



Bulletin du Centre de recherche français à Jérusalem

1 | 1997
Varia

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Electronic version

URL: <http://journals.openedition.org/bcrfj/5162>

ISSN: 2075-5287

Publisher

Centre de recherche français de Jérusalem

Printed version

Date of publication: 15 October 1997

Number of pages: 72-82

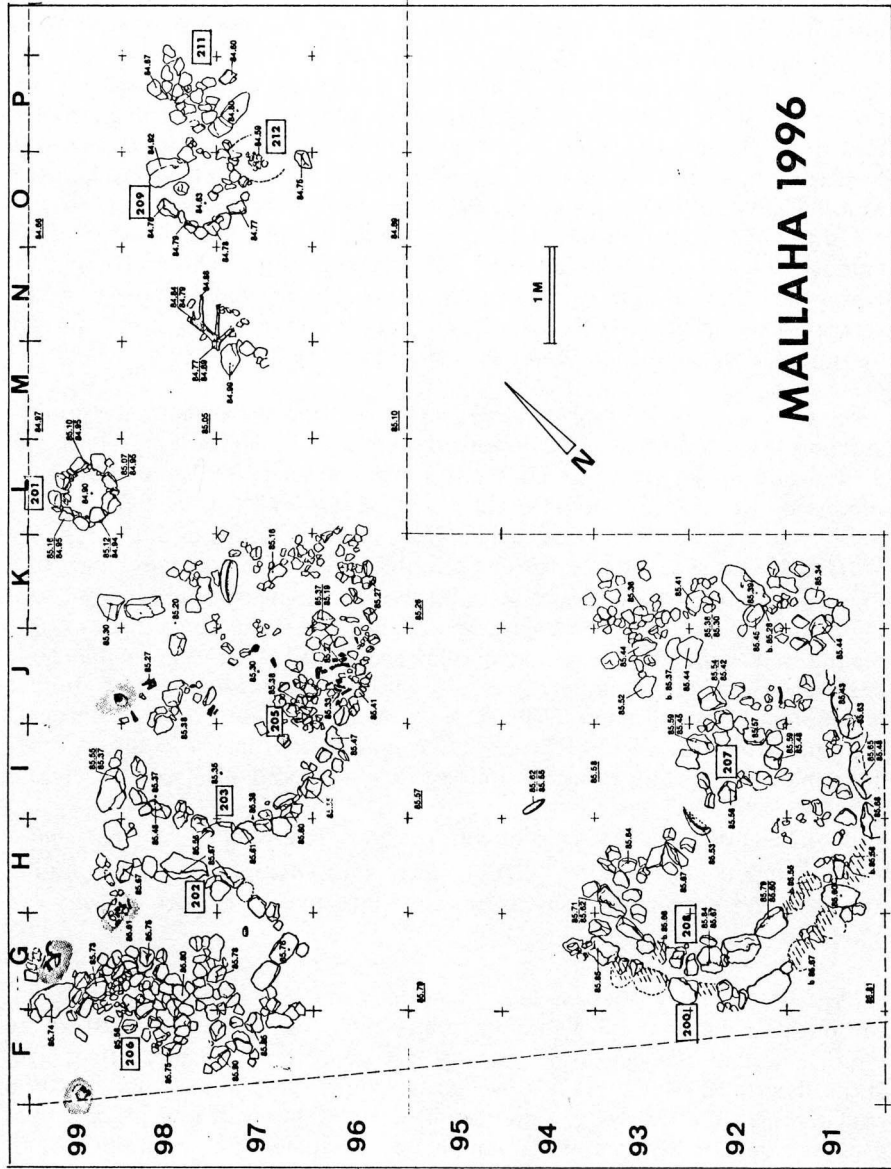
Electronic reference

François R. Valla and Hamoudi Khalaily, « The First Sedentary Peoples in Israel », *Bulletin du Centre de recherche français à Jérusalem* [Online], 1 | 1997, Online since 07 July 2008, connection on 19 April 2019. URL : <http://journals.openedition.org/bcrfj/5162>

