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► To cite this version:

François Valla, Hamoudi Khalaily, Nicolas Samuelian, Fanny Bocquentin. What Happened in the Final Natufian?. Journal of the Israel prehistoric society, 2010, 40, pp.131-148. hal-02014803

HAL Id: hal-02014803

<https://hal.parisnanterre.fr/hal-02014803>

Submitted on 11 Feb 2019

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What Happened in the Final Natufian?

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The end of the Natufian culture and the rise of the PPNA horizon are still obscure. This is evidenced by the discussions prompted by the terms “Final Natufian” and “Khiamian” (Bar-Yosef 1988, Garfinkel and Nadel 1989, Nadel 1990). This situation is not new. Its origin can be traced in the pioneering works of René Neuville and Dorothy Garrod. The debate stems from the problematic stratigraphy at El Khiam in the Judean Desert where Neuville (1934) claimed he could identify four phases (I to IV according to his terminology) in the Natufian culture. In his view, his phases I and II were equivalent to the Early and Late Natufian as recognized by Garrod (1932) during her excavations at Shukba and El Wad. They were followed by the otherwise unknown phases III and IV. To Neuville’s mind these two new episodes had the advantage to bridge the gap between what he considered to be a “Mesolithic” phenomenon – the Natufian – and the following “Eneolithic”, when metal and pottery were in use. The confusion was made possible by the compacted chronology then accepted, according to which the Natufian culture could not possibly be dated earlier than the fifth millenium B.C. (Garrod *ibidem*). It was also fed by the assumption that there was no true Neolithic in the Levant. This perception, based on a narrow definition of the Neolithic as an “Age of the polished stone”, prevented Neuville from correctly understanding the Tahunian industry described by Buzy (1928).

If this record is correct, three main difficulties contributed to confusing the situation. First: a basic conceptual misunderstanding about what the sequence should be, second: the lack of any good stratified site in the field, third: the poor chronological control on the available finds. These problems were partly cleared up by subsequent work. Neuville's theoretical framework became obsolete in the Near East due to the impact of the thinking of Childe and Braidwood who centered the identification of the "Neolithic" on economic aspects of human life. New observations at El Khiam by Perrot (in Neuville 1952) and Echegaray (1966), as well as a revision of the finds by Bar-Yosef (1970), led to the conclusion that the sharply sloping deposits at El Khiam were probably not in-situ and should not be used as a type for a stratigraphic sequence. Meanwhile, works by Garstang, Kenyon and others accumulated new data. Finally, the chronological construct proved untenable when C¹⁴ dating was introduced. After a period when confusion prevailed and any subdivision in the Natufian culture was rejected together with the term "Khiamian" (suggested by Echegaray for assemblages following the Natufian culture and including early arrowheads) a new terminology emerged: the term Khiamian was revived by J.Crowfoot-Payne (1976) and it was proposed to return to a partition of the Natufian culture in two phases, Early and Late, similar to those of Garrod with some modifications (Bar-Yosef and Valla 1979).

As research continued, further observations at Eynan (Ain Mallaha) and analyses of lithic assemblages from Nahal Oren (Higgs and Noy excavations) and Fazael IV prompted one of us to identify a third phase in the Natufian. This stage – the Final Natufian – supposedly chronologically followed the Early and Late phases now currently accepted (Valla 1981a, 1984, 1987, 1995). The basis for this suggestion was the fact that, at Eynan, a stratigraphically clearly separate layer (labelled Ib) was comprised of a flint industry distinctive from Early and Late Natufian assemblages as identified at the site itself and elsewhere. Moreover, the very small lunates typical for this microlithic industry were not an isolated phenomenon. They could be observed in the aforementioned sites as well as at Mureybet IA (Cauvin 1977) and in the Harifian toolkit in the Negev (Marks and Scott 1976, Scott 1977, Goring-Morris 1987, 1991, Phillips 1977). Stratigraphic and chronological control, when possible, confirmed the terminal position in the Natufian sequence of the layers involved.

Nevertheless the Final Natufian suggestion was not received positively by many researchers. At least five important objections could be raised against it. First: there was no proof for Eynan layer Ib to be very late in the Natufian sequence. Helwan retouch on flint tools, a feature commonly associated with the Early phase of the Natufian, could still be found in that layer. Arguably, this could indicate that the layer was not so "final". Second: C¹⁴ control on the chronological position of the Final Natufian was very poor. Not taking into account the well dated Harifian in the Negev, only Mureybet had a set of more or less acceptable dates. Third: the small size of the lunates, which was a shared feature of the proposed Final Natufian assemblages, was perhaps not significant. It was easy to show that

there was no uniform decrease in the length of lunates during the Natufian era in the large area where this culture could be traced (Henry 1981). Fourth: no in-situ deposit could be assigned to the Final Natufian besides Mureybet IA. At Eynan, layer Ib was supposed to result from a “flash flood” (Perrot 1966: 439). Also, the analyzed sample from Nahal Oren was taken from deposits not less sloping than those at El Khiam and could not be confidently relied upon. Fifth: due to this situation, the Final Natufian, if accepted, stood as a cultural entity lacking any of the economic and other features prehistorians had become used to taking into account when analysing the rise of the Neolithic in the Near-East after the work of Childe and Braidwood. As such, it had but little value, if any, in picturing the Natufian phenomenon.

