Yabrud II rock-shelter archaeological sequence (Syria) and possible Proto-Aurignacian origin in the Levant.

Yuri E. Demidenko[1] & Thomas C. Hauck[2]
[1]Institute of Archaeology, National Ukrainian Academy of Sciences, Kyiv, Ukraine.
yuri.demidenko@voliacable.com
[2]Institute of Prehistoric Archaeology, University of Cologne, Germany.
thomas.hauck@uni-koeln.de

Abstract

After more than 80 years of Yabrud II rock-shelter excavations by A. Rust in Syria, the site's Levantine Mousterian and Early Upper Paleolithic archaeological sequence does not have yet a unanimous archaeological interpretation. The present paper tries to propose new understanding for the sequence and, as a result, it appears to be of a "dotted line" character with no continuity at all except the layer 5-2 Levantine Aurignacian A / Phase 3 industry sequence. The latter industry is suggested to have its origin in a specific facies of Southern Levantine Early Ahmarian and being then transformed into Levantine Aurignacian B / Phase 4 industry, a possible "industrial starting point" for European Proto-Aurignacian.

"Leaving aside for the moment the chronological approach, let us try something rather different. Wherever the place of origin of the Aurignacian may be, we ought in that region to find an earlier culture stage from which it could have developed" (Garrod 1953: 32).

Introduction

Scientific development of Paleolithic archaeology has been always going on upon studies of sites with long and industrially variable multi-layer archaeological sequences. Any regional archaeology is also built up on such sites leading not only to construction of a regional industrial-chronological sequence for a common understanding of a region's Paleolithic but also to studies of Paleolithic industries' changes through time. Accordingly, these important sites and their finds are always in a study focus being usually well studied and understood.

It is, however, not the case with Yabrud II rock-shelter (Syria) excavated more than 80 years ago (Rust 1950) and being always considered as an important Levantine Paleolithic site continuing for Late Mousterian and Upper Paleolithic the famous Lower and Middle Paleolithic sequence of the nearby Yabrud I rock-shelter. There were several studies of the site's materials with the subsequent publications and attempts to incorporate Yabrud II data in a wider Levantine and even Western Eurasia Paleolithic context but there is no yet more or less unanimous archaeological interpretation not only for its whole sequence with 10 archaeological layers but even for each layer's finds (see the data overview: Bakdach 1982; Pastoors, Weniger & Kegler 2008). Because of such uncertain archaeological situation with Yabrud II, when the site is still widely mentioned in many textbooks, monographs and articles, we make a new study and propose new interpretations for the sites' artifact assemblages. Following the complex approach of Prof. Dr. Jean-Marie Le Tensorer, which jubilee is celebrated now, when a regional scheme is additionally considered under some major scientific topics, we put forward not just interpretations but do it from the standpoint of a basic problem, an Early Ahmarian-Aurignacian interface and possible Proto-Aurignacian origin in the Levant.

Proto-Aurignacian possible industrial roots in the Levant: some recent hypotheses

Since the pioneering work of Abbé H. Breuil in the beginning of XX century (Breuil 1906) the Aurignacian origin topic is still in a center of Early Upper Paleolithic (UP) studies in Western Eurasia. Keeping in mind the Aurignacian multi-stage industrial-chronological complexity, a search for Aurignacian lithic industrial "roots" should start with a discussion not on aggregated techno-typological features from Aurignacian O / Proto-Aurignacian and Aurignacian I / Early Aurignacian up to Aurignacian III-IV / Evolved Aurignacian, but only on artifact characteristics of an initial Aurignacian industry type.

According to all recently proposed ideas on Aurignacian initial manifestations (articles in: Bar-Yosef & Zilhao, eds., 2006), Proto-Aurignacian is the first industrial appearance of the technocomplex in Europe. Using, however, chronological data, there are also some substantial data on geochronological co-existence of Proto-Aurignacian and Early Aurignacian industry types in Europe and particularly in its central part (Higham *et al.* 2012; 2013; Nigst *et al.* 2014; Hublin 2015), despite some known sites in Western Europe with the presence of the two in-

dustries' archaeological layers where a Proto-Aurignacian layer is always (sic!) below an Early Aurignacian layer (Leroyer & Leroi-Gourhan 1983; Demidenko & Noiret 2012; Banks, d'Errico & Zilhao 2013a; 2013b).