THE FIRST SEDENTARY PEOPLES IN ISRAEL
MALLAHA (EYNAN) 1996

A seven weeks excavation was carried out from July 15 to August 31 on the Natufian site of Mallaha (Eynan) [12,500-10,200 BP]. This work was conducted in cooperation with the Israel Antiquities Authority, the French Research Center in Jerusalem (CNRS-DGRCST) and the Laboratory of Prehistoric Ethnology (URA 275) of the CNRS (Paris). It was supervised by Brian Boyd (Cambridge University), Agnes El-Maleh (École Normale Supérieure, Paris) and Bruno Leger (Paris). Twenty five students, French, English, German and American, participated in the dig, assuring a constant presence of fifteen to twenty people. The team was housed in the Kibbutz Gadot. A magnetic survey conducted by Sonia Yudkis (Israel Antiquities Authority) had prepared the work. Most of the financing was provided by the DGRCST of the French Ministry of Foreign Affairs (Paris). The team also benefited from the support of the Israel Antiquities Authority, of the CRFJ and of the Israel Exploration Society. The active kindness of the personnel of *Mekorot* at Mallaha-Eynan never lacked.

The neolithization, that is, the passage of hunter-gatherer societies to the food production, began in the Old World more than 12,000 years ago (uncalibrated C14 date). It is a complicated phenomenon that seems to have been initiated for the first time in the Levant where it develops over several millenia. One can distinguish today three major stages. The first is marked by a strong tendency toward sedentary life that flourished mostly in the Carmel and in the Galilee during the Natufian period (12,500-10,200 BP). The second corresponds to the Khiamian and pre-ceramic Neolithic A (PPNA) (10,200-9,200). This is considered to be the time when cereals (wheat, barley) and certain pulses (peas, lentils) were domesticated in the Damascus basin and the Jordan valley. The domestication, that is, being in charge of animals such as goats and sheep, would come later. It is still debated whether it is local or it has been introduced from the North.



The Natufian period thus corresponds to the first stage of a phenomenon which would transform life styles and lead, in a few millenia, to the first Mesopotamian cities. Mallaha (Eynan), known since 1954, is one of the best sites available for this period. Nonetheless, it has only been subject to some ten seasons of excavation, first conducted by J. Perrot, then J. Perrot and Monique Lechevallier, then both of them along with F. Valla, for the French Research Center in Jerusalem. Its importance stems both from the thickness of the deposits which preserve a long sequence from the early Natufian to the final Natufian, and from the state of conservation of the associated constructions and structures (post holes, hearths, pits) which allow in certain cases exceptional palethnological observations. It thus offers the rare opportunity to cross diachronically and synchronically, that is, to observe at the same place the behaviors of the prehistoric people and the manner in which they changed during perhaps one millenium. All of this occurred at a particularly sensitive moment in the history of humankind.

This is why it seemed necessary to renew the excavation, after almost twenty years of interruption. Our aims are multiple. The stratigraphy must be refined to the point of microstratigraphy, in order to shed light on the formation of deposits. In order to better understand behaviors at the dawn of the neolithization, one must recognize the extent of the site. Based on the approximately 200 m² excavated to date, hypotheses have been elaborated upon regarding the organization of the “village” in the successive phases of its occupation; expanding the dig will enable testing of the hypotheses. One must systematically explore everything that the site could have preserved concerning life-style, such as remains of floors, hearths, burials, etc... The analysis methods have enormously improved in this domain in the last years: it is certain that they will be beneficial. Furthermore, new approaches of the various categories of material are available which tend to document the technical habits and the ways of doing, as much in terms of the manufacture of the tools as of their use. These approaches include: searching for the sources of the raw materials, studies of the techniques and of the methods of debitage (flint, bone), analyses of use-wear and of the preserved residues (flint, basalt, bone). The changes in the fauna, and thus in hunting, can be of great interest at the dawn of neolithization. In addition, one must systematically search for the remains of the flora, macroscopic (but they are rare) and microscopic (the pollen, the phytoliths), that can yield information on the oscillations of the climate, on the foodways, even on the technological uses of plants.

This season, the problem of the extent of the site was approached, but for the most part we have demonstrated the existence of an architecture that was unknown to the last stage of the installation, on the rocky layer (“cailloutis”) (IB) that corresponds to the final Natufian. This unexpected discovery

contributes filling in the gap which exists in the Mediterranean zone of the Levant between late Natufian architecture and the constructions of the PPNA. The set of materials collected, very abundant but whose exploitation will demand time, should serve to shed light on the final Natufian, an obscure time in the Carmel and the Galilee where it seems like sedentary processes backtrack at the same time as the region loses its role of the “center” that it seemed to have played until then.

