

Did they meet or not? Observations on Châtelperronian and Aurignacian settlement patterns in eastern France

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ABSTRACT Eastern France, and particularly northern and southern Burgundy, provides an important archeological record of early Upper Paleolithic industries. This paper presents dates

and distribution patterns of the Châtelperronian and the Aurignacian and tries to discuss possible relations between the last Neandertals and the first anatomically modern humans in this area.

Introduction

The Swabian Jura, an important region of research of our Prehistory Institute in Tübingen, is among the most significant regions in Europe containing Aurignacian localities. After more than one hundred years of research, we have a wealth of information about the distribution of sites (Hahn, 1977), the chronostratigraphic framework (Hahn, 1995; Richter et al., 2000, 2001; Conard and Bolus, 2003), the lithic and organic industries (Hahn, 1977; Liolios, in press), the subsistence patterns (Niven et al., 2001) and intrasite spatial patterns (Hahn, 1988) and the cultural innovations (Conard, 2000). The region has yielded numerous objects of mobiliary art (Hahn, 1986; Floss, 2000c) and two bone flutes (Hahn and Münzel, 1995), which represent the oldest examples of such artifacts in Europe. The recent discovery of an ivory sculpture representing the head of a horse from Hohle Fels cave (Conard and Floss, 2000) increases the number of early Upper Paleolithic sites with mobiliary art in southwestern Germany. Ongoing excavations suggest that this site has great potential to provide information on the development of the Swabian Aurignacian (Conard et al., 2002). Contrary to some recent criticisms (Zilhão and d’Errico, 1999; Zilhão, 2001), horizon III of Geissenklösterle cave remains in our point of view a key example of an initial Aurignacian (Bolus and Conard, 2001; Teyssandier and Liolios, 2001). The Danube corridor hypothesis (Conard and Floss, 2000), the idea that modern humans utilized this river valley to move across central Europe, is supported by evidence of east-west transportation of lithic raw materials along the Danube (Floss, 2001b; Burkert and Floss, in press).

Despite its rich Aurignacian record, southwestern Germany is not one of the regions of Europe yielding best information on the Middle to Upper Paleolithic transition and the relation between the last Neandertals and the first modern humans. Although the chronostratigraphic position of the Aurignacian is well established (Conard and Bolus, 2003), that of the local transitional industries (*Blattspitzengruppen*) is much less clear.

If we defend the theory of an early expansion of Aurignacian anatomically modern humans from east to central Europe and if we want to know how the story continued, it is interesting to have a look at those regions that are situated west of the Swabian Jura. And if we do so, we have to go to the very southwestern edge of Germany and the eastern parts of France where we have been working in the last 5 years (Floss, 1997, 2000a, 2000b, 2001a). Our particular interest is devoted to southern Burgundy where we find an outstanding territorial situation at the very eastern limit of the Châtelperronian (Floss, 2002).

The Aurignacian settlement of southwestern Germany and eastern France

Baden and upper Rhine valley

On our journey to the regions west of the Swabian Jura we start with Baden in the very southwestern edge of Germany and the upper Rhine Valley. Contrary to the Swabian Jura, in these regions, which are characterized by important loess deposits, early Upper Paleolithic remains are almost completely missing. The only exceptions are some find spots of isolated Aurignacian-like bone and ivory points (e.g., Wehrberger, 1982) and a new open air site in Königsbach-Stein (Floss and Poenicke, in press) which yielded thousands of lithic artifacts including 200 tools. Among these tools there are nosed and carinated elements, busked burins, retouched blades and marginally retouched bladelets which point to an assignment of the assemblage to the Aurignacian. Up to now, it has not been possible to obtain samples for the absolute dating of this site. Farther to the west, in the upper Rhine valley, the absence of Aurignacian elements is even more striking as this region is well known for their numerous Upper Paleolithic remains (Holdermann, 1996; Pasda, 1998a, 1998b). The only localities where isolated Aurignacian-like lithic artifacts have been discovered are the Alsatian sites of Achenheim, Lingolsheim and Holtzheim (Thévenin, 1976; Combier, 1989b; Junkmanns, 1991). In summary, we have to emphasize a nearly complete absence of Aurignacian remains in the regions situated immediately west of the Swabian Jura.

