Analecta Praehistorica Leidensia 31 / Hunters of the Golden Age : the mid upper palaeolithic of Eurasia : 30,000-20,000 BP

Roebroeks, Wil; Mussi, Marghareta; et al., ; Roebroeks, Wil; Mussi, Marghareta; Svodoba, Jiri; Fennema, Kelly

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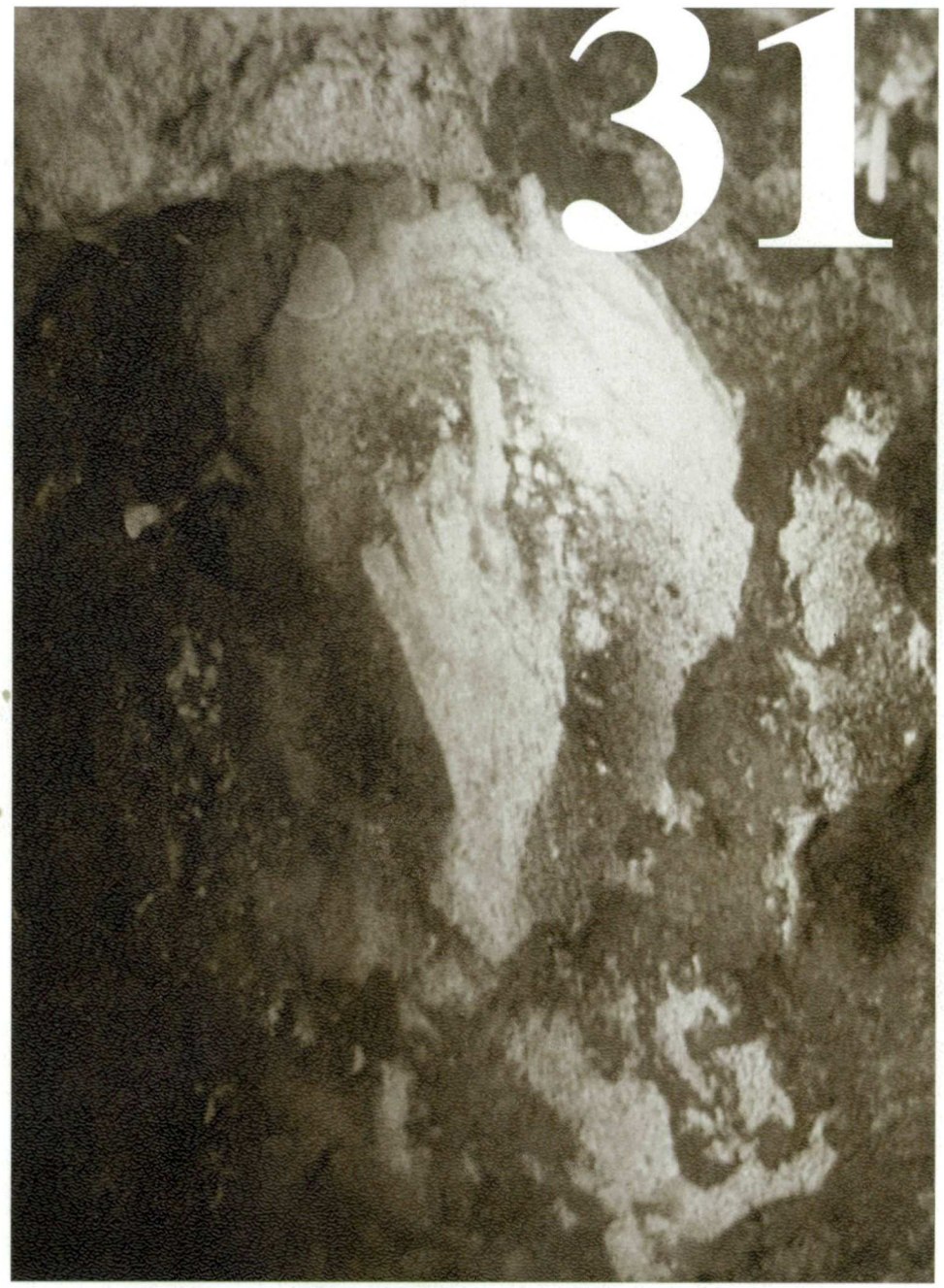

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HUNTERS OF THE GOLDEN AGE

THE MID UPPER PALAEOLITHIC OF EURASIA 30,000 – 20,000 BP

EDITED BY WIL ROEBROEKS, MARGHERITA MUSSI,
JIŘÍ SVODOBA AND KELLY FENNEMA

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Jean Clottes

7 Art between 30,000 and 20,000 bp

Recent discoveries and analyses – e.g. at Grotte Chauvet – have falsified traditionally held notions about a gradual and linear development of parietal art. This paper evaluates the chronological value of current notions on art and stylistic conventions. The evidence from Grotte Chauvet and other sites shows that around 30,000 bp art must already have had a long history, largely unknown because of taphonomic processes. The implications of new research are that the notion of a crude aurignacian beginning of parietal art is no longer tenable: from the Aurignacian onward, all artistic techniques were mastered and used to depict themes which saw a gradual shift from a focus on 'dangerous' animals such as rhinoceros, felines and bears in the Aurignacian, to a focus on commonly hunted animals in later periods. The chronology of the thematic changes indicates that in Central and Eastern Europe this shift occurred later than in southwestern France.

1. Introduction

In a recent paper on this subject, Brigitte and Gilles Delluc (1996: 87) envisaged "the birth of drawing, at the very beginning of the Aurignacian, in two separate centres (the region of Les Eyzies in the Périgord and the high Danube in Baden-Württemberg); a considerable expansion, especially northeastwards, of these graphic arts during the Gravettian (from Spain to the Don Valley in Russia); their subsequent retreat towards some regions of southwestern Europe during the Solutrean (in a very cold period, namely that of the Last Glacial Maximum at 20,000 years when Central Europe was emptied of its inhabitants), and then one sees the technology improving and specialising, and becoming richer with new contributions, mostly related to the mastering of perspective, before blossoming at Lascaux at the beginning of the Magdalenian".

These few lines summarize well the notion, classic since A. Leroi-Gourhan, of a linear evolution of art, with aurignacian beginnings in the Périgord and the Swabian Jura and with technical improvements – amongst which the invention of the perspective – in the Solutrean, before the apogee of Lascaux, dating to the beginning of the Magdalenian.

Yet, in the last few years analyses, discoveries, and re-evaluations have substantially changed this relatively simple scene. Very early dates have been obtained for Grotte Chauvet (Clottes *et al.* 1995; Clottes 1996b), Grotte Cosquer (Clottes and Courtin 1994; Clottes *et al.* 1996) and the Grande Grotte of Arcy-sur-Cure (Girard *et al.* 1995). Others, older than expected, have been obtained for Pech-Merle (Lorblanchet *et al.* 1995) and Cougnac (Lorblanchet 1994, 1995). The homogeneity of Lascaux is contested (Bahn 1994) and the themes used both in parietal art and in portable art are believed to have undergone considerable changes in the period under consideration (Clottes 1995, 1996a).

