

# ON THE REBOUND – A LEVANTINE VIEW OF UPPER PALAEOLITHIC DYNAMICS

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**Abstract:** In our overview we endeavour to present the current state of research as regards the Levantine Upper Palaeolithic sequence from the Initial Upper Palaeolithic onwards, with particular emphasis upon the relationship between the Ahmarian and Aurignacian techno-complexes. It seems to us that the Euro-centric bias in the interpretations of the local data, initially apparent in the writings of the pioneer researchers of Levantine prehistory can still be traced, at least to a degree, in present-day studies.

**Key-Words:** Upper Palaeolithic, Euro-centrism, Initial Upper Palaeolithic (IUP), Aurignacian, Ahmarian, Levant.

## 1 INTRODUCTION

Some notions die hard... Pioneering prehistoric research in the Levant was conducted by scholars trained and experienced in Europe, which was both a blessing and a curse (Garrod 1934, 1938, 1953; Neuville 1934, 1951); accordingly there was a tendency to search for and highlight the similar rather than emphasize the differences with what was then known in Europe. In this vein it is of interest to follow the tortuous path taken by Dorothy Garrod when she initiated study of the local Upper Palaeolithic - first encountering it in el-Wad cave she immediately labeled the assemblages as 'Aurignacian' (Garrod & Bate 1937). Subsequently, after acquiring experience studying other local Upper Palaeolithic assemblages, she repudiated her initial definition, considering the particularities of the indigenous lithic assemblages as being more significant than the general similarities to European UP assemblages (Garrod 1953, 1957a). Accordingly she relabeled the successive el-Wad 'Aurignacian' assemblages as the 'Antelian' and then 'Atlitian' industries, while recognizing differences and discontinuities between them (Garrod 1957a).

Given the initial Euro-centric bias to prehistoric research in the Near East, today it is ironic to note that researchers in Europe are questioning the long-entrenched chrono-cultural frameworks within Europe and sometimes even adopt Near Eastern cultural terminology for European phenomena, i.e. the use of the term 'Ahmarian' (Teyssandier *et al.* 2010 and references therein). Indeed, there is an on-going debate as to the very nature of the 'European' frame of reference, as it has emerged that 'Aurignacian' should not be considered as a synonym for all early Upper Palaeolithic occurrences in Europe (*ibid.*). Scholars have long taken liberties in their assignment of archaeological phenomena to the 'Aurignacian', mostly because the term was accepted as a generic synonym for 'Early Upper Palaeolithic'. Over time, this practice has made comprehension of early Upper Palaeolithic developments more complex, since the various entities assigned to the 'Aurignacian' *sensu lato*, especially in Western Europe, differ in their specific techno-typological characteristics, resulting in incongruities (*ibid.*; Bon 2002). Currently 'Aurignacian' research within Europe is in a state of flux, with regards its' material culture characteristics, local developments and its range of variability (e.g. Tsanova *et al.* 2012).

This has major implications for UP research and terminology in the Near East. Until the mid 1970's debates on the Levantine UP largely revolved around the six-part unilinear framework suggested by Garrod (1957a) and Neuville (1951). Still, research in the late 1960's had already led to the adoption of a new status for the microlithic industries of the later part of the sequence, namely the Epi-Palaeolithic (Garrod 1957b; Perrot 1968; Bar-Yosef 1970).

It was only in light of field research in the marginal regions of the southern Levant during the 1970's that this unilinear developmental model was replaced by a radically new hypothesis encompassing the entire Levant. This new approach posited the presence of at least two (partially) parallel UP phyla by Gilead (1981) and Marks (1981; and see descriptions in Goring-Morris & Belfer-Cohen 2003). Altogether the Levantine UP currently spans some 25,000 years, beginning at ca. 50 k calBP, and concluding with the shift to the Epi-Palaeolithic at ca. 23 k calBP, more or less coinciding with the onset of the Late Glacial Maximum.

In the following pages we discuss the earlier Upper Palaeolithic from a Levantine viewpoint focusing on the Ahmarian/Aurignacian dichotomy.