Haute-Saône and the Lorraine Plateau

On our way to the west, the regions of Lorraine, eastern Champagne and Franche-Comté are also characterized by an almost total absence of indications of an early Upper Paleolithic settlement. Chanson et al. (1997) mention an open air site near Hautevelle (Haute-Saône) where about 30 carinated and nosed elements could indicate the presence of an Aurignacian occupation. More important is the cave site of Trou de la Mère Clochette, at Rochefort-sur-Nenon (Jura) (Desbrosses, 1976, 1982; Combier, 1989b; Brou, 1997, 2000), excavated by Feuvrier from 1905 to 1909. Beside a rich lithic and bone industry, including Dufour bladelets and split based points, its Aurignacian occupation also contained some non-utilitarian objects (Brou, 1997). The age of this Aurignacian was recently determined by direct dating of elements of the bone industry to 29 920±220 BP (Beta-150311), 29 490±190 BP (Beta-150312) and 30 800±220 BP (Beta-150314) (Brou, 2001).

Even farther to the west, a very important concentration of early Upper Paleolithic sites is situated in northern Burgundy (Yonne), where the Morvan plateau passes into the southern parts of the Paris Basin. The most famous location in that area is, of course, Arcy-sur-Cure, with its several Aurignacian occupations in such caves as, for example, Grotte des Fées, Grotte du Trilobite, Grotte du Loup and Grotte du Renne (level VII) (Schmider and Perpère, 1997; Schmider, 2002). Farther to the north, two open air sites, at Thèmes (Cézy, Yonne) (Bernadini et al., 1997) and at Lailly, Le Domaine de Beauregard (Bodu, 1999), have recently been recorded. In spite of the author's understandable caution, the lithic industry of Lailly can probably be placed in an Aurignacian context on the basis of technological and typological arguments, whereas that of Thèmes is much more uncertain (Le Brun-Ricalens and Brou, 2003).

A second well-established but less known concentration of Aurignacian sites is situated in the southeastern regions of Burgundy from the Côte d'Or, in the north, to the Chalon-nais, the Mâconnais and the Beaujolais in the south, and the Charollais hinterland in the west (Fig. 1). The quality of the data from these localities is variable, and the assignment to an Aurignacian context is in some cases difficult due to the questionable role of so-called key Aurignacian lithic types. We cannot exclude that the higher density of Aurignacian localities in comparison to other regions (Fig. 1) is caused by the intensity of research in that area. Nevertheless, this fact does not reduce the important position of the region in the early Upper Paleolithic settlement in eastern France.

Localities where surface finds or those from old excavations possibly indicate Aurignacian occupations are: the Grotte du Perroquet in Auxey, the Grotte de la Baume in Balot, both at the Côte d'Or (Joly, 1950; Combier, 1989b); the open air site of Chenoves, Rue Cataux (Guillard, 1959); the cave of Cullès-les-Roches (Guillard, 1959; Gros, pers. comm.), which yielded a typical Aurignacian bone industry; the open air sites of Les Crays and Les Varennes in Dracy-le-Fort (Armand-Calliat, 1950; Combier, 1963a); the very important open air site of La Roche in Saint Martin-sous-Montaigu (Armand-Calliat, 1950; Combier, 1963b; Gros, 1964; Combier and Ayroles, 1976), where a rich lithic assemblage and faunal remains are in good context; the open air site of Azé-Rizerolles (Saône-et-Loire) where, besides an important Gravettian settlement, some lithic implements could reflect a short Aurignacian occupation (Floss, 2000b); or the Beaujolais sites of Abri du Breuil (Combier, 1963c) and Roclaine II (Combier, 1951), where typical Aurignacian lithic industries have been described. At the flank of the Roche de Vergisson, a sister formation of the Roche de Solutré, Combier (1996, p. 51) described an isolated Aurignacian hearth at the site Vergisson IV. In the Charollais hinterland, several open air sites yielded lithic industries of Aurignacian type, for example at Baron (Fig. 1), Vitry-en-Charollais, Saligny-sur-Roudon or Diou (Combier, 1959b, p. 124; Philibert, 1982). Even at the Grotte des Fées (Allier), the Châtelperronian type locality (Delporte, 1955, 1957, 1976, 1983), Combier (1990, p. 270) mentions the presence of lithic artifacts with Aurignacian affinities.