Rather than examining the current state of our understanding of art between 30,000 and 20,000 years bp region by region or culture by culture, we would like to discuss here some of the major problems that are presented by the latest developments in research and the changes that they bring about in our notions of palaeolithic art.

2. Before 30,000 bp

Around 30,000 bp, art had already a long history. Art results from the projection on the world that surrounds humans of a strong mental image that colours reality before taking shape and transfiguring it (Clottes 1993). Consequently, by using this definition, we qualify only those activities as art which aim to reproduce a physical or a symbolic reality in two or three dimensions.

The first artistic evidence is always subject to debate. It seems, however, that two facts emerge very clearly: on the one hand, more and more numerous material traces, for periods that go further and further back – including the Lower Palaeolithic – betray an awakening that goes beyond the contingencies of everyday life, beyond the simple quest for food and survival, and which casts an inquisitive look around; on the other hand, the 'symbolic representation', "conclusive evidence of access to abstract values" (Leroi-Gourhan 1980: 132) coincides with the diffusion of *Homo sapiens sapiens*, the real creators of art. Before them we may, at least so far, speak of pre-art.

The humans that preceded *Homo sapiens sapiens*, whether we are dealing with the Neanderthals or *Homo erectus*, have left behind several categories of remains that are generally classified under the heading of 'art', but which must be discussed separately. The *cupules* are among them. A stone

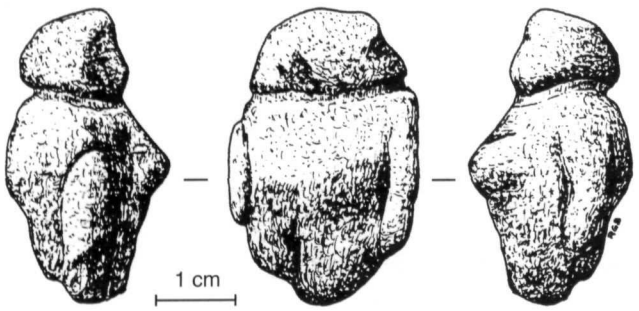

Fig. 1. Acheulean 'Figurine' (?) from Berekhat Ram (Israel). The natural form could have been partially modified (after Bednarik 1994b, fig. 1, p. 353).

slab with 18 *cupules* covered a burial of a mousterian child at La Ferrassie. A *cupule* and a dotted wavy line have been indicated under an acheulean layer in India, in the Bhimbetka (Bednarik 1994b). These *cupules*, are they really art in the sense defined above?

The same question can be asked for the series of parallel lines with sometimes very early dates, such as the lines on bone from Bilzingsleben, in Germany, undoubtedly the most famous ones because of their inferred age of 220,000 to 250,000 years, or those engraved on a cortex from Quneitra in Israel (around 54,000). Also in Israel, in Berekhat Ram, a stone, the natural shape of which evokes a human silhouette (Fig. 1), would have been partially engraved in order to accentuate this resemblance: it would date from an extremely early period since a lava flow that overlies the layer in which it was found, is dated to 230,000 bp, while the one underneath dates to 800,000 years ago (Goren-Inbar 1986; Bednarik 1994c).

And finally, the use of ochre has been demonstrated in very early periods in Europe, Africa, Asia, and Australia. Even if this was mainly for the tanning of hides or other practical uses, those who used it must surely have noticed its colouring effect. Consequently arguments were drawn from its presence in support of hypotheses, not proven but plausible, of the use for body painting or on perishable objects (Kozlowski 1992).

If the evidence of an art dating back to tens, even hundreds of thousands of years remains scarce then this would be for taphonomic reasons, as quite obviously it would have been less susceptible to preservation than art of the Upper Palaeolithic (Bednarik 1994a; Bahn 1995). Yet, if in Europe the last Neanderthals of the Châtelperronian engraved lines on bones or stones and if they indisputably possessed jewelry, they did not produce a real portable art – or parietal one – contrary to the Aurignacians. Given their contemporaneity with the latter, the taphonomic argument does not seem to work in this case.

The first Aurignacians arrived in Western Europe around at least 38,000 bp. Between this date and the beginning of the period that interests us here, all crucial progress had been made as far as art is concerned. We now have evidence that proves the existence of very varied techniques and themes that are subsequently encountered again in Franco-Cantabrian art.

With the portable art of the rock shelters of the Swabian Jura, in southwestern Germany, and the 17 ivory statuettes found in the aurignacian layers of the rock shelters of Hohlenstein-Stadel, Geissenklösterle and Vogelherd, as with the stone female statuette of Galgenberg in Austria, the Aurignacians have shown their mastery of three-dimensional sculpture, where naturalism and stylization often combine with subtlety (Fig. 2). The engravings complement them and they are sometimes coloured red. The three main techniques, sculpture, engraving and painting are thus jointly used in portable art from this period, before 30,000 years ago.

The same applies to parietal art. Until the discovery of Grotte Chauvet, aurignacian parietal art was hardly known, except from the rock shelters in the Dordogne and it was considered as an art of the exterior (Leroi-Gourhan 1965). However, those that studied it have occasionally noticed a preliminary preparation of the wall surface (Les Bernous) or the application of a red background on which the aurignacian drawings were traced in black (Blanchard, La Ferrassie), or also the fact that many walls of aurignacian rock shelters were colourwashed with red (Delluc and Delluc 1991: 340). Painting – sometimes dichromic – was therefore commonly used at the same time as the engravings on blocks. The engravings could be fine (La Croze à Gontran), or more often dotted (Belcayre, Blanchard, Cellier), or both. When deep, they occasionally go over in bas-relief (vulvas).

The discovery of Grotte Chauvet and the dates in excess of 30,000 years for several of its black drawings (Clottes *et al.* 1995) had, nevertheless, a stunning effect. How was it possible that at such an early date, supposedly only at the very beginnings of art, this cave in the Ardèche already contained real masterpieces of line drawings instead of the expected clumsy and crude sketches? The certainty that such a mastery of the art could not be but 'developed', i.e. relatively late, was such that before these dates were known, the art of Grotte Chauvet was placed in the Magdalenian on the chronological scale intended for a permanent exhibition at Vallon-Pont-d'Arc, an error that was only rectified several years later.

