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# THE EXCAVATIONS AT TELL ES-SAWWAN FIRST PRELIMINARY REPORT (1964) 



## 1. Introduction.

The site known locally as Tell es-Sawwan ('Mound of the Flints') is situated on the eastern bank of the Tigris some eleven kilometers downstream of Samarra (lat. $34^{\circ} 80^{\prime} \mathrm{N}$. long. $43^{\circ} 55^{\prime} \mathrm{E}$ ), where it stands on a cliff commanding an extensive view of the river (fig. 1). It has a maximum height of 3.5 m . above the level of the pain behnd, and is roughty as! in shape, measuring approximately 230 m . north-south by 110 m . east-west (fig. 2); it is composed of three mounds, hereafter designated $\mathrm{A}, \mathrm{B}$, and C , of which the highest ( B ) is partly separated from A and C , to its north and south respectively, by two seasonal watercourses. The site was first noted by Ernst Herzfeld in 1911, during the course of the German exarations at Samarra. ${ }^{\text {. }}$ Its importance was subsequently recognised from collections of the material foind on its surface: crude and incised Hassuma together with painted sumama potsherds are plentiful, also flint and obsidian artifacts. This evidence led us to conclude that the occupation of Tell

[^0]es-Sawwan was limited to a period stretching from some time during the sixth into the early fifth millennium B.C., after which it was effectively abandoned.

- In deciding to excavate Tell esSawwan, the Directorate General of Antiquities hoped to provide answers to sereral important, ret hitherto unfathomed, problems of Mesopotamian prehistory. In particula it seemed rirtmally assured that here at last we might be able to reveal a Samaran village commumity in all its material details, including its architecture. Moreover, in view of Tell es-Sawan's central geographical position, there was a reasonable prospect of our uncovering further evidence of cultural contacts between northern and southern Irag during the sixth milleminum B.C. The results of the first seasom, which lasted little more than three months, not onty answered most of the questions we had posed but also brought to light material far exceeding our expectations.


## 2. Progress of the Excavations.

Operations were started at Tell es. Sawwan on 17th, Febuary, 1964, be
a team from the Deparment ${ }^{\circ}$ stechnical staff under the direction of Behnam Abu Al es-Soot. The assistant archaeologists were Tarig en-Nami. Rabie el-Qeisi Ghanim Wahida, and Yasin Rashid. The pliotographs, both of the excaration and the objects, were taken br Antran Eran, chief photographer of the Department. The site was visited continually throughout the season by the Director-General Dr. Faisal El-Wailly and the InspectorGeneral Profesor Fun Gafar The also hat the pleasure of welcoming, among many risitors and scholars the heads and members of the foreign Institutes of Archaeology and expeditions working in Trag at the time.

Excaration was first begun on mound A, where some Islamic graves were encountered; our investigations here were consequently suspended for the time being, and work turned to the relatively undisturbed areas of mounds $B$ and $C$. A trench opened on the western side of mound C led to well-preserved walls constructed of large rectangular mud-bricks (fig. 3). Extending our excavations at this point, we succeeded in exposing a building of no less than fourteen rooms (fig. 4), whose walls were found to be resting directly on virgin soil. To the east a second building was discovered (fig. 5, background); despite its general similarity to the first, which was still standing at the time of its construction, it was somewhat less regular in plan, and underneath it we subsequently unearthed an earlier house built with greater regularity on the virgin soil (fig. 6-8). These buildings represent the earliest levels at Tell esSawwan (levels I and II, counted upwards from the bottom).

Work was being carried out simultaneously on the southern side of mound B, (figs. 9, 10), and a trench was also driven to the mound's northernmost limit (fig. 11). These operations, which enlarged the excavated area until it
covered almost a third of the site. rewaled that here there existed, hetwen the summit of the mound (fig. 12, level V) and rirgin soil, no less than fire main buidding-levels. In order to conpare the levels encountered on momed (; with those in the core of mound $B$, two deep somndings were made at different points on the latter. The first, dug from near the summit of the mound, Tas 2 m . square at its top and reached rogin soil, in an area 1 m . squate, at a denth of 3 m. ; here again five build-ing-levels were found, probably with two phases in level III, and the pottery and small finds were similar to those from the levels, in the main area of cxeavation, to which the levels of the sounding appeared to correspond. The second sounding was located at the northern end of mound $B$; it had the same dimensions as the first, and reached virgia soil with similar results (fig. 13). Further inrestigations. on the eastern periphery of the same monnd. led to the discorery of a defensive ditch, several parts of which were subsequently examined.

The excatation was originally due to finish, with the himeove yonr, at the end of March, 1964. During L . last few days of this month, - however, we discovered a number of graves dug from level I into the virgin soil below, and these were so remarkable that the Directorate General of Antiquities felt it necessary to prolong the season and investigate more of them. Extra money was obtained, and work continued without interruption until May 20th, exposing over a hundred and thirty burials of extraordinary interest.

An understanding of the relationships, chronological and cultural, which exist between the levels excavated at Tell es-Sawwan and those of other sites of comparable age, will depend on a detailed analysis of the pottery and other artifacts which has not yet been completed; we have generally limited ourselves, in
the following preliminary account, to straight descriptions of material from Sawwan itself. Some indication of the site's absolute date, however, may be gained from three carbon-14 readings for which we are indebted to the laboratory of the Pennsylvania University Museum. The laboratory's provisional estimates, based on the Libby method rather than the 5730 halflife (which would add about a century to each date), are $5506 \pm 73$ B.C. for a sample from a level I floor (P. 855), $5349 \pm 86$ B.C. for a sample from Sounding II, floor 3, which is probably equivalent to level III elsewhere (P. 856), and $4858 \pm 82$ B.C. for a sample from the level III floor of room 39 (P. 857). The last figure is remarkably low, and some contamination may be suspected.