According to lithic artifact data (Demidenko 2000; 2000-2001; 2001-2002; Demidenko & Otte 2000-2001; 2007; Demidenko & Noiret 2012; Bon 2002; Le Brun-Ricalens, Bordes & Bon, eds., 2005; Bar-Yosef & Zilhao, eds., 2006), European Proto-Aurignacian is, first of all, characterized by various bladelet single-platform and "double single-platform" (orthogonal / 90 degree and bidirectional-perpendicular but no true bidirectional) cores with no elongated flaking surfaces, including wide-fronted carinated endscrapers-cores (but having not at all or just a few carinated burins / narrow-flaked cores), serving for production of usually on-axis and non-twisted medium-sized (no longer 5 cm) bladelets (< 1,2 cm wide) and microblades (< 0,7 cm wide) often used for manufacture of Dufour sub-type microliths with alternate bilateral and/or ventral lateral retouch and a few Font-Yves / Krems points. Other tools in Proto-Aurignacian assemblages are mainly represented by simple endscrapers, angle and on truncation / lateral retouch burins, retouched blades but no pieces bearing true Early Aurignacian stepped retouch, splintered tools but no bipolar anvil cores. The lithics are added by simple types of bone points (no split-based ones) and awls, as well as some personal ornaments mostly made of mollusk shells.

Geographically, sites with Proto-Aurignacian layers are mostly situated throughout southern geographical band in Europe - somewhat above 40°N latitude to around 46°N latitude, enveloping in Western Europe mainly its "Mediterranean belt" in Spain, France and Italy, continuing along Danube River valley into Central Europe (Lower Austria, South-Western Romania, North-Western Bulgaria, Ukrainian Transcarpathia) and going into southern territories of Ukraine (Crimea) and Russia (Lower Don River area) (Demidenko 2000-2001; 2001-2002; Demidenko & Noiret 2012).

After Bar-Yosef's suggestion that the European Mediterranean Proto-Aurignacian resembles the Levantine Early Ahmarian (Bar-Yosef 2003), some colleagues started to argue about real similarity and the origin of Proto-Aurignacian from Early Ahmarian in the Levant (e.g. Mellars 2004; 2006; Teyssandier 2006; Hauck 2015), trying even to state that "t*echnologically and typologically, the Protoaurignacian is virtually indistinguishable from the Early Ahmarian of the Levant*" (Zilhao 2006: 190). One of us (Yu.E. Demidenko) has already showed a great industrial variability of the Levantine Early Ahmarian seen in the presence of four industry types, why it is impossible to claim the Proto-Aurignacian origin just from Early Ahmarian. Moreover, it has been also proposed that one of the Early Ahmarian industry's types (Ksar Akil 1930s excavations level X / Phase 4 - see Williams & Bergman 2010), which was also previously named as Levantine Aurignacian B industry type (Bergman 1987), is indeed the most similar to European Proto-Aurignacian (Demidenko 2012a), although these Levantine materials have been not mentioned before among concrete "indistinguishable" Levantine Early Ahmarian assemblages to Proto-Aurignacian. Similar opinion on a real industrial similarity between European Proto-Aurignacian and Ksar Akil, Phase 4 Early Ahmarian industry type was also then made by colleagues from Japan working with some recently excavated Early UP materials in Northern Syria (Kadowaki, Omori & Nishiaki 2015), where they emphasized possible chronologically later position of the Levantine industry in comparison to Proto-Aurignacian known dates.

But aside of the "industrial similarity proposition", it was further suggested to view another industry type in the Levant, Ksar Akil 1930s excavations levels XIII-XI / Phase 3 / Levantine Aurignacian A, stratigraphically sandwiched between Northern Levantine Early Ahmarian (Ksar Akil 1930s excavations levels XVII-XVI / Phase 2) and the above-noted Ksar Akil 1930s excavations level X / Phase 4 / Levantine Aurignacian B industry within the Ksar Akil rock-shelter Early UP sequence in Lebanon, as a possible "industrial source" for the Proto-Aurignacian origin in the Levant (Demidenko 2011; 2012a; 2012b).

The newly proposed hypothesis on the Levantine Proto-Aurignacian origin was also developed after some work of one of us (Yu.E. Demidenko) in Cologne in 2009 with Yabrud II, layers 5-3 artifact assemblages. That's why a work with Yabrud II artifacts was continued in 2013 by already two of us with later participation of some students (Hauck *et al.* 2014). Our work with Yabrud II also had to include not only layers 5-1 "Early Ahmarian-Aurignacian interface subject" but also lower layers' finds for a better understanding of the site's archaeological sequence. As a result, the proposed article aims to represent the whole Yabrud II sequence understanding.

Yabrud II rock-shelter: past and present study results

Yabrud II rock-shelter, discovered and excavated

in 1932-1933 by Alfred Rust (Cologne, Germany), is one of concavities located along the northern rim of the Skifta dry valley within the Eocene limestone plateau of Western Syria at ca. 1 400 m.a.s.l. of eastern slopes of Anti-Lebanon Mountains, 60 km north-east of Damascus. The rock-shelter (ca. 33 m wide and 8 m deep) opens to the southeast but only its western part contained undisturbed Pleistocene sediments for an area of ca. 20 sq. m that Rust excavated. The Pleistocene sediment sequence was 3 m thick where Rust identified 3 Late Mousterian ("*Jung Moustérien*") layers 10-8 and 7 various sorts of Aurignacian ("*Älteres* / *Mittel* / *Jung* / *End Aurignacien*") layers 7-1.

