FRIENDS OF GORDION

NEWSLETTER



Figure 1: Gilded ivory sphinx discovered in the Mosaic Building (early 6th century BCE). Photo by Ahmet Remzi Erdoğan.

The 2023 season at Gordion lasted for nearly three months, and we regard it as one of the most successful campaigns we have ever had. In terms of excavation, we finally uncovered the gatehouse of the Phrygian citadel's South Gate, while continued digging in the adjacent Mosaic Building yielded a gilded ivory sphinx that probably decorated a wooden throne (fig. 1).

The architectural conservators nearly finished all the work in the Terrace Building, and also embarked on a new conservation project in Megaron 3, the largest of the 9th century

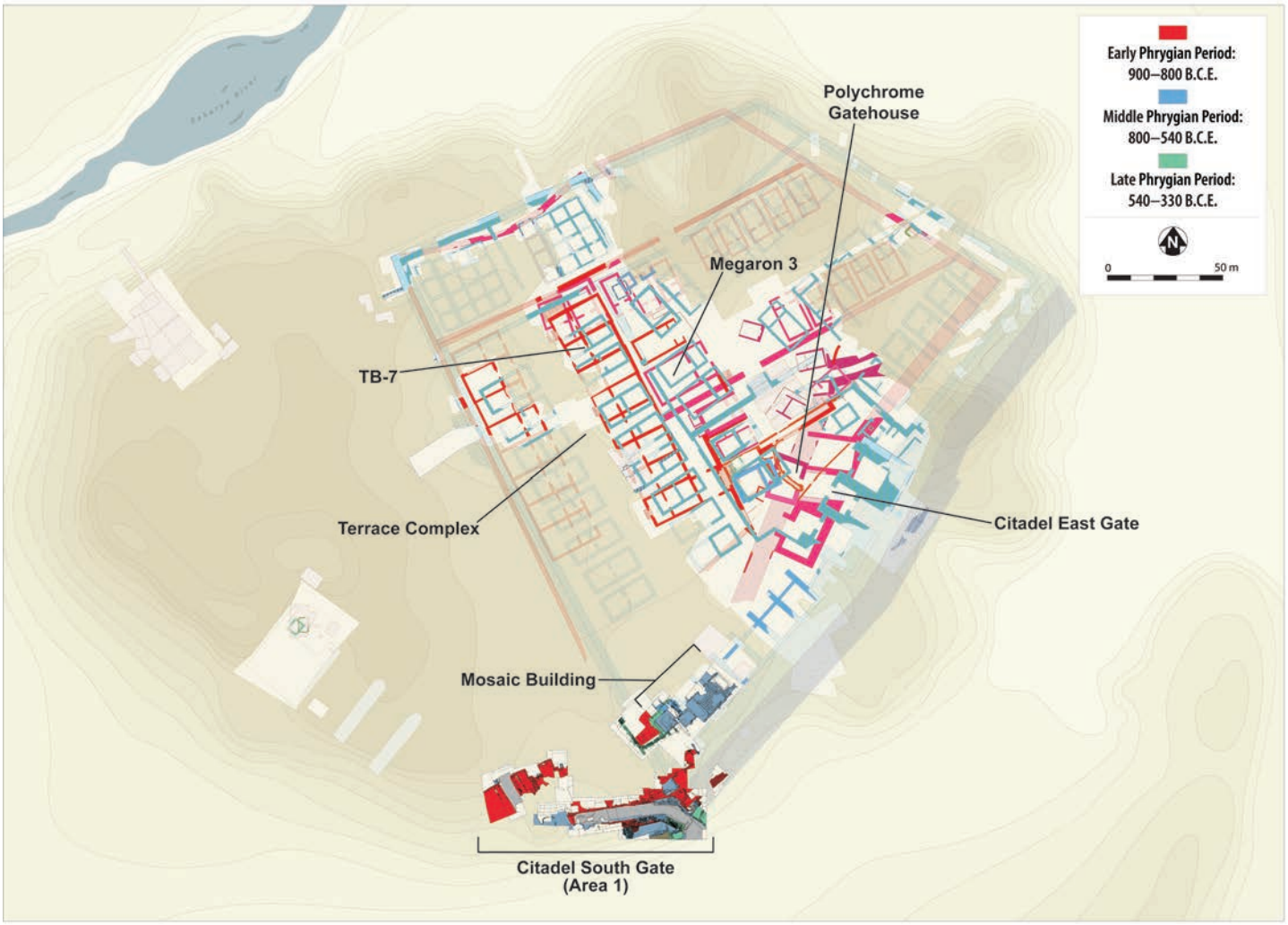


Figure 2: Color phase plan of Phrygian Gordion. Plan by Gareth Darbyshire, Ardeth Anderson, and Gabriel Pizzorno.

megarons. Meanwhile, the Visitor Circuit was leveled and lined with sleek new galvanized steel fencing. A longer than usual campaign of remote sensing allowed us to calculate the size of the newly discovered eastern Outer Town, which brings the area of the Middle Phrygian settlement (8th–6th centuries BCE) to over 110 hectares (272 acres).

With the assistance of the Center for Cultural Heritage in the nearby town of Polatlı, directed by Mr. Kadim Koç, we published a lavishly illustrated Gordion guidebook in Turkish that was prepared by the excavation staff. At the same time, the University Museum Press published two spectacular new volumes in the Gordion publication series: *The Bone and Ivory Objects from Gordion*, by Phoebe Sheftel; and *The Lesser Phrygian Tumuli II: The Cremations*, by Ellen Kohler and Elspeth Dusinberre, with contributions by Elizabeth Baughan, Andrea Berlin, Gareth Darbyshire, Jane Hickman, and Brigitte Keslinke.

The highlight in July was a day-long conference in Polatlı with eleven scholars speaking on Gordion and its relationship to other Anatolian sites during the Middle Phrygian period. Over 200 people attended the conference, and some of them, as students, had taken part in our Cultural Heritage Education Program, which was held for the ninth time in 2023.

Our proudest achievement, however, occurred a few weeks after the end of the season, when Gordion was inscribed on the UNESCO World Heritage Site List. This decision was reached at UNESCO's meeting in Riyadh on September 18, and it was a wonderful conclusion to a nearly four-year long application process. In the sections below, we begin with conservation, then move to excavation, remote sensing, the UNESCO declaration, the Cultural Heritage Project, and finally, research and publication.



Figure 3: Aerial view of the Citadel Mound looking southeast. The East Gate is at upper left and the Terrace Building at right. The Visitor Circuit is visible at left, bottom, and right. Photo by Ali Can Kırcaali and Zekeriya Utğu.

Architectural Conservation

The architectural conservation team worked in three primary areas this year: unit 7 of the Terrace Building (TB-7), Megaron 3, and the Visitor Circuit. Elisa Del Bono and Angelo Lanza served as field managers, assisted by Renzo Durante and Mauro Perrone in masonry conservation and stabilization works. Ali Can Kırcaali and İlayda Şahin were responsible for carrying out field survey and photography, documentation, and preparation of the final drawings of Megaron 3. The team also included Penn graduate students Daniel Qin (Ancient History) and Sheridan

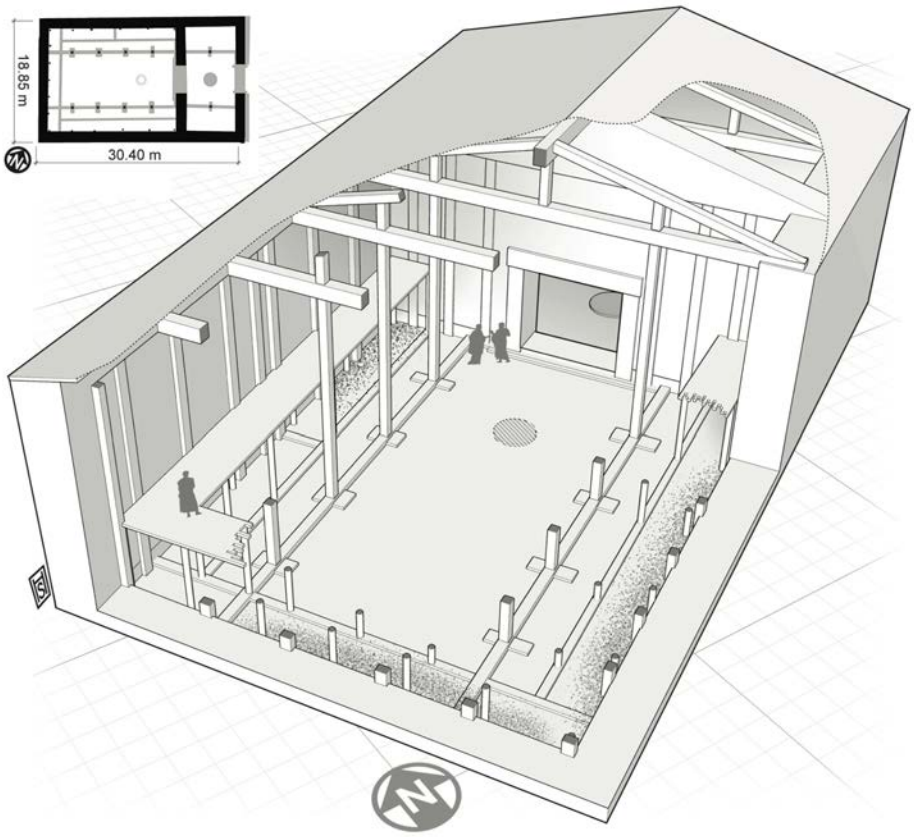


Figure 4: Reconstruction of the interior of Megaron 3 in the late 9th century BCE, with human scale. Drawing by Samuel Holzman.



Figure 5: The conservation of Megaron 3, looking west. The disintegrated state of the wall is visible at right; the new stone encasement is at left. Photo by Elisa Del Bono.

Marsh (Art and Archaeology of the Mediterranean World).

Megaron 3

Megaron 3 is the largest megaron found so far inside the excavated area of the Gordion citadel, and presumably served as an audience hall in the 9th century BCE (figs. 2, 3, 4). The anteroom at its center contained a round hearth 2 m in diameter, while a slightly smaller one with a diameter of 1.50 m was located in the main room along the same axis. There were probably upper galleries on either side of the anteroom and on the three sides of the main room, dividing the latter into a nave and side aisles (fig. 4). Like the other citadel buildings, Megaron 3 was heavily damaged by the great fire of ca. 800 BCE, and the protective covering of rubble and earth placed over it by the original excavators had rendered it invisible to modern visitors.

In 2023, we exposed the original walls of Megaron 3 to document the condition of the masonry and explore conservation options that would improve the legibility of the building's footprint. The highly fragile condition of the remains meant that the kind of stabilization we used in the Terrace Building would not be possible, because it would require the replacement of nearly all the original masonry with new stone. On the other hand, we wanted to avoid the complete reburial of the megaron's remains and the placement of new stones above them to indicate their plan, as one sees at the Hittite capital of Hattusa. This would have resulted in the disappearance of the associated terraces, stairs, and enclosure walls. We therefore decided to continue experimenting with the encasement of the original wall remains as an alternative to their replacement.

The walls of Megaron 3 featured

alternating niches and buttresses. The niches are the slots that were once occupied by vertical wooden posts, and the buttresses between them constitute the wall face proper, made of large, squared facing-stones covering a compact core of rubble (figs. 5, 6). Mud plaster vitrified by the heat of the fire still covers some areas of the interior wall faces. Severe fracturing of the original blocks made it impossible to distinguish their size and height, and in fact only a few blocks were found intact (fig. 5).

In 2023, conservation focused on the interior wall dividing the vestibule from the main room on the southeast side. We enclosed it with dry-laid stone walls in an attempt to build an enclosure around the fragile 9th century remains (figs. 5, 6). Like the original masonry, the new walls were built in intervals of coursed limestone blocks 0.80 to 1 m wide, separated by recessed niches of rubble stone. The new walls are held in place by stainless-steel bars, and geotextile was used to cover and protect the megaron's original masonry.

This method is highly protective of the remains and is completely reversible, while making the megaron's plan clear to visitors. The use of stainless-steel bars makes the modern intervention distinguishable, but does not disrupt the aesthetic integrity of the building. We will evaluate the results of this technique at the beginning of 2024, and if it has proven truly effective, we will apply it to the remainder of the building.

The Terrace Building

The 9th century Terrace Complex ranks as one of the largest ancient industrial centers in Anatolia (figs. 2, 3). A 23 m wide court separates two long row-buildings devoted primarily to textile production, grain processing, and



Figure 6: The new stone encasement around the damaged walls of Megaron 3, with the citadel's East Gate at top, looking southeast. Photo by Elisa Del Bono.



