Plate I

Air view of Yassihuyuk-Gordion. At the left the Sangarios River, with the city mound beside it. The modern village appears upper center; some of the tumuli, including the great tumulus, lie along the spur to the right of it.

UNIVERSITY MUSEUM BULLETIN
VOL. 16 MAY, 1951 NO. 1

GORDION - 1950

Seventy miles to the southwest of Ankara a long low mound—its Turkish name, Yassihuyuk, means just that—rises beside the Sangarios River a mile or two above its junction with the Porsuk. The railroad line from Istanbul to Ankara, following the valley of the Porsuk and then that of the Sangarios, passes by on the opposite side of the river. This was the military route from the coast to the interior of Anatolia in ancient times, just as it is the route followed by the railroad today. From Greek and Roman writers we know that Gordion, the capital of ancient Phrygia, lay on the Sangarios River and on the military road; hence the visit of Alexander the Great in 333 B.C. during his campaign against the Persian King, when the famous episode of the cutting of the Gordian knot is said to have occurred. The site at Yassihuyuk thus fulfils the two topographical requirements which are known to us for ancient Gordion; and the impressive size of the mound, together with the number and scale of the tumuli or grave mounds which surround it, give assurance that in times past this was a center of culture and of population worthy to be the capital of the dynasty of the famous King Midas.

The air view of the site (Plate I) shows the city mound at the lower left beside the river and some of the grave tumuli rising on the slightly higher spurs of the hills which run down to the flood-plain. The largest of these tumuli, which may be seen to the right of the modern village, rises to a height of about 150 feet; from its summit it is possible to count eighty or more tumuli, large and small.

The modern village which served as headquarters for the expedition is hardly a metropolis and is entirely modern; it did not exist when an Austrian expedition dug briefly at Gordion in the summer of 1900. The village was moved to its present site after the Greco-Turkish War of 1922, the attraction being a copious spring of water. Beyond the good water, cold even in mid-summer, the amenities offered were few. Two houses were rented, and these served as living and working quarters for the expedition, as well as for the storage of most of the small finds. In addition to the

writer, the members of the staff were Raci Temiser, Commissioner representing the Turkish Antiquities Service, and Burhan Tezcan, Turkish Assistant; Edward B. Reed of Princeton, Architect; E. R. Gallagher of Doylestown and Conrad Wilson of the University of Pennsylvania, excavators. Dr. Edwards spent a month at Gordion, and Miss Ellen Kohler two, during which time she was in charge of records, assisted by Miss Margaret H. Young. Miss Mabel Lang of Bryn Mawr took over this work in July, and Miss Machteld Mellink, also of Bryn Mawr, completed the excavating staff during June and July. A general survey of the site was made by Mahmout Akok during a two weeks' visit from Ankara. Every courtesy and assistance was rendered by the Turkish Archaeological Service in Ankara, and especially by Necati Dolunay, the Assistant to the Director.

Very little is known about the history of Phrygia in early times, and almost no systematic excavation has been done in that part of Anatolia. We do know that the Phrygians, who apparently spoke a language akin to Greek, entered Asia Minor in the twelfth or thirteenth century before Christ, coming perhaps by way of Thrace and across the Hellespont and the Bosporus. The impact which these migrants may have had on a declining Hittite Empire is little known; in any case the Phrygians seem to have taken over the hegemony of western Asia Minor during the tenth, ninth and eighth centuries. They were ruled by a dynasty of kings alternately named Gordius and Midas, concerning whom a number of extravagant legends have come down to us through Greek sources. King Midas was known from his fabulous wealth, which perhaps gave rise to the legend of the "golden touch"; a great façade carved on the rock face of a cliff some seventy miles to the west of Gordion has traditionally been called the tomb of King Midas because his name appears in its inscription. The problems on which light may be shed by excavation at Gordion, then, concern the origin and culture of the Phrygians, their impact on the Hittite Empire, their rôle as transmitters of Hittite culture, and their influence on the Greeks during the early formative period of Greek culture.

