ANTHROPOLOGIE • XLII/3 • pp. 199–201 • 2004

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FROM THE NILE TO THE DANUBE: AN INTRODUCTION

The hypothetical "route" of Early Modern Humans, as outlined by anthropological finds, roughly copies the two major continental rivers of Africa and Europe, the Nile and the Danube: Herto in Ethiopia, at 160 ka BP; Qafzeh and Skhul in Israel, at 90–60 ka BP; Peştera cu Oase in Romania, at 35 ka BP; and Mladeč in the Czech Republic, after 35 ka BP. This route would suggest a linear penetration of the new population into northern Eurasia, a vast zone still occupied by the Neandertals at that time. Such a model of two separate populations, one expanding while the other one concentrating into refugia, also accords with the first results of molecular genetic studies (Serre *et al.* 2004). Thus, one would expect that archaeology will reflect the same process, or, at least, show that the invading population was equally better equipped by means of culture. However, this was apparently not the case.

Before opening the problem of late Neandertal – early modern human relationships on the basis of anthropological and archaeological records, it would be useful to address the theoretical question of identifying human anatomical difference with variability in behaviour and technology, but discussing theory lies beyond the scope of this issue (d'Errico *et al.* 1998). In the Near East, for example, the problem of behavioural difference has been discussed from viewpoints of settlement archaeology (Lieberman, Shea 1994), or physical anthropology (Trinkaus *et al.* 1998), but basically still remains unresolved. There is probably not a single and unequivocal reply to the question of human types–versus–behaviours relationship. Whereas the Middle Paleolithic archaeological record has no ties to distinct human types, the situation may be different during the transitional process, and especially during the Upper Paleolithic.

It is clear that Europe, as the westernmost Eurasian peninsula, played not only the passive role of recipient of the expanding populations, but functioned also as a cradle of new behavioural patterns and cultures. In this area, the anatomically modern humans created the major Upper Paleolithic civilizations such as the Aurignacian and the Gravettian. The related archaeological record supplies a complex picture of advancement in behaviour and lifestyles, be it in artifact production (the soft-hammer production of blades from prepared prismatic cores and the derived typological structure), in settlement structure (as a reflection of more complex society), and especially in symbolism and art (as a form of information transmission and information storage). In my view, the "modern" way of understanding and defining the time and space probably stood behind some of these changes.

Archaeology does not record these achievements during the process of colonization from Africa to Eurasia, but only after its termination. They should be understood as a result of local – European or Eurasian – adaptation, and, possibly, of contacts with the aboriginal Neandertal population.

This issue of Anthropologie collects some new evidence on the period of presumed colonization from the territories of north Africa, Near East, and southeast Europe. Whereas Isabelle Crevecoeur and Erik Trinkaus, while comparing human mandibles from Nazlet Khater (Egypt) and Peştera cu Oase (Romania), confirm generally certain intercontinental relationships in human anatomy, most of the archaeological contributions rather display a regional variability. Philip van Peer introduces Egypt as a part of Paleolithic Africa, with all technological patterns typical for the Middle Stone Age there, and my results from Bahariya are generally consistent with this picture. Marcel Otte and Fereidoun Biglari look for the origin of Aurignacian in the Iranian Zagros. Steven L. Kuhn and Janusz K. Kozłowski follow the Levallois-leptolithic or Levallois-derived type of industries from southern Turkey to the Balkans and Middle Danube. Two papers focus on various aspects of the most "aboriginal" Middle Danubian transitional industry – the Szeletian (Philip Allworth Jones, Zdeňka and Petr Neruda). The concluding paper by Lubomíra Kaminská, Janusz

K. Kozłowski and myself presents preliminary results of revision of the Early Upper Paleolithic sequence in the Dzeravá skala cave in Slovakia.