Figure 7: Conservation of the damaged walls of unit 7 of the Terrace Building (TB-7), looking southeast. The new security camera is the tall, slender looking object visible on the skyline at left. Photo by Elisa Del Bono.

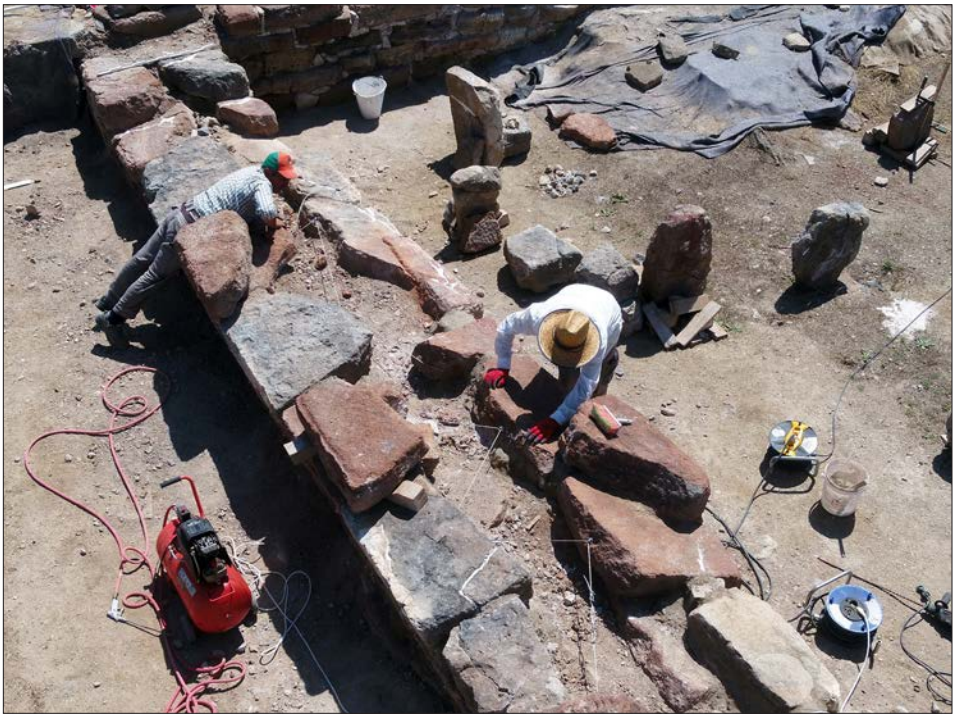


Figure 8: Conservation of the damaged walls of unit 7 of the Terrace Building (TB-7), looking southeast: insertion of steel cables through the core of the wall to secure the facing stones. Photo by Elisa Del Bono.



Figure 9: Installation of the new fence on the Visitor Circuit, looking south. The Terrace Building is at upper left. Photo by Ali Can Kırcaali and Zekeriya Utğu.

cooking. The complex was heavily burned in the conflagration of ca. 800 BCE, and since 2009 we have been conserving the fire-damaged stone walls of the eastern row-building – the so-called "Terrace Building". There are eight units in this enormous structure, each with a vestibule and a main room. We had conserved six of these units (TB-1 – TB-6) by the end of 2022, and this year we completed work on the seventh (TB-7). The eighth and last unit (TB-8) will be finished next year.

The stone walls of TB-7, standing 1.0 – 1.5 m high, were occasionally preserved up to seven courses, of red sandstone, gypsum, and limestone blocks. As in previous years, our techniques included the use of adhesives (epoxy resins) and lime-based grout injections to conserve the heat-cracked and delaminated stones (fig. 7). Steel cables were installed in the interior of the conserved walls to prevent future splaying of the masonry (fig. 8), and the wall tops were capped by a mudbrick frame enclosing a bed of shallow-rooted plants. The latter task was completed by women from the adjacent village of Yassıhöyük, who have been trained in the technique by paleobotanist Naomi Miller of the Penn Museum. Occasionally, the fire of ca. 800 had left the blocks so badly cracked and deteriorated that new stones had to be used instead, but in most cases the original blocks could be conserved and then returned to their original locations.

Visitor Circuit and Site Protection

The uneven terrain on the north side of the Visitor Circuit was leveled and a new galvanized steel fence, approximately 210 meters long, was installed along the west, northwest, north, and northeast sides of the mound (figs. 2, 9). All the old barbed-wire fencing was removed, and although

there is still some reshaping of the path to be done next year, the Visitor Circuit is essentially complete. The leveling project was largely overseen by our government representative, Mr. Tolga Çelik of the Museum of Anatolian Civilizations. The earth that we used to raise the level of the path was material we had previously excavated from the South Gate, and we were very pleased to be able to recycle this dump in an especially profitable way. Next year we hope to complete the installation of a stone-paved ramp to provide access to the citadel for visitors with disabilities.

The expanded Visitor Circuit and fence are not the only components of our new site protection program. The Museum of Anatolian Civilizations has installed a large and powerful security camera on the Citadel Mound (fig. 7), and a grant from the U.S. Embassy in Ankara has enabled us to install 33 more security cameras at various other locations: at Tumulus MM, around the Gordion Museum, and at the depot in the Gordion Excavation House compound. Never before has the site benefitted from such widespread security coverage.

Object Conservation

Object conservation was supervised by Jessica Johnson, working in tandem with Dr. İbrahim Dural and Amber Swanson. The most important discovery that we conserved was a carved ivory sphinx with gold foil decoration (figs. 1, 10, 24, 25). Although the artifact's surfaces were obscured with dirt, initial examination showed that the gold foil wing had become detached from the sphinx's body. The object was allowed to equilibrate to the post-excavation environment for 24 hours before cleaning was started. Removal of the dirt was carried out with bamboo skewers and brushes until the entire



Figure 10: The gilded ivory sphinx from the Mosaic Building, prior to conservation. Photo by Brian Rose.

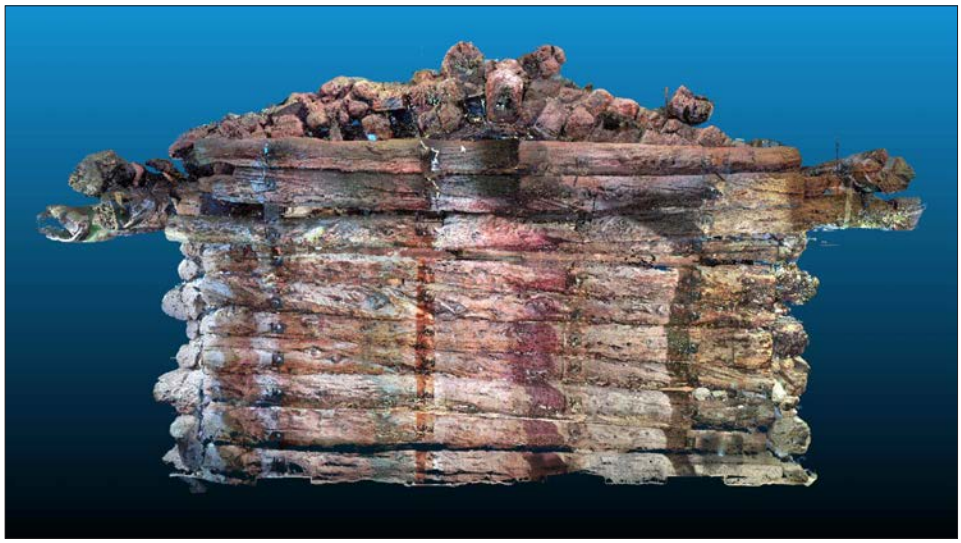


Figure 11: Digital model of Tumulus MM by Matthew Harpster, Michael Barngrover, and Günce Oçgüden. The shadows from the modern metal supports placed around the tomb are visible on the facade. Photo by Michael Barngrover.



Figure 12: Aerial view of the citadel's South Gate (bottom and left), and the Mosaic Building complex (upper right). Photo by Ali Can Kırcaali and Zekeriya Utğu.

surface was revealed. Final cleaning was done with cotton swabs moistened with a mixture of 50% isopropyl alcohol and 50% deionized water to remove the remaining loose dirt. Two broken pieces of ivory were reattached using an adhesive mixture made from 50% Paraloid B-72 and 50% Paraloid B-44 in acetone. During the cleaning, the sphinx's gold foil hair came off once the soil that was actually holding it in place was removed. However, the gold on the tail tip remained secure because it was clamped in place. In its as-discovered state, the elaborately decorated gold foil wing was somewhat crumpled and bent, but it was reshaped using small wooden skewers until it could be fitted properly back into place on the ivory body. The hair was likewise restored to the head, held in place with the same adhesive that was used for the wing.

Tumulus MM: Tomb Chamber Scanning

The project to create a digital three-dimensional model of the wooden tomb chamber buried inside Tumulus MM culminated in 2023, when Matthew Harpster, Michael Barngrover, and Günce Oçgüden briefly returned to the site in June. The 2021 and 2022 summer seasons had involved the use of a FARO laser scanner and photogrammetry techniques to collect visual and spatial data, and the intervening months were devoted to synthesizing and optimizing the results. The digital model we now have is not only the most accurate record of the tomb's structure ever made; it also provides scholars with an opportunity to readily examine the details of the entire chamber – its interior, exterior, the gables at either end, and the roof – in a way that was impossible before (fig. 11). Now that the digital model of the tomb is complete, we have begun planning and building a mobile application for visitors that we hope to finish in the coming year. Meant to augment the current educational presentation in the museum and in the tumulus, this application will allow visitors to orient the digital model

however they choose, examine specific details of the structure, and watch short videos explaining the history of the tomb and its discovery more than 60 years ago in 1957.

Excavations at the The South Gate (Area 1)

Since the beginning of the new excavation campaign at Gordion in 2013, one of our principal objectives has been to clarify the plan of the southern side of the Citadel Mound, especially the South Gate and the adjacent Mosaic Building (figs. 2, 12). Both of these areas witnessed continued excavation in the summer of 2023, and the results were better than we could have hoped for. Excavations at the citadel's South Gate, which we first discovered in 2013, now cover an area measuring 105 x 40 m. We have been able to demonstrate that it served as the citadel's principal gate from the 9th century BCE through at least the fourth century CE., a span of over 1200 years (fig. 13).

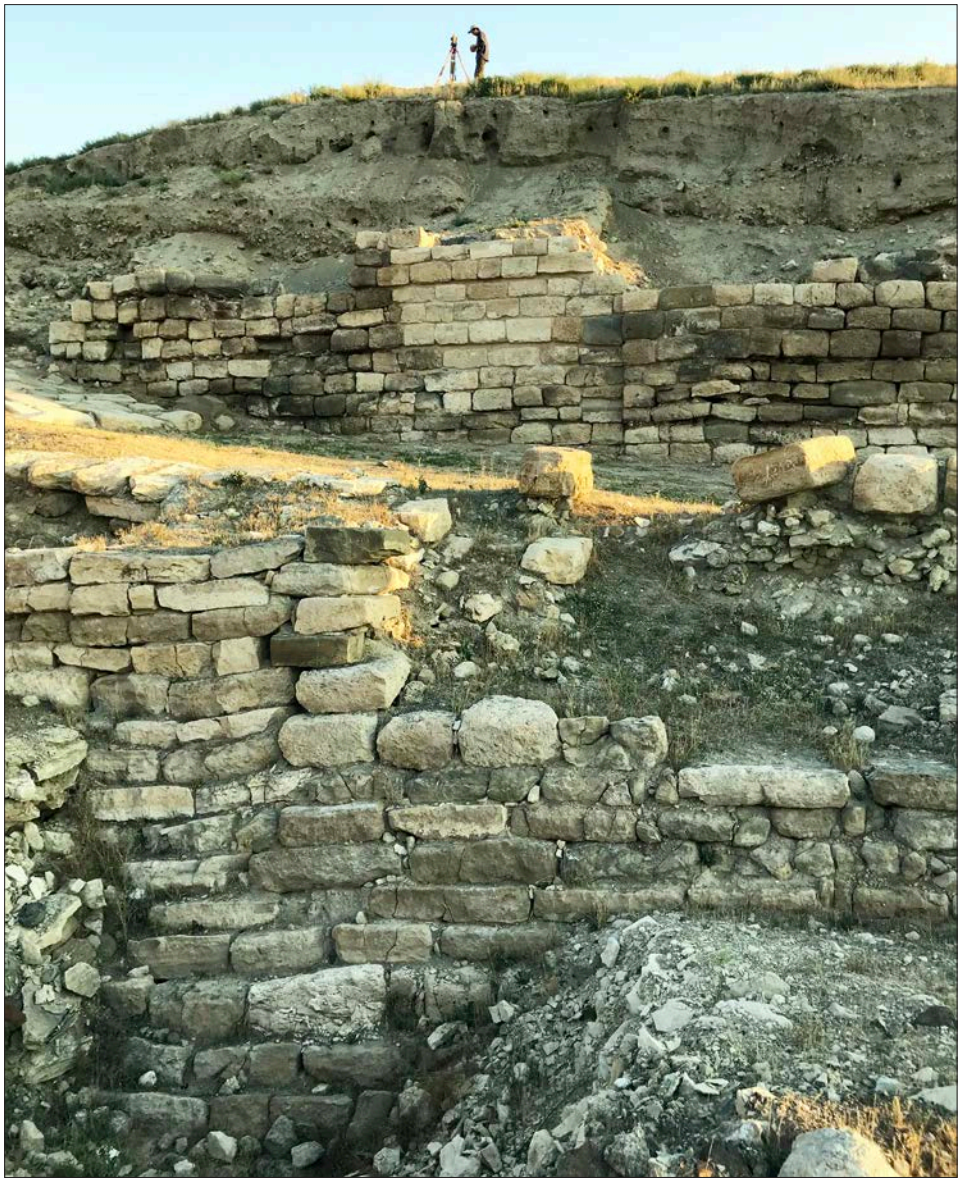


Figure 13: The citadel's South Gate, looking north, showing: (in the foreground) the Early Phrygian (9th century BCE) glacis, or stepped terrace wall; (running across the middle of the picture) the E-W approach road; (in the background) the Early Phrygian fortification wall that bordered the road. Braden Cordivari is surveying at the top. Photo by Brian Rose.