## 3. The Defenses and the Architecture.

The earliest feature identified on the site consists of an artificial ditch, averaging 2.5 m . wide and 3 m . deep, cut into the natural conglomerate underlying the mound. The cut is V-shaped, and narrows to a maximum width of 50 cm . at its lovest point. It was investigatud in ity trenches (fig. 2, nos. 1-5, mumbered in chronological order). The ditch was first discovered while we were examining the south-eastern fringes of mound $B$; further work to the north-east revealed a continuation of the same ditch, and we were then able to locate and expose its south-eastern comer (fig. 14). Once this had been established, we followed the course of the ditch northwards, and presently reached its northeastern comer (fig. 15). Digging a point further to the west, we confirmed the course of the ditch's northern side. ${ }^{2}$ It was clear from these investigations that
(2) Here we found the ditch partly filled with burnt debris which included several varieties of grain. Cf. Hans Helbaek; Sumer XX, (1964), pp. 45-48.
the ditch formed, approximately, three sides of a square round the eastern side of mound B; the northern and southern arms of the ditch coincide with the lines of the two watercourses which now carry the run-off from the mound to the river, but they were not themselves continued westwards. It may be conjectured that the ditch was originally supplied with water from the river, but before the construction of the Samarra barrage the level of the Tigris was already well below the mound, even at the height of the annual flood. The ditch was dominated on its inside by a thick buttressed wall (studied more thoroughly in the second season), and many sling-balls were discovered in its fill. Clearly the Sawwan ditch, whether or not it was actually a moat, may be regarded as an example, unique in Mesopotamia, of an early defensive system, calling to mind the more elaborate pre-pottery neolithic defenses of Jericho.

The ditch was created during an early phase of level I. Later, when the settlement was extended southwards, berond the confines of mound B where the first rillage .ras presumably located, walls were constructed over the western tip of the ditch's southern arm (figs. $16-18,20$ ); here the ditch was extremelyshallow, and the new buildings can hardly have prejudiced the defenses of the settlement. Elsewhere the ditch remained open during the occupations associated with levels II and III, and at least part of it was still exposed in level V; potsherds of the latter level, mostly painted Samarra ware but also one Halaf sherd, were occasionally found together with other objects at its very bottom.

There were as mentioned abore, five main building-levels found at Tell esSawwan, and these were numbered I-V from the bottom upwards; the surviving height of these architectural remains does not exceed 3.5 m . in all (figs. 2123). Buildings from the earliest phases of
level I, preceding or contemporary with the ditch, may be presumed to exist in the heart of mound $B$; those which we were able to excavate fullo were constructed on virgin soil ontside the ditch to the south. Here lerel I is principally represented by two large architectural units with a notably regular ground-plan (fig. 2t). Building 1 , to the west, has more than fourteen rooms and probably: more than one courtrard (fig. 25; Building 2. further to the east, corers a greater area. but was designed with leses regularity both inside and out (figs. 26-29). The buttresses which are a no-- table feature of the external faces of both buildings normally occur at the junc-
$\because$ tion of two walls, and had apparently the purely functional purpose of strengthening the outer walls. Both buildings, ne. 1 at its north end and no. 2 at its west, contain unusual features which are probably to be understood as staircases leading to the roofs thongh ther might be no more than platforms (figs. It, 33. 34). Between the two buildings is a narrow lane. This begins parallel to the south-east wall of Building 1 , then turns north-west separating the two buildings, and finally divides into two branches going east and west; to its north lies another building, also of level I (fig. 24, 25, 30).

Rooms 15, 8, 12, and 13, in the eastern part of Building 1, deserve special attention. They are linked by three axial doors (fig. 35), and the endroom 13 has a niche in the centre of its northern wall; below this niche was discovered a most striking alabaster statuette of a "mother-godd̉ess" (fig. 36). Two comparable clay figurines were found, headless, on the floor of room 8 (fig. 37, the two seated figures on the left), and in another room (7) of the same building we found yet another "mother-goddess'" statuette of alabaster (fig. 38, right). These finds, com-
bined with the regularity of the building's lay-out, may indicate that it was some kind of religious structure. Further evidence in support of this hypothesis may possibly be provided by the presence of the extensive cemetery, to be described below, which was unearthed beneath its floors, and by the length of time for which the building itself continued in use.

Building 1, though damaged by fire during its first period of occupation, was still standing without significant alterations in level 11 ( 5 or. 31); only an abutment was added to part ue the outer face of its eastern wall, perhaps $w$ ait as a buttress. At the same time Building 2 was replaced by another building less regular than its predecessor in plan (fig. 32). A street, running on the same lines as that described abore, still existed in level II.

Level III was Jess extensively excarated than levels I and II, and consequently no buildings were completely uncovered (fig. 39). It was plain, however, from the limited architectural evidence, that between levels I-II and level III there was unbroken continuity both in the building matorints used and in the general lay-out. The house of lovel ITT were probably smaller, yet their rooms were as large and their plans as regtia; their corners were again oriented towards the cardinal points of the compass, and there were external buttresses at wall-junctions. There was a wide unoccupied space betrveen the eastern and western ends of the exposed area of level III; here we found three circular grainbins or siloes made of gypsum (juss), one with a diameter of 1 m . and the others with diameters of over 2 m . (figs. 39-44). It should be noted that in some places level III was divisible into two successive phases of building; walls of the earlier phase are to be seen beneath rooms 107, 120, 129, and 132.
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The excavated area of level IV was again smaller than that of levels I-II, but there was enough to show the same evidence of architectural continuity as had been observed in level III (figs. 45, 46). Three square mud-brick enclosures, located at the eastern end of the area exposed, were probably used as storage bins (figs. 47, 48). Heary door-sockets made of gypsum were a particular feature of this level (fig. 49). In some parts of level IV, most notably rooms 92 and 93 , there was evidence for two phases of occupation separated by a brief interval (figs. 52, 53); here two floors were found with 40 cm . of fill between them.