Several other authors could not accept the very early dates for Chauvet. Thus, Brigitte and Gilles Delluc (1996: 90) content themselves to note, without the slightest discussion, that "these dates are clearly much older than the stylistic

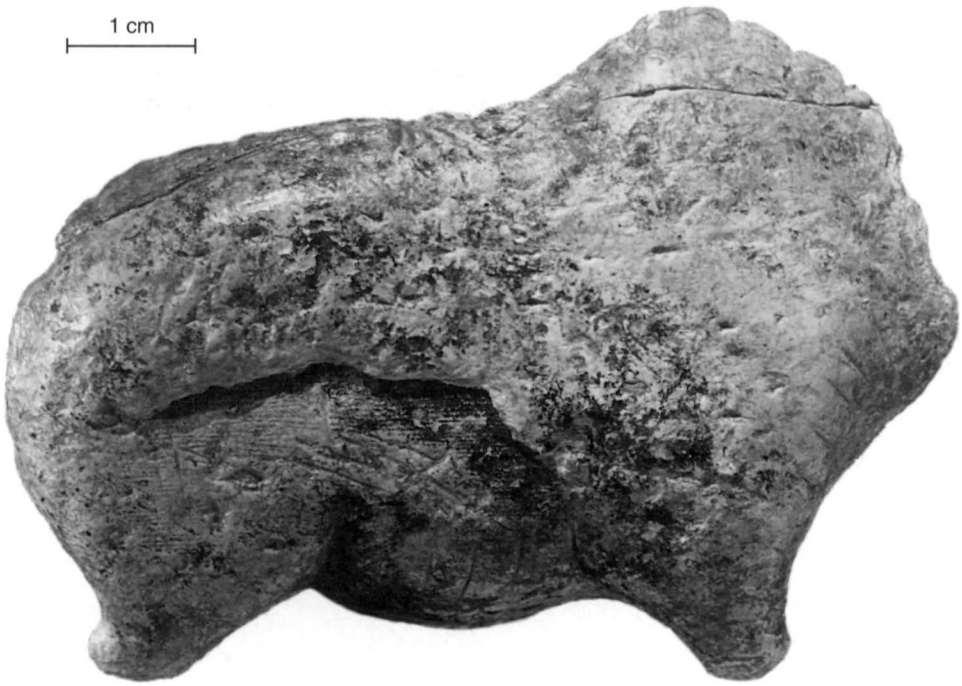

Fig. 2. Bison no. 9, sculpted in ivory and carrying various signs, found in an aurignacian layer in the Vogelherd (Germany) rock shelter (photo University of Tübingen).

analysis of the work indicates". Nevertheless, there is a major problem: either the dates of Grotte Chauvet are believed to be erroneous, in which case they should at least be discussed and reasons should be put forward for them not being credible, or else they should be accepted, and in that case the stylistic analyses need to be revised, or at least the assumptions that underlie them. That clearly raises the question of the chronological value of the current notions on art and on the stylistic conventions, which are even less certain the older the art is, especially with regard to parietal art.

3. Grotte Chauvet and the chronological problems of palaeolithic parietal art prior to 20,000 bp

So far only one specialist, Christian Züchner, has explicitly contested the dates for Grotte Chauvet and has argued his point of view (Züchner 1994-95, 1996). He attributes the red paintings of the Ardèche cave to the Gravettian and lower Solutrean, and the black paintings to the final Solutrean and the early Magdalenian (contemporary with Lascaux and Gabillou). In doing so he uses three arguments: the techniques (red and black), the themes (signs, different animal species), and the conventions followed in the representation of the animals.

These arguments are based on a fundamental postulate, which is an implicit acceptance of the value of our current knowledge. For example, in order to refute the direct radiocarbon dates, Züchner writes that "the reindeer is a theme of magdalenian art. It is not represented earlier" (Züchner 1996: 26), and that "the manner in which the anatomical details, the volumes, the perspective, and the movement are present in Chauvet is unknown before the final Solutrean and early Magdalenian" (*op. cit.*). The implicit assumption behind these assertions is that we know enough of the development of palaeolithic art, both about the use and duration of its themes and its conventions and techniques, that the broad outlines are definitely fixed, and that new discoveries should of necessity fit within established frameworks.

It is true that the study of themes, techniques, superpositions and conventions can allow an approach that, in a number of cases, proves to be on the whole correct as ^{14}C datings become available. This was the case, for instance, with the attribution to the Gravettian of part of Pech-Merle (Lorblanchet *et al.* 1995), as in this cave the possibility of the Panel of the spotted Horses belonging to the Gravettian had already been envisaged (Clottes *et al.* 1992: 273-4; Clottes and Courtin 1994: 167).

However, experience proves that every time a major discovery is made, it brings with it amazing novelties and

Fig. 3. Grotte Chauvet (Vallon-Pont-d'Arc, France). Clashing rhinoceroses, which have been given three ^{14}C dates: the rhinoceros on the right: 32,410 ± 720 bp (Gif A 95132) and 30,790 ± 600 bp (Gif A 95133); the rhinoceros on the left: 30,940 ± 610 bp (Gif A 95126) (photo J. Clottes).

provokes sometimes very important readjustments of our knowledge and our notions. For instance, during the last ten years an open air palaeolithic art of great magnitude has been discovered, against all expectations, in the Iberian peninsula (Foz Côa in Portugal, Siega Verde, Domingo Garcia and others in Spain).

In fact, these surprises were nothing out of the ordinary and their occurrence was foreseeable. Palaeolithic art has an established life of more than twenty thousand years. For this very long period a little over three hundred sites featuring parietal art are known in the whole of Europe, from the southern tip of Spain to the Urals. This is a very small number when we take into consideration the necessity of the transmission of knowledge and ritual practices. Thousands of sites must have disappeared or remain undiscovered (Bednarik 1994a). We have no means to know precisely whether those that we have found constitute a representative sample of the whole. We assume this to be the case because we cannot do otherwise. Under these conditions, we should expect modifications to, and even a shake-up of, our knowledge as discoveries are made. To judge the validity of dates obtained from such or such a cave, we should therefore consider each case individually on its own merits. What are the implications of this for Grotte Chauvet, given its importance, and more generally for sites dated between 20,000 and 30,000 bp?

If we had had only a single date for Grotte Chauvet, it would most probably have been dismissed as 'aberrant', following the old saying 'one date is no date'. In fact, there are five dates obtained from three samples, coming from three different animals (Fig. 3). These dates fall in the same range, between 30,000 and 32,000 bp. They are confirmed by the dating of charcoal on the floor, that gave a date of 29,000 ± 400 bp. Moreover, a non-calcited torch mark superimposed on a thin layer of calcite that covers the animals painted in black (Fig. 4) has been dated to 26,120 ± 400 bp, a date corroborated by the analysis of another *mouchage*, in a different chamber, that has given two