What does the archaeological evidence tell about the modern human dispersal process? The first horizon of Middle Paleolithic blade industries expanded over Eurasia considerably earlier, between 200–50 ka. These industries are encountered in the Near East (Hayonim), Transcaucasia, Poland, Germany, Belgium and northern France, thus in regions presumably still occupied by the Neandertals by that time. A later expansion of Levallois-leptolithic, or Emiro-Bohunician industries occurred between 50–35 ka (all ^{14}C dates used in this text are uncalibrated), and it ranges from Near East (Ksar Akil, Boker Tachtit, Üçağızlı Cave) eastwards to central and eastern Asia (Kara Bom, Shuidong-gou), and westwards to eastern and central Europe (Temnata Cave, Kulychivka, Bohunice). Traditionally, the Near East is considered as a developmental centre, as suggested by the early dates for the Emirian of Boker Tachtit (around 47 ka), followed shortly after that by the Upper Paleolithic Ahmarian. More recently, Altai (Kara Bom) is also being evaluated as a possible point of origin. In north-east Africa, the Levallois industries are more "conservative", with less evidence for blade production (cf. Taramsa), so that the first fully Upper Paleolithic industries such as Nazlet Khater mark a distinct developmental break in the Nile valley. However, certain trends parallel to the Levallois-leptolithic industries (increased blade production and occurrence of Upper Paleolithic tool-types) may be observed in some Aterian industries of the Sahara. Along the Danube, two major cultural entities, transitional between the Middle and Upper Paleolithic in terms of lithic technology and typology, are recorded: the Bohunician, recently dated between 43 ka and 34 ka, and the Szeletian, with uncalibrated ^{14}C dates between 41 ka and 35 ka. Whereas the first one is rather a western part of the widely extended Levallois-leptolithic tradition of Eurasia, the second forms compact settlement zones restricted to the Middle Danube area. In terms of technology, the Middle Paleolithic tradition is mainly reflected in conservative way of thinking, be it the persisting "Levallois memory" in the Bohunician or the "bifacial memory" in the Szeletian. However, the Levallois-leptolithic technologies (contrary to the Szeletian) display no continuity to the traditions of local Middle Paleolithic, but are instead considered as intrusive.

Not only in eastern central Europe, but in the whole of Eurasia we lack human fossils from the context of Levallois-leptolithic industries, to be able to identify the spread of technology with an anatomically discrete population. An exception is the Obi-Rakhmat rockshelter (layer 16) in western Tian-Shan Mountains that provided in 2003 six maxillary teeth and over 150 cranial fragments of an individual of 9–12 years of age. However, it is impossible to determine whether the child is modern or not (Glantz *et al.*, In: Derevianko 2004; Tashkent and Samarkand Conference, August 2004). The archaeological context is a laminar Levallois industry of Middle Paleolithic character which certainly predates the Bohunician (the ^{14}C dates are earlier than 40 ka, but the U-series dates as early as 90 ka).

For western Europe, the Chatelperronian model suggests a case of late Neandertals associated to a transitional type of lithic industry. Such model (if correct, see discussion at the Blaubeuren Conference, July 2004) would seem usable for the Szeletian of eastern central Europe, which is another Initial Upper Paleolithic industry rooted in the local technologies. However, the caves that provided more representative assemblages of Szeletian leaf-points only yielded human teeth which do not allow a more secure determination (even if "large" in dimensions and possibly Neandertal). Vindija G1, a cave that provided clearly Neandertal specimens (Smith *et al.* 1999; Ahern *et al.* 2004), shows a contradictory cultural association: a "Szeletian" leaf-point and "Aurignacian" bone points. If we accept the comparative evidence showing that in eastern central Europe the bone points were not as strictly Aurignacian "fossil directeur" as was supposed, then Vindija G1 may fall in the latest Szeletian or Szeletian-like group of sites. Thus, even if all the currently available arguments for identification of the late Neandertals and the Szeletian are indirect in nature, such association remains as a probable one.

The redating projects of the last few years in central Europe (Smith *et al.* 1999, Svoboda *et al.* 2002, 2004, Conard *et al.* 2004) reduced considerably the number of human fossils that were believed to be – for this or that reason – Aurignacian (cf. Churchill, Smith 2000, for example). At the same time, new discoveries are being added from Peştera cu Oase, Romania, unfortunately without a diagnostic archaeological context (Trinkaus *et al.* 2003a, 2003b), while an analysis and ^{14}C dating of the Aurignacian site complex at Mladeč is still in progress. The early Aurignacian sites, dated as early as 38 ka BP, are rare, isolated, and seem to follow the course of the Danube river (Temnata Cave in north Bulgaria; Willendorf II in Lower Austria; Geissenklösterle in south Germany; Haesaerts *et al.* 2004). Only with the middle Aurignacian a compact network of open-air settlements over large parts of the region emerged, including lithic exploitation sites and hunting posts in caves. Wherever decorative and symbolic objects are preserved (as in south Germany) we also find figurative art. The dates of 35–34 ka BP for the beginning of the middle Aurignacian expansion are coincident with the late Szeletian and Bohunician datings. Thus, if we may identify Aurignacian with early modern humans, and if the increased site density reflects their demographic growth, and the art their higher social complexity, then the whole process may demonstrate the final victory of modern humans.

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