Practically the whole of level V bas disappeared because of erosion. Nevertheless a ferr remains, chiefly rooms or parts of rooms and walls were identifiable (figs. $54,5 \check{5}$ ). The height of these walls does not exceed 30 cm .; yet again they exhibit the same architectural techniques as in previous levels.

Apart from the more general evidences of continuity mentioned above, buildings of all five levels had several characteristic details in common. They were all constructed of rather large oblong mudbricks, made in moulds and measuring $50-70$ by $21-30$ by $6-8 \mathrm{~cm}$. (fig. 56); the thickness of a wall is the normal width of a brick ( $21-30 \mathrm{~cm}$.). Walls were mudplastered on both their internal and external faces, and the latter sometimes showed three or more well-executed !ayers of re-phastering (figs. 57, 58). Cipsum (juss), which was used as a flooring material throughout levels 11 [$Y$, first appeared in this capacitr in level II (fig. 31, room 72). Here it was the last of three coats of plaster: first mud was laid down, then a layer of bitumen mas applied, and then the gypsum phaster was added as a finish. In some instances gypsum flooring reaches only to the foot of the walls of a room, but in others it is carried up the walls to form a slightly concave footing
which was probably intended to seal the base of the walls and protect them from the action of water.

## 4. The Pottery.

Levels I and II, especially the former, furnished very little pottery. The sherds from level I mainly resemble the late archaic type of Hassuna Ib-II, though some may have earlier affinities. Level II shows continuity in the pottery (figs. 59-60, nos. $1-8,10,16,17$ ), and incised and painted Hassuna wares appear. The coarse pottery of both levels has, as a rule, a black unoxidized core which may be attributed to poor firing, and the clay tends to contain large particles of extraneous matter. The surface colour of such pottery is usually buff or light-brown; it it coated with a self-slip, and sometimes burnished. A fer fragments of a very crude variety, found on the level I floor of room 13, belong to hemispherical bowls (fig. 65, no. 2). Fragments of red-slipped and grey wares are also evident (fig. 65, nos. 3-4, from level II, room 28, floor).

In level III the incised Hassuma ware becomes very popular and the crude archaic type disappears. Painted Samarra makes its appearance in considerable quantities, and a ferr examples which were painted after firing are found (fig. 65, no. 1, from level III, room 44). In level IV the incised Hassuna pottery appears for the last time. and the painted, and painted and incised, Samarra ware now predominates. Very little is left of Sawwan V, but it sufficles to show continuity in the pottery; Samarra wares are the only ceramic product of this level. Only one, polyehrome, Halaf fragment was present (fig. 61, no. 28); it was found at the bottom of the defensive ditch, and should probably be associated with the topmost level, Detailed drawings of the shapes and motifs of the Samarra pottery found in levels III-V
are now being prepared, and will be included in the second preliminary report: provenances of the pieces illustrated here (fig. 60, nos. 14. 15, 18-21, and fig. 61. nos. 21-27. 29-32) are listed at the end of this article.

Thus the pottery sequence confirms the architectural evidence that the site of Tell es-Satrwan was occupied, from begimning to end, without any significant interruptions: there tras no rigorous change in population or drastic foreign inrasion. In level III, where Samarra ware is seen emerging alongside the contimuation of standard Hassuna, it is clear that there is no sharp break but rather an orerlap between the two techniques. The finding in this level of some Samarra fragments painted after fring, and perhaps lightly exposed to heat just to fix the paint but not to the degree of oxidization, may be taken as an indication that the potters of this period twere given to experimenting with colours and nerr techniques of painting.

## 5. Other Artifacts.

The most remarkable objects from Tell es-Sawwan were found in level I, mainly in graves under Building 1; their material is usually a creamy alabaster. Among them are vessels of many shapes and sizes (figs. 73, 74), including tiny dishes, plates, round or oval bowls, cups, flasks, and large pots; "cult objects," some probably of phallic significance (fig. 66, middle row); and a fine series of "mother-goddess" statuettes (fig. 67), some with bitumen caps and eyes inlaid with shell. There were also many beads of various materials: dentalia and other shells, bitumen, alabaster, bone, and semi-precious stones such as carnelian (fig. 69, and 70, I.M. 68749). One of the statuettes (fig. 67, bottom row, third from left) is unfinished, and it is more than likely that all the alabaster objects were locally made, chiefly for funerary
purposes. The show an exquisite :standand of craftsmanship, much superior to that of pottery of the same date. The people of level I were the masters of this industry, but a few similar pieces were found in level II also. and there were even some in level III though these mar have been stray pieces re-used.

The flint and obsidian industries at Teil es-Sawwan are represented by a number of fakes and blades. some of which mar be termed microlithic. Both materials occurred in all five levels. The flints include steep scrapers, one-sided scrapers, notched scrapers core-scrapers, parallel-sided scrapers, curred points and one triangular arrow-head (fig. 79, TM. 68336). There were also flint sickleblades (fig. 78, IM. 68793), and one fragment of a sickle was found which incorporated three fiints and one obsidian blade stuck together with bitumen (fig. 7S, IM. 68792). Other obsidian tools, apart from sickle-blades, include borers, core-scrapers, and knife-blades; some of these showed signs of having been retouched and resharpened.

Implements of ground hack stone were found in all levels :is Samman; among them were hoes, celts, polishers, rubbers, palettes, mortars, pestles, mullers, and querns (fig. 78, 80); and there were many sling-balls, especially in the defensive ditch. Awls, pins, needles, and spatulas made of bone were frequent at all levels (fig. 70), and so were clay spindle-whorls of various sizes. We found several figurines of clay, and one, in a level III grave, of juss (fig. 66, top second from left). Two baskets caulked with bitumen from level II should also be mentioned (figs. 62, 63). No metal was found in 1964, but during the second season several beads and a small knife of copper came to light in a level I grave beside the door of room 142 .