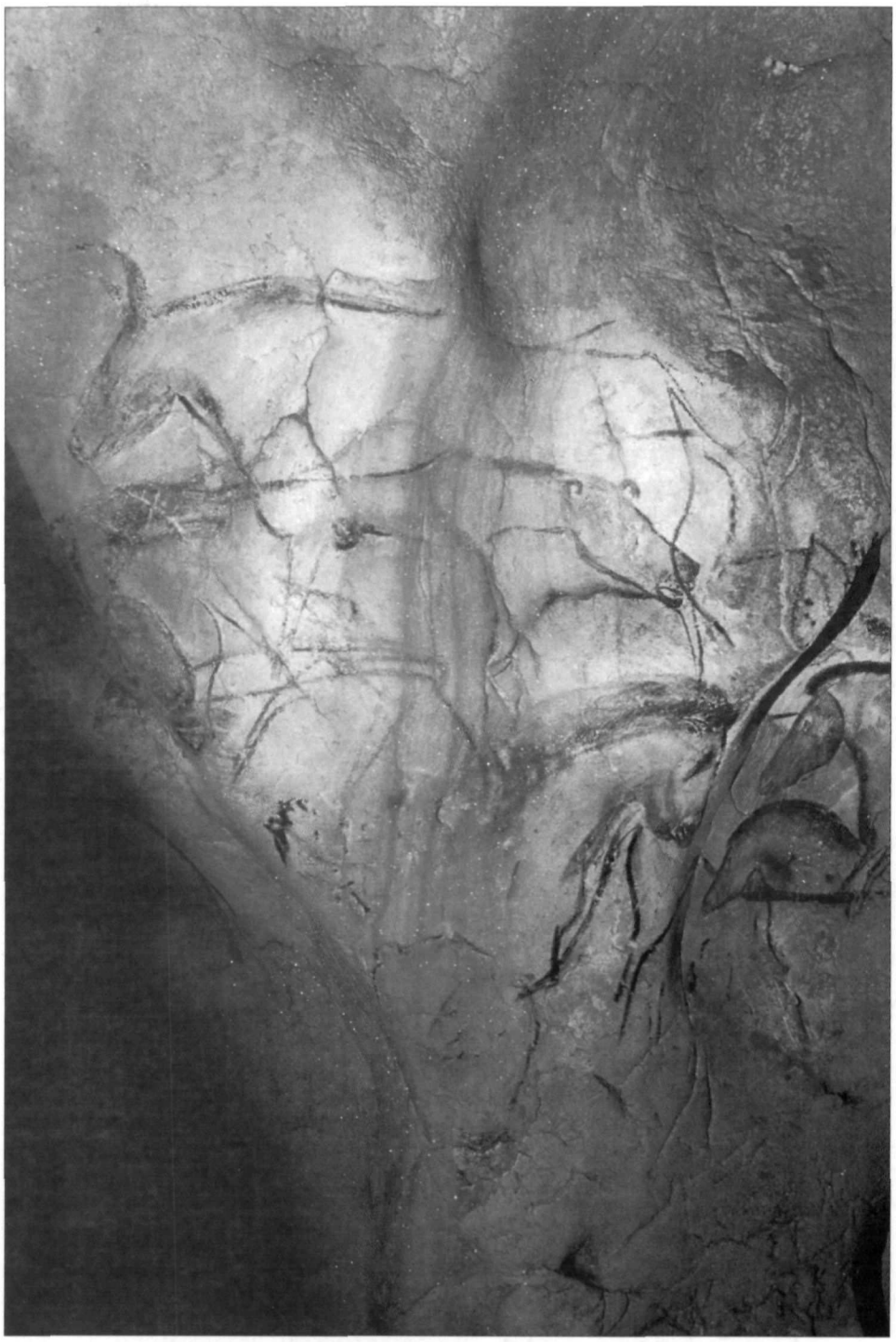

Fig. 4. Grotte Chauvet. On the very left of the panel, torch marks are superimposed on the calcite that covers the earlier paintings. They have been given a date of 26,120 ± 400 bp (Gif A 95127) (photo J. Clottes).

identical dates (26,980 ± 410 and 26,980 ± 420 bp; Clottes *et al.* 1995). It is a genuine parietal stratigraphy with a coherent sequence of dates that has thus been obtained. These observations eliminate one of Züchner's hypotheses: in order to explain the very early dates of the black animals of Chauvet, the artists could have used fossil wood, or picked up charcoal that was lying on the ground. It would have been necessary in that case that by exceptional

coincidence the wood used for the torches was sufficiently old, but not too much so, to remain compatible with the observed parietal stratigraphy. Finally, the oldest dates of Chauvet tie in with the discoveries of portable art made in the Swabian Jura where ivory statuettes, found in aurignacian levels with similar dates, depict identical subjects to those of Grotte Chauvet: mammoth, felines, bisons, bear, horse, rhinoceros and composite beings. The dating of part of the parietal depiction of Chauvet, provisional as it may be until other ^{14}C dates have been obtained, does therefore not rest on a single date but on a series of dates and on a set of observations. That makes Chauvet one of the more certain sites on the chronological map. What about others?

In a recent work, M. Lorblanchet has drawn up the list of sites with "objectively dated Palaeolithic parietal art" (Lorblanchet 1995: 284). The period dealt with here (30,000-20,000 bp) covers the Aurignacian, the Gravettian and the very beginning of the Solutrean. For the Aurignacian, six sites are mentioned (the rock shelters of Blanchard, Castanet, Cellier, La Ferrassie and La Viña, and Grotte Chauvet); for the Perigordian these are Arcy-sur-Cure, Cosquer, Cougnac, Fuente del Salín, Gargas, Labattut, Laussel, Pair-non-Pair, La Viña, and Pech-Merle, that is to say ten sites; Cosquer, Cougnac, Le Fourneau du Diable, Le Placard, La Tête du Lion, and La Viña (six sites) represent the Solutrean sample. This list was established "using the most objective methods, that means mainly the integration of representations within a stratigraphic context, their relation to an archaeological level and for 27 parietal motifs age measurements directly on the pigments" (p. 279).

These criteria could be debated. Direct radiocarbon dates are no panaceas and should be placed into context, as we have just seen for Chauvet. As for the dates obtained on archaeological remains on the floor, there can be no question of extrapolating them to the painted walls of the caves (except in special cases, such as La Tête du Lion where the dated level contained drops of pigment). M. Lorblanchet knows this (p. 271) and yet he uses this criterion to classify certain ensembles amongst those that are 'dated objectively' (Arcy-sur-Cure, Fuente del Salín). In the case of Le Placard, he envisages the very theoretical possibility of "a decorated perigordian cave" (p. 268-9) of which the artists would not have left any traces. The same reasoning could be applied to many other sites where the parietal art is much less well dated than that of Le Placard, and it could be said with as much plausibility, for instance, that the art of the Grande Grotte of Arcy-sur-Cure or that of Pair-non-Pair could be Aurignacian. Whereas, "if as a rule the engravings of Pair-non-Pair are more often attributed to the Gravettian than to the Aurignacian then it is to the stylistic motifs that they owe this preference" (Delluc and Delluc 1991: 64). This shows how strong the influence of established ideas is, even on those that challenge them *a priori*.

Nevertheless, this list, imperfect as it may be, gives a base to which one can add several other caves and decorated rock shelters of which the attribution to the periods concerned is probable, either because of their archaeological context, or because of stylistic similarities with well-dated caves (cf. Delluc and Delluc 1991). For the Aurignacian these are El Conde, Les Bernous, Belcayre, La Croze-à-Gontran, Lartet, Le Poisson, La Souquette, and Brassempouy. That would therefore make 14 sites in total for the Aurignacian, twelve of which are in France and only two in Spain. For the Gravettian the list would come to 21 in total, of which two only are in Spain, with the addition of the following sites: Le Poisson, Jovelle, Roucadour, Pataud, Vignaud, Oreille d'Enfer, Laugerie-Haute, Le Facteur, La Cavaille, Fongal, and Les Trois-Frères (Galerie des Chouettes). As for the Solutrean, there would only be nine sites, two of which are in Spain, with amongst others Roc de Sers, Oullen, and Ambrosio. Taking into account that a certain number of these solutrean sites are undoubtedly younger than 20,000 years bp and that certain others have been mentioned under two different chronological headings, there would be in total about forty caves and decorated rock shelters that belong to the period with which we are concerned. Hereto added should most probably be caves for which we have not a single solid dating element, such as La Baume Latrone, La Grotte aux Points (Gard), maybe Mayenne-Sciences, and at least part of the surface art (Foz Côa).