As the excavations continued, we realized that the plan of the gate was far larger and more complex than that of any other Iron Age citadel gate known from Asia Minor. The ramped approach road consists of two differently aligned segments: lower down the Citadel Mound it runs E-W, but higher up it turns to a N-S orientation and passes directly into the citadel (figs. 12, 14). We thought we had found one side of the N-S segment last summer, but the gatehouse has continually eluded us. Fortunately, during the 2023 season, we were successful not only in recovering the full width of the road, but also the actual gatehouse (the "South Gatehouse") as well as a court that flanked it at the east. We provide here a summary of the gate's development, although again, the continual modification of the plan over more than a millennium makes it a difficult monument to understand.

Visitors to the citadel entered the gate from the residential district in the Lower Town. The E-W approach road measures 70 m in length, at which point it angles toward the north and continues another 24 m to the gatehouse (figs. 12, 14). Bordering the south side of the E-W stretch was a fortification wall nearly 3 m wide, and the two bends in the approach road – one of them ca. 10 m from the entrance, the other ca. 60 m further on – were undoubtedly designed to slow the advance of an attacker.

The road was not of even width throughout its course. The E-W segment was ca. 5.50 m wide, but it broadened to just over 10 m after its turn toward the north. At the citadel's East Gate, the road that led into the Polychrome Gatehouse (fig. 2) was also ca. 10 m wide,

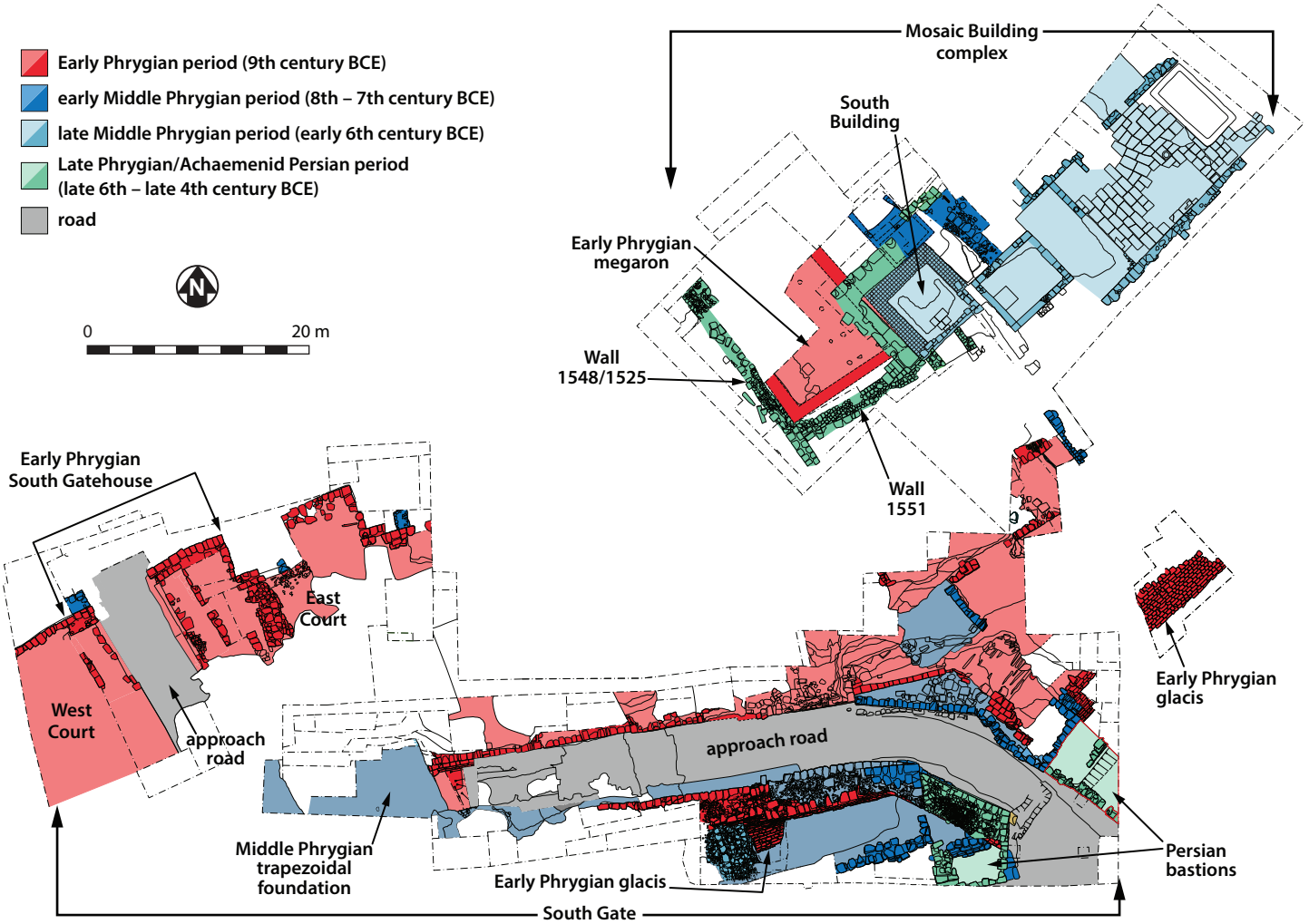


Figure 14: Color phase plan of the citadel's South Gate and the Mosaic Building complex. Prepared by Simon Greenslade and Sarah Leppard, with modifications by Gareth Darbyshire and Ardeth Anderson.

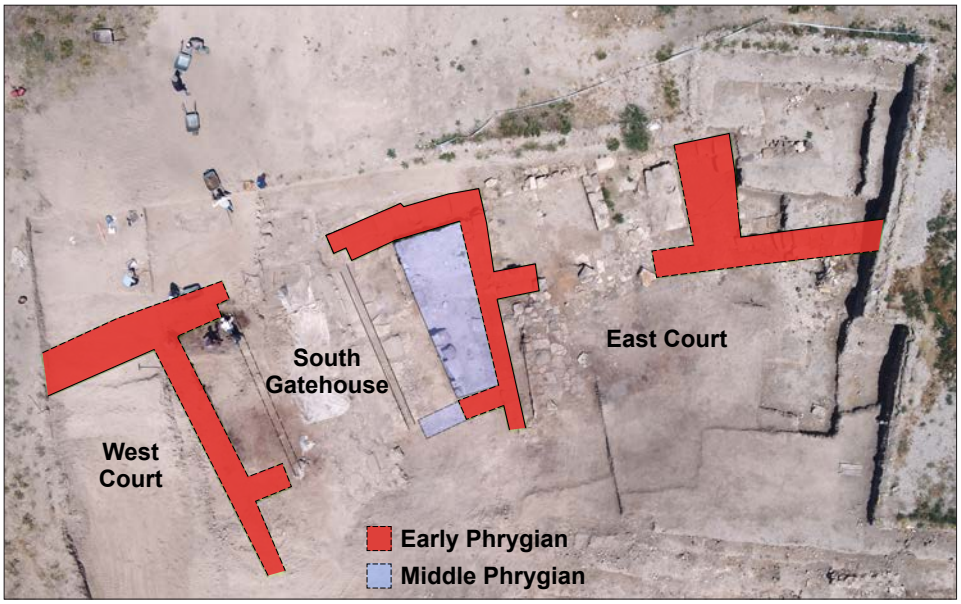


Figure 15: Plan of the Early Phrygian (9th century BCE) South Gatehouse and East Court, at the citadel's South Gate. Prepared by Simon Greenslade.

and it is likely that the two gatehouses were contemporaneous. The newly discovered South Gatehouse is 8.20 m deep x 11 m wide, slightly smaller than the Polychrome Gatehouse (figs. 14, 15, 16). It included two mudbrick walls, each built on a wooden beam foundation set in a slot, which divided the interior into a main room 5.85 m wide flanked by side rooms 2.30 m in width. Fragments of burned beams still occupied the slots, and it is worth noting that a similar interior organization was used in the Polychrome Gatehouse.

The South Gatehouse's floor was paved with stone, and even though the building had suffered from stone robbing during the 19th century, the walls at the

northwest still stand to a height of 1.65 m. On both sides of the gatehouse there was a walled court, but only parts of these have survived. Excavations in the South Gate's East Court revealed a stone-paved entrance at the north leading into the court, which appears to have been 17 m long and at least 15 m wide. The West Court has not yet been completely excavated. Again, the design of an enclosed gate house flanked by walled courts is paralleled at the East Gate, as is the general size of the courts.

The great fire of ca. 800 BCE that swept through much of the citadel's eastern sector did not reach the South Gate. Nevertheless, the subsequent rebuilding of the entire citadel at a level 5 m higher than its predecessor spurred several significant changes to the South Gate's appearance. The wall bordering the eastern side of the road was repaired, and a new wall constructed on the interior side of the gatehouse may represent a refortification of this sector of the citadel in the early 8th century (fig. 17).

The primary modification during this period was a new structure at the western end of the E-W part of the approach road (figs. 12, 14). This was a massive trapezoidal foundation of stone rubble that extended across the road and had a length of over 15 m. The eastern side of this rubble foundation cuts through the Early Phrygian wall on the north side of the E-W road, and it runs parallel to the axis of the N-S road segment rather than the E-W segment across which it was built. We have regarded this structure in the past as either a bastion or another gatehouse, and we still have difficulty determining its precise function, although a date in the early 8th century BCE is secure. We can also say that it was intended to provide a transition between the different orientations of the approach



Figure 16: The remains of the Early Phrygian South Gatehouse, at the citadel's South Gate, looking north. The two horizontal cuts in the center were intended for wood and mudbrick walls dividing the interior into a main room with side aisles. The road was continually rebuilt, and the wheel ruts from the Late Roman phase are clearly visible. Photo by Ali Can Kırcaali and Zekeriya Utğu.



Figure 17: The citadel's South Gate, looking northeast toward Tumulus MM. The Middle Phrygian (8th century BCE) walls on the northwest side of the gatehouse are visible. Photo by Brian Rose.



Figure 18: Tuğba Gençer excavating one of the Medieval skeletons at the South Gate. Photo by Gareth Darbyshire.

