Twenty Thousand Years of Palaeolithic Cave Art in Southern France

JEAN CLOTTES

ABOUT 350 PALAEOLITHIC SITES with rock art are now known in Europe, most of them in France and Spain, with a scattering in Italy and Sicily, and a few sites as far as Romania and even the Urals in Russia. They are not all deep caves. Shallow shelters at the foot of a cliff, inhabited cave entrances, and even outside rocks in Spain and Portugal have also been painted and engraved. In France, nearly 160 Palaeolithic rock art sites have so far been discovered, of which fewer than a dozen are situated in the northern half of France. This means that the majority of the sites—including some very major ones, such as Lascaux, Chauvet, Cosquer, Trois-Frères, Niaux, and Font-de-Gaume—are located in Southern France. This paper will therefore have to be highly selective and will primarily be based on the research and findings of the past few years. Three aspects will be covered: the progress in dating and the consequences for our understanding of Palaeolithic cave art; some temporal and regional specificities in the cave art of Southern France; and finally, the question: what overall view—if any—is it now possible to have about the art?

Dating cave art

Within the past few years, numerous radiocarbon dates of charcoal directly lifted from paintings have been obtained from French and Spanish caves. For the Chauvet cave these dates were very early, ranging between 30,000 and more than 32,000 BP (Clottes *et al.* 1995). They created quite a stir. If there had been one single date with such a result, it would no doubt have been set aside and considered to be 'too early' and too far off the range to be accepted. However, at Chauvet there were four direct dates from three samples coming from three different animal representations (two rhinos (see Plate 1) and one

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bison). In addition, they were confirmed on the one hand by the dating of a large piece of charcoal found among many others on the ground (29,000±400 BP, Ly-6878), and on the other hand by the dating of a torch mark (26,120±400 BP, GifA-95127) superimposed on a thin veil of calcite that covered some earlier paintings in the vicinity of the two dated rhinos. Another identical torch mark in a different chamber gave two dates (26,980±410 BP, GifA-95129 and 26,980±420 BP, GiFA-95130) (Clottes *et al.* 1995) that tallied with the other one. A veritable stratigraphy on the wall thus yielded a coherent set of dates and destroyed the possibility that the earliest dates for the art could have been due to the use of fossil wood or to the picking up and reuse of early charcoal by latecomers to the cave (Züchner 1996).

Other very early dates going back to the Aurignacian or to the early Gravettian have been obtained in a few other caves, such as Cosquer (Clottes & Courtin 1994; Clottes *et al.* 1997), Grande Grotte at Arcy-sur-Cure (Girard *et al.* 1995), and Gargas (Clottes *et al.* 1992). Others were older than presumed at Pech-Merle (Lorblanchet *et al.* 1995) and Cougnac (Lorblanchet 1994). On the other hand, at Niaux (Clottes *et al.* 1992) and Portel (Figure 1) (Igler *et al.* 1994), in the Ariège, several dates fell within the Late Magdalenian, somewhat later than was expected by applying the existing set of stylistic criteria.

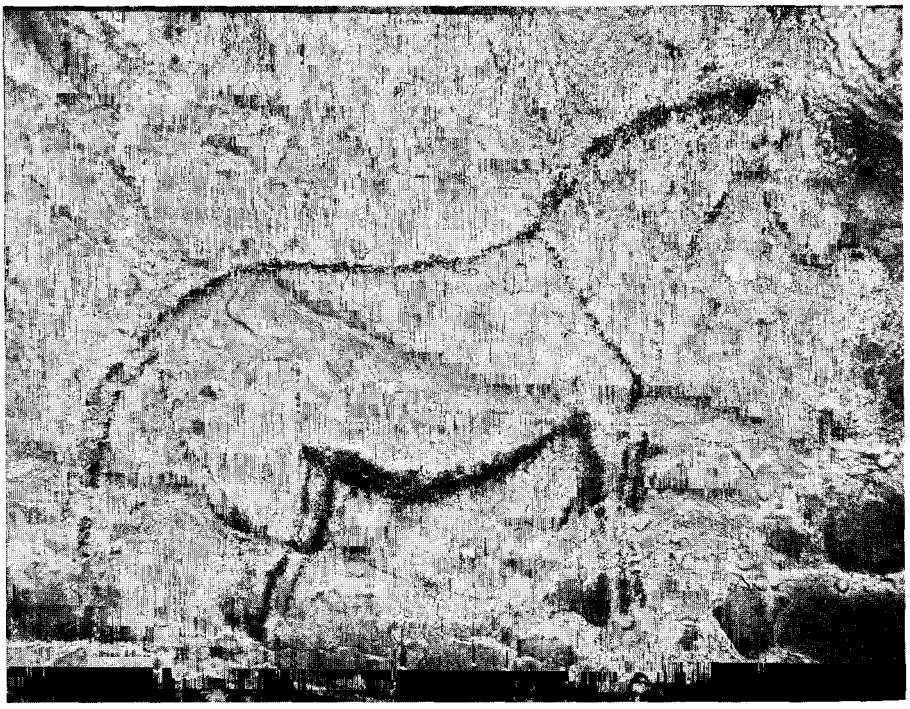

Figure 1. The most recent date for an Upper Palaeolithic painting was obtained for this horse in Portel. (Photo: J. Clottes)

All this drastically changes the rather simple landscape of Palaeolithic art in the caves which, since Leroi-Gourhan's work (1965), had been considered as firmly set. At this stage, three main consequences can be established and discussed.