## 2 THE EMERGENCE OF THE UPPER PALAEOLITHIC IN THE LEVANT

Currently the date of the Middle to Upper Palaeolithic (MP-UP) transition in the Levant is ca. 42 k BP uncalibrated (Rebollo *et al.* 2011). The main changes observed are a significant rise in the frequencies and types of end-scrapers and burins and the introduction of new tool types mostly blade forms (a variety of points on blade/bladelets). These reflect a technological shift away from surficial to volumetric concepts of cores for the production of the aforementioned blade/bladelets (Belfer-Cohen & Goring-Morris 2009).

While the Initial UP material culture demonstrates changes in its techno-typological characteristics, it provides few, if any clues as to who were its makers. The dominant scenario currently correlates those changes with the arrival of modern humans from Africa, replacing or mingling with local populations throughout Eurasia (Bar-Yosef 2000, 2007; Mellars 2005).

## 3 THE INITIAL UPPER PALAEOLITHIC

The first IUP industry in the Levant was defined by D. Garrod as the “Emiran” – initially recognized in the assemblages from Emireh Cave and el-Wad Cave E (Garrod 1955). By far the best documented example of the Emiran derives from the southern open-air site of Boker Tachtit dated to ca. 40 k BP uncalibrated (Marks 1983). Here, Levallois-type points (produced by an Upper Palaeolithic technique) were found together with a distinct tool type or *fossile directeur* – the basally thinned Emireh point (Marks 1983; Marks & Kaufman 1983; Volkman 1983). Systematically refitted cores demonstrate that the Levallois points were produced by a bidirectional blade technology, stemming from the North African MP ‘Nubian’ concept, which differs from the local, convergent late Mousterian Levallois points (Meignen & Bar-Yosef 1991; Kerry & Henry 2003; and see Belfer-Cohen & Goring-Morris 2007, 2009). Blade production, another distinctive characteristic of the Levantine IUP industries, has been observed within the Nile Valley Mousterian site of Taramsa (Van Peer 2004; Vermeersch 2001).

Another variant of an IUP industry in the Levant, with chamfered pieces, was described from layers overlying Mousterian occupations at the Ksar ‘Akil rock shelter (Azoury 1986; Copeland 1975; Ohnuma 1988). Assemblages overlying these “chanfrein” layers comprise single platform, pyramidal cores that produced serial convergent blades and elongated, Levallois-type points (Ohnuma & Bergman 1990), resembling the Emiran assemblages from Boker Tachtit. Similar techno-typological traits were observed also at the open-air site Tor Sadaf in southern Transjordan (Fox 2003). Though the Emireh points are absent from this IUP variant, the reduction sequence is similar and comprises a uni-directional technology producing blades and elongated triangular blanks with faceted platforms.

An additional IUP occurrence is reported from the el-Kowm Basin of northeast Syria at the open-air site of Umm el-Tlel (layers II Base and III 2A); the assemblage comprises a “para-Levallois” reduction sequence, which results in narrow and elongated Levallois – “Umm el-Tlel” – points that feature unidirectional scar patterns. The cores grade into blade core types, somewhat akin to those at Tor Sadaf (Boëda & Muhesen 1993; Bourguignon 1998). At the same time the assemblages at Umm el-Tlel also comprise numerous burins and end-scrapers. The dates for these levels, ~34–36 k yrs (Bourguignon 1998) are rather late compared with IUP dates elsewhere.

Farther north in the Levant, the coastal sites of Üçagizli and Kanal caves have yielded IUP assemblages that are blade-based, with faceted striking platforms, similar to the Umm el-Tlel points. There are also a few chamfered pieces, end-scrapers, burins and retouched blades, although Emireh points are absent (Kuhn *et al.* 2009).

Industries similar to the two Levantine IUP variants have been reported from Eastern Europe. Thus the Moravian “Bohunician” entity displays remarkable similarity to the Boker Tachtit levels 1–2 assemblages (Skrdla 2003; Svoboda & Bar-Yosef 2003 and papers therein; Tostevin 2003). Chamfered elements were observed also in the IUP “Dabban” culture at Haua Fteah Cave, Cyrenaica (McBurney 1967). These IUP variants may reflect diffusions by long-range, ‘leap-frogging’ movements of highly mobile groups.

