

RECENT RESEARCHES AT ABU ḤAMID

by

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In 1984, an international research program was initiated by the Institute of Archaeology and Anthropology of Yarmouk University, the Centre Français de la Recherche Scientifique (CNRS) and the Institut Français d'Archéologie du Proche-Orient (IFAPO), with the cooperation of the Department of Antiquities of Jordan. It concerns the Jordan Valley and the Northern Transjordanian Plateau in the fifth-early fourth millennia BC.

Objectives

The archaeological sequence for the late sixth-early fourth millennia in these regions was still very imprecise; it was necessary to establish solid bases on which to rely. The program itself had a series of goals:

- * To define the respective roles of the Middle Jordan Valley and of the Transjordanian Plateau during this period. Were these regions always populated by stable, sedentary groups? Were there periods in which these areas were marginal? Did they sometimes constitute a route between Syria and the Southern Levant passing along the Jordan Valley? If changes occurred, when and why did they occur?
- * To obtain, for each of the major phases, well-defined information on the ancient environment in the two bio-climatic zones in order:
 - to study the possible modifications of the environment and their impact on the extension of sedentary populations into the marginal arid zones —taking into account the varied topography of the region and the precarious nature of the ecology;
 - to evaluate the impact on the populations of the environment and particularly

the changes in the hydrology and vegetation;

- to excavate a sufficient area at one site in each zone in order to obtain enough data to examine economic and social organization;

- to attempt to explain the adaptation of strategies and tactics that led to a high level of production;

- to examine the origin of the culture in the areas in order to see whether there was primarily an indigenous development and, if not, to determine the sources and extent of external influence, then determine if the region can be broken down into subunits such as "territories".

For this period and these regions, few sites were excavated up until the last few years. As for the excavations, they were either conducted a long time ago (Ghassul, Jericho), were very small soundings (Ghrubba, Abu Habil, Shuneh) or they concerned sites not fully published (Munḥata, Ghassul for the pre-Ghassulian levels).

Hence, the chronological sequence is poorly understood, and the economic and sociocultural changes observed are difficult to date and their causes to explain. It was not possible to determine to what extent we were observing groups sharing the same ways of life and the same cultures and if, in this case, the changes that we observed were due to temporal variations or, in the contrary, they were the result not of an evolution but of contemporaneous groups with different economic and social organizations utilizing the same area.

To answer these types of questions, we need large-scale excavations of several sites; also because the area is composed of a number of ecological regions, more palaeoenvironmental studies are needed to better under-

stand the impacts —positive or negative— of man on the environment and vice-versa.

ABU ḤAMID

Because of the extension of modern irrigated agriculture in the Ghor and the threat this presented to the sites, Dr A. Hadidi, then Director General of Antiquities, requested we began by the excavation of a site in the Valley.

Among the sites already surveyed, Dr M. Ibrahim suggested that we start work at Abu Ḥamid, because it was immediately threatened¹; the site is located at equal distance between the Dead Sea and Lake Tiberias, close to the confluence of the valleys descending from the 'Ajlun mountains on the east, and from the Nablus mountains on the west (Dollfus, Kafafi *et al.* 1986; 1988; Dollfus and Kafafi 1988b; in press).

The five seasons from 1986 to 1992 led to a firm stratigraphic and chronological sequence, since large exposures —350 to 2000 sq m— were opened. The sequence and chronology can now be combined with the sequence at Munḥaṭa (30km to the north on the other bank of the river, see Perrot 1964; 1966; Gopher 1989; Garfinkel 1992) to provide a clear picture of the history of the Middle Jordan Valley region. At Abu Ḥamid, there is no significant gap in the stratigraphical sequence, although small gaps may be present due to the temporary abandonment or use of the site by seasonal groups.

Stratigraphy

In the main excavations, two large perpendicular 1-2m wide trenches, one running east-west (30m long, squares A6-AA01), the other north-south (60m long, squares AH2-AD2, AE3-AD3) provided us with the best stratigraphic sequence. In general, excavations were carried out 20-30cm into

sterile deposits. In several areas, excavations were extended to the depth of the ancient marl deposits of the Lake Lisan, and in one square, these marl deposits were excavated to a depth of one meter. Presented below is a description of the general stratigraphic sequence:

- a. top soil: 20-40cm;
- b. a grey sediment; thickness between 0.40 and 0.70m; in this sediment several levels of buildings (mud brick walls and walls on stone foundations) and pits were observed; the artifacts (pottery, flint, stone vessels, maceheads, figurines) are Ghassulian (cf. Dollfus and Kafafi, in press);
- c. a greenish/pinkish sediment: thickness between 0.50 and 1m; ashy lenses, several levels of green plano-convex mud brick buildings and small red clay bricks, pits —some of them very deep, cutting the lower layers— were observed; the artifacts, especially the pottery can be compared to some types of the pottery of Wadi Rabah assemblages found at Munḥaṭa (level 2a, Garfinkel 1992), Tell Tsaf (Gophna and Sadeh 1989), and at Hazorea (Anati *et al.* 1973);
- d. a layer of compact red clay sediment (*terra rossa*): thickness 0.30-0.80cm. In some areas of the site, this *terra rossa* is sterile while in other areas, some circular features, possibly dwellings (?), basins, fire places and ashy floors were observed. Also, large, deep (1.50-1.80m) depressions cut from this layer are frequent. Some of them have rather vertical and regular sides, while others are sloping more gently and irregularly. The pottery sherds and all the material found have similarities with Ghрубba assemblages; painted sherds can be compared to some types of pottery found at Abu

1. The site was first surveyed in 1975, cf. Ibrahim *et al.* 1976 and report to the Department of Antiquities. It was surveyed for a second time by Kafafi in 1982.

Thawwab (Kafafi 1988) and at Munḥaṭa (level 2b; Garfinkel 1992);

- e. a layer of dark reddish brown soil (*terra rossa*): thickness 15-20cm. No structures; extremely rare sherds and bones that could be intrusive.
- f. the marl deposits (ancient Lake Lisan deposits): the marl layer is evident in various areas of the excavation field. In some of the probes, the upper 50-60cm of these deposits are turned pinkish. In one square (AA01), under 45cm of sterile pinkish-white deposits, a pit containing stones and some sherds related to the pottery of the earliest settlement was observed. According to J. Rewerski (in Dollfus and Kafafi 1988; in press and pers. comm.), this phenomenon could be the result of ancient "subterranean" gullying as still observed in neighbouring areas.

Evolution of the Settlement

The main changes in the settlement appearing since its foundation will now be described and some examples given.

- A: **In the lowest levels**, large pits were observed, up to 1.50m deep and varying from 1.50 to 3m in diameter. The profiles of these pits vary from vertical to gently sloping walls. Until micromorphological studies are completed (by M. A. Courty and F. Hourani), it is too early to determine if these pits are the result of human excavation (dwelling pits; earth quarries) or are due to erosion; similar erosion features can still be observed in the *kattar's*. Supporting the idea that at least some of these features may be the result of erosion is the fact that a gullying phase that cut the "glacis" seems to have taken place by that time (Rewerski in Dollfus and Kafafi 1988; in press and pers. comm.). Above these levels are round or oval semi-subterranean habitations with only one or two small internal

hearths; the surfaces between these structures are characterized by a large number of basins, some plastered pits, and firing structures.

- A1. *The northern sector*: In one of the depressions of layer d (square A2-A1), what could have been an oval (2.80m E-W/1.80m N-S; at least 0.50m deep) dwelling structure (locus 612) has been excavated. It was dug through the *terra rossa* into the surface of the marls deposits. It was partially lined with a curvilinear mud brick (or pisé ?) wall. Inside this structure, on a floor made of yellowish earth, were two associated small fireplaces. Outside, towards the west, was a thick layer of what appeared to be fallen and very decayed bricks.

