

## En route vers l'Ouest. Les débuts de l'Aurignacien en Europe

Nicolas Teyssandier

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A decade ago, under the umbrella of the “Human Revolution” paradigm, the Middle-to-Upper Paleolithic transition in Europe and the replacement of Neandertals by modern humans (hereafter the Transition) tended to be portrayed as one and the same straightforward story. A fairly typical short-hand version of the narrative is that which could be found between 2002 and 2005 in the web page of one (randomly selected) British academic institution:

“The story of the Aurignacian is that of the spread of anatomically modern humans across Europe. It is the first true Upper Paleolithic industry in Europe and the Near East, where it is thought to originate around 40,000 years ago” (<http://web.archive.org/web/20020202224943/http://scarab.newport.ac.uk/pavi/page2.html>).

So defined as “the culture of modern humans,” the Aurignacian became reduced/compressed to a monolithic entity that could be recognized in the archeological record by tell-tale indicators (such as carinated scrapers), the presence of which provided, in turn, a reliable proxy for the rest of the package—anatomical modernity and, with it, behavioral and cognitive modernity (and corresponding archeographic correlates, such as personal ornaments and figurative art)—all of which would be lacking in the preceding, Neandertal-associated cultures of the continent.

With Francesco d’Errico, I challenged this view of the process in a series of papers published since 1998. In particular, we stressed that the dates and sites used to support a radiocarbon age of 40,000 BP for the Aurignacian package were the exception, not the rule, and argued that these anomalies could be explained by the operation of ordinary, well-known sources of archeological error, such as post-depositional disturbance or ambiguity in the definition of technological and typological categories. We showed that, if these sources of error were duly accounted for, the biological and cultural aspects of the Transition could not be construed as an integrated whole with a single underlying cause, the out-of-Africa migration of modern humans. A corollary of our taphonomic critique of the evidence was that European Neandertals had already undergone their own “Upper Paleolithic revolution” (Gilman 1984; Bar-Yosef 1998) well before modern human groups had begun to disperse into the continent.

This now decade-long debate prompted, and was in turn fed, by much research aimed at clarifying the empirical aspects of the controversy (Fleagle 2006; Sisk and

Shea 2006). Of paramount importance in my (obviously biased) view of this process was the revision of key early Aurignacian sites of Europe undertaken by a new generation of French students. Combining the *remontage-à-intérêt-stratigraphique* or lithic taphonomy approach (to assess the integrity of sites and levels) with the *chaîne opératoire* approach (to assess the meaning of differences between lithic assemblages), they established a number of key facts with profound implications for our understanding of the Transition. Among them, that the early Aurignacian label in fact subsumed two very distinct technological entities, the “classical” Aurignacian I (with split-based bone points), and the Protoaurignacian (Bon 2000, 2002); and, that the latter was stratigraphically earlier than the former, both post-dating the Châtelperronian and with claimed instances of Aurignacian/Châtelperronian interstratification being an artifact of post-depositional disturbance compounded by excavation error (Bordes 2002).

While Bon and Bordes focused on the revision of classic sites and collections from France, Teyssandier (2003) chose to assess the issue from a broader European perspective. *En route vers l'Ouest* is the book publication of his Ph.D. dissertation, with slight modifications of the initial sections and a much revised concluding chapter. The implications of his results are as significant for central and eastern Europe as those of Bon and Bordes had been for France. Teyssandier shows that the distribution of these redefined Protoaurignacian and Aurignacian I entities extends well into central Europe, as exemplified by the Austrian sites of Willendorf II (for the Aurignacian I) and Krems (for the Protoaurignacian), and that disentangling palimpsest level III of Geissenklösterle (in southwestern Germany) shows, on one hand, that it contained a true Aurignacian I component, and, on the other hand, that the dated bone samples in clear association with that component indicate an age in the order of ca. 35 ka, not ca. 40 ka <sup>14</sup>C BP.

