IRANIAN PREHISTORIC PROJECT

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with
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Preliminary Report on the Joint ICHTO-Oriental Institute Excavations at KS-004 and KS-108 in Lowland Susiana, Southwestern Iran

After three years of delay and loss of budget and crucial staff members (see *News & Notes* no. 187), the joint Iranian Cultural Heritage and Tourism Organization-Oriental Institute expedition eventually reached Khuzestan in mid-December 2004. Our 2004/2005 season was supported by a generous grant from the National Science Foundation as well as some financial support from the Oriental Institute. Here we would like to express our gratitude to Dr. John Yellen of National Science Foundation and Oriental Institute Director Gil Stein for their much needed support.

The co-director of the expedition was Mr. Ali Mahfroozi, director of the Mazandaran archaeological project and Technical Deputy of the Mazandaran Iranian Cultural Heritage and Tourism Organization. We owe a debt of gratitude to him and the Iranian students who participated in the project. Most of the students had worked with me in Fars, but some were new and totally inexperienced. They eagerly joined us with a tremendous level of work ethic, seemingly unlimited enthusiasm to learn, and full of energy to do hard work. We thank them all for making the season possible and successful. We also thank Mrs. Sahar Beigi, who spent many long hours drawing potsherds and other objects at Haft Tappeh (fig. 14).

Thanks to Dr. Hasan Talebian, Director of the Haft Tappeh/Chogha Zanbil and Parse-Pasargadae Research Foundation, we were allowed to stay at the Haft Tappeh Research Center, only 25 km southwest of where the sites were located. The staff of the Haft Tappeh Archaeological Compound was very pleasant and helpful to us in many ways including solving our electronic problems. In addition, we would like to thank Mr. Beheshti, Deputy of Research, and Dr. M. Azarnoush, Director of Iranian Cultural Heritage and Tourism Organization Archaeological Research.

The joint expedition consisted of over fifty Iranian Cultural Heritage and Tourism Organization archaeologists and university students. Tobin Hartnell of the Oriental Institute was the only non-Iranian participant in the project. We were hoping to resume our work in Khuzestan in September, before the rainy season started, but for various reasons the project had to be postponed until the fall of 2004. However, the postponement of our project resulted in the loss of a number of our key specialists and forced us to make substantial changes to our original research design.

The absence of a number of key expedition members, namely Tony Wilkinson of the University of Edinburgh and Nick Kouchoukos and Andrew Bauer of the University of Chicago's Department of Anthropology made it impossible for us to address the major questions we had already formulated about geomorphology and ancient land use in Susiana. That part of the project will have to wait for another season. Faced with these adverse conditions and without our team of geoarchaeologists, the scope of our fieldwork had to be narrowed down and redesigned in such a way that some simple questions of stratigraphy and chronology could be addressed.

With these modest goals in mind, we set out to excavate two sites, KS-004, Chogha Do Sar (Two-headed mound) and KS-108, Tappeh Belladieh (Town mound), some 10 km southwest of

Chogha Mish (KS-001). In addition to the materials from the sixth millennium B.C., these sites also have deposits that date to the crucial period (fifth and fourth millennia B.C.) prior to the formation of early states and the rise of urban centers in southwest Asia (fig. 1).

Because of the lengthy bureaucratic procedures, choosing other sites that would be more manageable than what we had originally selected was not an option. We therefore adopted some new strategies to answer some basic questions of stratigraphy and in determining the surface extent of all the periods represented by surface sherds at both sites.

We went back to Khuzestan as part of what we originally conceived as a long-term joint project between the Iranian Cultural Heritage and Tourism Organization, the Oriental Institute, and the Department of Anthropology of the University of Chicago. Initiated in 2001/2002, the major aim of this project was to gain a deeper understanding of the interaction between the environment and human cultural activities in lowland Susiana, located in the modern-day province of Khuzestan, southwestern Iran. Our first season produced important clues on the geomorphology of the region, especially east of the Karun River, as well as on the nature and formation processes of some fifth and fourth millennia sites. Our preliminary observations indicated that some of these sites may have been occupied only parts of the year and that they may, pending further research, turn out to have belonged to the ancient mobile pastoralists of the region. Eastern Khuzestan still is used annually by the mobile Bakhtiyari tribes as their winter pasture.

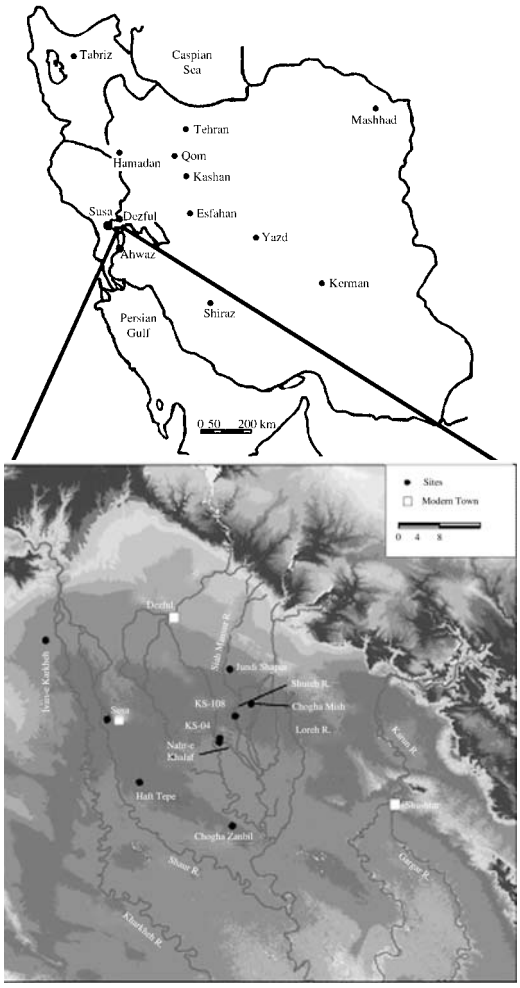


Figure 1. Map of upper Khuzestan showing the location of KS-004 and KS-108. Map generated by Tobin Hartnell