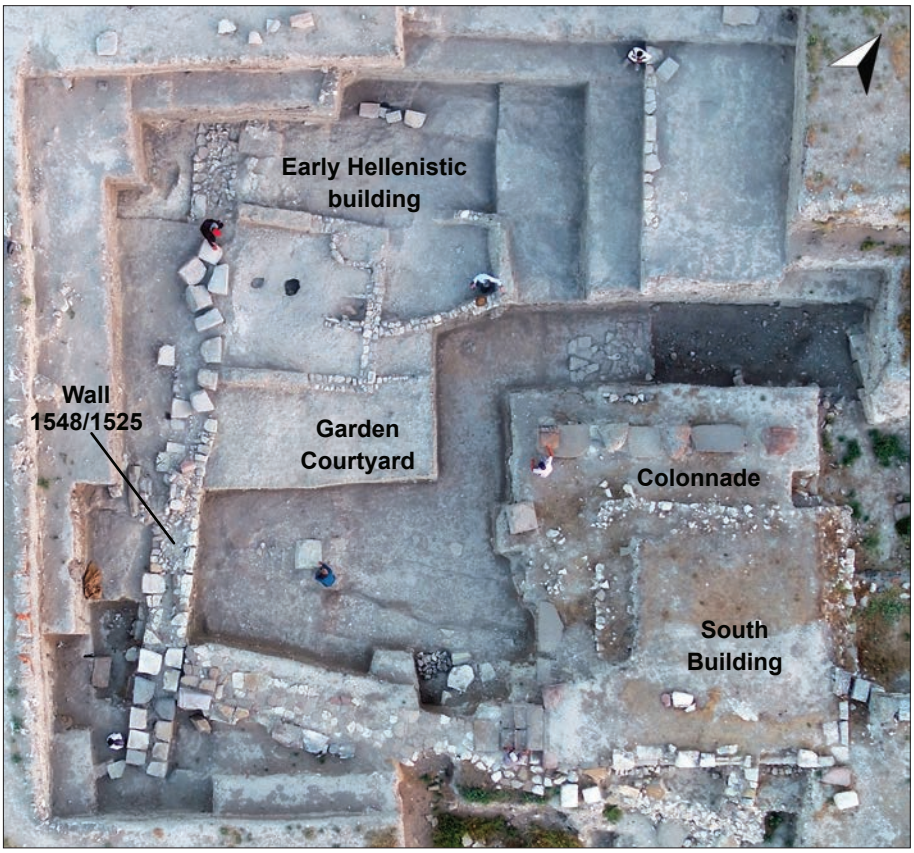


Figure 19: Aerial view of the western end of the Mosaic Building complex. The wall at the left (Wall 1548/1525) contains the sequential series of numbers as used by architects at Lydian Sardis. Photo by Ali Can Kırcaali and Zekeriya Utğu.

road, and to lift the level of the road as it turned the corner and moved up into the citadel.

We also have a better idea of the South Gate's connection to other roads in and around the citadel. The use of remote sensing (Electric Resistivity Tomography, or ERT) to the south of the West Court indicates the presence of another E-W road that would have led to the South Gatehouse from the western side of the Lower Town. To the north of the South Gatehouse, remote sensing has also demonstrated that the gate's N-S road extended nearly 100 m further to the north, ending just beyond the eastern corner of Rodney Young's South Trench. Gradually, the plan of the citadel during the early first millennium is coming together.

The area around the South Gate was damaged during the Persian sack in ca. 540 BCE, during which the neighboring fort at the Küçük Höyük caught fire and collapsed. Rodney Young found hundreds of Persian arrowheads still buried in the mudbrick walls when he excavated the Küçük Höyük 2,500 years after the attack. There are also likely traces of this attack on the stone walls flanking the South Gate's E-W approach road. The builders of those walls placed rows of juniper logs between every three courses of stones, apparently to provide the walls with greater flexibility in the event of an earthquake. In the course of the Persian attack, the logs caught fire and burned from end to end within the wall, weakening the blocks around them. Following the attack, with Gordion's citadel now controlled by the Persians, two new bastions were added at the Gate's east entrance, but otherwise there were no other discernible changes (fig. 14).

The next major phase of construction would not come until the Late Roman period, in the early 4th century CE, when Gordion likely functioned as a Roman

military base called *Vinda* or *Vindia*. At this time, a ca. 11 m. long ramp paved with spoliated stones was added to the E-W approach road, with wheel ruts 1.50 m apart. In the 2023 season, we found a comparable and contemporary surface on the N-S road segment, directly south of the gatehouse. The surface was covered with pebbles and stone slabs, and it featured two wide-grooved wheel ruts, with a drain on the eastern side (fig. 16). This may have been the time when two stone walls were built to the north of the gatehouse, encroaching on the road surface. Such an installation would have further narrowed the entrance to the citadel and it may have been connected with the Roman military camp.

How long that camp continued to operate is unclear, but we uncovered evidence in the South Gate trenches for a subsequent fire, along with several well-cut limestone blocks that had presumably collapsed from adjacent buildings. Presumably in the 12th–14th centuries CE – the period of Gordion's Medieval village – the high point on top of the two stone walls mentioned above (situated directly north of the original gatehouse) was used as a cemetery. This cemetery probably encompassed the entire southwest side of the Citadel Mound, extending at least 100 m NW–SE. The South Gatehouse and adjacent road appear to have marked its eastern boundary. In 2023, we excavated sixteen graves in the South Gate trenches: nine of these were Islamic, four were Christian, and three were too badly disturbed to judge the religion affiliation of the decedents (fig. 18).

Those in the Islamic graves were (as today) buried lying on their right side, with the left arm crossing the torso, and with the head facing toward Mecca. The Christians were interred lying on their backs with the arms either crossed over the torso or extending down over the pelvis. No remains of artifacts, clothing, coffins, or wooden grave covers were found with the burials, with the exception of a simple copper-alloy earring found in situ on the skull of one of the Islamic skeletons. Significantly, the food remains from Gordion's Medieval village (dated 12th–14th centuries CE) include pig bones, which indicates that some members of the population were pork-eating, and therefore likely Christian.

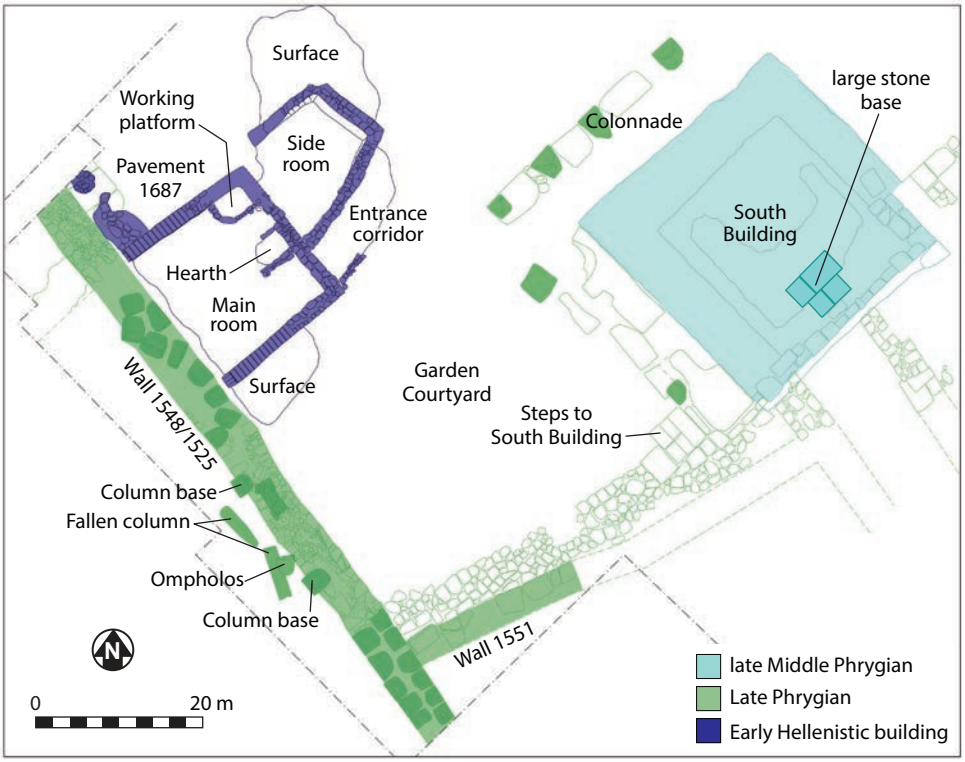


Figure 20: Plan of the western part of the Mosaic Building complex: late Middle Phrygian (early 6th century BCE), Late Phrygian (late 6th – late 4th century BCE), and Hellenistic (late 4th – mid 3rd century BCE) phases. Prepared by Sarah Leppard, with modifications by Gareth Darbyshire and Ardeth Anderson.



Figure 21: Architectural terracottas from the Mosaic Building complex, early 6th century BCE. Photo by Gebhard Bieg.



Figure 22: Excavation of the Mosaic Building in 2022, looking northwest. Sarah Leppard uncovers the andesite omphalos and limestone column. Photo by Gebhard Bieg.

A fully detailed osteological analysis of the remains will be completed next year by Tuğba Gençer, in association with Gareth Darbyshire, both of whom excavated the burials. Their preliminary conclusions indicate that the Islamic interments included one infant, two children, three adult females, and three adult males. The Christian burials included one sub-adult, possibly male, one adult female, and two adult males. The decedents suffered from osteoporosis, congenital diseases such as rheumatoid arthritis and ankylosis spondylitis, and defects such as osteoid osteoma (a benign tumor), which was found in the vertebrae of most of the skeletons.

The detailed sequence of the burials is currently difficult to discern, because we have no closely datable artifacts or radiocarbon dating evidence. It is perhaps more likely that all the Christian burials are earlier than the Islamic ones, but we cannot rule out the possibility that at least some of the Christian and Islamic burials overlap in date. In either case, the cemetery offers important evidence for mortuary customs in medieval central Anatolia, and it appears to be the first known example in the region with Christian and Islamic graves in the same location. This discovery therefore brings Gordion's Medieval occupation into even sharper focus, especially the religious configuration of its inhabitants.

One of the principal problems in excavating the South Gate trenches is that a large area on the western side, south of the gatehouse, was the victim of late 19th century stone robbing for the construction of a branch of the Berlin-Baghdad railroad. This has made the reconstruction of the various construction phases especially difficult, and the task could not have been accomplished without the patience and perseverance of the Area 1 trench supervisor, Simon Greenslade.

Excavations in The Mosaic Building (Area 1 MB Extension Trench)

The Mosaic Building appears to have been the most elaborately decorated and spatially complex layout within the citadel during the 6th and 5th centuries BCE (figs. 2, 12, 14, 19, 20). Rodney Young was the first to explore the complex, and we continued excavations there in 2019, 2022, and 2023. The building's name derives from its pebble mosaic floors, all of which featured a hooked meander motif in blue set against a white ground.

During the excavations in 2019 and 2022, we realized that the building's history was far more complicated than had previously been thought. There was construction here already in the Early Phrygian period (9th century BCE), in the form of a megaron, probably measuring 19 x 9.50 m, with interior columns (fig. 14). After the fire of ca. 800 BCE, the Early Phrygian megaron was replaced by another building whose plan is unclear, although we have extensive evidence for the building that followed it in the early 6th century (figs. 12, 14, 19, 20). At this point, Gordion was under Lydian control, and Lydian financial support likely made it possible to add new roofs with architectural terracottas throughout the citadel (fig. 21). The newly constructed Mosaic Building featured a stone-paved court, several rooms with colored pebble mosaic floors, and a nearly square building bordered by stone half-columns on two sides, which Young labeled the "South Building" (figs. 19, 20).

Young believed that the complex dated to the early 5th century, when Gordion was under Persian control, but re-examination of the pottery and small finds in the destruction level has demonstrated that the building was severely damaged in the Persian attack of

ca. 540 BCE, and much of it went out of use at that time. This re-examination was launched by Gebhard Bieg and Elspeth Dusinberre, both of whom have been studying 6th century buildings in other parts of the site, and we are enormously grateful to them for their meticulous analysis.

The South Building was reconstructed after the Persian attack with largely reused material; the new gray and red stone half-columns, in fact, were clearly recut from Middle Phrygian wall blocks. Within the South Building and set against the back wall was a large stone base intended for a display of importance, which may have been the ancient cart with the Gordian Knot that was cut by Alexander during his visit to the site in 333 (fig. 20).

A flight of steps led from the South Building into a courtyard that measured at least 19 m N-S and 12.5 m E-W. Given the fascination with gardens in the Persian period, as well as the size of the courtyard, it is likely that a garden occupied this space, and palaeobotanical analysis of the fills in this area should enable us to reconstruct it, at least in part. The western side of the court was bordered by a 1.30 m thick wall, composed primarily of large gray granite and white limestone blocks. This wall continues for a least 20 m, and we have not yet found its northern end (Wall 1548/1525 in figs. 19, 20). All of the large blocks feature a sequential series of numbers that conform to the system used by architects at Lydian Sardis, but here too there are signs of reuse. The blocks that comprise the wall likely come from an early 6th century structure on the citadel – which one is still unclear – and they were set in place here when the South Building was reconstructed after the Persian attack. Nevertheless, even in their reused state, the sequence of numbers was scrupulously followed, and they represent the only numbering system known from architecture in the Phrygian region.



