Chapter 8

CONCLUSIONS

In our discussion of the possible ways the Early Natufian habitation at el-Wad may be reconstructed, we have tried to bring together all data that could be culled from various phases of excavation and research, and from different disciplines and approaches. Important for a broadening of our understanding were comparisons with other sites, from the nearby Galilee and the Jordan Valley. The resulting picture is still far from complete, and several issues will always remain in the dark, but it appears possible to conclude that we are dealing here with a large and complex Early Natufian site that encompasses the el-Wad cave, terrace and the other caves on the same cliff. Moreover, some kind of inner organization seems to emerge, with a habitation, a cemetery, and dumping areas.

While it is obvious that the Natufian people at el-Wad knew how to make good use of the cave, that a cave was ready at hand seems to have been not an obligatory, prerequisite feature but rather a matter of convenience. As in other cases (e.g., Eynan), it is possible that the inhabitants were especially attracted by the fact that the ecotonal setting of the site meant that natural resources were easily available — the presence of a cave may simply have been a "bonus", *pace* O. Bar-Yosef and Martin (1981) who postulate an apparent "return to the caves" during the Natufian. That the el-Wad Natufians made good use of their environment is clear from the way they exploited the many different animals in the region, and possibly also a large number of plants, from various biotopes, as well as their command of the local mineral resources, especially flint and ochre. The faunal and botanical evidence suggests that this Lower Carmel site probably had a more coastal (and southern?) orientation, dictated by topographical constraints and evidenced by the abundant gazelles and the occurrence of marshy and marine species. The favourable location of el-Wad is best described by Garrod (1957: 213, citing Dorothea Bate) "... the Wady el-Mughara ... is singularly well situated for access to country of different types, mountains are near, rivers near their entry to the sea, whose undrained banks would provide swamps, and the extensive plains of Esdraelon and Jezreel, giving entry to the plain of Beisan and the Jordan Valley." As

we saw, the fact that the coastal plain was considerably vaster during the Natufian, contributed significantly to the abundance of natural resources, while the "entry" to the Jordan Valley facilitated long-distance contacts with other areas.

Whether we can speak of Natufian sedentism remains a contentious issue (e.g., Perrot, 1966; O. Bar-Yosef, 1983; Tchernov, 1984, 1991, 1993a; Henry, 1985, 1989, 1994, 1995; Edwards, 1989; Byrd, 1989, 1994b; Belfer-Cohen, 1991a; O. Bar-Yosef and Belfer-Cohen, 1992; Kaufman, 1992; Lieberman, 1993a; Fellner, 1995; Valla, n.d., Valla and Khalaily, 1997), nor is it at all clear what criteria we should apply to decide how Natufian sedentism can be recognized (e.g., Edwards, 1989). Not surprisingly, we find various definitions to what the permanency of Natufian habitation may have amounted to (from intensive, multiseasonal, long-term, near-sedentary or semisedentary occupations to permanent or sedentary ones; from aggregation sites or basecamps to hamlets). The limitations within which our discussion takes place, especially the meagre evidence from the outer chambers of the cave regarding such aspects as the architectural features and environmental exploitation, make it impossible to ascertain whether el-Wad was a sedentary occupation. Still, in light of the available data and the potential of the terrace and the inner part of the cave, we have shown that el-Wad should probably be listed not among the medium sites, as suggested by O. Bar-Yosef (1983), but among the large ones. Moreover, when we add the architectural features implied by the results of Lambert's trial excavation to the various permanent features that Garrod unearthed (e.g., rock-cut basins, pavements, terrace wall), we find that the site reveals a rather complex layout. These data, together with the numerous burials (e.g., Belfer-Cohen et al., 1991), the rich and varied groundstone assemblage (e.g., Wright, 1991), the thickness of the Natufian layers and the high artefact density (Bar-Yosef, 1983), the manifestations of artistic activity (Belfer-Cohen, 1991a), all suggest that generalizations concerning sedentism, based on findings from other major Natufian sites of the Mediterranean "core area", are valid for el-Wad as well. One of these is the practically all-year-round habitation by at least part of the inhabitants. Had she been aware that the site contained more architectural features, Garrod may not have concluded that "Village life, even its simplest form, had apparently not yet begun" (Garrod, 1957:214). She did realize, however, that "At the same time the sites on Mount Carmel testify to a fairly long continuous habitation" (idem).

Besides the archaeological criteria, much of the recent arguments regarding sedentism are based on biological data, i.e., the occurrence of commensals (Tchernov, 1984, 1991, 1993a) as well as studies concerning seasonal indicators, such as the age of the hunted gazelles (Davis, 1983), the remains of certain migratory birds (Pichon, 1987), growth rings of fish vertebrae (Desse, 1987) and cementum increment of teeth (Lieberman, 1991, 1993a). While no specific data concerning the occurrence of commensals are as yet available for el-Wad, faunal studies from the recent excavations (see below, Appendix III), and especially gazelle age distribution, suggest prolonged and even year-round utilization of the site which is in line with observations based on gazelle-teeth cementum increment from the faunal assemblage of Garrod's Natufian Layer B (Lieberman, 1993a). Our palynological analyses also provided us with information on seasonality. The occurrence of clumps of olive pollen that probably had dropped from flowering branches and of myrtle pollen grains, indicates a spring/early summer habitation of the cave. Obviously, this does not necessarily mean that people

were not present during the other seasons of the year — given the faunal evidence and the natural affluence of the area, there is no reason to doubt that people roamed in and around the site all year-round.

