

MARCELLO PIPERNO · SANDRO SALVATORI

RECENT RESULTS AND NEW PERSPECTIVES  
FROM THE RESEARCH  
AT THE GRAVEYARD OF SHAHR-I SOKHTA, SISTAN, IRAN

Estratto da  
**ANNALI**  
dell'Istituto Universitario Orientale  
Volume 43

1983

ISTITUTO UNIVERSITARIO ORIENTALE 1983

MARCELLO PIPERNO - SANDRO SALVATORI

**Recent Results and New Perspectives from the Research  
at the Graveyard of Shahr-i Sokhta, Sistan, Iran**

The complex protohistorical society reconstructed from over a decade of research in Sistan by Is.M.E.O.\* particularly through the impressive documentation collected at Shahr-i Sokhta has left in the vast graveyard, which extends for about 20 hectares alongside the southern limits of the area, a true patrimony of cultural information among the most significant in the recent history of oriental prehistoric archaeology.

Hundreds of graves have already been uncovered and thousands more are awaiting future exploration. They represent a series of clear flashbacks onto the social structure, the cultural patrimony, the economic and technological capacities as well as the rituals of a protourban population living throughout the whole span of the 3rd millenium BC in an articulated system of more or less intensive relationships of interchange, to the east with the largely contemporaneous Indus civilization and its predecessors and to the west with the Elamite and Sumerian worlds.

The exploration of the graveyard, initiated in the fall of 1972 with a limited and accidental sounding, in the course of five campaigns has extended to an area of more than 2500 m<sup>2</sup>. The concentration of graves is of varying distribution with an average density of approximately 11 graves to every 100 m<sup>2</sup> (Biscione et alii 1974; Piperno, Tosi 1975) (Fig. 1).

Paradoxically, yet according to a well known process (Ucko 1969), the ideology of death and all that which determines the funerary ritual is such that, for this as for many other prehistoric and protohistoric societies, the graves offer the safest line of approach for a deeper knowledge of the daily life, the relationships and social hierarchy in which a dominant section of the population was structured.

The widely spread belief that the activities of earthly life are carried

---

\* The research program was conducted with the collaboration of the « Centro Studi e Ricerche Ligabue », Venice and in concurrence with the Consiglio Nazionale delle Ricerche and the Italian Ministry of Foreign Affairs.

on into the afterlife, and still more important, the impulse to emphasize an individual's station in life with a greater or lesser offering of goods might be evidenced in the graves of Shahr-i Sokhta in a series of symbolic and material elements. These are beginning to be decoded only due to the progressive expansion of completed observations, from a sample, however, which is still far too limited in comparison with the potentially available documentation which we reckon to be around 20,000 graves.

If it is correct to assert that every grave can be considered as a complete document in itself circumscribed in time, unlike the chronological dilution generally characteristic of settlement contexts, then it is also true that single graves can be seen diachronically in a much broader perspective.

Only through a global perspective of the history of the graveyard can we gain a clear image of the complex phenomenology marking the transformation of the Hilmand civilization in the course of the different generations from the earliest phases selected (Period I: 3200-2900 BC), to the protourban (Period II: 2800-2500 BC), to the protostate (Period III: 2400-2100 BC) until its end (the reasons for which are still in dispute) documented by the last protourban phase (Period IV: around 2000 BC) (Fig. 2).

Considered as a whole, the graveyard shows selective organization of land use and a progressive dilation until around the middle of the 3rd millennium BC, with initial expansion growing from the central southern areas (Fig. 2) towards the northern boundary of the plateau which was reached and densely populated in the course of Period II and climaxing at the beginning of Period III in phase 4 (Pl. I). This expansion was interrupted towards the end of the millennium by the graves of phase 3 which reoccupied a large section of the plateau superimposing themselves in pre-existent clusters of graves.

From the first soundings it was evident that one of the main characteristics of the graveyard consisted in its lack of homogeneity and in the extreme diversification of the funerary practices.

Simple pit graves, graves with the pit partitioned by a mudbrick wall (Pl. II), catacomb graves with the funerary chamber at the base of an often quite deep access pit alternate in infinite variations, consisting, for example, in the partitions in the pits evidenced by a particular way of disposing the remains or by differentiated depths in the level of placement. Other graves repeat, with lesser precision in the details, the large catacomb graves, reflecting their overall scheme with the funerary chamber of the catacomb type, yet neither observing the strict division between this and the access pit nor the clear separation achieved in the best examples of graves of this type, with little walls which seal off communication between the pit and the burial chamber. This latter was sometimes re-utilised probably for the disposal of entire family groups.

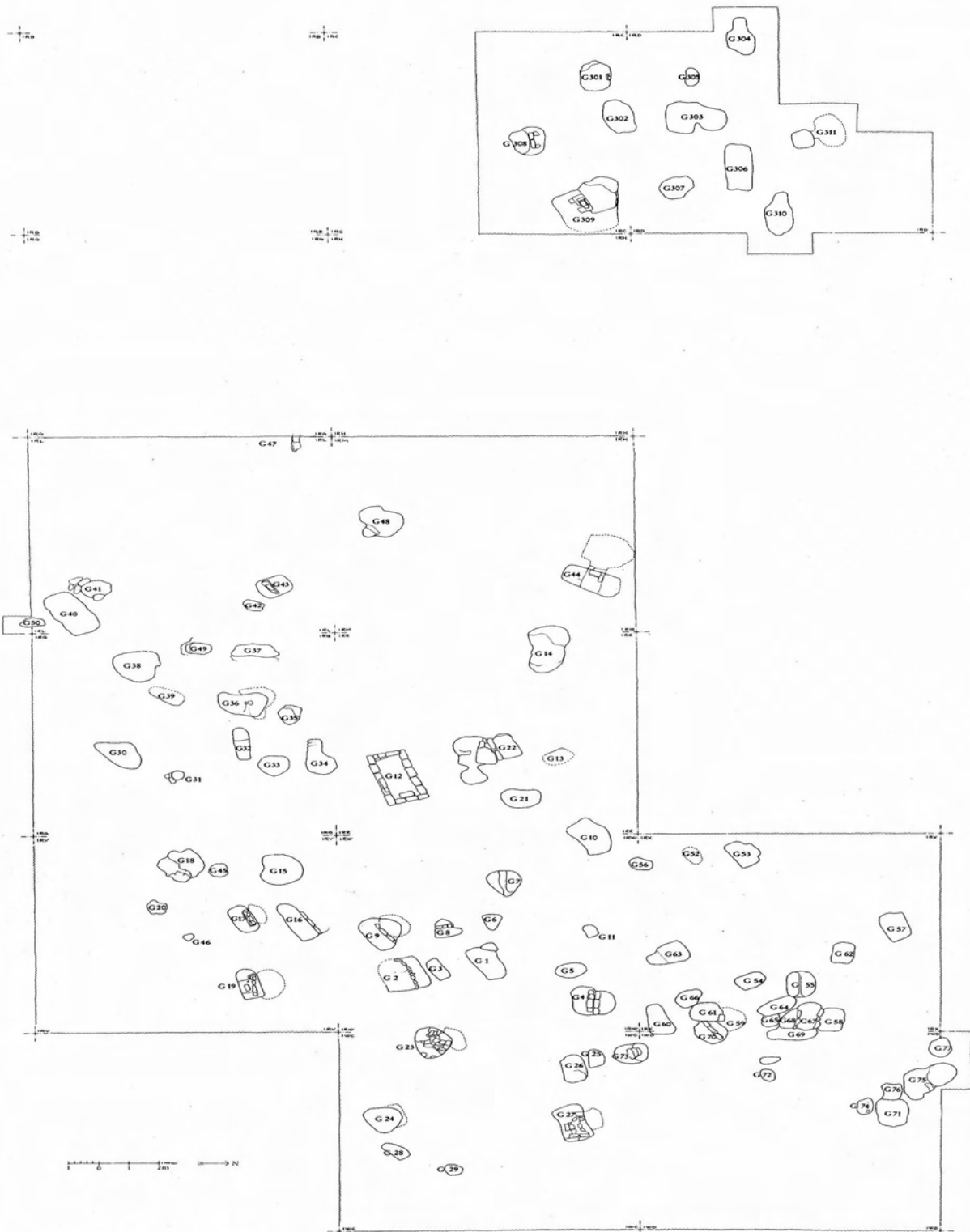


Fig. 1 - Map of the extensive excavation in the IR sector towards the northern boundary of the graveyard. The illustrated graves are of various types: simple pit, partitioned pit and pseudocatacomb, mostly datable to phases 5-6 (2700-2500 BC)

