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# Excavations at Chogha Mish and Chogha Bonut

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The 1976/77 season of the Joint Iranian Expedition of the Oriental Institute and the University of California at Los Angeles was longer than usual, from November 12, 1976 to March 29, 1977. The latter part of 1976 was marked by two congresses, the large quadrennial International Congress of Iranian Art and Archaeology, held in Munich in September, and the fifth Annual Symposium of the Iranian Centre for Archaeological Research, conducted in Tehran at the beginning of November. In view of the materials awaiting study in the Expedition's excavation house, it seemed opportune to combine the meetings with a leave of absence from teaching responsibilities in the Autumn Quarter so as to make it possible to go to Khuzestan immediately after the Symposium. At

the beginning of the Symposium the special exhibit in the Muze Iran Bastan of the finds of the previous year was opened by Her Imperial Majesty, the Shahbanu of Iran. She showed much interest in the Chogha Mish case, asking a number of questions about the objects. Our conversation was shown in that evening's television newscast. This is the second year in succession that our work at Chogha Mish has been featured on the Iranian television network.

The American staff of the eleventh season consisted of Mr. Daniel M. Shimabuku (UCLA) and Mr. William Raymond Johnson (University of Chicago) as regular members. In addition, Professor Milton M. Winn (University of Southern Mississippi) and Mr. Douglas Bagwell, his student, came as volunteer members for the month of December, during which they made major contributions to the work. The Iranian members of the staff were Mr. Aghil Abedi, the official representative of the Iranian Centre for Archaeological Research, and Miss Fatimeh Pajuhandeh, also of the Centre, who came as a student assistant. Dr. Firouz Bagherzadeh, Director of the Centre, as always, actively furthered the work of the Expedition. Thanks are owed to him, to the members of his staff in Tehran, and to all the expedition members for everything they did to make this season a success.

In 1976/77 our activities were affected to some degree by weather, but to a much greater extent by economic factors. The season's budget was much less than in previous years, since UCLA was unable to contribute at its usual scale and the difficulties were compounded by the enormous increase in wages in the rapidly developing province of Khuzestan. As a result, the professional staff had to be very small and it was impossible to employ the normal increment of workmen or to move as much earth as usual.

The season fell into three phases of which the first was devoted primarily to the analysis and recording of materials, such as sherds, stone objects, and flints, which had accumulated in the expedition house to the extent that the storage there needed systematic organization. Much energy was spent on these tasks. Practical chores such as repairs to the interior of the house and the training of a trusted pickman as the new cook also took considerable time. During the "study" phase, Professor Winn and Messrs. Shimabuku and Bagwell spent some time resurveying sites in the area of Chogha Mish to collect pottery and check on the dates assigned to them during extensive surveys carried out by Professors Robert McC. Adams and Henry Wright. One afternoon they returned quickly with the news that a mound three kilometers west of our village, in a large agrobusiness area, was at that moment being destroyed. I immediately went over to stop the bulldozer operator

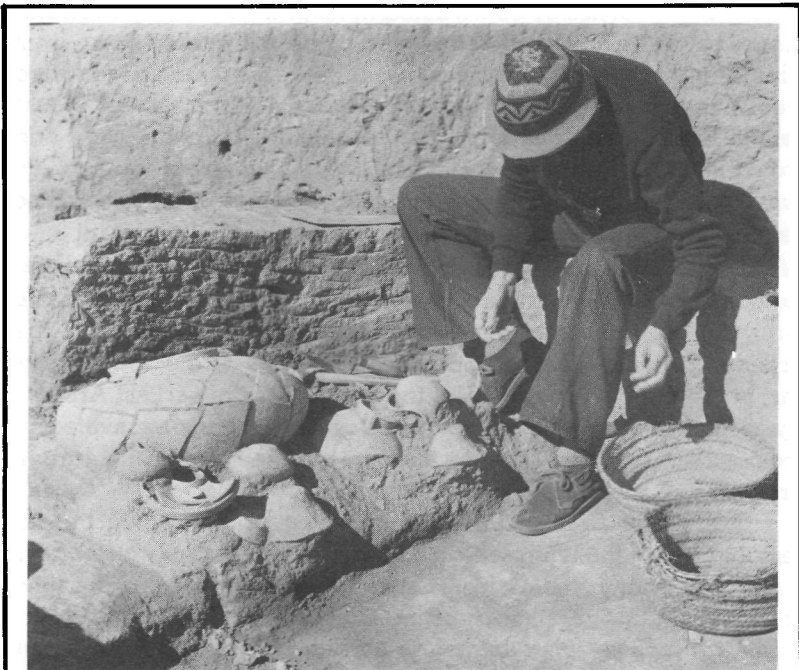
and to arrange with his supervisors that no further destruction of the mound, called Chogha Bonut-e Moezi, should be done.