The relation between this curvilinear wall and a large firing (?) structure (807) is not yet clear. The firing structure is made of a ca. 1m high heap of stones; of which some, on the northern side of the structure, had been fired. Two large remains of wooden posts were found among the stones; the stone structure was surrounded by a thin (2cm thick) layer of charcoal.

A large pit or depression cut into the marls—found in A2-A3—if not natural, should be put in relation with this level. All the artifacts and animal bones collected in loc. 612 were very badly damaged by water (gypsification, oxidation) and were rolled.

- A2. *The southern sector*: A large depression was also observed there, but without the presence of any architectural remains. Several pits were excavated. Nowhere on the site was a significant gap in the stratigraphy observed. However, in some grey and red (*terra rossa*) strata only *pits*, *basins*, and *hearths* were noted; this might indicate that, at some periods, the site was inhabited by less permanently settled human groups.

The Pits

In the above-mentioned strata, as well as in the levels with architectural remains, the pits are of three different kinds :

- a - shallow large pits: their shapes are not very regular; their diameters vary between 2m and 2.50m, whereas their depths are between 0.50 and 0.70m. This kind of pit is often considered to be used for dwelling. There is no evidence, however, to confirm this use: they have no floors (plastered or any other kind) nor the usual internal features. Their fills are usually very powdery, with some layers of stones mixed with a lot of ceramic sherds and bones so they might have been only used for dumping trash;
- b - pits that are very deep (2.50m) and conical in shape (between 1.20 and 1.50m at their opening, 0.50-0.70m at their base) (Pl. V, 1, 2). These are similar to some pits used in modern villages as cisterns, but it should be noted that their walls are not covered by any kind of plaster and none of them contained laminated sediments that would have been deposited by water;
- c - cylindrical pits: their diameters vary between 1m and 1.80 m; depths between 1m to 1.70m. Their fills are often very powdery with layers of ash 10-25cm thick.

The Basins

Two types were observed: a - shallow cylindrical basins; and b - conical basins.

They are clay and plaster-lined basins (Pl. V, 3, 4). Their diameters vary between 0.40 and 0.90m; their depths between 0.40 and 0.70m.

The Hearths and Fire Pits

Three major types were distinguished:

- a - small circular and oval depressions (length or diameter 0.30-0.40m; depth

0.10m) full of ashes and charcoal; in most instances, a lot of small stones were found close to the hearth;

- b - large basins (0.80-1m diameter; depth 0.15-0.20m) full of ashes, and with layers of burnt clay and stones;

- c - oval fire-pits (length 0.80-1.20 m; width 0.50-0.60m). Their walls and bottoms are heavily burnt and reddish in colour. They are always covered by a layer of stones. Animal bones, most often not burnt, were found in or around them.

- **B: In the middle levels,**² the buildings are composed in general of several rooms that could have been remodeled during their occupation. Their plans suggest that they were used for different functions: small and narrow rooms could have been used for storage; the largest rectangular rooms for habitations.

- B1. *The northern sector:* In the northern sector, at least three levels of building were recognized. These buildings are multicellular; the rooms are small and rectangular. Their walls are built of plano-convex mud bricks. In the earliest levels, the bricks are small and made of red clay while later greenish clay is used. In this area one large building complex (Pl. III, 1, 3) was in use for a relatively long period; walls had been added, some partitions made. An open space area is enclosed by a slightly curved wall to which are attached several small rooms. In one large rectangular room two levels of occupation were distinguished. In that room, a large rectangular platform of bricks against the southern wall and a small one in the middle of the room were excavated. On the floor, close to the small platform, two grinding stones were found. In another room was a wall painting fallen from its support (Fig. 5; cf. *infra*). In relation with this building are

2. One C14 date was obtained from the very top of these levels (GrN 16357): 6030 +/- 60 bp.

circular or oval pavements of stones (Pl. III, 4), all of them accompanied by a firing pit (?). To clarify the plan of this complex and of its domestic structures (platforms, hearths, pits associated with the various levels) a more intensive study of the plans and sections is needed.

B2. *The southern sector*: In the southern sector another complex was excavated during the last three seasons. Built on a thin greyish stratum which covers the terra rossa layer, it is composed of two major buildings and an open space area where the domestic activities were taking place.

a - One building, excavated in 1989 (Pl. II: 1), is made of two small rectangular rooms surrounded by thick (0.80-0.90m) walls built with plano-convex bricks (Pl. IV: 2). On the northern side, a small square room was added *a posteriori*. On its western side a kind of platform or terrace was built of six courses of bricks.

b - The second building is a large rectangular room (ca. 7.75 x 4m; Pl. II, 2) built of plano-convex brick walls. One of them is lined with white plaster on the inside. Two small platforms, made of bricks and plastered, could have been the bases of posts which sustained the roof. Also inside, against the southern wall, was a small partition wall or bench. Hearths and a pit containing a jar were also found inside the room. The last floor was littered with pottery, flint tools (among them 14 axes/adzes) and some animal bones. Some walls on the outside of the building are later additions as is what seems to have been a corral on the northern side of the house; the corral wall was almost curvilinear and made of pisé. Outside the building were several concentrations of small stones, gypsum-

plastered basins and fire pits.

c - North and east of these buildings was an open space area with a large number of oval hearths with heavily fired reddish walls similar to the ones found in the northern area, and many pits (Pl. II, 3).

-C: **In the upper levels**,³ the basic structure of the houses is a large rectangular room with in some cases an enclosed courtyard. This unit is sometimes modified by the addition of one or two small rooms, sometimes adjoining the main large room. The walls are composed entirely of bricks or have stone bases on which bricks are laid (Pl. I, 1, 2). Some of the houses shared a long stone wall (Pl. I, 3). Not all the houses follow the same orientation. Between them are some open areas with stone benches (Pl. I, 2) often associated with jars, big basins lined with stones and large pits with ashy fill.

In Operation II, however, we found one building that was composed of a series of contiguous rooms. The floor of these rooms was 20-30cm lower than the surrounding surface. In these rooms were found hearths, fire pits, and small depressions for the placement of jars; in one of them was a place where axes and adzes were resharpened. In another room, a large pit with vertical walls was dug in which was found in 1986 an immense storage jar, now exhibited at the Museum of Jordanian Heritage at Yarmouk University.

The Economy

From the beginning of the occupation of the site, the subsistence was based almost exclusively on agriculture and herding products. The evidence for hunting is minimal (less than 10% of wild animals), and

3. GrN 16358: 5745 +/- 35 bp; GrN 14623: 5670 +/- 40 bp; GrN 17496: 5651 +/- 40 bp.

fish appears almost completely absent.⁴ This absence is surprising considering the close proximity of the Jordan River. The analysis of the faunal remains by Jean Desse shows that from the earliest levels, the occupants extensively exploited the potential of domestic animals. In a decreasing order of importance, the inhabitants utilized Sheep, Goat, Pig and Cattle. To this list may be added the Dog and a small Equid, probably the ass. An examination of age classes of sheep/goat indicates an absence of very young animals (0-3 months). This seems to indicate that the animals were away from the site part of the year. Based on certain aspects of the material culture of the upper levels, it is possible to suggest that at the beginning of the fourth millennium at least, the animals were taken to the Golan Plateau and the region of Irbid. The biological data for sheep and goat allow the proposal of the hypothesis that the animals were away from the village in May, June and July and returned by September-November. The studies of Desse suggest how the group was exploiting their animals. The age class data indicate that 20-25% of the animals (probably the young males) were slaughtered between 6 and 9 months, another 20-25% between 18 months and 2 years. The remaining animals survive to 3 years and a half; they were used for milk and probably wool.