As an integral part of the project, Kouchoukos, Bauer, and Wilkinson were to conduct a series of landscape and geomorphological surveys in the central part of Khuzestan, concentrating especially on the remnants of the geological features that looked like irrigation canals. They sought to develop a method for recognizing the traces of human activities on the landscape and a framework for analyzing the effects of these activities both on the conditions for subsistence

Figure 2. Panoramic view of KS-004, looking east

Figure 3. Left: Ojirub Dam; right: Khalaf irrigation canal, west of KS-004

economy in the region and on the formation and preservation of the archaeological record. In addition, Royal Ghazal of the University of Chicago's Department of Anthropology had designed a project to test the validity of Gregory Johnson's hypothesis concerning the spatial organization and distribution of the fourth millennium B.C. pottery. Our work at KS-108 had been designed to determine the temporal distribution of that pottery. Nevertheless, the derailment of our original plans was to some extent compensated by the serendipitous discoveries we made at both sites. Here we relate the preliminary results of our latest archaeological investigations in lowland Susiana.

KS-004

KS-004 (263493 E, 3561107 N; fig. 2) with a total area of about 7.00 ha is located near the Ojirub River, a branch of the Dez, where some thirty years ago archaeologist Henry Wright observed what seems to be an ancient (fourth millennium B.C.) irrigation canal. There are two canals on the western side of KS-004, one (the closer) is a 4 m wide, 2 m deep drainage canal (Fig. 3); the other, much wider (8 m) and deeper (5 m), is the irrigation canal that brings water

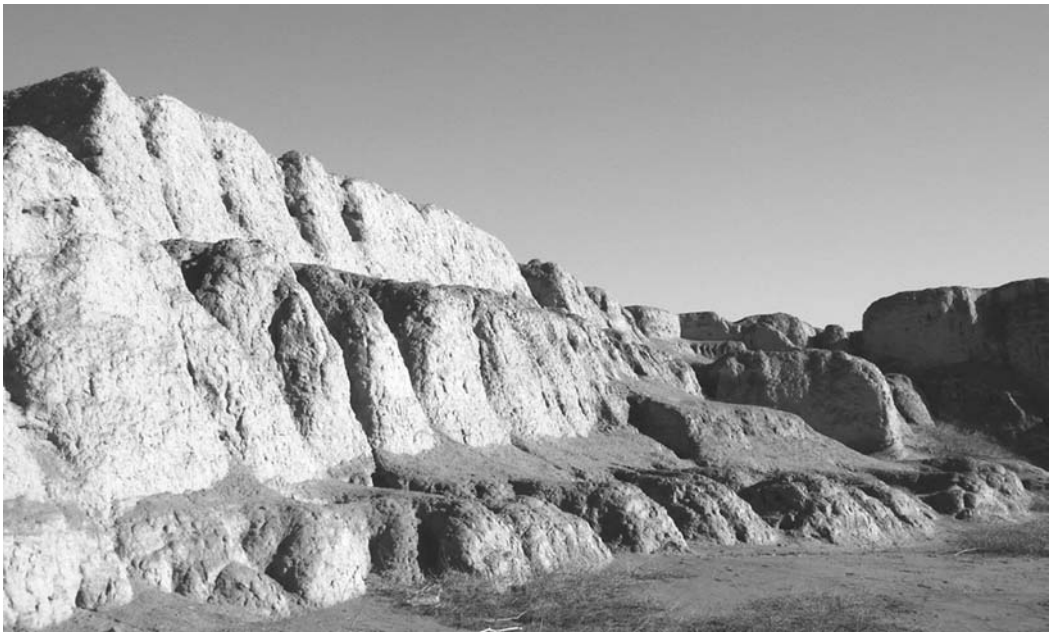


Figure 4. Remnants of the Susa platform; the cemetery was found in the foreground

Figure 5. (left) South section of Square R15 N (KS-004) showing individual bricks. (right) Top view of the same square showing the mudbricks at lower level

from the Ojirub River, some 900 m west of the site, and is known locally as *Nahr Khalaf* (Khalaf Stream). The irrigation canal is fed by the waters behind a dam just next to the head of the canal (for a full description and history of this canal, see *News & Notes* no. 187).

The combined archaeological and geomorphological evidence from our last season established various lines of evidence for a shifting, intermittent occupation of the eastern Khuzestan plains in the Late Susiana period (ca. 4800–4000 B.C.). Our observations thus supported existing hypotheses about the development of specialized mobile pastoralism during this era and could contribute to the understanding of its chronology and spatial organization. Our observations suggest that specialized pastoralism was not a localized development but one that was integral to the development of hierarchical polities across western Iran through such mechanisms as the production of valuable textiles or the presence of a catalyzing military threat.