As at other sites, what remains unknown is the degree and nature of Natufian sedentism at el-Wad. Thus, we have no way of telling, for example, whether the site can be better defined as a "base camp", "aggregation site" or simply a "home". Although there were long-distance contacts, the data seem to suggest a high degree of self-sufficiency or self-containment within the area. We may also assume that within the Mount Carmel area there were less altitude-related seasonal movements than has been argued for other regions (e.g., O. Bar-Yosef and Belfer-Cohen, 1989, 1992; Henry, 1985, 1994). Such seasonal movements are often regarded as a key factor in explaining mechanisms of aggregation and dispersal (e.g., Valla, n.d.; O. Bar-Yosef and Belfer-Cohen, 1992; Kaufman, 1992). The self-containment suggested above may have had more to do with subsistence requirements than with social behaviour and choices, especially if we look at the apparent exchange/trade in basalt groundstone utensils (Weinstein-Evron et al., n.d.2), that was probably also influenced by the latter.

In all, two main archaeological entities were found in the NE part of Chamber III: Early Natufian and Upper Palaeolithic. The Natufian sample analysed to date is rich in cores but contains surprisingly low frequencies of lunates, sickle blades and awls as compared with Garrod's Layer B2 in other parts of the cave (Garrod and Bate, 1937). It was largely these differences, together with the abundance of gazelle horncores (see Appendix III, Table 16), that seem to indicate that this part of Chamber III was used for a specific activity, possibly as a waste dump, which is rather likely if we also take into consideration the special location of this area within the inner, relatively darker recesses of the cave. The broken pestles certainly seem to point in this direction. But then, again, most of the pestles Garrod found in the outer chambers were also broken (Garrod and Bate, 1937). The many gazelle horn cores, in turn, seem to imply a disposal routine similar to the one practised by the shepherds who used the cave until recent times. More surprising is the occurrence of complete well-made tools and art objects in the "dump", raising the question of why such artefacts would have been discarded. This phenomenon will remain unexplained until we have further information concerning the cultural systems in which these artefacts operated (e.g., Binford, 1972). More data, including use-wear pattern analysis, are required before we can hope to arrive at a full understanding of the function of this specific area of the cave.

The major differences between the composition of our Natufian lithic assemblage and the one Garrod unearthed in the outer chambers and the terrace may also explain, in our opinion, why she failed to identify the Natufian layer in Chamber III. Garrod indicates in her report that she had excavated the whole of Chamber III, but our finds show that this was not the case — our excavation exposed the southern limit of her excavation, making clear that she had excavated some Natufian deposits comparable to those exposed by us, to a depth of at least 40 cm.

We have defined this assemblage as Natufian on the basis of the admittedly few but typical lunates, as well as the abundant basalt tools, characteristic bone implements, and typical art and decorative objects. This definition was subsequently substantiated by the ^{14}C determinations. In fact, since the lithic assemblage (especially the dominant

endscraper and burin groups), cannot be differentiated from the underlying Upper Palaeolithic assemblage of Chamber III, it is very easy to mistake them for Upper Palaeolithic. Thus, we believe that Garrod did excavate Natufian levels in Chamber III, but failed to identify them as such.

In spite of our small sample, it seems that the Upper Palaeolithic assemblage does not differ very much from the overlying Natufian layers. This is so because of its typological composition and because flakes were most often selected for tool manufacture. The main difference lies in the absence of typical Natufian elements and the scarce microliths. It is this lack of Natufian tools, on the one hand, and the abundance of endscrapers and burins, especially on flakes, on the other hand, that has led us to define these lower assemblages as Upper Palaeolithic. As already mentioned, the Upper Palaeolithic tools, and especially the cores, are somewhat better made.

The stratigraphic relationships between our Upper Palaeolithic assemblage and others previously excavated are not fully understood yet. Moreover, the small sample so far excavated made it impossible to relate it to any of Garrod's "Aurignacian" or "Atlitian" layers. What is clear, however, is that of the prevailing technological traditions at the end of the Upper Palaeolithic our assemblage can be better assigned to those with a dominant flake (O. Bar-Yosef and Belfer-Cohen, 1988) rather than blade/bladelet (e.g., Gilead, 1981; Marks, 1981; Kaufman, 1988) component.