Hence it appears that there were strong connexions between the Middle Jordan Valley, the Upper Valley, the Golan Heights and the region of Irbid.⁵

These ties may also be related to the movement of basalt vessels. The studies

and analyses made by K. Wright and N. Qedi suggest that most of the basalt vessels, grinding stones and mortars found at Abu Hamid in the upper levels were without doubt preformed elsewhere, since few blanks were found at the site. The analyses by K. Ibrahim (Natural Resources Authority) show that they might come from the basalt flows located between Wadi al-Yarmouk and Wadi al-'Arab. It would be interesting to look for workshops in that region (cf. Wright *et al.*, in press).

It is too early to give any analysis of the artifacts found: pottery, flint, bone tools, ornaments, figurines, painting; hence we will just give short general descriptions of the different groups found in the "pre-Ghassulian" levels.

The Pottery

In the bottom levels (Fig. 1), the pottery is hand-made, mostly coil-built, and coarse. The surfaces are usually rough despite a smoothing done either with hand or with grass. Some sherds are painted and similar to the painted pottery of Ghрубba levels 5-16 and to the painted pottery of Munḥaṭa 2b. The ware is the same: coarse with grit and/or grog temper, extremely rarely chopped-straw temper. Forms are almost identical: bowls with or without handles, chalices, hole-mouth and less frequent necked jars; most of the handles are very wide loop-handles; lugs and thick knob handles are present; pierced and tubular handles are attested but rare; the bases are either flat, disc or round. Same designs: painted red lines, zig-zags, chevrons, lines of dots; some of them should be noted, such

4. Despite of the screening of sediments, only one or two fish vertebrae were found in the lower levels. If in the upper levels a problem of conservation due to the acidity of the soil could be the reason for non recovery of fish remains, this is not a reason in the lower and middle levels where the conditions of preservation are excellent.

5. Cf. the site of Sal surveyed by Dr Mittmann and

Dr M. Ibrahim; it has pottery and flint assemblages almost identical to those of Abu Hamid. For this reason we were planning to excavate the site, unfortunately it was considerably damaged by the extension of the modern village and by the new techniques of agriculture during the past two years. It seems already too late to have excavations there.

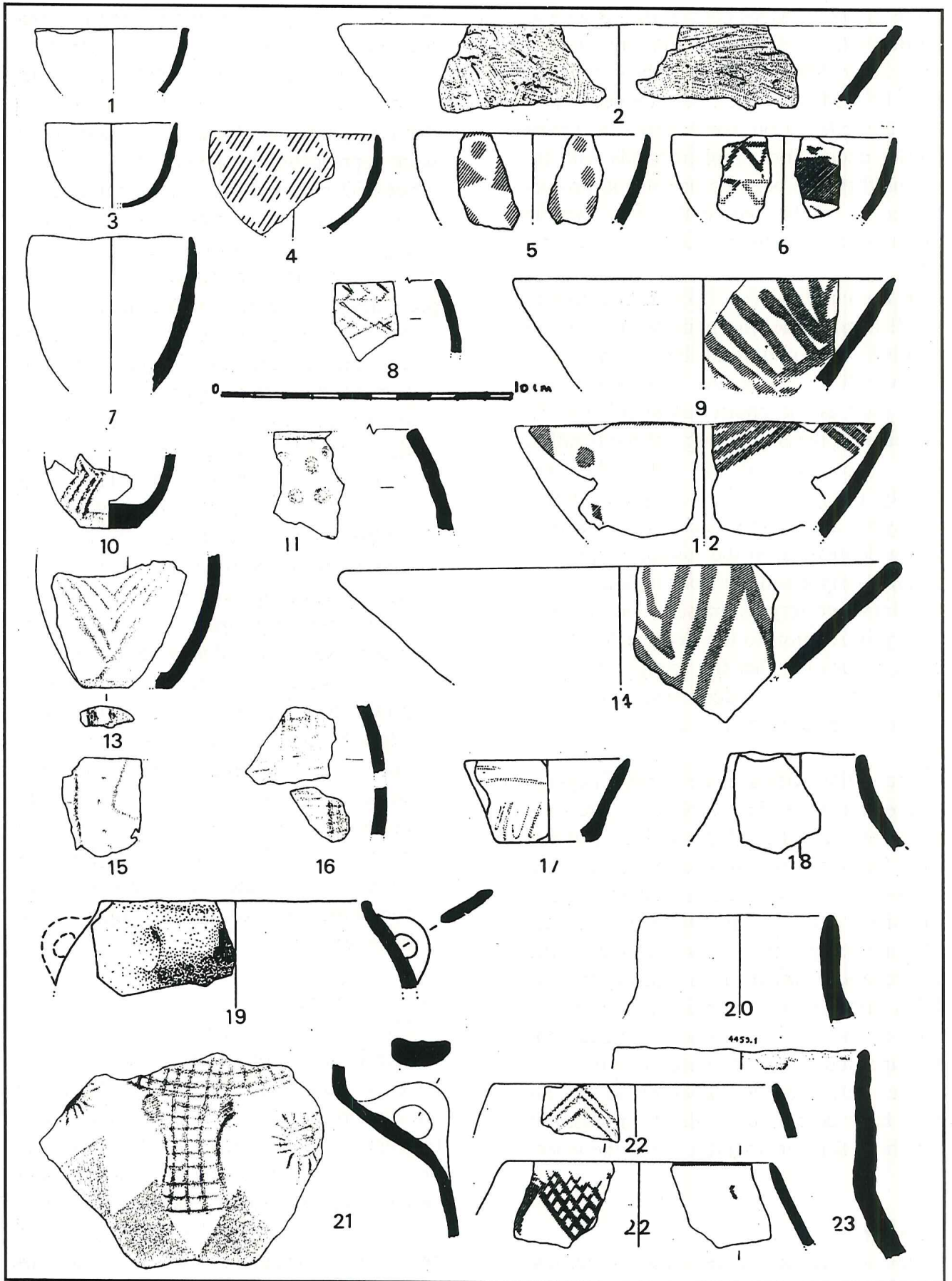


Fig. 1. Abu Hamid: Pottery of the bottom levels.

as the “suns” motives (Fig. 1:16), as well as the disposition of motives that are close to some later Mesopotamian Obeid motives (Fig. 1:8). Most of the time, the decoration is on the exterior but some bowls also have interior decoration. Applied bands with incisions that will become one of the favourite decors by the end of the fifth and the fourth millennia appear here for the first time.

In the middle levels (Fig. 2) the pottery is still hand made; the plain ware is in the tradition of the pottery of the bottom levels, however finer wares and new shapes appear, such as the churn vessel (Pl. IV, 3). Considering the morphology of the handles, some types such as the very wide and slightly bumped handles disappear, while new types are present such as the handles with a depression in the middle or the one with nail-impressed incisions on top.

Painted pottery is present, but its frequency in relation to the deepest levels remains a question that the analysis will answer. Most of the decorated pottery is incised, impressed or has applied bands in relief.

Decoration with a snake in relief appears for the first time (Fig. 2:10, 11). The rims of vessels are often decorated by impressions. Some sherds —few of extremely fine ware— are red or black slipped and highly burnished (RFBW and DFBW). This assemblage of pottery is very similar to the ones recently published from Munḥaṭa (level 2a) and Bezek Channel, but we should insist on the fact that no bow-rim neck nor any carinated bowls have been found.

The pottery of *the upper levels* has already been described (Vaillant, in press). It is in these deposits that the use of the wheel starts.

The Flints

During the last three seasons, almost 50,000 pieces of flint were collected and

are under analysis. From the very preliminary field study of a series of 15,000 artifacts collected during the 1992 season from the middle and bottom levels, we found that debitage products, blades, flakes and debris were represented by about 14,000 pieces, while 950 tools and nuclei were counted.