The four large trenches cut on the city mound are shown on its plan (Plate II). The contours show that the mound is somewhat higher on its south and west edges than elsewhere, and this greater height proves to be the result of longer habitation. Remains of a settlement of Roman

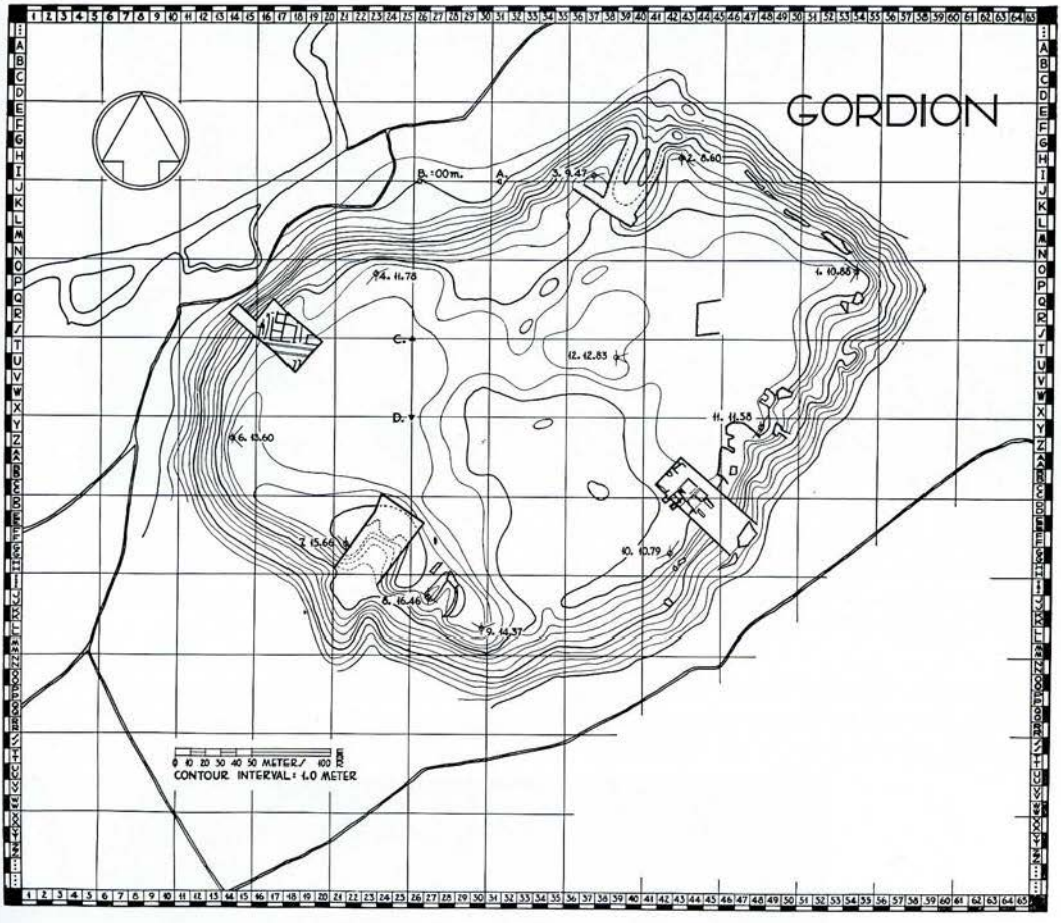


Plate II

Survey of the city mound, showing trenches dug in 1950. The central trench, outlined on only three sides on this plan, lies at 44-45/Q-S. The trench at the north end of the mound is an old cutting made by the Austrians in 1900.

Figure 1. (Above) Hellenistic remains in the southeast trench. Three below-ground storage rooms of a house built of sun-dried bricks and rubble; in the partition between the rooms the bricks are covered with clay plaster. The heavy stone foundations into which this basement was laid belong to the second or archaic level.