The Extent of the Site

An open-air site, and first Natufian site on which a developed architecture had been identified, Mallaha (Eynan) is known for the importance of its stratigraphy that levels on about 3 m and covers the early (levels 2-3-4), late (level IC) and final (level IB) phases of the culture. Nonetheless, the exact extension of the establishment remains undetermined. Towards the north, it was destroyed in 1954 on the occasion of the work resulting from the “exploitation” of the neighboring spring. It can hardly extend on the west where the bedrock crops out at some thirty meters from the zone being excavated. But towards the south-west, the south and the east, a considerable surface may have been colonized. The presence, in the zone under study, of a layer of pebbles, about 0.5 to 1 m thick, which contains a rich industry of the final Natufian and which perhaps results from a landslide, suggests that at least at this period the occupation extended upward, from where the sediments have slipped, covering the deposits of the late Natufian.

A systematic survey on the surface is possible but could not be conducted this year. It should give indications on the limit of the zone where chipped flints and fauna are found. It is, however, more important to define, if possible, the zone of habitation. We attempted this search with the magnetic survey of Sonia Yudkis. The results suggest that houses are still found at some fifteen meters east of the dig. A small test pit of 3 m² in the O/80-81 and P/81 meters showed that the layer of pebbles extends until there. The presence of constructions on the “cailloutis” is possible but the narrow test pit does not enable confirmation of this. Rather than extending the test pit we thought it temporally preferable to be satisfied with these indications and to concentrate our effort on the main excavation area in order to give body to the new informations it yielded.

The IB layer and the final Natufian structures

A zone of about 90 m² has been opened adjacent to the south-east of the earlier excavations. The surface uncovered at Mallaha is now approximately 300 m² in one piece.

Beneath the surface layer, the top of the layer IB appears as a dense “cailloutis” in which the elements relatively calibrated are 7 to 10 cm long. It

has a north-east slope of 10 to 15 cm for one meter. In the F-L/91-100 meters, one can distinguish several curvilinear (200, 201, etc.) constructions indicated by alignments of stones larger than the host “cailloutis” around it. Other structures (200-208, 203) are indicated by a surface filling either poorer in stones than the “cailloutis”, or are characterized by pebbles of smaller dimensions. In the case of Structures 200-208, the filling seemed also grayer than the surrounding sediment. The M-U/96-99 meters did not reveal any obvious structure. One could, however, recognize a set of massive stones in M/97 and two large blocks not far from each other, one standing vertically (O/98) and one laying down (P/98), which could indicate structures. Downward, the “cailloutis” became increasingly thicker. It included on the surface considerable blocks but without coherent organization. In U/96-97 it was disturbed with modern inclusions.

Structure 201 (L/99 meter). It is a circle of stones of approximately 80 cm exterior and 60 cm interior diameter. At the top, the crown results from the assembly of 9 main blocks in limestone, each reaching almost twenty centimeters in length. Several of these blocks are cracked *in situ*. Displayed more or less vertically, depending on the case, they constitute the wall of a small pit which has about fifteen centimeters in depth. Under some of these blocks, the wall seems to have been built of small stones intentionally placed. In other parts, there is no obvious limit. In addition, the floor is not built up.

The filling is constituted of homogeneous sediment similar to the surrounding silt and in which one cannot distinguish any stratigraphy. This sediment covers numerous stones of 7 to 8 cm long, especially of limestone, but also fragments of basalt which include at least two small tiles. Of particular interest are small blocks which are peeling away into gray or white powder, that the excavator describes as grouped one on top of the other, appearing transformed, and creating irregular heaps like stalagmites. These stones, as well as the gray color of the concretions present under the other blocks, suggest that the structure was associated with the use of fire. Neither the flint nor the fauna are abundant. There are no human bones.