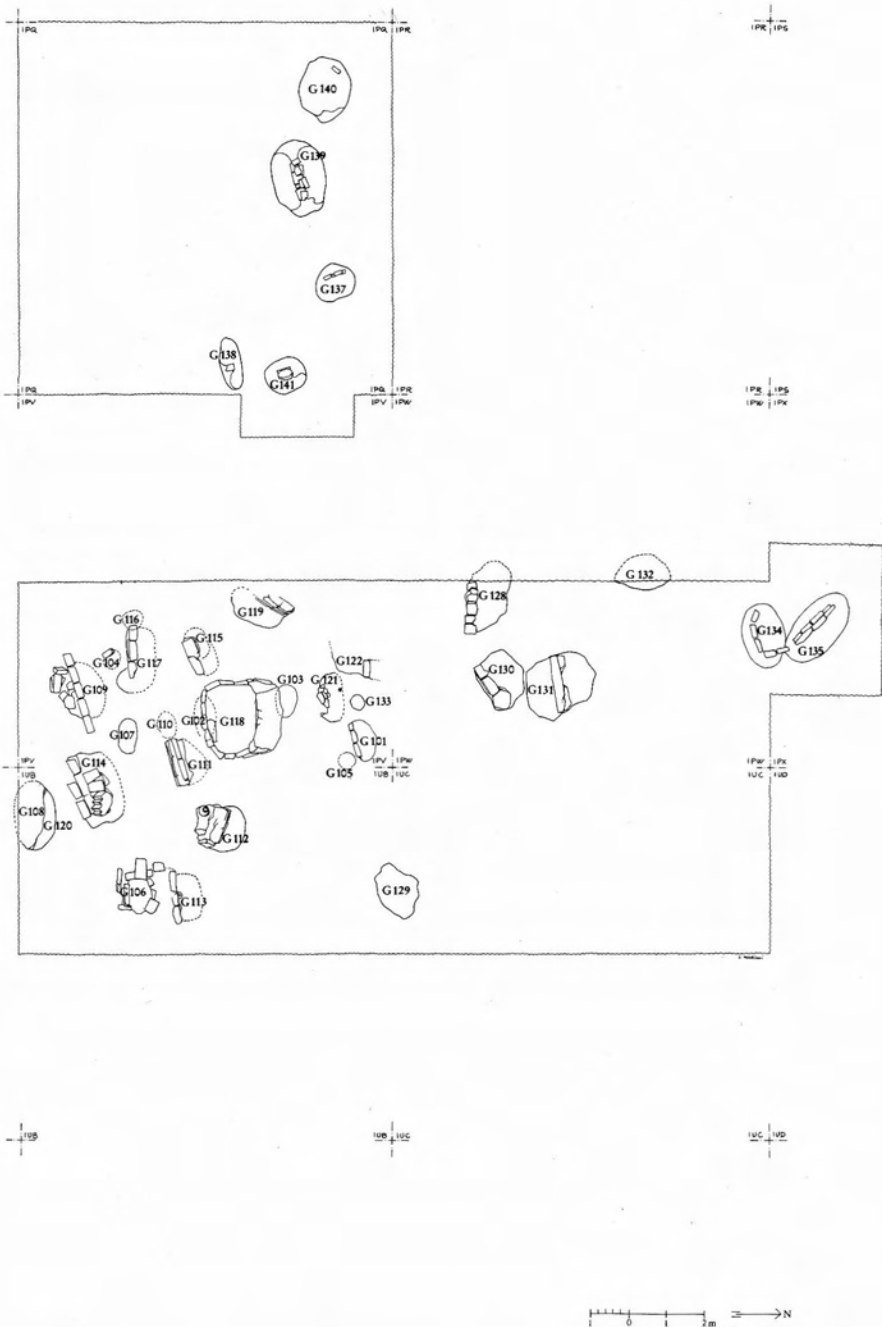
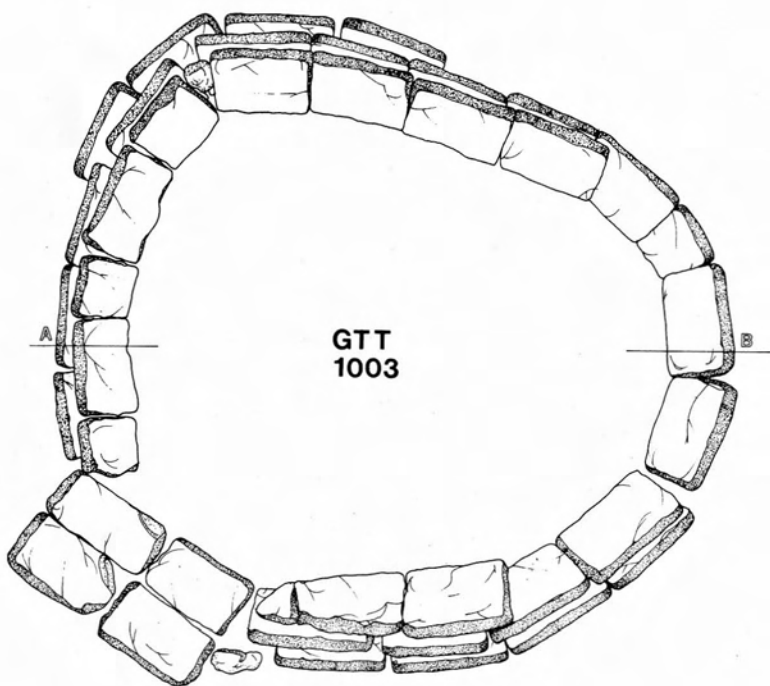


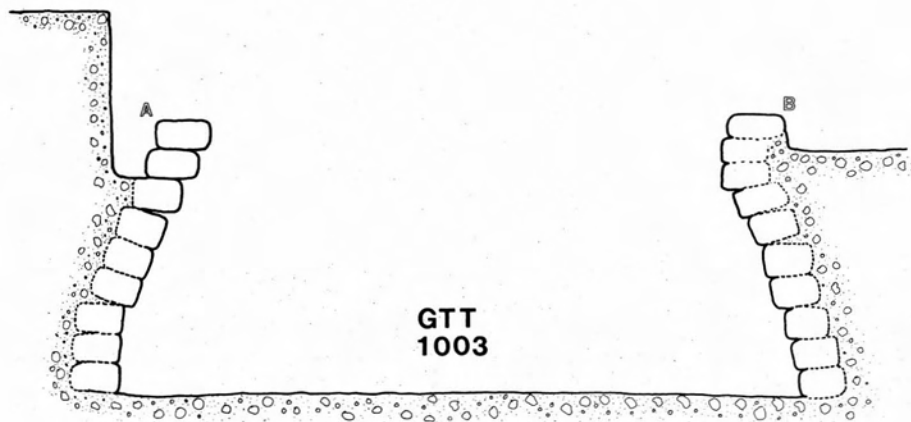
Fig. 2 - Concentration of burials in sectors IP-IU in the central area of the graveyard, prevalently phases 7-8 (2900-2700 BC)



Fig. 3a-c - Section and plans of the impressive circular structure of grave 1003 in the southern sector GTT. This collective grave was utilized at different times for the disposal of more than 13 individuals. Only the most recently inhumed (centre) are anatomically connected. The remains of three dogs were placed next to the inhumed. (Drawing by L. Mariani) Scale 1:30.



*a*



*c*

It would seem that scattered among this multiform grave typology there are some graves of a more complex structure: G. 118 (Pl. II) an impressive grave from phase 3 comprised of a brick structure which gives rise to a plastered tank in the interior; G. 12, where the grave goods and the inhumed are contained in a rectangular brick structure, preserved for only one row; and G. 106 and G. 604 where the bricks are uniformly placed limiting kinds of containers as in true cist graves (Pl. IIIa).

To date the most impressive example of a constructed grave is G. 1003 (Fig. 3a-c) which displays various phases of reutilization with a total of more than 13 disposals and which can be dated on the basis of the clay grave goods, a cylindrical seal of the Jemdet Nasr type, from the beginning of the 3rd millennium BC (Amiet personal communication). A circular mudbrick structure of approximately three meters in diameter and preserved for over a meter in height closes up the layers of successive burials of which the order can, with a fair degree of certainty, be established. This grave also stands out for another particularity which makes it one of the most interesting documents of the most ancient phases of Shahr-i Sokhta. Three dog skeletons, one complete and two partial were buried, these too at varying times, as companions to the inhumed. They offer us a rare opportunity to study in full detail the selective process brought by the domestication in the protourban stage of a Turanian society.

The same lack of uniformity we have noted in the grave typology is reflected in the kind of offerings placed with the inhumed. Although in most graves pottery represents the most recurrent element (and at times quantitatively impressive) other categories of goods are more directly indicative of the rituals, the technology or, more simply, of the burial customs.

The documentation of relative cases is vast and articulated. Sheep or goats (usually young individuals) were sacrificed with complex ritual perhaps subsequent to the moment of burial. This aspect is particularly recurrent in phases 7 and 8. Partridges (*Ammoperdix griseogularis*) (P. Casoli personal communication) have also been encountered in two graves from phase 3 which we shall deal with later.

The vessels often show, in the repetition of identical decorative motifs frequently applied in pairs onto the same vascular shapes (Pl. IIIb) in the quantity of potter's marks which especially characterize the manufacture in phase 3, or simply in the typology of the shapes offered, a complicated symbolism which is perhaps linked to an effective functional meaning of the decoration in the daily use of the pottery.

Other objects of greater prestige like bronze discs, wands, pins and in rare cases tools, or functional objects like blades flint products, biconical sling-stones of unfired clay, baskets, bone instruments, stone polishers etc. all appear in the range of handicrafts, both at a highly specialized level



(as in the case already mentioned of the lapidary of grave 12 devoted to the manufacture of lapis lazuli), or they are simply limited to a domestic context.

We know, for example, that the inumed of G. 77 (Piperno 1976) was a craftsman involved in the production of chlorite and chalcedony necklace elements (Pl. IVa). The presence of mineral substances such as limonite, hematite, lapis lazuli and copper oxides in a basket placed in the collective grave 311 of phase 5/6 seems to suggest that the occupant was probably a craftsman working in the decoration of polychrome pottery.