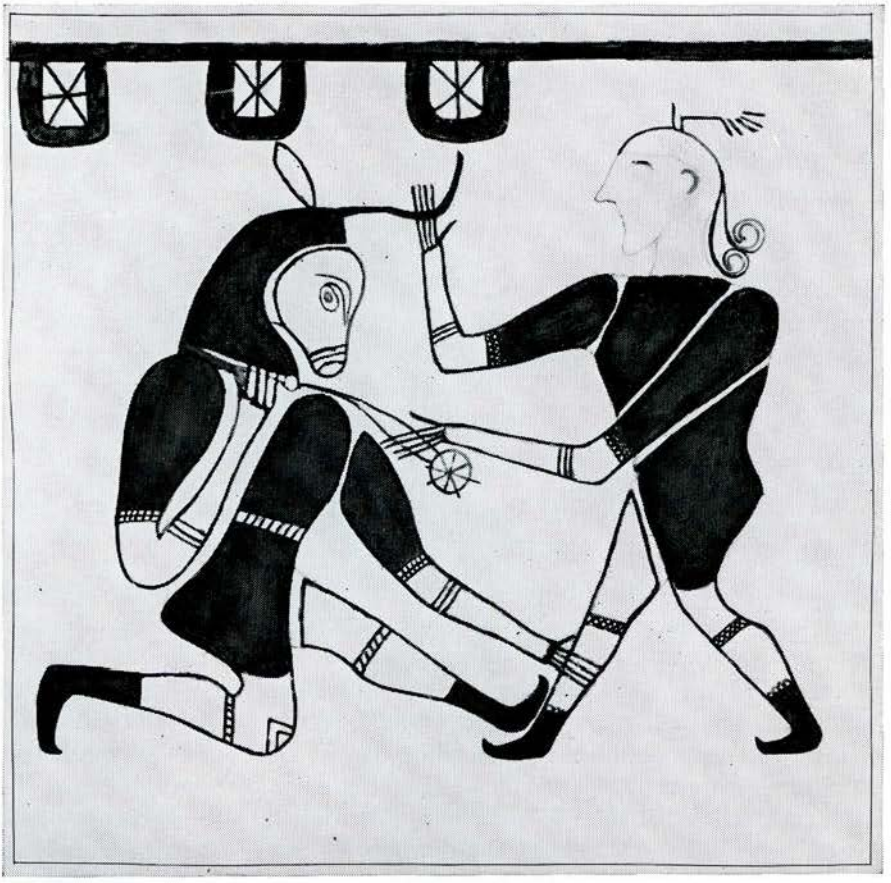
Figure 2. (Below) Fallen tiles from a house of the fourth or third century. The decorated tile was painted in red and black on a white ground. Fragments of roof tiles lie all about it.

Plate III

times were found only in the south and west trenches; elsewhere the uppermost habitation level is Hellenistic. This discovery bears out a statement of Strabo, that in his day the formerly great city had shrunk to a mere hamlet, which now appears to have been limited to the southern and western rim of the mound. In the other two trenches the uppermost level proved to be of the third century before Christ, and the greater part of the mound seems to have been abandoned at some time around 200 B.C. This abandonment was perhaps a result of the incursion of the Gauls who took over this part of Anatolia, subsequently known as Galatia, in the closing years of the third century. If this interpretation of the desertion of the greater part of the site proves to be correct, and if no subsequent disturbances of the stratification occurred, we may have in the uppermost levels at Gordion an important fixed point for the chronology of Anatolia in Hellenistic times.

The remains of private houses of the fourth and third centuries which were uncovered suggest a fairly prosperous agricultural community. Beneath one house storage-bins or chambers built of sun-dried bricks were uncovered (Plate III, Fig. 1); the house itself had evidently been decorated with gaily painted terracotta tiles bearing designs in relief. At one point one of these was found as it had fallen on the destruction of the house, together with a heap of roof tiles (Plate III, Fig. 2). The finding of the decorated tile together with roof tiles is important in that it gives evidence as to the original position of the decoration—evidently part of an ornamental band at the top of the house wall just below the roof. No remains of public buildings of the Hellenistic Period were found in the somewhat limited area tested in 1950. Fragments of painted relief tiles, however, turned up all over the mound at this level, indicating that such tiles were a common form of house decoration, not specially made for the adornment of public buildings. This, together with the fact that tiles from the Hellenistic and the archaic levels have been combined into one building, makes impossible such a restoration of the "temple" at Gordion as was proposed by the Austrian excavators in 1900.