Figure 23: Dr. İbrahim Dural conserving the bronze cheekpiece from a helmet, probably of 6th century BCE date, from the Mosaic Building. Photo by Fatma Nur Bahar.

Projecting from the southwestern (exterior) side of the wall were two well-cut limestone blocks spaced 3 m apart (fig. 20). These were clearly bases for limestone columns, one of which was found lying in front of them (figs. 20, 22). The shaft had split into two halves but the break was clean, and so we can be sure that the column's total height was 3.20 m. It is now clear that the columns flanked a niche in which was displayed the stone omphalos or navel that we found last year. The omphalos, which has a height of 0.57 m and a diameter of 0.49 m, is the only one to have been found in Asia Minor. There was a door on either side of this omphalos shrine, so it must have been intended to highlight the sanctity of the court that visitors were about to enter.

Excavation on the opposite (interior) side of the wall containing the omphalos demonstrated that this zone, apparently part of a court, was a highly decorated area different from any other in the complex. Hundreds of gray and coral-colored terracotta cones or pegs originally formed part of a wall mosaic, probably arranged in geometric patterns that echoed those in the contemporary architectural terracottas on the Mosaic Building's roof. The latter were also found in large numbers, and fragments of wall plaster indicate that the walls were painted blue, red, and white.

A few other discoveries highlight the elite nature of the complex. Altogether we have found five small gold foil panels with relief decoration that were once affixed to wooden boxes or furniture, as well as a large three-nozzled marble lamp featuring incised concentric circles,

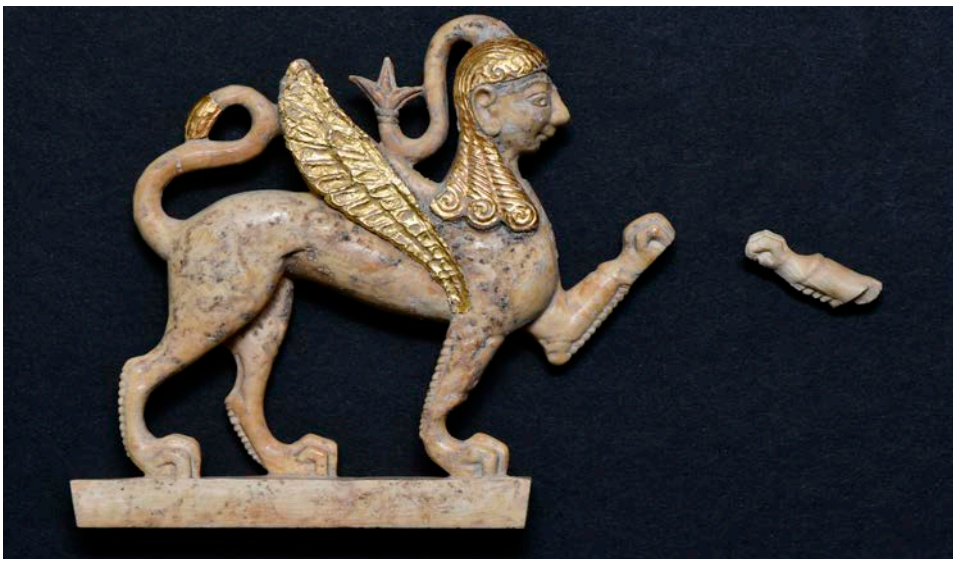




Figure 24: (top) Gilded ivory sphinx discovered in the Mosaic Building complex, with the paw from a fragmentary second sphinx at right (early 6th century BCE). Photo by Ahmet Remzi Erdoğan.

Figure 25: (bottom) The opposite side of the complete sphinx. Photo by Ahmet Remzi Erdoğan.

a meander surrounding a star, and knobs or reels in relief. There was also a cheekpiece belonging to a bronze helmet, probably of 6th century BCE date, and therefore contemporary with the bronze and iron breastplate found in this area in 2019 (fig. 23).

Our most unusual and exciting find from this area was a gilded ivory sphinx nearly 7 cm high and 8 cm long (figs. 1, 10, 24, 25; cf. Object Conservation above). The sphinx is carved on both sides, but only one side includes gilding and detailed carving. She stands on a flat base with one forepaw raised and a tail curving over its hindquarters. A tendril terminating in a trefoil lotus extends from her head, while hair on the back of the legs is indicated by notches. Gilding was applied in three areas: to the striated hair ending in spirals; to the wing, with two rows of outlined feathers; and to the tip of the tail, marked by striated lines. The sphinx probably decorated a wooden chair or throne, perhaps standing along the top of the furniture since there is no trace of any attachment on the sphinx's head. We discovered another piece that is a mirror image of the raised paw, although slightly smaller (fig. 24), so it seems likely that there was originally a heraldic pair of sphinxes. The style suggests a date in the early 6th century, with parallels in East Greek vase painting (the head tendril is found in pottery from Chios), Assyrian and Lycian ivories, and Archaic marble kouroi (statues of youthful, idealized men).

This was the period when Gordion was under Lydian control, and the Mosaic Building where it was found probably served as the residence of Gordion's rulers during that period. Such a prestige object is therefore perfectly understandable in this context. However, the deposit from which it came dates to the end of the building's use in the Early Hellenistic period, nor were any other parts of a throne or chair discovered, despite a complete excavation of the surrounding area. It therefore seems possible that both the ivories and the bronze cheekpiece were damaged in the Persian attack, and then deposited in a fragmented state as votives when the building was reconstructed. I have already hypothesized in last year's newsletter that this complex likely contained the cart with the Gordian Knot, and all of the evidence we have discovered thus far would fit with that hypothesis.

The western wall of the court (Wall 1548/1525) was still standing in the early 3rd century BCE, although the decorated façade with the columns and omphalos had collapsed by then. Built within the court against the northern part of the wall was a small mudbrick structure with two rooms and a narrow porch leading into the main room. A hearth was installed in the center of the main room's northeast wall, and nearby, in the north corner, there was a mudbrick and stone working

platform, as well as an alabastron (fig. 20). After the building had fallen out of use ca. 250 BCE, the smaller stones in the wall were robbed. Gradually, 1.30 m of fill was deposited there, and a terrace wall was built across the northeast side of the area. The late third century witnessed the construction of a building with rooms both small and large as well as a stone-paved courtyard, but the complex was abandoned when the Romans moved into the region in 189 BCE in pursuit of the Celtic Galatians.

Tumulus 52

Tumulus 52, one of Gordion's largest burial mounds, was excavated in 2019 as a collaboration with the Museum of Anatolian Civilizations in Ankara. We had several reasons for conducting excavations there, but prominent among them was the fact that the tumulus lies directly along the axis of the Middle Phrygian citadel's East Gate. Anyone leaving the citadel would have had their attention directed toward the center of the tumulus, so it seems highly likely that the decedent was a member of the ruling family. Excavation reached the wooden tomb chamber, which had collapsed, and there was evidence of an earlier robbing that had disturbed the contents, but much of the original assemblage remained intact. Further work on this assemblage was delayed by the pandemic, but both conservation and research continued this summer at an accelerated pace. The research was directed by Mustafa Metin of the Anatolian Civilizations Museum and Braden Cordivari of the Institute for



Figure 26: Conservation of the small dinoi or cauldrons from Tumulus 52 (8th century BCE) by Kozan Uzun and Murat Can Süygün, both of Ankara University. Photo by Brian Rose.

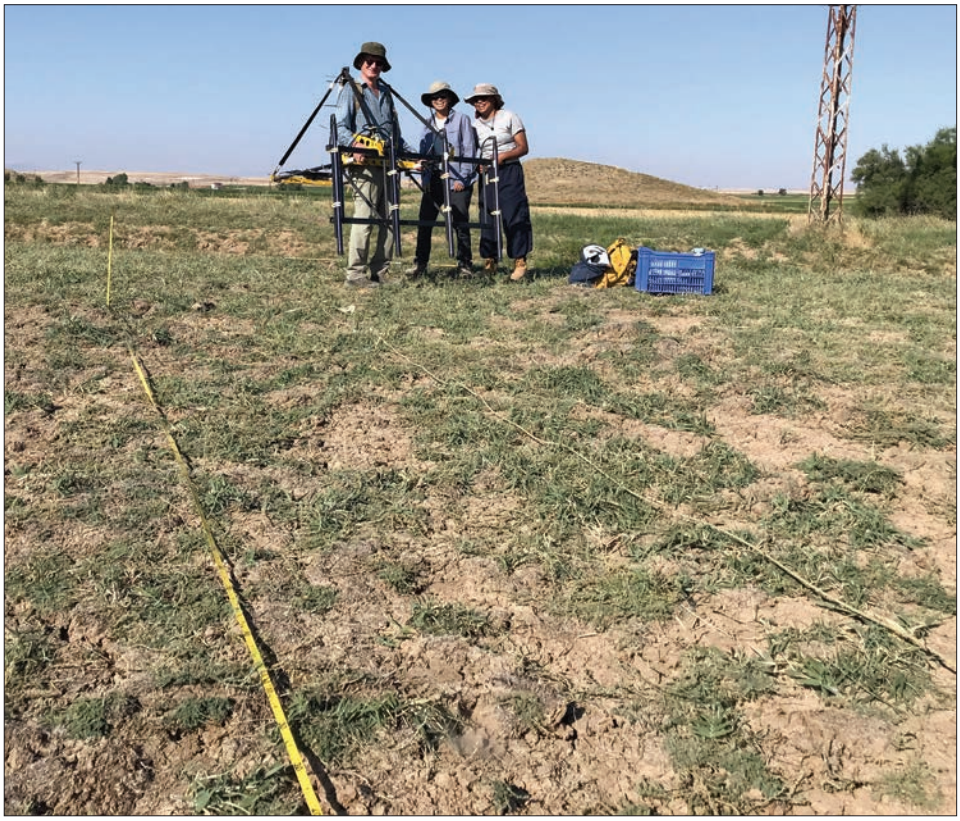


Figure 27: From left to right: Christian Hübner and Penn graduate students Helen Wong and Sheridan Marsh, in the midst of magnetic prospection. Photo by Brian Rose.

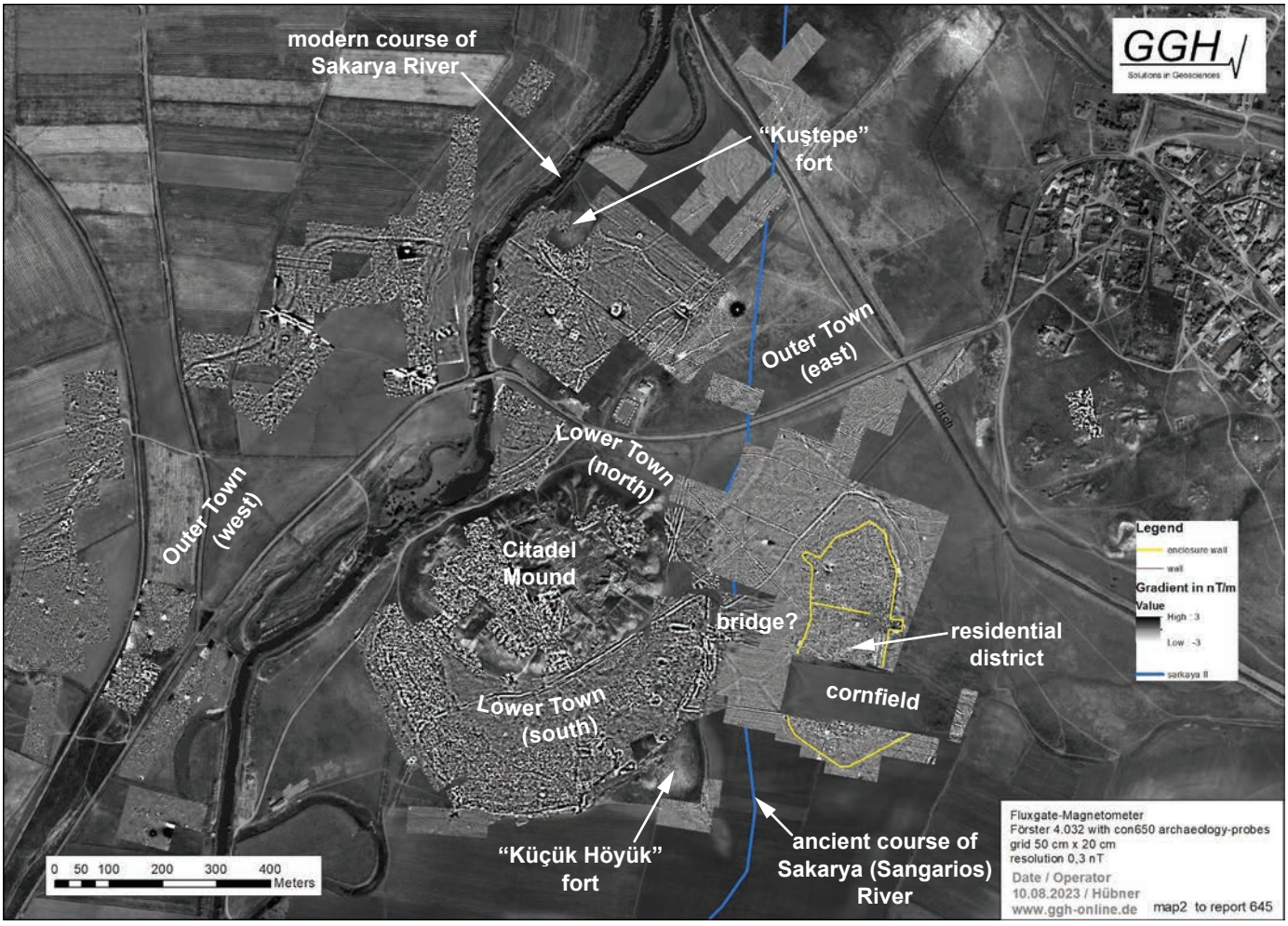


Figure 28: Magnetic prospection results from Gordion, with the outlined borders of the newly discovered residential district in the eastern Outer Town. Plan by GGH.

the Study of the Ancient World at NYU, while the conservation was overseen by Kozan Uzun of Ankara University, working in tandem with Murat Can Süygün, an M.A. student also at Ankara University.

