

EXPEDITION NEWS

SOUTH ASIA

The Museum's Director, Dr. Rainey, and Professor W. Norman Brown, Chairman of the South Asia Regional Studies Department of the University of Pennsylvania, announce the opening of a new program devoted to the archaeology of South Asia (India, Pakistan, Ceylon, Afghanistan). Dr. George F. Dales has received the joint appointment as Assistant Curator of the new South Asia Section at the Museum and Assistant Professor in the South Asia Regional Studies Department. This is believed to be the first university chair in America devoted specifically to the archaeology of South Asia.

Dr. Dales, who did his graduate work at the University of Pennsylvania and was associated with the Museum's Near Eastern Section, has been with the Near Eastern Department of the Royal Ontario Museum in Toronto, Canada, for the past two-and-a-half years.

The new Section is making plans to begin a long-range program of excavations in South Asia beginning in Pakistan in 1964. Dr. Dales will go to Pakistan in January to make the final selection of sites for excavation.

THE SEARCH FOR SYBARIS

The Museum continued its search for the Archaic Greek city of Sybaris during April, May, and June of this year, again in collaboration with the Lerici Foundation and the Superintendent of Antiquities in Calabria, Southern Italy.

With electronic instruments and power-driven drills, the search was extended from the Ionian Sea to the foot-hills surrounding the plain of Sybaris, a distance of some fifteen miles. All of the plain in the vicinity of the two rivers, Crati and Coscile (Sybaris), has now been drilled on a grid pattern to the depth of some twenty-five feet. Pottery fragments of the Archaic period (6th century B.C.) are concentrated in an area of about three and one half kilometers, at a depth of approximately twenty feet, near the sea on the Crati river. This could be the site of ancient Sybaris or it could be only the port for the city. Building ruins located in that area by the instruments and drills are very limited—probably too limited to confirm the location of the city proper.

In an extended search of the foot-hills about the plain, we also found a Greek city located on a plateau, known as Torre Mordillo, above the plain near the junction of the Esaro and Coscile (Sybaris) rivers. Test excavations made by the Superintendent of Antiquities in June prove that it is a settlement occupied as early as the 6th century B.C. as well as later in the 5th and the 4th centuries. However, we believe that it is too small to be identified with Sybaris or the later (4th century) city of Thurii. The new techniques developed by the University Museum's ASCA and the Lerici Foundation are working, but we have yet to prove the actual location of buried Sybaris.

FROELICH RAINEY

GORDION 1963

Excavation at Gordion, aided this year by a grant from the American Philosophical Society, began on April 1 and continued until August 24. The specific objectives were to clear the Phrygian building discovered in 1961 at the west of Megaron 3; to recover the entire plan of a Phrygian building behind it on a terrace, and to explore its relation to another building at the south, partially uncovered in 1955; to clear the north side of the open square in the Phrygian city; and finally to make deeper cuts in the square itself in order to learn something of its earlier phases. All of these objectives were attained to a degree; but, as always, unexpected things turned up at the higher levels, making necessary some diversion from the original plan.

The deepening of the cut in which the railroad runs brought to light (not unexpectedly) a stretch of the Persian city wall at the north end of the mound. We had sought it before; in 1952 Machteld Mellink made a cut just to the east to look for it, and although she discovered traces of its existence, the wall itself had disappeared. We found it just half a meter within the scarp of her old trench. Charles Williams, during lulls in his architectural work, then made eight more trenches to trace its course along the north end and toward the northwest corner of the mound. Elsewhere in the upper levels Crawford Greenewalt had the good fortune to find two hoards of coins (the sixth and seventh from Gordion). The later of these, five gold coins, included two staters of Alexander and one of Philip, and two octadrachms, one of Antiochus I, the other of Seleucus III. These last are practically in mint condition and are beautiful to behold; but they seem also to be of great interest to the numismatists as the first specimens of their kind. The second hoard, of electrum, consists of 45 coins, thirds, sixths, and twelfths of the Lydian stater. All show the lion-head on the obverse, a plain punch impression on the reverse. They are among the earliest issues minted in Lydia, usually assigned to Alyattes, the father of King Croesus.

Megaron 4 was cleared by Ridge Kunzel, a student of Trinity College, Hartford, and by our own students Jane Sammis and Carol Ward. The building had been burned as had all those on the south side of the square. Its debris yielded large quantities of pottery and some bronzes, while a gold hinge or clasp, probably from a wooden box, hinted that our Phrygian buildings once contained more valuable articles, unfortunately portable. The building was like in plan to Megaron 3, with a wooden gallery around three sides of its main room; it affords new details on Phrygian construction and architecture. Of the Terrace Building at the south the east end was cleared by Peter Spanos of Michigan State University, showing that it was a long structure consisting of a row of rooms side by side, each with its anteroom at the south. Five of these had been cleared in earlier seasons; at the west, Bill Biers cleared a sixth and discovered that a seventh has yet to be opened. As each of these rooms is a little more than 11 meters in width, the building must be about 85 meters long—nearly 275 feet—if there is not yet another, eighth, room. All of these rooms

produced any quantity of minor finds to keep Ellen Kohler, our registrar, and Andy Seuffert, our artist, busy.