The decorated tiles from the second level, of archaic style and probably made in the sixth century, are more interesting than those from the first level because they show scenes with figures rather than mere geometrical and floral patterns. Numerous fragments bearing the same figures turned up, and though no complete tile was found, it was possible to restore the



Decorated tile from the second or archaic level: Theseus killing the Minotaur. Reconstructed drawing.

complete scene with certainty (page 8): Theseus slaying the Minotaur. The figures are in relief; both wear bright pinkish-red garments and boots, and the details are added in black. The ornamental border at the top varies from tile to tile. These architectural terracottas were found in conjunction with very massive walls and foundations, and must have served to decorate the buildings which stood on them. The walls were of roughly dressed stones laid in parallel lines with rubble filling between, usually to a total thickness of six to eight feet, and bedded (Plate IV, Fig. 1) on rubble foundations below ground level. Characteristic of these foundations at Gordion are great wooden beams laid through their thickness to serve as binders, which bespeak a good supply of wood near at

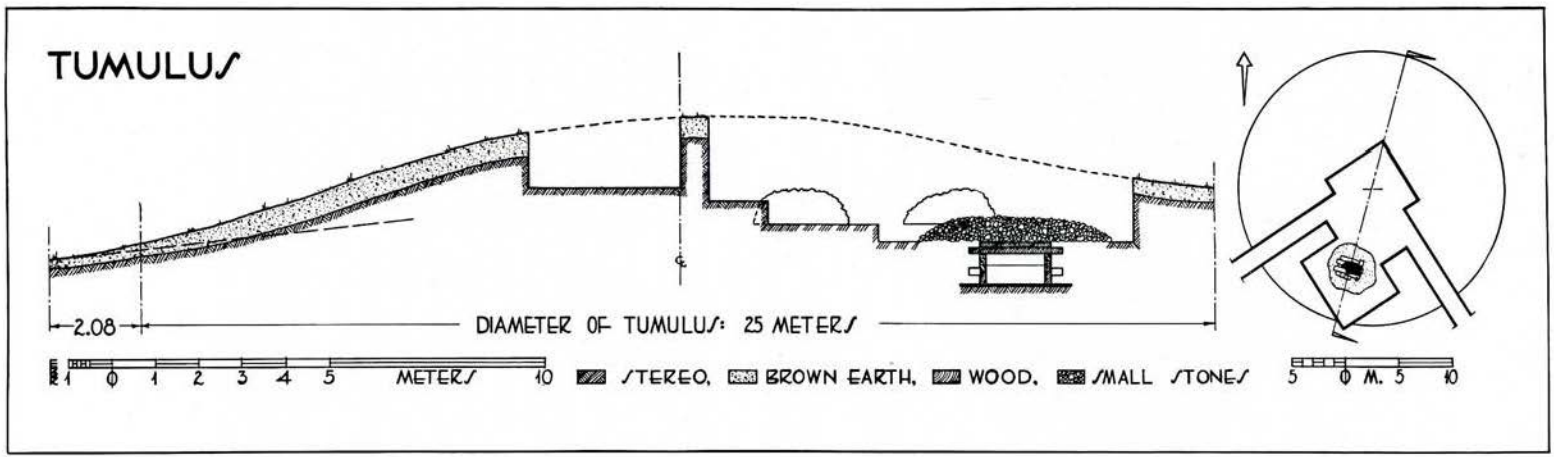
Figure 1. Foundations of a building of the archaic level. The roughly squared blocks of the wall rest on a rubble foundation; the wall was about eight feet thick, the foundation somewhat more.

Plate IV

Figure 2. Phrygian inscription on limestone, found among débris in the Hellenistic level, but certainly to be assigned to the second, archaic, layer.