The second phase of the season, beginning on December 15th, was devoted to excavations at Chogha Mish, where our resources allowed us to work only in two areas. The Gully Cut, lying on the low eastern slope of the Chogha Mish terrace, had already been excavated down to the level of the final phase of the Archaic Susiana period, the earliest culture of the Susiana plain. The absence of any architectural remains for the first two of the Archaic Susiana phases had remained a major gap in our knowledge, even raising the question of whether substantial buildings existed at that time. Accordingly, in the western half of the Gully Cut we excavated from the level of Archaic Susiana 3, dating probably to the later part of the sixth millennium B.C., to virgin soil. A striking find was a great embankment of red clay, practically sterile except for occasional lumps of *pisée* or small fragments of the long, narrow Archaic bricks. The embankment was thick at one side, but became much thinner as it sloped downward to the other side. It does not appear to have been purposely constructed in its present, highly irregular shape, but rather to have been formed by debris washed down from a building presumably once existing in the adjacent, unexcavated area. Excellent Archaic Susiana 3 pottery came from the black, pebble-filled layers overlying the embankment. In the grey and brown layers of debris under it, pottery wares typical for Archaic Susiana 2 appeared together with a few examples of the Close Line ware of Archaic Susiana 3. These finds provide important new information for the transition between Archaic Susiana 2 and 3 and the continuity of the cultural tradition. Gradually pottery became rarer until in the lowest layer of occupation a few sherds of the Archaic Susiana 1 phase appeared just above virgin soil. In this part of the Gully Cut, however, the remains of the earliest Archaic phase turned out to be far sparser than in portions excavated in previous seasons. The question as to the existence of architecture in Archaic Susiana 1 remained unanswered.

In the East Area of Protoliterate houses, from which the incessant rains of the tenth season had driven us after only a few days of digging, many uncertain architectural elements were clarified and several building phases distinguished by the hard work of Mr. Shimabuku. Close to an open area bordered on two sides by rooms with niched walls were two well-preserved pipe drains 3.20 and 5.85 meters long respectively. Both were carefully constructed, the narrow end of each pipe being inserted into the wide end of its neighbor. In the longer drain sherds of water pipes had been

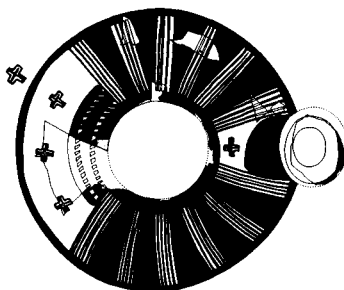
placed around the joints. Another noteworthy feature of the Protoliterate area was a pair of circular pits, about 90 centimeters in diameter, the one 2.25 and the other 3.25 meters deep. The ancient footholds for climbing down and up them were well-preserved and still served the modern pickman. Close to the bottom of the shallower pit a small opening connects it with the other. One pit had relatively little pottery; the other was full of sherds, mostly of beveled-rim bowls. The green stains on them suggest that the pits in their final phase were used for organic wastes. They may have always been drainage pits, though it is possible that they originally served as cool storage places, which would be particularly needed in the torrid heat of much of the year.

An outstanding find from the Protoliterate area was the greater part of a well-made stone bowl, the fragments of which had been broken anciently and mended by drill holes and metal wire, whose corroded remains still fill the holes. Also of much interest was a group of complete or semi-complete vessels clustered around a large four-lugged storage jar.