## 6. The Graves.

The occupants of level I buried their dead beneath their floors. We had our first intimation of what these graves were to contain when we found, lying on virgin soil under room 117, a few disturbed human bones, mostly belonging to an infant, together with some small stone ressels and shell beads. Further excaration in rooms 19 and 20 of level I brought to light more burials and their furniture, and it was at this stage that we decided to prolong the dig in order to investigate the entire area below the floors of Building. 1 and possibly Building 2. As a result of this operation more than one hundred and thirty burials were discovered, almost all of them below Building 1. The burials were richly furnished with stone statuettes, stone ressels, and beads of rarious materials: a general impression of the cemetery's main characteristics mar be gained from a perusal of the provisional list of graves and grave-goods given below. There can be no donbt as to the connection between the graves and the buildings of level $I$. All the burials were sunk from level I floors into the rirgin soil, and the floors were then thickly replastered. Not one burial was fornd extending beneath the walls. and almost all were inside level I buildings; in one instance the whole centre of a room was occupied by the burial of one important adult male (fig. 71). ${ }^{3}$ Although no grates contained potters, we did find, on the floors of level I, statuettes, ressels, and other objects, precisely similar to those used for furnishing the graves.

The graves themselves consisted of shallow pits, irregularly oval in shape dug into the virgin soil to a depth of $25-$ 50 cm . below floor level; ther were oc-

[^1]casionally bordered or encased with crude hand-moulded lumps of clay. Most of the skeletons were those of very young children, but there were also several adolescents and adults. The skeletal material has not been analysed; some skulls appear dolichocephatic. A high proportion of the skeletons were fragmentary, and this may indicate the custom of partial burial though it is by no means the only possible explanation; ${ }^{4}$ for the very age of these burials should itself be taken into consideration, and it is relerant that over a third of the grave-pits dug did not contain any bones at all. Almost all the skeletons whose original position was observable were contracted; they generally faced west, but there were some facing east; the heads of the majority were directed southwards. Several of the hodies had been wrapped in rery fine reed-mats, the impressions of which were well preserved by a thin coating of bitumen which had been applied to them. In grave 113. where the skeleton was not contracted but heaped in a disorderly fachion with the skull separate, there were traces of red ochre on the head and bodr: in all probability this colour was applied as a kind of ritual adornment to the skin after death, and came into contact with the bones only when the flesh had decomposed. ${ }^{5}$

Some of the beads found may have been attached to garments, but others had belonged to strings wound either round the neck or the hips; the latter arrangement is reminiscent of the iewelled garland worn romd the waist of one of the terracotta figurines from the site
(') Cf. "Sumer" XX (1964), p. 2. It is interesting to compare the findings at Warka, where out of some 150 skeletons burjed in well-fitting double pots of the NeoBabylonian period, only same ten to fifteen were in good condition. (Information supplied by Dr. Mark A. Brandes of the German Archacological Institute, Baghdad).
(5) For other possibilities C/. J. Mellaart, Inntolimn Studies TIF (1964), Pp. 92, 93.
(fig. 66, top row, third from left, and fig. 72, top left).

The Tell es-Sawwan cemetery was not limited to Building 1. At the bottom of our first deep sounding near the centre of mound $B$ (fig. 75), we uncovered a few infant bones accompanied by a small stone ressel and a statuette in the form of a seated "mother-goddess", all sunk into virgin soil; though there is of course no established connection between the lower floor-levels in this somaing and those of mound C , it seems rirtually certain that here we have a grave approximately contemporary with those of Building 1. We also uncorered three graves belor rooms 141 and 142 of Building 2; rork in the second season has confirmed that there were burials beneath the floor all orer this building, though they were not so crorrded as in the adjacent Building 1. Subsequent work has also exposed graves west of Building 1 and at the northern fringes of the site; again all these burials had been cut into the virgin soil below level I floors.

No comparable graves were discovered in level II, but one which had been sunk, probably from level III, into the level II wall of room 32 , was found to contain an alabaster figurine of a "mother-goddess"; this had been broken and repaired in antiquity, and may perhaps have reached its position in the grave long after it had first been carved. Another level III burial contained a "mother-goddess"' figurine of juss (fig. 66 , top row, second from left).

There were several infant burials in level IV; these were contained in oval receptacles of juss (figs. 50, 51). The example illustrated had a lid of the same shape and material as the receptacle itself, and enclosed the skeleton of a young child contracted like an embryo in the womb, a string of tiny white shell beads, and a small pottery hemispherical bowl with a trough spout.

## 7. Summary.

The excaration of Tell es-Sawwan constitutes the most important event in the field of Mesopotamian prehistory since the work at Hassuna and Eridu in the 1940s. Here we have the rare opportunity of unearthing, completely and methodically, just below present groundlevel, an extensire and prosperous neolithic settlement. Among the results of the frst ceacon, the following are especially siguificant.

1. The ditch of level $I$ is uite caliest wohk of its kind ret identified in Irag, and indicates that we are dealing with a settled community capable of organised self-defense.
$\xrightarrow{2}$. The five building-levels discorered, with their regularity of plan and the elaborate techniques they display, are evidence for a degree of architectural sophistication hitherto unknown in Irag at this early date.
2. The pottery corresponds fairly closely to the standard Hassuna-Samarra repertoire known from Hassuna itself; the association of the tro wares in levels III and IV demonstrates clearly that, one gradually replaced the other wifh no sharp break intervening.
3. The continuity of architectural and ceramic traditions through all levels at Tell es-Sawwan suggests most powerfully that there was no abrupt change of population in the area during this period.
4. The carved alabaster objects found in the earliest levels far exceed, in quality and quantity alike, anything that had been anticipated. Their extraordinary importance is immediately apparent, and is indeed enhanced by the fact that they raise as many questions as they answer. They were almost certainly made in the locality, and their discovery has cast unprecedented light on a vital aspect of the early civilisation of Iraq.
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## 8. Provisional List of Level I Graves.

