Archaeological Exploration of Sardis

NEWSLETTER 1 FROM SARDIS, 2023 Late June, 2023

Dear Friends and Supporters,

Torrential rains throughout our first weeks at Sardis this year made it seem as if summer would never arrive. On the one hand, the landscape remains green and lush even now at the end of June. Exuberant purple hollyhocks still cover the slopes of the theater and stadium; they drift and gleam almost transparent as they catch the raking sunlight early in the morning or late in the afternoon. Tiny brilliant red poppies peek out among the hollyhocks, and shining white Queen Anne's lace, a symphony of color and texture. Swirling stormy mists transformed the Acropolis into a scene from a Chinese landscape painting, the impossibly sheer peaks and precipitous buildings emerging from the eddying clouds and then vanishing. And the smell of the freshly wetted earth is delicious. On the other hand, the storms were so violent that they flooded roads, damaged olive orchards and grape vineyards, destroyed hard-earned crops, turned our trenches into sludgy ponds, and prevented us from working day after day. Every year we say the rains are unprecedented; and every year they exceed the last.

So we're excited and relieved to be embarking on the construction of a protective shelter over the Lydian Fortification and adjacent features in sector MMS, which will provide much more security from rain and wind than the existing hodgepodge of roofs. This project, part of the "Touristic Enhancement Project" to protect and make accessible a series of ancient buildings here, is the culmination of many years of hard work by architects Troy Thompson (SmithGroup LLC), Nate Schlundt (Building Conservation Associates), and Phil Stinson (University of Kansas), conservators Michael Morris and Hiroko Kariya (private practice), engineers Teoman Yalçınkaya (Sardis Expedition Representative) and Taner Kurtuluş (Artabel, Izmir), and a host of others. A roof over the fortification was planned way back in the 1980s, and Troy and Phil, then architecture students, drew up a series of designs. But at the time, we couldn't come up with a plan that would properly protect the mudbrick fortification. So in the end we built a smaller (but very successful) roof over the Roman and Lydian houses adjacent to the fortification, and intended to rebury the mudbrick wall itself. Years later, though, the team has solved the problems that stymied us. After completing and learning from the roof built over the Synagogue two years ago, and digging test sondages last summer (see the 2022 newsletter), we received permission from the Ministry of Culture, and are now beginning construction. The new construction is a twin of the

Fig. 1. Rainy mists swirl around the Acropolis, veiling and then revealing the sheer cliffs and precariously perched Flying Towers.

Fig. 2. The slopes of Field 49 are still covered with lovely purple hollyhocks; in the distance, the Tumulus of Alyattes.

Fig. 3. Troy, Nate, Phil, Teoman, Ümit Güngör (Ege University), and foreman Necmi Erdoğan watch as the cement truck pours the concrete foundations for the new roof. In the background, the sister roof over the Synagogue.

Fig. 4. Tractor and motorcycle traffic on the former Izmir–Ankara highway slows while the crane installs the columns for the new roof.

roof over the Synagogue in design and materials, but is much more complex, since it has to tiptoe carefully among the densely packed archaeology of this sector. A couple weeks ago we poured the concrete foundations—the ugliest part of the job. Most of the steel columns went up a week ago, and the trusses will arrive in a few days for the next stage of the project. It will take a couple years more to build the encapsulation, platforms, and other elements that will make the protected sector accessible to visitors, but we're well on our way.

Excavation this summer is even more widely scattered than in previous years. In addition to the core sectors in the city center, we are beginning a new excavation sector in the Necropolis, and have returned to excavate a Lydian tumulus tomb at Bin Tepe, more than seven miles from Sardis, reminding us that Sardis was not just a big walled city, but spread far through the landscape.

The work on Field 49, part of the Lydian palatial complex in the city center, will be familiar to you from previous summers, with a team of old hands working there. Will Bruce (University of Kansas) is carefully dissecting the last remaining Hellenistic floors and fills that lie immediately above the burned floor dating to the capture of Sardis by Cyrus of Persia in 547 BC. In 2021 he found parts of a very burned human casualty of battle on this floor, together with a couple dozen arrowheads, and a collection of nine Lydian silver coins belonging to our poor victim, among the earliest silver coins in the world. We don't expect anything quite so dramatic this year, but we didn't expect that discovery, either… He is also excavating deeper and earlier levels of the palace, continuing last year's work. That brought him from 547 BC back into the early sixth or late seventh century BC, the era of Alyattes. This year, will he reach the lesser-known periods of Lydian history, the Early Iron Age of the eighth century and earlier; or even the Bronze Age? But Will's trench was particularly hard-hit by the floods early in the season, despite all his efforts, and these deeper areas are still not dried out, making excavation difficult.