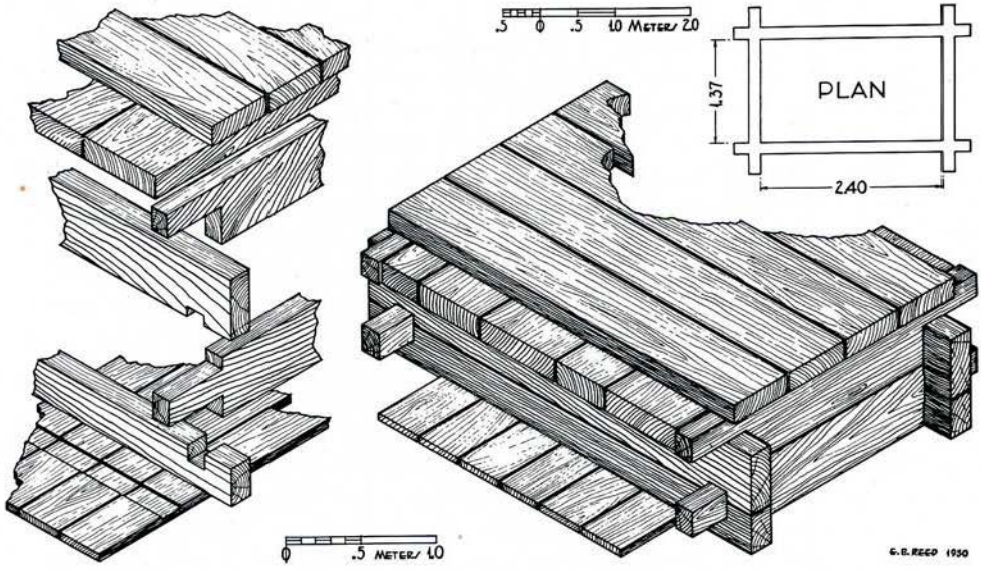
hand in archaic times; as may be seen in the air view (Plate I) the country is now entirely treeless, except for a fringe of willows and poplars along the river. The scale and extent of the archaic foundations, which fill the southeast and the central trenches and which show the same orientation in both, bespeak important public buildings, palaces, temples and the like. The area so far uncovered, however, is not enough to give any complete building plans, and one of the main objectives of the second campaign will be to clear enough of the archaic level to recover the plans of these buildings, and to gather any evidence available as to their identification. To this end, the finding of Phrygian inscriptions like the one found in 1950 (Plate IV, Fig. 2) will be of help, if enough can be found to give the data with which to "break" the Phrygian language. Up to the present, the known inscriptions in Phrygian have been so few in number that they give no adequate material with which to work in any attempt at interpretation. As may be seen from the picture, the alphabet used resembles the Greek, but with the addition of exotic forms. The lines are written from right to left—retrograde—and apparently were meant to be seen from two sides, since the first line at the bottom is upside-down to the other three above. Characteristic of the Phrygian seems to be the *epsilon* with four slanting bars, a phenomenon rare but not unknown in Greek.

The massive foundations of the second level occupied so much space in our trenches that only in a very limited area were we able to make a deep cut in order to test the stratification of the mound. In our "peephole," however, we were able to go to a depth of fifty feet from the surface, where we reached water-level, and to identify six major habitation layers in the mound. The sixth, at the botttom, yielded some complete vases of hand-made burnished red ware, to be attributed to the "Copper Age" or Early Bronze Age late in the third millennium before Christ. Above this level a stratum producing Hittite pottery was partly occupied by foundations made of rough boulders heaped up and chinked with small stone and clay in the Hittite manner. With the fourth level appears, side by side with the late Hittite pottery, a coarse grey ware, later characteristic of the Phrygian culture, and here suggesting the first arrival of the Phrygians in this part of Anatolia and a period when native and imported styles went along side by side. Above this the third layer produced a preponderance of the characteristic grey and black Phrygian



Sectional drawing of a Phrygian tumulus, showing the wooden burial chamber well off center toward the southwest.

Plate V



Wooden chamber in a Phrygian tumulus; reconstructed drawing, showing the mortised joints at the corners.

pottery, but with the addition of painted ware decorated in geometric patterns. This third layer was occupied by part of a large building, apparently well preserved, of which the further investigation will be pursued next year. Unlike the buildings of the archaic second layer, which had been badly plundered in later times by people in search of building material, this Phrygian building of the third level gives promise of being recovered in good condition. The débris over its floor, largely of broken bricks and rubble, contained also ash and cinders, perhaps suggesting a destruction by fire which could conceivably be brought into connection with the invasion of Asia Minor by the Cimmerians at the beginning of the seventh century, bringing to an end the hegemony of the Phrygian kingdom.