In the 2019 newsletter, we announced the discovery of a leather belt with metal studs set around a copper alloy disk, over 20 bronze fibulae (clothing pins), several bronze bowls and a cauldron, and an iron tripod, most of which are items typically found in Gordion's elite tombs. This summer our analyses yielded a wealth of new information. We had earlier suggested that there were two decedents in the tomb chamber – a woman and an 8 or 9 year old child. A re-examination of the bones has demonstrated that all of them belong to the child, who was therefore the sole occupant of the tomb chamber. Such a burial calls to mind Gordion's Tumulus P, built ca. 760 BCE and similar in size, which contained the remains of a child aged 4-5. The wood used to build the tomb was pine and cedar, as in the case of the Tumulus MM ("Midas Mound") tomb chamber, and there were at least 24 small ceramic dinoi, or mixing bowls, presumably used during the funeral meal (fig. 26).

We had previously thought that the glazed pottery found near the tomb chamber was indicative of robbing in the 12th or 13th century CE, but after XRF analysis and conservation, we realized that this was glazed pottery of Middle Phrygian (8th century BCE) date, which means that we cannot actually pinpoint when the robbers entered the tumulus. Among the many significant discoveries in and around the tomb chamber, the most striking are the more than 3,000 amber beads, which constitute one of the largest assemblages of amber found anywhere in the ancient world. Fourier Transform infrared spectroscopy, conducted by Prof. Dr. Yusuf Kağan Kadıoğlu and Prof. Dr. Ali Akın Akyol, indicates that the amber was imported from the Baltic, so this discovery

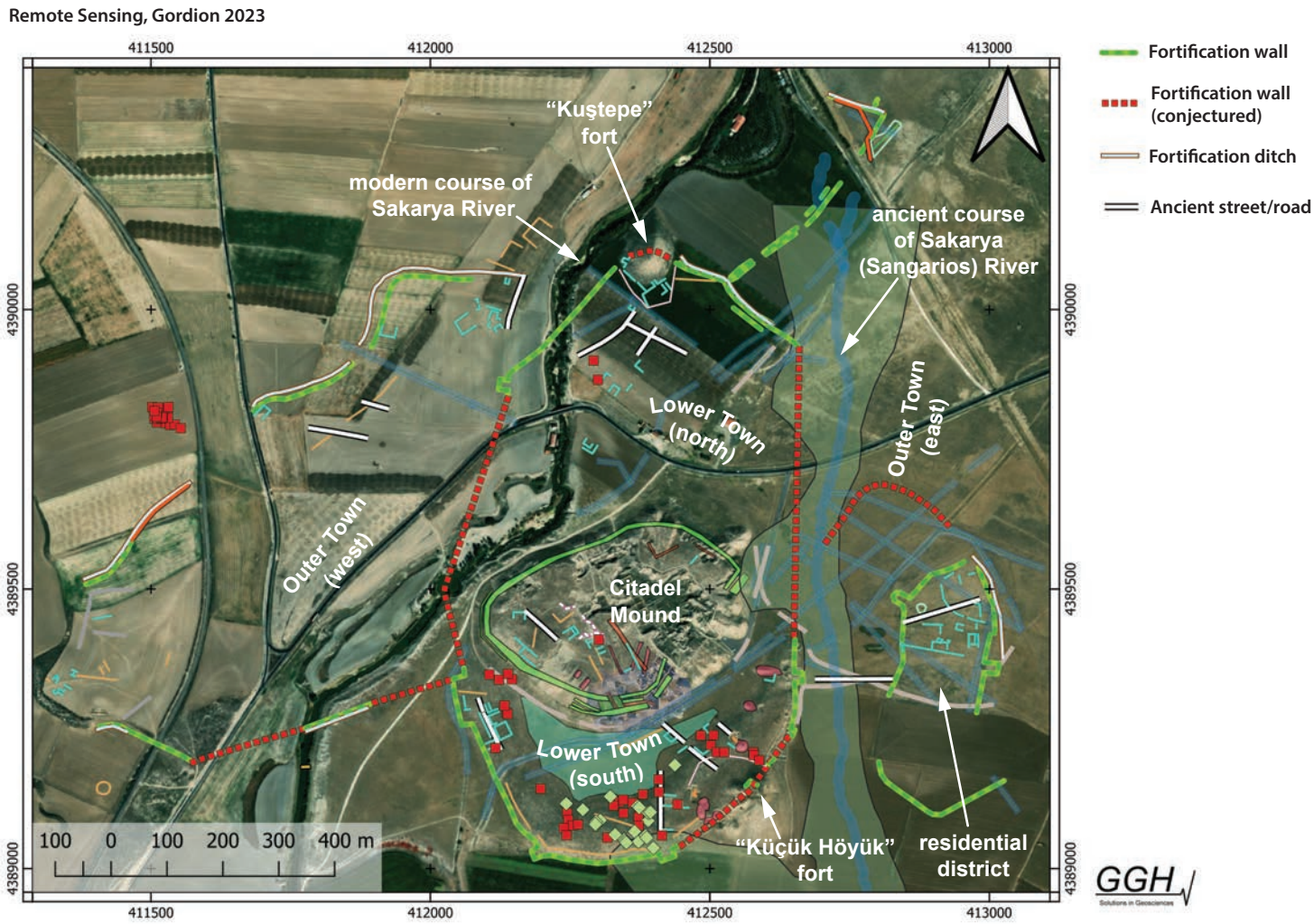


Figure 29: The results of remote sensing on and around the Citadel Mound, as of August 2023. Plan by GGH, with modifications by Gareth Darbyshire and Ardeth Anderson.

supplies welcome information regarding the 8th century trade networks to which Gordion was connected.

Remote Sensing

We devoted twice as much time as usual to remote sensing this year, due to the unexpected discovery in 2022 of an eastern Outer Town area, the full extent and character of which remain to be determined (figs. 27–29). Once again, work was conducted under the direction of Christian Hübner and Stefan Giese, assisted by Penn graduate students Sheridan Marsh, Helen Wong (Art and Archaeology of the Mediterranean World), and Danielle Perry (Ancient History). The team covered an area of 15.2 hectares (37.5 acres) and focused primarily on a discrete residential district within the eastern Outer Town (figs. 28, 29). We also continued our investigations to the northeast of "Kuştepe", an early 6th century Lydian-period fort at the northern end of the Lower Town that had been destroyed in the Persian attack on Gordion ca. 540 BCE. Most of the remote sensing involved the use of magnetic prospection, the results of which were refined by Electric Resistivity Tomography (ERT).

We were able to investigate most of the residential district, even though the presence of a cornfield in the middle of the target area precluded the use of magnetometry, and our work there will be completed next year when the cornfield becomes available for prospection. The district covers an area of 6.75 hectares (16.7 acres), measuring 450 m N-S x 150 m E-W, and it was surrounded by a fortification wall with towers, as was the case for the Lower Town. Judging by the ceramics on the surface, the district was inhabited during the Middle Phrygian period (ca. 800-540 BCE). Magnetometry detected the existence of

several sizable structures, the largest of which measured 17 x 26 m, as well as the presence of a road and bridge crossing the Sakarya River and leading toward the citadel's South Gate. The Sakarya, which in antiquity flowed along the eastern side of the Citadel Mound, was the principal water source for the settlement, and was no doubt the reason why an eastern Outer Town was built here. There may have been a second walled district to the north of our investigation area, as was the case with the western Outer Town and Lower Town, but further investigation with ERT next year will be necessary to confirm it.

To the east of Kuştepe, we were able to confirm our readings of yet another fortified district there, although the later movement of the Sakarya River has resulted in the disruption of some of its walls. In any event, the size of Gordion – its Citadel Mound, Lower Town, and Outer Towns, can now be estimated at over 110 hectares (272 acres). This is larger than the protected areas of Troy (32 or 33 hectares), Zincirli (39 hectares), and Carchemish (90 hectares), although smaller than that of Hattuşa (180 hectares) and Kerkenes (270 hectares).

In conclusion, remote sensing suggests that there may have been as many as five fortified districts ("towns") in addition to the fortified citadel. This kind of plan is duplicated in no other known Iron Age city, although it is reminiscent of the Gordion citadel's division into a series of walled courts. We still do not know how the population was divided among these districts, but they highlight Gordion's concerns for security during the Middle Phrygian period.

UNESCO, Gordion Conference, and the Gordion Museum

The dominant conversation topic throughout the summer was Gordion's nomination for inscription on the World Heritage Site List. This has been a long and complicated process extending all the way back to 2012, when Gordion was first recognized as a candidate for the UNESCO list. We completed the application dossier in 2020–2021, in tandem with the Department of World Heritage Sites in the General Directorate of Cultural Heritage and Museums, a division of the Turkish Ministry of Culture and Tourism. The on-site evaluation took place in the 2021 field season, with members of UNESCO, Turkey-ICOMOS (International Council on Monuments and Sites), and the Cultural Ministry's Department of World Heritage Sites (see *Friends of Gordion Newsletter 2021*, pages 11–12).

The 2022 UNESCO meeting to decide on the World Heritage Site nominations was postponed due to the war in Ukraine, but at UNESCO's September 2023 meeting in Riyadh, Saudi Arabia, the delegates voted in favor of Gordion's inscription, which means that we have become the twentieth site in Turkey to be added to the World Heritage Site list (figs. 30, 31). Throughout this lengthy process, we benefited from the guidance and energy of a dedicated group from the Ministry of Culture and Tourism: Gökhan Bozkurtlar, Kıvılcın Neşe Akdoğan, Zeynep Tuna Yüncü, Pınar Kuşseven, Yıldırım İnan, and, of course, Yusuf Kıraç, director of Ankara's Museum of Anatolian Civilizations, and his staff. We also received strong and continuous support from the Turkish Ministry of Culture and Tourism, the Ankara Chamber of Commerce, and the Polatlı Belediye (municipality) and Kaymakamlık (district governorship).

Even before the UNESCO meeting we wanted to signal the importance of Gordion's candidacy as a World Heritage Site while celebrating the 100th anniversary of the foundation of the Turkish Republic. We therefore organized a day-long conference on *Gordion and its Neighbors in the Middle Phrygian Period (800-540 BCE)*, focusing on both archaeology and conservation (fig. 32). In addition to the Gordion team (Brian Rose, Richard Liebhart), the speakers included Scott Branting on Kerkenes (an expansive Phrygian site near Yozgat), Nick Cahill and Gül Gürtekin-Demir on Lydian Sardis, Bahattin Çelik on Hacıtuğrul (a large Phrygian citadel mound near Gordion), Çiçek Karagöz on Daskyleion, Mehmet Işıklı and Oğuz Aras on Urartian Ayanis, Michele Massa on the Konya Regional Survey Project, and Yusuf Polat on Midas City. The following day featured a tour for the conference participants of Gordion's Citadel Mound, the Gordion Museum, and Tumulus MM. The discussions throughout these two days allowed us to bring together a vast number of new archaeological discoveries within a single venue, and we are greatly indebted to a generous group of sponsors for making the event possible. Principal among these are the municipality of Polatlı, the U.S. Embassy in Ankara, and Ankara's Museum of Anatolian Civilizations. Gareth Darbyshire and Günsel Özbilen Güngör (Gordion Project) handled much of the detailed organization for the conference, together with Mr. Kadim Koç, deputy director of the Polatlı Municipality, and we are extremely grateful to the municipality for hosting the event and for ensuring that everything ran smoothly.

