

THE EARLY NATUFIAN OCCUPATION AT EL WAD, MT. CARMEL RECONSIDERED

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ABSTRACT

The poorly preserved Early Natufian architectural remains of layer B2 excavated many years ago by Garrod on the terrace of el Wad are re-interpreted in light of analogies with more recent excavations attributable to the same period elsewhere in the Levant. It is tentatively suggested that the scanty remains represent a large, 8-9 m in diameter, U-shaped or circular residential structure. If valid, the internal arrangement other features and activities raise anew the question as to the significance of the co-association of structures and *cimetières*/group burials during the Early Natufian. Also it illustrates yet again the spatial segregation of certain activities between caves and terraces, with residential occupation being limited to the latter. Finally evidence is presented for an overall trend in the diminution of habitation size during the course of the Natufian *sensu lato* throughout the Southern Levant.

INTRODUCTION

It is almost 70 years since Dorothy Garrod initiated pioneering investigations in the Carmel Caves in Israel (Figure 1). The results of the excavations in the cave and on the terrace of el Wad contributed in a major way to her definition of the Natufian Culture in the Levant (Garrod 1932, 1957). Conducted according to the standards of the day, her findings from the extensive dig, encompassing at least 750m² on the terrace and another 80-100m² in the outermost Chamber I of the cave, included scanty architectural remains and some 90-100 burials, accompanied by a rich material culture of lithics, artistic remains, bone tools and a rich and varied faunal assemblage, all mostly located on the terrace in front of the cave (Garrod and Bate 1937). On the basis of stratigraphic observations Garrod divided layer B, into two sub phases, the more substantial Early Natufian B2 being overlain by the Late Natufian B1. Layer B2 included almost all the architectural remains, most of the burials and a richer material culture, while layer B1 was thinner, had fewer burials and demonstrated a more restricted material repertoire. Garrod (1932; Garrod and Bate 1937) published two slightly different sketch plans of the Natufian remains at el Wad, with slight discrepancies in terms of both architecture and the location of burials.

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Garrods' findings concerning the nature of the burials and accompanying grave goods were used later by Wright (1978) for an investigation of social ranking in the Natufian, a position recently refuted in detail by Belfer-Cohen (in press).

Recent limited testing in the immediately adjacent area northeast of Garrods' terrace excavations has indicated that layer B1 should itself be subdivided and includes both Late and Final Natufian phases (Valla et al. 1986). Restricted excavations have also been conducted deeper within the cave than Garrods' exposure and further excavations are planned in the near future on the terrace (Weinstein-Evron *nd*, and personal communication).

The architectural remains described on the terrace and near the cave entrance were poorly preserved and included several curved 'terrace' walls founded on bedrock close to the outer northern wall of the cave and sterile sediments downslope on the terrace. Several bedrock basin/mortars as well as a slab-paved surface were also ascribed by Garrod to Layer B2.

The present paper focuses on these scanty architectural remains from the Early Natufian Layer B2 and the accompanying burials at el Wad in light of the more recent investigations of Early Natufian levels at Mallaha in the Huleh Valley and Wadi Hammeh 27 in the central Jordan Valley (Valla 1981; Edwards 1991, 1993). A brief discussion follows as to the implications of the re-interpretation of the remains at el Wad.

EARLY NATUFIAN ARCHITECTURE

At both Mallaha and at Wadi Hammeh 27 the Early Natufian levels are characterized by large circular or U-shaped residential structures, some 7-15m in diameter. These are constructed of outer stone walls and inner rings of posts, sometimes accompanied by central wooden pillars to support the roof (Valla 1981, 1989; Goring-Morris in preparation). Various stone built installations, plastered 'benches', well constructed hearths etc. are also sometimes present. In general it may be stated that there is evidence for a high standardization of architectural concept in terms of both planning and implementation at both sites. Given the standards of excavation in vogue at the time of Garrod's investigations, the relatively poor preservation of architectural features, and, most importantly, the then total absence of analogies available, it is hardly surprising that her interpretations concerning the architecture present at el Wad were limited.