Based on a first impression by E. Coqueugniot, C. Navarro Barberan and H. Wada from this series which deals with the pre-Ghassulian levels it seems that:

- the tabular scrapers, especially fan scrapers, become increasingly less common towards the bottom layers;
- among the sickle blades, the ones with a denticulated working edge are the most numerous; among these some have large denticulation (but the denticulation is different from that of the “classic” Yarmukian period as the notches are contiguous and not separated);
- only three very small arrowheads with transverse cutting edge were found;
- among the heavy tools of the axe/adze group, the artifacts with straight lateral edges become less abundant than in the upper levels; instead the artifacts with a lenticular section (symmetrical or asymmetrical) are more frequent. Several picks/chisels which have a highly polished straight and very narrow, even sometimes pointed cutting edge should be noted.

The Stone Objects

The usual grinding tools are present in all levels; most of them made of basalt, fewer of sandstone. Mortars in limestone are also present as well as door sockets, and for some of these objects the difference between the two categories is difficult to ascertain before further analysis. Polished axes and grooved pebbles that might have been used to straighten shafts or for polishing bone tools were also found.

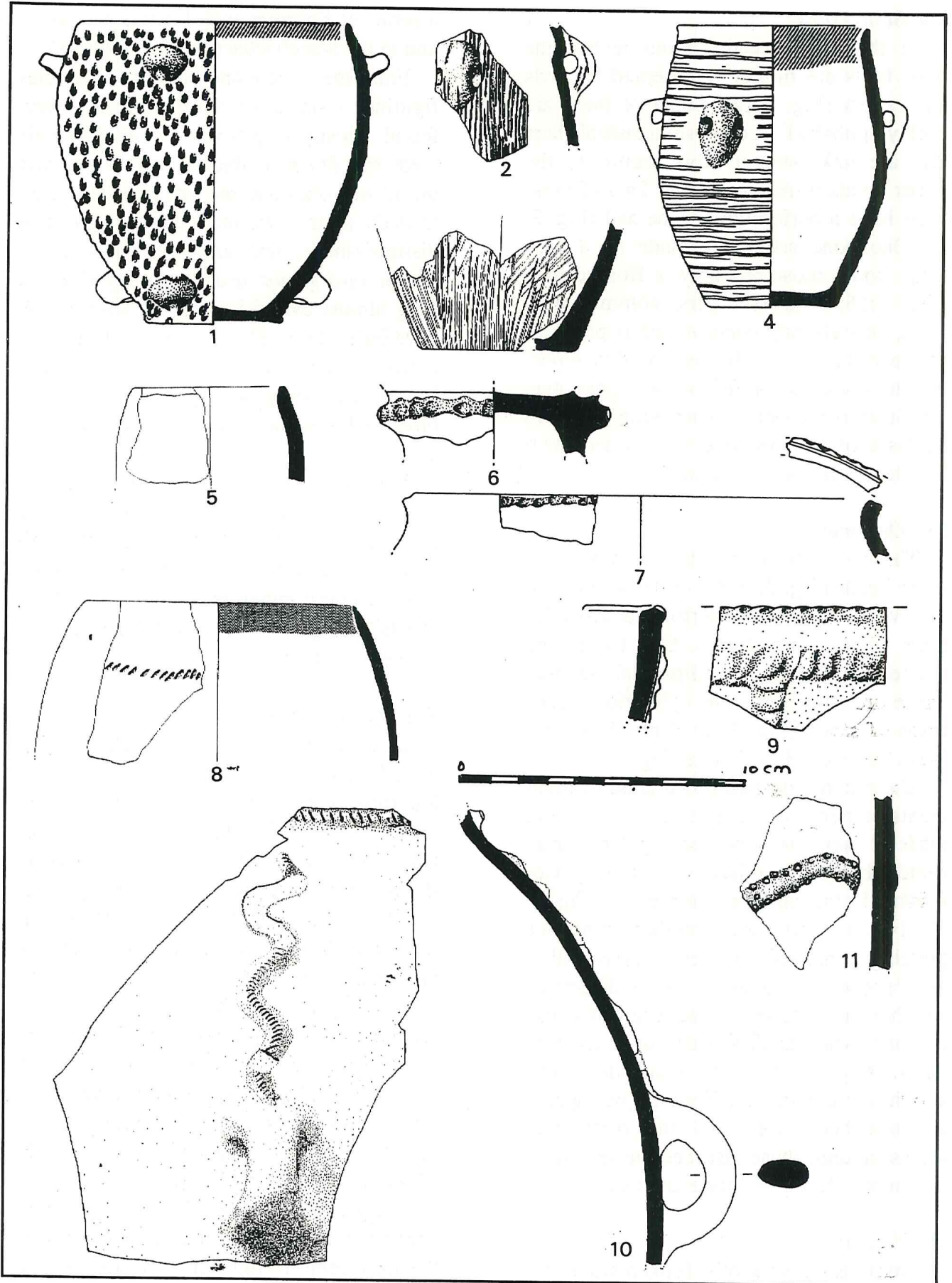


Fig. 2. Abu Hamid: Pottery of the middle levels.

The Bone Tools

In the middle and bottom levels, the bone tools are mostly represented by awls and borers (Fig. 3:12). Some of them are highly polished. Long spatulas/polishers that are unknown at Abu Ḥamid in the upper levels were also found. Two of these tools have a perforation at one end (Fig. 3: 1). One bone artifact is made on a very large bone, most probably a *Bos* scapula (Fig. 3:15; J. Desse, pers. comm.), it is wide, very slightly concave and is perforated near its point. The use of this object which looks like a fish is still unknown, was it an ornament or a weaving tool? An analysis of the possible wear traces will help to determine its function.

The Ornaments

The best represented class of ornaments is the beads (Fig. 3: 6, 8-11). These are usually very small stone perforated disks (5-6mm diam., 2mm thick). One larger and thicker bead has an ellipsoidal section. There are also very rare cylindrical beads made of stone (Fig. 3: 9). One object that looks like a bead is of bone (Fig. 3: 8).

The second most common class of ornaments is pendants (Fig. 3: 2-7). They are made of shell, are either rectangular or trapezoidal in shape and have one or two perforations. Some cardium are pierced (Fig. 3: 13, 14); it is not clear whether or not the piercing is natural. Further analysis with a microscope should allow us to determine whether this piercing is the result of working and whether they were used as pendants. A group of small helicoidal shells also have perforations. They do not appear to have been used and the perforation seems natural; these also need to be examined more closely in future analysis.

The Figurines

From the upper levels, broken stone "vilinear" figurines were found. They belong to

a series of figurines well known at Ghassul and in the Negeb sites (Dollfus, in press).

From the middle and bottom levels, clay figurines —most of them broken— were found mostly in pits (Pl. IV, 4). Not only were the finished objects found but also unfinished ones and the lumps of clay used to make them. Two main categories can be distinguished: "bird" and "quadruped".

The bird group: usually the figurine is a long almost cylindrical object with a concave base; the head gives the impression of a bird (it could be also anthropomorphic ?, Fig. 4: 1-3); only one figurine is clearly a bird; its body and head are modelled (Fig. 4: 4).

The quadruped group (Fig. 4: 5-10): most of them are broken and the head is missing. It is difficult to identify the animals represented. One feature, the tail, does provide clues: either up, on top of the back (goats?) (Fig. 4: 5-6), or hanging down (sheep?) (Fig. 4: 7-9).

The Wall Paintings

In 1992, fragments of a wall painting were found for the first time. These had fallen from a wall into the bottom of a pit which was later dug through it. The pit was filled with grey, ashy, powdery sediment. Based on stratigraphy, the painting fragments can be assigned to a wall of the middle levels (late fifth millennium); hence it is pre-Ghassulian. The design is linear with broad straight lines (yellow and red) intersected by a series of thinner red vertical and curved lines (Fig. 5). When it was removed, it was clear that there were two layers of gypsum, one with very thin incisions, and one on which the painting was done (F. Zink, pers. comm.). After advising the Department of Antiquities of its bad condition, specialists of the conservation laboratory of the IAA came to the field, removed it and are conserving it.