It should be underlined that only during 2013 our work with Yabrud II lithics in Cologne it became clear a major scientific problem for assemblages' composition. It is the bias introduced by the artifact sampling method of Rust after excavations for bringing them to Germany. Actually, he has been about only taking lithics looking for him as core-like pieces and tools (including items with an edge damage), and almost no other lithic classes and types. Therefore, Yabrud II collection lacks many artifacts that would allow reconstructing the complete chaîne opératoire for every layer. The assemblages are not a random collection (contra Pastoors, Weniger & Kegler 2008: 50) caused by the 1930s excavation technique but specific samples of certain artifact categories that represent only parts of the core reduction and tool manufacture processes. That's why any Yabrud II assemblage studies, including ours, will only reveal limited information.

Another important lithic artifact factor is a great variability of lithic raw materials represented throughout the site's sequence when usually an assemblage of any layer significantly differs by various flint, chalcedony and chert type occurrence from another layer's assemblage. It is already well described (e.g. Pastoors, Weniger & Kegler 2008: 49). For us it means usage of various lithic raw material outcrops around Yabrud rock-shelters (Solecki & Solecki 2007) by Yabrud II human visitors and also some chronological breaks between layers when people even of the same industry type visiting again the rock-shelter have been using different from previous outcrops, probably, forgetting the "ancestor information" on ones used before. It also allows us a better understanding of core and tool variability for such layer clusters.

Keeping additionally in mind the two above-noted lithic factors, the following industrial interpretation summary for Yabrud II archaeological sequence is proposed.

Layers 10 (7 artifacts) & 9 (ca. 150 artifacts). The layers' lithics from the base of the site's sequence can be only basically attributed to Levantine Mousterian with no decision possible in favor either to Early Levantine Mousterian / Tabun-D type Levallois-Mousterian or to Late Levantine Mousterian / Tabun-B type Levallois-Mousterian. It contradicts to most the made before attributions starting from the Rust's "*Jung Moustérien*" up to the very recent "*Levantine Mousterian*" for layer 10 and "*Tabun B-type*" for layer 9 (Pastoors, Weniger & Kegler 2008). That's because the low artifact sample sizes inhibit any clear attribution. Moreover, it is also because the occurrence of some basic similar technological features for Levallois point unidirectional convergent core reduction methods known for both Early and Late Levantine Mousterian, absence of so characteristic for Tabun-B type assemblages of metrically shortened Levallois convergent points having wide "*chapeau de gendarme*" butts and "*Concorde*" arched lateral profiles, and ventrally retouched Levallois points, as well as the presence of typical for Tabun-D type assemblages of some elongated debitage pieces having no faceted butts in the two assemblages.

Layers 8 (ca. 80 artifacts) & 7 (ca. 120 artifacts). It has been already proposed attribution of assemblages from the layers to Early Emiran / Initial Upper Paleolithic (Demidenko 2013). Also, possible is a comparison with Nubian / Arabian MSA, like materials from Ain Difla rock-shelter (West-Central Jordan). The two attribution variations appear because of some evident presence of not only debitage related to Levallois bidirectional point blade technology there (sensu Demidenko & Usik 1993) but also the occurrence of such characteristic "*fossile directoir*" lithic types as two Levallois bidirectional point blade cores from layer 7 (Pastoors, Weniger & Kegler 2008: Fig. 6, 1-2) and a Levallois bidirectional point having a marginal dorsal retouch at right lateral edge near the butt from layer 8 (Bakdach 1982: Taf. 80, 2). Before layer 8 was considered as being "*Jung Moustérien*" (Rust 1950) / "*Late Levantine Mousterian*" (Ziffer 1981) or "*Levallois-Mousterian*" (Bakdach 1982) / "*late Tabun B-type of Levantine Mousterian*" (Pastoors, Weniger & Kegler 2008), while layer 7 was always considered as an Upper Paleolithic one in a range between the Rust's "*Älteres Aurignacien*" till the 1982 Bakdach's "*Frühjungpaläolithikum Phase I - Ksar Akil Phase B, 1930s excavations layers XX-XIV*", although the most recent opinion was on the side of "*Unspecified Middle Palaeolithic*" (Pastoors, Weniger & Kegler 2008). At the same time, we agree that a part of layer 8 lithics belongs to Levantine Mousterian.