At the north side of the square Jim Carpenter cleared the remains of three buildings. These had not been burned as had those at the south; evidently the wind was from the north on the day of doom. Their remains had been picked clean, probably for material for reuse, and little was found in the fill over them. The central building, with different orientation from the others, had evidently been carried over from an earlier phase of the town; the level around it had been raised by about a meter and a staircase leading down from the new level of the square was constructed across its front. The building beside it also afforded evidence of a rather elegant earlier town: its foundations contained many reused architectural blocks, most of them more finely worked and finished than those of the eighth century city. Cuts through the level of the open square in front of these buildings showed a leveling fill put in to make an even surface for the stone pavement; beneath this was an earlier floor of pebble cobbling. A cut through this in turn brought to light a stretch of still earlier wall, evidently still Phrygian, about two meters below the eighth century square. The massiveness of this wall suggests that it may have been the fortification wall of the primitive Phrygian settlement. A cut in front of it discovered a heavy wall of crude brick, probably Hittite, at a still deeper level. But the 1963 campaign suggests that Phrygian Gordion had a long early history over three or four centuries, with at least two phases before the now-familiar eighth century town. Future work at Gordion will be directed as much to the city of King Gordios as to that of King Midas.

RODNEY S. YOUNG

CUNEIFORM TEXTS

This summer the Sumerians, dead and gone these four millennia, lived it up internationally, as it were, in Jena's "Hilprecht Sammlung," London's British Museum, and Oxford's Ashmolean Museum. For largely as a result of my researches in the cuneiform collections of these three institutions, some four hundred tablets and fragments will probably see the light of day in the next two or three years in the form of publications prepared jointly with Inez Bernhardt of Jena, C. J. Gadd of London, and Oliver Gurney of Oxford. The contents of these documents run the full gamut of Sumerian literary types: myths and epic tales, hymns and laments, proverbs, fables, and diverse essays. But as a foretaste of the coming Sumerological spread, let me mention here several essays concerned with the Sumerian schools, whose words will find a not unresponsive echo in the hearts of the students and professors of our own day.

One of the school essays, for example, begins with a student's rather unexpected but far from disheartening words: "Fellows, today we don't do any work (in school)." Another composition is taken up almost entirely by the student's grateful and flattering account of his professor who—according to the student—had taught him such practical matters as applied mathematics and how to get on in the world. And then, to close, there is the rather

plaintive essay in which the student describes some of the curricular activities current in his school, and complains that the six days' vacation which he has per month are all too brief. Or, as the student himself puts it:

Here is my monthly school schedule:
I have three days recess in the month,
I (also) have three (holy) feast days in the month,
(So that) twenty-four days (each) month,
I have to stay in school—(and) long days they are.

SAMUEL NOAH KRAMER

TIKAL, GUATEMALA

The 1963 field season at Tikal ran from January to September, with a summer staff replacing the winter one in June. The huge North Acropolis, the focus of much of the Tikal Project's interest since 1958, continued to be excavated in the form of a center-line trench some 170 feet long, 5 to 30 feet wide. In 1963 the trench was carried to bedrock throughout, providing a continuous record of the intricate evolution of this Acropolis which, with the Early and Late Classic temples fronting it, eventually covered about two and a half acres. While traces of much earlier occupation were found at the trench bottom, it was not until about 200 B.C. that the first formal Acropolis was built and then in the form of a platform with a triple stairway, the whole measuring 75 by 65 feet. This supported buildings which were dismantled with the onset of renewed construction. About forty structures have been located so far, many of them built prior to A.D. 1, between bedrock and the level of the A.D. 600 version of the Acropolis and its associated temple structures. Probably double this number of constructions lies beyond the present limits of trenches and tunnels. Twenty sequent plaster floors in the Acropolis sequence provide an idea of the magnitude of building activity here. The latest floor is 40 feet above bedrock. Of great interest was the recovery this year in the Acropolis work of monument fragments from levels dating from about 100 B.C. and A.D. 200. The presence in such early times of monumental art, however fragmentary and scarce, together with massive, mature, heavily decorated ceremonial construction allows a new perspective on the complexity and sophistication of early or Pre-Classic Tikal. Knowledge of this most important era was further amplified in 1963 with the uncovering of deposits of equal date and even centuries earlier in widely separated parts of Tikal.

