measurement of the left tibia of the skeleton on the east bench (bench A) suggested to Anthropologist Ethne Barnes "a small stature around 152 cm. (5 feet), most likely female." (personal communication, 27.X.2003).

Some nineteen objects and object lots were recovered in the chamber, most of them related to cosmetics and personal adornment. Some rested on the side benches (a stone *alabastron* by leg bones on the west bench, bench C; Figs. 5, 8; plain ceramic *lekythoi* at the head of the west bench, bench A); others rested in fill in the central space between benches.

There were seven-to-eight plain pottery *lekythoi* (like the one at far right in Fig. 9; all friable and poorly fired); four core-formed glass vessels (*alabastron*, miniature oinochoe, two *aryballoi*; the *alabastron* and one *aryballos* were intact, Figs. 9, 10; the other two vessels were missing small parts); a black-glaze, palmette-stamped dish, an Attic red-figure *askos* (Fig. 9), an iron disk having a short tang with iron studs and adhering woody remains or wood pseudomorphs (perhaps a mirror; Fig. 11); beads of glass, shell, stone, and perhaps other materials, which, like several other items remain to be cleaned and studied. The most (chronologically) diagnostic item is the Attic red-figure *askos* (Fig. 9); the decoration of which Professor I. McPhee dates "to the last quarter of the 5th century (later perhaps rather than earlier" (personal communications, April, May 2004). As is true of excavated assemblages from many other tombs of the Persian Era at Sardis, no items of Persian design were recovered from this Tomb.

Conservation and site maintenance projects in 2003 included objects (like the Roman glass goblet with paper-thin walls restored by conservator P. Artal-Isbrand, Fig. 12), mosaic pavings, and architecture. Backing of mosaics from a Late Roman portico (sector MMS/N) continued with paving segments that had been damaged in an accidental fire in 1997. In 2003, fourteen of those segments (with a total surface area of 13 square meters, were backed with the relatively light-weight construction of Glass Fiber Reinforced Cement (GRFC) in the process originally developed by conservator K. J. Severson, and, in recent seasons, further developed by conservator D. Fullick.

Since reconstruction thirty-five years ago, the marble columnar and aedicular facades of the "Marble Court" of the Roman Bath-Gymnasium Complex ... have become discolored by organic growth; and the restored red paint in the inscribed dedicatory text has streaked over entablature surfaces. In 2003, half of the Court and most of the Court façade marbles were cleaned with water and pressure washer, operated from metal scaffolding (Fig. 13). Cleaning was done by a team of four - enterprising and resourceful - local workman, who had been trained to assemble and disassemble the scaffolding, and to use the pressure washer by Teoman Yalçinkaya and K. J. Severson. Cleaned parts of the dedicatory inscription were repainted.

Behind the Bath-Gymnasium Complex, a doorway connecting the Complex with a latrine of early Byzantine times was repaired. The lintel block, already broken when excavated in 1959, was consolidated (with Araldite epoxy and stainless-steel dowels), a missing jamb block was replaced (with a cast concrete block, faced with appropriately tinted marble dust), and displaced wall blocks were removed, given support, and replaced.

Building A, the large, unexcavated building of Late Roman and Mediaeval times (cited above, in connection with the Christian inscription), over time has become weakened by losses of construction material on either side of one long wall. In 2003, parts of both sides of that wall were stabilized by infills of stone and concrete (Fig. 14). The infills approximate the appearance of original construction; but are slightly set back

from the plane of the original faces and discretely contoured by schist markers, to distinguish modern additions from original Construction.

Wall stumps of Lydian (Archaic) buildings in the locale gold and silver refining (sector PN) were consolidated with infills of fieldstones and "modified mud" (fine earth mixed with an acrylic emulsion, Primal AC33); and wall stumps of Late Roman houses (at sector MMS) were capped with slate and concrete, over a mortar interface layer; both to protect the wall remains and to clarify house plans and layout. The protective shelter over one excavation area (sector MMS/S) was replaced by sturdier - but removable - Temporary Construction (with trusses and purlins of steel and a covering of fiber-reinforced cement profile sheet, eternit).

Two sets of oil-base spray-paint graffiti in the east pronaos of the Temple of Artemis were removed with the use of paint stripper (AKRIPOL Q-SOLVER) and an acetic acid solution, formulated and applied by Conservator K. J. Severson.

For a modest "site enhancement" program, which aims to protect and display Lydian and Late Roman house rooms (in sector MMS I) the floor of a Late Roman apsidal room (VI) was restored with recreated tiles, of the proper size and dimension (65 cm. on a side); and the well-preserved tile floor of a nearby room (II) was assessed for its protection requirements in future display.

Study projects included continued study of the Temple of Artemis (by F. K. Yeğül) inventorying of objects reexamination, by J. Magness, helped by M. L. Rautman, of pottery and coins relevant to the date of the Late Roman Synagogue. Professor Magness has concluded that the Synagogue was created in the 5th Century A.D. (not in the 4th century A.D., as suggested in several Sardis Expedition Publications; an article on that subject is scheduled to appear in a forthcoming issue of American Journal of Archaeology).