Some of these objections were clearly rooted in the experience gained in discussing Neuville’s misconceptions. Nevertheless, as time passed, part of them tended to loose their virulence. For example, whenever a set of very small Natufian lunates was found, researchers classified them “at the end of the (Late Natufian) sequence” (Henry 1995: 326), implicitly acknowledging the chronological value of the length criteria (see also Grosman *et al.* 1999). Moreover, laboratory excavation of a block of sediment cut at the base of the Natufian graveyard during the Stekelis and Yisraeli field work at Nahal Oren (Stekelis and Yisraeli 1963) found a flint assemblage – admittedly small –, which fitted the description of the Final Natufian (Nadel *et al.* 1997). This finding was potentially very significant since it pointed to a Final Natufian age for the nearby fireplace apparently earlier than the graves. If so, an in-situ Final Natufian deposit was present, along with a set of data with cultural information beyond flint. Today, there are hints of Final Natufian deposits at six sites spread over a large area – from the Middle Euphrates valley (Mureybet IA) to Southern Jordan (Wadi Humeima) – including the Lower Jordan valley (Fazael IV), the Carmel mountains (El Wad and Nahal Oren) and the Galilee (Eynan). Among these sites, two, Mureybet and Eynan, and possibly three if Nahal Oren is added, have in-situ deposits. The aims of this paper is to report briefly about the architecture and burial customs recently uncovered at Eynan, which add to the Final Natufian the missing data, allowing comparisons with the former Early and Late Natufian episodes. We will then examine their originality compared to their earlier counterparts in order to validate, or not, the Final Natufian subdivision. A preliminary discussion will follow to introduce the data in the broader framework of changing Natufian behaviors.

FINAL NATUFIAN STRUCTURES AND GRAVES AT EYNAN

The discovery of architectural features in the layer associated with a Final Natufian industry is the most significant finding of the excavations renewed at Eynan since 1996. This finding allows us to study the transformations occurring in the architectural tradition during the Final Natufian in the “core area” of the Natufian culture. It also provides us with a new basis for analysis of possible sedentism during that period at the site. Moreover, the association of

graves with some of the uncovered buildings provides us with an opportunity to observe the development of the relationship between buildings and graves, already known from the Early and Late phases.

In the newly excavated area, the Final Natufian layer, labelled Ib, is approximately 50 cm thick. This layer is densely packed with small stones, most of them angular limestone fragments, embedded in a matrix of red-brown “silt” that still awaits thorough geological analysis. Preliminarily, due to the archaeological remains it contains, this layer can be subdivided into two sub-layers: Ib2 (lower) and Ib1 (upper). As a further refinement, it is possible to suggest some subdivisions into Ib1 since this unit includes all the structures and graves associated with the surface of the layer. From a stratigraphic point of view, this means two different things. First, that the structures and associated graves were dug from the top of layer Ib during the unknown duration of its exposure. Except for cases of superposition, it seems to us impossible to establish detailed stratigraphic correlations (or subdivisions) between these structures, which are archaeologically synchronous. Secondly, the graves were apparently dug from a subsequent deposit now supposedly eroded. For the purpose of this presentation we will tentatively (and we insist on this “tentatively”) try to separate these later graves probably posterior to the structures, from the buildings and associated burials (figure 1) Two C¹⁴ dates were obtained for the Ib2 building. These dates are 10530 ± 100 bp (GifA. 99332) and 10540 ± 90 bp (GifA. 100400) (Valladas et Tisnérat-Laborde in Valla *et al.* 2004). They fit well with the age assigned to the Final Natufian on the basis of comparisons with the flint assemblages and length of lunates from Mureybet IA and Harifian sites in the Negev altogether, five main buildings were excavated: one from Ib2 and four from Ib1. They share the same architectural characteristics. They are set in shallow pits lined on part of their circumference with blocks of limestone. These curvilinear walls never stand higher than the surface of the layer around. They are made of one row of unshaped blocks, end to end occasionally on only one course. When superstructures are probable, which is not always the case, they may have been made from light materials, possibly reeds from the nearby waterbodies (Eynan spring, the rivulet between the spring and lake Hula, the lake shore).

These buildings can be subdivided into two main groups. One of these groups is comprised of buildings we interpret as “houses”. The other group appears to be less homogeneous: it includes a variety of buildings, which share as a main common feature a lack of obvious housing facilities. In both groups, each building is associated with minor features, which may be found inside the buildings or outside and adjacent to them. These minor structures display a range of variation. Among those we are able to interpret are post holes (associated only with houses according to current evidence) and different kinds of hearth. But there is, as well, a number of minor structures that we don’t know how to interpret. Most of them we call “basins” because they are hollow and made of stones, but they lack any uniformity, either in shape (some of them are open, others are closed) or in size.

