



Contents lists available at ScienceDirect

Quaternary International

journal homepage: www.elsevier.com/locate/quaint

Paleolithic recycling: The example of Aurignacian artifacts from Kebara and Hayonim caves

A. Belfer-Cohen ^{a,*}, O. Bar-Yosef ^b^a Institute of Archaeology, The Hebrew University, Mt. Scopus, Jerusalem 91905, Israel^b Department of Anthropology, Harvard University, Cambridge, MA 02138, USA

ARTICLE INFO

Article history:

Available online 25 June 2014

Keywords:

Recycled tools

Levant

Upper Palaeolithic

ABSTRACT

This is a short account of recycling observed in Levantine Aurignacian assemblages in Kebara and Hayonim cave sites in Israel. It appears that the makers of the Aurignacian industries made use of flint pieces collected outside the caves, to modify them a new. Thus Upper Palaeolithic morphotypes were modified either on Mousterian tools or Mousterian blanks produced by the Levallois technique. Though quite distinct, this behavior portrays an exception rather than the rule, as most of the modified flint recovered in both caves was collected from resources of local flint, located in the general vicinity, some 2–15 km away, of the sites. Moreover, while recurring (though to a degree) recycling of Mousterian items was observed in other Levantine Aurignacian assemblages, this was not the case for the local Ahmarian assemblages, including the ones underlying the Aurignacian levels in Kebara Cave. Speculations as regards the reason(s) for this behavior should await further studies and a better database of its extent and recurrence.

© 2014 Elsevier Ltd and INQUA. All rights reserved.

1. Introduction

Trying to understand the phenomenon of recycling observed in the Aurignacian assemblages in Israel as detailed below, requires a brief discussion of some general assumptions that may explain this behavior. One can assume that prehistoric humans (just like their modern equals) were pragmatic and when in urgent need for a piece of hard rock for making a usable tool, may had picked up items found on the surface in or close to their camp, be it a cave or an open-air locality. Thus it seems quite natural that Palaeolithic people should have collected and ‘recycled’ older objects lying around. Those could be products of earlier camping by the same band or generations apart, modified by people long bygone. One may even suggest that ‘left over pieces’ were the result of ‘site provisioning’.

It is only lately that study of lithic recycling became a prominent topic of research as evidenced from the articles in the present volume, and while it is clear that the phenomena of flint recycling existed all through the Levantine Prehistoric sequence (e.g., the articles by Agam et al., Assaf et al., Parush-Glikman et al.,

Shimelmitz, Summer and Malinsky-Buller, Zaidner and Grosman, herein), most of the information available until quite recently stems from cursory observations in various reports with but a few detailed studies (e.g., Belfer-Cohen, 1980; Barkai, 1999).

Following is a short presentation of ‘recycling’ observed in the tool categories of Aurignacian assemblages recovered at the Hayonim and Kebara caves. The items defined as ‘recycled’ are Upper Palaeolithic morpho-types modified on Mousterian blanks: flakes, blades and tools which are predominantly products of the Levallois technique with faceted butts, consistently showing double patina. Though usually denoted as ‘double patinated’ items, the double patina alone is not enough to define recycling, since patina can accrue during a relatively short time span – several weeks on the surface of open-air sites. This phenomenon, also known as ‘varnish’ in geological studies, was researched in depth in the Negev (Ganor et al., 2009; Goldsmith, 2011). Therefore, what archaeologists referred to as ‘patina’ was formed by a complex process involving mainly clay minerals enriched with manganese (Mn). The formation of patina inside Levantine caves where sunlight does not penetrate was not studied. Patinated pieces may occur in rockshelters where sunlight reach the back wall as well as on the terraces in front of the caves or in the talus below the cave entrance.

The Aurignacian entity in the Levant represents a relatively short-time span in the Upper Palaeolithic sequence (dated to ca. 37–33 ka cal BP). Most probably it represents a cultural intrusion

* Corresponding author.

E-mail addresses: belferac@mscc.huji.ac.il, Anna.Belfer-Cohen@mail.huji.ac.il (A. Belfer-Cohen), obaryos@fas.harvard.edu (O. Bar-Yosef).