1 The direct dates for Palaeolithic paintings range from Chauvet for the earliest one (Plate 1) (32,410±720 BP, GifA-95132) to Portel for the latest one (Figure 1) (11,600±150 BP, AA-9466). It is a timespan of at least 20,000 years, with possibilities for still earlier dates since the Aurignacians had reached western Europe by 38,000 BP at least (Delporte 1998). For such an enormous timespan, the 350 or so sites known from the tip of the Iberian Peninsula to the Urals are far too few to have allowed a proper transmission of cultural traditions and practices. Thousands of sites have probably been destroyed or have not yet been discovered (Bednarik 1994). As we have no means of reaching any degree of certainty as to whether the painted sites that have reached us constitute a representative sample of what there used to be, we must expect changes and even upheavals in our knowledge of the art when major discoveries are made. We are very far from knowing all there is to know about the evolution of artistic techniques, themes, and practices over such a very long period.

Specialists are generally reluctant to admit such ignorance, obvious though it is, as was pointed out some years ago (Ucko & Rosenfeld 1967). Which is probably why, whenever an upsetting discovery is made, it may be rejected out of hand as being 'a fake' (see, for example, the Cosquer Cave, in Clottes & Courtin 1994). The dates at Chauvet elicited two kinds of adverse attitudes, both based on an implicit faith in the validity and intangibility of stylistic criteria. Züchner (1996) argued at length why they were contradictory with existing schemas (but see Clottes 1996a). Much more strangely, Brigitte and Gilles Delluc in a recent synthesis on the earliest European cave art did not change any of their theories—inherited from Leroi-Gourhan—and did not discuss the Chauvet dates. They simply remarked that 'those dates are notably more ancient than is indicated by the stylistic analysis of the works of art' (Delluc & Delluc 1996, 90). If they do not 'believe' in the Chauvet dates they should express their arguments against them. Or else, the dates must be accepted, in which case it becomes necessary to re-examine the validity of traditional conceptions about several stylistic conventions in cave art, as well as about its origins and its development.

2 One of the main advances made in the past few years is the realization that the Aurignacians had mastered all the artistic techniques that were supposed to have gradually developed over the following millennia. At Chauvet, for instance, they made great use of spatial perspective and they did so by different means, which shows that they deliberately tried to create certain effects: next to the Panel of Horses, a lion was made to look as though it were behind some horses by stopping the line of its contour next to the previously painted animals (Chauvet *et al.* 1995, Fig. 54); the horns of a group of rhinos (see Plate 2) have been drawn in decreasing perspective from the one in the foreground to those in the background (Chauvet *et al.* op. cit., Fig. 86); a bison was drawn on the angle of a wall, with its head facing us, on one plane, and its body on another plane at a 90° angle,

which stresses its perspective (Chauvet *et al.* op. cit., Fig. 88). Still at Chauvet the Aurignacians made an extensive and very sophisticated use of stump-drawing to shade the inside of animal bodies, they scraped the walls to provide a blank space where their works would stand out, and they captured the vivid expressions of the animals they drew with an incredible accuracy.

Since the beginning of the twentieth century, the current paradigm has been that art had known crude beginnings in the Aurignacian—mostly in the Dordogne—and had then slowly and gradually improved up to the apogee of Lascaux. This argument is no longer tenable, but the problem of how early the development of art is still remains. For those who believe that the achievements of Chauvet must have been preceded by thousands (if not tens or hundreds of thousands) of years of artistic endeavours of various kinds, the origins of art are very early. Several authors have lately insisted on the taphonomy of visual art whether it be portable art or on cave walls: the earlier it is the less chance it would have of being preserved (Bednarik 1994; Bahn 1995). However, even if the Châtelperronians—the last of the European Neanderthals—are responsible for striated bones and stones and if they used beads and pendants, they did not make any portable or wall art, at least so far as we know. In their case, as they were contemporary with the Aurignacians, the taphonomic argument of the slow erosion of many millennia cannot hold. Even if one leaves aside the possibility of very early art forms, created by Neanderthals, or even by *Homo erectus*, it is still theoretically possible to contemplate an invention of art thousands of years before Chauvet and to hold to the idea of a gradual evolution and progress. After all, the earliest dates at Chauvet are a full 6000 years later than the earliest Aurignacian dates in western Europe, without even mentioning the presence of *Homo sapiens sapiens* in the Middle East nearly 100,000 years ago.

However, another possibility also exists, that the essential discoveries concerning the multitudinous techniques of visual art—portable or on walls—should not have taken many millennia but that from the moment humans decided—for whatever cultural reasons—to represent some aspects of their environment (essentially animal and human forms) in two or three dimensions, the progress was swift and that some forms of art developed within a few generations or even centuries. Ucko (1987, 18) has shown very clearly how Breuil, Luquet, and even Leroi-Gourhan refused to admit that art could thus emerge quickly under a perfectly accomplished form, even though many historical examples are available in Africa and elsewhere (Ucko op cit., 41).

3 Leroi-Gourhan's theories about the stylistic evolution of art throughout the Upper Palaeolithic are no longer tenable after the discoveries in Chauvet and Cosquer and the dates obtained in other caves. His Style I, that he equated with the Aurignacian, can now only apply to a few Dordogne sites. The new Ardèche cave (Chauvet) is totally outside of it because of its originality and sophistication. Lions and rhinos (see Plates 1 and 2) are given a great importance on the main panels where they are centrally situated. This is also contrary to Leroi-Gourhan's ideas about the organization and structure of Palaeolithic parietal art, because lions, for example, should have been either in the entrance or at the

bottom of the cave in a secondary position. In addition, those animals are often represented in movement (Plate 1), which is contrary to Leroi-Gourhan's contention (1982, 42) that in Palaeolithic art, there was an 'ever increasing preoccupation with representing movement during the course of the evolution of Upper Palaeolithic art' with still figures at the beginning and many more 'animated' ones at the end.