The evidence from our deep cut cannot of course be regarded as conclusive as to the history of the mound in all its phases because the area tested was so limited in size. The six major occupation levels, however,

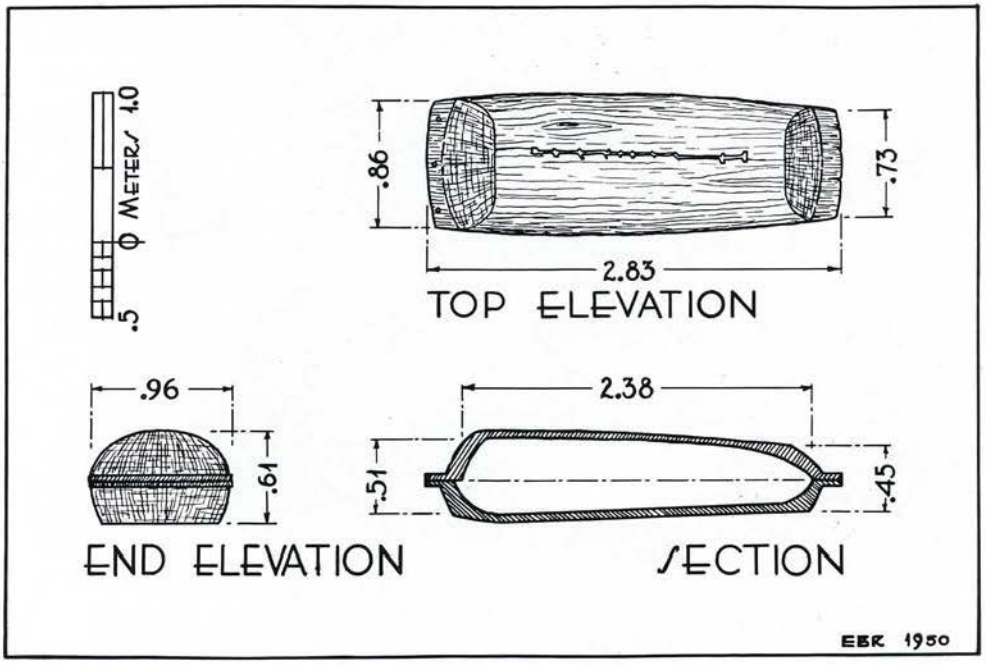
seem to be well established, though the niceties of sub-periods must await more extended digging. The indications are most encouraging that data will be forthcoming on the entire history of the Phrygian people in Anatolia, from their arrival during the later phases of the Hittite Empire through their period of flourishing and leadership to their almost total eclipse by the Gauls in Hellenistic times.

During all this long period people of course continually died and were buried, and further valuable light on the history and culture of the Phrygians may be obtained from the graves. The building of tumuli as monuments over burials has been taken to be a characteristic Phrygian custom; in fact the existence of similar grave tumuli in Thrace has been cited as evidence for the route of the Phrygian migration from the Balkan peninsula through Thrace to Asia Minor. Six of the tumuli at Gordion were dug during the 1950 campaign; three of these, it would appear, belong to the second or archaic level of the city mound, three to the third or Phrygian layer. These latter were typical Phrygian burials, presumably of people of wealth, since the very building of a mound twenty or more feet high over a grave must have been very costly. The drawing in section of one of these tumuli (Plate V) shows the burial well away from the center. This was the case too in the second tumulus dug, as evidently also in the third, which remains unfinished since the burial has not yet been found, although the entire center of the mound has been cleared. The burials were purposely off-center, perhaps as a measure of security against robbery; evidence was found to show that a device was used during the building of the tumuli to keep the center and the peak at one fixed point as the heap of earth rose. This device was the laying of lines of stones, renewed every few feet as the mound rose, which crossed each other at a fixed central point.

