Quaternary International xxx (2017) 1–9

Contents lists available at ScienceDirect

Quaternary International

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

Same as it ever was? The Aurignacian of the Swabian Jura and the origins of Palaeolithic art

Harald Floss

Eberhard Karls Universität Tübingen, Institut für Ur- und Frühgeschichte und Archäologie des Mittelalters, Abteilung Ältere Urgeschichte und Quartärökologie, Schloss, Burgsteige 11, D 72070 Tübingen, Germany

ARTICLE INFO

Article history:
Received 7 June 2016
Received in revised form
7 December 2016
Accepted 18 December 2016
Available online xxx

Keywords:
Aurignacian
Swabian Jura
Mobiliary art
Parietal art

ABSTRACT

The Aurignacian of the Swabian Jura constitutes a key region for the understanding of the behaviour of the first populations of modern humans in Europe. The region has yielded works of figurative art and musical instruments that are among the oldest in the world. The objects are evidence for the existence of a new type of society distinct from those known in previous phases of human prehistory. This article highlights the innovations intrinsic to the beginning of the Upper Palaeolithic and contests the idea of a gradual evolution, which erodes the clear distinction between the Middle Palaeolithic and the Upper Palaeolithic at some point in the transition.

1. Paradigms and ideologies

Our understandings of Palaeolithic art are subject, since the early days of prehistoric research, to the idea of a continuous evolutionary trajectory along which art developed from the simple toward the complex, from the crude to the sophisticated, and, yes, from the primitive to ideal beauty. This mode of thinking, which has its roots in the works of Henri Breuil and Annette Laming-Emperaire, reached its apex in the 1960s, with the structuralist movement of that time and particularly represented by the main publication of André Leroi-Gourhan (1965), who subdivided Palaeolithic art into different styles, if not different stages. These ideas, in large part dated by today's standards, presented obstacles to the recognition of the full antiquity of works of art that were at the same time very old and highly aesthetically developed.

Another current of thought, more contemporary, supported a model according to which the basic elements of all of the characteristic facets of Upper Palaeolithic culture, associated with anatomically modern humans (AMH), would have already existed among Neanderthal populations who, thusly rehabilitated, experienced an unparalleled renaissance and became the true inventors of art, music and human culture, quite simply. Hence, the transition between the Middle Palaeolithic and the Upper Palaeolithic, recognized and established by our academic predecessors with great knowledge and discernment, would be eroded at some given moment in prehistory.

2. Solutions

Caught between two competing ideologies, the sensible prehistorian today must try to form his or her own vision of the past that most closely reflects the reality of events in prehistory. This point of view leads us to the following observation: the Aurignacian, certainly in the form of an extensive mosaic but nonetheless the first pan-European culture of AMH (Hahn, 1977; Bolus and Conard, 2001), marks a new type of society that differed in numerous aspects from those of the preceding era, the Middle Palaeolithic, a product of Neanderthal populations. The first AMH on the European continent are distinct from preceding populations on the basis of a different social structure, a highly diversified social network (White, 2006), new shared traditions and numerous innovations intrinsic to the period in the realms of technology and social life (Heckel, 2009; Münzel et al., 2016), as well in the symbolic and religious worlds (Hahn, 1986; Floss, 2009b). The material culture of this period is concretely characterized for the first time by unambiguous examples of figurative art, both parietal and mobiliary, musical instruments (Hahn and Münzel, 1995; Conard et al., 2009b), sculpted personal ornaments, representations of hybrid figures (therianthropes), and the generalized use of

E-mail address: harald.floss@uni-tuebingen.de.

http://dx.doi.org/10.1016/j.quaint.2016.12.044
1040-6182/

previously rarely-exploited materials such as ivory, antler, and certain lithic raw materials such as soapstone.

To be sure, the nature of a society cannot be directly inferred from the elaborateness of its material culture, and the current discussion is not an evaluation of this complexity. Nonetheless, resemblance or contrast between different elements of material culture leas the archaeologist to note similarities or differences and to deduce from them either rupture or continuity in traditions, customs, practices, and rites.

In the present case differences predominate, and they cannot be explained by differential preservation of artefacts deriving from older periods. Unfortunately, use of the highly vague term of "cultural modernity" has largely masked the very concrete cultural realities that hide behind it. The study of older series, for example from the European Middle Palaeolithic or the African Middle Stone Age, confirms an absence of certain types of objects in durable as well as perishable materials. The dogma "Absence of evidence is not evidence of absence" is appealing. But for the archaeologist, notably, it amounts to no more than a safety net, offering protection against future discoveries that in this specific case, and at the risk of overconfidence, will probably never occur.

A recent key analysis (Floss and Hussain, 2015), unambiguous in its methodology, statistical foundations, and results, clearly demonstrated real differences between the world of the Middle Palaeolithic and that of the Upper Palaeolithic. This study also demonstrated that in this moment of prehistory, there was not a gradual evolution, but a sudden and vertiginous one. Furthermore, the results show that the observed differences cannot be explained by differential preservation or by variations in the longevity of the cultural periods relevant to the transition.