This past season also saw full-scale excavation of all "Twin-Pyramid Complexes," beyond one excavated in 1958. A group consisting of two four-stairwayed pyramids, a palace and an "enclosure," along with monuments, was built at about 20-year intervals during Late Classic times at Tikal. A great deal of information was gathered on the make-up of these groups, how they changed in time, albeit slightly, and particularly on how old groups were abandoned during Late Classic times and were either converted to later uses or dismantled as fill for new construction elsewhere.

Other winter work at Tikal included the starting of a center-line tunnel into Temple II, facing Temple I whose magnificent tomb is described on pages 2-19.

(Continued on Page 48)

Several types of Italic helmets, together with imported ones, were commonly found in Villanovan and Picene graves, while more conservative ones occur frequently in Etruscan graves. To look for inspiration only to Magna Graecia would be inaccurate. Landing places along the Tyrrhenian Sea were engaged in wide commerce with the Aegean, decades before the foundation of Cumae, about 740 B.C., as the contents of the tombs show. In various parts of North Italy, Villanovans had already, over several generations, developed a metal industry under the inspiration of Central Europe. Before active organized traffic began, the armorer's craft had been practiced in these regions on a high level, as evidenced by the frequently occurring shrapnel-shaped helmets, some of which had been hammered from one piece of metal long before the arrival of fashionable Greek types.

Traders reached the Italian coast quite some time before the Greek colonization. Phoenician, Cypriote, and Phocaeen vessels brought their cargoes to some points of the Tyrrhenian shores where they traded popular Greek armor along with the staple products of the Aegean for raw material. During the archaic age of trade, helmets in particular had already reached distant points, as the archaic Jerez and Huelva helmets of Spain and the helmet of Ascalon in Israel reveal.

Another active traffic in arms during the early Iron Age was by way of the trade route in the Adriatic region, which passed through the Balkans and Lombardy overland and then by sea down along the eastern coast of Italy, with Trieste and Ancona as trading points. This traffic became the chief source of the large quantity of weapons found in Picene graves.

Some of the weapons and armor arriving in Italy were already barbaric imitations of Greek ones which had survived because of local preference in the Balkans long after their regular use in Greece had been discontinued.

With the foundation of Greek colonies in Magna Graecia, Greek armor gradually found its way directly to Central and North Italy. The great variety of weapons in graves—imports beside locally made imitations—shows that Picene and Etruscan warriors did not develop any definite preference for one type of armor, and, as a result, standardization of equipment did not become a keynote in the early armies of Italy. Once the pleasing, fashionable models found their way to the mainland, the inventive local armor-smiths modified them along simpler and more practical lines, only echoing the original pattern. 2

(Continued from Page 35)

Considerable progress was made in recording buildings with standing masonry for which excavation has not been planned. A number of previously untouched monuments were also excavated. This essentially completes a long-term program of excavation of the over two hundred local monuments.

The summer session has three aspects: further ceramic testing by small strategically placed excavations to recover pottery needed to fill gaps or amplify portions of the 2000-year, detailed sequence of Tikal ceramics; excavation of all known Tikal *chultuns*, the enigmatic chambers cut down into bedrock; and completion of a five-year program of investigation of potentially residential parts of Tikal, as mapped. About one hundred relatively small structures and associated plazas have been quite thoroughly investigated in this latter program. The bulk of such structures could have served as houses. Other structures so examined appear to have been family shrines. A true kitchen was identified this past season. The major part of the information of residence pertains to Late Classic times. A great deal can now be said about the nature of Late Classic Tikal and whether or not it was a "city," a most difficult term to define. However, the greatest difficulty lies not in concluding that such and such a mound was once a house but in specifying its occupants, both socially and economically.

WILLIAM R. COE

NEW PUBLICATION

The latest volume in the Museum Monographs series, *The Bronze Age Cemetery at Gibeon* by Dr. James B. Pritchard, has just come from the press. In it, Dr. Pritchard reports on the 55 tombs excavated by the University Museum expeditions of 1960 and 1962 to el-Jib, Jordan, of which he was the field director. The book contains a description of each of the tombs and its contents, plans of the tombs, and a complete illustrated catalogue of the finds. This is the third in the series of reports by Dr. Pritchard on the work at el-Jib, the others being *Hebrew Inscriptions and Stamps from Gibeon* (1959) and *The Water System of Gibeon* (1961). He is at present working on the final publication of the winery discovered at el-Jib in 1959.

TO OUR SUBSCRIBERS:

If there is a change in your address, please remember to advise us promptly so that you will receive your copy of *Expedition* without delay. Notice of change of address should be sent to

Expedition

The University Museum
33rd and Spruce Streets
Philadelphia, Pa. 19104