A number of systematic archaeological surface surveys in Khuzestan indicate that from the beginning of settled life, unlike in southern Mesopotamia, a single site dominated the landscape in the region. Prior to the fifth millennium B.C., Chogha Mish, with about 17 ha of occupation area, was the largest population center. Oriental Institute archaeological investigations at the site from 1969 to 1979 also showed increasing social and economic complexity until it was temporarily abandoned sometime in the early fifth millennium B.C., perhaps ca. 4800 B.C. Data obtained in several surface surveys had indicated that for several hundred years no single site seems to have been a particular regional center; however, our 2004/2005 investigations indicated that KS-004 was indeed the largest settlement (6 ha) during this "transitional" phase, which we have attributed to the increasing

Figure 6. Students huddling in Squares R–S 15 during a storm

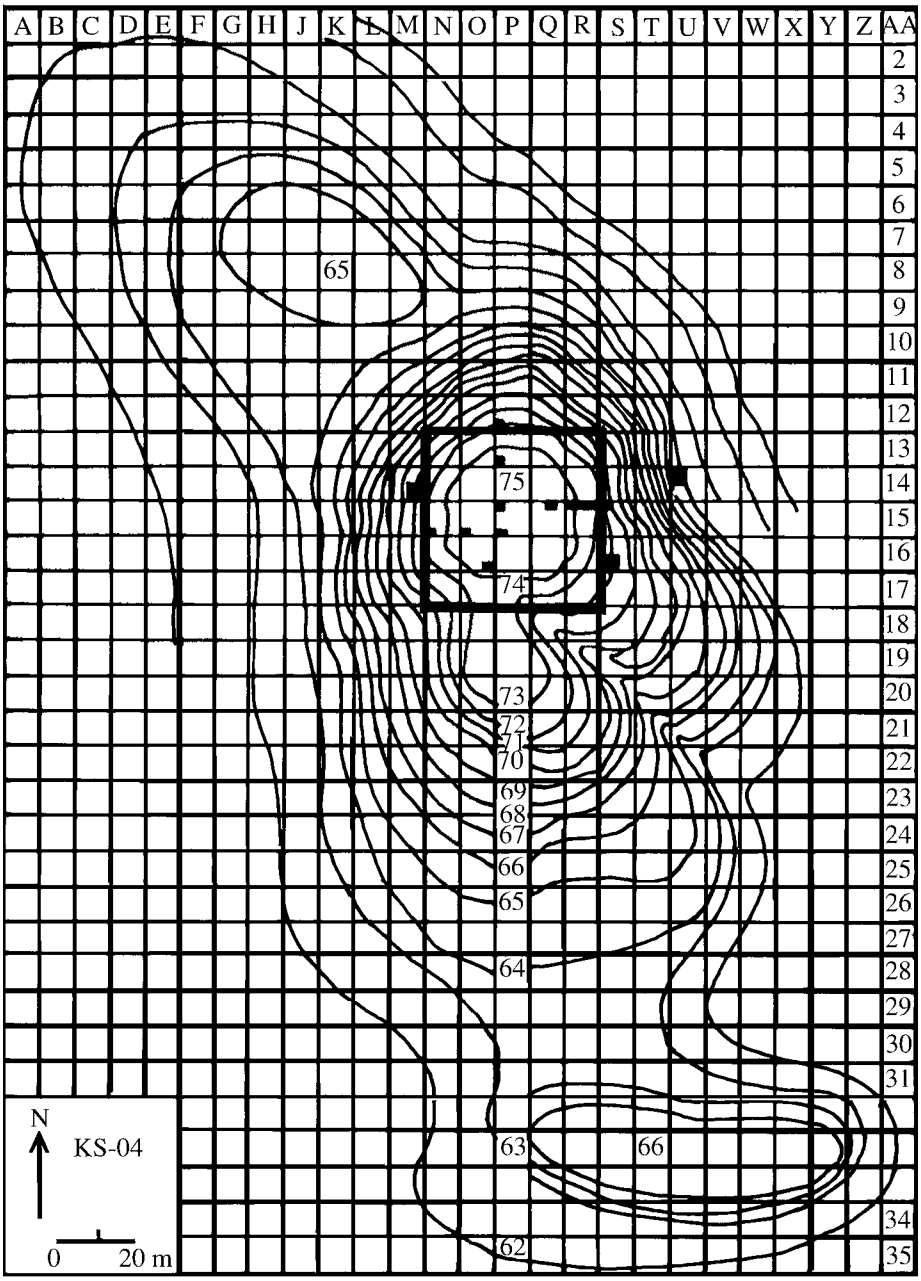
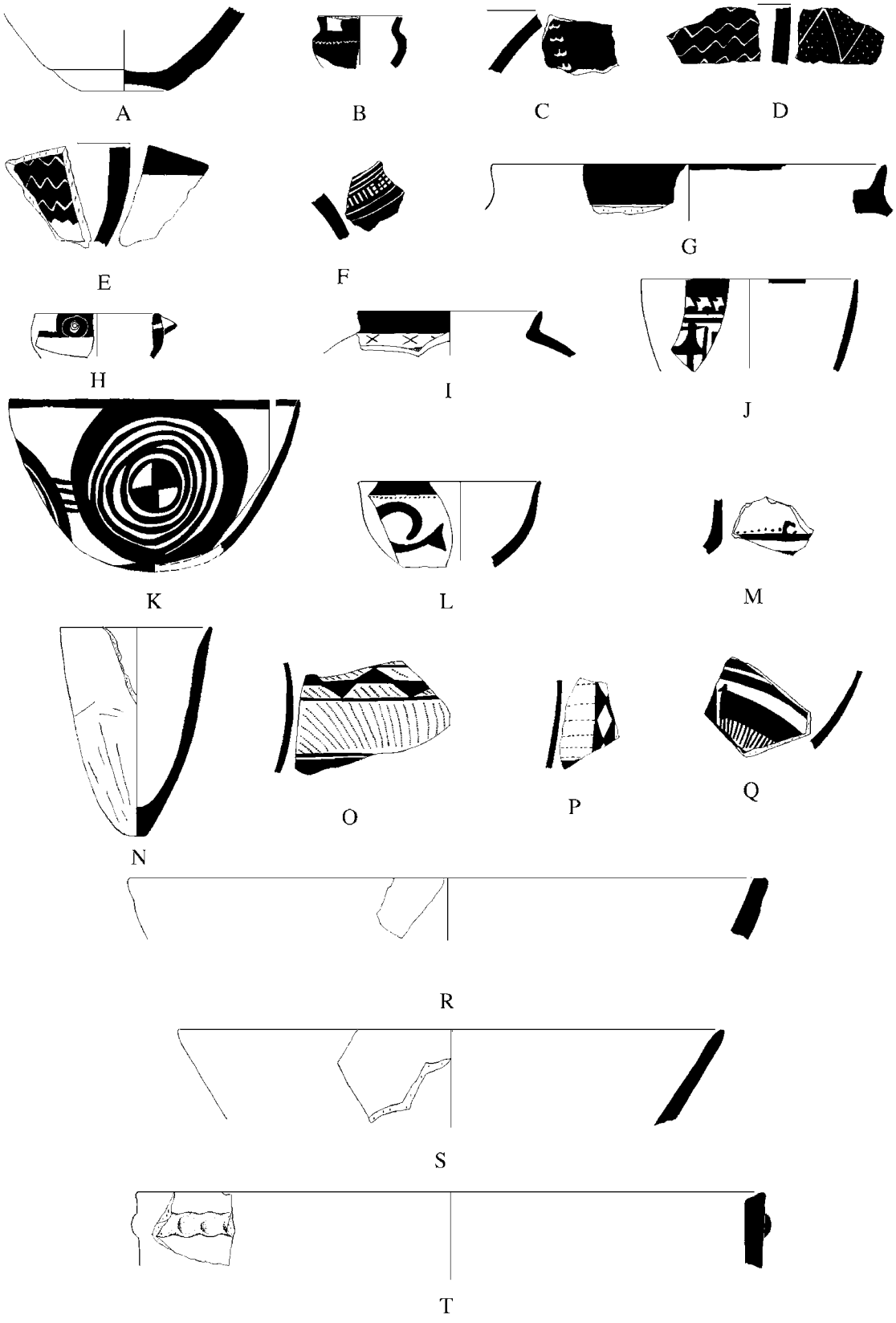