The most important Aurignacian sites in southern Burgundy are Solutré and Germolles. At Solutré, numerous excavations since the late nineteenth century have yielded Aurignacian stone and bone artifacts associated with rich faunal remains (Combier, 1956). The more recent 1968-1987 investigations in the "Crôt-du-Charnier" sector revealed at least three Aurignacian layers in the reddish sediments of debris cones (Combier, 1989b, p. 275). The lithic industry contains nosed and carinated scrapers and blades with typical Aurignacian retouch. These tools are associated with an "archaic" industry produced on local pebbles. The association with bone tools (*bâtons percés* with helicoïdal holes, etc.) (Combier,

1989a, Fig. 34) is questionable. Level 6, Aurignacian, has recently been dated to $33\ 970 \pm 360$ (SR-5194) and $34\ 000 \pm 600$ BP (Ly-9246) (Combiér and Montet-White, 2002; pers. comm. A. Montet-White and J. Evin). These radiometric data point to a quite early date for Solutré in comparison to other Aurignacian localities in eastern France.

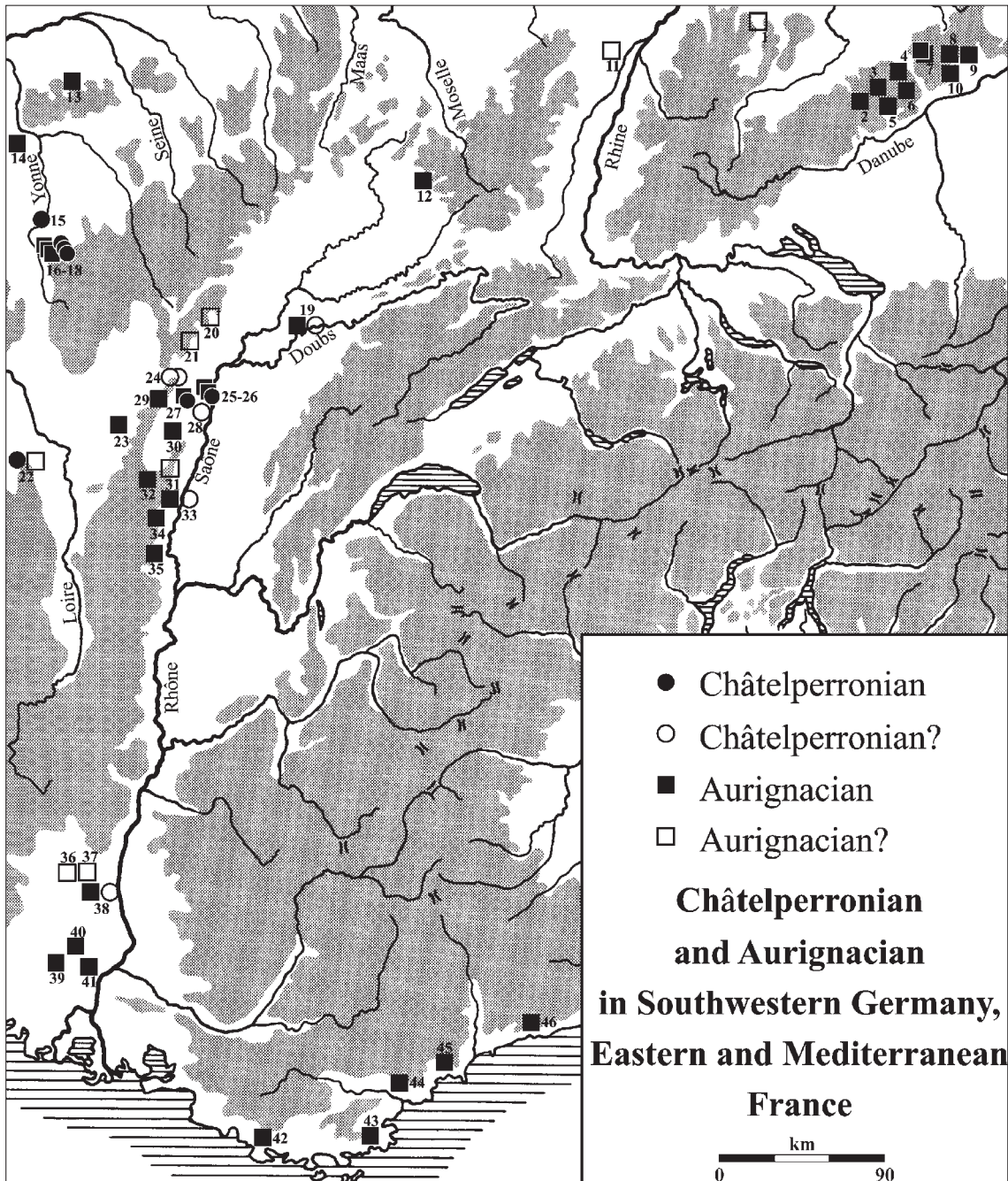


FIG. 1 – Châtelperronian and Aurignacian sites in southwestern Germany; eastern and Mediterranean France.