Perhaps the best documented aspect to date of the graveyard of Shahr-i Sokhta is that of costume. Bracelets, necklaces, single beads and bone hairpins have been found in many graves, and often in the original position.

As the anthropological data elaborated by E. Pardini (personal communication) indicate, it seems that there is no strong link between sex and dress which is recognizable in archaeological terms. Newborn infants, children, male and female adults are all equally provided with lapis lazuli beads, turquoise, chlorite, chalcedony and other semi-precious stones. The degree of dichotomy between adult and juvenile or male and female in no way represents a sharp polarization of access of ceramics or signals of prestige.

The study of these offerings, together with other elements, is valuable not only for the research of costume, but especially for possible observations on the distribution of wealth through a qualitative and quantitative analysis of the grave goods basing the value of the various raw materials on their lesser or greater distance of extraction from Shahr-i Sokhta, and on the time necessary for their manufacture (Piperno 1979).

The first results of the anthropological study of the inhumed at Shahr-i Sokhta (Pardini, Sarvari Negahban 1976) are extremely interesting in this regard, especially in the relationship which exists between male and female individuals and a particular category of objects; the seals, clearly an indicator of a concentration of goods. The association between female individuals and seals seems to prevail over that of male individuals and seals, possibly indicating control of property, or at least of certain goods, quite different from that which one would have expected.

The latest excavation campaigns have opened further prospects for the research on the graveyard at Shahr-i Sokhta and for the socio-economic approach outlined in the preceding pages.

Exploration of the central area of the graveyard has already revealed that a strong concentrated wealth existed, particularly towards the second half of the 3rd millennium BC. This area, already intensively exploited for the installation of graves of the archaic phases (7-9), was reutilized during the period approximately between 2400 and 2200 BC. These graves

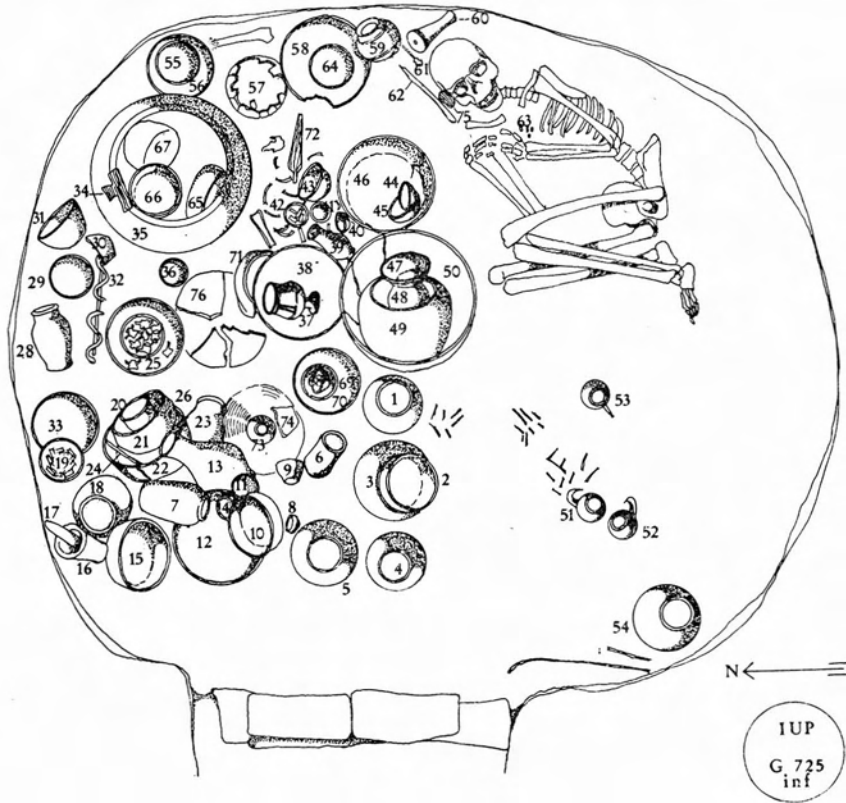


Fig. 4 – Plan of the funerary chamber of the lower grave IUP 725. A pseudo-catacomb grave with a small elevated brick wall separating it from the vertical access pit. Phase 3. (Drawing by L. Mariani)

offer furnishings which are among the most outstanding recorded so far at Shahr-i Sokhta, and which, due to the quantity of tracts in common, can be interpreted as participants of a well distinguished social group which we shall call the *group of phase 3*, and which joins those individualized in other associations of graves in different areas of the site (Piperno 1977).

The attribution to phase 3 in the sequence of Shahr-i Sokhta is given here with a degree of uncertainty since the association of these grave goods in reality reflects the transition between phases 4 and 3 of the settlement with a greater incidence of more recent elements in comparison with those which are connected to the materials of such specialized production sites as Tepe Rud-i Biyaban 2.

The spectacularity of the grave goods in some ways emphasizes the

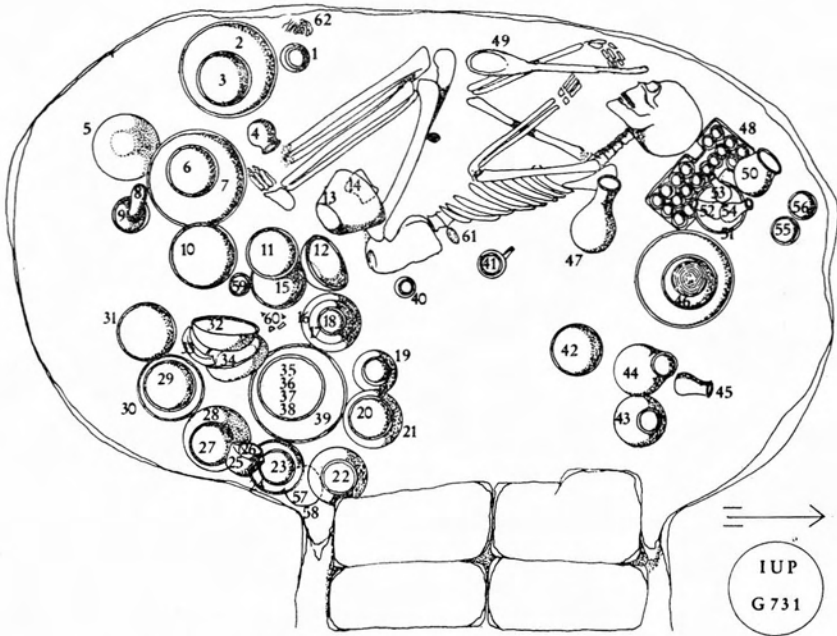


Fig. 5 – Plan of the funerary chamber of grave IUP G. 731, one of the pseudo-catacomb type, phase 3. The wooden gaming board had been placed next to the head. A basket containing the pieces and dice was lying in close proximity to No. 60. The structure of the grave, its topographical position as well as numerous elements of the grave goods indicate a strong resemblance to grave IUP G. 725. (Drawing by L. Mariani)

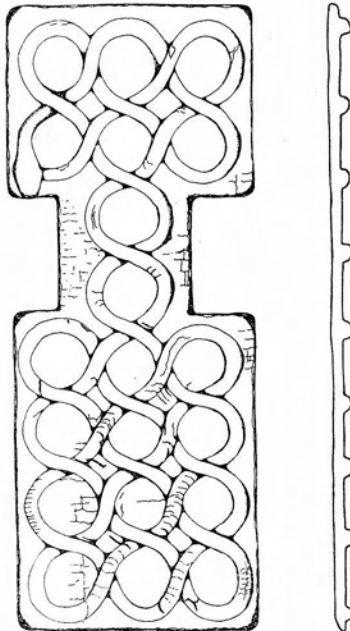
grandeur of the installations: the catacomb graves, with the first examples arising in phase 7-6, seem to constitute a constant for the large graves of phase 3 in the central area. IU Q G. 712, IU P G. 725 Lower (Fig. 4) and IUP G. 731 (Fig. 5) are all constructed according to this typology, with a deep rectangular pit and an ample catacomb; in the three graves the obstruction wall is elevated with particular attention and seals off access to the burial chamber which was always used for the disposal of single individuals. The fourth grave of this group, IU Q G. 711 (Pl. IVb) although attributed to the partitioned pit type, could also be a catacomb grave of which the vaulting collapsed in ancient times due to poor cementation of the gravel in which it had been dug, like G. 725 Lower. The topographical situation of these four graves indicates a clear condensation in a restricted area, if one considers that G. 711, G. 712 and G. 731 were excavated practically a few meters from each other with the last two actually bordering onto each other. G. 725 is installed further away towards the SE corner of the sector IUP and between this and G. 731 the similarities

are, also for other numerous elements, so obvious as to suggest a close social tie between the inhumed.

Of the four graves in the Group of phase 3, G. 731 is the one which directly illuminates the cultural convergence between Mesopotamia and Sistan, thanks to the existence of a "gaming board" similar to those known from the Royal Cemetery at Ur.

Rectangular in shape (Pl. Va and Fig. 6), 33.2 cm long, 12.7 cm wide, the wooden tablet upon which the chequerboard is drawn is divided into two compartments which are connected by a bridge of about two thirds the length. On one of the faces there is a total of twenty little circular spaces which are fashioned by the coils of a snake, carved in relief, which beginning from the top compartment winds its way across the second. The head and tail meet, closing the intricate convolutions in the first space of the upper compartment (Pl. Vb).