*Mrs. Alice Ryerson excavating an important deposit of Protoliterate pottery during her visit in February, 1977*

*The Chogha Bonut  
"Yortoise" jar. One of  
the cross motifs is  
shown at the upper left  
without foreshortening.  
[all drawings by W.  
Raymond Johnson]*



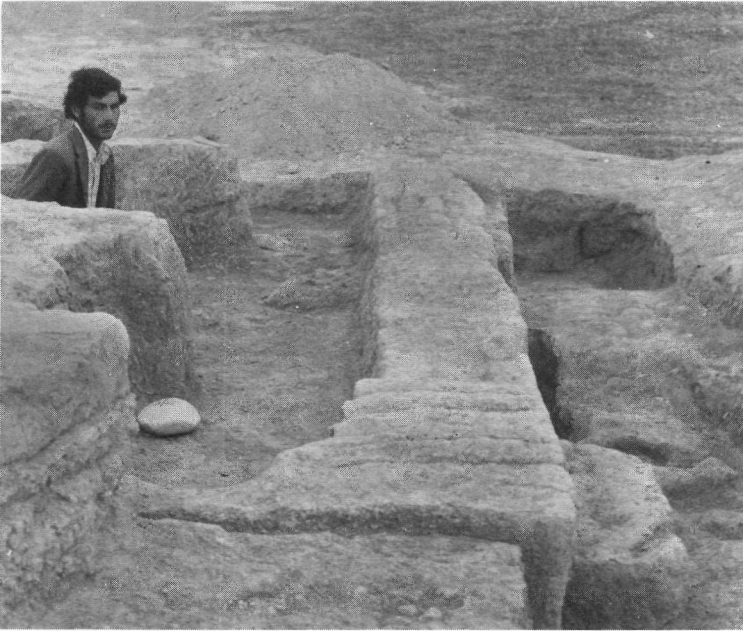
Our limited resources of money and workers forced a choice as the work in the Gully Cut and in the western part of the East Area approached appropriate stopping points. This was whether to turn to important unfinished tasks at Chogha Mish (such as the Middle Susiana Burnt Building area or the Susiana, Protoliterate, and Elamite remains on the high mound) or to devote the remaining time of the season to a salvage excavation at the bulldozed site of Chogha Bonut. There were compelling reasons for moving to Bonut. The pottery lying in the bulldozer debris cried for rescue; on our first visit to the site after rains had made the sherds easily visible, Mr. Johnson had found almost all the pieces of a lentoid-shaped spouted jar. "Tortoise" vessels are common at Chogha Mish and are also known in Mesopotamia, so the type is important as a link between the two areas. The one from Bonut is a magnificent example and must have been intact before the bulldozer struck it. Its recovery indicated the caliber of Middle Susiana finds to be expected from Chogha Bonut. However, even more decisive were a few chips of pottery found on the undisturbed periphery of the site. These were of essentially the same fabric as the Painted Burnished ware of Archaic Susiana I, so far known only from Chogha Mish and the nearby site of Boneh Fazili, tested in the fifth season. Tiny

though they were, these sherds indicated the existence of Archaic Susiana I deposits at Chogha Bonut and posed the problem of explaining why in the color of their paint and the details of their designs they differed from the Painted Burnished ware found at sites only six to eight kilometers distant and clearly visible from Chogha Bonut.

The third phase of the season consisted of the trial rescue dig at Chogha Bonut. Dr. Bagherzadeh had kindly arranged for permission to excavate there as soon as I requested it, but before work could start various practical preparations were necessary. A sizable stream between our village and the new site had to be spanned by a bridge of earth and branches resting on large concrete pipes made available by Mr. David Chambers, chief engineer of the Development and Resources Corporation. Means of transporting workmen to the site had to be arranged, as it was too far for most of them to reach by themselves. In addition, during the first days there a contour map was prepared by Mr. Shimabuku with the assistance of Mr. Abedi and Miss Pajuhandeh. The absolute levels of the points of reference necessary and of the destroyed original top of the mound were most helpfully provided by Mr. Shahrukhi of the D and R.