1. Königsbach-Stein; 2. Göpfelsteinhöhle; 3. Sirgenstein; 4. Brillenhöhle; 5. Hohle Fels; 6. Geissenklösterle; 7. Große und Kleine Ofnet; 8. Bockstein-Törle; 9. Hohlenstein-Stadel; 10. Vogelherd; 11. Achenheim; 12. Hautevelle; 13. Lailly, Le Domaine de Beauregard; 14. Thèmes; 15. Merry-sur-Yonne; 16-18. Arcy-sur-Cure; 19. Trou de la Mère Clochette; 20. Auxey; 21. Balot; 22. Grotte des Fées (Châtelperron); 23. Baron; 24. Saint-Aubin (Abri Virely; Abri Vasselon); 25. Germolles, Grotte de la Verpillière; 26. Germolles, En Roche; 27. Dracy-le-Fort; 28. Chenoves; 29. Saint-Martin-sous-Montaigu; 30. Cullès-les-Roches; 31. Azé, Rizerolles; 32. Vergisson IV; 33. Solutré; 34. Roclaine II; 35. Abri du Breuil; 36. Abri des Pecheurs; 37. Grotte Chauvet; 38. Grotte Figuiér; 39. La Laouza; 40. L'Esquicho Grapaou; 41. La Salpêtrière; 42. Sainte-Anne-d'Evenos; 43. Pardigon; 44. Rainaude; 45. Baral; 46. La Baume Périgaud.

The second important early Upper Paleolithic site of the region is the Grotte de la Verpillière in Germolles, west of Chalon-sur-Saône (Fig. 1). Excavated since the late nineteenth century (Meray and Chabas, 1876; Breuil, 1911), this cave has suffered a lot due to premature or unauthorized investigations. In the 1950s, Delporte, Thevenot and Combier conducted the last excavations in front or at the immediate entrance to the cave (Delporte, 1955; Combier, 1959a; Combier and Ayroles, 1976). In addition to important Middle Paleolithic remains, which are notable in particular for the presence of the Prondnik thinning flake technique (Desbrosse et al., 1976), the site provided important early Upper Paleolithic remains from which stratigraphic information is unfortunately lacking due to the fact that the excavations were carried out very early in the history of the discipline. The Aurignacian is represented by typical stone and bone assemblages, including bone points, awls and smoothing tools (Fig. 3). A particularly interesting object is an engraved horse rib (Combier and Ayroles, 1976, Fig. 32). We have started a series of AMS ¹⁴C dates on typical Aurignacian bone tools, following-up on the similar work carried out by Brou (2000, 2001) on bone implements of the cave site of Trou de la Mère Clochette. Other aspects of our Germolles research project concern an exhaustive study of the lithic and organic assemblages, analysis of finds in the backdirt of former excavations, analysis of intact deposits under blocks in front of the cave entrance and, finally, cleaning-up of the site, which had been abandoned to the point of increasingly becoming a garbage pit.

Rhône Valley

Contrary to southern Burgundy, the Rhône valley and its tributaries show only a sparse distribution of early Upper Paleolithic sites (Fig. 1), in spite of generally dense Paleolithic settlement patterns. In a vast area from the Lyonnais in the north to the Gard and the Vaucluse in the south, we note only two or three localities where Aurignacian occupations can be demonstrated. All of these places are situated in the Ardèche canyon, from which a wealth of information on Paleolithic cave settlement and cave art is available (Combier, 1967). At Grotte du Figuier, layer 2, Combier (1967, 1990, p. 270) describes a small inventory of typical Aurignacian lithic tools associated with two awls, one made of reindeer antler and one of bone. At the same site, Combier (1967, Fig. 107, no. 4, 1990, p. 270) mentions a single Châtelperron point and, at Abri des Pêcheurs (Lhomme, 1976), a single split-based bone point associated with a more or less atypical lithic industry is probably diagnostic of an Aurignacian context. In Grotte d'Hannibal near Montelimar, J. Combier (personal communication) recognized a late Mousterian occupation yielding isolated lithic implements of Aurignacian type.

