

BECOMING HUMAN: INNOVATION IN PREHISTORIC MATERIAL AND SPIRITUAL CULTURE

Edited by

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CAMBRIDGE
UNIVERSITY PRESS

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Situating the creative explosion: universal or local?

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In this chapter, the intention is to reassess the significance of what has been termed the 'creative explosion' (Pfeiffer 1982), that is to say the appearance in Europe during the Upper Palaeolithic period of the cave art, and of the smaller carvings on bone and ivory (the so-called mobiliary art) which form the subject matter for so much of this book. As noted in the Introduction, and as authoritatively documented in the paper by Henshilwood, our notion of the 'human revolution' has recently been transformed. The emergence of *Homo sapiens*, and of most of the behaviours associated with the appearance of *Homo sapiens* is to be sought and found in Africa. With the out-of-Africa dispersal of our species around sixty thousand years ago, these sapient behaviour patterns were carried by the new population to Asia and along the southern route as far as Australia, and by forty thousand years ago to Europe. There is no reason to think that the cognitive capacities of one group of these new humans differed significantly from those of another group of the same species.

Yet in one specific area, in Europe, there came, before the end of the Pleistocene climatic period, an almost explosive proliferation of new activities and behaviours. In most earlier accounts, especially those which tended to locate the 'human revolution', in the sense of the emergence of the species *Homo sapiens* and the accompanying behaviours reflected in the new lithic industry and other ways, in Europe, the new creativity in painting and sculpture was viewed as an important component of that 'human revolution'. For this reason such products were often regarded as an integral part of that revolution, inextricably associated with the emergence and early existence of *Homo sapiens*.

It can now be demonstrated that this assumption was an error. We can indeed recognise that symbolic capacities were part of that 'human

revolution' associated with the emergence of our species. They are seen in a modest way already at Blombos in Southern Africa, prior to the out-of-Africa dispersal, and then, not long after that dispersal, in Australia. But sculptures like those of the Gravettian culture of Europe are not, in general, seen elsewhere until after the end of the Pleistocene period. And it seems that cave art in the Franco-Cantabrian style, with large, sometimes almost life-sized representations of mammals, often seen in profile, in a manner which might be described as 'naturalistic', were, during the Upper Palaeolithic period, found only in southern France, northern Spain and a few outlying sites, mainly in Italy. Cave art was not a general feature of the human revolution or of the Upper Palaeolithic, on a worldwide scale, but a very special phenomenon, restricted exclusively at that time to western Europe.

To say this is not, I hope, merely to develop a novel expression of Eurocentrism. And of course there will, over the years to come, be many important new discoveries elsewhere which may change that emerging picture. But the general soundness of this position should, I believe, be recognised and its implications noted. Instead it may be worth comparing this creative explosion (of the Franco-Cantabrian Upper Palaeolithic) with another, perhaps even more significant explosion which occurred in Western Asia rather later, around 10,000 BC: the sedentary revolution. Both were localised phenomena, and both drew upon qualities which must have been latent within the more general human capacities which had been distributed widely over the world following the out-of-Africa dispersal.

In a later paper in this volume, Paul Mellars offers an interesting analysis, seeking an explanation for this localisation of Upper Palaeolithic cave art to the Franco-Cantabrian region. Here my intention is simply to stress the significance of that localisation, and to compare that creative episode with others which took place later in the human story.

Relocating the human revolution: the shift to Africa

The astonishing antiquity of humankind was first established in France (Daniel & Renfrew 1988), in that remarkable year 1859, which also saw the publication of Darwin's *On the Origin of Species* (Darwin 1859). There the first finds of fossilised remains of early *Homo sapiens* were made at various sites in the Dordogne, which have given their name to

'Cro-Magnon man', and to the Aurignacian lithic industry which accompanied these early finds. In France, too, were first recognised the 'hand axes' and other early flint tools which are representative of the much earlier Lower and Middle Palaeolithic periods, and which we now associated with that much earlier hominid *Homo erectus*. And it was in Germany, at a site in the Neander Thal, that fossil remains of our immediate predecessor in Europe, *Homo neanderthalensis*, were first recognised. Indeed the social behaviour of these early hominids has been very well studied in France. Various important advances, such as the use of fire and the development of their skills in lithic manufacture, have also been investigated there, as Henry de Lumley's paper 'The emergence of symbolic thought' (this volume) indicates. Another feature of interest to the modern observer is the craftsmanship we see in some of the flint tools, particularly the hand axes, which are symmetrical and carefully produced in a manner which we find satisfying and sometimes beautiful. It is interesting to wonder whether the creator of objects which we admire in this way were themselves susceptible to such aesthetic feelings – and why not? But we ourselves are capable of seeing beauty in the natural world also, and must be careful not to fall into the 'pathetic fallacy' of ascribing our own human feelings and sentiments to the material things which provoke them.