Typically for Sardis, while Will is working in Hellenistic and Lydian remains of the first thousand years BC, just adjacent to him Burçin Güzel (Ege University) is excavating at the same elevations but much more recent history, uncovering Byzantine rooms and graves of the tenth century AD and later. Last year she found a very long-lived building, originally Roman but occupied for many centuries thereafter, filled with a couple dozen Byzantine burials. Burçin and her

Fig. 5. Our view of Will and Burçin's excavations on Field 49 is obscured by their system of emergency tarps ready to be rigged in an instant should a thunderstorm blow in. At the top, Will is deep into the remains of the Lydian palace of the sixth and seventh centuries BC. At the bottom you can see a few of Burçin's Byzantine graves, already excavated; others are protected by green sun shades as well as rain tarps.

Fig. 6. Flooding in Will's trench undercut a monumental Hellenistic wall (built entirely from reused blocks from the Lydian palace), forcing conservators Kiernan Graves (Site & Studio Conservation, LLC), Caitlin Gallupe (Queen's University, Ontario), and others to spend days stabilizing it with grout injections.

Fig. 7. Architect Zichen Liu (Harvard University) draws a collapsed brick wall in Burçin's trench, another victim of the medieval earthquake that destroyed these buildings, leaving the bricks lying neatly stacked on their edges. The fine and regular masonry would seem to belong to a building with some prestige, not just a squatter's hut.

team are expertly excavating the graves. These buildings finally collapsed in an earthquake, which toppled the walls and buried the graves under a deep layer of rubble. The date of the earthquake is not quite settled, but it may be the same quake that destroyed Church E, the Lascarid (13th c) church by the banks of the Pactolus River. We had thought that the area around the church and the modern village was the only part of the lower city occupied during the later Byzantine era; now we find occupation more widely spread and more substantial than the small village described by later travelers.

Güzin Eren (Koç University Research Center for Anatolian Civilizations) is back among her beloved Lydian terraces on the steep slopes of Field 49, after a few years' absence while she finished her doctorate. Her goals this year are to uncover the connections between two major terrace walls, and to find deposits that could help date the massive Lydian boulder terrace wall that dominates the front of this hill. She argues persuasively that the wall was first built in the eighth century BC, roughly the time of Homer, and was reconstructed later in the sixth century. But to prove this she must find pockets of earth with pottery that can be shown to belong with the earlier phase of the wall, and those have proved elusive; the later Lydian builders were pretty thorough in their work. In addition, a later and even more monumental terrace wall was built in front of the boulder wall; and the junctions among all these walls lie buried under huge boulders that have slid down the hill from the uppermost wall. We have avoided this area in part because of the difficulty in moving these boulders safely; now the time has come, and Güzin is preparing both for the practical challenge of moving those colossal stones, and the stratigraphic challenge of identifying the deposits that will clarify the long history of Lydian terracing here.

The sector below, Field 55, now enters its tenth year of excavation since we restarted work in 2013. This terrace was occupied by luxurious late Roman houses, built after the destruction of an early Roman sanctuary here dedicated to the cult of the Roman emperors. Liam Devlin and Arsen Nişanyan (Harvard University) are uncovering new rooms at the north part of a house, which are quite

Fig. 8. In Field 55, Liam and Arsen uncover more of the Roman house that has been the focus of work in this sector for the past few years. On the left, columns fallen in the seventh-century earthquake still lie on the white marble-paved courtyard. On the right, the rooms being exposed this summer are filled with fallen bricks, stones, and tiles from that same earthquake, still a bit of a muddy mess from the rains. Arsen (digging the room at lower right) has already removed the less substantial collapse and revealed the fairly scrappy drain and other features of the last phase of occupation of the house.

Fig. 9. Early in the season, just a couple days apart, Liam found artifacts from the earliest and latest eras of Sardis: a beautiful polished stone hand axe, perhaps of Early Bronze Age date (3,000–2,000 BC) or earlier, and a Byzantine lead seal, probably of the sixth or early seventh century AD. The seal, inscribed "[Seal] of Dorotheos, Metropolitan," was used to secure official correspondence and documents, and is the fourth from these houses, showing close contact between these elite inhabitants and the Byzantine bishops. The hand axe might have originated in prehistoric levels on Field 49. Was this lovely object, buttery-smooth and soft, found and cherished by some late Roman inhabitant here? Such "thunder stones" were collected and prized in many parts of the ancient world. Pliny describes black stone axes, which "are looked upon as sacred … never being found in any place but one that has been struck by lightning."