In recognition of Gordion's new UNESCO status, the Ankara Museum also decided that the exhibits, text panels,

and interior of the Gordion Museum should be thoroughly renovated. The museum's revitalized spaces will open in November of 2023, and the newly discovered gilded ivory sphinx can now be viewed by everyone.

The new UNESCO designation will enable us to accelerate the protection of the site and its monuments, while increasing the number of visitors who come to Gordion and the local museum. All visitors to the site now receive a free copy of our new guidebook (fig. 33), the production of which was financed completely by the Polatlı municipality. Our hope is that the book will be used by secondary schools as a means to highlight the importance of greater cultural heritage protection in the region.

2023 Gordion Cultural Heritage Education Project

The Cultural Heritage Educational Project (CHEP) has been a vital part of the Gordion Project since 2014. The program's principal goal is to reach out to the children and young adults living near Gordion and to demonstrate that the archaeological site and the surrounding areas are very much a part of their heritage. The program is directed by Dr. Ayşe Gürsan-Salzmann, archaeologist/anthropologist at the Penn Museum, assisted by Mr. Halil Demirdelen, an archaeologist and museum educator, and Prof. Mecit Vural of Gazi University's Department of Botany and Environmental Sciences in Ankara. In 2023, we also benefited from the assistance of Ms. Ece Erlat, a Turkish archaeologist/educator with a specialization in interactive outreach/education projects in archaeology and history.

There were 22 Turkish participants in the ninth season of CHEP, the



Figure 30: The UNESCO meetings in Riyadh, Saudi Arabia, on September 18, 2023. Gordion had just been declared a World Heritage Site, and Prof. Dr. Gülnur Aybet (Turkish ambassador to UNESCO) is addressing the body.



Figure 31: The reception in Riyadh following Gordion's inscription on UNESCO's World Heritage Site List. From left to right: Mr. Halil İbrahim Yılmaz (Vice Chair of the Board of Directors, Ankara Chamber of Commerce); Mr. Kadim Koç (Deputy Director of the Municipality of Polatlı); Mr. Mürsel Yıldızkaya (Mayor of the Municipality of Polatlı); Ms. Zeynep Tuna Yüncü (Turkish Ministry of Culture and Tourism); Ms. Cennet Ceylan (Gordion Site Manager, Turkish Ministry of Culture and Tourism); Mr. Gürsel Baran (Chairman of the Board of Directors, Ankara Chamber of Commerce); Mr. Fatih Ulusoy (Turkish ambassador to the Kingdom of Saudi Arabia); Prof. Dr. Gülnur Aybet (Turkish ambassador to UNESCO); Mr. Birol İnceciköz (General Director of Cultural Heritage and Museums, Turkish Ministry of Culture and Tourism); Mr. Mustafa Pulat (Turkish Ambassador to Yemen); Ms. İpek Özbek (Turkish Ministry of Culture and Tourism); Prof. Dr. C. Brian Rose (Gordion Project Director); Dr. Şule Kılıç Yıldız (Turkish Ministry of Culture and Tourism).



Figure 32: The conference *Gordion and its Neighbors in the Middle Phrygian Period (800-540 BCE)*, held in Polatlı on 13 July 2023.

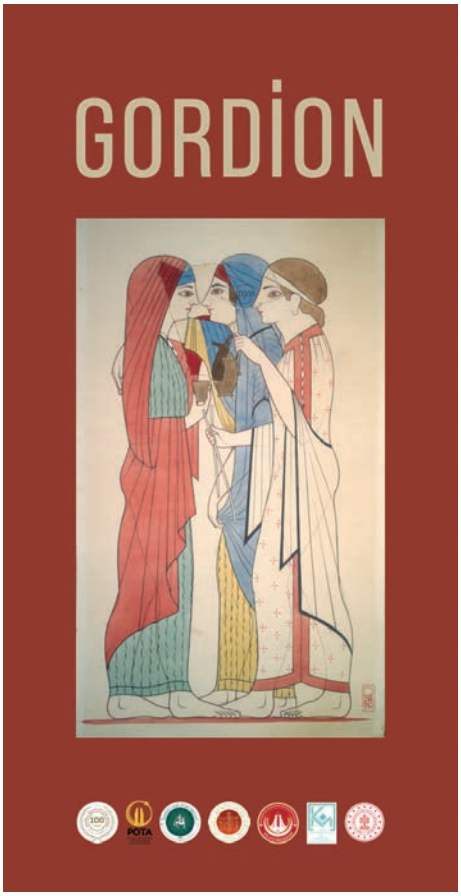


Figure 33: The newly published Turkish language *Gordion Guidebook*.

majority of whom were high school and university students. The orientation included Gordion team members Brian Rose, Gareth Darbyshire, Günsel Özbilen Güngör, Tuğba Gençer, and Ramazan Parmaksız, who provided an overview of past and present excavation and conservation projects (fig. 34). There was also a presentation by Ms. Sinem Çakmak, who is the head of the Cultural Heritage Section of the Ministry of Culture and Tourism in Ankara, and director of programs for elementary school children.

This season we wanted the students to receive a broader overview of the cultural riches of west-central Anatolia. Among many other sites, the group visited the Neolithic settlement of Çatal Höyük, near Konya; the Roman theater and baths being conserved in Ankara, not far from the Temple of Rome and Augustus; several 16th century Sufi Islamic monuments dedicated to Mevlana and his followers; and the City Museum in Beypazarı, near Ankara.

During our visit to the Neolithic site of Çatal Höyük, the group learned about crafting obsidian tools, mudbrick production, rituals associated with wild bulls, and the role of women in religion (fig. 35). The City Museum in Beypazarı contained personal memorabilia linked

to several generations of the town's founding families. There were also manuscripts written in Ottoman Turkish describing the construction of 17th-19th century historic buildings, and photographs of elderly craftsmen. Some students remarked that the contents of the museum represented their grandparents' era or even earlier, and several of them were inspired to conduct an oral history of their families.

The city of Eskişehir is located only 3 km from the ancient Phrygian city of Dorylaion (Şarhöyük). Once can still find a crafts quarter there, called Odunpazarı, where craftsmen make replicas of historical objects, pottery, and jewelry using local materials and traditional tools. Many of these objects are made from meerschaum stone acquired from local mines that have been in operation for thousands of years. The trip provided students with a visual synopsis of past and present craftsmen at work.

Dümrek is an open-air Phrygian monument that features massive rock-cut stepped thrones dedicated to Matar, the Phrygian Mother Goddess. Some of these thrones were recently destroyed by looters with dynamite, and this desecration provided the opportunity for a larger discussion with the students about cultural property protection. One participant commented that "the destruction at Dümrek convinced us that we have to assume responsibility for the preservation of our cultural heritage, to keep our connections to the past alive."

At the ancient Roman theater in Ankara, the local conservation team provided an overview of the materials and techniques they have been using, including the stones they have selected and the quarries from which these came. On the last day of the program there was a ceramics workshop led by Gordion Project archaeologist Serkan Pamuk, in



Figure 34: Ramazan Parmaksız lecturing on faunal analysis to the students in the Gordion Cultural Heritage Education Program (CHEP). Photo by Brian Rose.



Figure 35: The Gordion Cultural Heritage Education Program at Çatal Höyük, listening to a lecture by archaeologist Numan Arslan.



Figure 36: The Gordion Cultural Heritage Education Program students participate in a ceramics workshop led by archaeologist Serkan Pamuk. Photo by Ayşe Gürsan-Salzmann.

which the students made vessels from clay (fig. 36). During that session, the enthusiasm of the participants was at a high level, especially when their finished products turned out to be what they had envisioned, even though the open-air firing was not as successful as we had hoped.

Publication and Staffing

Our work during the 2023 season was made easier due to the energetic support of our representative, Mr. Tolga Çelik of the Museum of Anatolian Civilizations in Ankara. We also benefited tremendously this year from the periodic visits of Mr. Yusuf Kıraç, the director of the Museum of Anatolian Civilizations; and of Mr. Umut Alagöz, Mr. Murat Yıldırım, and Mr. Mehmet Akalın, the Deputy Directors. We extend warm thanks to the General Directorate for Cultural Heritage and Museums, especially Mr. Gökhan Yazgı, Mr. Birol Inceciköz, Mr. Yahya Coşkun, Mr. Köksal Özköklü, Mr. Umut Görgülü, Ms. Nihal Metin, and Mr. Ömer Balamir, many of whom visited us this summer.

Equally generous in their assistance were the Kaymakam and Belediye Başkanı of Polatlı, Mr. Murat Bulacak and Mr. Mürsel Yıldızkaya, respectively. Mr. Kadim Koç, deputy director of the Polatlı Municipality, has been a constant source of support for us, especially with regard to the new Gordion guidebook, the Cultural Heritage Education Program, and the Gordion Conference. We were also honored by several visits from the staff of the U.S. Embassy in Ankara, who have been among our biggest supporters. We extend our thanks, in particular, to Ms. Gözde Doğan and Ms. Fulya Yavuz, as well as to Mr. Jeff Flake and Mr. Scott Oudkirk, the Ambassador and Deputy Chief of Mission of the Embassy, respectively. Finally, the Ankara Chamber of Commerce has been especially supportive of the Gordion UNESCO application, and we are very grateful to them for their energetic promotion of the site.

The excavation house was filled with researchers working on a wide variety of manuscripts that spanned a period from the Bronze Age through the Roman period. These included Gareth Darbyshire (Penn Museum), iron objects, especially those from the Early Phrygian Terrace Complex and megarons; Elspeth Dusinberre (University of Colorado, Boulder), Early Phrygian megarons and the Middle Phrygian Mosaic Building; Penn graduate student Brigitte Keslinke,

Hellenistic ceramics and Middle Phrygian architectural terracottas; Tuğba Gençer (Istanbul University—Cerrahpaşa), human skeletal material from the Lower Town and the South Gate; Canan Çakırlar (Groeningen University) and Ramazan Parmaksız, zooarchaeological analysis; Billur Tekkök Karaöz and Ali Akın Akyol (Başkent University), Roman ceramics; Gülşah Günata (Koç University), Iron Age ceramics; Günsel Özbilen Güngör, lamps; and Rostislav Oreshko, Phrygian graffiti.

The pace of publication continues to increase. Last year witnessed the appearance of Gül Gürtekin-Demir's study of the Lydian pottery from Gordion, *Lydian Painted Pottery Abroad*. The Gordion monographs that appeared this year include *The Gordion Excavations, 1950-1973: Final Reports Volume II. The Lesser Phrygian Tumuli Part II: The Cremations*, by Ellen Kohler and Elspeth Dusinberre, and Phoebe Sheftel's *Bone and Ivory Objects from Gordion* (figs. 37, 38). Janet Jones' volume on the glass artifacts from Gordion is now in press, and we are in the final stages of editing *The Hellenistic Settlement at Gordion* by Shannan Stewart and Martin Wells, and a volume of collected studies on Middle and Late Phrygian Gordion, edited by Brian Rose and Elspeth Dusinberre. Mustafa Metin (Museum of Anatolian Civilizations), Braden Cordivari (ISAW/NYU), and Prof. Dr. Ali Metin Büyükkarakaya (Hacettepe University) prepared for publication the report on the Tumulus 52 excavations, and Richard Liebhart, Mustafa Metin, and Braden Cordivari finalized their article on the Beyceğiz Tumulus excavation. Finally, the Turkish version of the *Gordion Guidebook* was published this season, thanks in particular to Gareth Darbyshire, Günsel Özbilen Güngör, Kadim Koç, and Cuneyt Kaya.