Since the 1920s the remarkable discoveries in Africa, from the recognition of that very early ancestral form *Australopithecus* by Raymond Dart to the rich researches of Louis Leakey at Olduvai and the recovery of *Homo habilis*, the focus of attention has moved south. It is now well documented that our own species *Homo sapiens* developed in Africa from the ancestral *Homo erectus* or *Homo ergaster*, which indeed ultimately were themselves the descendents of *Australopithecus*. All of this has become increasingly clear in recent decades. But until recently it was still possible to take seriously the notion of multilinear evolution, with comparable processes taking place in East Asia, and perhaps also in Europe. The impact of DNA studies (Forster 2004) now documents in a much more detailed way the out-of-Africa expansion of our species around sixty thousand years ago.

Until recently, however, the behavioural changes which we see as accompanying the emergence of our species, or following from that emergence (see, for instance, Mellars 1991) were seen as emerging most clearly in Europe. This was the so-called human revolution (Mellars & Stringer 1989). Now, however, with the increase in our knowledge of the African Middle Stone Age, that perception has changed

(McBrearty & Brooks 2000). The finds at the Blombos Cave in southern Africa (Henshilwood, this volume) confirm that at least two important traits which we recognise as integral to that human revolution may be discerned in Africa as much as seventy thousand years ago. The first of these is the production of beads of pierced shell, which are among the very earliest indications of deliberate human adornment. Such body decorations are rightly regarded as an indication that personal identity was now finding expression in the form of material culture. These small artefacts are thus of very considerable significance for our understanding not only of the emergence of social relations of new kinds, but also of new kinds of attractiveness or even new perceptions of human beauty, a beauty which can be enhanced through bodily adornment.

The remarkable patterns incised on the small, carefully shaped block of red ochre at Blombos, for all their modesty, have comparably significant implications. They are not representational – to call them ‘art’ might be too ambitious: patterning is a sufficiently grand term. But here are markings, deliberately made by a human being, which we may at least regard as ‘expressive’. They mark the first step of what Merlin Donald (1991) has termed ‘external symbolic storage’. Meaningful marks are being made upon some object, so that their meaning can be revisited at a later date when that object is returned to. For the first time, a device is being created where elements of memory may be stored outside the brain. Of course the various tools that humans had made, well before that time, would have carried various memories with them or at least were able to kindle such memories in their maker on subsequent occasions. But they remained tools. Here we see the beginning of deliberate markings, which we can regard as the starting point in the long process which led to the development of art in the Upper Palaeolithic period, and very much later, to writing.

The salient elements of the ‘human revolution’ have been set out by Mellars (1991) in a much-quoted article in which he listed some of the behavioural changes which characterise the transition from Middle to Upper Palaeolithic, notably in France:

1. a shift in the production of stone tools, from a ‘flake’ technology to one which gives more regular and standardised forms of ‘blade’ manufacture;
2. an increase in the variety and complexity of the stone tools produced, with more obvious standardisation of production;

3. the appearance for the first time of artefacts made out of bone, antler and ivory which have been extensively shaped;
4. an increased tempo of technological change, with an increased degree of regional diversification;
5. the appearance for the first time of a wide range of beads, pendants and personal adornments;
6. significant changes in both the economic and social organisation of human groups;
7. the appearance for the first time of representational or 'naturalistic' art, seen both in small carvings, mainly on bone, antler or ivory, and in the remarkable painted animals seen in the painted caves such as Lascaux or Altamira, or earlier at the Grotte Chauvet;

We can now recognise that the first six of these were indeed a general feature of the human revolution, as seen first in Africa (McBrearty & Brooks 2000) and then subsequently in other parts of the globe, with the dispersal of our species (Mellars 2006). The seventh, however, was at that time specific to the 'creative explosion' of France and Spain. Instead one could insert a new and more modest claim in place of number 7:

7. the deliberate use of simple patterns inscribed on small objects (and sometimes painted) documenting an external expression, which might be considered a basic instance of external symbolic storage.