TENTATIVE RECONSTRUCTION OF A HABITATION AT EL WAD

Scrutiny of the published sketch plans and accompanying photographs of the scanty and poorly preserved remains of Layer B2 at el Wad (Garrod 1932; Garrod and Bate 1937) reveals that, while not entirely conclusive, they do not negate the possibility of reconstructing in Area A a poorly preserved dwelling similar to the quite standardized Early Natufian structures briefly described above

at Mallaha and Wadi Hammeh 27. Thus, following the line of the main curved wall and the southward continuation of the bedrock contours outside the cave entrance, a large, ca. 8-9 m diameter, U-shaped or circular structure can be conjectured in Area A (Figure 2). Such a dwelling would have provided an internal living area on the scale of some 50-60 m², not dissimilar to that of Abri 131 at Mallaha. Occasional limestone blocks on the northwest may represent the poorly preserved continuation of the outer wall, including what appears to be a paved area/installation (see Feature 2 below) located on the northwest side of the structure. The most likely location for an entrance to the structure would have been to the southwest, facing the path leading up to the cave, Chamber I of which was also in use during this period. Such an orientation would, of course, have provided both maximum light exposure and protection from the prevailing winds.

Given the reconstruction proposed above the internal spatial arrangements within the habitation can be outlined as follows :

Feature 1. The four bedrock mortars and deeper bedrock rimmed basin, together with the immediately adjacent artificially leveled bedrock surface would have been located on the southeast side of the structure. This flattened surface was extended artificially in the vicinity of the large basin, where the bedrock again dropped steeply to the northwest, by a limestone slab pavement, together covering a total area of some 10-12 1/2 m². It is of interest to note that Edwards (1991 : Figures 5/1-2) has described a similar cluster of mortars within Habitation 1 at Wadi Hammeh 27 (though not bedrock, which is lacking in that site).

Feature 2. Another paved area/installation is located on the opposite, northwest side of the structure, part of which may, as noted above, have formed part of the external wall in this area. This paved area is somewhat amorphous in shape and covers some 3-4m². Somewhat similar (raised) surfaces/areas have again been described within habitations at Wadi Hammeh 27 (Edwards 1991 : 128).

Feature 3. Occasional limestone blocks, occurring either singly or in small clusters, are depicted by Garrod within the conjectured walls of the structure, particularly on the northern side. It is possible to view these as simply construction debris out of their original contexts. However, given the evidence for definite postholes in Abri 131 at Mallaha (Valla 1981) and post holes/footings probably present in Abri 1 and also in both habitations at Wadi Hammeh 27 (Goring-Morris in preparation), another, more intriguing possibility exists. These blocks, perhaps together with part of Feature 2, could be interpreted as representing similar post holes/footings. For, if the structure was to have been roofed, practical constraints would have required posts to support the span of 8-9 m as estimated above. At both Mallaha and Wadi Hammeh 27 these are arranged as rings of supporting posts.

Feature 4. A stone-lined hearth, seemingly some 70-80 cm in diameter, is located internally from Feature 2. Two off-centre, well defined, stone-lined hearths were also investigated at Mallaha Abri 131 (Valla 1981; Valla and Lechevallier 1989).

Feature 5. Garrod described numerous burials of various types on the terrace at el Wad. The majority appear to date to the earlier layer B1, though several were of

uncertain attribution within the Natufian levels. A cluster of the terrace burials are located in the central to southwestern (entrance) side of the structure as reconstructed here. Some of these are group burials while others are clearly single events. They comprise at least 4 group burials (H25, a-c, 26; H57-a-g; H28-32; H23, a, b) in the central area/entrance of the structure. It is also feasible, though unproven, that H14, 55, 56, and 58, as well as H 20?, 49, 51? could also represent group burials. Additionally, within the interior of the structure are a few individual burials, but these appear to have more peripheral locations towards the back and sides of the structure. All of the group burials include at least one decorated individual (H23, 25, 28?, 57, 9), though some of the individual burials are also decorated (H 15, 41).

Again this finds parallels at Mallaha, where *cimetière B* is located beneath the central area of Abri 131 and *cimetière A* is located beneath most of Abri 1 (Perrot and Ladiray 1988). At Mallaha the precise stratigraphic relationships between the *cimetières* and associated structures remains somewhat equivocal - see the various interpretations offered by Perrot for *cimetière B* over the years (Perrot and Ladiray 1988 : Figure 9). What is clear is that these *cimetières* either pre-date the construction of the associated structures (the situation favoured by Belfer-Cohen 1988) or continued to be used for interments during the course of the structures use. Whatever the case it seems unlikely that the associations are fortuitous. Unfortunately at Wadi Hammeh 27 only the latest Early Natufian phase was extensively exposed. Nevertheless sondages within Structure 1 did produce evidence for burials beneath them (Edwards 1991 : Figures 2/3-4). It remains to be seen whether these are sporadic or also represent *cimetières*/group burials.