In the context of such a sparse Aurignacian record it was so much more surprising that some of the Grotte Chauvet paintings were dated to >30 000 years ago: Rhino 1, 30 940±610 BP (GifA-95126); Rhino 2, 30 790±600 BP (GifA-95133); Rhino 2, 32 410±720 BP (GifA-95132); Bison, 30 340±570 BP (GifA-95128); Bison, 30 800±1500 BP (GifA-95155) (Valladas et al., 1998; Djindjian et al., 1999; Armomino, 2000). If we assume these dates to be correct, the only possible cultural assignment of the paintings would be to the Aurignacian. Nevertheless, considering that outstanding examples of Paleolithic cave art are generally located in areas with a well-documented habitation settlement of the period, we are beginning to regard the early dates from Grotte Chauvet with some skepticism. Studies based on Paleolithic cave art styles suggest a younger age for the Chauvet representations (Züchner, 1998).

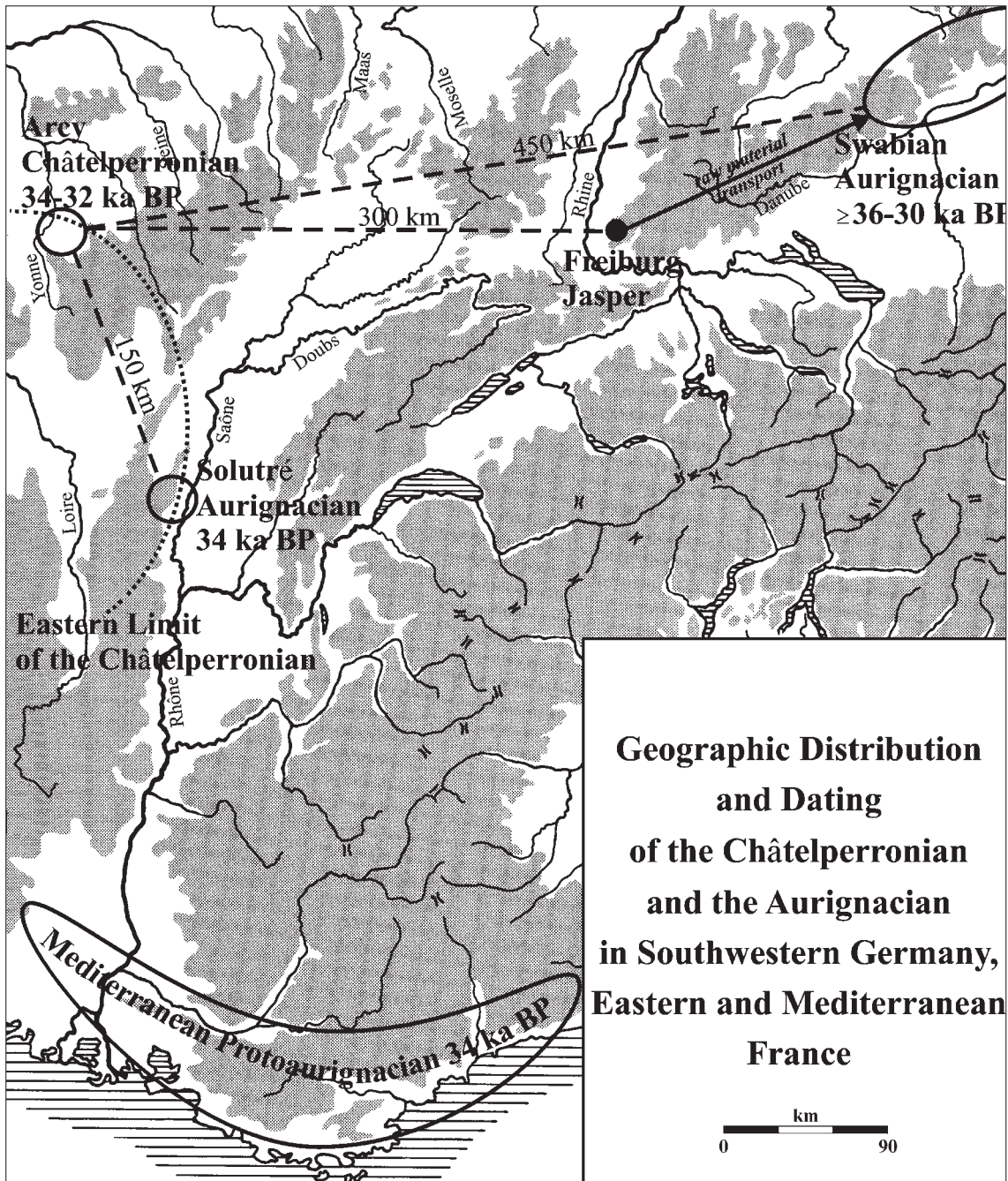


FIG. 2 – Geographic distribution and dating of the Châtelperronian and the Aurignacian in southwestern Germany, eastern and Mediterranean France.

Mediterranean Coast

The Mediterranean coastal regions of France, from the Pyrénées-Orientales in the west to the Alpes-Maritimes in the east, are again significant Aurignacian areas (Fig. 2). As this is not the main focus of this paper, our only purpose here is to emphasize the abundance and the early beginning of the Aurignacian settlement on the Mediterranean coast, which starts at about 34 000 BP (for example at L'Esquicho Grapaou, Gard) (Combiér, 1990, p. 276). The Aurignacian begins in northern Italy around the same time (e.g., Broglio et al., 1996). The rockshelter of La Vache (also situated in the Gardon valley, much as L'Esquicho Grapaou)



FIG. 3 – Bone tools, probably Aurignacian, from La grotte de la Verpillière at Germolles, Saône-et-Loire, France.

(Escalon de Fonton and Bazile 1976), Grotte Rainaude (Onoratini, 1986) can also be placed in an early Aurignacian (Proto-Aurignacian) context. Baral (Onoratini et al., 1981; Onoratini, 1982), La Balauzière (Escalon de Fonton, 1966), La Baume-Périgaud (Onoratini, 1982; Combier, 1990, p. 270), La Crouzade (Sacchi, 1976), La Salpêtrière (Escalon de Fonton and Bazile, 1976), La Grotte du Merle (Onoratini, 1982), Pardigon (Onoratini, 1982), and Sainte-Anne-d'Evenos (Escalon de Fonton and Onoratini, 1976) (Fig. 1), are additional Aurignacian sites on the Mediterranean coast, but likely of somewhat younger age.