More important still, after the discoveries of the past few years, it is no longer possible to hold to the idea that art slowly and gradually evolved from archaic crude beginnings in the Aurignacian to better and better representations in a kind of linear progress. The aesthetic quality of the Chauvet wall art can be compared with that of the contemporary portable art found in the Aurignacian shelters of the Swabian Jura in Germany. But for the same period no such successes are known either in the Périgord, the Spanish Cantabrian coast, or the Pyrenees. Occasionally, some sophisticated forms of art have been created. Under what kind of cultural, personal, or religious influences did they appear? Were there any further developments and continuations or did they remain local and short-lived? The data are not yet sufficient to be able to answer those questions. As Ucko and Rosenfeld (1967) surmised as early as 30 years ago, all along the Upper Palaeolithic there may have been all sorts of apogees and declines, as well as the temporal coexistence in different places of talented and poor artists (see also Ucko 1987). For a progressive linear evolution of early art, with the slow acquisition of more and more complex techniques (Leroi-Gourhan 1965; Delluc & Delluc 1991), must now be substituted the idea of a zigzag type of evolution, depending on local circumstances.

Some temporal and regional specificities

Given what has been said above, one of the most promising lines of research is probably to distinguish particular themes or techniques that can be solidly ascribed to a precise timespan and/or to a precise area. Leroi-Gourhan (1981) insisted on the value of some of those 'ethnical markers' as he called them. Among them were the tectiform signs in the Eyzies region and the so-called 'aviform' signs of Pech-Merle and Cougnac.

Our knowledge of the latter has lately progressed. They consist of a kind of thick horizontal bar topped in its middle by a chimney-like appendage; at each of its extremities the bar generally has one short extension more or less perpendicular to it, that is, pointing downwards. Even though they do not look much like a bird or a roof, they were called 'aviforms' and 'tectiforms' and even 'tectiforms with chimneys'. These very inadequate terms are still occasionally used, even though it is much preferable to call them Placard signs, from the cave where most have been found and the only one where they are well dated. Their discovery at Placard (Figure 2) was important for several reasons. First, both painted and engraved signs of the same type were found in the cave; previously only painted ones had been known at Cougnac (Figure 3) and Pech-Merle. That type of sign could thus be painted and/or engraved. Secondly, they could be dated to the Solutrean (ie

20,000 BP or slightly earlier) by using different methods (Clottes *et al.* 1990a; 1991). Thirdly, their discovery in the Charentes, 150 km from Pech-Merle and Cougnac, showed that the area in which they had been used was much more extensive than previously assumed. This was confirmed in a most unexpected way with the discovery of one of those very distinctive complex signs (see Plate 3) in the Cosquer Cave near Marseilles (Clottes *et al.* 1997, Fig. 2), which marks a remarkable extension of its range.

Claviforms are other very specific geometric signs present in caves which have been found distributed over a wide area, since they are known mostly in a number of caves in the French Pyrenees (Ariège region) (see Plate 4) but also in Quercy (Sainte-Eulalie) and even in Cantabria (La Cullalvera) and Asturias (Pindal). They were thought to be restricted to the Middle Magdalenian until paint analyses in the Niaux Cave showed that the Magdalenians there made use of different recipes for their paint. One of those recipes could be tied to the Late Magdalenian—in particular from similar analyses made of pigment covering artefacts found in a well-dated archaeological layer at La Vache, very close to Niaux. All the available claviforms in Niaux were analysed and it appeared that two had been made with the latest recipe (Clottes *et al.* 1990b, 191) whereas the other five had been made with the earlier type of recipe. Apparently, the symbols we call claviforms were used for longer than had been surmised, from the Middle Magdalenian to the Late