We can see from the evidence that we are well behind what could have been expected, since these approximately 40 sites correspond to less than one seventh of the total ensemble of palaeolithic caves and decorated rock shelters, while the period concerned covers more than half the duration of the parietal art.

4. Development and specialisation of art

This shortage of information is due to one of the major unsolved problems, namely the dating and the duration of stylistic criteria which support convictions on the creation date of sites and on their use over time. I do not think that we have entered a "post-stylistic era", as has been predicted (Lorblanchet and Bahn 1993; Lorblanchet 1995: 282; see on this subject Clottes 1994). Strictly speaking, this would mean that 'style', that is the manner in which figures are represented, the details of their realisation, their techniques and even their themes, are hardly important. Nothing can support such a paradox. If the notion of a 'post-stylistic era' only applies to criteria of the chronological determination of figures, then the expression becomes more defensible but it still remains exaggerated. In fact, we will never manage to have enough radiocarbon dates and laboratory analyses to date *all* the parietal figures in a cave. At best, certain

Fig. 5. Grotte Chauvet. A large lion turned towards the right has deliberately been placed in a spatial perspective in relation to three earlier horses by interrupting the lines, to make him appear to be behind them (photo J. Clottes).

representations – as many as possible – will be dated but not the engravings nor the red figures, and only a small part of the black drawings: some of those made with charcoal that are sufficiently well preserved, but not those made with manganese dioxide (Lascaux or Rouffignac). These bases, always inadequate, having been reached, we will of necessity proceed as we have done since Breuil – even those against it – namely by stylistic comparison: if A, B, or C, which resemble each other because of the recurrence of the characteristics x, y or z, have been given dates between 20 and 23,000, it is assumed that D which shows the same traits x, y and z should roughly be attributed to the same period.

The difficulty is therefore to have fixed points in such numbers that the beginning and end of themes, conventions, and techniques can be determined. This means evaluating the relevance of the dates obtained and of the observations carried out, and to have a sufficient number of quasi-certainties to be in a position to extrapolate from them. At present we are a long way from such a situation.

Despite this fundamental reservation, a certain amount of knowledge appears almost assured. This concerns in the first place the mastery of techniques from the beginning of the Aurignacian. It is no longer possible, after the discoveries of these last few years, to envisage an archaic and crude Style I and a gradual development in the course of the ten or fifteen thousand years that followed. Right from the start the artists are capable of skilfully and accurately engraving, painting and sculpting the images of the animals that surround them. The Aurignacians of Grotte Chauvet have not only rendered the spatial perspective but they have done so by means of different techniques. In this we note a real meticulousness: the lion of the Panel of the Horses (Fig. 5) was deliberately placed in the background by stopping the line at the level of the animals that were drawn earlier (Chauvet *et al.* 1995, fig. 54), the horns of a group of rhinoceroses (Fig. 6) were sketched in a diminishing perspective from the horn in the foreground to those in the background (*op. cit.*, fig. 86); a bison was drawn on a dihedron, the face seen full face on

Fig. 6. Grotte Chauvet. The horns of the upper rhinoceroses that show the same conventions as the two dated rhinoceroses (cf. fig. 3), have been represented according to the laws of perspective (photo J. Clottes).

one level and the body seen in profile on another, at 90^0, to accentuate the effect of the perspective (*op. cit.*, fig 88). The use of stump-drawing, in the same cave, is common. The animals are often represented in action, "animated" as A. Leroi-Gourhan called it, which contradicts his remarks on "the growing preoccupation with representing movement in the course of the development of Upper Palaeolithic art" (Leroi-Gourhan 1982: 42).

Fig. 7. In the Grotte Cosquer (Marseille, France) negative hands such as these are numerous (55). Some have been given very high dates: 27,740 ± 410 bp (Gif A 96073) for hand no. 19, 27,110 ± 390 bp (Gif A 92409) and 27,110 ± 350 bp for hand no. MR7 (photo National Navy).

These observations have very important implications. We can no longer consider that, during these ten thousand years, art slowly developed along a more or less constant linear scheme of progress. From that point of view, the parietal art of Chauvet corresponds with the portable art of the Swabian Jura and is closely akin to it: in certain periods very sophisticated art forms have come to light, but under which influences? Culturally? Individually? Have these major successes been further developed and continued? We have too few elements to say so. The fact remains that in the same periods and in other regions (Périgord, Pyrenees, Cantabria), we do not record the presence of such masterpieces. Undoubtedly we should believe, as Ucko and Rosenfeld have suggested from 1967 onwards (cf. also Ucko 1987) that there could have been many apogees and many declines, just as the coexistence, at the same time but in different places, of talented artists and less gifted practitioners. That relativises to a great extent the value accorded to the criteria that Leroi-Gourhan (1965), and subsequently the Dellucs (1991), have given for defining his Styles I and II. The image of a linear and progressive evolution of art in the course of these ten thousand years, with a slow acquisition of more and more complex techniques, is therefore substituted for the notion of a seesaw-like evolution.

Amongst the specifics of the period, the finger tracings have to be mentioned, as they are certainly more numerous and widespread at that time, even in the major caves (Cosquer, Chauvet, Gargas, Trois-Frères) than later (Tuc d'Audoubert). Negative hands, or positive ones, are attributable to the Gravettian (Fuente del Salín, Cosquer (Fig. 7), Gargas, Labattut) and it is possible that they go back to the Aurignacian (Grotte Chauvet, where they are closely associated with red figures that show the same characteristics as the dated black drawings; cf. Chauvet *et al.* 1995, fig. 25).

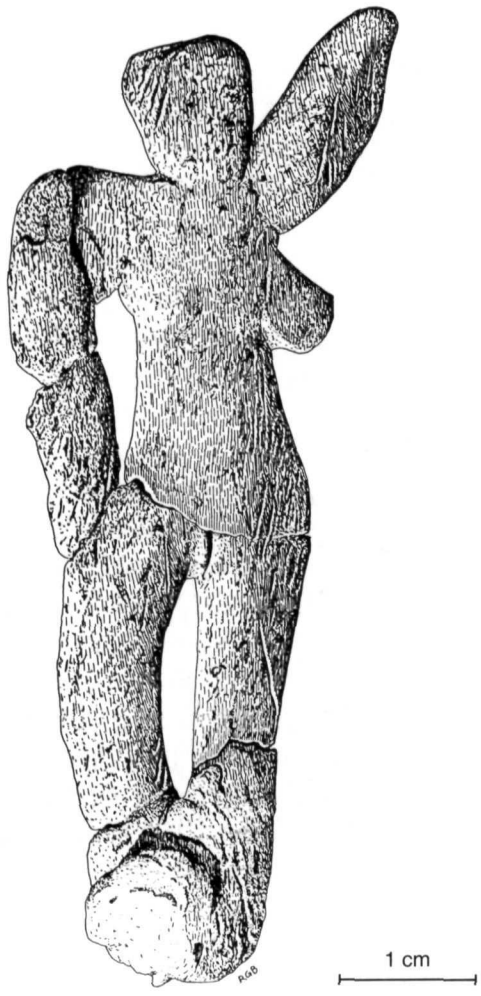

Fig. 8. Female sculpture (serpentine) from Galgenberg (Austria), dated to more than 31,000 bp (after Bednarik 1994b, fig. 2, p. 79).