A preliminary study of Garrod's collection in the Rockefeller Museum in Jerusalem showed that Garrod's Layer C ("Atlitian") was indeed characterized by many burins on tabular flint (Garrod and Bate, 1937). These are identical to the special dihedral burin described above (Chapter 5, "The Lithic Assemblage"), in both the Natufian (in small numbers) and Upper Palaeolithic layers of the present excavation (Fig. 46:8; Fig. 47:1; Fig. 52:4). Included in this group are typical tabular burins in which "secondary working is often confined to one or more burin-facets on a slab of flint, 5-10 mm. in thickness, with cortex on both faces" (Garrod and Bate, 1937:41), as well as burins made on secondary blanks with cortex on one side and old patina on the other. According to our counts these tabular burins form a significant component of the 160 burins of Garrod's Layer C (see also Ronen, 1976). Neither these nor the other burin types are different from our Natufian or Upper Palaeolithic burins. The difference between the analysed assemblages are again quantitative, not qualitative. The same holds true for the other tool types, especially the endscrapers. Moreover, our observations indicate that the composition of the assemblage of Garrod's Layer D1 in the Rockefeller Museum does not differ greatly from that of layer C. There, too, "tabular" burins are abundant.

There are a number of reasons to suggest that Garrod's Layer C ("Atlitian"), uncovered at the northern part of Chamber III (Fig. 3), represents either a very localized activity assemblage within the Upper Palaeolithic (Perrot, 1968) or belongs to the Early Natufian of el-Wad. These are: First, the apparent similarities between layers C and D1 as seen in the Rockefeller collection; second, the fact that Garrod excavated only a limited area of Layer C, which raises the possibility of a biased sample; and third, a scarcity of typical "Atlitian" elements in the pre-Natufian layers excavated in Chamber III to date. Finally, there are strong general similarities between the Upper Palaeolithic and Early Natufian assemblages recovered in the recent excavations.

At this stage of the research there are three possible ways to explain the relationship between the Natufian and pre-Natufian layers of el-Wad:

1) The actual sequence includes Upper Palaeolithic layer D, Upper Palaeolithic Layer C and Early Natufian (Layer B2), as described by Garrod. Thus, the "Atlitian" (Layer C) represents a separate chronological/cultural entity, as suggested originally by Garrod (Garrod and Bate, 1937).

2) Garrod's Layer C represents a specific activity zone within the cave, of Upper Palaeolithic (Layer D) age, hence the resemblance to Layer D1.

3) Garrod's Layer C should be regarded as a specific-task assemblage within the Early Natufian of el-Wad.

If alternative 2 or 3 is accepted, then there is good reason to question the use of the term "Atlitian" as either a cultural or chrono-stratigraphical taxon, at least in el-Wad, where it was first defined.

The ramifications of these possibilities are beyond the scope of the current discussion, but it is worth noting that the validity of Neuville's (1934) and Garrod's (1953) six-stage sequence of the Upper Palaeolithic, and the criteria on which this framework was formed, have been questioned before (e.g., Stekelis, 1956; Perrot, 1968; O. Bar-Yosef, 1970; O. Bar-Yosef and Vandermeerch, 1972; Marks, 1975; Ronen, 1976; Gilead, 1981). More importantly, several researchers have questioned the general applicability of a unique term "Atlitian" to assemblages attributed to the closing stages of the Upper Palaeolithic (e.g., Perrot, 1968; O. Bar-Yosef, 1970, 1973; Marks, 1975).

Our study has shown the value of additional research in what appear to be archaeologically exploited sites. Even if, as in the case of el-Wad, spatial analyses are not feasible, and the layout of the site will never be fully established, new data regarding mineral raw material procurement and faunal and botanical resources can contribute significantly to our understanding of the mode of exploitation of the environment by the inhabitants of what is a major Natufian site. Moreover, important insights can be gained into such Natufian characteristics as sedentism, trade/exchange networks and symbolic manifestations. The new absolute dates can help to define better the chronological framework of these processes.

Then also, we were able to demonstrate that one can gain a great deal of information and a better "feel" of the site from "digging" in old archives. In our case, Lambert's notes (Lambert, 1928, 1-3) and, to some extent, Garrod's recently discovered archive (Garrod, 1930b; Smith et al., 1997) have contributed significantly to our understanding of el-Wad and enabled us to substantiate the base on which previous contentions were — sometimes rather intuitively — made. Rather than defining it as a medium-sized site, with scarce architectural remains and a rich cemetery (which could, in fact, be more appropriately defined as a burial site together with some kind of cult site), el-Wad can now be better understood and described as a varied, composite, large site — all the more since we have good reason to believe it had all the architectural features that would justify ranking it as a major Natufian basecamp.

This study is, of course, not the final word. The interior parts of the cave and especially the terrace have great potential for additional finds and merit further

investigation. If we wish to extend our knowledge and perspective of el-Wad we certainly need to go beyond earlier excavations that were clearly restricted to the daylit parts of the cave and the upper part of the terrace only. Given the great variety in the possible uses of caves in prehistoric and historic times (Bonsall and Tolan-Smith, 1997), not least of their darker parts, the results of our geophysical surveys, as promising as they are, show us that yet further investigations are needed if we want el-Wad to yield more of its secrets.