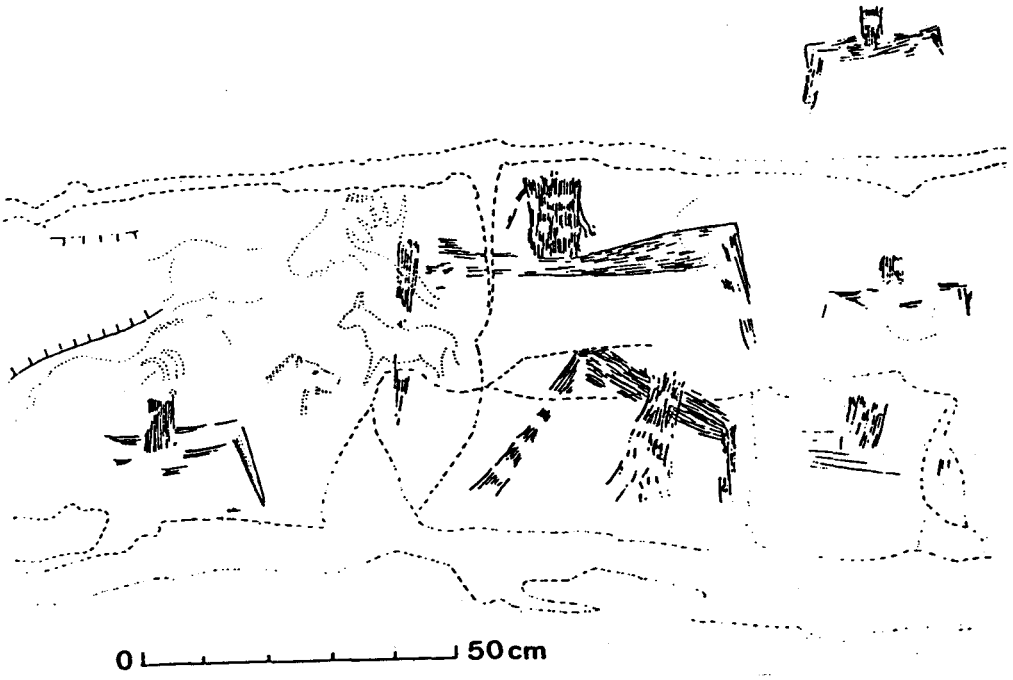

Figure 2. Engraved Placard signs in the Placard Cave (Charente). (Tracing: V. Feruglio)

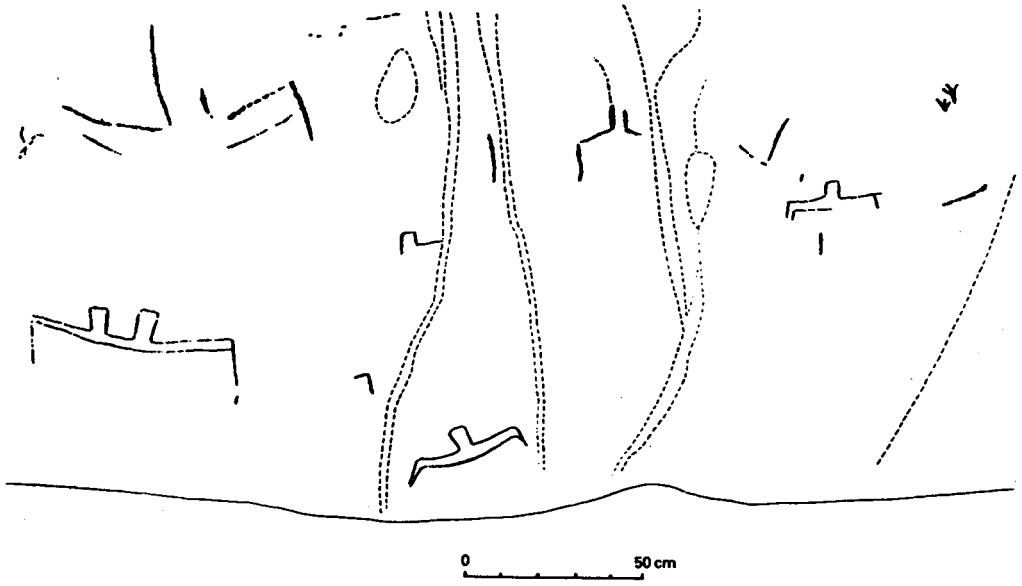

Figure 3. Painted Placard signs in the Cougnac Cave (Lot). (Tracing: M. Lorblanchet)

Magdalenian inclusive. The existence of paintings attributable to both periods in Niaux was confirmed by direct radiocarbon dating of three drawings (Valladas *et al.* 1992).

New data have also been obtained on hand stencils and handprints. They were traditionally attributed to the Gravettian (as in Labattut shelter in the Dordogne). This has been confirmed with a radiocarbon dating for an associated archaeological context at Fuente del Salín, in Cantabria, which gave a date of 22,340±510/480 BP (GrN 18.574) (Moure Romanillo & Gonzalez Morales 1992), the latest for that motif. The earliest ones are in Cosquer: 27,740±410 BP (GifA-96073) for hand stencil no. 19; 27,110±390 BP (GifA-92409) for hand stencil no. MR7; and 24,840±340 BP (GifA-95358) for hand stencil no. 12 (Clottes & Courtin 1994; Clottes *et al.* 1997). However, if the hand stencils and handprints in Chauvet are contemporary with the dated black paintings of the same cave, they could be Aurignacian and older than 30,000 BP. Two other radiocarbon dates, in Gargas and Pech-Merle, have given comparable results. At Gargas one of several bits of bones stuck into cracks next to some hand stencils was dated to 26,860±460 BP (GifA-92369). The Gargas and Cosquer dates reinforce each other all the more as the hand stencils in both caves show incomplete fingers, that is, they belong to a very special category. In Gargas two series (5 and 3) of stencilled bent thumbs shown in profile (Plate 5a) have long been known. The same extraordinary motif also exists in Trois-Frères and in Pech-Merle. As this is far too specific a theme for its repetition to be coincidental, when the Gargas date was published we had assumed that some of the oldest figures in Pech-Merle were probably Gravettian, contrary to traditional evaluations (Clottes *et al.* 1992). This

was confirmed soon afterwards when one of the Pech-Merle spotted horses associated to hand stencils was dated to 24,640±390 BP (GifA-95357) (Lorblanchet *et al.* 1995). No evidence exists for later dates for hand stencils. They thus seem to have been essentially in use during all the Gravettian with a strong possibility of beginning in the Aurignacian, that is, for a timespan of nearly 10,000 years.