In portable art, two series of typical objects have been known for a long time. Their diffusion is very specific. The gravettian-pavlovian-kostenkian female statuettes cover the whole of Europe and are found as far away as Siberia. But they were apparently not made south of the Pyrenees, which is very surprising. The pseudo-statuette reported from Setubal (Portugal) (Farinha dos Santos 1980-81) is a *lusus naturae* without the slightest human intervention. Since the discovery of the 'Venus' of Galgenberg (Fig. 8) it is known that this theme goes back to the Aurignacian. On the other hand, the recent discoveries in Canada, of a series of 7 figurines from the excavations by Jullien at Grimaldi (Bisson and Bolduc 1994) should not be questioned: their careful examination shows that we are really dealing with authentic palaeolithic statuettes, in spite of certain ill-founded doubts (Bahn 1995: 204). They are very probably attributable to the Gravettian, like their colleagues (Bolduc *et al.* 1996). In Central and Eastern Europe quite a small statuary, prior to 20,000, has been known for a long time (Kozlowski 1992).

The engraved *plaquettes* of El Parpalló, in Spain, have received much less attention. However, it is the only known case where a very important portable art on *plaquette* has survived locally for about ten thousand years, from the Gravettian up to and including the late Magdalenian. According to the dates obtained in southeastern Spain, the period concerned, besides the non-represented Aurignacian in El Parpalló, covered the Gravettian and the lower and early middle Solutrean. Decorated *plaquettes* are rare in the Gravettian of El Parpalló (7, with 13 decorated sides) and they become much more numerous in the Solutrean (lower: 154, with 193 sides; early middle: 326, with 402 sides) (Villaverde Bonilla 1994b: 146). It is therefore impossible to determine a development. It should be noted, however, that, according to the author who has made a very detailed analysis trying – often not without difficulties – to apply the criteria and principles of Leroi-Gourhan, the perspective and the shading for the interior of the bodies of the animals were already mastered (Villaverde Bonilla 1994a, 1994b).

Whether we are dealing with the aurignacian statuettes from the Swabian Jura, the absence of 'Venuses' in Spain and Portugal, the long tradition of engraved and painted *plaquettes* in El Parpalló, or even the pavlovian and kostenkian statuary, the counterpart of which is not found in Western Europe, a specialisation according to region and cultural group is noticeable prior to 20,000 bp. Certain techniques and subjects seem specific for particular regions at such or such times. What about the themes?

5. Animal themes and their development

According to Leroi-Gourhan, the figurative themes hardly change from the Aurignacian to the Magdalenian: "The themes of period I (...) are the same which dominate the entire Palaeolithic art" (1965: 148). Since those distant beginnings, we are, according to him, dealing with "a system of symbolic representation of the living world that persists with minor variations for the whole duration of Palaeolithic art" (p. 147). Leroi-Gourhan has lain great emphasis on the survival of the same content from beginning to end, to conclude that "the ideological unity therefore deprives parietal art of the reference points that would be provided by the changes in the fundamental figurative theme. Only the variations in the representation of this uniform content remain perceptible through stylistic study" (p. 137). As for the Dellucs, they compiled (Delluc and Delluc 1991: 328) an

Fig. 9. Grotte Chauvet. The representations of bears and other *a priori* non-hunted animals are numerous in this cave. Here a large red bear from a side gallery near the entrance (photo J. Clottes).

interesting enumeration of parietal animals to which we will return, and they note that rhinoceros and bear are only represented in the Aurignacian (p. 334) while the cervids are lacking, and that, as has been pointed out many times, the vulvas are then numerous (p. 347). However, they do not draw any conclusions from this enumeration which would be at odds with the theories developed by Leroi-Gourhan.

On the other hand, J. Hahn has stressed the originality of the themes of the German statuettes, which is no less great than the sophistication of their techniques. This originality was such that he even envisaged an aurignacian cultural isolation in southern Germany (Hahn, in Albrecht *et al.* 1989: 35). He remarked that the represented species were the largest, the most powerful and the most dangerous, an idea reinforced by the threatening posture of some animals and by their sexual characterisation as males: "According to the choice of animals, force and strength seem to be the components that they were trying to express" (Hahn 1986: 222). He also mentions the influence of the seasons of occupation and the functions of the sites on this choice (Hahn 1990: 181), as well as that of the environment on the greater or lesser abundance of mammoths, which are more numerous in the Pleniglacial than at the end of the Pleistocene (*op. cit.* p. 182; cf. also de Sonneville-Bordes, in Hahn 1990: 183); the intensive hunting of mammoths and rhinoceroses could have been the determining criterion for these choices (Hahn, in Albrecht *et al.* 1989: 35). However, he specifies that this remark could not apply to lions and bears and that these last ones by their presence exclude the hypothesis of hunting magic (Hahn 1986: 221).

J. Kozlowski also insists on the fact that these statuettes represent animals that were difficult to hunt, but he draws opposite conclusions from it as, according to him, they seem "as the expression of a magic destined to appropriate the qualities of the animals and, perhaps, to ensure the success of the hunt. (This art) does in no way correspond with a complex and structured religious system" (1992: 40). The beginnings of this religious thought in Western Europe were only