Almost all the graves dug in 1964 are summarily described below. E2eh entry begins with a rough estimate of the age at death, based often on very limited eridence; complete skeletons are specified; where no estimate of age is given, no bones at all were found. Objects, unless otherwise stated, are of alabaster. The numbers in brackets at the end of each entry refer to the Sawwan 1964 catalogue, in which two or more objects from the same grave were sometimes joined under a single number.

## Sounding 1.

1. Infant. Statuette; flask. (1,2).

## Room 2.

2. Adolescent. Statuette; flask of pink stone; plate. (30).
B. Infant. Dish of black stone, plate. (135).
3. Plate, broken and mended in antiquitr; flint blade; dentalia shells 4 cm . long. (120).
г). Adult. Borrl; flask; plate; pendant. (121)
ri. Infant. Flask. (123)
4. Cup of red stone, with red ochre staining at bottom. (126)
s. Dish; beads; large hivalve shell beads. (127)
a. Infant. Flask; bitumen attachment somewhat resembling snake-head. (113)
5. Arolescent. Three bowls, one of pink stone; celt of ground stone. (109).
6. Infant. Plate; some small animal bones. (107).
7. Infant. contracted. Dislı; flask. (115)
8. Adult. Tro bowls; carnelian and turquoise beads. (105)
9. Adolescent. Cup; phate; large bead of green stone. (88)
10. Infant. Flask. (203)
11. Infant. Flask with projection, somewhat resembling a seated pair of legs, on one of its sides (cf. fig. 68). (204)
12. Infant, complete, contracted. Two flasks; shell needle; carnelian beads. (205, 206).
13. Two plates. (207, 208).
14. Adolescent, contracted. Plate, on which the hands were resting; flask and two phalli between the hands and the skull; alternating bitumen and dentalia beads round the hips. (223-226)
15. Infant. Two dishes; two fint scrapers. (186, 187, 190).
16. Infant. Flask; dish: three beads of green stone. (233, 234)
17. Infant, contracted. Statuefte; plate; dish; hollow cylinder with ribbing on half of its external length; dentalia and bitumen beads on hips. (210-213)
18. Adult. Three bowls; beads; pigpendant of green stone (fig. 66, bottom row, centre); one carnelian bead; many beads of turquoise and large biralve shells. (214-217)
19. Infant. Dish; plate; two flasks; one large bead of green stone. ( 297 230)

## Room 3.

2.5. At least one adult. Six statuettes, some pierced as pendants; cight plates, flasks, and bowls; figurine of a rabbit (?) ; ring of shell; celt of ground stone; bone nemple: tursnoise and dentalia bends. 146164)
26. Infant. Three borls; one bitumen spindle-whot (14)

## Room 4.

27. Statuette. (25)
28. Dish, with the skull of a bird inside. (40)
29. Infant. Plate. (78)
30. Adult Dist; one large bead of green stone. (137)
31. Adult. Flask; sance-boat, somewhat resembling a tortoise. (139)
32. Infant- Two bowls. (124)
33. Infapt wrapped in mat. Two dishes, one of black stone; dentalia beades (140 410).

## Room 5.

34. Adult, complete tall male, contracted (fig. il). Statuette; cup; two bowls, including the largest yet discorered (fg. 74, top row, right); object with half-hollowed cylindrical bodr (fig. 74, second row, centre) found under head.

## Room 6.

35. Bowl; small animal bones. (141)
36. Infant. Statuette. (23)
37. Infant. Two flasks. (122)
38. Infant. Dish. (125)
39. Adolescent, contracted. Two bowls; many bivalve shell beads. (112)
40. Infant. Dish; punt-shaped bow]; beads of green stone. (106)
41. Adult. Bowl; dish of black stone; two flint blades; univalve shell beads. (119)
42. Bowl. (128)
43. Infant, contracted. Statuette; three flasks; dish; flint blade; one carnelian bead. (129)

## Room 7.

44. Two flasks, one of grey stone; dish. (47)
45. Flask. (49)
46. Cup; large carnelian beads. (38).
47. Infant, contracted, wrapped in mat. Two bowls. $(32,33)$
48. Adult. Plate; figurine of rabbit (?). (27)
49. Infant. Two bowls. (130)
50. Adolescent. Three bowls. (131)
51. Adolescent. No objects.
52. Three bowls. (111)
53. Infant, contracted. Three didies (110)

## Room 8.

54. Infant, complete, confraded $\operatorname{Tish}$ of pink stone. (209)
55. Flask. (185)
56. Plate; hollow crlinder withauting on half of its external length. (231, 232)
57. Flask; dish. (188, 189)
58. Adolescent, contracted. Black stone bowl. (241)
59. Plate; dish broken and mended in antiquity. (246, 247)
60. Infant. Bowl with two vertically pierced lags. (245)
61. Infant. Flask; carnelian and large turquoise beads. (249, 250)
62. Statuette, wearing bitumen cap and pierced for use as a pendant; plate; flask. (238-240)
63. Infant, complete, contracted. Flask, found by mouth; sauceboat; necklace of small beads. (251, 252)
64. Infant. Three flasks; conical object of grey stone; necklace of carnelian beads; dentalia beads round hips. (268-273)

## Room 9.

65. Infant. Flask; three plates. (59)
66. Adolescent. Dish; flask; bow]; bitumen and dentalia beads. (77, 417)
67. Adolescent. Two bowls; univalve shell bead with traces of red ochre. (72)
68. Dish. (69)
69. Dish. (70)
70. Bowl. (68)
71. Infant. Three flasks. (75)
72. Male statuette (fig. 67, bottom left). (17).