The duration of another very special theme must also be extended now for an extra number of millennia. Therianthropes, or composite creatures, are representations of beings with both animal and human features. They were supposed to belong only to the Magdalenian, with the Middle Magdalenian figures in Trois-Frères, and with the famous bird-man in the Well of Lascaux and the Sorcerer in Gabillou, both supposed to belong to the Early Magdalenian. The Cougnac and Pech-Merle figures, also with bird heads, were often forgotten. The recent dates obtained in Pech-Merle (see above) and in Cougnac (Lorblanchet 1994) make dates for them over 20,000 BP plausible. Two other cave art discoveries of therianthropes were made, one at Cosquer, the other at Chauvet. At Cosquer, there is an engraved figure of a supine man with the head of a seal; he seems to be dead on his back and a fearsome spear was drawn all over him (Clottes & Courtin 1994, Figs 157, 158). Now, in Cosquer, two sets of dates are centred around 19,000 BP and 27,000 BP respectively (Clottes *et al.* 1997) and we cannot be certain to which group the 'Killed Man' belongs. Whereas in Chauvet the chances are that the composite creature standing (see Plate 6), whose lower body is human and whose upper part is that of a bison (Chauvet *et al.* 1995, Fig. 93), dates to the same period as the other figures, that is, to the Aurignacian, between 30,000 and 32,000 BP. An ivory statuette of a man with a lion's head had been found in an Aurignacian layer at Hohlenstein-Stadel, in south-western Germany (Hahn 1986). Thus, the theme of a man partially transformed into an animal or that of creatures part-human and part-animal runs all through the Upper Palaeolithic. As the same idea is also to be found in all sorts of different cultural and chronological contexts all over the world, it is quite likely that it is part of the universals of the human mind.

On the other hand, the discovery of the Chauvet Cave has made it possible to pinpoint some deep thematic changes in the course of the early Upper Palaeolithic (Clottes 1996b). Leroi-Gourhan (1965, 137, 147) believed that Palaeolithic cave art represented one single symbolic view of the world from the Aurignacian to the Magdalenian with a continuity of the same themes and only minor variations, with the representation of male-female principles essentially embodied in horses and bison. The dominance in Chauvet of rhinos (Plates 1 and 2), lions, mammoths, and bears, that is, of fearsome, difficult to hunt, or even not-hunted animals (60.8 per cent of the identifiable animals in the cave), posed a problem. Was this a freakish local phenomenon or could those themes be found elsewhere on Aurignacian or other sites and thus testify to a major change in concepts at an unspecified date after the Aurignacian?

The well-dated Aurignacian sites of the Dordogne include about three times more 'dangerous' animals than those of the Gravettian in the same area (Delluc & Delluc 1991). Those animals are also dominant for the Aurignacian German statuettes (Riek 1934; Hahn

1986). In Gargas, the Gravettian cave with most figures, only a few mammoths are present and they represent a mere 4 per cent of the bestiary (Barrière 1976, 380). Other caves, belonging to early periods of parietal art but still undated (Grande Grotte at Arcy-sur-Cure, Grotte Bayol, and Baume-Latrone in the Gard), show that the enormous number of dangerous animals at Chauvet is not a unique phenomenon that would be isolated in time and space. Drastic thematic changes have occurred at the end of the Aurignacian or during the Gravettian in south-western France, though perhaps not everywhere at the same time. In central and eastern Europe, the same dangerous animals continued to be carved on the statuettes during all the Pavlov (62.6 per cent) and Kostienki-Avdeevo periods (60.4 per cent) (Kozlowski 1992), whereas in the same regions, they became far fewer in the Magdalenian (8.6 per cent; Hahn 1990).

A common way of thinking over 20,000 years

We have now seen that in the course of the Upper Palaeolithic changes did occur in the use of various themes, and recent research has brought precision as to their duration (hand stencils, claviforms, fearsome animals) or geographic extension (Placard signs). Other themes (such as therianthropes) have been used all through the period. For an art which lasted for more than 20,000 years over such immense distances it would be naive to expect a solid unity. Most specialists have stressed this point and direct all their efforts to determining the duration and extension of particular motifs and techniques, the influences from one group to another, and problems of chronological evolution.

However, many characteristics are common to all the Palaeolithic cultures that produced cave art. We can briefly sum them up, as a reminder, because they appear so commonplace now—after a century of studies of cave art—that they are no longer mentioned or even noticed because of the current focus on 'diversity' rather than on 'unity'.

The artists mostly represented animals and geometric signs. Humans were seldom depicted and when they were, they appeared deliberately sketchy or caricatural: they did not play the same part as the animals in the ceremonies, myths, and religious practices of the time. Composite beings, or therianthropes, constituted one of the minor—in numbers—but important, themes of Palaeolithic art. Among the available animals around them, Palaeolithic people chose to represent the large herbivores that they hunted, especially horses which are the dominant animal images by far. But they also represented bison and aurochs, ibex and all varieties of deer, even if the Aurignacians, as we have seen, seemed to favour the most fearsome species statistically. Birds and fish are only occasionally featured. Some animals are very rare, such as snakes, wolves, and foxes, or missing altogether like insects. Generally animals were painted or engraved without any understandable reference one to the other; explicit scenes are exceptional. The art does not give an accurate account of the world around the artists. The sun, stars, and moon are never drawn, nor the ground line. There are no mountains, no huts, no rivers, no recognizable

representations of tools, weapons, or personal adornment. There was no finality, no inevitability either in the artists' choices or in the fact that they kept to them for thousands of years; they could have chosen to represent many other subjects which they did not, and they could have changed their choices every so often. There are a few exceptions but surprisingly few.