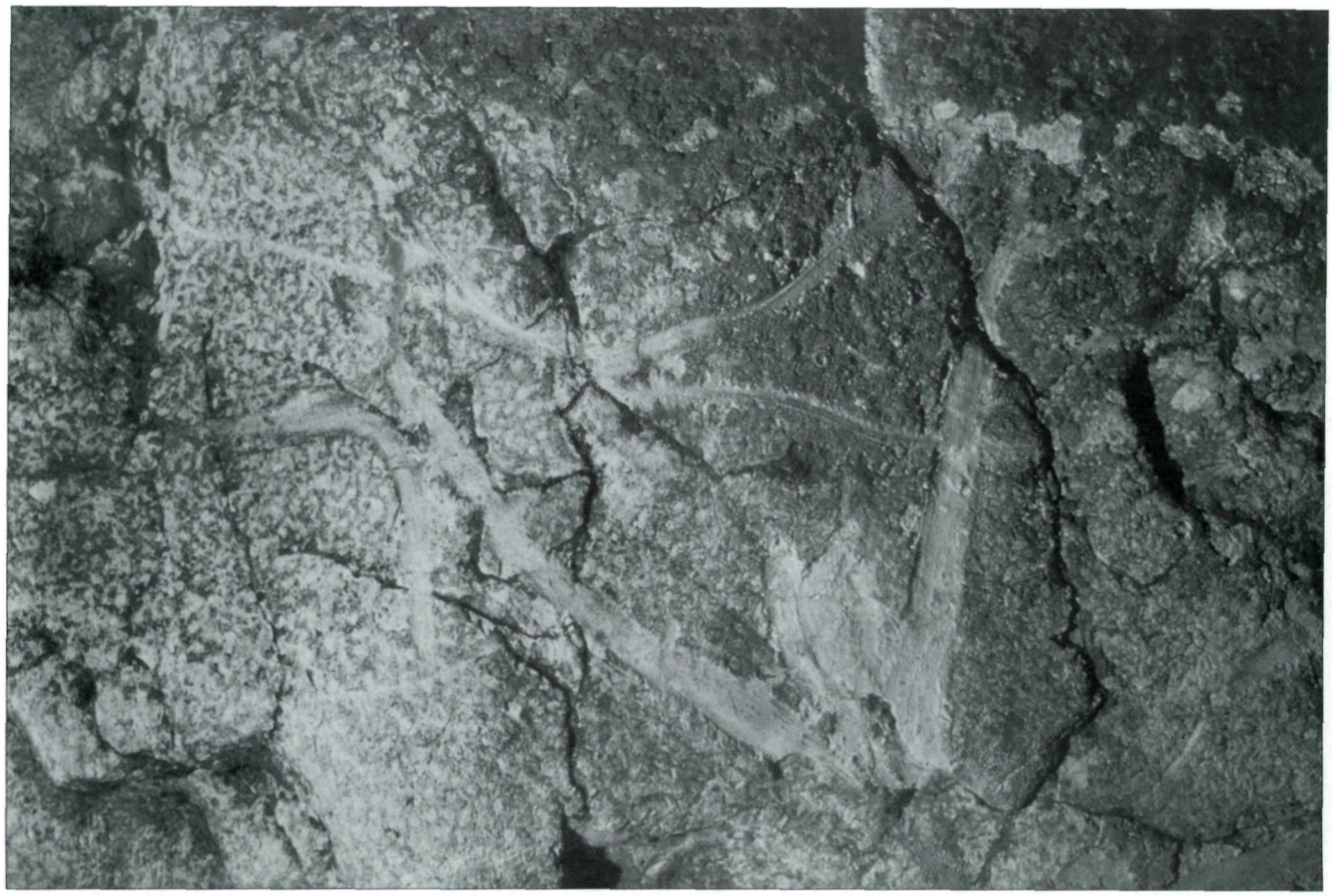

Fig. 10. Grotte Chauvet. Engraving of a vulva, a very frequent motif in aurignacian parietal art (photo J. Clottes).

perceptible through "the rather crude representations" (p. 42) in the Dordogne, whereas the aurignacian magic tradition would be carried on through gravettian zoomorphological statuettes in Central and Eastern Europe: "In fact, in Dolní Věstonice, for instance, the animals most frequently depicted are felines and bears, thus animals difficult to hunt, the ones that probably most impressed gravettian man" (Kozlowski 1992: 68). Despite this convergence, he thinks that the gravettian works of art, whether pavlovian or kostenkian, contrary to aurignacian ones, could be interpreted within the framework of a coherent religious system because of the more complex symbolic behaviour to which they testify (p. 66).

A first inventory of the animals represented in Grotte Chauvet has shown that species that were not hunted clearly dominate here (Clottes 1995, 1996a; Clottes *et al.* 1999). Of the 313 animal representations found, rhinoceros (Fig. 6) (61, that is 19%), mammoth (64, that is 20%), and lion (61, that is 19%) (Fig. 5) are by far the most numerous. The most common animals in the Franco-Cantabrian caves, horses, bovids, cervids and caprids, represent in all 115 units, i.e. 36% of the identifiable animals in Grotte Chauvet, whereas the dangerous and generally rarer animals in parietal and portable art, rhinoceros, felines, mammoths and bears (11, that is 4%) (Fig. 9) number 197, almost twice as much (62%).

This inversion of themes in relation to what we know from elsewhere poses a problem. Even if lions, rhinoceroses and mammoths were more abundant in the aurignacian fauna than they would be a few thousand years later, which remains to be proven, it has long been accepted that the animals represented were not necessarily representative of the biotope of the artists. Nor did they copy it closely, otherwise we would have to picture the Dordogne around Rouffignac covered with mammoths during the Magdalenian.

In the Périgord the rock art sites considered as archaeologically dated to the Aurignacian are not very numerous, as we have seen. The inventory of animals gives 6 ibexes, 3 horses, 2 bovids, 2 mammoths, 2 rhinoceroses, 2 bears, and 6 indeterminates (Delluc and Delluc 1991: 328). The total number (23) is not very high and any

percentage can only be indicative with such a small total. Nevertheless, we can see that dangerous animals constitute an abnormally high proportion (26%, or 32% of the identifiable animals), especially if we compare it with the detailed account that the same authors give for the gravettian parietal animals: 9 ibexes, 9 cervids, 7 horses, 4 mammoths, 3 bovids, 1 megaceros, 1 salmon, and 10 indeterminates (*op. cit.*). The dangerous animals of the Gravettian therefore do not constitute more than 9% of the ensemble and slightly more than 11% of the determinable animals, which means that they are nearly three times less numerous than in the preceding period. They remain, nevertheless, at a higher frequency than later in the Solutrean and Magdalenian, when rhinoceroses, bears, and lions will be considered as rare animals, just as the mammoth will be in entire regions (Pyrenees, Cantabria).

The preferred themes of Grotte Chauvet thus find a definite echo in southwestern France during the Aurignacian. These parallels are further accentuated by the presence of three engraved and two painted vulvas in Chauvet (Fig. 10) which recall this theme, so abundant in the Aurignacian of the Dordogne.

A certain number of other undated caves show resemblances with Chauvet. Thus, the Grande Grotte of Arcy-sur-Cure, apart from 8 negative hands and a positive one, has several points in common with the cavern in the Ardèche, with the presence of rhinoceros (1, and 1 possible but not certain), feline (1), bear (4), and mammoth (27). Other species are: 6 cervids, 1 ibex, 2 bovids, 1 horse, 1 bird, and 9 indeterminates (Baffier and Girard 1995). Also in this case, the number of animals is slightly too low to have reliable percentages, except for information only. However, it is not uninteresting to note that the dangerous animals that made the researchers qualify this bestiary as 'original' represent more than 62% of the total number and 75% of the identifiable animals.

Amongst the other undated caves, the strangest by its style is La Baume Latrone (Gard), which was intuitively attributed to the Gravettian by H. Breuil, by A. Leroi-Gourhan, and next by Dr Drouot, who studied it. The list of represented species, according to this last author, consists of: 10 mammoths, 2 ibexes, 2 cervids, 1 horse, 1 bovid, 1 bear, 1 feline, and 1 rhinoceros (Drouot 1984b). All the dangerous animals of the Grotte Chauvet are here. They account for more than 56% of the ensemble and for more than 68% of the determinable subjects. In addition to these convergences there is the presence of finger tracings and of 5 positive hands in clay.