The pawns and dice of the game (Fig. 7) were contained inside a basket placed near the pelvis of the inhumed. The four dice are of wood and are parallelepiped in shape, they display numeration, arranged along the long faces, from one to four following a variable order. On three of them the numbers have been achieved by fixing fine little washers of bone, ivory or mother-of-pearl onto the wood with mastic. On the fourth, a series of diamonds and triangles have been drawn with subtle inlay, contriving



1507 3007  
731 | 48

Fig. 6 - Wooden gaming board from grave 731 (Drawing by L. Mariani).  
See pl. V.

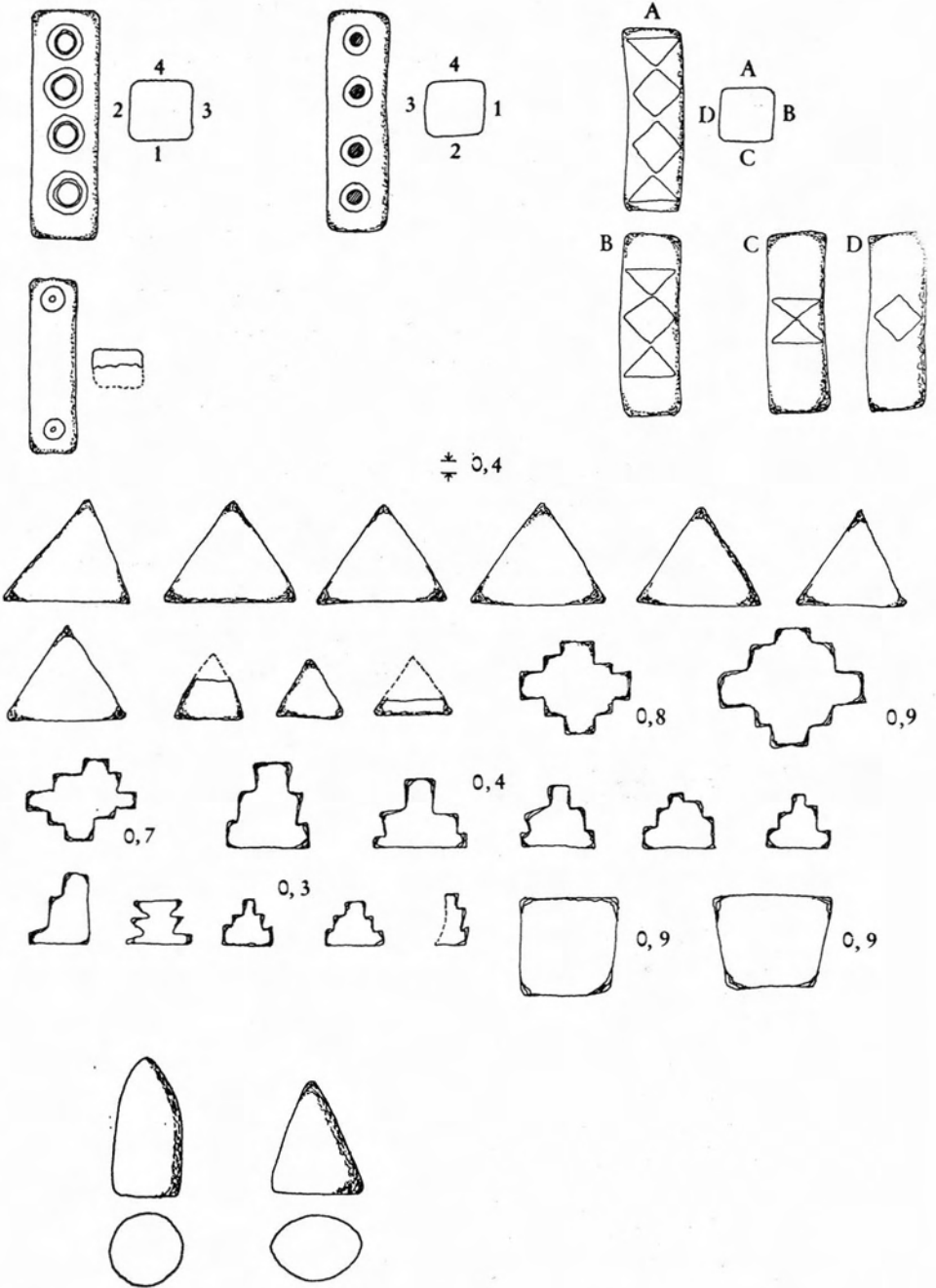


Fig. 7 - Dice and pieces of the gaming board from grave 731. (Drawing by L. Mariani)

a sort of illustrated numeration, still from one to four and in this order: a diamond; two triangles placed facing the vertex; a rhombus and two triangles; two diamonds and two triangles.

Ten of the pieces are triangular, three are squared cruciforms, ten are triangular with little gradations carved into two sides and two are quadrangular, all are in wood. Two truncated cones of variegated limestone complete the set.

In spite of the difficulties in reconstructing its exact course, it is possible to see that this game is the probable precursor of all those which still use a chequerboard base over which two separate groups of pieces are moved according to diverse rules.

It is probably a question of contriving an encounter between two groups; two players guide their effectives across the field represented by the gaming board departing from a position of parity.

The duel is activated by successively occupying different strategic points on the field with aim of overthrowing the adversary by either eliminating single pieces or by capturing, as in chess, a particular piece which symbolically represents the enemy king. The third possibility in chequerboard games consists in conquering enemy territory or else in converging one's forces towards a particular space on the board with the aim of being the first to occupy it.

Certain elements would suggest that the basic principle of the game found at Shahr-i Sokhta as well as those from Ur does not stray far from these basic rules and courses of play. With both Shahr-i Sokhta and Ur the pieces are distributed by shape and colour into two groups. The game proceeds, then, between two contenders, each deploying his own numerical force as the fact that all the elements of the game found at Shahr-i Sokhta, except the three cruciform pieces, are equal in number seems to suggest.

The documentation of Ur concurs with that of Shahr-i Sokhta in this regard, but varies in that each player has fewer pieces at his disposal.

The unusual shape of the board suggests however that in the opening position the pieces, unlike in draughts and chess, are not placed in opposition. This would be borne out by the asymmetry between the upper and lower partition of the board and the narrowing at the connecting bridge which perhaps played an important role in the course of the game.

Rather than just an encounter between pieces placed in opposite but symmetrical positions, the object of the game must have been the occupation of a determined sector, that is territorial conquest rather than the capturing of pieces.

These observations and others which can be made don't pretend to offer an exact interpretation of the game but rather to suggest the complex

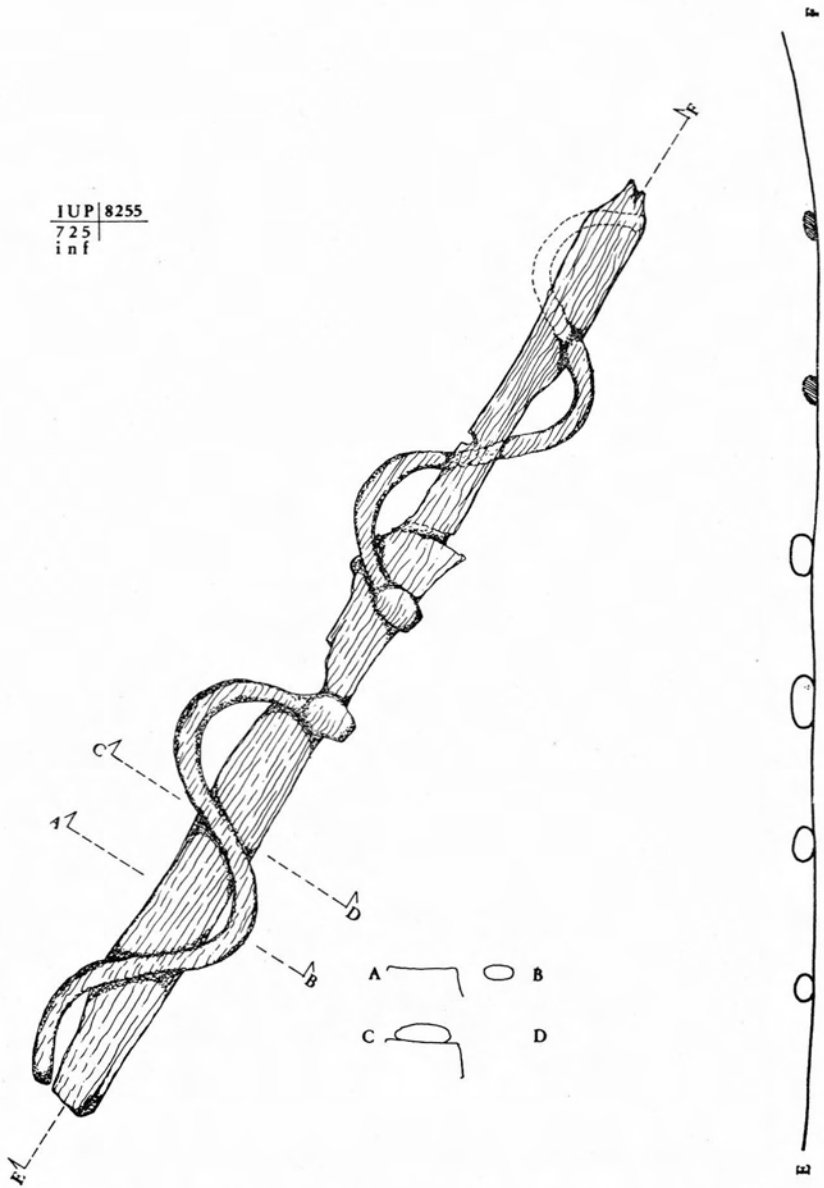


Fig. 8 – Facing snakes in wooden inlay from lower grave 725

structure on which it is based. An exact interpretation, however, is not impossible but requires a more in-depth analysis<sup>1</sup>.

