## Excavations at Chogha Mish

## Helene I. Kantor

This season's work of the Joint Iranian Expedition of the Oriental Institute and the University of California at Los Angeles at Chogha Mish is overshadowed by the death of P. P. Delougaz about a week and a half before we had expected to close camp. In the words of one of our Persian friends "He died like a general on the battlefield." All morning on March 29 he had been surveying the architectural structures discovered on the "high mound." When about to resume work after the luncheon break, he was suddenly struck down by a heart attack. The outpouring of grief and concern from our workmen and many friends in Iran was moving testimony to the deep regard in which he is held.

The season of 1974/75 lasted from our arrival in Tehran on December 20, 1974, until our departure on April 7, 1975. Excavations continued from January 1 to March 29, interrupted a number of times by rain. Aside from Professor Delougaz, H. J. Kantor, and Miss Johanne Vindenas, the registrar, all the members of the staff this year were newcomers: Mrs. Karen Briggs, Miss Valerie Fargo, Mr. Glenn Schwartz (students at New York University's Institute of Fine Arts, at the University of Chicago, and at Yale University, respectively), and Mr. St. John Smith (an architect from Boston, who came as a volunteer member). In addition, two English women presently living in Iran joined us as volunteers: Miss Jane Cowgill and Mrs. Elisabeth Richmond. The archeologist sent to work with us by the Iranian

Centre for Archaeological Research was Mr. Aghil Abedi, whom we already knew from three years ago when he was one of three University of Tehran students brought by their teacher, Mr. Y. Majidzadeh, to work with the Expedition for several weeks. We owe Dr. Firouz Bagherzadeh, director of the Iranian Centre for Archaeological Research, and members of his staff our warm thanks for their continued interest in our work and for their efficiency in having the renewal of our excavation permit ready so that we could begin excavations without delay on our arrival. We were glad that this season Dr. Bagherzadeh was able to visit us at the excavations for the first time.

Our aims this season were multiple. They included, on the tepe, the continuation of work in important areas of the eighth season as well as the reopening of excavation in the "high mound" and, in the expedition house, the recording of pottery from the eighth season not yet finished as well, of course, as the recording of current finds. Many of the staff worked at times on the backlog, the efforts of the volunteer members being particularly marked. Mr. Smith with indefatigable energy and devotion drew a great number of pottery vessels. Mrs. Richmond and Miss Cowgill worked faithfully on the detailed sorting and recording of the extremely important Early Susiana pottery groups discovered in the Gully Cut in the eighth season. On the mound we worked in three main areas, and archeologically the ex-



Sherd boy washing pottery from the Middle Susiana 3 complex in one of the sherd yards. Photo by H. J. Kantor.

cavations were as successful as we had hoped at the outset, although sometimes in a very unexpected way.

The Gully Cut: Archaic and Early Susiana Periods (Sixth Millennium B.C.).—In the low-lying Gully Cut, on the east side of the terrace, we continued with the excavation of the Early Susiana buttressed wall discovered in the eighth season. At both sides it had run into the undug sides of the dig so that this year an overburden of Protoliterate and Middle Susiana remains was removed in order to reach the Early Susiana level at those points. We found that the buttressed wall turns so as to form at its southern end a small rectangular room, which appears to be the center of the complex. The resulting plan, rather different from what we had expected, is of special interest. Below the Early Susiana level a relatively large expanse of occupation dating to the Archaic Susiana 3 Period, that is, to about the beginning of the sixth millennium B.C., was dug. It is characterized by unevenly sloping masses of river pebbles, "stone carpets" as our workmen called them. Such extensive stone-covered areas are a new feature that did not exist in the sectors where substantial brick walls of the same period had been found in the previous seasons. We begin now to obtain an idea of the configuration of the Archaic 3 settlement with houses flanked on the sloping edge of the community by "paved" areas, where many everyday activities were carried on. We are reminded of the courtyard of our own expedition house to which year by year we add pebbles to keep down the mud and dust and to make possible its use as a working space.

Lying among the stones and the irregular earth layers between groups of stones were numerous sherds as well as other small finds. The very demanding and lengthy task of sorting seemingly innumerable sherds and chips of Archaic unpainted straw-tempered pottery, though not yet completed, has already led to the reconstruction of a large vessel, the only example yet known of its kind, and of portions of others. The contemporary painted sherds are enlarging our understanding of the different cultural components present in Khuzestan during the final phase of the Archaic Susiana Period and providing additional evidence for cultural continuity with the following Early Susiana Period. In addition to the numerous pottery finds, fragments of female figurines were frequent; they demonstrate the variety of renderings of the human form in the early periods at Chogha Mish. Surprisingly enough, though the bodies are frequently extremely simplified, incision is used to indicate such details as patterned skirts. The Gully Cut also provided fragments or chips from stone vessels.



Though in themselves not very impressive, they are of substantial importance as indications of the widespread production of stone vessels in the early periods of the Susiana sequence.