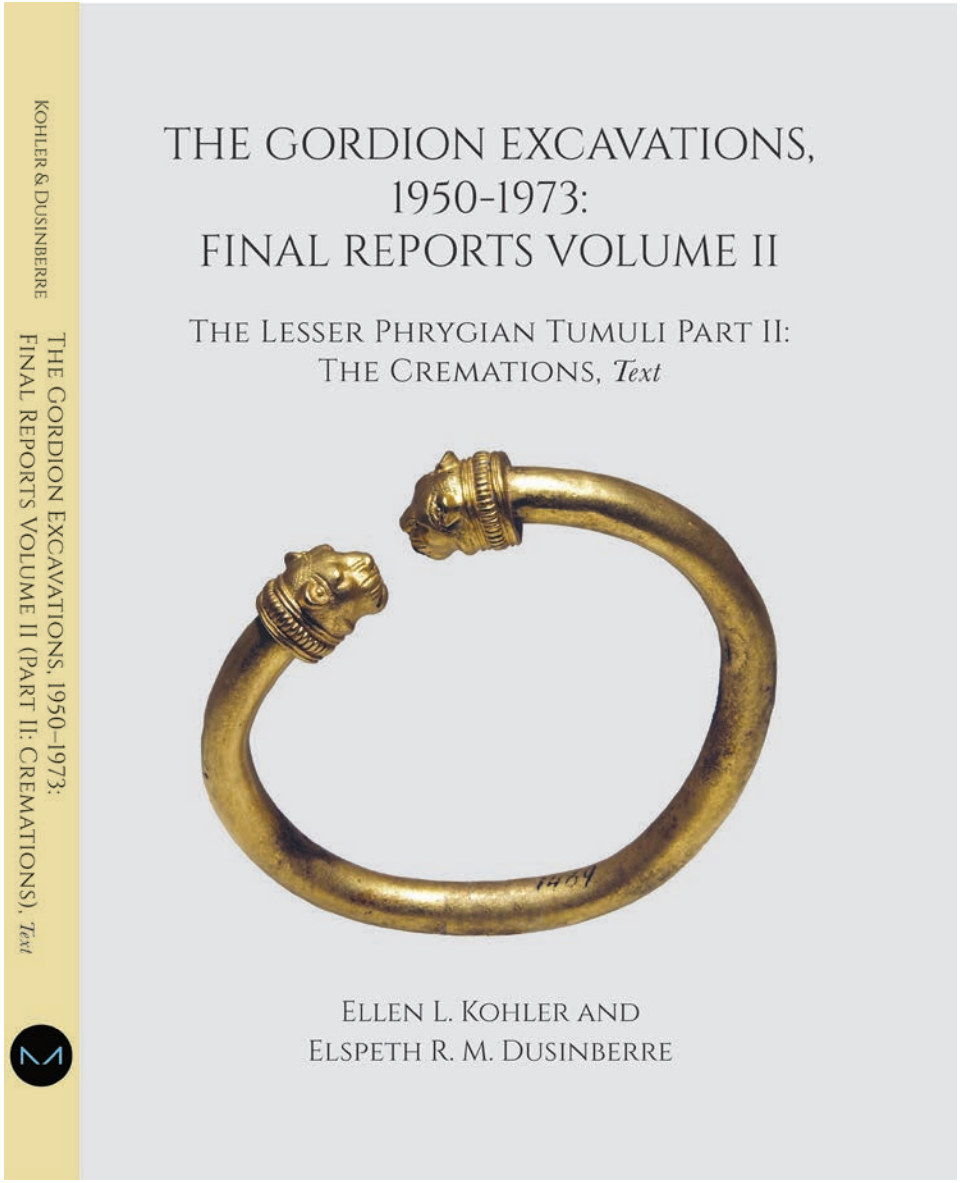


Figure 37: The newly published volume on Gordion's cremation tumuli.

We want to single out several members of the staff without whom this summer's work could not have functioned as well as it did (fig. 39): Dr. Günsel Özbilen Güngör, first deputy director, Tuğba Gençer, second deputy director, and Dr. Gareth Darbyshire, Gordion Project archivist, all of whom were also instrumental in staging a costume party for the 4th of July (fig. 40); Janessa Reeves (Penn), registrar, assisted by Fatma Nur Bahar; Doğa Koç (photographer), assisted by Fatma Nur Bahar; Prof. Dr. Canan Çakırlar (Groeningen University) and Ramazan Parmaksız, zooarchaeological analysis; Prof. Dr. Edibe Özmen Baysal (Hacettepe University), assisted by Şule Duman (Başkent University) and İpek Özdemir (Hacettepe University), archaeobotany; Prof. Dr. Billur Tekkök Karaöz, Dr. Deniz Tamer, Ebru Kırkanlı, Şule Duman (Başkent University), and Eda Altıparmak, ceramic analysis; Serkan Pamuk (Akdeniz University), pithos project; Braden Cordivari, Joseph

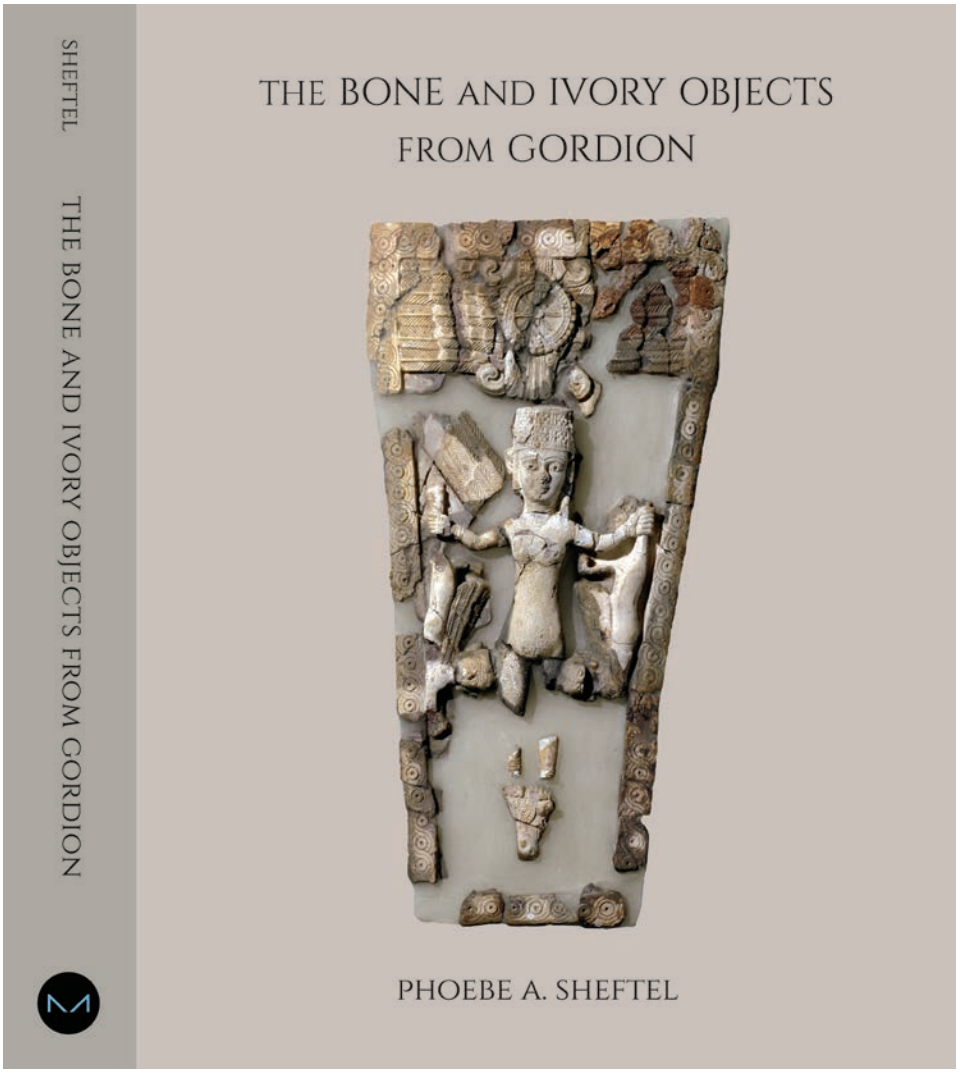


Figure 38: The newly published volume on Gordion's bone and ivory objects.

Nigro, Brian Norris, Emily McGowan (surveying); Prof. Dr. Ünal Akkemik (Istanbul University-Cerrahpasa), assisted by Hakan Çelik (Istanbul University), dendrochronology; Tuğba Gençer, bioarchaeology; and Christian Hübner (geophysics).

Dr. Ayse Gürsan-Salzmann (Penn) co-directed the Cultural Heritage Education Project (CHEP) with Mr. Halil Demirdelen, assisted by Bedirhan Demirel (Başkent University) and Ece Erlat. The excavation of the South Gate was supervised by Simon Greenslade, assisted by Matthew Reichelt (Graduate Group in Ancient History, Penn), and the cemetery there was excavated by Tuğba Gençer and Gareth Darbyshire. The Mosaic Building excavations were supervised by Sarah Leppard, assisted by Eda Mollahuseyinoğlu (Mimar Sinan University, Istanbul) and Kris Forrest (Penn Museum). We are especially grateful to Ahmet Remzi Erdoğan, the photographer of the Museum of Anatolian Civilizations in Ankara, who photographed several of the most important discoveries.

The architectural conservation was overseen by Elisa Del Bono, Angelo Lanza, Renzo Durante, and Mauro Perrone, assisted by Ali Can Kırcaali (Samsun University) and İlayda Şahin (Istanbul Technical University). The object conservation work was overseen by Jessica Johnson (Smithsonian), assisted by Dr. H. İbrahim Dural (Hacı Bayram Veli University, Ankara) and Amber Swanson (Penn). The conservation of the finds from Tumulus 52 was supervised by Prof. Dr. Kozan Uzun (Ankara University), assisted by Murat Can Süygün (Ankara University). The digital imaging of the Tumulus MM tomb chamber was conducted by Prof. Dr. Matthew Harpster, Dr. Michael Barngrover, Günce Pelin Öçgüden (Koç University), and Dr. Richard Liebhart, while the drone photography was conducted by Ali Can Kırcaali and Zekeriya Utğu, our house manager and guard. Zekeriya kept everything running efficiently within the excavation compound and on the Citadel Mound. As every year, Gareth Darbyshire assisted with the preparation of the Gordion newsletter. Ardeth Anderson, of the Penn Museum, also deserves our heartfelt thanks. Although she is not a member of the Gordion staff in Turkey, she is responsible for the design and layout of each newsletter. She also finalizes the illustrations in our annual permit application and reports, and in our Gordion publications, including the monographs mentioned above.

Within the U.S., we continually rely on the counsel, guidance, and support of Dr. Charles K. Williams, II, as well as Dr. Christopher Woods, the Williams Director of the Penn Museum, Amanda Mitchell-Boyask, deputy director at the Penn Museum; and the Museum's Board of Advisors. It was a pleasure to welcome Chris Woods for a three-day stay at Gordion in late July, when he was able to meet Mr. Yusuf Kıraç, director of the Museum of Anatolian

Civilizations in Ankara (fig. 41).

We would like to close by noting again that none of our accomplishments this summer would have been possible without your encouragement and generous support. It is a pleasure to acknowledge, in particular, the assistance offered to us by the Penn Museum of Archaeology and Anthropology, the C.K. Williams II Foundation, the U.S. Embassy in Ankara, the Merops Foundation, the Areté Foundation, Matthew J. Storm, C94, WG00, and Natalia Arias Storm, Paul Williams and Leslie Berger, Alix and Keith Morgan, Nina Robinson Vitow, Robert and Joan Rothberg, and Ben and Jane Ashcom.

At this particular time, when so much cultural heritage has been disappearing so rapidly, we're enormously grateful for the investment that you've made in the



Figure 39: The 2023 Gordion staff in June. Photo by Fatma Nur Bahar.



Figure 40: The 2023 Gordion staff at the 4th of July costume party. Photo by Fatma Nur Bahar.



Figure 41: Mr. Yusuf Kıraç, director of Ankara's Museum of Anatolian Civilizations, with Penn Museum Director Dr. Christopher Woods. Photo by Brian Rose.

preservation of the past. We hope to be able to share our results with more of you during this year, at lectures in the U.S. or at Gordion itself. You'll find the latest information about the project on our website:

https://www.penn.museum/sites/gordion/

We look forward to welcoming you to the site!

With best wishes,

C. Brian Rose
Günsel Özbilen Güngör
Tuğba Gençer
Gareth Darbyshire



The Friends of Gordion support the ongoing activities of the Gordion Excavation Project, which include site conservation, fieldwork, and publications of the latest discoveries. All Friends of Gordion receive the annual newsletter that provides information about the results of the season's work. Friends are especially welcome at Gordion and are given guided tours of the site, the excavation, and the museum. Every contribution, no matter how small, enables us to further the cause of protecting and publicizing the site. You can support Gordion by making your tax deductible donation at

https://www.penn.museum/sites/gordion/friends-of-gordion/