Figure 7. Contour map of KS-004 showing various areas of excavation

activities of the ancient highland mobile pastoralist groups in lowland Susiana.

Around 4400 B.C., Susa, located next to the Shaur River on the opposite side of the plain, was probably established as several closely spaced hamlets that later joined to form a single population center (about 10 to 12 ha). Based on the same surveys, it is reported that during the Susa 1 or Late Susiana 2 phase (ca. 4400 B.C.) Susa was more than four times larger than some forty contemporary sites recorded in the region. Soon after Susa became a regional center, some violent event led to the construction of a massive

Figure 8 (to right). Sample pottery from KS-004: (A–E) Early Susiana, (F–J) Middle Susiana, (K–M, P) Late Susiana 1, (O–Q) Late Susiana 2, and (R–T) Terminal Susa/Early Uruk. Scale 1:4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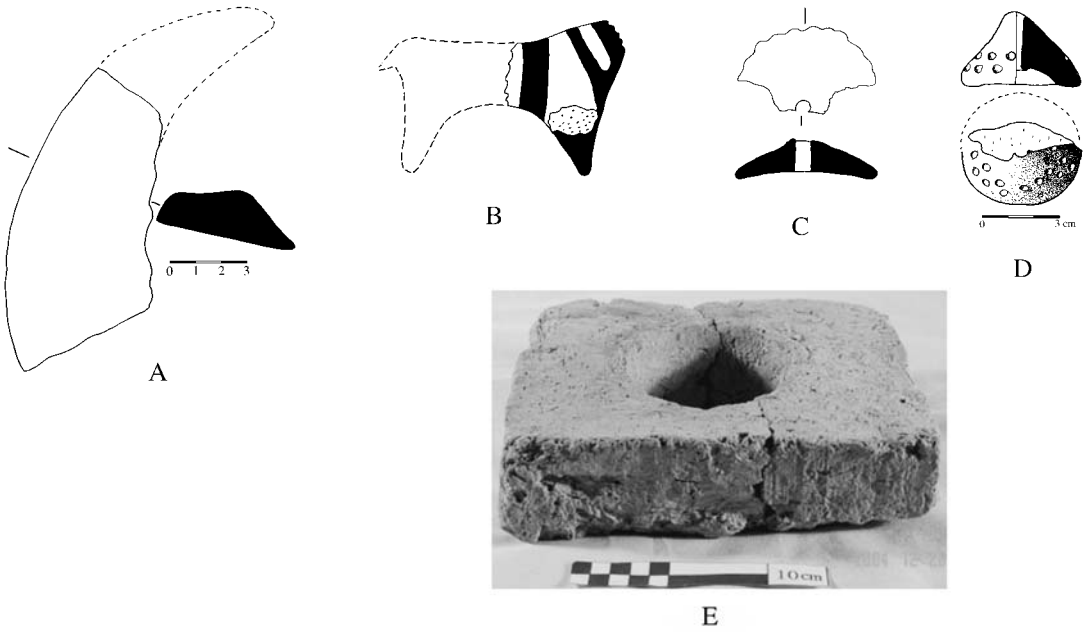

Figure 9. Objects from KS-004. (A) Clay sickle (Terminal Susa/Early Uruk), (B) animal figurine (Middle Susiana), (C) spindle whorl (Early Susiana), (D) spindle whorl (fourth millennium B.C.), and (E) baked decorative plaque (late fifth–early fourth millennium B.C.)

cemetery at the foot of Susa's large mudbrick platform, containing approximately 2,000 burials (fig. 4).