#### 4 THE AHMARIAN

The ‘Ahmarian’ was actually first observed much earlier at Qafzeh and Erq el-Ahmar (Neuville 1951; Ronen 1976) than when it was formally defined (Gilead 1981; Marks 1981); yet, preconceptions had barred an awareness of this distinctive UP tradition.

The Ahmarian is subdivided into an Early, ~45–30 k calBP, and a Late phase, ~30–24 k calBP. It appears both in the Mediterranean zone and most especially in the steppic zone, where most sites are quite ephemeral. In the southern and eastern desertic margins of the Levant there appears to have been a greater degree of continuity between the Ahmarian phases than within the Mediterranean coastal areas; there local developments appear to have been interrupted by the brief incursion of the Levantine Aurignacian phenomenon (and see below). In the Mediterranean zone Ahmarian sites are found in caves and rock-shelters, e.g. Üçagizli, Kebara, Qafzeh and Erq el-Ahmar (Bar-Yosef & Belfer-Cohen 2005; Bar-Yosef *et al.* 1992; Gilead 1981; Kuhn *et al.* 2009). The site with by far the longest Ahmarian sequence is Ksar ‘Akil, where the 7 m thickness of Levels 20–8 provides an extended techno-typological profile (Ohnuma 1988; and see Williams & Bergman 2010).

The techno-typological profile of the Ahmarian comprises narrow-fronted single-platform cores that yielded series of flat or incurvate, thin, narrow, convergent blade/let blanks. It should be noted though that sometimes there is a clear bimodal distribution according to the produced blanks, i.e. blades vs. bladelets (e.g. Bar-Yosef & Belfer 1977). Many of the retouched bladelets comfortably fit within current (European) definitions of *lamelles Dufour* (Chiotti 2005, and references therein). Larger tools were made on secondary blanks from the initial setting up or rejuvenation of the core (e.g. Davidzon & Goring-Morris 2003; Goring-Morris & Davidzon 2006). Ochre is present in many sites, while bone tools are only found in small numbers, perhaps due to taphonomic processes, while *Dentalium* also occurs sporadically (e.g. Bar-Yosef & Belfer 1977; Coinman 2000).

In light of recent studies it seems likely that there was diffusion by groups related to the Early Ahmarian to Europe by way of the Danube corridor, as illustrated by Level VII at the site of Kozarnika, Bulgaria, dated to ~43–41 k calBP (Tsanova 2006; Tsanova 2012).

## 5 THE LEVANTINE AURIGNACIAN

The Levantine Aurignacian entity (most similar to Aurignacian I of Western Europe; and see below) appears rather sparsely, distributed only in the Mediterranean zone and, though still poorly dated, ~37–32(?) k yrs calBP, it seems to represent a relatively short incursion by groups from outside the Levant. At Ksar 'Akil the Levantine Aurignacian of Levels 7–8 is sandwiched between early and later Ahmarian occupations (and see Williams & Bergman 2010). The few cave and rock-shelter occupations are all small and ephemeral in nature. In addition to Ksar 'Akil and Antelias III on the Lebanese coast, they include mostly sites in the Galilee, e.g. Manot and Hayonim D, and the Carmel, e.g. el-Wad D-E, Kebara I-II, Raqefet III and Sefunim 8–10, as well as further east at Yabrud II/3–4 (Barzilai *et al.* 2012; Belfer-Cohen & Bar-Yosef 1981; Garrod & Bate 1937; Lengyel 2007; Ronen 1984). The technology of the Levantine Aurignacian lithic industry is characterized by single platform flake cores, though among the tools there is a marked and preferential use of blade/lets for tool blanks (Belfer-Cohen & Bar-Yosef 1981; Ronen 1976, 1984). Notable amongst the tools are **frontally** carinated and shouldered scrapers, items with Aurignacian retouch, burins and low frequencies of rather nondescript points. One should mention the relatively rich bone and antler assemblages, often including distinctive bi-points, although it is the two split-based points from Kebara and Hayonim caves that most closely associate the entity with its European counterparts. Of interest is the presence of decorative items on bone and equid teeth (Bar-Yosef & Belfer-Cohen 1996; Belfer-Cohen & Bar-Yosef 1999). So too, we note the faint engraving of a quadruped on an ochre-smear plaque at Hayonim Cave (Belfer-Cohen & Bar-Yosef 1981). Marine molluscs comprising *Dentalium* and *Nassa gibbosula* were recovered at Yabrud II/4 (Rust 1950).