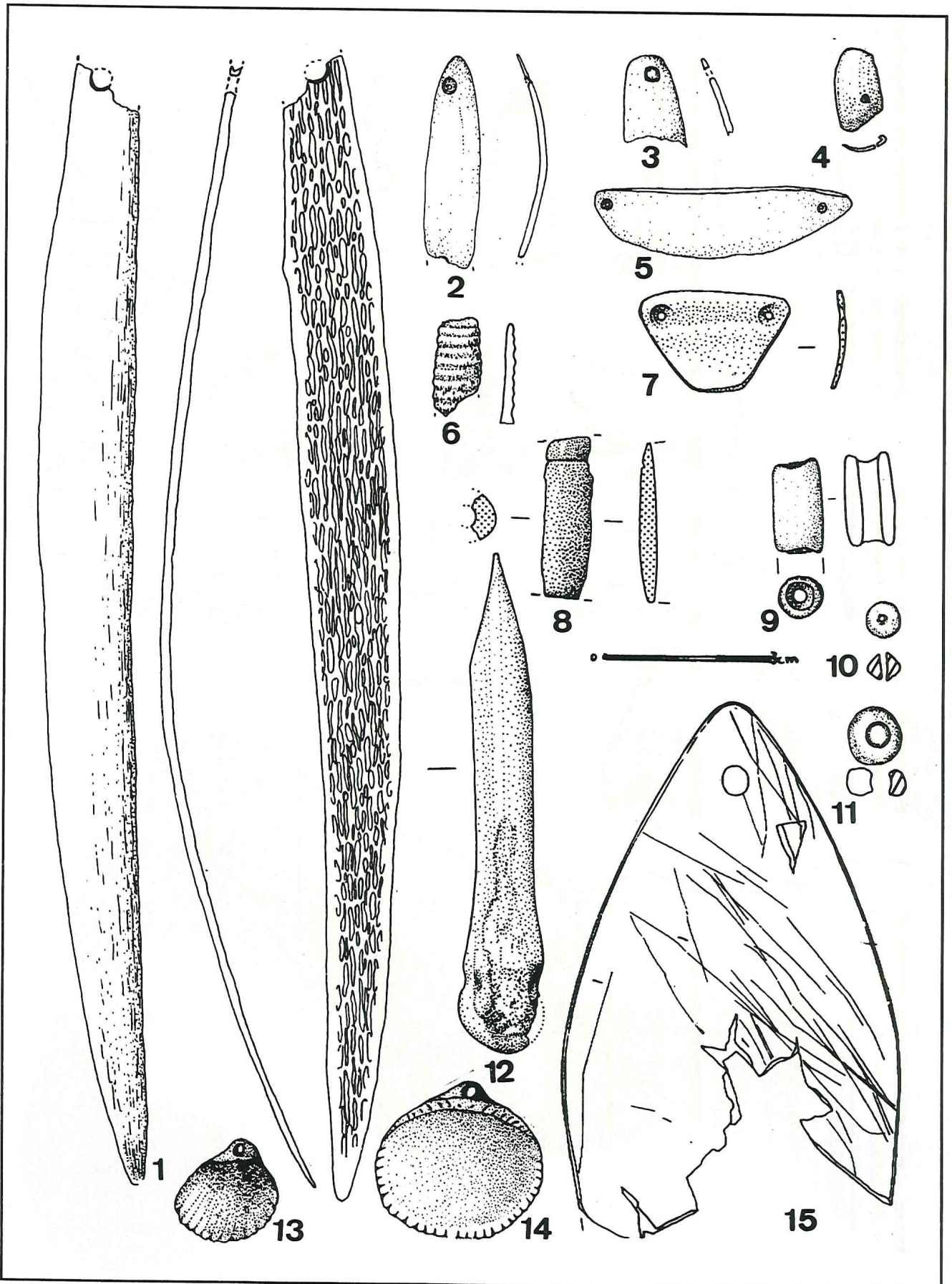


Fig. 3. Abu Hamid: Bottom and middle levels: bone tools, pendants and beads.

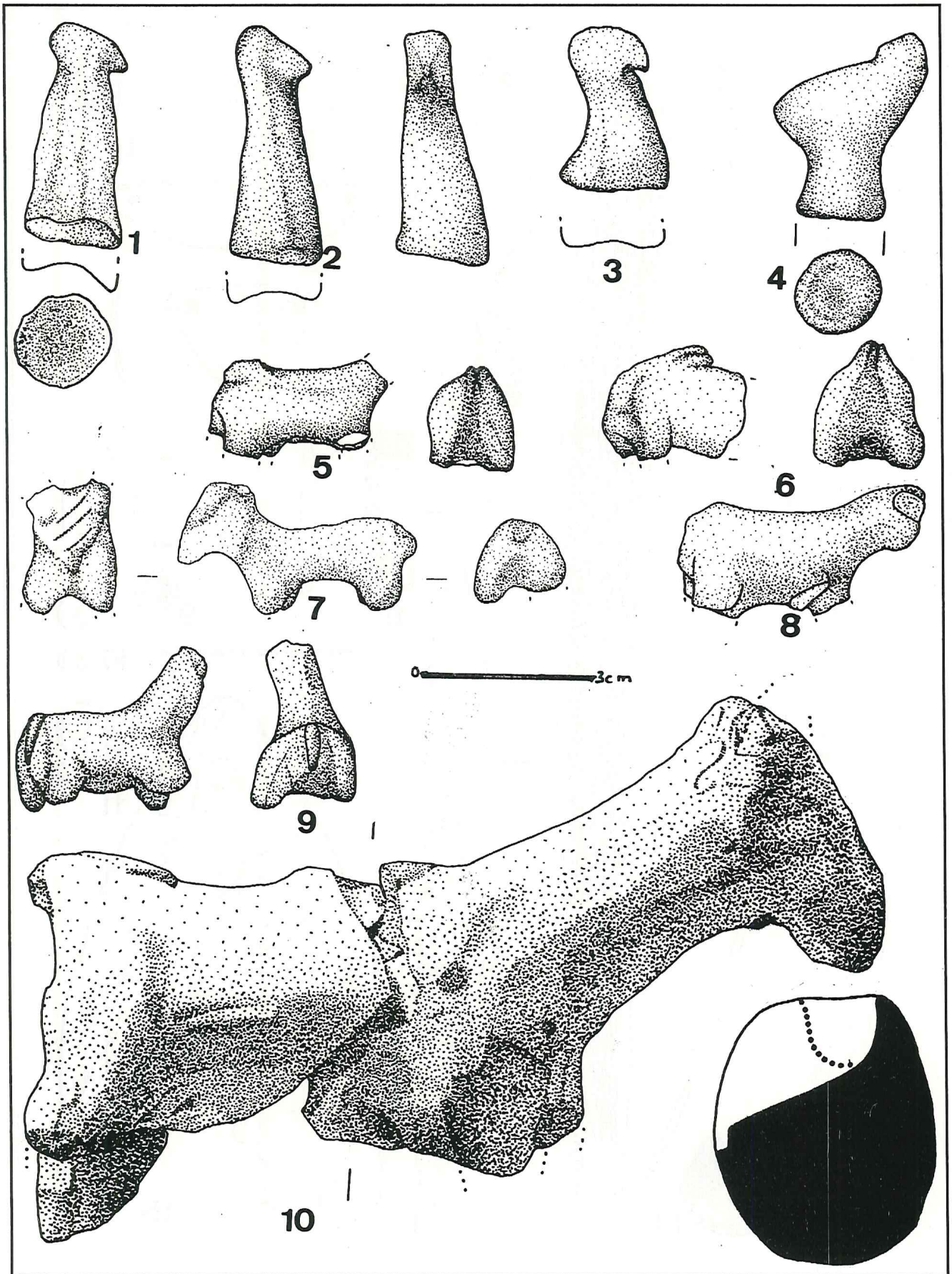


Fig. 4. Abu Hamid: Bottom and middle levels: figurines.