We know very little about this cemetery, as it was excavated in the days when archaeology had not yet become scientific in its procedures. As a result, interpretations of what caused this catastrophic event range from nomadic invasion from the highlands, communicable diseases caused by starvation, peasant revolts, and so on. Except for the idea of a peasant revolt, no other internal or intra-regional factor (such as a rival center) has been offered to explain this event because no site large enough to be considered a potential rival for Susa had been recorded in the archaeological surveys.

Our investigations at KS-004 provide clues that can be used to develop an alternative, though by no means exclusive, interpretation of the fate of Susa during the Late Susiana 2 phase. Needless to say much of our assertion here on the nature of KS-004 will have to be supported by extensive excavation the site. Until then, our conclusions will remain, of course, hypothetical. Our intensive systematic block survey indicated that during the Late Susiana 1 and Late Susiana 2 phases about 5.0–4.5 ha of the mound had been occupied. The site had never been excavated before and therefore we decided to excavate a number of small trenches to test the validity of surface distribution of pottery (figs. 8–9).

After laying down a 10 ×10 m grid on the entire site, we began collecting everything we saw in each grid. We then carefully dated each grid based on the presence/absence of diagnostic pottery and other objects found in that particular grid. The data were then transferred on the general contour maps, which became our basis for selecting our excavation areas. At both KS-108 and KS-004 we chose the steepest parts of the mounds for our stratigraphic cuts. Again, based on our distribution maps, we also selected several areas to expose the remains of the Late Susiana and Protoliterate (ca. 3400 B.C.) periods on both mounds.

From the beginning, our stratigraphic trench at KS-004 (Squares R–S 15) revealed a thick layer of a mudbrick structure (figs. 5–6); the bricks measured 44/42 × 22/20 × 10/8 cm. The bricks continued downward to the first step, 1.5 m below the summit of the mound. We encountered the same structure in our second step, at which point we realized the structure cannot be a wall but must have been a mudbrick platform. All the pottery found in the bricks and in the rubble filling the gaps between bricks dated to the Late Susiana 1–2 phases. It was clear to us then that this structure must date to the Late Susiana 2 phase, contemporary with Susa 1.

To ascertain our initial assumption, we opened a number of 1 × 2 m exploratory trenches on the summit, the western and eastern slopes of KS-004 (fig. 7). Most of these trenches contained mudbricks and mudbrick detritus into which Islamic graves had been dug down to a depth of 1.0–1.5 m. In most of our trenches we reached the remnant of the mudbrick platform we had encountered in our stratigraphic trench. Based on our observation, the preserved topmost platform had an area of at least some 50 × 50 m (shown with thick lines on the map). Our limited horizontal exposures did not reveal any buildings that once stood on this platform, however surface remnants of burnt building materials, especially on the western slope of the mound, indicated that this platform may have accommodated some solid architecture.

As we continued our stratigraphic trench downward, we realized that the topmost mudbrick platform was built directly over another one with a 5–10 cm interface that consisted of a wash of mudbrick detritus and some shallow refuse pits with small rocks and sherds of the Late Susiana 2 phase. This piece of evidence left no doubt as to the date of this platform. The second platform continued down to the Late Middle Susiana (ca. 5000 B.C.) deposit. The lack of time and weather conditions did not allow us to penetrate below these levels; nor could we continue the work in the small probe trenches below the first layer of the mudbricks of the first phase of the platform. No Late Susiana 2 sherds were found associated with the lower platform, only sherds of Late Middle Susiana and Late Susiana 1. Since archaeological contexts are dated by the latest materials, the second, lower platform must be dated to the Late Susiana 1 phase.

Our investigations at KS-004 indicated that the site with its monumental mudbrick platform would be a good candidate for the Chogha Mish diasporas after Chogha Mish was abandoned. KS-004 was initially occupied in the Early Susiana period (ca. 5800 B.C.). The site is only less than 9 km southwest of Chogha Mish and was probably one of its satellites during Chogha Mish's heyday. Small mudbrick platforms are not rare during the Late Susiana 1 phase. Some sites such as Qabr-e Sheykhein, southeast of Chogha Mish, are reported to have been furnished with this architectural element on which stood a large house, presumably of chiefly character and analogous to the residents of the highland tribal chiefs in southwestern Iran. Some scholars argue that from the beginning Susa was the preeminent site in Khuzestan. For this reason I had considered Susa as the site to which the Chogha Mish population retreated/fled after its demise. But this idea does not seem to be tenable because we have several centuries to account for between the time Susa was founded (ca. 4400 B.C.) and the time Chogha Mish was abandoned (ca. 4800 B.C.). With KS-004, the temporal problem may be addressed, although at present we have absolutely no concrete evidence to claim that the earlier monumental mudbrick platform at KS-004 was built by people from Chogha Mish. Nevertheless, KS-004 makes a much better alternative than Susa. The fact remains,