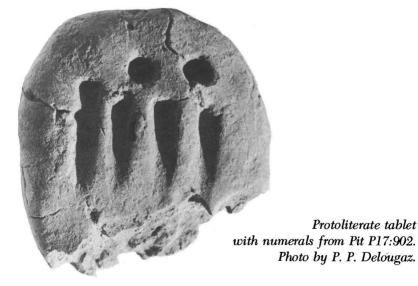
The High Mound: Elamite and Protoliterate Periods (Early Second and Late Fourth Millennia B.C.).—One of the major goals this season was to return to the high area forming the northern part of Chogha Mish to make an extensive test of the deposits underlying the massive walls of the Elamite fort cleared and planned in the third season. It seemed particularly fitting to return to this area since in Chicago last summer Professor Delougaz had reviewed the evidence for the Elamite fort previously excavated and had worked out a probable reconstruction of it.

In 1965/66 it was proved that on the west slope of the high mound the remains of the Elamite fort directly overlie earlier Protoliterate brickwork, also of massive size. The two brick masses were practically fused together and only by articulating single bricks were we able to establish the demarcation line between Elamite and Protoliterate in the single sloping surface to which the storms of centuries had eroded the remains of the two periods. This season we probed along this demarcation line to find whether there is any feature leading toward substantial architectural features of the Protoliterate Period underlying the Elamite brickwork. Any such features would have had to survive exposure to the elements between the abandonment of the site sometime before 3200 B.C. and the erection of the Elamite fort. probably over a thousand years later. In the work this season the first indications were a few baked bricks of Protoliterate type among the masses of unbaked ones. The overlying Elamite brickwork already recorded in the third season was removed in order to follow the Protoliterate remains. At first they seemed to consist of a floor made up for the most part of broken baked bricks, but we soon came upon an imposing drain construction slanting upward and built of well-preserved complete bricks. The drain has now been extended for more than 10 meters and leads to an apparent catch basin on which secondary drains converge from all four directions. While the drain may not lead us to any still remaining monumental building, its size and construction undoubtedly testify to the existence of some such structure at this point on the mound. How much of this structure still exists is uncertain, and it may even have been completely destroyed, since, as the drain slopes upward, it is approaching the modern surface. At this stage the excavation on the high mound ended this season. Clearly there is still much to be done, and Professor Delougaz was hoping that the mound here would still provide some important surprises. It did in fact on that last morning of his work on the site give up, from a spot very close to the great drain, one of the finest objects to have been discovered by us there—a cylindrical, bituminous stone Elamite cup with a handle formed by the figure of a rampant wild goat, carved in the round.

The East Area: Achaemenid, Protoliterate and Middle Susiana 3 (Middle of First, Late Fourth, and Late Fifth Millennia B.C.).—The third main sector this season was in that part of the northeastern terrace which we are accustomed to call the east area of Protoliterate houses. Although these do constitute the bulk of the structures so far excavated here, the complicated stratigraphy of the area is now becoming clearer. This season we excavated two additional strips

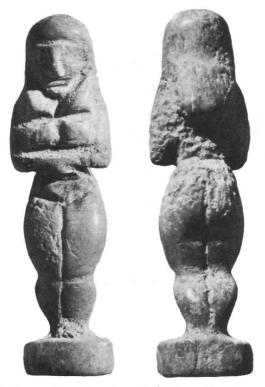
along the area's northwestern and eastern edges from the surface down. In the uppermost level of the northern area immediately below the surface, as nearby in previous season, traces of Achaemenid Persian occupation occurred. In addition a pit containing Achaemenid pottery was found. Our knowledge of the wares and pottery shapes in use in the Achaemenid settlement at Chogha Mish is increasing rapidly. Although apparently only a village, its inhabitants still shared in a modest way in the art that made Persepolis and Susa such impressive cities. This is demonstrated by a small terra-cotta lion's head, covered with a bright red wash, that probably originally projected from some such object as a cylindrical cosmetic container. Despite its tiny size, the head is represented with the same details found on large-scale Achaemenid sculpture in stone: a threatening open mouth, fangs, wrinkled nose, and ruff. The features in relief are supplemented by refined incised details that show the great care with which the head was made.

In the north strip, Protoliterate rooms and installations, together with a number of pits containing rich deposits of pottery, constitute the bulk of the finds. Close to the bottom of one of these pits were five tablets of a type new to Chogha Mish. They are small, without seal impressions, and bear only numerals: small or large circles, long strokes, and a large oval, apparently a new sign. These signs were used in varying arrangements on the tablets to record different total sums. The new Chogha Mish tablets find parallels among the tablets belong-



ing to a somewhat later stage of the Protoliterate Period discovered by Professor Delougaz years ago at Khafaje in the Diyala region of Iraq.