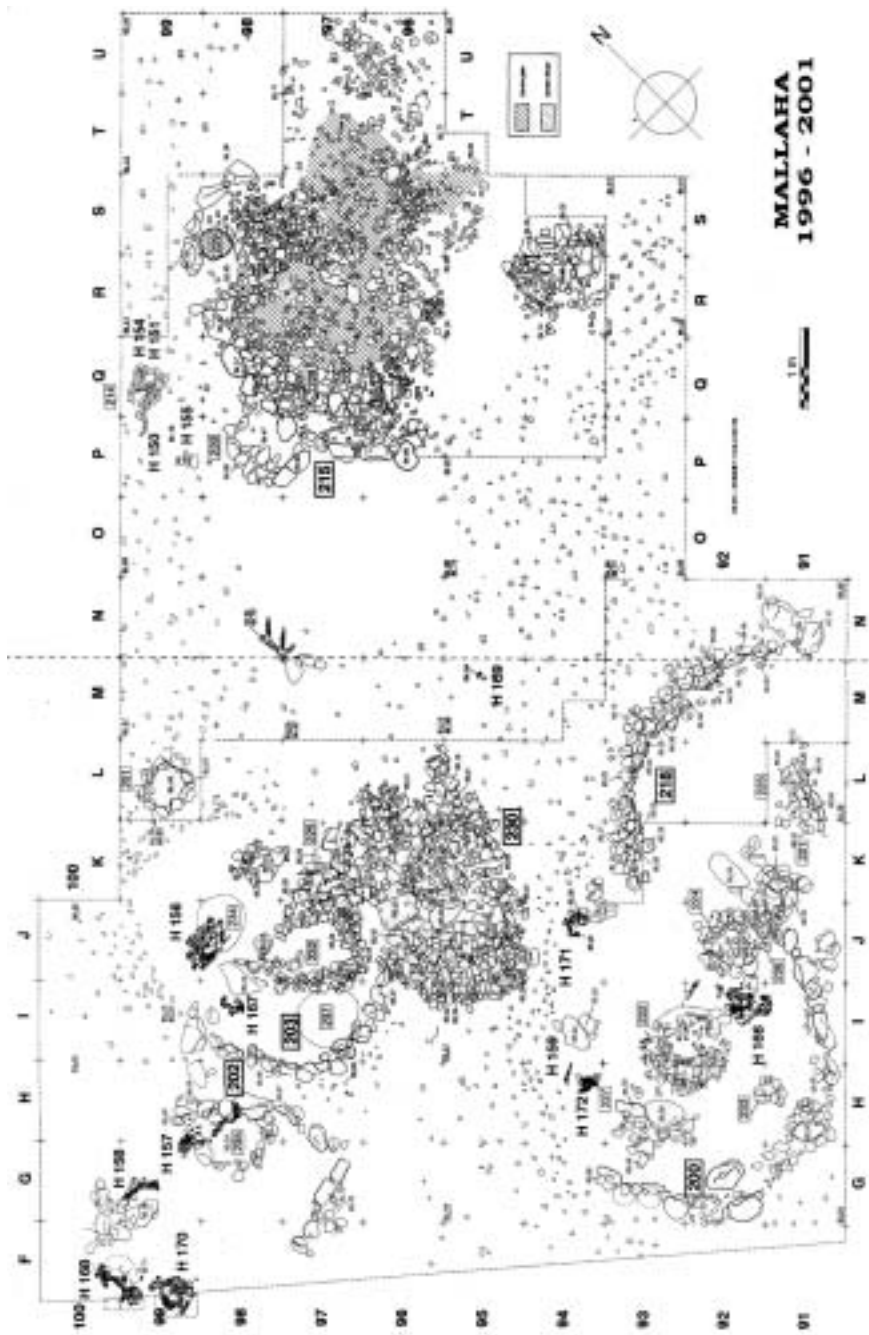


Figure 1: General map of main Final Natufian structures and graves excavated at Eynan (1996-2001). Structure 215 (Ib2) is older than structures 200, 202, 218, 230 (Ib1). Graves H.150, H.151, H.154, H.155, as well as H.168 and H.170, belong to the surface of the layer; they were excavated later than the structures mentioned above

Each of the buildings passed through a history that is recorded in a succession of floors or stages. These are evidenced by superimposed features, sometimes with interstratified graves. For example, the main house under excavation (labelled 200-208) exhibits at least three successive floors, each of which is associated with a reorganisation of the same hearth. In general, floors are not built with any coating of plaster or clay, but some of them have a kind of pavement in limited areas. They are separated with deposits only a few centimeters thick, which are never devoid of artefacts. This situation makes it difficult to expose their entire surface with absolute security but the successive arrangements of the small structures testify for the multiplicity of stages. The interstratified graves, in some cases, demonstrate that there were periods of abandonment between the reorganizations of the floors. Unfortunately, we have little control of the duration of these sequences of occupations and abandonments. From the little we know, it is apparent that some changes in the use of the buildings may have occurred during their lifetime. In one case, if our inferences are correct, a building (203) first aimed at other purposes was then turned into a house. Arguably, this may indicate that the sequences involved are more of the amplitude of months or years than days or even weeks.

According to current understanding, two of the exposed buildings (200-208 and 203) were houses. One of them (200-208) seems to keep this function for the three levels of floor exposed up to now. The other was turned into a house after a stage when the space was crowded with hearths. It then worked as a house for two successive floors. The general organizations of the houses are variations on the same schematic outline. They are set in shallow pits dug from a sloping surface; oval in general shape and lined with a stone wall only upslope, at most on half of their circumference. The associated minor structures, mainly post holes and hearths, are set on two axis: one is a line approximately joining the extremities of the stone wall and the other is perpendicular to that line in its middle point. They have several superimposed floors which do not reach 10 m² in surface.