The differences so clearly observed also cannot be explained, at least not largely, by a fundamental cognitive difference between the different types of humans concerned. In Africa, for example, AMH populations existed already for 150,000 years before the advent of the European Upper Paleolithic, and we find in this archaeological record nothing that parallels the exceptional and unequalled foundations of Upper Palaeolithic parietal art (so-called "Ice-Age art") in Europe. Certainly, human beings must possess certain basic capacities, intellectual and physical. But these basic and widely-shared capabilities do not explain the varied cultural and social achievements that exist on earth. To take a contemporary and popular-athletic example, such an explanation would amount to trying to account for Paris Saint-Germain and its supporters by appealing to the leather and turf of the Paris Basin.

But if it is not pure biology that explains the crucial events that unfolded in Europe 40,000 years ago, what is it? We consider here that it was a particular confluence of circumstances, including probable contact between Neanderthal and AMH groups (a perspective recently supported by the work of our colleagues in the field of genetics), which precipitated a novel demographic and social situation that, for its part, shifted the behaviours and solutions of societies, who resorted to methods self-signification in contrast to an *other*.

These distinct behaviours created the differences in the archaeological record of the periods concerned (the Middle and Upper Palaeolithic), and these differences are not imagined, they are quantifiable:

With the beginning of the Aurignacian, a culture was established that was characterized by distinct behaviours and material foundations (Niven, 2006). Let us take the example of ornaments, always a good indicator of the complexity of a social system. In certain regions of Europe, for example, the Périgord, Belgium, and the Swabian Jura (Conard, 2003a; Wolf, 2013), we know hundreds, if not thousands, of highly varied objects attributable to the category of Aurignacian adornment. Let us take also the example of parietal art (Valladas et al., 2004) and mobiliary art: nearly four dozen European sites dated to the Early Upper Palaeolithic have yielded paintings, engravings, and sculptures that represent animals, humans, therianthropes, and graphic signs. The works present, as much in their foundations as their form, techniques and subjects comparable to those known in later, more evolved, Palaeolithic art.

In order to convince the incorrigible, we have conducted an in-depth study that is quantitative as well as qualitative in approach (see above, Floss and Hussain, 2015). But honestly: is it really necessary to explain the differences between a morsel of manganese recovered from a Neanderthal site and the Grotte Chauvet, the latter of which achieves in beauty, depth of technical achievement, complexity, and aesthetics, the uncontested apogee of humanity? Is it really useful to compare the object dubiously identified as a "mask" from La Roche-Cotard to the filigreed ivory statuettes of the Swabian Jura? Does it truly follow that an isolated engraving, barely discernable from taphonomic phenomena at a Middle Palaeolithic site, must be compared to the extensive *artification* of the Aurignacian landscape known in the valleys of the Swabian Jura and the *vallon* of Castel-Merle in Dordogne (Delluc, 1991; Mensan et al., 2012)? What end does it serve to seek homologues to the hybrid beings of Hohlenstein-Stadel, Fumane, and Chauvet in a Mousterian context?

3. Evidence from the Swabian Jura

No, none of this is necessary, but we find it nonetheless beneficial to offer some few points of evidence in light of recent debates. The argument for a particular Aurignacian genius that we wish to make here rests on the art of the Aurignacian of the Swabian Jura. Four caves in this region of south-western Germany, have yielded an altogether remarkable and unique Aurignacian assemblage. Geißenklösterle and Hohle Fels in the Ach Valley near the city of Ulm, as well as Vogelherd and Hohlenstein-Stadel in the Lone Valley near Heidenheim (all in the administrative department of Baden-Württemberg) (Fig. 1) provide what are currently the oldest examples of figurative art and musical instruments in the world. The Swabian Jura is a plateau of a medium-sized mountain range oriented southwest-northeast, 200 km long by 40 km wide and reaching a maximum altitude of around 1000 m. Geologically speaking, the Swabian Jura is part of the Jurassic formation the extends from France in the west to Switzerland and Bavaria in east. Petrographically speaking, it is a formation of Jurassic limestones that has been altered by karstic phenomena and is therefore rich in rockshelters and caves (Fig. 2). Like many other regions of Europe, the Swabian Jura has a long history of prehistoric research that began in the mid-19th Century. Oskar Fraas conducted the first systematic excavations on a Palaeolithic site in Central Europe in 1856 and began to explore the caves of the Lone Valley (Bärenhöhle) in the 1860s. Other key figures in the archaeological history of the region, in which the University of Tübingen has always played an active role, include: Ludwig Bürger, Robert Rudolf Schmidt, Robert Wetzel, Otto Völzing, Gustav Riek, Eberhard Wagner, Joachim Hahn and Hansjürgen Müller-Beck. Current research on the Palaeolithic art of the region is largely led by Nicholas J. Conard and the present author.

The first discovery of elements that suggested the existence of Aurignacian mobiliary art were discovered in 1931, when Gustav Riek excavated the cave of Vogelherd over the course of a few months (Fig. 2). The site had remained unknown up to that point because the infilling deposits had concealed and limited access to the cave chamber. The most spectacular objects are a dozen small figurines in mammoth ivory recovered from Aurignacian layers IV and V (Riek, 1934; Floss, 2000), including the famous Vogelherd

Please cite this article in press as: Floss, H., Same as it ever was? The Aurignacian of the Swabian Jura and the origins of Palaeolithic art, Quaternary International (2017), http://dx.doi.org/10.1016/j.quaint.2016.12.044