The eastern limit of the distribution of the Châtelperronian

After having described Aurignacian settlement patterns in eastern France, we want to point out the close geographical association of Châtelperronian and Aurignacian distribution patterns in Burgundy (Fig. 1). In southern Burgundy, the Saône river marks the eastern limit of the Châtelperronian distribution zone (Fig. 2). Summary reviews covering our research area have previously been published by different colleagues (e.g., Desbrosse, 1982; Bosinski, 1987; Combier, 1989b; Harrold, 1986, 1988; Pelegrin, 1995). Several sites have yielded Châtelperronian and Aurignacian artifacts without a clear stratigraphic separation. Whereas some authors (Combier, 1990, p. 277) considered the presence of isolated Châtelperronian artifacts, particularly Châtelperron points, as episodes of influx within an ordinary Aurignacian context, other researchers considered southern Burgundy within the range of the Châtelperronian (e.g., Desbrosse, 1982; Pelegrin, 1995). These authors believe that the mixture of Châtelperronian and Aurignacian artifacts is the result of premature excavations. In southern Burgundy, Châtelperronian lithic artifacts have been discovered at eight places and, in five cases, artifacts of Aurignacian type were also recovered.

At Solutré, J. Combier (1956, p. 198, 202, 1989b) mentions retouched flakes from the so-called “*industries des foyers profonds*” (such as those from trench E of the 1922 excavations within the “*série beige*”) which he considers similar to Châtelperronian knives (1989b, p. 274). The cave site of La Mère Clochette (Haute-Saône), discussed above in connection with the Aurignacian, produced a very rich lithic assemblage with more than 360 tools that contains a series of “*couteaux à dos*”. Whereas L. Brou (1997, p. 17) could not decide whether this assemblage belonged to the Châtelperronian or to the Gravettian, because of the uncertain stratigraphic position of the artifacts in question, R. Desbrosse (1982, p. 107, Fig. 9-11) classifies this assemblage as a “*Périgordien inférieur*”. J. Combier (personal communication), who observed the assemblage in the Musée de Dôle, is of the opinion that its appearance is clearly Châtelperronian and underlines the presence of Châtelperron points.