Besides the basic characteristics shared by all of the main constructions, the buildings which are not understood as houses do not follow a single pattern. As opposed to houses, the walls of most of those we excavated are not open downslope but have a different orientation. The limits of the floors where it is not made by the wall are not so clearcut as in the case of houses. Whenever they were observed, they seem to gradually vanish. These buildings seem to have a wider size range than the houses. Finally, the surface they include is often densely occupied by minor structures which allow no place for living. Their particular history seems to be not less complicated than that of the houses, with superimposed inner structures which sometimes suggest changes in function. But, again, we have no control on the length of time involved and we believe it should be premature to enter in discussions or interpretations of these buildings as long as we don't have a full record of the sequences of their successive floors.

The equivocacy of the data can best be illustrated with two examples. In building 215 (Ib2) the latest stages involve a large hearth on top of which two big standing blocks were then erected. Clearly, our understanding will be dependant on the suggested time between these events. Another building (202, from Ib1) encompasses an elaborate hearth (an oven ?) associated with a thick layer of ash and burnt material. This hearth was later capped with a pile of cobbles in which an open “basin” was arranged. Then, a corpse (H.157) was deposited on the cobbles, between the “basin” and the outer wall, and covered with undifferentiated sediment and stones. Again, the meaning of this sequence would be very different if we understand it as a short succession of events aimed at the burial of the corpse, or if we see it as a series of non related actions ending with the opportunistic use of a pre-existing excavation to bury a dead body (the favored interpretation at the time of writing).

Final Natufian burial customs at Eynan were not totally unknown before our excavations, since some graves had been previously found on the surface of layer Ib (Perrot *et al.* 1988). But for the first time graves are excavated into the thickness of the deposit and in association with the architectural remains. Not taking into account isolated human bones scattered in the layer, the remains of seventeen individuals were recovered in the Final Natufian deposit since 1996. Of these, only one can be tentatively associated with Ib2. It should be emphasized that this figure is not definitive since it includes neither a partially excavated grave under building 200 with at least five individuals, nor a probable burial recognized at the top of layer Ib.

Each sample taken separately is relatively small, so it is not feasible to draw general conclusions. One can only note that, according to available observations, graves are not evenly dispersed. In the thickness of the layer, they are clearly related to buildings – mainly to houses. On the surface of the layer they are found in two groups of six and two individuals respectively. For all the sequence, individual burials seem to be the rule but some exceptions were recorded. (Valla *et al.* 1998 and 2004).

Graves related to buildings may often have been shallow pits, but the original depth is often difficult to ascertain because of later disturbances. At least one individual (H.156) was deposited on the floor of a house in a box of some kind without any digging. Relatively deep holes (few tens of centimeters) were observed at the surface of the layer. Primary burials are overwhelmingly predominant. One skull (H.169: probably not in a grave) has a problematic status (see below) and one newborn is still to be studied in detail (H.175). It should be mentioned as well that there are hints that the partially excavated grave under building 200 is still problematic. More analyses are needed in order to reach a conclusion about its status.

Bodies in the graves are most often (but not always) in an hypercontracted position and the space they occupy is minimal. They were sometimes bound with ties or inserted in bags. None of them wears any item of personal ornament. “Grave goods” are not totally excluded but they are very difficult to identify due to indiscriminate packing of objects in the fills. Disturbances of the bones are not exceptional. They sometimes result from human activities

as can be observed in the buildings. There, bones were cut, removed or rearranged according to needs. It is worth noting that no manipulation of the skull is evidenced. On the other hand, removal of large long bones (femur, etc.) that made problems for the builders is well attested. In this context, the finding of a large part of an isolated skull of a child on what is perhaps a floor outside of the Ib2 building, is difficult to interpret. At the moment, a conservative hypothesis would prefer to see it as the result of a mere “accident” preferably to a further testimony of the “skull removal practice” (Belfer-Cohen 1988).

The small sample at hand provides no evidence for the criteria of selection of the part of the population buried at the site. As far as we can determine, newborns, children, adolescents and adults are present. Young people are slightly under-represented, but this may be due to the small sample size. Males and females are in equal number among adults. Caries were noted on four out of six individuals, all with their set of teeth.

COMPARISONS WITH EARLY AND LATE NATUFIAN FINDS

A superficial comparison of these Final Natufian findings with the Early and Late Natufian architectures and graves as they are known from the site will suffice to emphasize some of the main general similarities and differences by which the Final Natufian appears well in the continuation of earlier traditions and yet displays its own originality. Final Natufian buildings are clearly rooted in the practice which produced the Early and Late Natufian architectures (figure 2). The basic concepts behind it (preparing a curvilinear excavation in the ground and lining the cut with a wall, at least on part of its circumference) are the same. Past analyses suggested that houses tend to become smaller from the Early to the Late Natufian. Final Natufian houses (or understood as such) seem to fall in the same size range, or are somewhat smaller, than their Late Natufian counterparts. Another difference is seen in a tendency for the pits to be more and more superficially dug. Some Early Natufian walls are more than 1 m high. In other words, houses seem to move out from the ground and become more protruding on the surface. But the time where there will be no preliminary digging has yet to come.