Structure 203 (I.J.K/96-98 meters). The study of this structure has been given to Nicolas Samuelian who made some of the following observations. The structure is dug in the layer IB. It is limited by an arch that corresponds to a circle of roughly 3.5 m in diameter, and open to the north. The western extremity is preserved. It is less obvious for the eastern extremity. The wall of the structure was bordered at the bottom of the arch by two rows of limestone rocks, of 15 to 20 cm long, with the upper row regularly found fallen or displaced. Towards the east, stones of this size seem to have been placed above

smaller pebbles. Some of them have fallen in the structure; they crushed the abandoned objects on the probable floor of the structure. The extremity of the wall is not, however, absolutely clear. An accumulation of blocks (Structure 210) might suggest that the stones had fallen, but their concentrated display, almost in a heap, does not indicate the simple tumbling induced by natural forces. Furthermore, an alignment of small blocks in the elongation of the well-identified wall can be seen either as the lower row of the construction or as a “wall-effect” (the stones would have come to hit against the step created by the continuation of the pit in which the structure had been installed). One hopes to be able to offer more precise details on this question next year. The western extremity was indicated by a block of 40 to 50 cm in length. The construction does not seem to have been circular but rather largely open. There are not more than thirty centimeters between the top of the stones and the probable floor, which is slightly sloping. In terms of its dimensions as well as from the excavation that it required, it is quite a modest installation.

The filling stood out because of the relative scarcity of the pebbles. These were even more scattered at the probable level of the floor which was indicated by various significant objects and a small structure. However, there were no cumbersome wastes. The largest ones are not more than about ten centimeters in their maximum dimension. They are rather towards the opening of the structure. The bottom, in contrast, is remarkably lacking these wastes. On the floor or associated with Structure 205, were detected several basalt objects: a grinder, some pestles and two grinding stone fragments originating probably from the same tool. Other basalt fragments lacking obvious traces of work were also found on the floor. Outside, just in front of the structure, a small grinder in consolidated marine sandstone (Kurkar) was observed as well as a fragment of a large basalt mortar, more or less vertical and left in place. Flintknapping is represented by some large tools in chert, a coarse-grained material: a burin-denticulate, an endscraper, a notch, etc. No bone tools can be attributed with certainty to the floor. The fauna is not abundant either, but it stands out because of some remains that draw attention. Found here are two metapodial extremities (pulleys) and one fragment of antler from Deer of Mesopotamia; a stag's head, a mandible and long bones of a doe; several fragments of wild boars' mandibles, gazelle remains; and fragments of perhaps the skull of a small ox. A certain number of these bones were gathered at the eastern extremity of the construction.

Structure 205 is implanted at the level where Wall 203 ceases to be well preserved. It is a subterranean structure that measures about 40 cm of in exterior diameter. It associates several blocks of limestone, of about fifteen centimeters long, placed more or less vertically to some smaller pebbles and to several

basalt objects. It does not seem to have been very deep (7 to 8 cm). At the bottom of the structure, small yellowish cobbles were discovered as some others were also found adjacent to an assemblage of bones. The understanding of this structure remains uncertain because several of its elements seem displaced. It could be constructed by a post hole. The presence of another set of stones that could be connected with it on the west appears to support this interpretation (one would then have two symmetrical builds-up) but the possible organization of these stones is unclear.

How does one understand this set? Structure 203 appears as a light construction if it is compared to the large “shelters” of the early Natufian or even to those of the late Natufian. Rather than of these impressive constructions, it is reminiscent of a “tent bottom”. There is no obvious hearth but the ash deposits seem not to have been preserved. The use of fire is attested for by a spread of heated clay fragments close to Structure 210. Do these stones indicate the remnants of a hearth? Or must Structure 201 nearby be understood as a hearth associated to Structure 203? The small dimensions of Structure 203 could indicate a specialized activity location. The detailed analysis of the material discarded on the floor does not enable a definite conclusion at the present stage. As always, except for the cumbersome remains, one cannot separate what belongs to the floor itself from the small material linked to the fillings. Nonetheless, the variety of objects found, grinding material, fauna, etc., does not indicate a repertoire of activity that would be very limited.

Structures 202 and 206. Structure 202 was formed of an ogival arch constructed of large stones at the surface of the “cailloutis”. It is almost adjacent to Structure 203, at the south. The blocks employed are around 30 cm in length. They are vertical. The base of these blocks has not been reached. Therefore it is unknown whether or not they occur in several rows. The structure seems to be closed on the north contrary to 203 but it gets lost towards the north-west. Its diameter seems to have been around 3 m.

In its filling, a set of relatively voluminous blocks (15-20 cm) has an elongated form (1 m x 0,30 m). The present state of the dig does not allow us to know if this grouping is intentional or not.