Later it will be appropriate to consider more carefully the repertoire of visible symbolic expression, patterning, representative figuration and other production of expressive form which might be subsumed under the notion of 'art', seen in different places worldwide during the Upper Palaeolithic period – that is to say before the end of the Pleistocene climatic regime around 9,500 or 10,000 BC. But first it is appropriate to seek to specify some of the features which were special to that much more localised creative explosion of the Franco-Cantabrian Upper Palaeolithic and its other European relatives.

Special features of the 'creative explosion' of the European Upper Palaeolithic

Having separated these two major phenomena: the 'human revolution' (African genesis and worldwide dispersal of *Homo sapiens*) and the

'creative explosion' (proliferation of social products including sculpture and painting in the European Upper Palaeolithic), it may be useful to seek to define the latter rather more closely. As already acknowledged, there may be a limited range of creative expressions which might just be characterised as 'art' which were produced elsewhere in the world during the Upper Palaeolithic period, that is to say before the end of the Pleistocene climatic phase around 10,000 BC. We shall turn again to them in a moment. But first we can list some of the salient features which seem to have been in effect restricted to Europe at that time.

We may list, among the notable features of the European Upper Palaeolithic creative explosion (Bahn & Vertut 1988), the following features, some of them of restricted distribution:

1. Small, three-dimensional hand-sized human figurines of bone, ivory, stone and sometimes baked clay, often readily identified as female and then sometimes termed 'Venus' figurines. These occur with a well-defined time range in the Gravettian culture of Europe, from c. 28,000 BP to c. 21,000 BP with a distribution extending far beyond that of the Franco-Cantabrian cave art, extending through the Czech Republic to sites in the Ukraine (e.g. Kostenki) associated with mammoth hunters. Among the more celebrated examples are those from Willendorf in Austria (see Figure 6.1), and those from Brassempouy (Figure 6.2) and Lespugue in France (Figure 6.3). Their approximate distribution is shown in Figure 6.4 (Renfrew 1991; Gamble 1982).

There is an extensive literature upon these interesting sculptures. Belonging with them in the Gravettian culture, within the same time frame, are some of the earliest known figurations in baked clay, also from sites in Moravia, in the Czech Republic, such as Pavlov and Dolní Vestonice (Figure 6.5).

Their occurrence outside the Franco-Cantabrian area might be seen to support Mellars' suggestion that their genesis is due to a shift towards sedentism. For the finds from Pavlov and Dolní Věstonice, like those from Kostienki, suggest that they come from the camps of mammoth hunters. These were not permanent dwellings, but they were well-established encampments. The use of baked clay for the creation of these animal and human figurines is particularly notable at these sites. The very clear use of this technique for producing human figurations is seen at an early date in the Jomon culture of Japan towards the end of the Pleistocene period and at the beginning of the Holocene.



6.1. 'Venus' of Willendorf, Austria. Stone, height 11.1 cms., ca. 25,000 to 23,000 BP. One of the figurines of the Gravettian culture, the earliest established category of sculpture known. (Cast, Natural History Museum, London)

As noted earlier, the principal distribution of these small sculptures occurred during the Gravettian period. Their origins probably go back earlier, to the preceding Aurignacian phase. For it is to this early time, around thirty-two thousand years ago that the remarkable lion-headed anthropomorphic (therianthrope) figure from Hohlenstein-Stadel in Germany is dated (Plate II).

The purpose here, however, is not to discuss in detail these first representations of the human body in three dimensions, but to emphasise their exceptional place in world history. Their distribution is limited to Europe (including some Italian sites). (In saying this, brief reference should be made to two very much earlier objects from Tan-Tan in Morocco (Bednarik 2003) and Berekhat Ram in Israel

(d'Errico & Nowell 2000), the former dated to some 300,000 years ago, the latter to 230,000 years ago. These are so far the only possible figurations which might be dated so early, far earlier than *Homo sapiens*, and indeed back to the time of *Homo erectus*. At the moment their status should be considered as uncertain.)

It is remarkable that, despite the undoubted capacity of *Homo sapiens* to produce such figures, as clearly documented by the objects mentioned, their distribution during the Palaeolithic period is restricted to Europe.

2. Small-sized carvings, usually on bone or ivory, of animals or animal heads, seen on small objects, as decoration, sometimes on what have been identified as 'spear throwers' (Garrod 1955). These are often referred to as 'mobiliary art'. They may be in relief or incised (Figure 6.6).