Layer 6 (ca. 300 artifacts). This is first archaeological layer at Yabrud II starting from the sequence's base, which was always recognized as an Early UP one since the Rust's "Primitiv Aurignacien", having also significantly higher number of lithics in comparison to the layers below. The seemingly well established Early Ahmarian affiliation (Belfer-Cohen & Goring-Morris 2003) that is about equal to the "*Ksar Akil, Phase Bii, layers XVII-XV*" (**Z**iffer 1981) and the "*Frühjungpaläolithikum Phase II - Ksar Akil Phase B, layers XX-XIV*" (Bakdach 1982), was recently challenged by an "Initial Upper Paleolithic" recognition (Pastoors, Weniger & Kegler 2008). Our industrial attribution for layer 6 lithics is in accordance with the above-noted Early Ahmarian recognition and having the closest techno-typological comparisons to Ksar Akil, 1930s excavations levels XIX-XVIII (Ohnuma 1988; Ohnuma & Bergman 1990). It's because the 2008 study's so-called "*Levallois recurrent unidirectional convergent / Levallois recurrent centripetal / Levallois recurrent unidirectional and bi-directional*" cores (Pastoors, Weniger & Kegler 2008: 54) are actually "residue cores" of a dominant for Northern Levant Early Ahmarian like Ksar Akil, 1930s excavations levels XIX-XVIII "*elaborate technology for producing blades and bladelets from parallel-sided prismatic cores with opposed striking platforms*" when some cores have faceted platforms sometimes making them false-looking as Levallois-like one, and in addition "*blade / bladelet production is far more refined than in the earlier levels*" (Ohnuma & Bergman 1990: 114) why some blade/bladelet cores with plain striking platforms also occur in layer 6.

Layers 5 through 2 sequence. The four layers' artifacts have been often considered as constituting a two-fold structured sequence of a similar Early UP industry having some definite Aurignacian artifact types. It was since the Rust's "*Mittelaurignacien*" for layers 5-4 and "*Jungaurignacien*" for layers 3-2 and till the Ziffer's various manifestations of "*Levantine Aurignacian Bii*", like Ksar Akil, 1930s excavations levels IX-VIII, and even a three-fold structure in the Bakdach's "*Mitteljungpaläolithikum*" with Phase I / Ksar Akil, 1930s excavations levels XIII-XII for layers 5-4, Phase II / Ksar Akil, 1930s excavations level XI for layer 3 and Phase III / Ksar Akil, 1930s excavations level X for layer 2 (Rust 1950; Ziffer 1981; Bakdach 1982). At the same time, recently there were expressed some different opinions pointing out that the lowermost of the sequence's layer 5 is "*Early Ahmarian*" like layer 6 (Belfer-Cohen & Goring-Morris 2003; Pastoors, Weniger & Kegler 2008), while layers 4-1 (Belfer-Cohen & Goring-Morris 2003) or 4-3 (Belfer-Cohen & Goring-Morris 2014) do supposedly belong to "*Classic Levantine Aurignacian*", like Ksar Akil, 1930s excavations levels VIII-VI. It has been probably done because of the presence of a few antler / bone points in layers 4 and 3. Our position is to some extent similar to the Bakdach's opinion with some corrections.

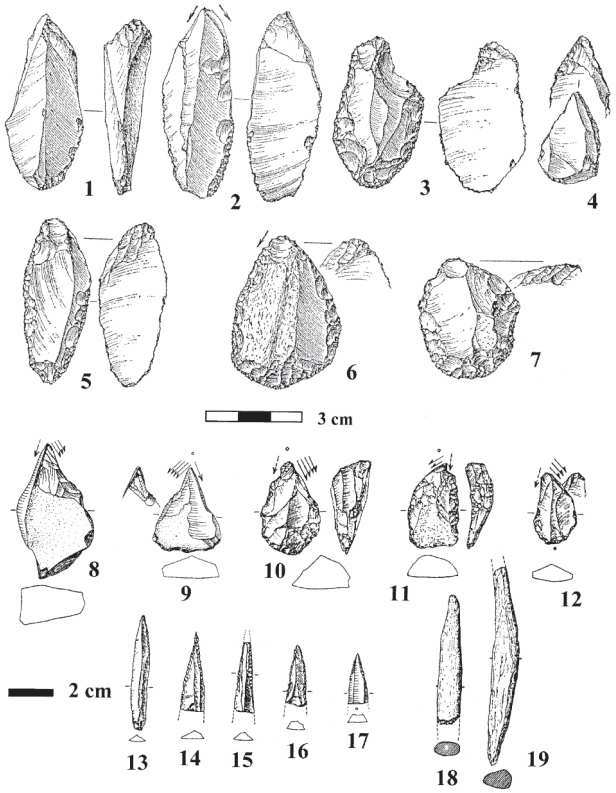

Figure 1: *Yabrud II, layer 3, Levantine Aurignacian A / Phase 3 Early UP industry. 1, 8-12 - various carinated burins-cores; 2-4 - flat-faced carinated burins-cores; 5-7 - various combined tools with lateral carinated pieces' parts; 13-17 - points on bladelets; 18-19 - bone points (modified after Rust 1950, Taf. 87-88; Bagdach 1982, Taf. 36-38).*