Leaning against these blocks, still in the filling of 202, an arch of stones of approximately 1 m of diameter, open to the south-west, has been uncovered (Structure 206). This construction is made of a series of subvertical blocks of limestone, 15-20 cm high. Above this, a second row uses blocks slightly smaller and positioned more or less vertically. A massive block indicates the extremity of the structure to the west. The filling, under a layer of stones quite similar to the “cailloutis” IB, is characterized by the presence of little stones in a grayish

sediment. Flint and fauna are present here but don't exhibit any obvious concentration. Several blocks which have apparently fallen from the upper row were found here. Some seem to have slipped along the vertical stones, indicating that it wasn't filled in during the occupation of the structure, but rather this occurred following the abandonment. This situation makes it difficult to comprehend the huge stones that are found at the bottom of the structure. They do not form a coherent stone building. Have they fallen? Are some of them part of the construction? Under these stones one finds again the "cailloutis" IB. The meaning of this largely open structure remains obscure for the time being, as well as its relation with the neighboring sets. The human bones seem to be abundant nearby. Are they intentionally associated with it? Next year's excavation should bring additional information.

Structures 200, 208, 207 (meters F to K/91-94). These structures are set one on top of the other or fitted into each other. They are found at about 3 m east of the former ones. It seems like 207 (in I/92-93) is the most recent one. It is an oval-shaped crown built from blocks of twenty centimeters or so. It measures approximately 1 x 0,8 m of exterior diameter and seems laid on the surrounding brown-red sediment. Contrary to the other structures described, it would thus not be subterranean. It would have been established slightly above the floors of the former structures which appear to correspond to sediments grayer than the ones with which it is associated.

Structure 208 is an arch of rather large stones (20-30 cm in length) recognized over more than 2 m. This arch corresponds to a circle of approximately 3 to 3.5 m in diameter. Even though the excavation of the wall is still unfinished, it is doubtful that it would continue towards the west, where some displaced stones, probably fallen, could have belonged to it. It is not clear either to which extent it continued to the east. This structure, embedded in Structure 200, seems to be but a restoration on a smaller scale.

Its filling was also perceptible on the top by an accumulation of rather small pebbles. Shades in the color of the soil were also visible and could lead one to guess the presence of a pit, which a detailed investigation did not confirm. Beneath the surface filling, the pebbles become rarer and tend to disappear near the floors (or at their probable level). At this level, the sediment becomes clearly grayer. A large basalt mortar tumbled toward the center of the structure could have been fixed in the floor.

Structure 200 appears as a half-circle of limestone rocks of at least 4 m in diameter, made of more massive blocks than Structure 208. There is little to say of it in the present state of the dig because it has not yet been studied in itself.

On a provisional basis, Structures 200 and 208 can be understood as “habitat structures”. This intentionally vague term emphasizes the difficulty in finding a vocabulary that does not impose on the prehistoric data connotations accumulated since by millenia of sedentary life.

An antler of a deer. The search for a possible structure in M-N/97-98 did not lead to the expected result. It led, however, to the discovery of a large cervidean antler, probably *dama mesopotamica*. It is not an antler that had fallen off; the animal was therefore killed. The branch is broken above the third tine. The extremity of the branch of the eye is also missing. The other ones are broken *in situ*. In the present state of the excavation, nothing enables us to see in this object an intentional deposit. One can only observe the rarity of this type of very large remain and the absence of traces of technical activity upon it.

Structures 209, 211 and 212. Further down on the slope (O-P/97-98 meters), small structures have been identified: an arch of stones; perhaps a small pit or basin; and a group of pebbles of medium dimension. These structures remain completely enigmatic for now.

Burials. No burial has been excavated this year. Isolated human remains have however been found several times. Most of them probably testify to the destruction of burials when the soil slipped and set the “cailloutis”. Some bones (not collected) might correspond to tombs that one hopes to uncover in good condition on the 1997 excavation with the help of Fanny Bocquentin. They are found in F/99 (skull), G/99 (leg), G-H/99 (facial) and J/98-99 (skull).

The material.

No description of the material is relevant as long as the residue of the sifting has not been sorted out, a slow operation that cannot be carried out simultaneously with excavation. Only some very limited and preliminary observations shall therefore be presented.