## 6 SUMMARY REMARKS

Basic questions arise when examining the developmental sequence of cultural dynamics during the earlier Upper Palaeolithic at the level of terminology. Prominent among these is what exactly we are talking about using the term 'Aurignacian'. Here it can be stated that the preconceptions of the Euro-centric background to the pioneering prehistoric research in the Near East has been a mixed blessing for comprehending cultural developments. Following her initial assignment of Upper Palaeolithic assemblages to the 'Aurignacian', Garrod later opted for local terms ('Antelian' and 'Atlitian') to describe those same assemblages. Later still, the 1969 Wenner-Gren London roundtable symposium convened to discuss the Upper Palaeolithic lithic assemblages at Ksar Akil was seminal, since it assembled a range of scholars working in the Near East as well as others in Europe to consider cultural developments in the Levant<sup>1</sup>. Although no official publication derived from this 'think tank', the discussions were recorded and unofficial transcripts circulated thereafter. These deliberations comprised the basis for synthetic papers on Levantine Upper Palaeolithic developments, most especially from a Lebanese perspective (e.g. Besançon *et al.* 1975–1976–1977; Copeland 1975; Hours 1974). Accordingly the terms 'Antelian' I and II and 'Atlitian' previously proposed by Garrod were replaced by 'Levantine Aurignacian' A, B and C (Ksar 'Akil levels 13–11 = A; 10–9 = B; and 8–6 = C).

1. Participants included: I. Azoury, O. Bar-Yosef, F. Bordes, M.N. Brezillon, L. Copeland, F. Hours, M. Newcomer, J. Perrot, A. Ronen, B. Schroeder, A. Sieveking, R. Solecki, D. de Sonneville-Bordes, and J. Waechter.

However, following detailed studies of the Ksar 'Akil Upper Palaeolithic assemblages from these layers, Bergman (1987) was uneasy with the terminological framework. Another gathering was convened in London in 1987 to consider the situation, and the results were summarized in Bergman and Goring-Morris (1987). There, it was suggested that only levels VIII-VII correspond to the term 'Levantine Aurignacian' (*sensu stricto*), i.e. most similar to 'Aurignacien I' of western Europe - an observation later corroborated by participants at the Lisbon 'Aurignacian' workshop in 2002 (and see Goring-Morris & Belfer-Cohen 2006). As an aside, as we are not going into detailed discussion of the 'Aurignacian' globally, it is of interest to note that currently, the expansive, all-encompassing use of the term 'Aurignacian' is raising a lively debate in Europe (e.g. Zilhão 2011, and references therein).

Both in the past and even today researchers who use the term 'Aurignacian' are motivated by different connotations; at one end of the scale the 'Aurignacian' has been a synonym for the early Upper Palaeolithic; on the other it is used in a minimalistic and particularistic fashion to relate only to very specific chrono-cultural attributes. In the present discourse we side with the more restricted definition since we believe that it is more appropriate for comprehending the dynamic cultural developments within the Levant, the Near East, and even further afield in Europe.