Turning now to the archaeological aspect in the strict sense, it is necessary to admit that without doubt the discovery of the gaming board in G. 731 at Shahr-i Sokhta opens new perspectives, as well as new problems, on the mechanisms of cultural interchange in the near and far east area during the 3rd millennium BC. A certain caution is advisable to avoid embarking on interpretive roads which could prove misleading contrary to immediate appearance.

This object can in fact be considered from various visual angles which are not altogether unrelated. Without doubt the most remarkable thing is the formal resemblance to the five gaming boards, each from different graves, restituted by Sir Leonard Woolley's excavations of the so-called Royal Cemetery of Ur (Graves: PG. 800, 513, 789, 580) (Pl. Vc). The general shape, the number of spaces (twenty in both cases) and the disposition of the gaming boards of both Ur and Shahr-i Sokhta prove identical. The only difference is in the realization of the spaces: in the examples from Ur these have been achieved with mosaic including elements in semi-precious materials, and in ours they have been achieved by the relief carving of a snake into the wooden plank.

The convergence of the formal appearance of the gaming boards of Ur and Shahr-i Sokhta is certain, but leaving these immediate considerations aside, another point of convergence is possible, this time less direct and in some ways more problematical; the coils of the snake motif which define the spaces of the Sistanic example. Other than at Shahr-i Sokhta, where it recurs in a modified form but stylistically identically in a wooden object found in IUP G. 725 Lower (Fig. 8), this motif has been widely noted over a quite long time span in both the Mesopotamian and Iranian, or more precisely, the Elamite milieu, especially on seals and in seal imprints. The relative archaeological documentation, at least that dealing with seals, is almost all to be found gathered in the work of Van Buren (1935-36) (Fig. 9) in the thirty or so documents. To Van Buren's list can be added an imprint from Susa (Amiet 1972: no. 484) (Fig. 3) dated to the second phase of the protourban period (second half of the 4th millennium BC) and, perhaps, another imprint (Amiet 1972: no. 1382), also from Susa, but from a more recent period (Pre-argonid Period = ED II, Fig. 9.9). We must also mention, still from Susa, the recurrence of this motif, although here there are two snakes intertwined, on a bitumen votive relief (Amiet

---

<sup>1</sup> A mathematical analysis of the game is currently being worked on by Professor T. Viola.



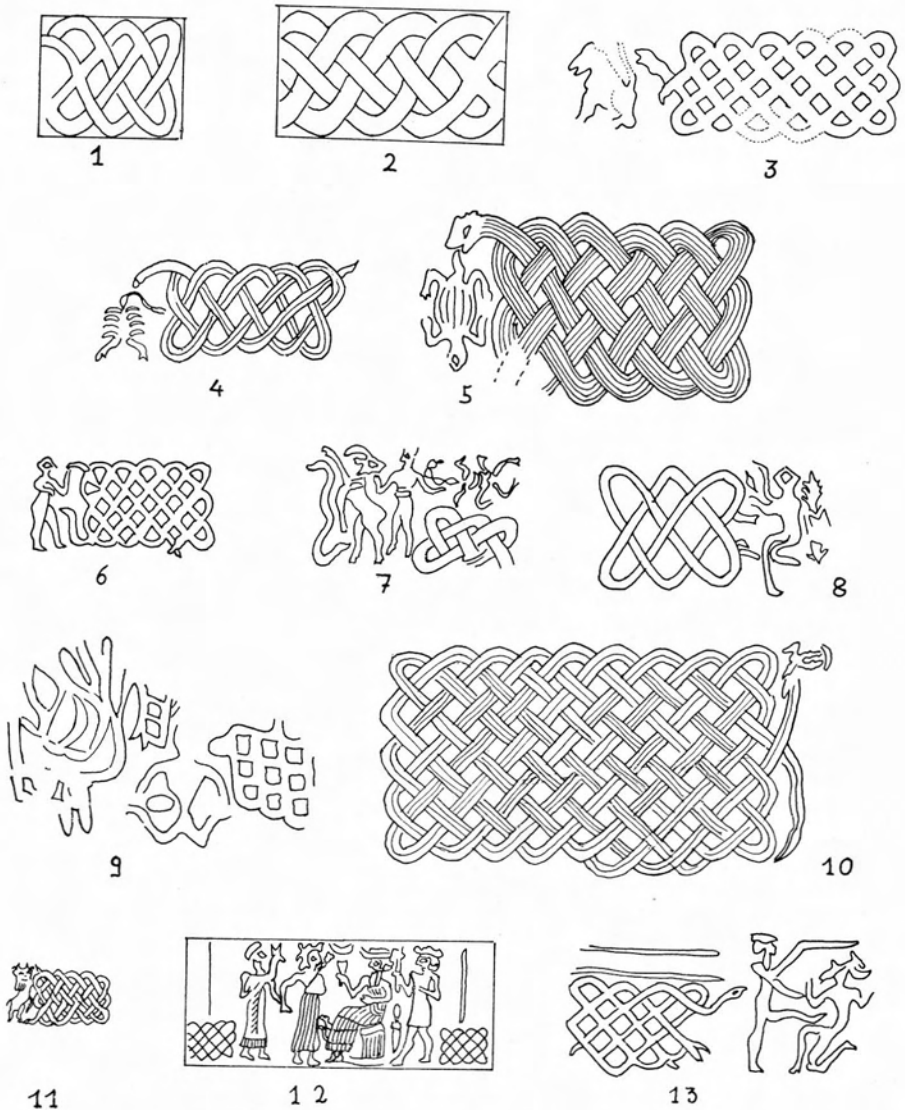


Fig. 9 – Recurrence of the entwined snake motif in Mesopotamia and Elam. Numbers correspond to those indicated in table 1.

1966: Fig. 124) dated by P. Amiet to around 2700 BC (Sumero-elamite epoch or Pre-sargonid).

Also among the things not mentioned by Van Buren, we note, again in Mesopotamia, yet another example of the motif formed by two snakes rather than one, on a steatite lamp lid from Tello, now at the Louvre,

datable to the 22nd century BC (Frankfort 1969: Fig. 51 C). Finally there is the magnificent series of sealings found by E. Strommenger during the recent excavations of Ḥabuba Kabira in the north of Syria, stamped repeatedly with seals bearing this same motif.



Fig. 10 – Stamp seal from Chanhudaro with possible stylization of the entwined snake motif (Mackay 1934, tab. 4).

Placing the recurrence of the motif in Mesopotamia and Elam in chronological order, it can be seen as present in both areas throughout the 3rd millennium BC, but with much greater numerical consistency in the Mesopotamian documentation (Tab. 1).

Even if this motif is extremely frequent in all of the Near and Middle East in practically every period, the particular composition of the entwined snake with a series of coils can be considered as a complex iconographic motif. In the light of recently available documentation it seems that it could have reached Shahr-i Sokhta from abroad, directly or indirectly from the Mesopotamian area where it has been steadily witnessed over the span of the 3rd millennium BC. With the possible exception of a stamp seal from Chanhudaro, attributed to the Jhukar culture (Mackay 1943: Tab. 4, Fig. 19) an iconographic motif such as this has never been noted east of Sistan. We shall presently see that this vestige in the Indus valley is not an altogether isolated instance when considered in the more general context of Sistan's interrelationships with the Indus plains.

Given the state of our present knowledge, we must limit ourselves to preliminar observations, or rather to the annotation of two elements of convergence between Shahr-i Sokhta and the Mesopotamian world, firstly a direct one constituted in the shape of the gaming board, secondly a more direct one is provided by the entwined snake motif. These are reinforced by the singular coincidence of the presence of a gaming board and a cylindrical seal bearing the entwined snake motif (Woolley 1934: Tab. 19 7.61, Fig. 18.11) in G. PG 779 at Ur, the grave in which the famous "standard" was found.