All in all, lithic pieces from Yabrud II, layers 5 (ca. 730 artifacts) & 4 (ca. 880 artifacts) do represent an enigmatic Early UP industry in the Levant, as Ch. Bergman was saying in the 1980s and 1990s, characterized by a mixture of some Early Ahmarian and Aurignacian techno-typological features, now the best known for Ksar Akil, 1930s excavations levels XIII-XI materials often also named as Levantine Aurignacian A or Ksar Akil Phase 3 (Bergman 1987; Ohnuma & Bergman 1990; Williams & Bergman 2010). From our point of view, the Levantine Aurignacian A / Phase 3 lithic data are distinguished from other Levantine Early UP industries by an overall dominance of burins over endscrapers, a significant share of various carinated burins-cores (carinated burins sensu stricto, wide-fronted carinated burins / narrow-flaked cores, flat-faced carinated burins like European Evolved Aurignacian Vachon type, but no true busqué type, and lateral carinated

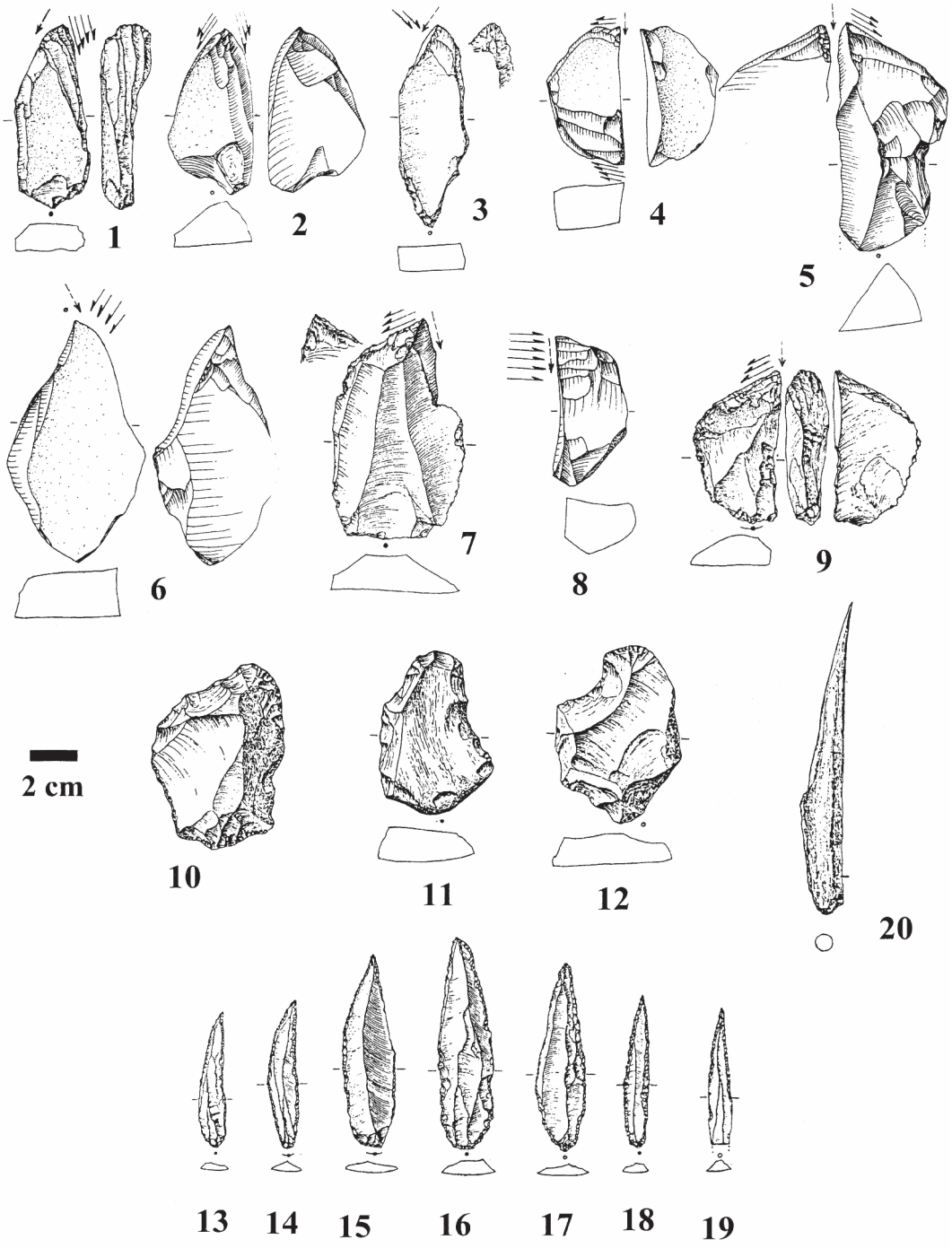

Figure 2: *Yabrud II, layer 2, Levantine Aurignacian A / Phase 3 Early UP industry. 1, 5, 7, 9 - various carinated burins-cores; 2, 4, 6, 8 - flat-faced carinated burins-cores; 3 - a combined tool with a flat-faced carinated burin-core's part; 10-12 - nosed / shouldered endscrapers-cores; 13-19 - various points; 20 - bone awl (modified after Rust 1950, Taf. 89-91; Bagdach 1982, Taf. 44-50).*