Figure 10. Panoramic view of KS-108, looking north

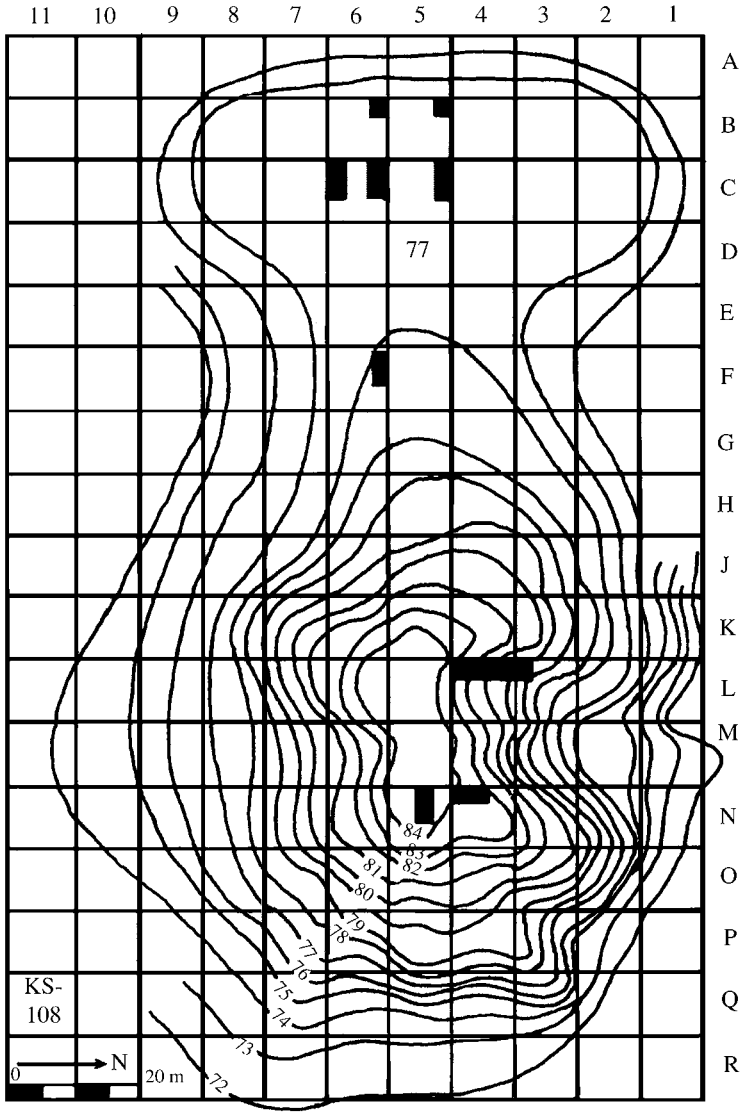

Figure 11. Contour map of KS-108 showing various areas of excavation

however, that the processes of social and economic complexity that started at Chogha Mish did not stop when the site was abandoned.

The presence at KS-004 of a Late Susiana 1 monumental platform, which presumably supported some formal structures or elite residences, suggests that the center of power in the fifth millennium B.C. shifted to a site away from the volatile area of Chogha Mish and that KS-004 continued to prosper until Susa was founded some 30 km away on the opposite side of the plain. If this is the case, then in the second half of the fifth millennium B.C., we have two regional centers in central Susiana that vied for supremacy. Whatever the details of this struggle, the settlement at Susa became paramount, a status it maintained for millennia.

As mentioned above, our small 1 × 2 m trenches did not provide enough horizontal exposure to see the remnants of buildings that once stood on the first platform. We therefore opened a larger (5 × 5 m) trench (Square M14) on the western slope of the mound where we found sur-