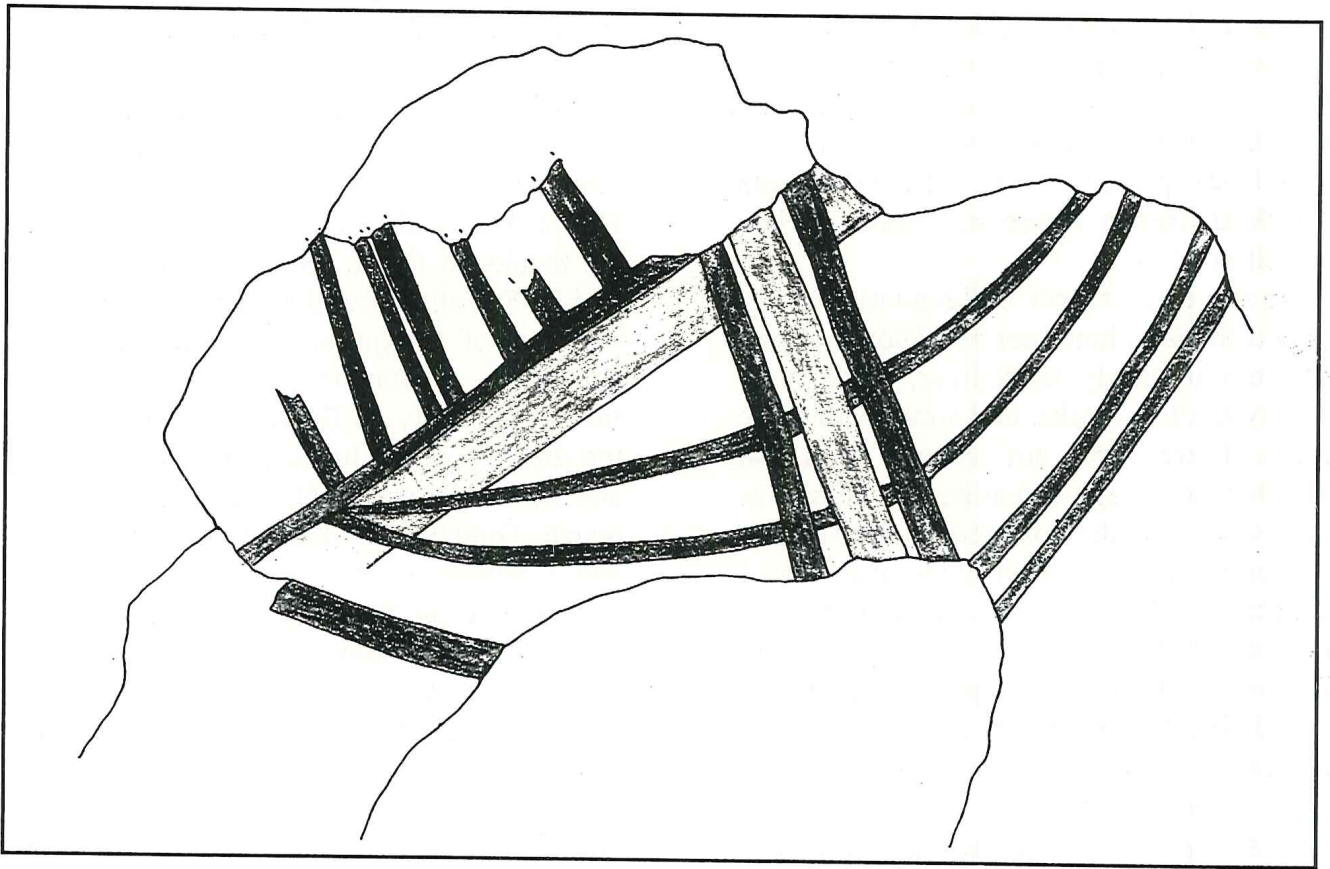


Fig 5. Abu Ḥamid : Fragment of a wall painting.

Conclusions

At the end of the fifth season, we begin to get a clearer idea of the ways of life of the inhabitants of Abu Ḥamid during the fifth and fourth millennia.

At the beginning, they were living in some circular shelters, maybe partially dug into the soil, sometimes with some roughly made bricks put along the side of the depression. The inhabitants were digging and using different kinds of pits. Their pottery was hand made, with a low percentage of painting. For their subsistence they were not exploiting the natural resources any more but already had a high level of production; they knew quite well the strategies to exploit their herds. To what cultural phase could these levels be related? They are certainly post "classical Yarmukian" as defined by Stekelis at Sha'ar Ha Golan (1951; 1972), and described at Munḥaṭa 2b, by Perrot (1964; 1966), Gopher (1989) and Garfinkel (1992), and at Abu Thawwab,

'Ain Raḥub, 'Ain Ghazal and Wadi Shu'eib (Kafafi, in press).

Most probably by the middle of the fifth millennium, and certainly in the second half of it, they were building houses with well made plano-convex bricks, and sometimes were plastering their walls with gypsum. At least one structure had a painting on its wall. The rooms were rectangular and while the occupants may have been doing some cooking inside or heating their structures, most of the domestic activities were taking place outside. The pottery they were using presents new features especially in the way they are decorated: impressed, incised or applied bands were used. Painted pottery is present, as are some sherds of dark and red slipped burnished ware. Some of these DFBW and RFBW wares are extremely fine. Some shapes that will take an important role in the following periods make their appearance such as the churns and pedestal vessels.

On a chronological point of view, these levels pertain without any doubt to the Wadi Rabah Phase (Kaplan 1958; Garfinkel 1992). We noticed, however, that both assemblages present some differences, and the Wadi Rabah Phase still needs a clear definition.

In the early fourth millennium, the village compound had a series of houses, most of them primarily unicellular, some completely built of bricks, and some with stone bases. There does not seem to be a real plan for the village and although the houses with stone foundations were mostly oriented north-south, the brick ones had various orientations. Like from the beginning of the occupation, the group was raising its food. The use of sheep, goat, pigs and cattle continued. In addition to the cereals and the legumes, the inhabitants were growing olive trees. If their culture was regional (cf. the large storage jars, perforated flint disks, pillar mortars) they certainly had ties with other groups living in the south (the Negeb) and they were most probably going to Wadi Feinan to get copper. These levels are Ghasulian (Dollfus and Kafafi, in press).

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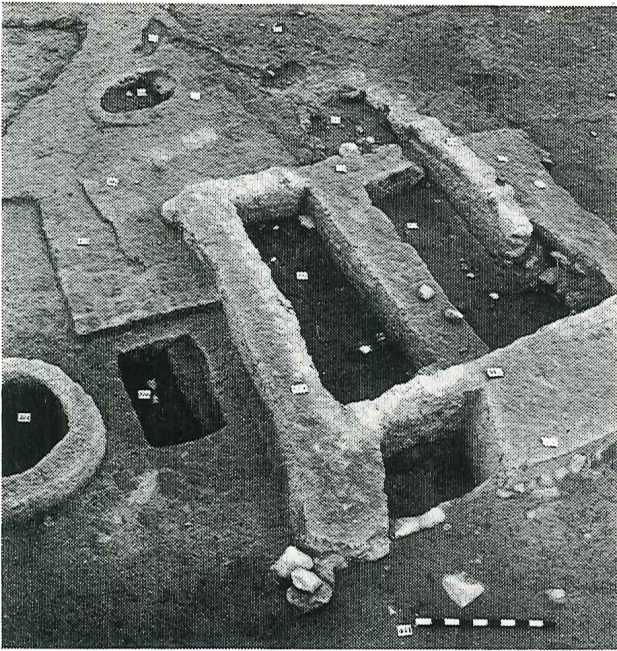
1. Abu Ḥamid: General view of the upper levels towards east and south.