During the past ten years or so, new discoveries and research have revealed some more consistent types of behaviour that cover the whole Upper Palaeolithic. We shall mention three of them.

1 Going inside deep caves. Leroi-Gourhan has devoted much thought to what he considered to be two distinct categories of sanctuaries: those under shelters or in the entrances to caves, and those in the dark (Leroi-Gourhan 1965, 114). He wrote that the use of deep caves was one of the characteristics of his Early Style IV during the Middle Magdalenian. Then, with the Late Magdalenian and the Late Style IV, 'the great period of deep sanctuaries comes to an end and wall art can again be found next to the entrances' (Leroi-Gourhan 1965, 42; see also 1965, 73, 77, 156, 316, 319). He thus saw differences in the choice of location as being characterized both culturally and chronologically. The first period, from the Gravettian to Magdalenian III, and the last were examples of art in the open.

A recent review of the evidence (Clottes 1997) has caused two surprises. Art in the light is just slightly less frequent (42.5 per cent) than art inside deep caves (57.5 per cent). This runs counter to the prevailing impression that art in the open is far more rare than cave art because most of it has been destroyed by natural and other causes, and that what is left constitutes 'exceptions', however 'notable' (Bednarik 1993, 4). Bednarik even challenges the very idea of 'cave art' which is only prominent 'because it generally survived only there' (Bednarik op. cit.).

The taphonomy of European Upper Palaeolithic rock art is not a new area of interest. It has been considered by researchers working on the subject ever since Breuil (Breuil 1952, 24; Laming-Emperaire 1962, 186). In France (Campome), in Portugal (Mazouco, Foz Côa), and in Spain (Domingo García, Carbonero Mayor, Siega Verde, Piedras Blancas) (Ripoll López & Muncio Gonzalez 1994), recent discoveries of engravings not only in shelters or in caves but also on rocks out in the open, show that it is possible for Palaeolithic petroglyphs to have survived in fairly exposed locations. Obviously, paintings are a different proposition. They can only endure in sheltered locations, and so many were probably destroyed. On the other hand, caves are certainly not museum-like places where wall art was always perfectly preserved. Wall surfaces can be ravaged by natural causes such as flooding (for example, two-thirds of the Cosquer Cave near Marseille has been damaged), or by water seeping through cracks and dissolving pigments (Niaux in 1978–80), or by calcite covering huge surfaces, or even by draughts (one entire gallery in Lascaux). Many cave entrances have been blocked by scree or by collapses and so remain undiscovered unless modern speleologists find a roundabout way to get in (Fontanet, Réseau Clastres, Chauvet). To postulate then that rock art in the open must have been the norm, since most of it has disappeared, and that compared to this worldwide phenomenon, cave

art was a sort of side-event, would mean taking the stance that the destruction of outside sites was far more frequent than that of caves. This is possible but it remains a gratuitous supposition until in-depth geological and taphonomical studies are undertaken, assuming they are feasible. If the rock art sites known today were to represent a hopelessly biased sample because of the destruction of a large number of open-air sites compared with the relative preservation of caves, one should find roughly the same proportion in each type of location whatever the period. This is not the case (Clottes 1997). The numbers of sites are about equal (13 and 12) for the earlier art (Leroi-Gourhan's Styles I–II, corresponding to the Aurignacian and Gravettian), for Style III (mostly Solutrean: 21 and 27), and for the Final Magdalenian (5 and 7), but change to a ratio of nearly one to three for Style IV (Middle and Upper Magdalenian), with 20 sites in the light (30 per cent) and 49 in the dark (70 per cent). As Leroi-Gourhan had argued, people during the Middle and perhaps the Final Magdalenian made a cultural choice to paint or engrave in deep caves more often than ever before or after. That choice is clearer in the Pyrenees where a larger number of deep caves were available.

Before the Magdalenian, however, deep caves were occasionally used, such as Chauvet in the Aurignacian, and that is the second surprise of the study. Gravettians left stencilled handprints, engravings, and finger tracings throughout fairly extensive caves such as Gargas and Cosquer. The Solutreans painted and engraved deep inside caves as well, for example at Cougnac, Pech-Merle, Cosquer, and Oulen. With the Middle Magdalenian, the main difference is that in a number of cases the creators of the art consistently explored mile-long caves, such as Niaux, Montespan, and Rouffignac. They also crawled along very narrow passages (Massat, Le Cheval at Arcy-sur-Cure—assuming the art in that cave is not earlier, as it might well be), climbed chimneys (Tuc d'Audoubert) and precipitously narrow ledges (Trois-Frères, Etcheberri-ko-karbia), and even went down shafts several metres deep (Fontanet). These speleological feats (Leroi-Gourhan 1992, 367) were accomplished again and again. Even if the Palaeolithic artists of western Europe were not the only humans to have dared to go far into the depths, as Leroi-Gourhan had supposed (Leroi-Gourham op. cit., 379) (see the Palaeolithic caves in Australia, such as Koonalda), they are unusual in that they did it habitually, whatever the difficulties, and in this they are unique in world history until much more recent times. The now established fact that, contrary to Leroi-Gourhan's observations, they did it from the Aurignacian (Chauvet) to the Late Magdalenian (Niaux) testifies to a most unusual—one might say 'unnatural'—way of behaving, that is, to a common way of thinking over 20 millennia at least.

Inside the caves other examples show that the cave walls and environment were considered with the same frame of mind from beginning to end.