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Flask. (63)
84. Statuette; bitumen beads. (24)

S5. Plate. (46)
86. Plate. (48)
87. Adolescent, complete, contracted,
wrapped in mat. Two dishes, one in front of the mouth and the other under the hands. (84)
88. Adolescent. Black stone dish. (85)
89. Infant, contracted. Bowl. (86)
90. Adolescent. Flask, broken and mended in antiquity. (87)
91. Cup. (262)

## Room 15.

92. Infant, contracted. Three statuet-
tess, including one pierced for use
as a pendant and with eves of in-
toes, including one pierced for use
as a pendant and with eyes of in-

## Room 10.

73. Infant, contracted. Three bowls. (41-43)

## Room 11.

74. Statuette; bowl. (22)
75. Dish; broken piece of bracelet (fig. 66, bottom). (131)

## Room 12.

76. Infant. Dish with two vertically pierced lugs. (263)
77. Adolescent. Two dishes; two bowls. (264-267)

## Room 13.

78. Infant, contracted. Plate; flask; phallus. (200-202)
79. Tetrapod bowl. (297)
80. Infant. Cup; tetrapod plate. (191, 192)
81. Infant. Bowl. (248)

S2. Statuette; cup. (218, 219)
Room 14.
83. Flask (63)

- Cup.

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laid shell; three flasks; carnelian and turquoise beads. (193-199)
93. Infant, contracted. Statuette; cup; flask; turquoise beads. (220-222)
94. Infant. Statuette, pierced for use as a pendant, wearing a bitumen cap, and with eyes of inlaid shell; flask; necklace of alternating alabaster and bitumen beads. (235237)
95. Dish. (184)

## Room 18.

96. Adolescent. Five dishes; two bowls; sling ball; some dentalia. (179, 276-281, 402)
97. Adolescent. Two statuettes; plate, two flasks, one with a projection somewhat resembling a seated pair of legs on one of its sides; dentalia. (19, 180, 274, 275, 415)
98. Infant. Statuette; plate; flask; obmidian blade. $(3,301,302)$
99. Bowl; flask. (171, 172)
100. Bowl; flask. (289)
101. Pot. (298)
102. Pot; flask. (303, 304)
103. Infant. Pot; celt of ground stone; dentalia, carnelian, and bitumen beads. (72)
104. Bowl. (66)
105. Infant. Bowl. (67)
106. Infant. Three bowls; three dentalia shell beads. (62)
107. One univalve shell, one carnelian. and one green stone bead. (73)
108. Infant. Flask; two dishes; necklace of carnelian, dentalia, and one univalve sliehtoead. (50, 377)
109. Dish. (257)

Area 19.
110. Phallus. (64)
111. Adult; bones in heap. Two bowls; some burnt material. (60)
112. Flask. (138)
113. Adult female: bones in heap, with traces of red ochre. Pear-shaped jar with cable pattern round base (fig. 68, top row, centre); many beads of alabaster and pink stone (fig. 69, bottom). (44).
114. Adult. Tro dishes; univalve, carnelian, and turquoise beads. (114)

## Room 20.

115. Two dishes; two bowls; flask; many dentalia beads. (178, 284 288)
116. Infant. Four bowls, with four stone balls in the largest of them. (166170)
117. Infant. Plate; bowl; turquoise beads. (174, 175, 414)
118. Infant. Punt-shaped bowl; turqnoise beads. (173)
119. Infant. Bowl. (300)
120. Two bowls; dentalia beads. (294, 295)
121. Flask of red stone. (296)
122. Cup; three stone balls. (176, 290, 291, 299)
123. Plate. (292)

## Room 21.

124. Adult. Cup; plate. (37, 39)

125 Infant, wrapped in mat. Two bowls; dentalia beads. (34-36)
126. Infant. Two bowls; alabaster, carnelian, and bitumen beads. (108)

## Room 141.

127. Infant. Plate; cup; bowl; bone needle; obsidian blade. (242-244)
128. Infant. Complete, contracted. Two flasks, one of them with a projection like a pair of seated legs on

> one of its sides; dish; ball of black
> stone; ground celt; some dentalia
> beads. (258-261)

## Room 142.

## 129. Infant. Plate. (256)

N.B. The excavation of the graves in rooms 141 and 142 was not completed in 1964, and others came to light in the next season. Among these was one containing a few copper beads and a small copper knife.

## 9. Notes on the Illustrations.

Figure 37.

1. Left: Seated clay figurine of a 'mother-goddess"; head and left breast lost in antiquity. Ht. 3.4 cm ., waist 2.5 cm.. Level I, room 8, floor.
2. Centre: seated clay figurine of a "mother-goddess"; head lost in antiquity. Ht. 3.9 cm ., waist 2.6 cm ., Level I, room 8, fioor.
3. Right: terracotta figurine, hollow inside and with a tiny hole on top of the head. Ht .11 .5 cm ., hips 5.5 cm ., waist 3.5 cm ., Level II, south of Building 1 . fill.

## Figure 38.

1. Left: alabaster statuette of a "'mother-goddess". Ht. 5.4 cm ., waist 3.3 cm ., Level I, room 13, floor.
2. Right: alabaster statuette of a ''mother-goddess'. Ht. $11 \mathrm{~cm} .$, waist 2.2 cm , Level I, room 7, floor.

Figure 59.