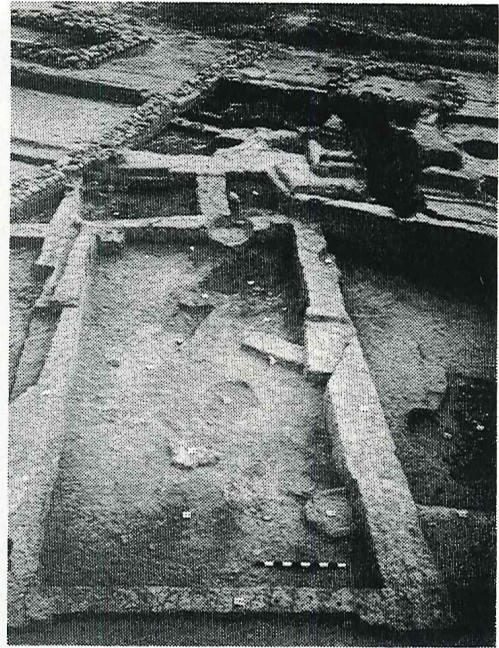
2. Abu Ḥamid: General view of the upper levels towards the west.



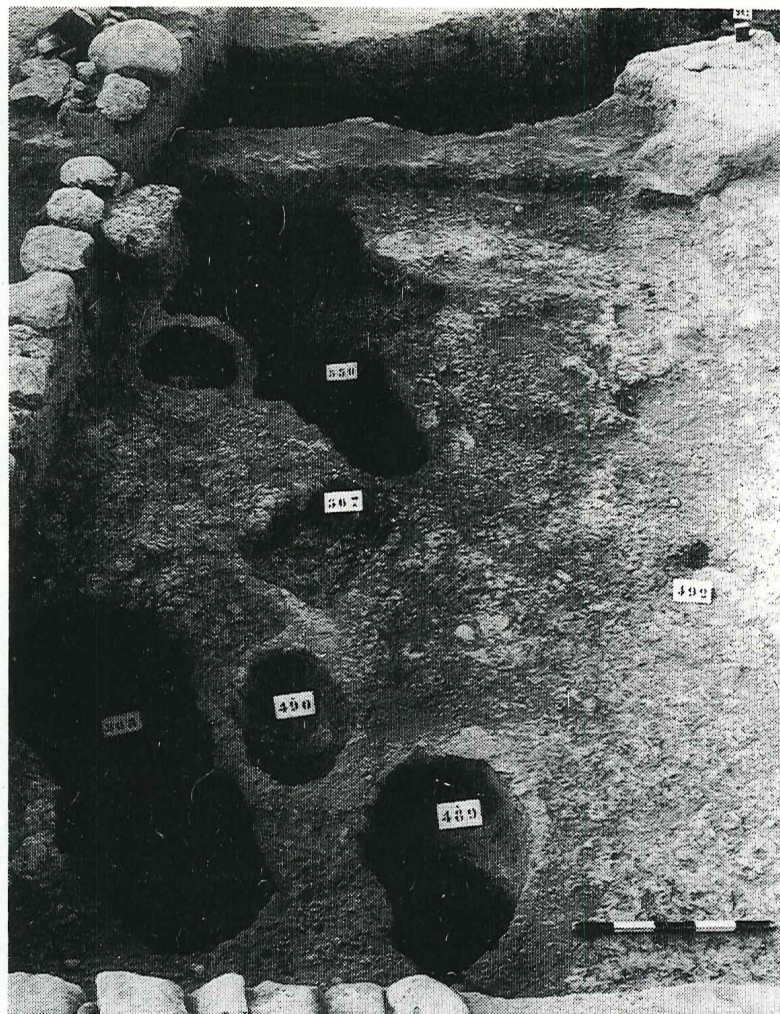
3. Abu Ḥamid: Long stone wall; upper levels.



1. Abu Ḥamid: Middle levels, southern sector; complex 1; storage rooms.



2. Abu Ḥamid: Middle levels, southern sector; complex 1; rectangular dwelling room.



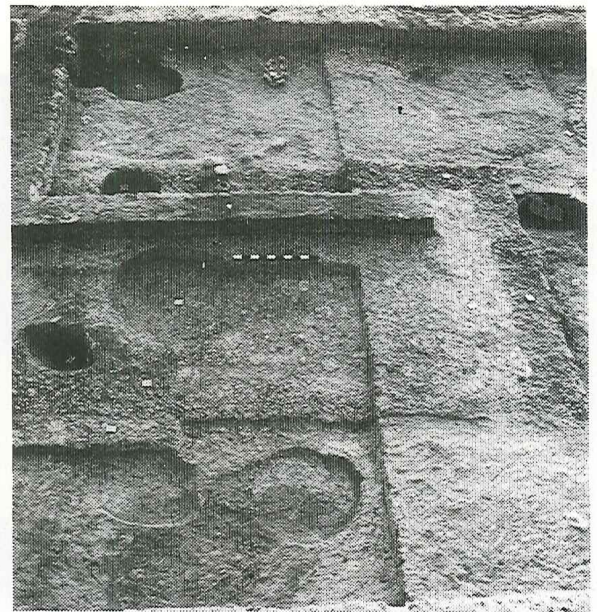
3. Abu Ḥamid: Middle levels, southern sector; complex 1; outdoor area with cooking structures.



1. Abu Ḥamid: Middle levels, northern sector; large multi-cellular complex.



1. Abu Ḥamid: Middle levels, northern sector; storage rooms of the large complex.



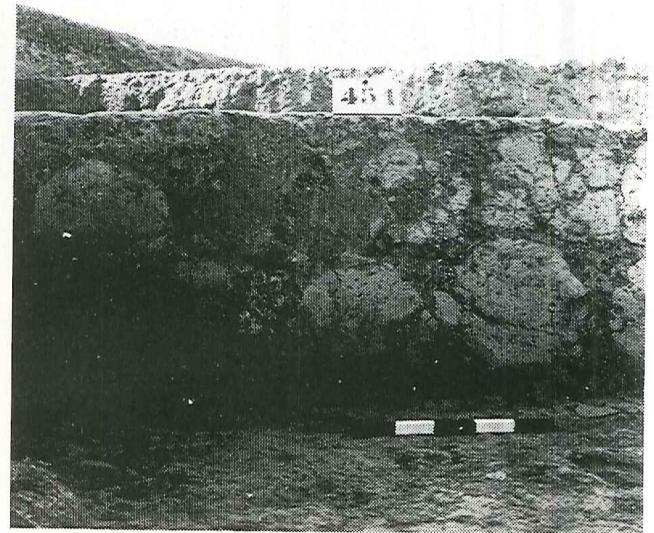
2. Abu Ḥamid: Middle levels, northern sector; dwelling part and open area of the large complex.