*En route vers l'Ouest* also deals with the “origins” aspect of the Aurignacian. Under “Human Revolution” views of the phenomenon, the so-called Bachokirian (Kozłowski 1979) of Bulgaria played a double role—on one hand, it was the stem technology whence the full-blown Aurignacian would have sprang; on the other hand, it represented a geographical and cultural bridge uniting eastern Europe with the Near East, whose Initial Upper Paleolithic (with which the Bachokirian would be technologically related) provided a close-by ancestry for the early modern human dispersal into Europe reflected in the Aurignacian phenomenon. Because of the heavily reduced nature, with little *in*

*situ* production, of the lithic assemblages from the relevant sites (Bacho Kiro and Temnata), Teyssandier was not able to apply the lithic taphonomy approach in his assessment of the Bachokirian. Attribute analysis and *remontage mentale* (Pelegrin 1995), however, sufficed to demonstrate the Middle Paleolithic nature of blank production in these assemblages, and the lack of any phylogenetic relationship with the Aurignacian, a view since formally accepted by Kozłowski (2004) himself.

Building on these observations, Teyssandier discusses the broader significance of such a chronologically and technologically redressed Aurignacian phenomenon. Bearing in mind the close affinities of the Protoaurignacian with the Early Ahmarian, he suggests that the widely shared traits and more or less coeval emergence of the Upper Paleolithic across western Eurasia, irrespective of biological boundaries between Neandertals and moderns, may relate to a common search for standardization in the production of points and barbs, leading to convergent technological solutions. In support of the hypothesis that these developments cannot be reduced to correlates of a putative cognitive breakthrough signaled by the emergence of art, Teyssandier contributes additional evidence and arguments in favor of the notion that figurative representation does not appear before the much later Aurignacian II (or Evolved Aurignacian) (Zilhão 2007).

This said, I find that the main interest of *En route vers l'Ouest*, one that should appeal to readers irrespective of where they stand on the interpretation of the Transition (and especially so to research students), is methodological. Building on the pioneer work of J. Hahn (1988), Teyssandier's refitting analysis of the Aurignacian of Geissenklösterle, the most substantial part of the book, begins by laying out a number of Transition-related research questions that the site has the potential to address, proceeds to identify, discuss, and select the analytical tools appropriate to obtain answers to those questions, and concludes with empirically supported interpretations that effectively advance our knowledge of the site. For instance, despite significant overall post-depositional movement, it is clear that particular areas of the excavated surface were less affected than others, enabling the use of criteria of vertical and horizontal proximity to sort out reliable associations between dated samples and the archaeology those samples are supposed to date. And it is now also clear that the lithic assemblages in Horizons II and III of the site are both overall amenable to inclusion in the Aurignacian I, the differences between them relating more to changes in site function (and, therefore, in the representation of the different stages of the *chaîne opératoire*) than to the technology of stone tool production.

As Teyssandier points out, however, the Aurignacian deposits of Geissenklösterle also contain artifacts that normally are not found in Aurignacian I contexts, namely the two ivory points with a round section from Horizon III, and the ivory-sculpture, nosed-scraper, and carinated-burin component of Horizon II. While parallels for the former exist in the Protoaurignacian and the Châtelperronian,

parallels for the latter are exclusive of the later Aurignacian (II and III/IV) of both France and other cave sites of the Swabian Jura. These observations vindicate Hahn's original characterization of Horizons II and III as representing the conflation for analytical purposes of several individual occupation events, and explain the scatter of results (ranging from ca. 28.6 ka to 36.6 ka <sup>14</sup>C BP) obtained when cut-marked bones from these levels were individually AMS-dated (Conard and Bolus 2003), as Zilhão and d'Errico (2003) had suggested.

Geissenklösterle thus becomes an excellent model against which to assess other Transition sites from central and eastern Europe. Most, in fact, are cave localities featuring specialized, short-term human occupations contained in sequences of deposits whose stratigraphic reading, even when their excavation was carried out with the highest modern standards, is complicated by the heavy scarring (in the form of erosional hiatuses, post-depositional disturbance, and palimpsest formation) imprinted on them by the abrupt oscillations of OIS-3 climate (van Andel and Davies 2003). No such sites ever will be easy to interpret, and disentangling the individual units of human use, in terms of suites of truly culturally related artifacts and their associations to features and to datable material recovered from the same levels, requires the kind of *Quellenkritik* of which *En route vers l'Ouest* is an excellent example. I can only hope that it will be widely followed.

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