different from the great marble courtyard that has occupied us for a couple years. They are now digging through the detritus of a terrible earthquake that destroyed Sardis in the seventh century AD, bringing an end to something like a thousand years of urban living. Liam in particular is finding his rooms filled with collapsed masonry, which should inform us about the superstructure of this building, and might also answer questions about the nature of the seismic event or events that destroyed this house (and the rest of Sardis). Was this one earthquake, or more than one? The recent and tragic events in Türkiye's southeast make these questions ever more relevant. This house was apparently not occupied at the time of the earthquake, as we have encountered no artifacts or casualties, but there are still many interesting finds to be made. We also hope to learn more about what this part of Sardis was like after the earthquake, when most occupation moved up to the Acropolis. Frances Gallart Marqués's (Cornell and Harvard Universities) excavations here in previous years uncovered a rich courtyard with fallen columns, and showed that the survivors were salvaging marble blocks to reuse elsewhere; but there are areas of permanent occupation as well, which will shed light, we hope, on a very little-known period of history of western Türkiye.

Nine years ago Gencay Öztürk (Ege University) was tasked with uncovering the Roman marble-paved colonnaded avenue in front of the Synagogue, to make the urban situation clearer to visitors. But scattered on the pavement he found fallen blocks belonging to what turned out to be a three-bayed arch, the largest monumental Roman arch in the world. This year he returns to excavate a last area of the arch to uncover any more blocks that might inform us about the upper part of this amazing building,

Fig. 10 (right). Arsen with a marble slab decorated with a cross, found shattered in the doorway of the Roman house just as it was left after the earthquake in the early seventh century. It looks like it should belong to a balustrade or some other architectural feature of the house, but doesn't fit anything nearby; perhaps it was just stored here in this unoccupied house awaiting reuse.

Fig. 11 (below). Our excavations and restorations are spread over an area of many miles, through one of the most dramatic and enchanting landscapes in the world; now more easily photographed with a tiny drone high above the birds' flights.

while John Sigmier (University of Pennsylvania) studies the blocks as part of the final publication.

It's not every year that we get to open a new excavation sector. This season we turn our attention to an olive orchard just across from the temple of Artemis, in the so-called Necropolis. In 2010, a rescue excavation retrieved a limestone sarcophagus from this field, one of hundreds or thousands of tombs scattered through these hills. The sarcophagus had been looted in antiquity; it probably dates to the Persian or Hellenistic period. But completely unexpectedly, we found that the sarcophagus was surrounded by a dense layer of Lydian pottery broken on a floor, and a fieldstone wall, apparently the remains of a Lydian house. The pottery dates to the middle of the sixth century BC, and this probably is another example of the famous capture of Sardis by Cyrus the Great of Persia in 547 BC, the same destruction layer that Will has been digging in the palace quarter. We concluded that the house was abandoned after the destruction, leaving many of its contents still intact, and then this area of Sardis was used as a cemetery, with the sarcophagus and other burials dug into the ruins of this house. We couldn't dig further in 2010, though, because the land was privately owned, and so there it has sat, patiently.

This is an extraordinary opportunity to explore Lydian settlements. In other sectors, these domestic destruction levels have offered us unique insights into the daily lives of the Lydians in the time of Croesus, how they cooked, ate, and drank, how they wove cloth, about trade with other cultures. But Lydian levels elsewhere are elusive and very deeply buried under important Byzantine, Roman, and Hellenistic buildings such as those Will, Burçin, Güzin, and others are dealing with.

After the field was purchased last year, Eric Hensley (UW-Madison) found Lydian walls buried under only a foot or two of earth. But archaeology is often an exercise in delayed gratification, and Eric is practicing great restraint. It's tempting to dig down to expose all that wonderful broken pottery, but he wants to dig one whole room at once, so he is first locating the walls of a room while exposing as little as possible of the pottery and other artifacts on the floor. So whenever he uncovers a bit of pottery, he leaves it buried, covers it with Tyvek to protect it, and moves on. Frustrating, but later in the season when we see this all at once, it will be worth the wait (we hope!). The new area offers the opportunity to explore not just a room or two, but potentially

Fig. 12. Two very different projects face off across the street. In the foreground, Gencay excavates a new strip of land to expose more fallen marble blocks from the Roman arch that stood here at the western entrance to the city. Behind and across the modern street, a crane lifts a column for the new roof over the Lydian fortification, which enclosed the city some seven centuries earlier.