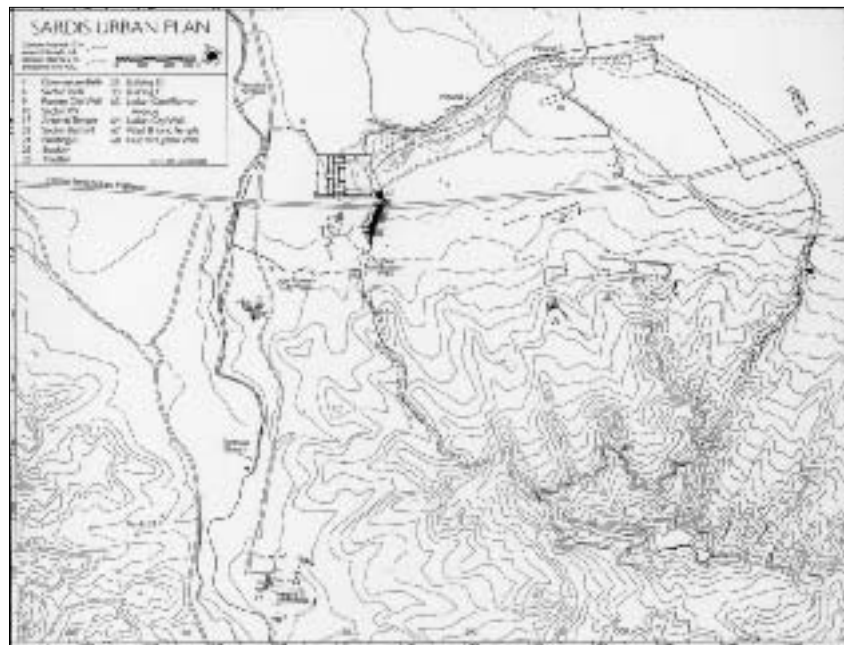


Fig. 1: Sardis, general site plan. The Lydian city wall appears in heavy black where excavated, in a pair of dashed lines where conjectural. Excavation locations of 2003 are at no. 64 (sectors MMS and MMS/S), no. 1 (Roman Bath-Gymnasium complex, southwest corner), and in the cemetery of the Pactolus valley (Tomb 03.1, at lower left).



Fig. 2: Recess in Lydian "early Archaic" city wall on west side of site (sector MMS III). Above, northeast corner of the recess; below (with excavator, N. D. Cahill), features that antedate the city wall, including sandstone remains of an unidentified building at far right. View looking northeast



Fig. 3: Silver "croeseid" coin recovered in 2002 from the recess in the Lydian city wall, after cleaning in 2003: obverse, left; reverse, right



Fig. 4: Ceramic ampulla from Late Roman dump (sector MMS III). The relief decoration evidently shows a stylite saint, with devotee at left and cross at right



Fig. 5: Chamber Tomb 03.1, plan showing U-shaped arrangement of benches in the main chamber, skeletal remains and some offerings



Fig. 6: Chamber Tomb 03.1, entrance, after partial removal of stone and earth blockage; view from the exterior looking (north) into the tomb

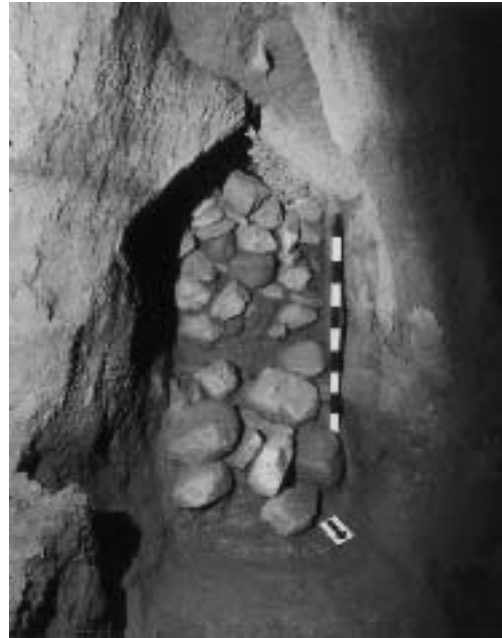


Fig. 7: Chamber Tomb 03.1, Entrance corridor or dromos, before excavation of stone and earth blockage; view from the chamber looking (south)



Fig. 8: Chamber Tomb 03.1. West bench (bench C), with skeletal assemblage and stone *alabastron*; view looking west



Fig. 9: Selection of offerings from Chamber Tomb 03.1: at left, red-figure *askos* (decorated with deer and sphinx) and black-glaze palmette-stamped dish; at center, four core-formed glass vessels (miniature *oinochoe*, missing handle; *aryballos* missing part of one handle and mouth; intact *aryballos* and *alabastron*); at right, plain ceramic *lekythos*



Fig. 10: Intact *alabastron* and *aryballos* from Tomb 03.1 (in the hands of excavator Gülru Evren Isınak)



Fig. 11: Iron disk with short tang (mirror ?), from Tomb 03.1



Fig. 12: Tumbler of thin blown glass (excavated in 1967, from Roman grave near the Gygaean Lake), being repaired and restored, with Acryloid B-72, adhesive, and tinted Japanese rice paper (by conservator P. Artal-Isbrand)



Fig. 13: Marble Court of the Roman Bath Gymnasium Complex: cleaning the first-storey entablature of the marble aedicular façade, with water and pressure washer. (The upper line of text at left preserves part of the titles and name of Emperor Geta; the letters break off in the middle of this view, where Geta's name was effaced in A.D. 212



Fig. 14: Building A (Fig. 1, no. 27), north wall, after partial infilling to replaces losses in original (Late Roman) mortared rubble and brick construction. View looking southwest