At Germolles, in the already mentioned Grotte de la Verpillière, typical Châtelperronian artifacts are quite frequent, but their stratigraphic position in relation to the MTA and the Aurignacian is not clear (Gros, 1958; Combier, 1959a). The later excavations by Delporte (1955) in front of the cave could not clarify this question. Whereas Desbrosse (1982) is in favor of an independent Châtelperronian occupation, Combier (1989b, p. 274) claims that the Châtelperronian elements are incorporated in an “*Aurignacien typique*”. In our study of the A.-C. Gros collection, recently donated to the Musée Dénon in Chalon-sur-Saône, we could observe an interesting aspect of lithic raw material procurement. A few artifacts of Châtelperronian type are made of Tertiary Etreilles flint, demonstrating contacts with the Haute-Saône, where the cave site of La Mère Clochette is situated and possibly yielded the northeasternmost Châtelperronian assemblage.

In southern Burgundy, isolated lithic implements of Châtelperronian type are known from Dracy-le-Fort and Moroges (personal communication A.-C. Gros), Chenoves (Guillard,

1959, p. 13; Combier, 1959a, p. 124) and at the rockshelters Abri Vasselon (Desbrosse, 1982, p. 106) and Abri Virely in St. Aubin (Joly, 1959, p. 98; Desbrosse, 1982; Combier, 1990, p. 270).

In northern Burgundy, besides the Grotte de la Roche-au-Loup at Merry-sur-Yonne (Breuil, 1911; Harrold, 1986, 1988; Desbrosse, 1982), by far the most significant Châtelperronian assemblage comes from Arcy-sur-Cure (Leroi-Gourhan, 1964). Apart from the important occupation in Grotte du Renne (layers VIII to X), Grotte du Trilobite, Grotte du Loup and Grotte du Bison have yielded Châtelperronian remains as well. The complex Arcy record cannot, of course, be the focus of this paper. We only want to refer to a newer analysis (David et al., 2001), which reiterates the problem of dating the Châtelperronian at Arcy. Despite obvious dating inconsistencies (which mostly concern Mousterian layers XI and XII) and the overall criticism of the Arcy dating record (Zilhão and d'Errico, 1999, p. 17-18), the new dates for the Châtelperronian confirm those previously obtained (Combier, 1989b, p. 274; Pelegrin, 1995, p. 48; Djindjian et al., 1999, p. 159; Zilhão and d'Errico, 1999, p. 11) and can be summarized between ca.34 000 and ca.32 000 BP (David et al., 2001, p. 228).

Conclusions

The map of sites (Fig. 1) reveals areas with dense Châtelperronian and Aurignacian distribution patterns but also reveals areas where traces of early Upper Paleolithic settlement are quite scarce, such as the upper Rhine and the Rhône. In northern areas and to a lesser extent in southern Burgundy, we find areas where Châtelperronian and Aurignacian traces are to be found in the same restricted areas. If it is true that the Châtelperronian is associated with Neandertals and the Aurignacian with modern humans, this would mean that two different human species lived in the same area in a quite restricted period of time. But, do we really know for sure which the physical anthropological background of this issue is?

Only two Châtelperronian sites are associated with Neandertal remains, the Grotte du Renne at Arcy-sur-Cure (Leroi-Gourhan, 1958; Hublin et al., 1996; Baffier, 1999) and Saint-Césaire (Lévêque and Vandermeersch, 1980; Lévêque et al., 1992). Concerning the latter, Bosinski (1987, p. 7) has raised some doubts on the attribution to the Châtelperronian of the archaeological layer containing the human remains. In Bosinski's opinion, the layer in question belongs to a very late MTA, what he calls MTA type C because the percentage of Middle Paleolithic lithic tool-types is still quite high. We must also keep in mind that, for a long time, before the Saint-Césaire remains were discovered, the Châtelperronian seemed to be associated with modern humans, due to the early twentieth century discovery of Combe Capelle (Klaatsch and Hauser, 1909). This point of view persisted until the first doubts on the relationship between the Combe Capelle skeleton and the site's Châtelperronian remains were formulated by Asmus (1964). Nevertheless, until the 1980s, Combe Capelle continued to be cited, at least in some publications (e.g., De Lumley, 1984), as an important example of Châtelperronian human remains.