6.2. 'Venus' of Brassempouy, France. Ivory, height 3.6 cms., ca 28,000 BP. Found in a layer associated with Aurignacian material, and so presumably earlier than the Gravettian figurines. (Photo by Jean Vertut. From Bahn, P. *The Cambridge Illustrated History of Prehistory Art*, p. 82)



6.3. 'Venus' of Lespugue, France. Ivory, height 14.7 cms., ca. 25,000 to 23,000 BP. (Cast, Natural History Museum, London)

These are widely found in contexts of the Aurignacian culture in Franco-Cantabria and beyond (Figure 6.7), and are also a feature of the Gravettian period. They are not well-documented elsewhere during the Upper Palaeolithic. Simple figurations of this kind will, I suspect, be found more widely from contexts of this period. For some of the simpler figurations would seem to be quite a predictable occurrence quite early in the developmental trajectory of human culture. But, so far as I am aware, they have not been documented in the Upper Palaeolithic of Australia or the Americas. Some terracotta figures of animals have reportedly been found along with human figurines in contexts dating from the end of the Pleistocene period on the northern part of the Pacific coast of Asia. They

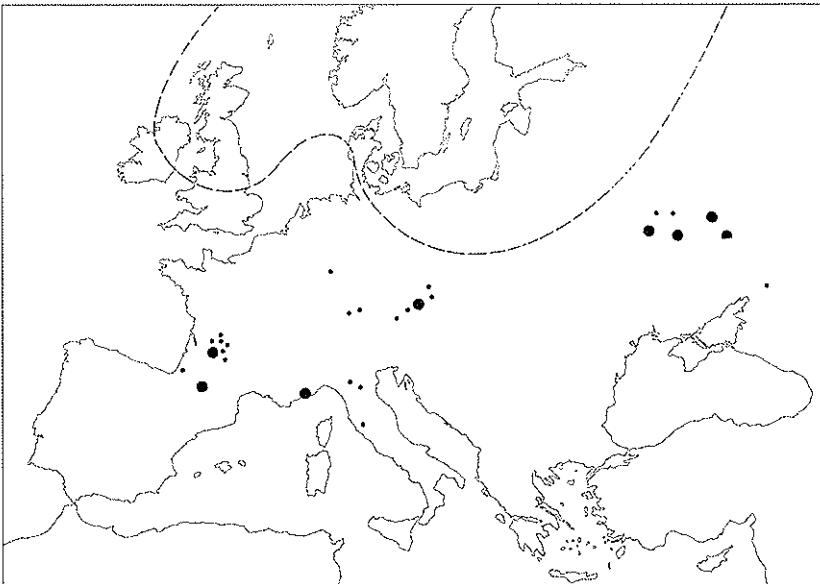
may represent developments similar to those of the Jomon culture of Japan at this time.

3. Larger carvings, often-in low relief either remaining in situ on the cave wall, or on heavy stone slabs. The so-called Venus of Laussel offers a good example (Figure 6.8).

Relief carvings are a noted feature of Franco-Cantabrian art. They are not yet documented for the Upper Palaeolithic period outside its distribution.

4. Sculptures in clay, left remaining in situ (such as the famous bison at Tuc d'Audobert: Figure 6.9). Such figurations as these have again not been reported outside the Franco-Cantabrian area for the Palaeolithic period.

5. Paintings of animals on the walls of caves or rock shelters, approaching life size, with 'naturalistic' outlines and sometimes with polychrome infilling to give a vivid effect. They were first recognised at Altamira (Plate XIII) and then at numerous sites in France and Spain, including Le Portel (Plate XIV). The early dates for their occurrence at the Grotte Chauvet (Plate XV), some thirty-two thousand years ago, occasioned surprise in view of the accomplishment of the figurations.



6.4. Map of the distribution of 'Venus' figurines, c. 25,000 to 23,000 BP. (From Renfrew 1991,9; after Gamble 1982)



6.5. 'Venus' of Dolní Věstonice, Moravia. Baked clay, 11.1 cms., ca 25,000 to 23,000 BP. (Cast, Natural History Museum, London)

Such splendid images as these naturally represent the paradigm case of what is meant by Palaeolithic cave art. Images of comparable scale, although differing in style, are found in the rock art of hunter-gatherer communities of the Holocene period, after 10,000 BC, in many parts of the world. These have been well studied in Australia (see Taçon, this volume), in South Africa (see Lewis-Williams, this volume), in North Africa (for instance in the Tassili area) and in the Americas.