Summing up our position we begin by noting that, to date, no IUP has been reported from the Zagros-Taurus arc, in contrast to the Levant, where numbers of sites have been described, e.g. Boqer Tachtit, Ksar 'Akil, Uçagizli, Emireh, Tor Sadaf, amongst others (Fox & Coinman 2004; Garrod & Bate 1937; Kuhn *et al.* 2009; Marks 1983). The IUP in the Levant demonstrates clear techno-typological affinities with the Middle Palaeolithic (Belfer-Cohen & Goring-Morris 2007, 2009; Goring-Morris & Belfer-Cohen 2003). By contrast, in the Zagros region there appears to be a significant hiatus throughout the region that extends northwards to the Caucasus (e.g. Adler *et al.* 2006; Belfer-Cohen & Goring-Morris 2014).

Furthermore, it can be stated that the initial development of the Early Upper Palaeolithic in the Near East, and especially in the Levant, is geared towards blade/let based industries with affinities to the Ahmarian (Bar-Yosef & Belfer-Cohen 2010 and see references above).

The Levantine 'Aurignacian' appears later in the Near East than in Europe (Conard 2011; Otte *et al.* 2011, and references therein) and it differs significantly in terms of technology and typology (as well as in other realms of material culture) from both the Ahmarian phases that precede and postdate it.

Nevertheless, it is the preconceptions and misconceptions in the terminology used over the years that have 'muddied the waters'. Indeed, here one can bring as an example the interpretation of level X at the key site of Ksar 'Akil by François Bordes, who stated flatly "Layer 10 at Ksar 'Akil is definitely Aurignacian" (Bordes 1968:200). Even after the renewed excavations at the site by Tixier in the early 1970's the industry of level X (old series of excavation), level 12 (Phase VII - new excavations) was still considered as Levantine Aurignacian, though it was noted that it is very poor in "Aurignacian" artefacts (Tixier & Inizian 1981:360). It was only much later, from the mid 1980's onward that, by means of detailed techno-typological studies (Bergman 1987; Williams & Bergman 2010), it was finally possible to distinguish between the long Ahmarian succession (including level X) and the brief incursion of the 'Aurignacian' (*sensu Aurignacien I*) relatively late in the sequence.

It is amazing that Minzoni-Roche, as late as 1992 called the industry in the site of Uçagizli 'Aurignacian' simply because it was, without doubt, stratigraphically Early Upper Palaeolithic, an assumption that became obsolete through the subsequent prolonged excavations there during the 2000's led by Kuhn (Kuhn *et al.* 2009) that revealed a long IUP duration, followed by an Ahmari sequence (but no 'Aurignacian' whatsoever).

It is instructive to follow Garrod's growing unease already in the 1950s with the situation of using European 'yardsticks': "... *the small, sharp Font-Yves point, which is the special feature of Upper Palaeolithic III* [i.e., the Levantine Aurignacian of today], *is hardly known in the West*" (Garrod 1953:25). And, additionally, "... *the Upper Palaeolithic III* (i.e. what Garrod later called 'Aurignacian') *represents the stage at which an incoming Aurignacian group made contact with the natives, adopting and developing the Font-Yves point, which was missing from their original tool-kit, and which in any case rather soon went out of fashion again*" (*ibid.*: 33).

It seems that the Upper Palaeolithic in the Levant was much more dynamic than assumed previously. Studying it from a local perspective, traditions spread through and out of the Levant beginning very early in the UP sequence, e.g. the 'Ahmari'-like industry at Kosarnika (see above); while other traditions intruded upon the Levant, e.g., the Levantine Aurignacian phenomenon. We believe that such a scenario is applicable to the Levant *sensu stricto* as well as for the whole Near East, e.g. Yafteh (Otte *et al.* 2012). The dynamics of earlier Upper Palaeolithic developments involved not just dispersions from points of origin, but also multi-dimensional interactions, influxes and movements back and forth (and see Zilhao 2011). We accept that new excavations and discoveries may provide fresh insights about issues concerning the Levantine Upper Palaeolithic and we are ready to adapt our views accordingly; data do talk and is much more reliable than theoretical discourse or wishful thinking based on previous presumptions and preconceptions. Still, we believe that the data available today more comfortably supports our current view point better than other theories as regards the sequences and spread of the Near Eastern Upper Palaeolithic.

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