What is known from the way Early Natufian houses underwent successive flooring is strikingly similar to what is observed in our Final Natufian examples. In Early Natufian house 131-151, a series of unplastered floors associated with inner structures were found closely stratified on top of each other and are occasionally linked to re-building of the wall. No sterile layer can be isolated between the floors (Valla 1988). A circumstantial parallel of the planning of the house can hardly be developed because of later destructions but a few observations are appealing. We will never know whether house 131 was fully oval in shape as are houses 200-208 and 203 from the Final Natufian. It is worth noting, however, that the reconstruction suggested for house 131, with a semi-circular wall and a row of structures (post holes, hearths) on a line joining the two ends of the wall, finds close parallels in Final

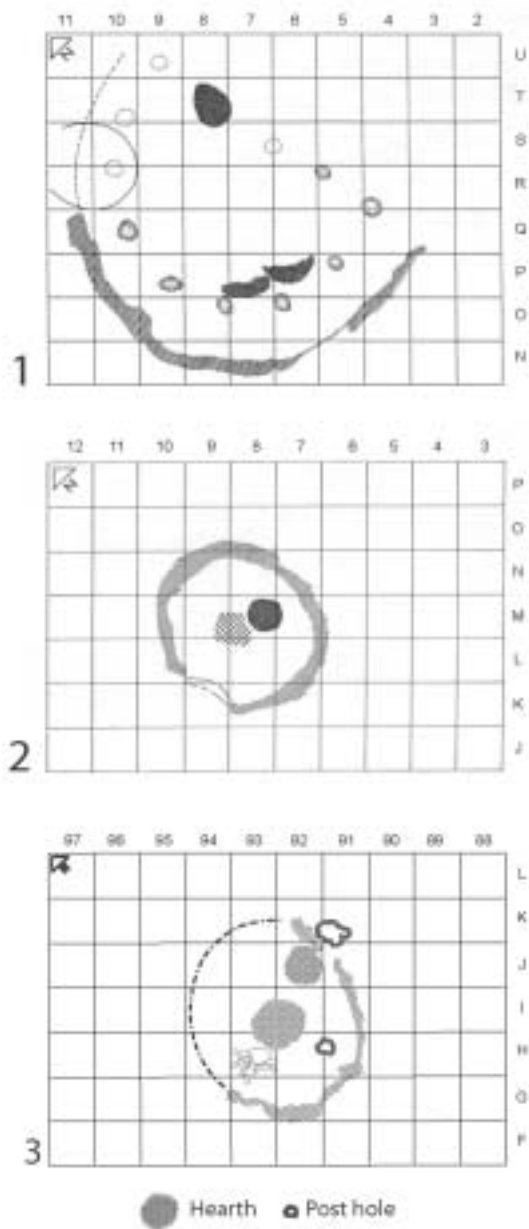


Figure 2: Schematic examples of selected houses from the Natufian at Eynan: 1, House 131 (Early Natufian); 2, House 29 (Late Natufian); 3, House 200 (Final Natufian). Note that the dotted lines do not have the same meaning in 1 and 3: in 1 the dots intend to suggest a probable reconstruction of a destroyed part of the wall; in 3 they suggest the full extension of the house where no wall was built. Redrawn from Valla 1988, Perrot 1966, Valla *et al.* 2004)

Natufian houses. It now appears that this outline may have been part of the architectural tradition at the site. This can also be understood as further illustration for a tendency to view space as a geometric construct, which was already recognizable through the general shape of the houses. But this tendency doesn't reach a point where a strict regularity would be imposed on buildings. None of the examples at hand exhibit a full geometric perfection and there is a range of variability accepted in the basic scheme.

At the more trivial level of everyday life, it is perhaps of interest to note that in both houses 131 and 200, more than one hearth was simultaneously in use. In their shape, these hearths are very different from each other. It is not excessively risky to suggest that they may have served different purposes, which indicates some kind of specialization at least among structures and space, if not among people themselves.

We do not have the same information for the houses of the Late Natufian, like their counterparts from the Early and Final Natufian excavated more recently. Moreover, some stratigraphic uncertainties remain, which may hamper comparisons. Nevertheless, the well preserved houses from this stage appear as more or less rounded pit-dwellings lined with a stone wall along their full circumference. Exceptions are, perhaps, the last stage of a house (26) and the building dug from its fill (22), which are reported to be semi-circular by Perrot (1966, figure 12). It is noticeable as well that no organization of small structures along one diameter can be observed in any of the Late Natufian buildings.

We do not want to say that the tradition of house building passed through a major break during the Late Natufian at Eynan. The data are too slender to sustain such a drastic conclusion. Neither Early, Late or Final Natufian houses are known from samples large enough to allow full comparisons between buildings, which certainly allowed some variability in outline during each of these periods, the shortest of which covered several hundred years. Fully lined rounded or oval pit-dwellings are possible (probable ?) during the Early Natufian at Eynan. We just want to emphasize, taking into account the record presently available, some striking structural similarities between some Early and Final Natufian houses and to note that the sample at hand does not provide so close parallels among Late Natufian houses. This does not prevent us thinking of continuity in building conception as well as in building technique.

Another important fact needs to be emphasized. This is the relatively large number of structures which do not look like houses among Final Natufian buildings. Again, comparisons with the Early and Late Natufian data are difficult, no detailed description being available. Buildings which are not houses possibly existed in the Early Natufian (see structure 61 in Perrot 1966, fig. 2). In the Late Natufian, structure 41 provides the most obvious case (Perrot, *ibidem* fig.14). At this low level of knowledge, there is no basis for a lengthy discussion. But some observations should be made. If our interpretations are correct, these structures are not less numerous than houses among the excavated Final Natufian buildings. Clearly this proportion needs confirmation through further work. It is necessary as well to get a

better understanding of their functions before suggesting any conclusion. Nevertheless their presence should be underlined as a possibly significant development in Natufian building habits.