The Phrygian burials consisted of wooden chambers (page 12) carefully constructed of great beams or planks neatly mortised at the corners. No traces of any bronze or iron nails to hold them together were found, nor of any wooden pegs. The careful joinery of the mortised corners (Plate VI, Fig. 1) bespeaks skilled carpenters, as well as a liberal supply of sizable wood. After the burial had been made in the wooden chamber—in one case the body was simply laid on the wooden floor, in the other there were two bodies, one on the stone-paved floor, the other in a large wooden coffin (Plate VI, Fig. 2 and page 15)—stones were heaped to

Figure 1. Photograph of the wooden construction of the second Phrygian tumulus, showing the mortise. The beams above are part of the cover. The wood was an unidentified variety of conifer.

Figure 2. View of the wooden chamber of the second tumulus, showing the skeleton and the pots offered in the grave, lying on the lower part of the coffin after the lid had been removed.



Reconstructed drawing of the coffin, which was evidently made from one great log split lengthwise and hollowed. Strips of lead were inset as decoration, and the whole may have been covered with inlay of bone or ivory.

some depth over the wooden covers of the burials; then the tumuli were built over all, at the same time serving to protect the graves and as rather ostentatious monuments over them. The offerings placed in the graves themselves were modest, usually consisting of simple clay vases and pins of bronze or ivory which may have served to fasten the grave clothing of the dead. The pottery, in one case painted Phrygian ware (Plate VII, Fig. 1), in the other plain grey ware, resembles the wares found in the third level of the city mound and serves to date the burials late in the eighth century or early in the seventh. The earth heaped over the graves was of course scraped up from somewhere nearby, and it contained various objects already deposited in it before the tumuli

Figure 1. Painted Phrygian jug from the first tumulus. The designs are geometric, in dark glaze on the buff surface of the clay. This style was probably prevalent in the eighth and seventh centuries.

Plate VII

Figure 2. Crude stone idol from the filling of a tumulus of Phrygian times.

were built. These included many fragments of pottery, some bearing scratched inscriptions or graffiti in Phrygian, bronze fibulae or safety pins and arrow points, and several crude little idols similar to the one shown on Plate VII, Fig. 2, of which the purpose and use cannot yet be determined.

The richest of the graves opened in 1950 was somewhat later, to be dated around 550 B.C. and to be associated with the second or archaic level of the city mound. In this case the grave contained not an inhumation but a cremation, evidently that of a young girl. The body had evidently been burned elsewhere, and the embers of the funeral pyre then brought to an area previously floored with a layer of fine white clay. A pit near the center of this floor was used to contain the bits of charred bone which remained after cremation; the rest of the pyre was scattered over the prepared floor. A large quantity of gold and electrum jewellery was found, mostly in the pit with the bones. Of this some pieces were preserved in almost perfect condition, while others were badly fused or damaged by heat. The jewellery had evidently been thrown into the pit with the bones after the cremation, some of it landing on relatively cool ash, while other pieces fell on hot embers. If the jewellery had been used to deck the body during its cremation, all would have melted. The best piece is a bracelet of gold (Plate VIII, Fig. 1) open at one side, the ends beside the opening finished with a finely wrought lion's head at each side. Of equally fine workmanship are the gold earrings (Plate VIII, Fig. 2) delicately made on a small scale and decorated with granular beading. Similar beading was used for the suspension rings of a number of acorn-shaped gold pendants (Plate VIII, Fig. 3), evidently parts of a necklace. A much larger pendant (Plate VIII, Fig. 4) is made of thin sheets of gold interspersed with bands of fine gold wire, braided, and decorated with fine granular beading. Not illustrated are gold and electrum pendants of other shapes, bits of chain wrought from gold wire, and plain globular beads of gold and electrum, evidently fillers between the pendants of the necklaces. A silver mirror (Plate IX, Fig. 1), its handle-joint masked by a leaf-shaped bit of carved ivory, had perhaps served the dead girl during her lifetime as a reflector in which to admire herself when bedecked in all her jewellery; its presence in the grave would seem to be a sure indication that the dead was one of the vainer sex. A number of fragments of carved ivory found in the

Plate VIII

Figure 1. Gold bracelet with lions' heads from the sixth century cremation.