SITE STRUCTURE AND THE USE OF SPACE

In light of the above interpretation, it remains to be seen how the tentatively reconstructed dwelling articulates spatially with other features associated with Layer B2:

1. The structure would have opened onto and been located immediately to the northeast of the principal access route to the cave. The northeast side of the structure would have backed onto the steeply sloping wall of the cave exterior;
2. The principal access to the interior chambers is on the southwest side of the cave entrance : a massive pillar is located slightly off-centre to the main entrance, another subsidiary entrance being located further to the northeast. Entrance to the cave through the latter would not have been (and indeed still is not) easily facilitated, the sill being higher and the opening much smaller than the principal entrance. Additionally there is a major drop in the bedrock topography in the form of large, natural steps to both northwest and southwest of the secondary entrance;
3. Access through the smaller entrance would have been further hindered by the location of the structure, resulting in a 'dead' area encompassing some 30-

35 m². This area was seemingly modified by the addition of short terrace walls following the natural topography, two of which abut the exterior wall of the structure. Together these thus partition the 'dead' area into a series of some four separate plots or ledges, the lower three of which were used for a total of some 9-10 separate, individual burials. That such an arrangement of delineated plots adjacent to the outer wall of the cave is indicated by the limited exposures excavated by Valla et al. (1986) in the area immediately to the north and east of Garrod's excavations and abutting the rear of the structure. These revealed evidence for what appear to be somewhat similar partition walls;

4. Some ten or so sporadic individual burials are also located adjacent to the main access route to the cave in the immediate vicinity of the entrance. However, of these at least six are of uncertain stratigraphic provenience within the Natufian. It thus seems likely that this was not a major burial area during the Early Natufian occupation, being used only occasionally for individual burials, e.g. H 14, 16, 59, and 60, while the status of H 12, 13, 18, 19, 21, and 62 remain uncertain (see Belfer-Cohen in press);

5. A group burial (*cimetière*) comprising 10 individuals (H1-10) is located within the cave in Chamber 1 on the main axis of access from the cave entrance to the interior chambers, but off-centre to the chamber itself. Garrod described this as being an exclusively Early Natufian pit some 4-5m² in extent, accumulated in three separate events and including two distinct hearths. In many respects this is reminiscent of the *cimetière*/group burial described for the Early Natufian at Erq el-Ahmar cave by Neuville (1951);

6. Recent testing deeper within the cave in Chamber 2 has provided evidence of at least sporadic use during the Early Natufian, seemingly amongst other uses, as a repository for symbolic objects (Weinstein-Evron and Belfer-Cohen 1993).

DISCUSSION AND SUMMARY

Clear patterning in the form, nature and size of domestic residential architecture can be documented from the more recently excavated Early Natufian sites of Mallaha and Wadi Hammeh 27 (Goring-Morris in preparation). In this light the poorly preserved architectural remains, installations and features documented by Garrod's excavations at el Wad, though by no means unequivocal, nevertheless do not negate the tentative reconstruction of a large, U-shaped or circular residential structure some 8-9 m diameter on the terrace. The nature and location of installations as well as burials within the confines of the habitation also accord well with the evidence from other Early Natufian occupations. Indeed this interpretation raises anew the question as to whether burials were invariably segregated from habitation areas. If the reconstruction suggested here is accepted, then it seems highly unlikely that the co-association of residential structures and *cimetières*/group burials is fortuitous, irrespective of whether graves continued to be used during the occupation of the habitations.

A trend in the size of residential and other durable structures during the course of the Natufian has been documented at Mallaha (Valla 1981). However, there is clear evidence to indicate that this represents a more general trend from Early to Late and Final Natufian *sensu lato*, irrespective of geographical location within the Levant. This is vividly illustrated and summarized in Figure 3. The wider implications of this phenomenon are investigated elsewhere (Goring-Morris in preparation).