pieces) among all identifiable burin verges (from 25-35% up to => 50%) with, however, a rarity of Aurignacian types among end-scrapers-cores. Such reduction objects caused a dominance of twisted and right off-axis bladelets and microblades. Moreover, Yabrud II, layers 5-4 tool-kits (see Hauck *et al.* 2014) do well match with Ksar Akil, level XIII (the lowermost level of the Levantine Aurignacian A / Phase 3 Ksar Akil sequence) where lateral carinated pieces are missing yet and also shares of all carinated burins do deviate within 25-35%. On the other hand, Yabrud II, layers 3 (ca. 490 artifacts) and 2 (ca. 950 artifacts) tool-kits show a higher ratio of all carinated burins-cores (=> 50%) (Fig. 1: 1-4, 8-12; Fig. 2: 1-9) with also serial lateral carinated pieces in layer 3 (Fig. 1: 5-7). At the same time, level 2 tools add some more techno-typological variability to the Levantine Aurignacian A / Phase 3 industry having no lateral carinated pieces but with some Aurignacian endscraper-core types (Fig. 2: 10-12).

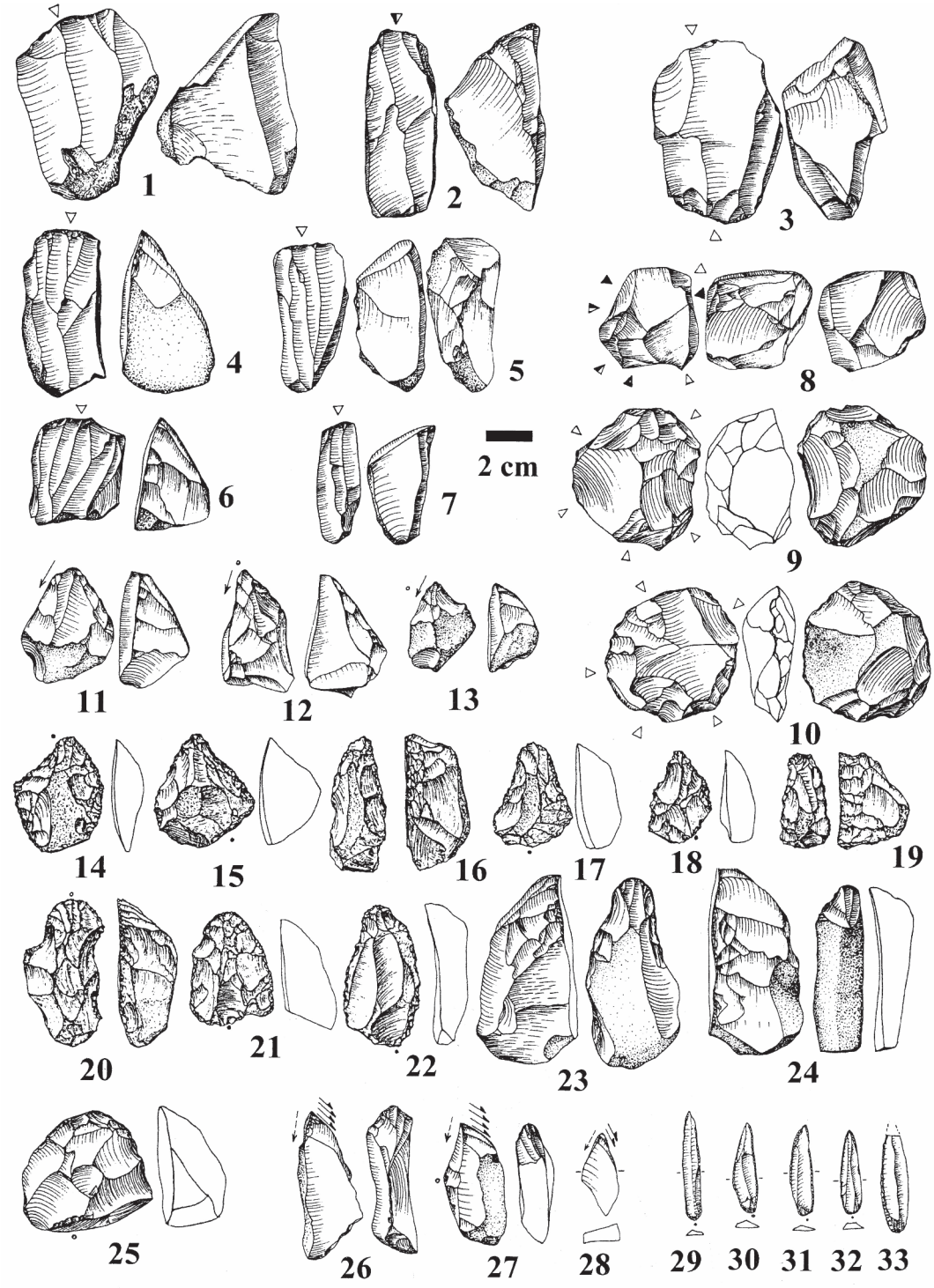

Figure 3: *Yabrud II, layer 1, Classic Levantine Aurignacian / Phase 5 Early UP industry. 1-3 - blade cores; 4-5 - blade / bladelet cores; 6-7 bladelet cores; 8-10 - flake cores; 11-13 - burins on nosed endscrapers-cores; 14-24 - nosed / shouldered endscrapers-cores; 25 - wide-fronted carinated endscraper-core; 26-28 - carinated burins-cores; 29-33 - microliths (modified after Rust 1950, Taf. 93; Bagdach 1982, Taf. 51-63).*

The latter pieces might indicate a possible "transitional role" of layer 2 lithics in transformation of Levantine Aurignacian A / Phase 3 industry into Levantine Aurignacian B / Ksar Akil Phase 4 - 1930s excavations levels X / 1940s excavations levels XIb-Xc industry that is, however, missing within Yabrud II sequence, if the Aurignacian endscraper-core types (mostly nosed / shouldered ones) are not a taphonomy / excavation admixture from layer 1 above.

Thus, the Yabrud II layer 5 to 2 sequence (see also Demidenko 2011; 2012a; 2012b) makes much wider our knowledge on the Levantine Aurignacian A / Phase 3 industry and it is even possible to trace some phases for it. The early phase already demonstrates a common prevalence of burins over endscrapers with, at the same time, an intermediate share of carinated burins-cores among all burins (Ksar Akil, level XIII; Yabrud II, layers 5-4). The phase