Since burial customs seem to be one of the Natufian traditions subjected to the most obvious changes from one phase to the other at Eynan, a synthetic overview will suffice in order to compare Final Natufian habits to former ones (figure 3). With very few exceptions, Early Natufian people buried individual corpses in primary deposition. Many of these graves are in groups which are, at least by virtue of superposition, related to house floors, but detailed stratigraphic successions often elude us (see cemetery A and B of Perrot *et al.* 1988). Later, isolated graves can also be found in the upper fill of the houses (H.96, H.80, H.82) (See Perrot *et al.* 1988). Even when arms and legs are tightly folded, the body does not appear reduced in as narrow as possible a space. People were sometimes buried with personal adornments.

Individual graves in primary deposition eventually still existed during the Late Natufian, but associations between graves and house floors become less close. A striking change is the presence of several pits up to 50 cm deep where two to eleven individuals were buried. Most of these pits were probably kept empty for further inhumations and the old bones were rearranged progressively to make place for new corpses (Bocquentin 2003: 264). Secondary burials were probably exceptional (contrary to Perrot and Ladiray's views). None of the individuals in these graves has any personal adornment, except for two people who may have been buried with horn cores of gazelle attached to their head (Perrot *et al.*: 59). Originally, corpses were probably folded or seated, but later disturbances prevent detailed observation of their initial position.

One cannot ignore that the changes in burial habits as seen in the Natufian sequence at Eynan are only variations in the tradition of burying at least part of the dead in association with buildings in the perimeter of the village. There is a good probability for a continuous trend in grouping the dead either in graves closely dug near each other, or in pits planed to receive more than one individual, to be at work (as suggested by Byrd and Monahan 1995). But outstanding variations occurred. Among the most noteworthy are the use of grave pits in the Late Natufian only, the disappearance of personal adornments from the Late Natufian on, and a growing tendency to reduce the space devoted to individual corpses. Despite these trends, it is between the Early and the Final Natufian that the closest affinities can be observed. In both Periods, graves are usually individual. Their relation to architecture seems to be closer than during the Late Natufian episode and results in a series of interstratifications which are difficult to elucidate. The tendency to group individual graves, as observed at the top of the Final Natufian layer, is also more reminiscent of the Early Natufian than of the Late Natufian.