In the Aurignacian, the situation is not much clearer. Whereas the physical anthropological record of some developed Aurignacian sites is well established, for example at Vogelherd cave (Churchill and Smith, 2000; Czarnetzki et al., 2000), in other well known cases situated in the classical Aurignacian region of southwestern France it might be better not to look too closely to avoid ugly surprises concerning putative associations between human remains and Aurignacian assemblages (see Gambier, 1989). The initial Aurignacian has not provided, to our knowledge, human remains at all. Nevertheless, we tend to follow the common opinion that associates the Châtelperronian with Neandertals and the entire Aurignacian with modern humans.

We prefer not to repeat here the recent discussion about the question of a possible Neandertal (Châtelperronian) acculturation by anatomically modern humans (Aurignacian) (see Harrold, 1986, 1988; Pelegrin, 1995; d’Errico et al., 1998; Zilhão and d’Errico, 1999; Zilhão, 2001). What we see in eastern France is that the Arcy Châtelperronian record represents an absolutely outstanding example of Châtelperronian remains both in the quantity and the variety of the bone industry and the personal ornaments. It is true that the Grotte du Renne at Arcy shows a clear stratigraphic superposition of the Châtelperronian layers VIII to X by the Aurignacian (layer VII). Nevertheless, based on the existing ¹⁴C dates, the Châtelperronian of Arcy is not earlier than the Aurignacian of Solutré, a site situated only 150 km to the southeast (Fig. 2). The Swabian Aurignacian begins even earlier than the Arcy Châtelperronian. The Swabian sites are situated 450 km east of Arcy, and the area of Freiburg, where a variety of Jurassic chert called “Jasper” (Bohnerzhornstein) was procured for tool production, is only 300 km away (Fig. 2).

What does this mean? This means that Châtelperronian Neandertals and Aurignacian modern humans were living, so to speak, in the neighborhood. It is true that the enormous variation in the production and deposition of radioisotopes in the period from 30 000 to 50 000 BP (van der Plicht, 1999; Voelker et al., 2000; see Conard and Bolus, 2003) falsifies at least some of the ¹⁴C dates. But even accepting that all dates in this time range are questionable, would this eliminate the existing chronological overlap between the Châtelperronian and the Aurignacian in eastern France? We don’t know, but we can turn it around as we want — with the existing data, a categorical exclusion of contacts between Neandertals and modern humans seems to us quite ignorant (for the different types of possible contacts see Pelegrin, 1995, p. 265-271). Despite the fact that the lithic technology of the Châtelperronian is different from that of the Aurignacian (eg., Pelegrin, 1995 — but see White, 1993, p. 345 — for the personal ornaments), we think that the exceptional modernity of the Châtelperronian from Arcy could be explained by the proximity with, and the influences received from, nearby Aurignacian sites in, for example, southern Burgundy or the Swabian Jura.

We know that this point of view is becoming somehow out of fashion and is nearly regarded as a kind of political incorrectness. But even Pelegrin, who emphasizes the differences more than the similarities between the two complexes in question, considers Arcy an exceptional site in comparison to the ordinary Châtelperronian record (1995, p. 269). The extraordinary nature of this record requires explanation. We should remember that Arcy is situated at the very northeastern periphery of the Châtelperronian, in quite close vicinity of the early Aurignacian in southern Burgundy, southwestern Germany and other regions of Central Europe (Figs. 1-2). Is this really a mere coincidence? In spite of the technological differences, we think, as some authors already did a while ago (see Farizy, 1990), that the exceptional geographical situation of Arcy near important areas of early Aurignacian occupation, supported by new ¹⁴C dates, could be an explanation for its particularly “modern” archeological record. Why should Neandertals invent, after an existence of more than 150 000 years, new technologies of bone tool manufacturing and personal ornaments just at that moment, when modern humans expand to regions which are just 150 km away? We do not believe that this happened totally independently, as a pure coincidence (see Mellars, 1999, p. 349).

There are many arguments in favor of a Mousterian (MTA) derivation of the Châtelperronian and, consequently, in favor of its being largely an independent Neandertal development. We do not argue that the Châtelperronian itself is a product of acculturation by Aurignacian modern humans. But we do believe that the most modern exponent of the Châtelperronian, Arcy-sur-Cure, which sometimes is, more or less subconsciously, equated with the whole of the Châtelperronian, could very well have been influenced by them.

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