might indicate its smooth industrial origin from a facies of Southern Levantine Early Ahmarian with some carinated burins (e.g. Erq el-Ahmar, layers E-D; Lagama V, VII, XII). The later phase demonstrates not only a higher content of carinated burins-cores (=> 50%) but also the often presence of their specific variety, lateral carinated pieces (Ksar Akil, levels XII-XI; Yabrud II, layer 3), although this core-tool-type is absent in some later phase assemblages (Yabrud II, layer 2; Umm el Tlel, secteur 2, locus Sud-Ouest, couche 14'b'; secteur 2, locus Nord, couche II2b; secteur 5, couche P1c - Ploux & Soriano 2003).

Layer 1 (ca. 2500 artifacts). The site's uppermost layer has been always considered as an Aurignacian one but again with no an integrated opinion on a particular Aurignacian industry type. The following basic attributions can be mentioned here: "*Endaurignacien (Mikro-Aurignacien)*" (Rust 1950), "*Levantine Aurignacian C - Ksar Akil, layers VII-VI*" (Ziffer 1981), "*Mitteljungpaläolithikum Phase IV - Ksar Akil, layers IX-VII*" (Bakdach 1982). Our study indicates that the layer 1 lithics belong to Classic Levantine Aurignacian or, in other terms, Levantine Aurignacian B-C / Ksar Akil Phase 5 industry - 1930s excavations levels VIII-VII / 1940s excavations levels Xb-IXc (Bergman 1987; Williams & Bergman 2010). The layer 1 assemblage shows several core reduction strategies (blade, blade/bladelet, microblade ones) (Fig. 3: 1-10), including also radial and even true discoidal ones for serial primary reduction of thick flakes as blanks for carinated endscrapers-cores sensu lato serving as specific microblade cores. Nosed / shouldered end-scrapers-cores (Fig. 3: 14-24) comprise a great majority of all carinated endscrapers-cores, while a share of wide-fronted carinated items is certainly small (Fig. 3: 25). Curiously, a series of specific burins on nosed endscrapers-cores (Fig. 3: 11-13) are exactly the same as such items from Willendorf II, AH 4 (Nigst 2012: Figs. 76-80). There are some carinated burins (Fig. 3: 26-28) but no flat-faced ones and lateral carinated pieces. Some blades with a heavy scalar retouch occur but they hardly can be identified as bearing an Early Aurignacian stepped retouch.