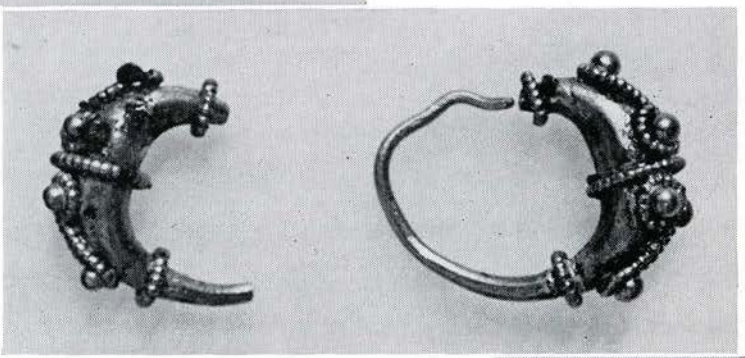


Figure 2. Gold earrings.

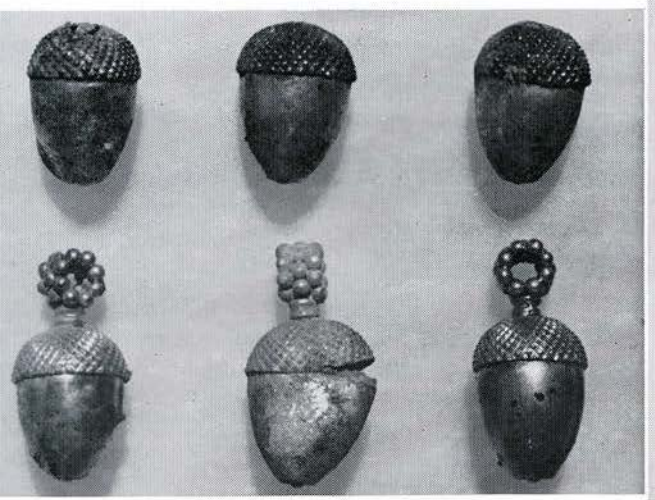


Figure 3. Acorn-shaped pendants of gold, from a necklace.

Figure 4. Large gold pendant.

grave was less well preserved than the jewellery, but some of the pieces had evidently served as inlay, suggesting that some furniture or decorated caskets had been included among the grave offerings. The two discs of ivory (Plate IX, Fig. 2) which were inlaid probably into wood, were themselves inlaid with some substance, probably colored glass paste, in the form of palmettes. The pottery from the grave included a number of small banded lydions, the ointment containers characteristic of Lydia in archaic times. A moulded vase in the form of a standing maiden clasping a bird to her bosom was an import from one of the Greek cities of the Ionian coast, to be dated with some assurance about 550 B.C. and thus a useful index as to the date of the grave. An alabastron or ointment vase of alabaster was another import; the jewellery itself, which finds its best parallels in archaic East Greek and Lydian work, was also probably imported. The contents of this grave bespeak not only a period of great prosperity in Phrygia in the mid-sixth century, but also a period of open communications and trade with other parts of the eastern Mediterranean world.

The combination of excavation on a stratified habitation site with the digging of graves has fulfilled the hopes entertained before work was started at Gordion. From the city mound we may expect good evidence on the history of Phrygia from well-stratified layers containing the ruins of buildings of various periods; from the graves we may expect rich finds of handsome objects which also serve to throw incidental light on the culture and history of the area. No definite answers can yet be given to the problems stated for Gordion and for Phrygia; but the work done during the first season of digging indicates that the answers may well lie in the mound and in the surrounding tombs of Yassihuyuk, almost certainly the ancient Gordion.

R. S. Y.

Figure 1. Mirror of silver, with leaf-shaped ivory decoration to conceal the joint where the handle was fastened to the mirror.

Plate IX

Figure 2. Ivory inlays from a casket or furniture. Palmettes, probably of colored glass paste, were in turn laid into the ivory.