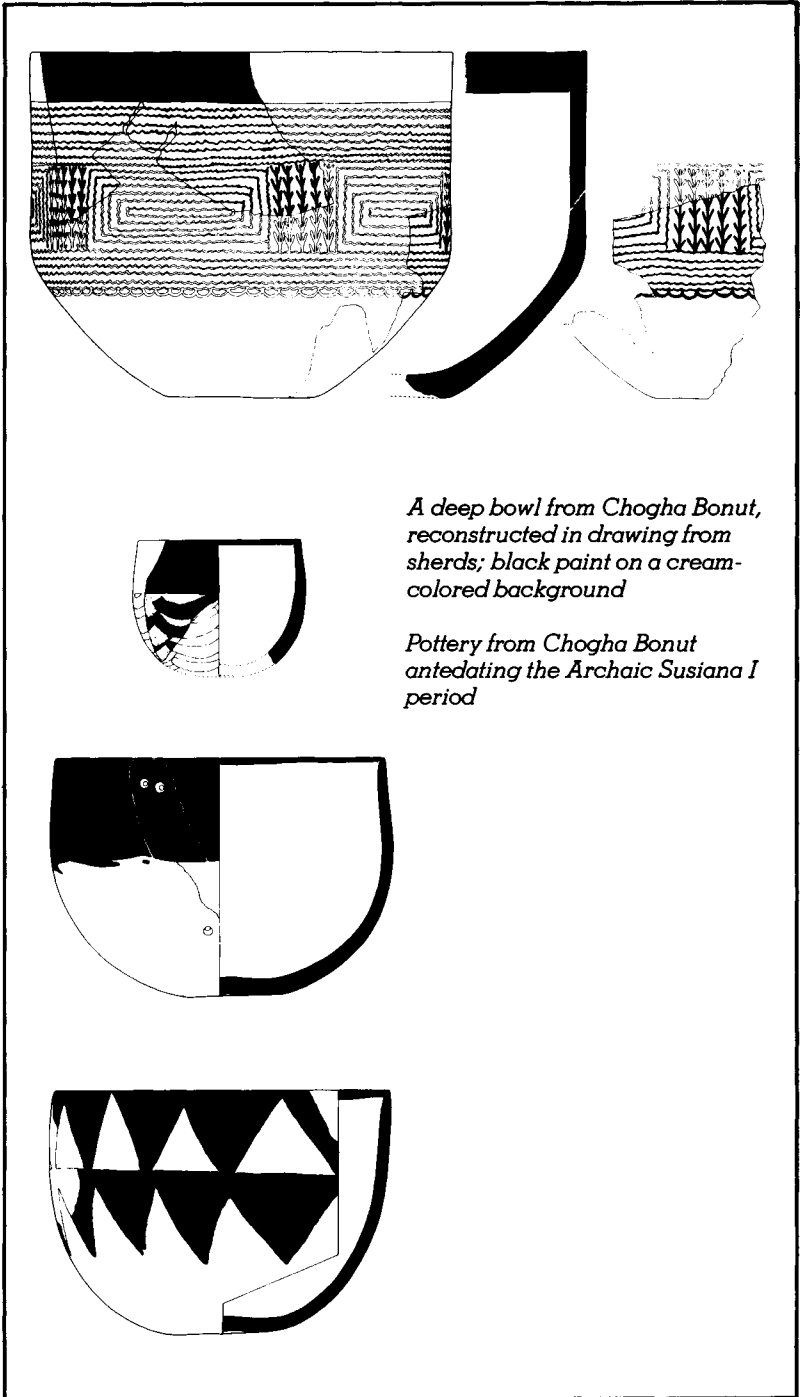
Chogha Bonut is a relatively small mound, covering an area of some 70×80 meters. It formerly rose steeply above the plain level, but the bulldozer had pushed the top two meters down the sides, covering the original slopes and filling a large cavity cut out of the east side in the summer of 1976 to obtain black earth for brick-making. The first days of work were spent collecting as many as possible of the sherds disturbed by the bulldozing and defining the original slopes of the mound on the east side. The plan was to remove the disturbed soil from this limited area so as to utilize the brickmakers' cavity to penetrate into the lower levels of the mound, which otherwise could hardly have been reached in the time remaining to us. This strategy could not have succeeded without mechanical aid in removing the bulldozed earth, which was accomplished through the great kindness of Mr. Chambers, who made available a loader tractor for a day.

The excavation fell into two parts: an area of some 170 square meters on the eastern part of the present top of the mound and a small stratigraphic trench in the immediately adjacent brickmakers' cavity. Both the sherds collected from the bulldozed earth and those excavated on the top of the mound represent the final phase of