An overall view, however, is not so easy. Proceeding with the formal

analysis of the game from G. 781 of Shahr-i Sokhta, the pieces and the dice deserve particular attention, especially considering that J.-F. Jarrige, director of the French Mission to the Indus, has recently recorded the discovery of some limestone game pieces, partly similar to those of Shahr-i Sokhta, at Mehrgarh in the Kachi plain of eastern Baluchistan. The pieces come from a grave from period VII in the sequence established by the

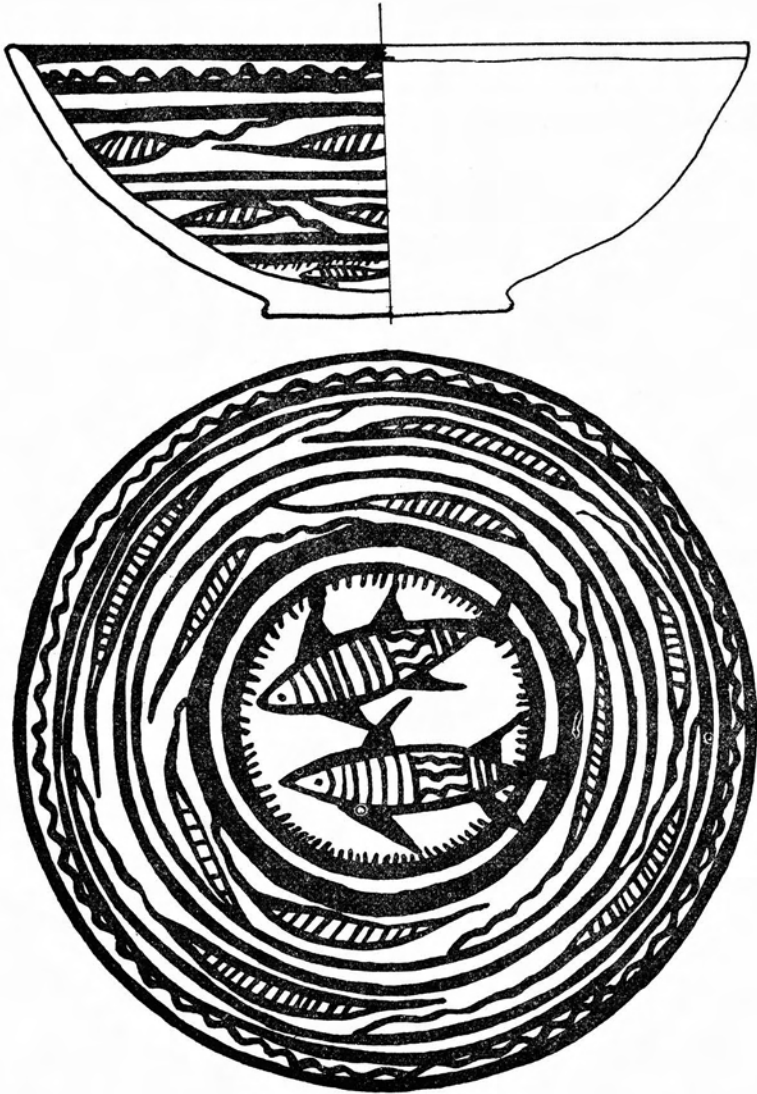


Fig. 11 – Hemispherical bowl internally decorated with fish and sheaves of leaves, from grave 731. Scale 1:1.5.

French archaeologists and are datable in absolute chronological terms to around the middle of the 3rd millennium BC. There are 39 pieces in all, 25 are triangular in shape with a flat base and scalariform sides and the other 14 are semi-circular in shape. In the same grave a copper spoon was found already noted at Altyn depe in southern Turkmenia and Mohenjodaro, in the Indus valley (Gupta and Shchetenko 1966-68: p. 195). It is very similar to the spoon-colander from one of the two "vases à la cachette" from Susa (Amiet 1966: Fig. 152 G) datable to the latest phase of the Sumero-Elamite period (2500-2400 BC). A similar spoon, though wooden, was also present in the grave at Shahr-i Sokhta in which the gaming board was found (Pl. VIa). This accordance also helps us to establish a fairly sure chronological limit for the grave at Mehrgarh synchronizing it with the "game" grave at Shahr-i Sokhta and those related to it.

The elements of convergence with Mehrgarh go beyond the presence, already significant on its own, of the pieces analogous to Shahr-i Sokhta. From the same grave comes a hemispherical cup, internally decorated with two fish painted in brown and two flowing sheaves of leaves identical to those found at Mehrgarh (Fig. 11). Painted fish treated in a very similar

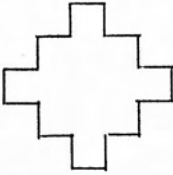
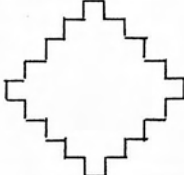
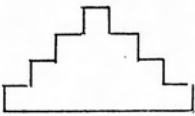








			
<b>SHAHR-I SOKHTA</b>	 <b>wood</b>		 <b>wood</b>
<b>MEHRGARH</b>			 <b>calcareous stone</b>
<b>HARAPPA</b>			 <b>shell</b>
<b>MOHENJO -DARO</b>	 <b>shell</b>	 <b>shell</b>	 <b>shell</b>
<b>UR</b>			 <b>shell</b>

Fig. 12 - Diffusion of the type of pieces found in grave 731.

way on the interior of bowls are fairly frequent at Mundigak IV, 2 and 3 (Casal 1961: nos. 398a, 430).

Still dealing with the pieces of the game we must mention that elements analogous to those of Shahr-i Sokhta, but of different material, shell, are present at Harappa (Vats 1940: Pl. CXXXII 4 d) and at Mohenjodaro (Mackay 1938: Pl. CXLIII 17; Pl. CXLII 29, 30; Marshall 1931: Pl. CLV 31, 32, 33). A summary analysis of their distribution, based on a simple examination of "presence/absence", already defines a precise areal (Fig. 12). At Ur we know of only one example (Vats 1940: Pl. CXXXIV 4) and it is plausible to suppose that it comes from elsewhere.

Passing to the dices, it seems superfluous to mention that those of Shahr-i Sokhta are of a type which is distinctive in the Indus valley and well known not only at Mohenjodaro and Harappa (Dales 1968) but also at Altyn depe in soviet Turkmenia as importations, accompanied by a whole series of circular and squared elements bearing numerical annotations on the faces (Masson and Sarianidi 1972). Numerous examples of dice of this type, still in use today in game called *pachisi* which is played on a cruciform gaming board, have also been found at sites in the Indus valley (Brown 1964; Snesarev 1963); here too numerical annotations are produced, as in the case of one of the dice from Shahr-i Sokhta, by the incision of a series of rhombi and triangles on the four faces (Mackay 1938: Pl. CXLIII).

The picture we have at this point is decidedly more complex and articulated, being composed of a series of precise convergences which would seem to lead in diametrically opposed directions: Sumerian Mesopotamia on the one hand, and the Indus valley on the other. If the contemporaneous presence of the game at Ur and at Shahr-i Sokhta provides irrefutable evidence of "morphological-cultural" convergences (Tosi 1978) limited to objects which seem to move within the confines of well defined social categories (at Ur the game appears as exclusive to an exceptionally marked elite context and at Shahr-i Sokhta it was also placed in a grave of relevance distinguished by a concentration of goods clearly greater than the average demonstrated by the other graves) then the independent and original formulation of the game in these two areas must be emphasized. The global orientation of the material documentation of Shahr-i Sokhta during phase 4 (2400-2300 BC) should not go ignored. A stronger orientation towards cultural and commercial contact with the area to the east of Sistan is witnessed by numerous other elements from both the graveyard and the settlement. It suffices here to cite the two "brandy cups" (Pl. VIb) decorated with pipal leaves from G. 731, which must have been imported from Mundigak where they are typical of period IV, 1 and 2 (Casal 1961: nos. 179, 180, 181, 372); the goblets of G. 725 (Pl. VIc) and those from

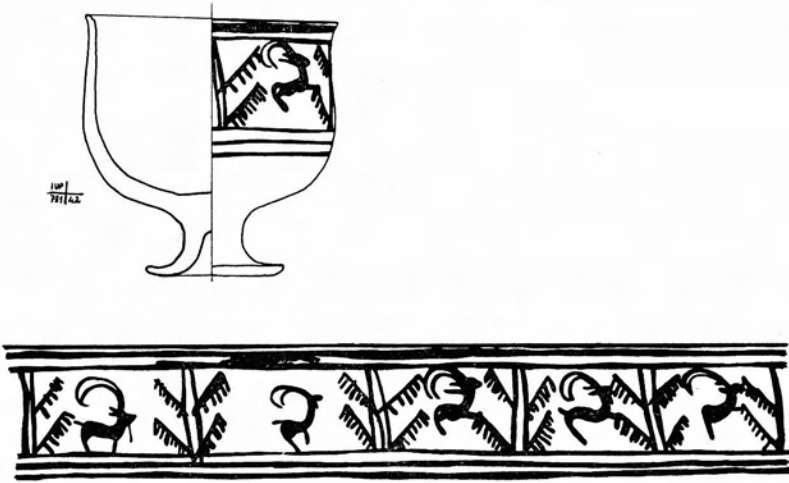


Fig. 13 – Cup of grave 731. (Drawing by L. Mariani). Scale 1:4.

G. 731 itself (Fig. 13) are also correlated with materials from Mundigak IV, 2 (Casal 1961: no. 383a); beads of ivory, a material originating from the Indian subcontinent where it was worked in great quantities, were found in levels of phase 4 in the Central Quarters of Shahr-i Sokhta; and finally another class of item present in the Sistanic city, also typical of the Indus valley civilization, the so-called “pancakes” triangular or rectangular shaped objects of baked clay which often bear the imprint of Indian type seals on one face.