2 Sticking bits of bones into cracks (see Plate 5b). Modern prehistorians entertain a deeply-rooted mistrust of the word 'ritual' and of whatever may be hidden behind it in the way of prejudice and ignorance. As a consequence, nothing is ritual any longer and as far as possible all traces and remains are explained in a utilitarian manner. However, we do know from ethnographic evidence that the making of rock art was often accompanied by

ritual activities, at times quite important and elaborate ones. What is left of them in the archaeological record will probably be very tenuous and may easily be overlooked unless special (and critical) attention is paid to it. When facts resist all practical explanations, even by the most sceptical and materialistic observers, the most convincing one may be that there could have been some religious activity involved, bearing in mind that wall art is generally set in a religious or magical context.

Various deposits of objects in cracks of the walls such as bear teeth or teeth of other animals, shells, flints, or antlers, or even mere bits of bones stuck into wall fissures (Plate 5b) may testify to such practices because there is no way a practical use can be found for them. After attention had been drawn to them in some Pyrenean caves (Bégouën & Clottes 1981), such discoveries became common in painted or engraved caves. In Bernifal, for example, Archambeau found a flint blade stuck half way up in the Mammoth Gallery. This led him to a systematic exploration of the walls and the roof in the area and he then discovered some new paintings, in particular two superb representations of mammoths in a chimney. Now, bits of bones stuck into cracks are known at Enlène, Trois-Frères, Tuc d'Audoubert, Bédeilhac, Portel, Erberua, Troubat, Isturitz, Brassempouy, Montespan, Gargas, all caves with Palaeolithic art.

The most important discovery though was that bone fragments were stuck into a number of cracks in the vicinity of hand stencils at Gargas. One of them could be radiocarbon dated (see above) to 26,860±460 BP (GifA-92369). As most of the others are in Late or Middle Magdalenian contexts, the obvious inference is that this was a practice which lasted for at least 15,000 years.

3 Making animals come out of the walls. The lighting techniques used at the time—torches or grease lamps that would cast a dim and fluctuating light—help to explain this practice. When such conditions are replicated, or even when visiting a cave with a candle, the walls seem to come alive with the moving shadows cast by the flickering flame. It becomes very easy then to see animals in the shapes of the rocks. As with some modern hunter gatherers, perhaps shapes seen in this way were taken for real and the artists then drew animals exactly where they happened to see them, possibly believing that they were thus bringing them to life, controlling them, or gaining their good will (Lewis-Williams 1994; Clottes 1995). This was done through different means. It has long been known that Palaeolithic artists made a great use of natural shapes. The location of very important panels in relation to deep shafts or to the entrances to galleries has sometimes been mentioned (for example, at Rouffignac, see Nougier 1981; Barrière 1982), but much more rarely the fissures or passages out of which some animals seem to emerge, as at Covalanas, Chauvet (Plate 7), Cosquer, and many others (Clottes & Lewis-Williams 1996; 1997). In that case again, the practice—which testifies to a common attitude in relation to the cave itself—has lasted from the Aurignacian (Chauvet) to the Magdalenian (Rouffignac).

Conclusion

It is an astonishing fact that an essentially common way of behaving in the caves, and of considering them as receptacles for images that have not changed so much over the millennia, should have persisted little changed for such an immensity of time. Even in Christianity a mere two thousand years have seen a great number of changes both in the content of the religion itself and in its outward manifestations. From what is an established—if so far underplayed—fact it is possible to draw two main conclusions.

First, such continuity could not have been possible without a very strong framework of beliefs that passed from generation to generation through a strict educational system, perhaps for all or perhaps for those who would have to enact the rites and create the art.

Secondly, the framework of beliefs and the forms of behaviour they generated must have remained fairly consistent throughout the period. This makes it possible not to propose a 'global explanation' of the art where one would try to explain all the cave images in all their details—an obviously impossible endeavour—but to aim at a far more modest goal which is to decipher the essential elements of prehistoric people's beliefs through their tangible manifestations, that is, to provide a theory which constitutes an explanatory framework. So far as we can tell at this stage the best-fit theory is that of shamanism (Lewis-Williams & Dowson 1988; Clottes & Lewis-Williams 1996; 1997). Grahame Clark's interest in cave art is present in much of his writings about the Stone Age (eg Clark 1967), and his analytical mind would, I think, surely be stimulated by all of the recent developments in this field of enquiry.

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JEAN CLOTTES

Twenty Thousand Years of Palaeolithic Cave Art in Southern France

Out of the 350 or so sites with rock art known in the Upper Palaeolithic about half are located in Southern France. A number of important discoveries have been made in the past few years. This overview will be mainly concerned with three points. The first deals with the results of direct radiocarbon dating for the art. The direct dates available range from 32,410±720 BP for a painted rhino in Chauvet to 11,600±150 BP for a painted horse in Portel. The realization that Aurignacians had mastered all the artistic techniques that were supposed to have developed gradually over the following millennia upsets the long-held theory of a gradual evolution of art from supposedly crude beginnings. The second point overturns the concept that particular themes, which were thought to be chronologically and/or spatially restricted (Placard signs, claviforms, hand stencils, composite creatures), are not. Finally, the third part examines some consistent types of behaviour all over the Upper Palaeolithic, relating to the deep caves. They testify to a common attitude in relation to the cave itself from the Aurignacian to the end of the Magdalenian, that is, to a common frame of beliefs that passed from generation to generation.