The same remarks apply to the Grotte Bayol, also in the Gard, where there are 3 ibexes, 1 mammoth, 1 bear, 1 feline, 1 cervid, and 1 horse, and 6 positive hands (Drouot 1984a). Positive hands are extremely rare in palaeolithic art. Their presence, in Bayol, as in La Baume Latrone and in Chauvet, is the more remarkable. This does not mean, of course, that we should automatically consider Bayol or La Baume Latrone as Aurignacian, as we never know for how long a certain theme could have persisted. Drouot has attributed certain figures of Bayol to the Solutrean by comparison with Oullins, but he reckons that the representations of hands and several other figures could be notably older (Drouot 1984a: 326).

These observations show that in the Aurignacian, in southeastern France and Germany and to a lesser degree in the Dordogne, the theme of non-hunted animals, the most fearsome or impressive ones, dominated in both parietal and portable art. These themes are also present in undated caves whether they be Aurignacian or of a later date, if they have persisted here and there.

In the French caves, the decorated ensembles attributed to the Gravettian, on the other hand, show a strong preponderance of hunted animals, with the horse very widely dominant. The animals itemised in Gargas (Barrière 1976) are 148, a respectable number that allows statistical comparison. In fact, this bestiary has neither feline, nor rhinoceros or bear, and the mammoths only amount to 4% here, whereas the rest of the fauna is more consistent with the usual scheme, with 36.5% bovids (bisons and aurochsen), 29% horses, 10% ibexes, 6% cervids, 8% indeterminates, apart from 2 birds and 1 wild boar. The thematic preferences of the Gravettians of Gargas therefore differed radically from those of their immediate predecessors.

The same applies to the Galerie des Chouettes of the Tréfonds des Trois-Frères whose stylistic and technical similarities with Gargas allow it to be definitely attributed to the Gravettian. Using the tracings made in this gallery by the Abbé Breuil (Bégouën and Breuil 1958), D. Vialou (1986: 124) has counted 2 birds (owls), 5 engraved bisons, 8 bovids, 8 horses, and 39 indeterminates.

It seems therefore that a thematic change has taken place in the French Midi from the beginning of the Gravettian (Gargas, Le Tréfonds des Trois-Frères, perhaps Cosquer) or at the end of the Aurignacian. It is not impossible that there could be chronological discrepancies, particularly in eastern France (La Grande Grotte) and that in some regions they have continued to use the same themes longer than in others. That could explain the multiplicity of mammoth representations in certain caves in more recent periods (Pech-Merle, Cougnac).

Persistencies such as these have been demonstrated in Central and Eastern Europe judging by the abundant portable art in those regions. In the Pavlovian and Kostenkian, corresponding *grosso modo* to the Gravettian, the percentages of dangerous animals are more or less the same and continue the aurignacian tradition. Among the 67 animal statuettes in the Pavlovian recorded a few years ago, there

were 21 bears, 11 small carnivores, 9 felines, 8 mammoths, 6 birds, 6 horses, 4 rhinoceroses, 1 caprid and 1 cervid. Even without counting the small carnivores, the total of the dangerous animals comes to 42 (62.6%). For the kostenkian statuettes the respective proportions of these animals vary but their total remains constant, since 36 mammoths have been counted, 11 birds, 8 rhinoceroses, 6 felines, 5 bears, 3 horses, 2 bisons, 1 caprid, 1 cervid, 1 small carnivore, 1 other and 16 indeterminates (Hahn 1990: 178). For these 91 representations the overall percentage of the 55 dangerous animals reaches 60.4%; it goes up to 73% if only identifiable animals are considered. On the other hand, the difference with the Magdalenian of the same regions is striking, where animal sculpture is not less abundant than previously but with a spectacular inversion of themes. In fact, 139 animal statuettes have been recorded (Hahn 1990: 178) of which 56 horses, 44 bisons, 9 bears, 2 felines, 2 birds, 1 mammoth, 1 caprid, 1 cervid, 5 miscellaneous species and 18 indeterminates. One notes the absence of rhinoceros and the small number of other dangerous species: 12 in total, thus barely 8.6% of the ensemble and 10% of the determinable animals.

For reasons that we can only assume, perhaps partly linked to the nature of the biotope, we therefore notice a drastic change in the represented themes, that is to say in the beliefs and cultural practices of the cultures concerned (Clottes 1995, 1996a). This change occurred rather early, at the end of the Aurignacian or the beginning of the Gravettian, in Western Europe, much later in Eastern Europe. These observations run counter to Leroi-Gourhan's theories on the unicity of themes from the beginning to the end of the Upper Palaeolithic.

6. Conclusions

To conclude this brief overview, we would like to mention once more the noteworthy facts of this long period prior to 20,000 bp, as they appear to us after the shake-ups of the last years.

Still very few certain elements are at our disposal. In particular, the chronological attributions of numerous parietal sites must be clarified and surprises are possible and even probable. However, we now know that from the Aurignacian onwards the people mastered all artistic techniques, in all their aspects, and that occasionally they could show the most sophisticated qualities in the rendering of forms and postures of animals. Other discoveries, in the future, will surely confirm this observation. From now on it changes our notions of the appearance and especially the development of art. We do not know exactly what will be the duration of the conventions and what those are that could prove to be decisive for characterizing undated sites. In this respect, the situation is somewhat comparable to the one the prehistoric specialists of industries went through when they abandoned the concept of the type fossil.

As for the themes, certain classic ones have been confirmed: the representations of vulvas are always abundant in the Aurignacian, and the 'Venuses' in the Gravettian, but for the latter now with an ancestor in the Aurignacian (Galgenberg). The theme of the composite figure, half human/half animal, known above all from the middle Magdalenian (Trois-Frères) and perhaps from the early Magdalenian (Gabillou), as well as from the Gravettian and the Solutrean (Cougnac, Pech-Merle), is now recognised in both the portable aurignacian art (Hohlenstein-Stadel) and the parietal one (Chauvet). The belief in therianthropic beings, demonstrated worldwide in every period, forms without doubt part of the universals of the human mind. If, as one could think, a large part of the works of Chauvet belongs to the same period, then the beginning of the negative hands could moreover be older by several thousand years. This original aurignacian art, certain aspects of which are similar in portable and in parietal art, has known different continuations in different places. It seems to have lasted during the entire Gravettian in Eastern Europe, while in southwestern France the animals commonly hunted took over from the dangerous animals and became generally the majority from the beginning of the Gravettian.

Finally, contrary to what Leroi-Gourhan thought, the oldest art is not only an exterior art, present in rock shelters with daylight. The discoveries of Chauvet, Cosquer, and La Grande Grotte of Arcy-sur-Cure show this well. A recent inventory of the decorated caves and rock shelters in France has shown that in the 'early' periods, that is the Aurignacian and the Gravettian, rock shelters exposed to daylight and deep caves were used concurrently, in comparable proportions (Clottes 1997).

All these observations confirm the sense of unity in palaeolithic art. We can no longer speak of 'archaic' art or of the 'primitive period' for the period prior to 20,000 bp. Distinctions exist, certainly, but they are more due to local particularities – for which we should attempt to elucidate the reasons and methods – than to a development with the passing of thousands of years, and even less to a progress in techniques and concepts.

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Jean Clottes
11, rue du Fourcat
09000 Foix
France