The picture as a whole, easy verifications of convergences apart, helps us to reinforce the idea of a substantial autonomy of the Hilmand civilization from the cultural models predominant in the Mesopotamian and Elamite worlds. The very character of the material documentation does not, however, permit Shahr-i Sokhta to be included in the cultural sphere of the Indus Valley. The emerging picture, as the multidisciplinary studies being conducted at Shahr-i Sokhta and elsewhere progress, is that of the Hilmand civilization originally and autonomously developing with its own socioeconomic processes of adaptation to the demands of the local historical context. This leads to internal differentiations of relative extent evidenced by two generative poles of the culture, the northern one being represented by Mundigak, and the southern one by Shahr-i Sokhta (Biscione 1974; Jarrige, Tosi 1981). The whole, in a context of specific interrelationships with the eastern and northern areas, and more limitedly with the Sumero-elamite east with which the ways and means of the interchange are still to be traced.

	B.C.	MESOPOTAMIA	E L A M	SHAHR-i SOKHTA
U R U K IV°	3100	sealings from Habuba Kabira	} 3	
JEMDET NASR	2900	} 1-2-5		
EARLY DYNASTIC I°	2750		4	
EARLY DYNASTIC II°	2600	6-7-8	9-16-20	
EARLY DYNASTIC III°	2400	10-11-14-15-18	19	
ACCADIAN	2200	12-13-17		gaming board from grave 731
POST-ACCADIAN	2100	21		

Table I: The entwined snake motif in Mesopotamia, Elam and Shahr-i Sokhta.

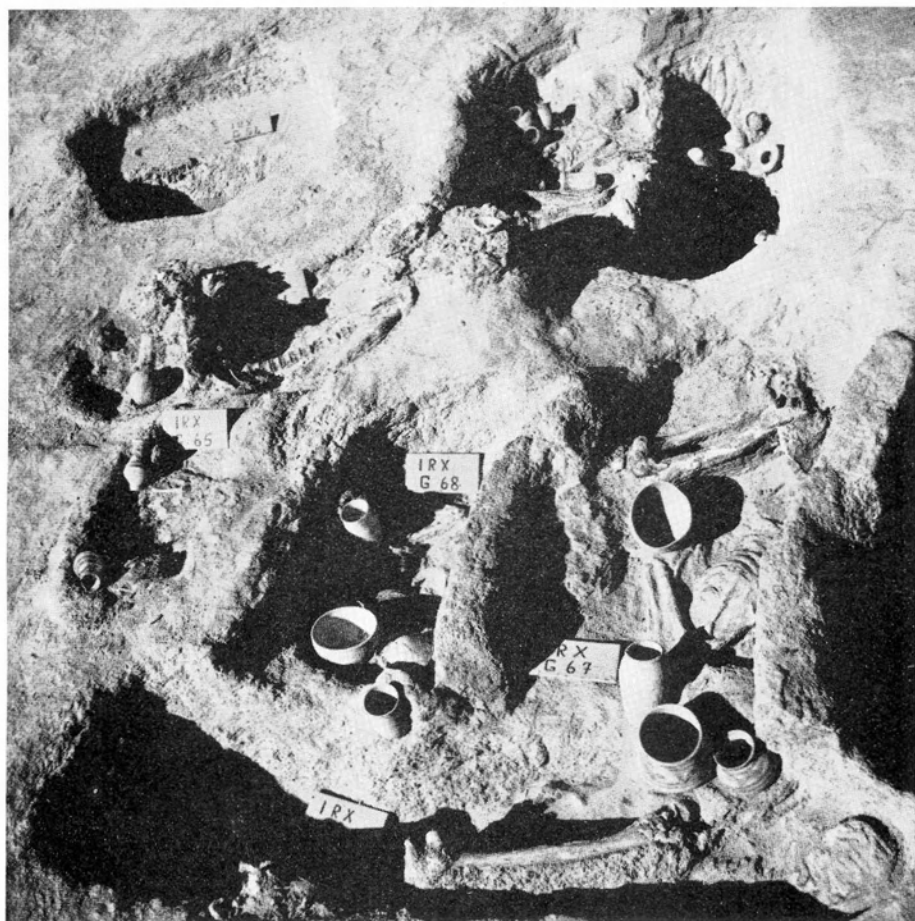
1) Heinrich, 1931, Pl. 69k; 2) Id., ibidem, Pl. 69n; 3) Amiet 1961, Pl. 14bis H; 1972, n. 484; 4) Amiet 1961, n. 1248; Frankfort 1955, n. 244; 5) Frankfort, 1939, Fig. 26; Heinrich, 1931, Tav. 69a; 6) Amiet, 1961, n. 1247 A; 7) Amiet, 1961, n. 1253; 8) Frankfort, 1939, Pl. XXXIX, c; 9) Amiet, 1972, n. 1382; 10) Amiet, 1961, n. 1247 B; 11) Woolley, 1934, Pl. 197 n. 61; Amiet, 1961, n. 1251; 12) Frankfort, 1939, Fig. 35; 13) Frankfort, 1939, Pl. XXI, d; 14) Woolley, 1934, Pl. 197 n. 60; 15) van Buren, 1935-36, Fig. 8; 16) Delaporte, 1920, Pl. 38 n. 6; 17) Delaporte, 1920, Pl. 49 n. 7; 18) Legrain, 1936, n. 538; 19) van Buren, 1935-36, Fig. 9; 20) Amiet, 1966, Fig. 124; 21) Frankfort, 1954, Pl. 51 C.

### Bibliography

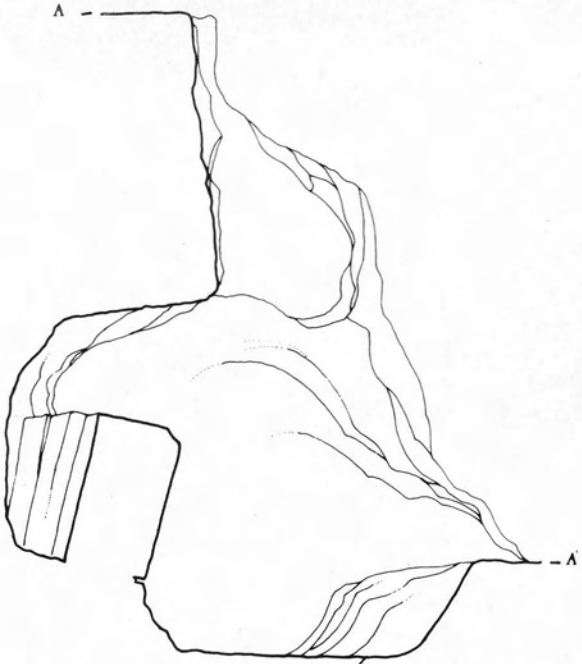
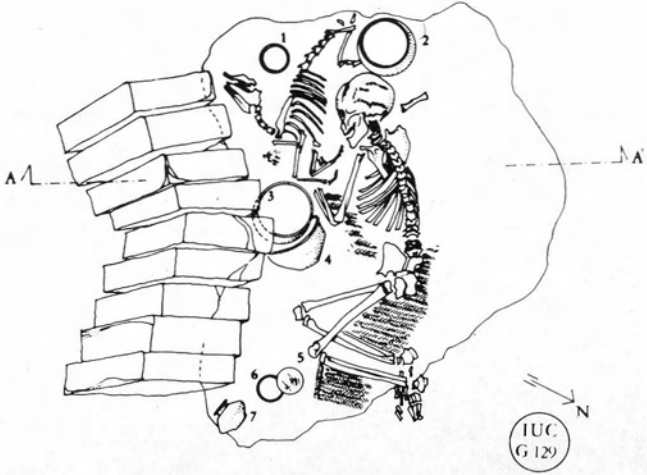
- Amiet P. (1961), *La Glyptique mésopotamienne archaïque*, Paris.  
 Amiet P. (1966), *Elam*, Paris.  
 Amiet P. (1972), *Glyptique Susienne*, Paris.  
 Biscione R. et alii, (1974), *Archaeological Discoveries and Methodological Problems in the Excavations of Shahr-i Sokhta*, in: J. E. van Lohuizen-de Leeuw, J. M. M. Ubaghs (eds), in «South Asian Archaeology 1973», Leiden, pp. 12-52.  
 Brown W. N. (1964), *The Indian Games of Pachisi, Chaupar, and Ghausar*, in «Expedition» VI, pp. 32-35.  
 Casal J. M. (1961), *Fouilles de Mundigak*, Paris.  
 Dales G. M. (1968), *Of Dice and Men*, in «JAOS», LXXXVIII, I, pp. 14-23.  
 Delaporte L. (1920), *Catalogue des Cylindres Orientaux au Musée du Louvre*, Paris.  
 Frankfort H. (1939), *Cylinder Seals. A Documentary Essay on the Art and Religion of the Ancient Near East*, London.  
 Frankfort H. (1955), *Stratified Cylinder Seals from the Diyala Region*, (OIP 72), Chicago.  
 Frankfort H. (1969), *The Art and Architecture of the Ancient Orient*, Harmandsworth.  
 Gupta S. P. e Shchetenko A. Ja. (1966-68), *New Evidence of the Harappa Culture in the Soviet Central Asia*, in «Bhārati» X-XI, Varanasi, pp. 190-197.  
 Heinrich E. (1931), *Fara* (Ergebnisse der Ausgrabungen der Deutschen Orientgesellschaft), Berlin.