Consideration of the articulation of the proposed structure in respect of the spatial organization of the rest of the Early Natufian occupation at el Wad, both on the terrace and within the cave is coherent and logical, with the spatial segregation of at least some activities : the cave appears to have been reserved primarily for burials, and other symbolic activities, rather than purely profane everyday domestic use, a situation paralleled at other sites, e.g. Erq el-Ahmar (Neuville 1951) and Hayonim Cave and terrace (Bar-Yosef 1991; Belfer-Cohen 1988; Henry et al. 1981; Valla et al. 1991). The pattern of occupation outlined above, if valid, contrasts starkly with the more sporadic use of the location during the Late and Final Natufian, a situation also documented elsewhere (Valla 1981).

In closing, it is to be hoped that sufficient remains of the Natufian occupation have escaped the ravages of recent 'development' of the Mt. Carmel caves for tourism (see also Chazan 1993) to enable future testing of the re-interpretations suggested above.

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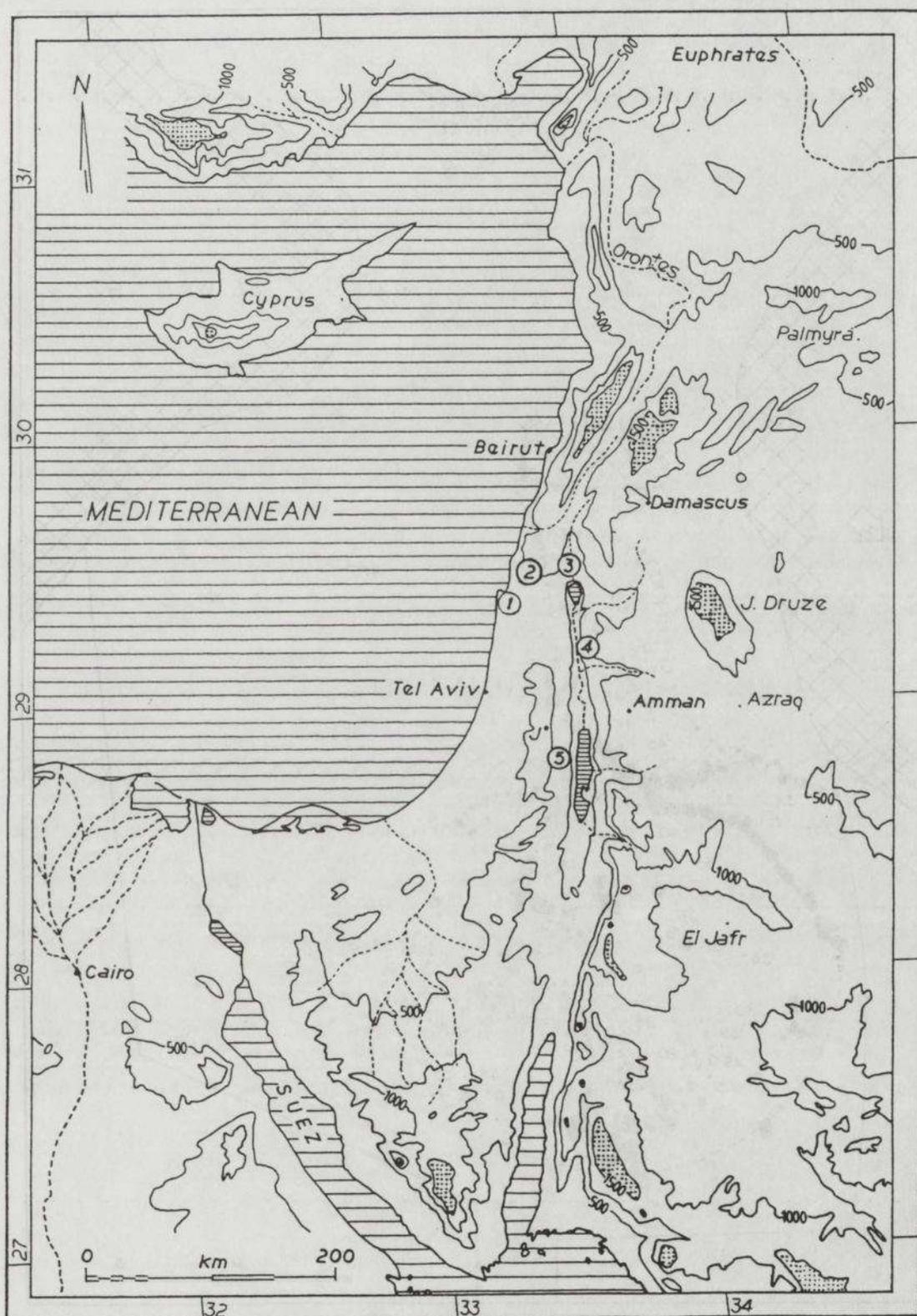


Fig. 1 : Map of the Levant showing the location of Early Natufian sites discussed in the text : 1 Mount Carmel sites (el Wad, Kebara); 2 Hayonim Cave and Terrace; 3 Mallaha (Eynan); 4 Wadi Hammeh 27; 5 Erq-el Ahmar.