*The high deposits on the left [flanking Jahan Shah Ahmedi, the surveying assistant] mark the point where the bulldozing of Chogha Bonut stopped. The brick wall with corner buttresses on the right belongs to an Archaic Susiana I house.*

the Middle Susiana period, dating to about the end of the fifth millennium B.C. However, the Middle Susiana 3 floors and stumps of walls still remaining formed only a thin layer and would have been completely destroyed if the bulldozer had worked an hour or two longer on the east part of the mound. They represent the lowest part of the Middle Susiana 3 occupation. We expected to find next deposits belonging to the earlier Middle Susiana phases. Instead, sherds suddenly became sparse and only a few centimeters lower than the Middle Susiana level there appeared walls built of the long, finger-impressed bricks of the Archaic period. Their precise position within that period was given by Painted Burnished and Red Washed sherds of the Archaic 1 phase. Thus, swiftly, at Chogha Bonut the problem of the existence of architecture in Archaic Susiana 1 was solved by the discovery of these well-built walls. Their bricks were made of remarkably pure clay and carefully laid in courses of stretchers to form walls 50 to 60 centimeters thick. One wall has two buttresses. The walls we had time to clear form two rooms differing slightly in orientation; thus they presumably belong



*A deep bowl from Chogha Bonut, reconstructed in drawing from sherds; black paint on a cream-colored background*

*Pottery from Chogha Bonut antedating the Archaic Susiana I period*



to different houses, each with its own wall. The avoidance of party walls was observed in Archaic Susiana 3 structures at Chogha Mish and may be characteristic for the Archaic period as a whole.

Archaic Susiana 1 pottery is found at Chogha Mish only at the lowest levels of the site, well below the surface of the modern plain. In contrast, at Chogha Bonut such pottery was *in situ* over five meters above plain level. This discovery had spectacular implications. If Archaic Susiana 1 existed this high in the ground, then below might be the remains of settlements earlier than any known from Chogha Mish. This was tested in the stratigraphic trench. It showed that below the Archaic Susiana 1 level on the east side of the mound is about a meter and a half of black earth with distinctive sherds of types unknown at Chogha Mish, but clearly related to the standard Archaic Susiana 1 wares. The problem of the atypical Painted Burnished chips collected from the surface on our first visits was solved. They are not contemporary variants of the Archaic Susiana 1 pottery of Chogha Mish. Rather they represent a period of occupation older than any yet known at our main site. There the great variety and complexity of Painted Burnished designs had long ago convinced P. P. Delougaz and myself that an earlier stage of that ceramic tradition must exist. We speculated that it was perhaps to be sought in the valleys of the Zagros rather than in the lowlands of the Susiana plain. Now it has been found at a site six kilometers to the west. The red or plum paint and the simple designs characteristic of the newly discovered ware appear not only on sherds from the stratigraphic trench but on four restorable bowls found in a cluster a little to the south at the edge of the brickmakers' cavity.

In the stratigraphic trench sherds became rarer and then disappeared completely as we went deeper. However, for over two meters hard brown clay surfaces alternated with ashy layers containing animal bones, occasional fragments of stone vessels, very primitive clay figurines, and distinctive bullet-shaped flint cores and flint blades. With these deposits Chogha Bonut provided its final great surprise of the season. They supplied the combination of features which characterizes pre-pottery stages of development in other parts of the Near East. It is to an aceramic period, presumably going back to the seventh millennium B.C., that we can attribute the low levels of Chogha Bonut, with only the reservation that our present sample of material is small.

The brief trial dig at Chogha Bonut has opened up new horizons in the history of the Susiana plain, carrying back the Archaic culture discovered at Chogha Mish to still earlier stages. Chogha Bonut is the earliest-known site in central Khuzestan. Its

occupation begins, almost certainly, before the invention of pottery and continues, apparently without a break, through a formative Archaic phase into Archaic Susiana 1. Before Archaic Susiana 2 the site was deserted. This is in marked contrast to the contemporary settlement at Chogha Mish, which continued to develop and expand. It is too soon to speculate as to why the history of Chogha Bonut was so different. It remained unoccupied for over a thousand years, until the final phase of the Middle Susiana period. It was then a small village perched on an artificial hill, while Chogha Mish was a huge town. After the Middle Susiana period Chogha Bonut may have been deserted for good. No conclusive evidence for a Late Susiana occupation has so far been given by any of the sherds recovered from the bulldozer debris. In the historical periods the site was not occupied, although a Parthian settlement existed immediately adjacent to it.

The season of 1976/77 has spectacularly enlarged our knowledge of the beginnings of human settlement in the lowlands of the Persian Gulf and has provided as well important new evidence for later periods. The season leaves us with the promise of great future advances in knowledge to be gained by supplementing the excavations at the focal site of Chogha Mish by those at some of the smaller sites forming the network of settlement around it. The mounds of Boneh Fazili and Rahimieh have long been of special interest to the Expedition, but now Chogha Bonut takes priority over them.