1. Jar. Rim diameter 22.5 cm ., body 37, base 13.5, ht. 26. Level II, sounding $I$, floor.
2. Pot. Rim diameter 26 cm. , body 29, bass 11.7. Level I, room 15, floor. 3. Pot. Rim diameters 28.3 and
20.1 cm ., body 21.7 , base 23.8 and 13.7, ht. 17.5 Level I, room 2, just above floor.
3. Incomplete pot. Body diameter 26.5 cm ., base 9. Level I, room 59, floor.
4. Pot. Rim diameter 23.7 cm ., body 24 , base 14.5. Level I, room 12, floor.
5. Jar. Body diameter 19 cm ., base 15, ht. 17. Level I, area 19, fioor.
6. Incomplete pot. Rim diameter 17 cm., body 20, base 13, ht. 8 . Level I, west of rooms 126 and 143, floor.
7. Open bowl. Ht. 9 cm . Level I, room 14, floor.
8. Open bowl. Rim diameter 25 cm ., base 19.3, ht. 5. Level III, room 106, fill.
9. Fragment of body of large jar. Level I, room 143, floor.

Figure 60.
11. Large, over-fired pot. Rim diameter 34 cm ., body 37 . Level III, room 41, fill.
12. Deep pot. Rim diameter 29 cm ., body 31.5 ht. 25 . Level IV, room 52, fill.
13. Cf. fig. 59, no. 9, above.
14. Bowl. Rim diameter 10 cm. , body 10.6, base 5.5, ht. 8.2. Level IV, room 100, fill.
15. Bowl. Rim diameter 11.4 cm ., Body 14.8, base 5, ht. 10.8. Level III, room 126, floor.
16. Fragmentary pot. Ht. 16.5 cm ., Level II, room 25 , floor.
17. Pot. Ht. 26.5 cm ., Level II, room 33, floor.
18. Pot. Rim diameter 18.9 cm ., body 20, ht. 10.7. Level IV, room 98, floor.
19. Bowl. Level III, room 140, floor.
20. Pot. Rim diameter 11 cm ., body
13.5, ht. 9.5. Level III, room 128, floor.
21. Bowl. Rim diameter $17 \mathrm{~cm} .$, body 17.4 , base 8 , ht. 9.5. Level III, room 188, floor.

## Figure 61.

21. Bowl. Rim diameter 16 cm ., body 16.3, base 7.5, ht. 7. Level V, room 63, floor.
22. Hollowed base of large bowl, found in the ditch 2.30 m . below the surface.
23. Pot. Rim diameter 18.9 cm ., body 24.7 , base 7.5 , ht. 17.5. Level III, room 126, floor.
24. Jar. Rim diameter 7 cm ., body 15, ht 15. Level III, room 44, floor.
25. Bowl. Rim diameter 25 cm ., body 23.5, ht. 7.5. Level III, room 140, floor.
26. Bowl reconstructed from fragments found in different parts of level III.
27. Pot. Rim diameter $13.7 \mathrm{~cm} .$, body 14, ht. 8.7. Level III, area 130, floor.
28. The only Halaf fragment found so far. Bottom of the ditch, in first trench.
29. Zoomorphic fragment. Level V, room 66, floor.
30. Zoomorphic fragment. Ht. 7.2 cm . Level III, room 110, floor.
31. Cup. Rim diameter 7.5 cm ., base 5.9, ht. 6. Level IV, room 112, floor.
32. Small jar. Rim diameter 7.8 ht. 8. Tevel V, room 41, floor.
33. Small jar. Rim diameter 7.8 cm ., body 10.4, base 5 , ht. 9.8 cm . Level V , room 63, floor.
34. Shallow plate, with heavy traces of red ochre paint still visible on it, indicating that like nos. 3-5 it was used as a palette. Rim diameter 13.8 cm ., ht. 2.4. Level III, room 131, floor.
35. Bowl, with traces of red ochre visible inside and out. Rim diameter 13 cm. ht. 4.5. Level IV, room 93, earliest floor.
36. Shallow plate, with traces of red ochre. Rim diameter 12.4 cm ., ht. 2. Level IV, room 114, floor.
37. Shallow plate, found with lumps of red ochre. Rim diameter 12 cm ., ht. 1.8. Level III, room 106, floor.

Figure 62.
Bitumen impression of large globular basket. Level II, eastern corner of room 32, floor.

Figure 63.
Bitumen impression of small basket. Level II, in western door of room 35.

## Figure 66.

Top row, from left:

1. Upper part of terracotta figurine with extremely wide shoulders; head, left breast, and lower body lost in antiquity. Width between shoulders 6.5 cm .. Level II, outside the south-east corner of room 25 , fill. Cf. also fig. 72.
2. Gypsum (juss) figurine of seated "mother-goddess"; head lost in antiquity. Found in a grave probably sunk from level III.
3. Lower part of terracotta figurine with garland of jewels around the waist and legs; head and upper body lost in antiquity. Level II, south of room 3. Cf. also fig. 72.
4. Bitumen attachment, perhaps of religious import. Ht. 7 cm . Found in an infant burial (no.9) in room 2. Cf. also fig. 72.

Middle row, from left:

1. Hollow object. Ht. 13 cm . Found in room 8, level I grave.

2-5. Objects probably of phallic significance. Found with others of larger size in level I graves in Building 1.

Bottom row, from left:

1. Solid stone object. Ht. 6.5 cm ., Level I, room 2, infant burial.
2. Bull's head, with two black lines painted on the mouth and forehead. Tievel IV, outside the eastern wall of room 93, fill.
3. Clay figurine of animal; head lost in antiquity. Level IV, room 42, floor.
4. Pig-amulet of green stone, used as a pendant. Length 5.7 cm ., Level I, room 2, grave 23.

5-7. Alabaster rabbit amulets. Found with others in level I graves, Building 1.

Below, 1. Fragment of alabaster bracelet Length 3.5 cm ., width 1.2 . Level II, outside the southern wall of room 32, floor.

Below, 2. Fragment of alabaster bracelet. Level I, room 11, grave 75.