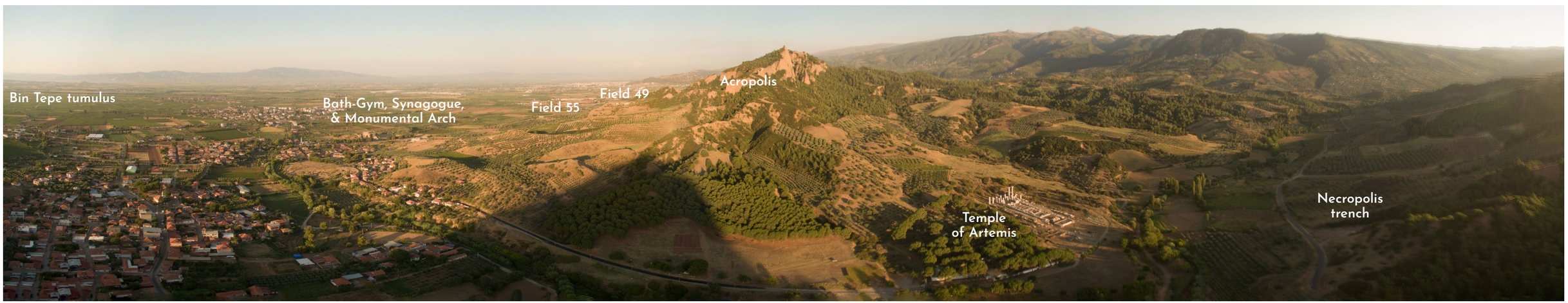

Fig. 13. The new field in the Necropolis has a lovely view of the temple of Artemis and the Acropolis just across the Pactolus River. Just under the surface lies a room of a Lydian house, conveniently (and not in any way by our design) located exactly between rows of olive trees. The deeper part of the trench, on the right, is the 2010 sondage, where the sarcophagus dug away part of the room; the pottery found that year should join with the sherds found this year. Eric has strung a one-meter grid over the room to help keep track of artifacts. The white stuff is Tyvek to protect and mark pottery emerging from the earth, and keep us from trampling it.

a large area of Lydian occupation. The discovery of Lydian occupation here also underscores the difference between Sardis under kings Croesus and Alyattes, and the city in Hellenistic and Roman times. Evidence for Lydian habitation is found up and down the Pactolus valley. This came to an end, however, with the Persian conquest, when the city shrunk and former settlement areas such as this field were converted to cemeteries. In the Hellenistic era, the city center was reoccupied, but these peripheral areas remained abandoned. More on this in the next newsletter.

A final excavation area of this season is a tumulus tomb in the so-called royal necropolis at Bin Tepe ("A Thousand Mounds"). This cemetery, covering almost 30 square miles, is home to more than 120 Lydian tumuli or burial mounds, including one of the world's largest, the tumulus of King Alyattes, the father of Croesus, a monster mound described by Herodotus as "the greatest structure ever built, apart from those of the Egyptians and Babylonians."

These mounds often have stone burial chambers within them, and the Expedition has explored a number of them over the last 60 years. But since antiquity people have known that these burial mounds contain gold, and the smell of gold attracts tomb-robbers like maggots. So looters repeatedly dig into the mounds to locate the chambers; every one of the mounds we have investigated had already been plundered. Nonetheless, there's a great deal to learn from them: the exquisite stone chambers are some of our best examples of Lydian masonry, revealing how the Lydians worked monumental stone blocks, and their technological and cultural connections with other architectural traditions. A number of tumuli had painted and sculpted burial couches (*klinai*); and sherds and other finds left over by the looters hint at the date of the burials and at Lydian burial customs. These tombs have long and complicated lives: they were mostly built as family tombs to be used over many generations, sometimes with multiple chambers and burial couches. The burial chambers thus accumulated bodies and grave goods including eating and drinking vessels, jewelry, perfume flasks, and other materials the deceased might need in the afterlife.

A couple winters ago, tomb-robbers bulldozed a row of tumuli, obliterating the mounds, and then dynamited their

Fig. 14. The haunting landscape of Bin Tepe, "A Thousand Mounds." In the foreground are some of the smaller tumuli near the Hermos River (the fully-grown olive trees give a sense of the scale of even these smaller mounds). On the ridge in the background are, at right, the Tumulus of Alyattes, one of the largest burial mounds in the world, and, at left, Karnıyarık Tepe, itself the width of the Great Pyramid at Giza. The arrow indicates the location of this year's tumulus, with the undistinguished name of BT05.026.