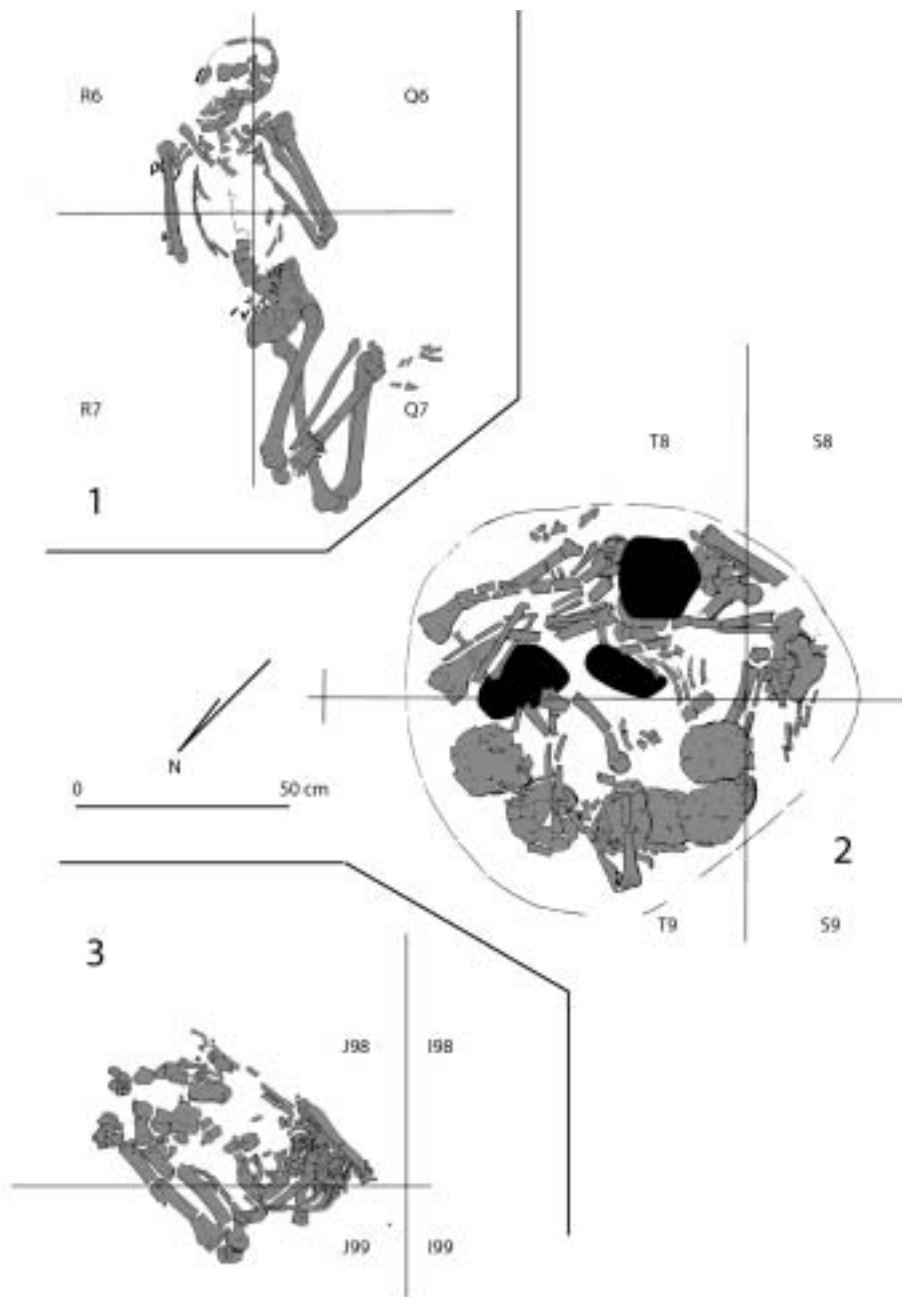


Figure 3: Schematic examples of selected graves from the Natufian at Eynanan: 1, H.91 (with a dentalium belt), Early Natufian; 2, locus 9 (stones are in black), Late Natufian; 3, H.156, Final Natufian. After Perrot *et al.* 1988 (1 and 2), Valla *et al.* 2001 (3)

DISCUSSION

Ongoing excavations at Eynan (Ain Mallaha) uncovered in-situ deposits including buildings and graves associated with a flint assemblage previously defined as Final Natufian. A few C.14 dates seem reliable enough to confirm the very late occurrence of these discoveries in the Natufian phenomenon. We now need to discuss whether the data are significant enough, and show enough specificity, to deserve the distinctive denomination “Final Natufian” or whether they simply can be lumped with the Late Natufian. If the finds in the suggested Final Natufian appear to differ significantly from those in the Late Natufian, then the term “Final Natufian” will be justified. From that point of view, the discoveries at Eynan are of particular interest because they testify to behavioral changes that took place in the same geographic setting and were subjected to minimal pressures other than internal cultural development.

Architectural features and graves, despite some hesitation, are currently the finds best associated with stratigraphic determination at Eynan from a global point of view. Comparisons demonstrate that there are continuous trends from the Early to the Final Natufian, both in architectural traditions and in burial customs. Buildings are in pits lined with a wall of some kind. These walls were not standing above the ground from which the pits were dug. Possible superstructures, when they existed, were probably made of light material. Beside these basic features, houses tend to be smaller and set in lesser deep pits. This results in a less impressive aspect of the buildings from one period to the other. As for graves, two main salient habits can be followed for the overall sequence; one is a tendency to bury at least some of the dead in the village. The other, a tendency to group graves together.

These trends allow for a range of variations through which the specificity of each period is manifested. What is perhaps significant for our discussion is that parallels are closer between the Early and Final Natufian than between the Final Natufian and the Late Natufian. The Late Natufian, with its mostly fully walled round houses and its group burials in pits kept empty for further interments, appears as relatively original. These particularities accentuate the apparent changes associated with the Final Natufian. Thus, the small houses, numerous buildings not dedicated to housing and sometimes related to adjacent minor dependant structures, and the individual graves in hypercontracted position, stand as even more innovative than they really are. Everything taken into consideration thus seems to validate the Final Natufian subdivision.

To go one step further, it should be necessary to widen the comparison and to take into account other aspects of prehistoric life, among them technical production besides the flint industry, subsistence and symbolism. Unfortunately, data bases are problematic in most of these fields. One can only note a few points that will deserve verification when more securely stratified material will become available. The fact that obsidian pieces first reach the site during the Final Natufian should be mentioned, because of the possible increase in relations with the northern cultures. It is also probable that more grinding slabs and more handstones

are produced instead of mortars and pestles. This may indicate some changes in grinding and pounding techniques and perhaps in the processed materials. On the other hand, game seem not to be very different from the earlier phases. Cervids (*Dama mesopotamica*, *Cervus elaphus*, *Capreolus capreolus*) still contribute a large part of the hunted mammals, together with suids (*Sus scrofa*) and, mainly, Gazelles (*Gazella gazella*). Waterfowl and fish are important parts of the diet. In the area of symbolism, to restrict oneself to decorative items, an increase in the use of green stone probably occurred. Dentalium shells are still numerous but they seemingly tend to be used as shorter beads than in earlier levels (Bar-Yosef Mayer in Valla *et al.* 2004).

These observations are the result of punctual rather than systematic comparisons. They are somewhat impressionistic and should not be relied on without reservations. From what we can guess, continuity is warranted. In the field of food procurement, game suggest a relative stability. It is not clear how the shift in grinding techniques should be understood. Even if it is related to food processing, more work is needed to understand whether it means a change in the ground material, or in the quantities ground, or whether it is mainly aimed at producing tools easier to make and to use. Besides that, one notices that most of the other changes listed above are related to exotic items: obsidian, green stone and even dentalium. This may mean an increase in permeability to objects and ideas foreign to the Carmel and Galilee area. This should be understood in relation to indications for a general weakening of the influence of the Carmel-Galilee “core area” in peripheries like the Negev and the Middle Euphrates valley, where original flint tools are developed independently (Valla 1998).