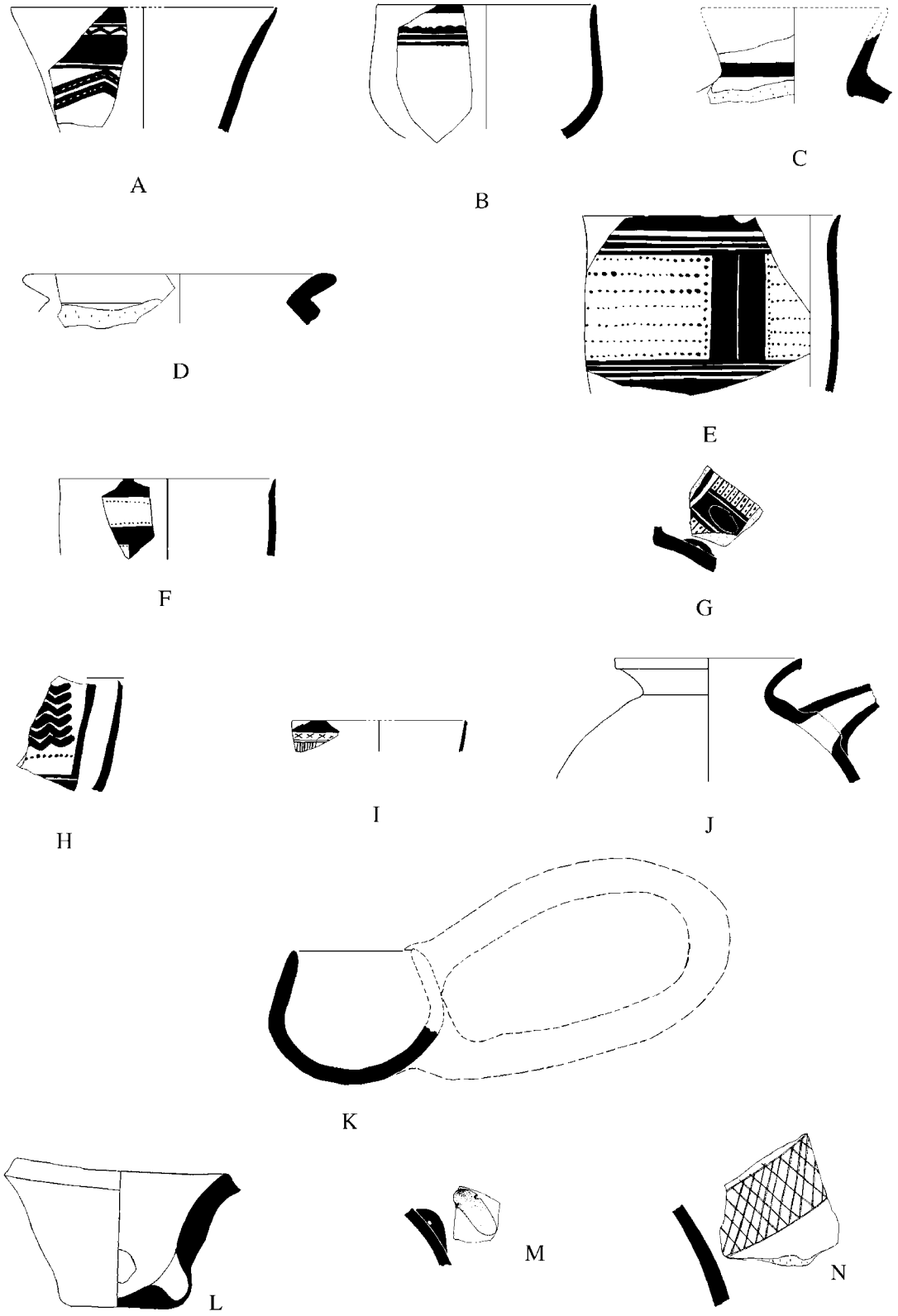

Figure 12. Sample pottery from KS-108: (A–D) Middle Susiana, (E–F) Late Susiana 1, (G–I) Late Susiana 2, (J–N) Protoliterate. Scale 1:4

Figure 13. M. Karami laying out Square C6 N on the western edge of KS-108

face remains of burnt bricks, ash, and roofing material that still bore reed and timber impressions. In this area nothing was found later than Late Susiana 2 phase. We opened this larger trench in the hope to link the surface burnt material to the later phase of the platform. Again, bad weather and lack of time did not allow us to penetrate the underlying layers deep enough to physically link them to the platform. Here we found an extensive and deep (1 m) deposit of very soft grayish green ash mixed with potsherds, burnt bricks, and roofing materials.

It was this evidence together with the size of the site in this phase (about 4.0–4.5 ha) that allows us to offer an alternative to the regional structure of lowland Susiana in the period prior to the crystallization of state organizations and urban centers. We need carefully and critically to analyze our data and conduct more excavations at the site with questions specifically formulated to shed light on the nature of the site. But based on the raw data we have at our disposal, KS-004 seems to be a good candidate as Susa's regional competitor. If this turns out to be the case, perhaps the violence attested by the burning and destruction at both Susa and KS-004 are related to this competition and rivalry that eventually frustrated the growth of KS-004 in the succeeding periods.

That was our serendipitous discovery at KS-004. In addition, we also discovered not only Early Susiana occupation on KS-004, but remnants of a small Early Susiana settlement (numbered temporarily KS-004a) 300 m northwest of KS-004, none of which had been reported before. This latter discovery was made when a few students and I were investigating the banks of Khalaf canal.

KS-108

In KS-108 (266502 E, 3565471 N) we planned to excavate several 3 × 6 m trenches on the rather flat lower mound which had abundant Protoliterate pot sherds (figs. 10–11). Our research had been designed to find stratified evidence for the very poorly understood early phases of the Protoliterate period, known as Early and Middle Uruk phases (ca. 3800–3500 B.C.). In addition, we planned to have enough horizontal exposure to reveal the functional nature of the site during the Protoliterate phase. From the pieces of pottery wasters, baked bricks, and small decorative clay cones, we expected to find a rural administrative center that might have been a satellite of the much larger Chogha Mish, only 3 km to the northwest.

The results of our surface survey indicated that the site was occupied sometime during the Middle Susiana period and continued to be occupied until the end of the Late Susiana 2 phase. We did not find any surface or excavated pottery datable to the first half of the fourth millennium. Sherds of the Middle Elamite, Parthian, Sasanian, and Islamic periods were also found scattered around the mound, indicating limited occupation or more probably use of the site dur-

ing these much later periods — none of our trenches revealed any archaeological levels that contained these late sherds (fig. 12).

In addition to the trenches on the terrace, we opened a stratigraphic trench, Square L4, on the northern slope of the mound to document the interface between the various phases known from the surface survey. We excavated this 3 × 12 m stratigraphic trench down to the Late Middle Susiana deposits. Again, lack of time and bad weather prevented us from penetrating deeper levels. Nevertheless, the evidence from this stratigraphic trench was inconclusive and except for an erosion layer of mudbrick detritus of the Late Susiana 2 phase that separated it from the later Protoliterate deposit, this part of the mound was so much disturbed by tree roots, animal holes, and pits that it was very difficult to find a clear line of demarcation between the various phases. We do know at this stage that the mound, at least where our stratigraphic trench was located, had very shallow deposits of Late Susiana 2 phase, indicating that the occupation in this phase was short and ephemeral. Our trench also indicated that after a hiatus of perhaps several hundred years, this sector of the settlement was reoccupied during the Protoliterate period.