The **flint industry** seems characteristic of the final Natufian. The origin of the nodules is being studied by Christophe Delage. The debitage that Boris Valentin is analyzing does not show signs of regularity. Among the tools there are very small armatures of projectiles (lunates that measure approximately 10 mm in length, and backed bladelets), as well as some heavy duty tools (10 to 15 cm). It might perhaps be possible to single out the material from the filling of the structures, which one part at least seems fresh, from the one slightly rolled that is associated with the “cailloutis”. The microliths do not abound. They should appear in the sorting out of the sifting. Only two arrowheads have

been recognized: a roughly-made point with the beginning of a tip obtained by two opposed notches; and a fragment of a notched point with tip (Helwan point) which is most probably from a later period than the rest of the material. For the moment, there is no El Khiam point (notched point with truncated base).

The fauna is being studied by Rivka Rabinovitch, Eitan Tchernov and Henk Mienis. It is abundant but it is too early to give even a provisional list of the species represented, and, *a fortiori*, an idea of the relative frequency of the hunted animals. We mentioned above the presence of the gazelle, the boar, Cervidae and the ox. The presence of carnivores (including the fox, the rabbit, which was probably trapped, and the earth Turtle) can also be mentioned. In the aquatic environment, one could find fresh-water crabs whose claws are easily identifiable. The Natufian people often caught fish from the Houle Lake. They searched for water birds. Among the shells, *Melanopsis* in great numbers and some *Unios* (sometimes perforated) are found, that could have been used as food or as ornament. The dentalia which originate in the Mediterranean Sea, at some forty kilometers from the site, are very rare. They sometimes are found in the form of small annular pearls.

Bone-working is present but the objects are not as numerous. Their representation will probably grow with the sorting out of the sifting. The tools that can be identified are mostly points that are small and not very robust. Several become extremely thin at the end. There is a fragment of a large spatula. A curved hook, unfortunately broken but uncontested, is the first object of this type at Mallaha. It finds its place in a context where all sorts of fishing must have been practiced. A curious fragment is reminiscent of a large and flat harpoon with lateral barbed-like edges and two perforations. But is it really a harpoon? Among the ornamental objects, exists an extremity of the perforated knuckle-bone of a gazelle and a pendant whose form is derived from that of a deer's antler.

The non-siliceous rock interested the Natufian people of Mallaha. Basalt is abundant. In principle, it is not accessible in the immediate surroundings of the site and it must have been brought there. This is why one endeavours to collect all its fragments. These are varied regarding their nature: compact basalt or more or less loose, pumice (rare); and their form: blocks, pebbles, and flat stones. The larger flakes which could testify to the *in situ* knapping of this material are rare, but small ones are found in the sifting process. A close examination of the surfaces is necessary in order to determine with certainty the used objects. At first glance, tools are not, by far, the majority. Among these, a large pestle (approximately 25 cm in length) was observed on the surface of the

“cailloutis”. Yet, it is the presence of small pestles or grinders, that is striking. In addition, the existence of several fragments of large grinding slabs, some associated with the floor of the structures, is nothing but significant. It anticipates what is observed in the PPNA of Nahal Oren, of Gilgal and of Netiv Hagedud, where cupmarked stones are often associated with the floor of the houses. The stone ornament is represented by several small annular pearls in different color materials (red, green, white). There is also an elongated pearl in a green stone. The importance of these ornaments comes from their novelty in comparison to the early Natufian.

The “cailloutis” includes relatively frequently limestone pebbles. Most have a blueish color undoubtedly acquired through heating. Some are flaked and might have been used as weights for fishing nets.

A certain number of stone objects bear incisions. An ovoid pebble in soft limestone has in its middle a slight groove on all its edges. A fragment of a polished black stone tool is marked with two converging incisions on one of its sides (convex). The other side is flat. A small elongated pebble of hard limestone bears a series of fine parallel incisions on both sides, seeming almost as if one had cut something while leaning on it. Another pebble, fragmentary, carries a deep incision probably in its middle. In this matter, the most remarkable stone object is a pebble in soft limestone, unfortunately very eroded, which seems to have displayed a complicated motif. At the “top”, a horizontal incision delimits more or less a kind of “head”. Each side is divided in its middle by a vertical incision and marked by a series of horizontal lines. One has two convergent oblique lines that look like an arm. The other seems to have been decorated moreover by a series of oblique lines finely engraved. Two small chips were extracted from the base. This figurine recalls two similar pebbles discovered during the very first seasons of excavation. It inscribes itself in the artistic tradition of the Natufian period which favored plastic art over graphics.