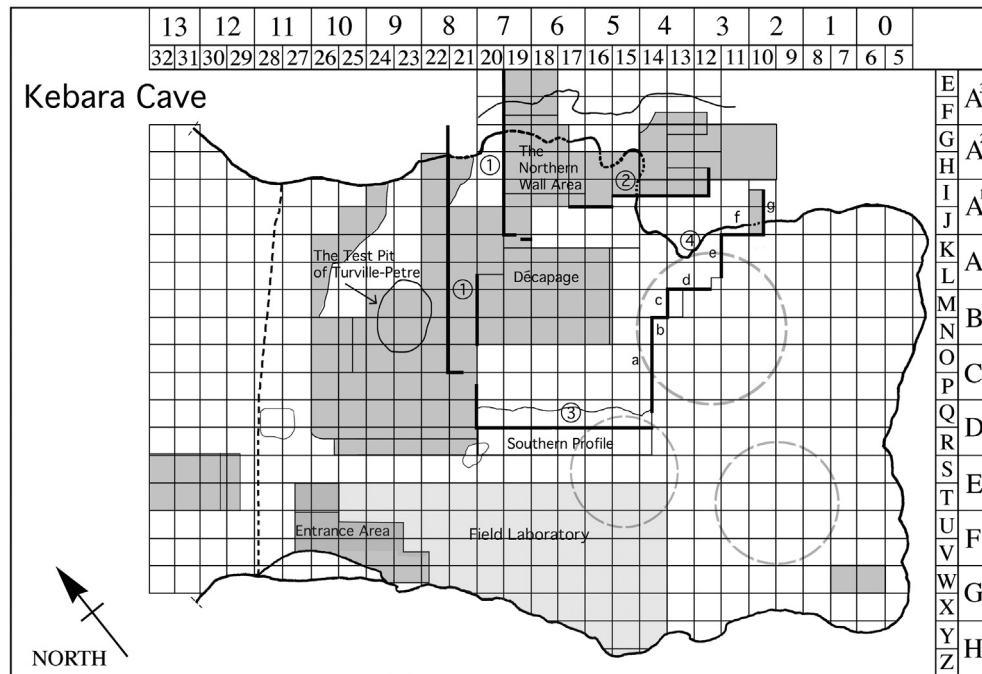


Fig. 1. Map of Kebara Cave indicating the place of the Southern Section (named Profile) and marked as No.3. (The Entrance Area is indicated near the cave's drip line where the fence was built.).

between the Early and Late Ahmarian, which are the 'endemic' and predominant Upper Palaeolithic cultural entities in the Levant. To date, Aurignacian assemblages *sensu stricto* were recovered only from some ten cave-sites, all of which are located in the Mediterranean phyto-geographic belt (for more details see Bar-Yosef and Belfer-Cohen, 2010; Belfer-Cohen and Goring-Morris, 2014). They differ significantly from the Ahmarian techno-complex, most obviously attested through the dominant typological morphotypes: nosed, shouldered, and frontally carinated endscrapers, and Aurignacian retouched items, which are missing from or extremely rare in Ahmarian assemblages. The technological attributes of the Levantine Aurignacian chipped-stone industry are quite complex in that, while most tool blanks are made on blades and, to a lesser degree, (twisted) bladelets, the vast majority of the debitage items comprise flakes. Aurignacian bone and antler tools number far more than the very few worked bone items reported from Ahmarian contexts. Two split-base points, a hallmark of the Early Aurignacian in Western Europe, were reported from Kebara and Hayonim caves (Belfer-Cohen and Bar-Yosef, 1999). A third split-base point was discovered in the site of Mazraq en Nag, excavated by Beduoin who worked with R. Neuville in the Judean

Desert (Perrot, 1955). However the excavated context from where this pieces was derived is unknown and the site does not contain an Aurignacian industry.

2. The Aurignacian recycled tools from Kebara Cave (Figs. 2–4)

The present discussion refers only to the assemblages excavated during the last series of excavations in the cave, namely seasons 1982–1990. The items were recovered from two areas in the cave: Unit I–II, in the Southern Section (SS) and the Upper Unit from the Entrance Area (Fig. 1). The stratigraphy of the SS (Goldberg et al., 2007, fig. 4.27) section was dated through two series of dating though the 2nd series of dating did not incorporate the dating of



Fig. 2. Endscrapers on Mousterian 'blanks' from the Aurignacian levels, Kebara Cave.

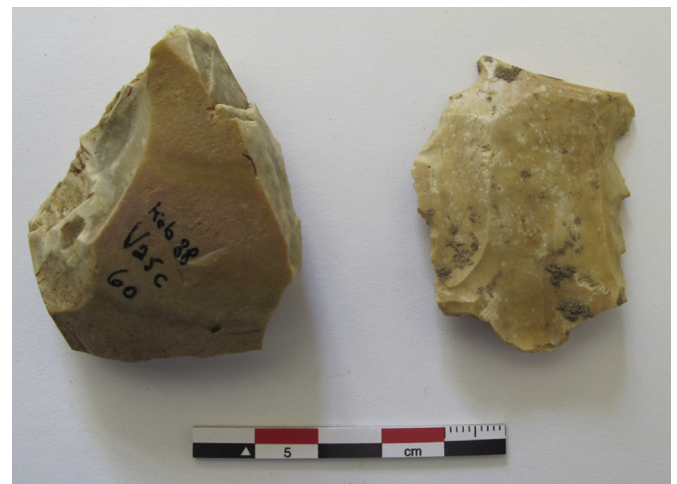


Fig. 3. Nosed end-scrapers on recycled pieces from the Aurignacian levels, Kebara Cave.

Download English Version:

<https://daneshyari.com/en/article/1040937>

Download Persian Version:

<https://daneshyari.com/article/1040937>

[Daneshyari.com](https://daneshyari.com)