- Jarrige C., Tosi M. (1981), *The natural resources of Mundigak*, in *South Asian Archaeology*, 1979, Berlin, pp. 115-142.
- Legrain L. (1936), *Archaic Seal Impressions*, in « Ur Excavations », III, London.
- Mackay E. J. H. (1938), *Further Excavations at Mohenjo-daro*, New Delhi.
- Mackay E. J. H. (1943), *Chanhu-daro Excavations 1935-36*, Boston.
- Marshall Sir. (1931), *Mohenjo-daro and the Indus Civilization*, London.
- Masson V. M., Sarianidi V. (1972), *Central Asia. Turkmenia before the Achaemenids*, London.
- Pardini E., Sarvari Negahban A. A. (1976), *Craniologia degli inumati di Shahr-i Sokhta, (Sistan, Iran)*, in « Archivio per l'Antropologia e l'Etnologia », 106, pp. 1-49.
- Piperno M. (1976), *Grave 77 at Shahr-i Sokhta: Further Evidence of Technological Specialization in the 3rd Millennium B. C.*, in « East and West », 26, pp. 9-12.
- Piperno M. (1977), *La necropoli di Shahr-i Sokhta*, in *La Città bruciata del Deserto salato*, ed. Erizzo, pp. 113-148.
- Piperno M. (1979), *Socio-economic Implications from the Graveyard of Shahr-i Sokhta*, in: M. Taddei (ed.), « *South Asian Archaeology 1977* », Naples, pp. 123-39.
- Piperno M., Tosi M. (1975), *The Graveyard of Shahr-i Sokhta, Iran*, in « *Archaeology* », 28, pp. 186-197.
- Snesarev G. P. (1963), *Ethnography of the Peoples of the Soviet Union*, in « *Soviet Anthropology and Archaeology* », II, 1, pp. 8-15.
- Tosi M. (1978), *The Development of Urban Societies in Turan and the Mesopotamian Trade with the East: the Evidence from Shahr-i Sokhta*, paper read at the XXV Rencontre Assyriologique Internationale, Berlin 3-7 July 1978.
- Ucko J. P. (1969), *Ethnography and archaeological interpretation of funerary remains*, in « *World Archaeology* », vol. I, No. 2, pp. 262-280.
- Van Buren E. D. (1935-36), *Entwined Serpents*, in « *AfO* », X, pp. 53-65.
- Vats M. S. (1940), *Excavations at Harappa*, New Delhi.
- Woolley L. (1934), *The Royal Cemetery, Ur Excavations*, in « *World Archaeology* », II, London.





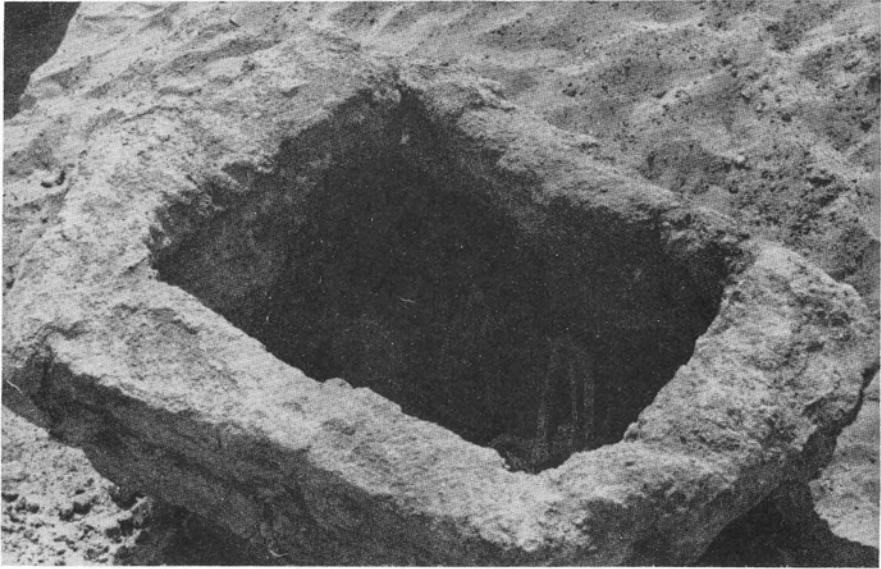
Detail of sector IRX towards the northern boundary of the graveyard. Area of maximum concentration of burials in phase 4-5 (2500-2400 BC). (Dep. C.S. Neg. 11711/4, E.B.)



Partitioned pit grave of phase 8 in sector IUC. The inhumed had been placed on a straw mat with a kid positioned near the head



Grave 118 of phase 3 in sector IPV. The inhumed was placed on a plastered level inside a structure defined by a small semicircular wall of bricks placed on edge resting on a segment of rectilinear wall running E-W. A more recent grave (IPV G. 102) disturbed part of the structure in a subsequent period.



a) Grave 604 in the central southern sector HNE, from phase 6. The skeleton lies in a crouched position on the left side inside a rectangular cist structure. (Dep. C.S. Neg. L. 12172, MP)



b) In numerous instances of grave goods, analogous vascular shapes present repeated identical decorative motifs, e.g. the 2 pearshaped beakers from grave IPX G. 59, phase 5. (Dep. C.S. Neg. 11700-9, EB)



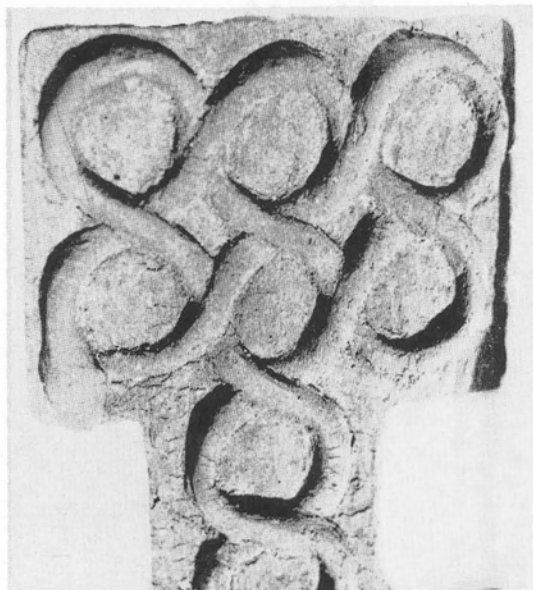
a) A detail of the grave goods from G. 77, phase 5. Cylindrical drill heads, cores of flint and little blocks of chalcedony in the various stages of manufacture constitute the key apparatus of a lapidiarist. A similar functional instrument, except for use in the manufacture of lapis lazuli, was found in grave 12.



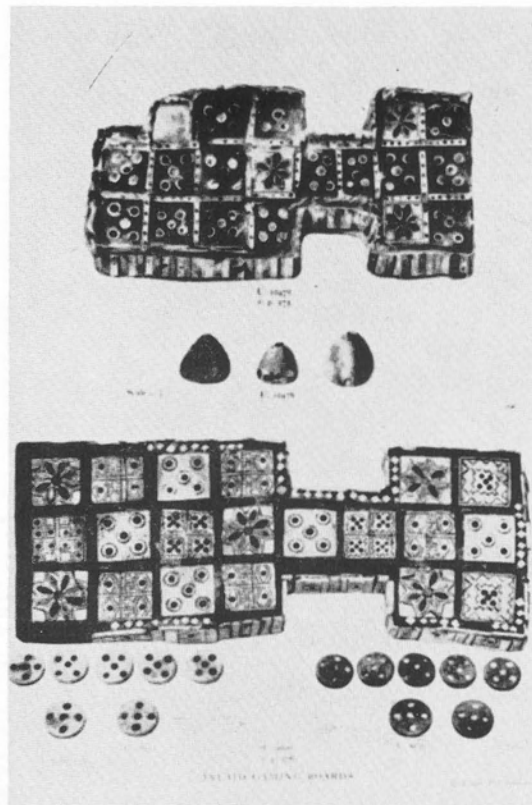
b) View of grave 711, probably of the pseudo-catacomb type, with collapsed vaulting. Part of the small brick wall is visible on right of the photograph. Phase 3.  
(Dep. C.S. Neg. IP 12171-18, MP)



a) Wooden gaming board from grave 731 (Dep. C.S. Neg. R. 12946-10, MP)



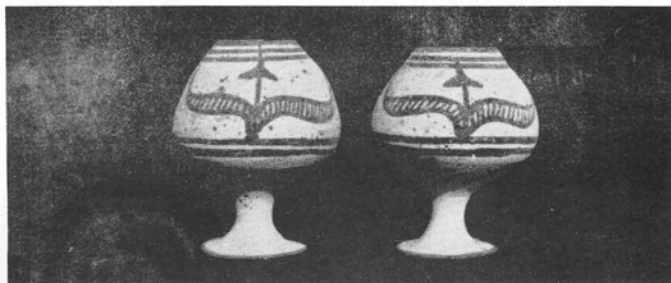
b) Detail of the upper compartment of the gaming board from grave 731 (Dep. C.S. Neg. R. 12946-4, MP)



c) Gaming boards from the Royal Cemetery of Ur (Woolley 1934).



a) Wooden spoon-colander from grave 731. (Dep. C.S. Neg. L 13089/18a, MP)



b) "Brandy cups" from grave 731. (Dep. C.S. Neg. R 12945-4, MP).



c) Cup of lower grave 725. (Dep. C.S. Neg. 12997-8 MP).