Though the evidence from Square L4 suggested that the site may not contain materials from the first half of the fourth millennium B.C., we hoped that this would be a localized gap and that the terrace that was littered with Protoliterate pottery may still contain earlier phases of this period since Gregory Johnson had reported the presence of sherds of the Terminal Susa, "Early Uruk," and "Middle Uruk" phases at the site.

We opened three 3 × 6 m trenches in the center and western edge of the terrace (fig. 13). Strangely, two of the trenches (Squares C6 N and C6 S) contained only a compact layer of soil with some Protoliterate sherds and reached what we considered a sterile soil at a depth of 80 cm below the surface. To make sure, we excavated a 1 × 1 m area on the corner of these two trenches for another meter. The whole deposit consisted of sterile soil with absolutely no archaeological materials. This was a puzzling situation since the area of our trenches is about 4 m

Figure 14. 2004/5 Joint Expedition members in front of the Haft Tappeh Research Center. Sitting front row, from left: K. Borhani, J. Mohammadi, S. Alkasir, Y. Zalaqi, M. Karami, I. Habibi, N. Mirmontazeri, M. Avazeh, N. Rava, M. Fallah, M. Qaedan; second row: A. Zalaqi, T. Hartnell, S. Ebrahimi, A. Talebian, A. Jamshidi, S. Akhtar, M. Zare, M. Molaii, M. Zarinkuh, M. Khalili, K. Aqaii, S. Beigi; standing: A. Ahrar, E. Karimi, M. Vahidi, S. Banna, M. Heidari, R. Valizadeh, S. Qorbani, L. Niakan, M. Lajmiri, H. Ashjai, M. Talebian, A. Alizadeh, S. Hamzavi, A. Mahfroozi, S. Ka'bi, M. Zare, B. Eshqi, O. Hootan, M. Omidfar, Y. Razmahang, M. R. Rokni, E. Bordbar, and K. Chenani

above the plain level. We opened another trench (Squares F6) on the very edge of the western sector of the mound so that we have both horizontal and vertical exposure. The same situation was encountered in this trench as well. Here, after a thin layer of disturbed top soil, we encountered a sterile compact clay deposit.

Square C6 N, however, contained archaeological materials just below the surface. Here we found wall fragments, living surfaces, and a mudbrick bin, but all were found in a very bad state of preservation. Square C6 N was just next to the one that did not produce any archaeological layers. Even in C6 N, below the level of the fragmentary surface, archaeological materials ceased to exist. To make sure, we also excavated a 1 × 1 m area for another meter but found no archaeological materials and the soil was completely sterile. All the pottery from these operations dated to the second half of the fourth millennium B.C. and we were much disappointed that we did not find any earlier fourth millennium material as reported by Johnson.

As we were discussing our puzzlement over this very odd situation, the workers from the nearby village of Beladieh told us that it was only recently that they stopped using the terrace as a farm and that this portion of the site, which is flat, was heavily plowed for some fifty years. While this explained the destruction of the upper part of the site, it did not account for the fact that virgin soil was reached 3–4 m above the surrounding plain.

Clearly we could have benefited from geomorphological investigations. Our own crude observations indicated that in the region of KS-108 the entire plain west of the Shureh River sharply drops 1 to 2 m below its eastern bank. Tectonic movement is a logical possibility to explain why this part of the plain is so obviously lower. It is also possible that this assumed tectonic movement had something to do with the genesis of the Shureh River. The Shureh is actually a spring river that originates some 10 km north of the site from the seepage of the Siah Mansur and Loreh Rivers on the eastern part of Khuzestan.

The unusually high level of the sterile soil at KS-108 may also be due to the presence of a natural rise on which people had settled. Such natural hills are excellent sites for settlements located near a river and thus in danger of seasonal floods. This hypothesis can be tested by digging a number of probes in various parts of the mound.

Having been disappointed by our trenches on the terrace, we decided to move to the summit of the mound where we had collected Protoliterate pottery on the surface, hoping that here archaeological layers associated with the pottery can be found. We opened two 3 × 6 m trenches here (Squares N5 and N5/N6). After removing about 20 cm of top soil we discovered a number of graves, some superimposed, that covered the whole area of the operation. Even though the skeleton in one grave had a necklace of semi-precious stones, all the skeletons were oriented east-west facing southwest (towards Mecca), a sure sign that they all belonged to the Islamic period. Our local workers told us that the graves belonged to the Bakhtiyari mobile pastoralist tribesmen. We could not simply remove the bones and reach lower levels. Graves are difficult and time-consuming to excavate. Therefore, after we completely excavated the ones we had encountered and collected the bones and reburied them, we quit this area. Bones jutting out of robber pits on the high mound also discouraged us to move to another spot since we realized that the entire high mound must have been used as a cemetery.

There is much to be done at both sites. In fact, we consider our 2004/2005 season as preparation for a larger operation, which we are just beginning to understand how to proceed. Nevertheless, the resumption of our work at these important sites requires the type of long-term plan and commitment that cannot be established at this time given all the problems I mentioned in the beginning of this report. Since 2003, Director Gil Stein has traveled twice to Iran to negotiate a long-term agreement and to keep in close cooperation with our Iranian colleagues through the

Iranian Cultural Heritage and Tourism Organization, ensuring continuity of our work in this and other regions. We have submitted a proposal that in principle has been approved by the Iranian Cultural Heritage and Tourism Organization, but it will have to be formally approved by both the Iranian Foreign Ministry and the University of Chicago Administration. We hope to hear from the Iranian Cultural Heritage and Tourism Organization soon and return to the region to resume our work.