In contrast to opinion of many colleagues considering Classic Levantine Aurignacian as about complete analog of West European Aurignacian I / Early Aurignacian, when its artifacts in the Levant "*are so similar to assemblages from southwest France at the other end of the Mediterranean, that one is tempted to view them literally as well as figuratively having just disembarked from the boat!*" (Goring-Morris & Belfer-Cohen 2006: 307-308), it is proposed here to view the very most, if not all, Classic Levantine Aurignacian assemblages with ca. 33-29,000 uncalBP dates as industrially and chronologically related to West and Central European Aurignacian II / Middle Aurignacian industry with ca. 33-31,000 uncalBP dates (e.g. Abri Pataud, layer 8 in France - Michel 2010; Higham *et al.* 2011; Willendorf II, AH 4 in Austria - Nigst 2012; Haesaerts *et al* 2013; Napajedla III in Moravia - Demidenko, Škrdla & Nejman in press). Indeed, when colleagues working on Levantine Early UP (e.g. Goring-Morris & Belfer-Cohen 2006: 304; Williams & Bergman 2010: 151-157) are surprised by a flake character of Classic Levantine Aurignacian in contrast to the West European Aurignacian I / Early Aurignacian having many blades among large-sized debitage pieces, they are correct as these are techno-typologically two different Aurignacian industry types, Aurignacian II / Middle Aurignacian in the Levant with mainly nosed / shouldered endscrapers-cores and flakey debitage, and Aurignacian I / Early Aurignacian in Europe with mainly wide-fronted carinated endscrapers-cores and bladey debitage. Application of such interpretation for Classic Levantine Aurignacian significantly changes the Levantine Early UP record.

Concluding remarks

As a result of our Yabrud II sequence interpretation, it becomes clear its "dotted line" character with no continuity except the layer 5-2 Levantine Aurignacian A / Phase 3 sequence with still industrially internal variable lithic assemblages that does not, however, stratigraphically underlined and/or overlapped chronologically preceding and/or succeeding it Levantine Early UP industries' layers. Also, including the Yabrud II materials into discussions on such topics as Levantine Mousterian (layers 10 & 9), Nubian MSA or Early Emiran (layers 8 & 7), Early Ahmarian (layer 6), Levantine Aurignacian A / Ksar Akil Phase 3 (layers 5-2), Classic Levantine Aurignacian / Ksar Akil Phase 5 (layer 1) leads to a better understanding of the Levantine Paleolithic. There are no absolute dates for Yabrud II. A dating program is, however, possible for layers 7, 4-2 with bone / antler tools and/or mollusk shells, and if successful, possible dates might make Yabrud II lithics "speaking more" on the Levantine Early UP subject.

Finally, turning back to the possible Proto-Aurignacian origin in the Levant, it should be underlined that the East Mediterranean Levant is the only region in Western Eurasia having an Early UP industry preceding Proto-Aurignacian and having some definite Aurignacian techno-typological features, the Levantine Aurignacian A / Phase 3 industry. The latter

industry demonstrates the first systematical "carination technology" usage but technologically mainly limited to its "burin variant" with various carinated burins-cores aiming primary reduction of twisted and off-axis bladelets and microblades for then microlith fabrication. Moreover, there are data on a gradual origin of the Levantine Aurignacian A / Phase 3 industry from a specific facies of Southern Levantine Early Ahmarian with some carinated burins. Such possible local transition in the Levant could be connected to humans search for new effective hunting projectile weaponry when Early Ahmarian one with mainly blades as components for light spears and darts has been replaced by using mainly a bow and arrows with bladelets and microblades, why the carinated burin-core technology appeared. Probably, a transitional process was not unilinear, reflecting some carinated burin-core morphological variability that is well illustrated by Yabrud II, layers 5-2 layer sequence assemblages. Then, further transformation of Levantine Aurignacian A / Phase 3 industry might reflect a change of the already used "carination burin-core technology" in favor of another way on producing microliths for arrows that did lead to establishment of wide-fronted "carination technology" mainly based on reduction of carinated cores and endscrapers-cores for production of non-twisted and on-axis bladelets and microblades for microlith manufacture, why the resulted Levantine Aurignacian B / Phase 4 industry looks much like European Proto-Aurignacian. Adding to the "projectile bow and arrow idea" some data on Early Ahmarian and Levantine Aurignacian A and B / Phases 3 and 4 human survivals in different landscapes (a woodland mountain foothill region along the Levantine Mediterranean coast with Ksar Akil rock-shelter and slopes of the Anti-Lebanon Mountains with Yabrud II rock-shelter) and exploitation of various ecological niches (Mediterranean woods, a forest-steppe, open woodlands, a steppe, an open rocky country, swampy / marshy vegetations and even marine resources), it is possible to suggest a development through time in some accelerated way their lithic traditions with the "carination technologies" for bladelet and microblade reduction, why namely the East Mediterranean Levant possibly became the homeland for Earliest Aurignacian technologies. At the same time, some overpopulation events for Earliest Aurignacian humans but no for Early Ahmarian communities (!) during rather stable paleoenvironment and climate conditions, according to fauna phase 4 data (Hooijer 1961) for Ksar Akil, 1930s excavations levels XVIII-X (Early Ahmarian, Levantine Aurignacian A & B / Phases 3 & 4 industries' sequence), could had force some of these humans to move outside the Levant (see Demidenko 2012b; 2012c; 2014). These studies on the Early Ahmarian-Aurignacian interface in the Levant are still in the initial phase and will be continued with more details using the related Yabrud II assemblage data.

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