Fig. 15. Ümit and Ministry of Culture and Tourism Representative Çengiz Aslantaş (Izmir Museum) watch as Okan, digging a small regular sondage within the bulldozed gash left by looters, uncovers the top of the chamber of the tomb at Bin Tepe. When excavation has finished, we will rebuild the tumulus to restore it to its original appearance.

way into the chamber of one of them. This is a truly lovely structure, with three rooms built of elegant limestone masonry set deep within a mound about 150 feet in diameter. It is unusually complex, with an antechamber and two burial chambers, one equipped with one couch (*kline*), the other with a pair of couches. The looters scattered the bones from the funerary couches, broke holes in the walls, couches, and floor (just in case there was gold inside solid bedrock—they're not the brightest bulbs…), and damaged the remaining grave goods. So we went in to clean up the mess and record the architecture.

Okan Emre Güney (Ege University) has excavated to reach the original door of the tomb, and has been clearing out the earth that fills the three chambers so they can be recorded by the architects. He has already found a few artifacts, such as alabaster vases for perfumed oil. But the looters have mixed everything up searching for gold, so the pottery, bones, and other material useless to treasure-seekers are now scattered through the earth. To recover everything that survives, Okan is bagging up all the dirt, about six tons so far, and sending tractor-loads back to the expedition camp, where it is carefully water-sieved to recover objects the size of a grain of rice. It's a herculean task, but has to be done; and has been unexpectedly rewarding. Okan has already found pottery dating from the sixth century BC into the Hellenistic period, documenting the early date and long use of the tumulus, as well as a few tiny bits of gilded bronze, hints of the wealth that the looters found in the tomb.

As always, the fieldwork is only the beginning of the story. Publications fill the days of many of our staff. Andy Seager (Ball State University), with the help of editors Kerri Sullivan (Harvard Art Museums) and Brianna Bricker (UW-Madison), is making a few last changes

Fig. 16. In the antechamber of the tomb, architects Micah Tichenor (Architectural Preservation Studio) and Brianna Bricker discuss how to best record the masonry of this tomb. You'll notice that nearly every course of every wall is made of a single huge block. From the unfinished state of the antechamber, we learn the steps in which the Lydians set and trimmed these masonry structures with their enormous, intricately joined and perfectly fitted blocks.

Fig. 17. After clearing the earth from the tomb, Micah and Honorary Architect Cathy Alexander begin to draw the plans and elevations of the first burial chamber. Unlike the antechamber, the walls are finished perfectly smooth, but again are built from single huge blocks. The orange lines are not Mission Impossible-like lasers but ordinary string, a low-tech but precise way to survey this small space.

Figs. 18, 19. Teoman and Sevinç Yalçınkaya were married fifty years ago. On the left, they celebrate in 1973 the completion of the restoration of the Marble Court, which Teoman oversaw. Half a century later, it was a wonderful pleasure to have Sevinç stay with us during the early part of the season; photographer Jivan Güner persuaded them to reenact the scene.

to the long-awaited final report on the Synagogue. Marcus Rautman (University of Missouri), Frances Gallart Marqués, Phil Stinson, Baha Yıldırım (Harvard Art Museums), Jane Evans (Temple University), Vanessa Rousseau (University of St. Thomas), and Liz DeRidder Raubolt (Grand Rapids Community College) are co-authoring a long article on the results of recent excavations at Field 55 and the Wadi B temple. Our story keeps changing as we learn more, but this is a good moment to summarize the last ten years' work. Frances is also working on her own monograph on the figural terracottas from Sardis, while Will prepares one on the excavations in sector PN in the 1960s. Will is also a co-author of a forthcoming article on the Lydian silver coins he found (with parts of their owner) two summers ago, together with numismatist Jack Kroll (University of Texas) and conservators Jen Kim (Los Angeles Art Conservation), Brian Castriota (University College London), Emily Frank (NYU), Süheyla Şimşek (Ankara University), and İzel Güngör (Istanbul University), who spent so much of last summer cleaning the coins. And the camp is full of teaching and learning. Baha and others hold informal seminars for the students and staff, while we have occasional, more formal seminars for the whole team.

There will be much more to report in your second newsletter; this one, begun in June, is only coming to you in July, as it's hard to keep up with the exciting work and discoveries every day. It fills us with pleasure, though, to see such progress in understanding our past, preserving and protecting it for others, and sharing it with the world. This is all due, as ever, to your unfailing support, for which we all remain most grateful.

Nick Cahill
Director, Sardis Expedition

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Fig. 20. In the Synagogue, the team of women continues the project begun last year to restore gaps in the mosaics with modern tesserae. With the help of the conservation team, they are now training a new cadre in the art of mosaic laying and restoration.