Besides the fairly well known Harifian in the Negev, Final Natufian evidence away from Eynan is still meagre but not without existence. Due to very small exposures, no architecture was found in Mureybet but hearths and floors made of brought in and packed clay were reported. If we rely on Nadel's observations, Final Natufian Nahal Oren comprised a floor with a large hearth and possible post holes. Graves are numerous. The ones we know are not similar to those at Eynan. They are relatively large pits, some of them lined with stones. Bodies are in primary position. Sometimes more than one person were put in the same pit. Hypercontraction of all the body is not common. No personal adornment were found, but a mortar was, in a few cases, buried with the corpse and some graves were marked with a standing “stone pipe” (elongated large limestone mortar). Skull removal was unusual but not totally absent (Noy 1989, Bocquentin 2003). Scanty as these data are, their diversity may look surprising. As a matter of fact, they hint at a situation not very different from what is known from the Early and Late Natufian, when each site appears with its own particularities.

Data related to subsistence activities are available for Eynan, Mureybet and Nahal Oren. But direct comparisons are problematic because of the extreme diversity in the environmental setting of the sites and because of the difference in nature of the data relative to vegetable food. Eynan is reputed to be in an exceptionally favorable place as far as food procurement

is concerned (Perrot 1966). Nahal Oren is far from being so valuable (Noy *et al.* 1973: 96). These discrepancies are probably highly significant, as were the cultural habits of Natufian people themselves. Eynan hunters exploited the lake (for fish and birds), the swamps and the valley (for wild boar, etc.), as well as the slopes and hills (for gazelles). Their counterparts from Mureybet neglected the bottom of the valley to concentrate on the Euphrates river (for fish and birds) and the steppes (for gazelles and asses) (Helmer 1991).

Nahal Oren hunters caught mainly gazelles, probably in the foothills of the Carmel mountain along the coastal plain. As for vegetal food, phytoliths analysis suggests that wheat was collected for food in the hills above Eynan, but in small quantities (Miller-Rosen in Valla *et al.* 2004). On the other hand, gatherers at Mureybet showed little interest for cereals and legumes but collected a lot of *Polygonum* from the Euphrates valley (Van Zeist and Bakker-Heerres 1974). Again, this diversity appears as the result of cultural habits with some adaptative behavior. It demonstrates that no behavioral uniformity has been reached by the turn to the PPNA (see also Belfer-Cohen and Bar-Yosef 2000).

To conclude, fieldwork during the last 20 years substantiated the Final Natufian as a particular episode in the Natufian sequence. Excavations at Eynan since 1996 provided the opportunity for a large exposure of relevant in-situ deposits with buildings and associated graves. Other in-situ structures at Nahal Oren were assigned to this phase with a relatively good probability. Together with the data obtained earlier at Mureybet, this provides a firm basis for a preliminary approach to the period, which is also known from a few other places spread from the Middle Euphrates valley to the Southern Jordan desert.

The Natufian tradition seems fully preserved during the Final Natufian. The basic scheme is that of “villages” including buildings closely associated with graves, and scattered small ephemeral sites, all of them sharing a similar microlithic flint industry. In each of the areas of human activity still available for archaeological observation, the sites involved share the same cultural tradition. But in each of these areas as well, no two sites are exactly similar. The Final Natufian is not an exception to this situation and it appears that there is no standardization reached by the end of the Natufian, either in building, burial or hunting and foraging habits. At Eynan, where we are able to follow these habits in the same place for a long period of time, the observations taken into consideration in this paper underline two characteristics of the Final Natufian. One is a tendency to revive some Early Natufian behaviors. The other could be a tendency to “think smaller”, if we can borrow an expression from Belfer-Cohen and Goring-Morris.

Together, the sum of these observations raises the question of Final Natufian sedentism. In the past, sedentism has been questioned for Nahal Oren (Higgs in Noy *et al.* 1973) and for the Final Natufian of Eynan (Valla 1981). Since most sites in the Carmel and Galilee area either had been deserted or were thought to have no architecture by the Final Natufian, it has even been suggested that people had given up sedentism for a while in this area before settling

in new villages during the PPNA (Valla 1995, 1998). This interpretation has to be revised in view of the new data. The Final Natufian occupation near the spring of Eynan shares the same characteristics with the prior Early and Late Natufian. It is not less ambiguous in term of year round or seasonal stays in the houses. It seems to indicate that some kind of sedentism or semi-sedentism not very different from the way of life of the former inhabitants was maintained on the site during part of the Final Natufian. Nevertheless, if it is true that the graves at the top of the layer were dug from a now eroded deposit, then they probably mean that the site was still used as a cemetery by Final Natufian people after being abandoned as a living place. This reevaluation simply makes the general trend toward mobility noticed by the end of the Natufian less abrupt and the passage to the PPNA somewhat softer than was previously understood.

ACKNOWLEDGEMENTS

The authors are grateful to J. Phillips and A. Belfer-Cohen who invited them to contribute in honor of O. Bar-Yosef. Some of the ideas expressed in the paper were discussed at length with D. Stordeur during fruitful exchanges for many years. Ongoing excavations at Eynan were made possible by grants from the DGRCSST of the Ministère des Affaires Étrangères (Paris), the Irene-Levi-Sala CARE Archaeological Foundation, The Wenner Gren Foundation for Anthropological Research and the National Geographic Society. Illustrations were completed by Marjolaine Barazani (Centre de Recherche Français de Jérusalem) and Maurice Hardy (ArScAn).

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