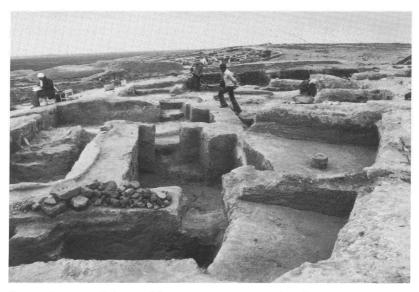
A noteworthy small find was made in the course of removing the stump of a Protoliterate wall. In its brickwork was a small bone figure of a nude woman standing with crossed arms. Her face is indicated by



Miniature bone figurine of the Protoliterate period (height 3.55 cm.). Photos by P. P. Delougaz.

relatively crude gouges but otherwise her body and heavy mass of hair are very well modeled. In style, despite the miniature size, the figure resembles larger Protoliterate figures of women, carved in stone, found at Warka and at Khafaje. The latter, furthermore, stands on a round base which provides an excellent parallel for that of the little Chogha Mish lady.

At the end of January, when rain soaked the excavations along the northwestern edge of the Protoliterate house area, we opened a new strip along its eastern edge at the point where the terrace begins to slope down toward the fields surrounding the mound. Here we ex-



General view of the Middle Susiana 3 burnt building seen from the north and looking toward the two doorways in the front. Photo by H. J. Kantor.



Detail of the interior of one of the rooms of the burnt building, showing well-preserved plaster. The door on the left leads into the room shown in the next photo. Photo by P. P. Delougaz.

pected to find the continuation of the Protoliterate houses, and in fact walls did appear immediately below the modern surface. In a matter of hours there emerged the upper parts of burned walls, to which fire reddened plaster still adhered. In a few days we had dug several rooms with some walls standing almost to a man's height and with well-preserved doorways. The conflagration that destroyed the building had hardened the mud plaster around the beams and reeds of the ceiling, thus preserving their imprints, which provide excellent evidence for the structure of the roof. Even some charred fragments of wood were preserved, as well as quantities of charcoal. The outstanding preservation, the massiveness of the walls, the sophistication of the doorway revetments, and the absence of Protoliterate pottery at first suggested that the burnt building might be a relatively late structure built into the slope of the terrace. We soon found, however, that on the west its walls were well underneath the Protoliterate houses and had elsewhere been cut into by Protoliterate pits. This stratigraphic evidence was corroborated by that of the pottery. The sherds in the debris of the building belong to the final stage of the Middle Susiana Period. As we approached the floor level, the ceramic finds became extensive. Charred and flattened vessels lay near the walls inside the main rooms. One of two small back rooms was still stacked full of ovoid jars with painted decoration on their shoulders. About eighteen complete unpainted bowls were clustered at the base of the structure's western wall, on the exterior side. The burnt edifice has thus turned out to be a sensational discovery providing us with extensive finds in situ in a building of the Middle Susiana 3 Period (late fifth millennium B.C.). Up until this season we had not found sherds of this period in architectural contexts and had feared that the Middle Susiana 3 buildings suffered great erosion while the city on the terrace was abandoned by the contracted population of the Late Susiana Period and that any remaining building traces had been destroyed by the extensive activities of the new Protoliterate settlers.

On the floors of the burnt building were found numerous flint nodules, the raw material for the manufacture of flint tools. A number of completed long blades were also present. When Professor Delougaz had the earth sifted in a very small-meshed sieve, miniscule chips of flint were recovered. Clearly flints were being manufactured on a scale far larger than would have been needed by an individual family. We may have here the earliest known Iranian industrial center for flint-making. The building's significance, however, may be even greater. Its monumentality goes beyond that which seems necessary for a workshop or an ordinary private dwelling. On the east it was flanked



Jars stacked on the east side of one of the store rooms of the burnt building. At the time of the photograph the west end of the room was still covered by Protoliterate remains. Photo by P. P. Delougaz.

by solidly-laid brickwork extending for more than 7 meters and of a shallowness which precludes the possibility of this brickwork being part of a platform. More likely it formed the lower part of a fortification wall adjacent to which the burnt building was located. Already this season we have speculated whether the rooms so far found may have belonged to an administrative building or even a temple, functions which would not necessarily preclude their utilization also for an industrial center.

At the end of the season we were in the process of tracing the walls of additional Middle Susiana 3 rooms to the west. Professor Delougaz and I were looking forward to our next season, when the removal of Protoliterate walls and drains would enable us to reveal more of the Middle Susiana structures below. Such evidence would be invaluable for further reconstruction of the character of the great Middle Susiana city at Chogha Mish and for dealing with the major historical problem of why it was abandoned by its inhabitants, whose Late Susiana survivors occupied only the northern part of the site—creating by their accumulated debris the high mound. Although Professor Delougaz is no longer here to carry on with the work, the initiation of which goes back to a project which he envisioned in the 1940's, the excavations at Chogha Mish, "this marvelously rich site" as he termed it in our first newsletter this season, must go on.