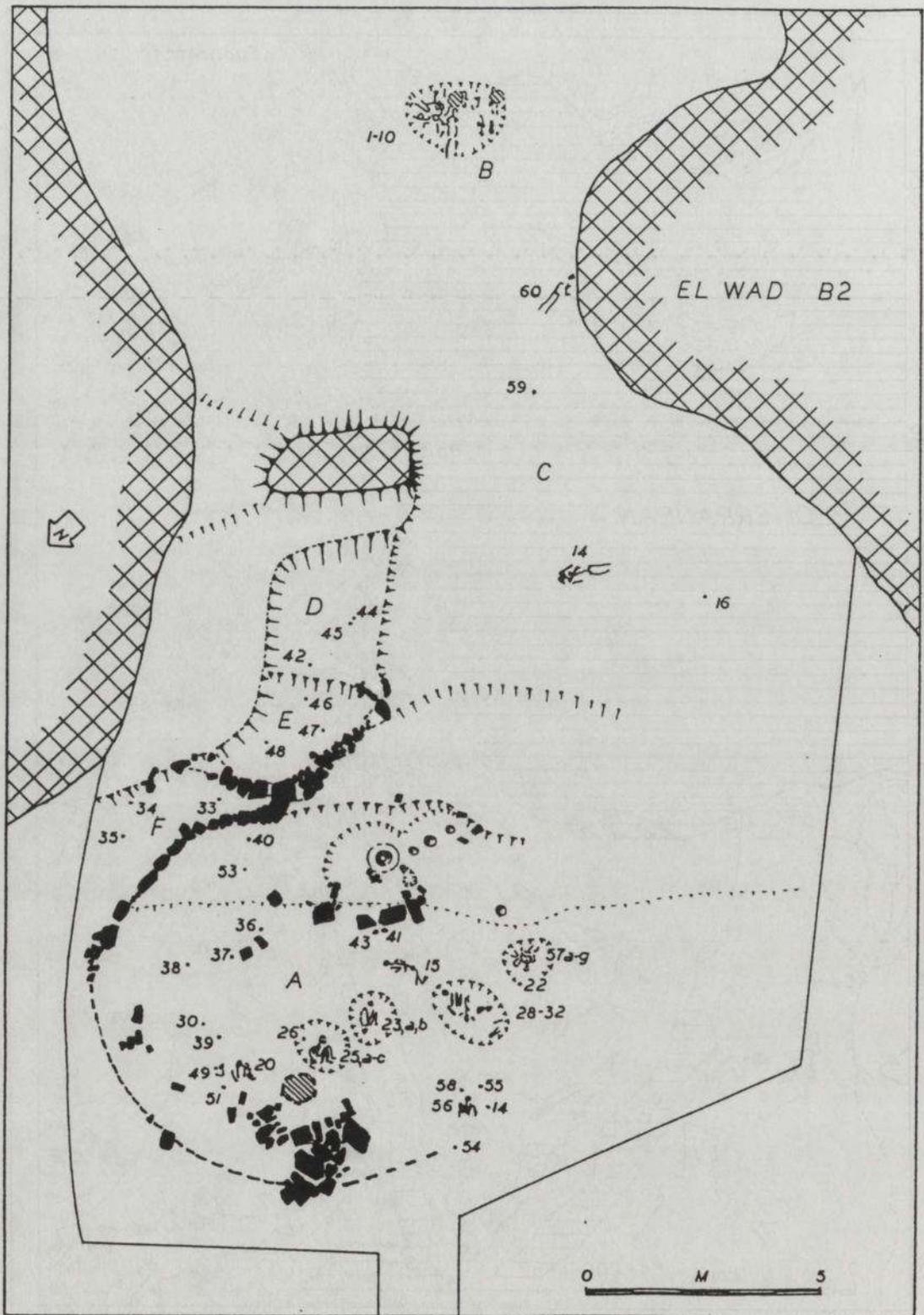
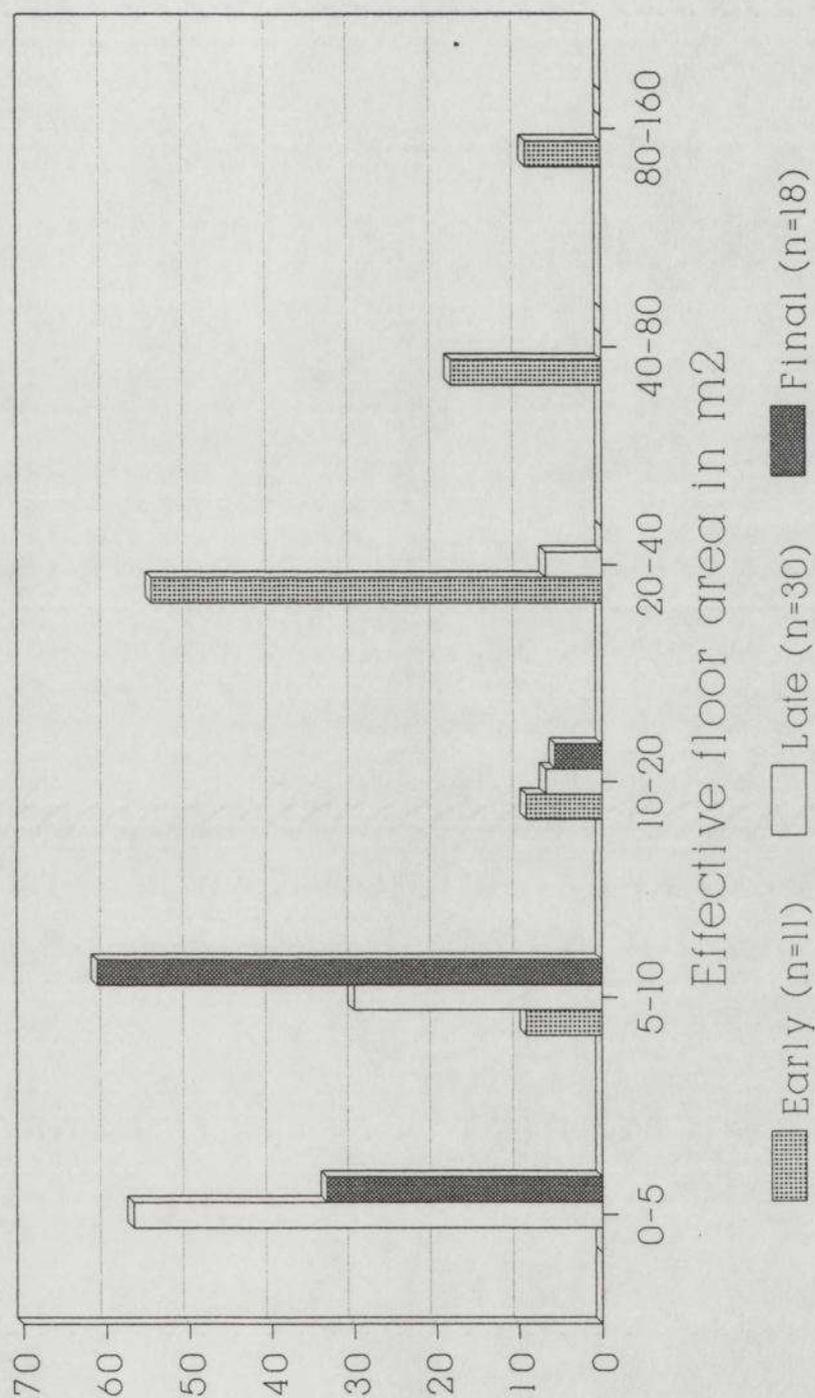


Fig. 2 : Tentative re-interpretation of the Early Natufian occupation of layer B2 on the terrace and in the cave of el Wad based on Garrods' reports.

NATUFIAN STRUCTURES

Mediterranean & periphery



Note: Final includes Harifian

Fig. 3 : Histogram showing the vectored diminution in the effective size of residential structures during the course of the Natufian sensu lato throughout the Levant. Note that the scale for effective floor space is incremental. Included amongst the final Natufian is the Harifian.