IAN HODDER

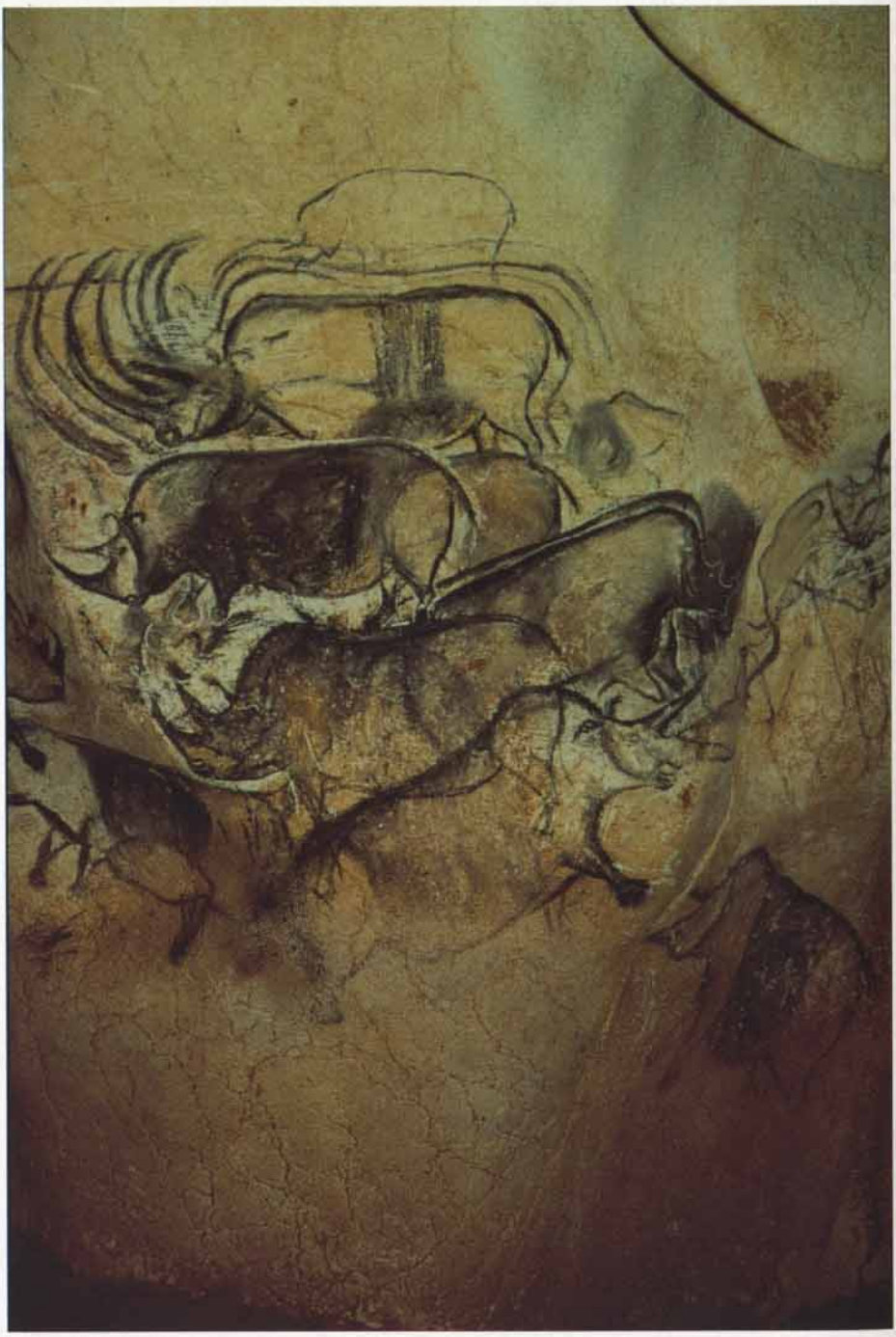
Symbolism at Çatalhöyük

This paper follows Grahame Clark's interest in the social character of art and in the diversity of cultural achievement. These themes are pursued in relation to the 9000 year old site of Çatalhöyük in central Turkey. Re-excavation of the site since 1993 has allowed questions to be asked about the environmental, economic, and social context of the art, although this paper deals only with social aspects. The detailed excavation of Building 1 in the north part of the Çatalhöyük East mound is described and the arrangement of activities in each phase of the building is shown. It is argued that two types of art relate to two different social rhythms. The relief sculpture is associated with the life cycles of buildings and whole extended family groups. It may be related to ancestral links between families and buildings. The painting, on the other hand, appears to be related to the burial of young people. It may have a specific and shorter-term role in dealing with the spiritual dangers of young death. These examples are presented as a first step in the understanding of the symbolism at Çatalhöyük.

The oldest paintings directly dated in the world so far. Two rhinos in the Chauvet Cave. (Photo: J. Clottes)

PLATE 1

PLATE 2



A number of rhinos shown in spatial perspective at Chauvet. (Photo: J. Clottes)

Engraved Placard sign in the Cosquer Cave (Photo: J. Collina-Girard)

PLATE 3

PLATE 4

Red claviforms (top and lower right) in the Niaux Cave. (Photo: J. Clottes)

(a) A row of stencilled thumbs shown in profile at Gargas. (Photo: J. Clottes)

(b) Bone fragments stuck into cracks at Elène (Ariège). (Photo: R. Bégouën)

PLATE 6

The Chauvet composite creature, part-human and part-bison. (Photo: J. Clottes)

An aurochs seeming to come out of the wall at Chauvet. (Photo: J. Clottes)

PLATE 7