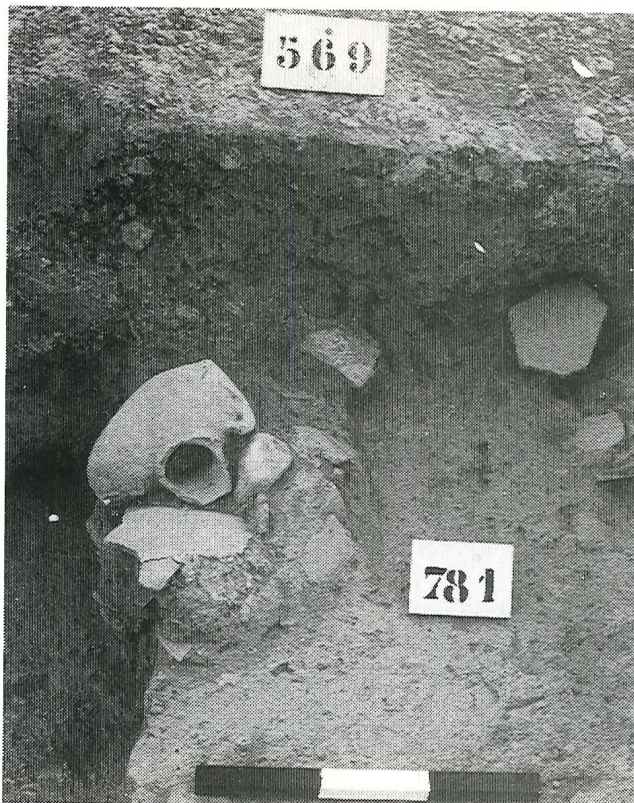
3. Abu Ḥamid: Middle levels, northern sector; oval stone paved structure.



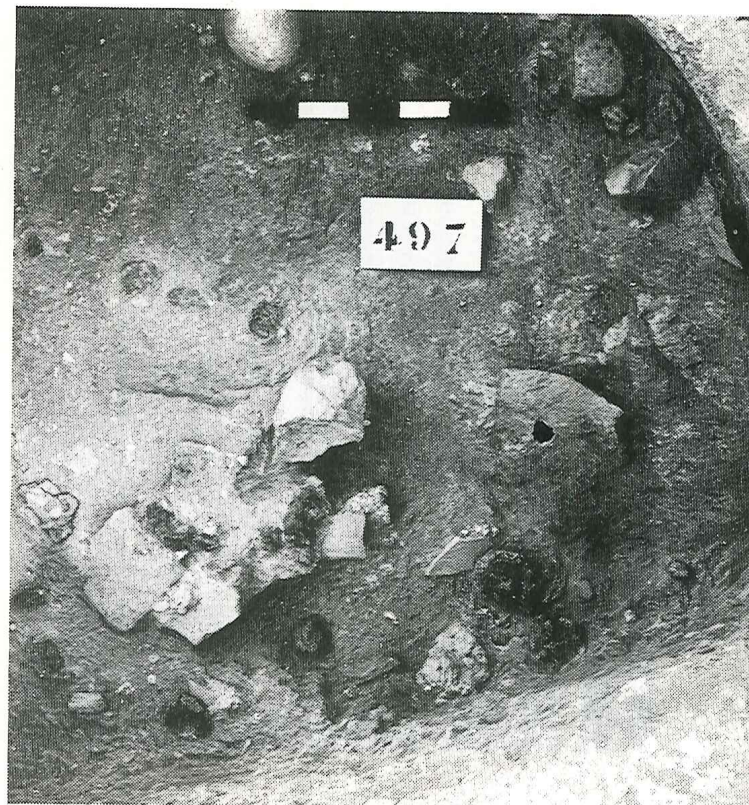
1. Abu Ḥamid: Middle levels; plano-convex mud brick wall.



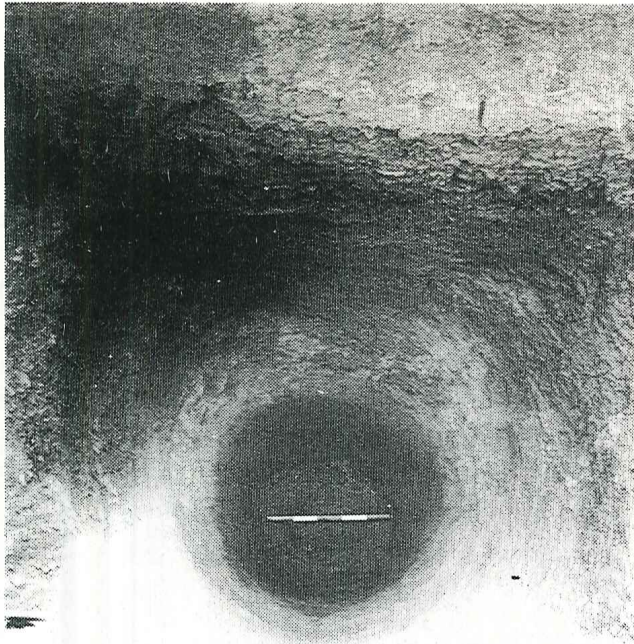
2. Abu Ḥamid: Middle levels; plano-convex mud brick wall.



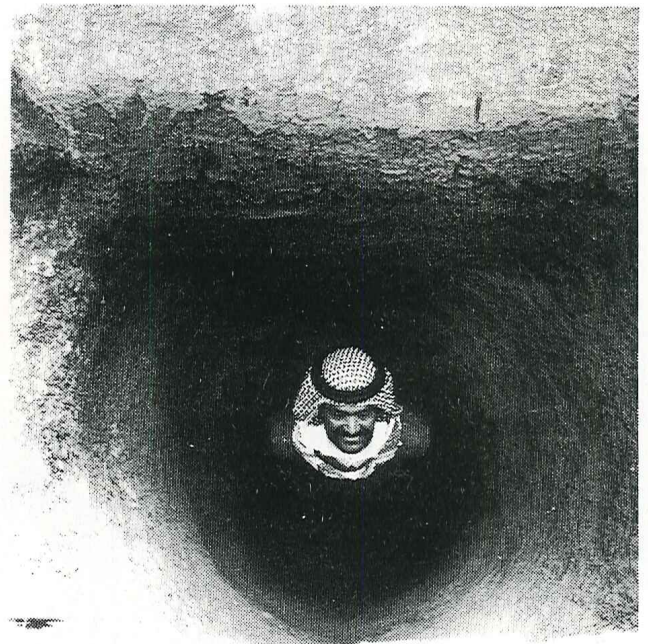
3. Abu Ḥamid: Middle levels; pit with a pottery churn.



4. Abu Ḥamid: Bottom levels; pit with finished and unfinished clay figurines, and lumps of clay.



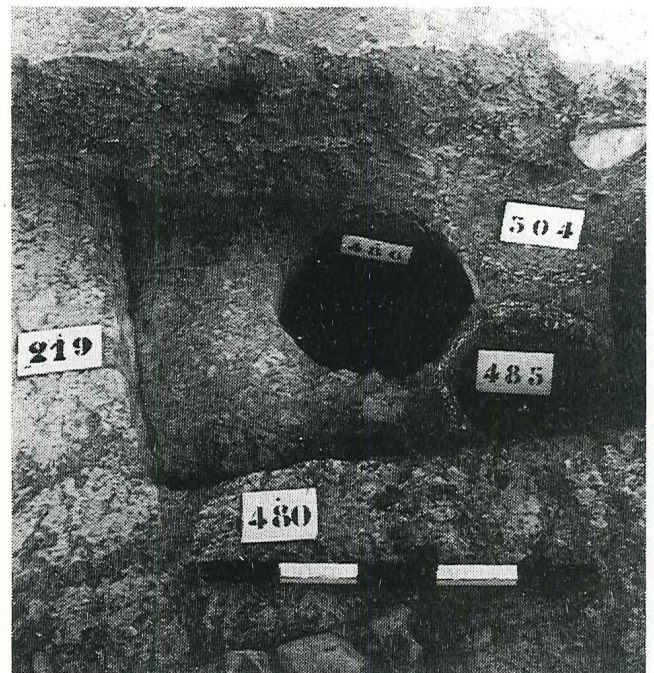
1. Abu Ḥamid: Northern sector, bottom level; large pit.



2. Abu Ḥamid: Northern sector, bottom level; large pit.



3. Abu Ḥamid: gypsum lined basin.



4. Abu Ḥamid: gypsum lined basins.