Figure 67.
Bottom row, third from left: alabaster statuette, unfinished and indicating that the Sawwan statuettes and vessels are most probably of local manufacture. Ht. 5 cm ., Level I, outside room 3.

Figure 70.
IM. 68782. Broken bone spatula. Length 7.2 cm ., Found 1.5 m . below the surface, in the defensive ditch (trench no. 5). IM. 68788. Broken bone spatula. Level II, room 36, floor. AM. 68790 . Bone spatula. Length 11 cmi, width 1.5. Level II, area 109.

IM. 68786. Bone needle. Length originally 22 cm ., Level $I$, room 22 , floor.
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IM. 68785. Bone borer. Length 8 cm ., Level II, room 34, floor.

IM. 68787. Bone object, probably fragment of handle. Length 7.4 cm ., Level I, room 10, floor.

IM. 68789. Bone borer. Length 6.5 cm.. Level I, room 12 floor.

IM. 68773. Grey stone tool. Length 5.7 cm .. Level I, room 12, floor.

IM. 68783. Shell tool Length 3.7 cm.. Level I, room 3, grave.

IM. 68784. Burned bone object. Length 12.5 cm . Level I, room 15, floor.

IM 68796. Many small oval, and some disk-shaped, pellets of alabaster which were found, together with the remains of clay cylinders (?), on the Level I floors of rooms 2 and 8. They were associated with retuse cones of grey and white stone, one of which also occurred in a level I grave (no. 64) in room 8.

Figure 78.
IM. 68765. Celt, one of a group of seren. Tength 7.5 cm ., width 4.2 . Tevel II, room 106, floor.

IM. 68771. Celt. Length 8.5 cm. , width 3.5. Tevel II, room 120 , floor.

IM. 68764, Side scraper. Length 10.2 cm ., width 5.5 Level I, room 9, grave.

LM. 68772. Hoe. Length 10 cm ., width 6. Level I, room 15, floor.

IM. 68763. Celt. Length 8.7 cm ., width 3.7. Level III, room 106, floor.

IM. 68775. Celt. Length 7 cm .. Tevel I. room 13, floor.

TM. 68770. Celt. Length 4.6 cm ., width 2. Lerel I, room 18, fill.

IM. 68769. Celt. Length 6.8 cm ., width 1.6. Level I, area 19, floor.

IM. 68777. Sharp edge of celt. Length $\check{5} \mathrm{~cm}$., width 4 . Level IV, room 105, floor.

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IM. 68792. Part of sickle, incorporating three flint blades and one obsidian stuck together with bitumen; slight traces of gloss on the blades indicate that the sickle was used in harvesting. Level II, room 115, floor.

IM. 68793. Flint sickle, with bitumen adhering, and again traces of gloss. Level IV, room 44, floor.

Figure 79.
Left: nail-shaped obsidian object, perhaps used as a hair separator or spacer. Level V, room 50 , fill.

IM. 68336. Triangular fint arrowhead. Length 2.8 cm ., width 1.4. Level I, room 84, floor. Compare J. Mellaart, Anatolian Studies XIV (1964), fig. 52, especially nos. $5,6,7,12, \& 21$.

IM. 68332. Clay sonical human figurine. Ht. 2.5 cm .. Level I, area 19 , floor.

## Figure 80.

IM. 68454 (top row, left). Pestle. Length 20 cm ., diameter 5.5 . Level I, room 2, floor.

IM. 68464. Pestle. Length 28 cm ., Level I, room 8, floor.

IM. 68465 . Large heavy pestle, with a perforation at the top probably to accomodate a wooden haft. Length 52.5 cm ., base diameter 13 , top diameter 10 . Level I, room 5, floor.

IM. 68452. Mortar, still containing traces of red ochre. Length 25 cm ., width 18 , ht. 13. Level I, room 10, floor.

IM. 68451. Mortar, still containing traces of red ochre. Diameter 27 cm. . ht. 14. Level I, area 19, floor.

TM. 68804. Large quern of black steatite. Diameter 38 cm ., ht. 11. Level I, room 21, floor.

IM. 68450. Palette for mixing colour, or quern for griading paint; still
retaining traces of red ochre. Length 20 cm. , width 18, ht. 10 . Level I, room 2, floor.

IM. 68449. Palette, still with traces of red ochre. Length 27 cm ., width 15 cm ., ht. 7.5. Level II, room 29, floor.

IM. 68453. Pestle. Length 16.5 cm ., diameter 6.5. Level I, room 2, floor.

IM. 68446. Pestle. Length 16 cm ., width 5. Level I, room 2, floor.

IM. 68338. Pestle. Length 29.5 cm ., diameter 5.5 Level I, room 10 , floor.
III. 68459. Pestle. Length 21 cm ., diameter 4.5. Level I, room 2, floor.

IXI. 68455 . Pestle. Length 20 cm ., diameter 5.5. Level I, room 2, floor.

IM. 68456. Pestle. Tenght 13 cm ., diameter 5.5 Level I, room 2, floor.

IM. 68457. Pestle. Length 6.5 cm ., top diameter 7.5. Level I., room 2, floor.
MM. 6845s. Pestle. Length 12.5 cm., top diameter 9.5. Level I, room 2 , floor.


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PI. 11


Fig. 2

Pl. 111


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Fig. 10

PI. IV


Fig. 7

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Fig. 22


Fig. 24




PI. XII


Fig. 37


Fig. 40


## Pl. XIV



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 Fig. 57

PI. XVI



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Fig. 52
Pl. XVII



Fig. 55




PI. XXI

Pi. XXII




Fig. 66




Pl. Xxvill

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Fig. 74


Fig. 80


[^0]:    (1) H. Herzfeld, Die Ausgrabungen von Samarra, Band V (1930), p. 5.

[^1]:    (3) Grave-pit 34, in room 5 . Close by to the south was the fragmentary skeleton of an adult female with a necklace of dentalia shells.