Conclusion

This first season of a new series of excavations at Mallaha is very rich in information. Even though it is not yet possible to determine the extent of the site, it is obvious that it is considerable. The 2,000 m² suggested by J. Perrot could appear as a minimum estimation. It remains to be seen if the site is built on this entire surface, if the inhabited zone moved during the occupation and how it was organized throughout its different stages. Answering these questions would entail work on a large scale, in a long-term project.

The discovery of a habitat built on the “cailloutis” IB, that is, in a very late phase of the Natufian period defined as “final Natufian”, brings an element of information of considerable interest. It brings up in new terms the question of

the life-style at Mallaha during this period. Until now, only one small structure very similar to 201 and some burials were known on this horizon.

The architecture of the early Natufian , the first of importance in the Levant, is known at certain sites (El Wad, Jericho (?), Upper Besor, but mainly at Hayonim and Wadi Hammeh 27) among which Mallaha stands out by the quality of its constructions. The architecture of the late Natufian can be appreciated at Nahal Oren, Rosh Cin, Hayonim Terrace, and, once again, at Mallaha. The structures mentioned by A. Betts in the sites of the Jordanian desert are still not very well known. To date, no architecture of the final Natufian had been documented. On this chronological horizon, the only known structures were Harifian structures of the Negev (Abou Salem, Ramat Harif, etc.), making it seem as if the Mediterranean region of the Levant had then abandoned its former architectural tradition old of more than a millenium. On The horizon of the post-Natufian period, the meager remains of Mureybet (a clay wall containing imprinted wood stems) and more modest vestiges of the Proto-Neolithic Jericho (floors limited by clay balls of the dimension of cricket balls) can be mentioned. After this, the tower of Jericho and the round houses that accompanied it, the houses of Gilgal, of Netiv Hagedud, of Hatoula and of Dharat revive the ancient habits. On the Euphrates River and in Iraq, Mureybet, Jerf el-Ahmar, Nemrik 9, Kermez Dere and MI'afaat develop their own practices, probably from the same source.

The architecture of the layer IBof Mallaha demonstrates that the ways of doing anciently experienced in the Mediterranean region of the Levant were not lost at the end of the Natufian period. It is obvious that the traditions were characterized by a slow retreat. This is obvious when one compares the structures of the early Natufian phase of Mallaha, that is one meter-thick subterranean "houses" with 6 to 7 m in diameter, with those of the late Natufian phase, which have generally not more than 3 to 4 m in diameter and are rarely dug into the ground on more than 70 cm, and finally compared with those that we just discovered in the final Natufian period. This backtracking is even more pronounced with the huts of Proto-Neolithic Jericho. In contrast, the architecture of Gilgal, which is relatively early in the PPNA, is not very different from that of Mallaha IB, despite its own character and the new layout due to the modifications in the lifestyle with the intensified use of cereals. From this point of view, the grinding slabs of Mallaha are rather surprising. In the Natufian tradition of the southern Levant, the most common grinding material is hollow. There are relatively deep mortars, of which the most spectacular examples are the large basalt basins of Mallaha and of Hayonim cave (early Natufian), the "stone-pipes" of Nahal Oren and the "bed-rock mortars" of Rosh Horesha, Saflulim, etc. (late Natufian). This tradition continues in the PPNA where the objects become, however, less hollow. These are cupmarked stones

that are already found in the Harifian period and whose use is perpetuated. The flat objects seem to rather originate from a northern tradition. They prevail at Abu Hureyra on the Euphrates River. Does their presence in the final Natufian period of Mallaha suggest influences from this region? From the viewpoint of the evolution of practices, it is relevant that one does not find the basins in a functional position in the houses until the late Natufian included (with the only exception of Shelter 26 of Mallaha). The cupmarked stones, conversely, are fixed on the floor of the Harifian houses and this manner of doing is maintained in the PPNA. A change in the habits may therefore be proven, which is even more interesting since it probably relates to the use of the cereals, a major factor in the transformations which characterize the PPNA.

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