The occurrences of animal paintings in the Pleistocene period are, however, few. Their very early occurrence in Australia is now well documented, as Taçon indicates. But it is not yet clear what the full range

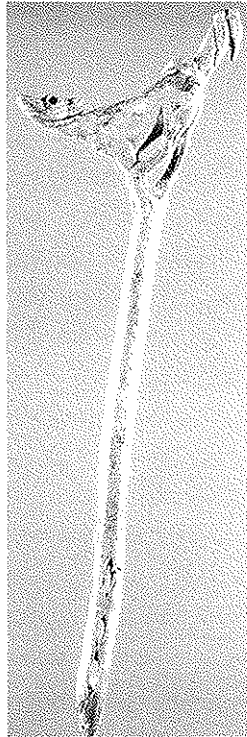
of subjects and styles may be, prior to the onset of the Holocene period some ten thousand years ago. So far nothing has been published which compares with the Franco-Cantabrian style.

This picture may yet change. The discovery of a painted plaque in the Apollo 11 Cave in Namibia (Plate XVI) well dated to before 25,000 years ago (Wendt 1976) is of particular interest. But so far, this is one of the very few cases of Palaeolithic painting outside of Australia and the Franco-Cantabrian distribution.

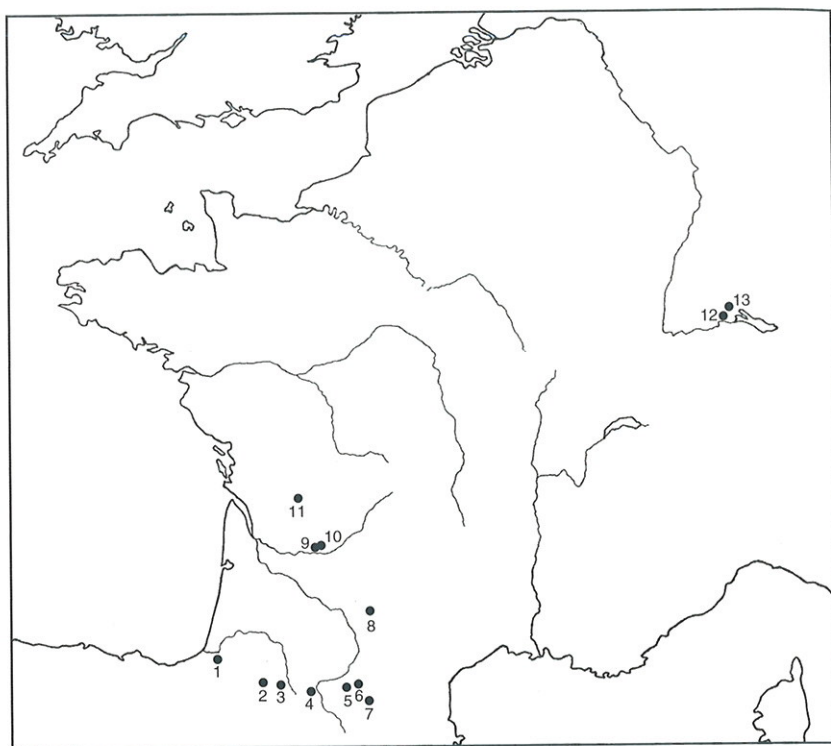
6. Paintings of hands on the walls of rock shelter or caves, resembling handprints, but often with the paint outlining the shape of the hand. These are a frequent feature of Franco-Cantabrian cave art (Plate XVII).

Superficially very similar paintings, but of the Holocene period, have been found in different parts of the world, for instance, in Borneo and in Argentina (Plate XVIII).

7. Paintings of schematic individual forms on the walls of caves or rock shelters, sometimes including 'tectiforms' and signs indicating the female sex (Figure 6.10).



6.6. Spear thrower from Mas d'Azil, France. Bone. Probably Magdalenian (ca. 15,000 BP). (Photo by Jean Vertut. From Bahn, P. & J. Vertut, 1997, *Journey Through the Ice Age*, p. 98)



6.7. Map of find spots of spear throwers from Palaeolithic Europe, showing a similar distribution to the 'Venus' figurines seen in Figure 6.4. (After Garrod 1955, 21)

This is somewhat of a residual category, and it would be surprising if examples outside of Europe were not found, even for the Upper Palaeolithic period.

8. Incisions on the walls of caves and rock shelters showing animals in profile, often carved in the same place as earlier representations and so forming a palimpsest (Plate XIX).

Such figurations as these are very frequent in the caves and rock shelters of Franco-Cantabria. They occur also in the Côa valley in Portugal not only in rock shelters, but carved on rock surfaces in the open air. Their occurrence there has been securely dated to the Upper Palaeolithic period.

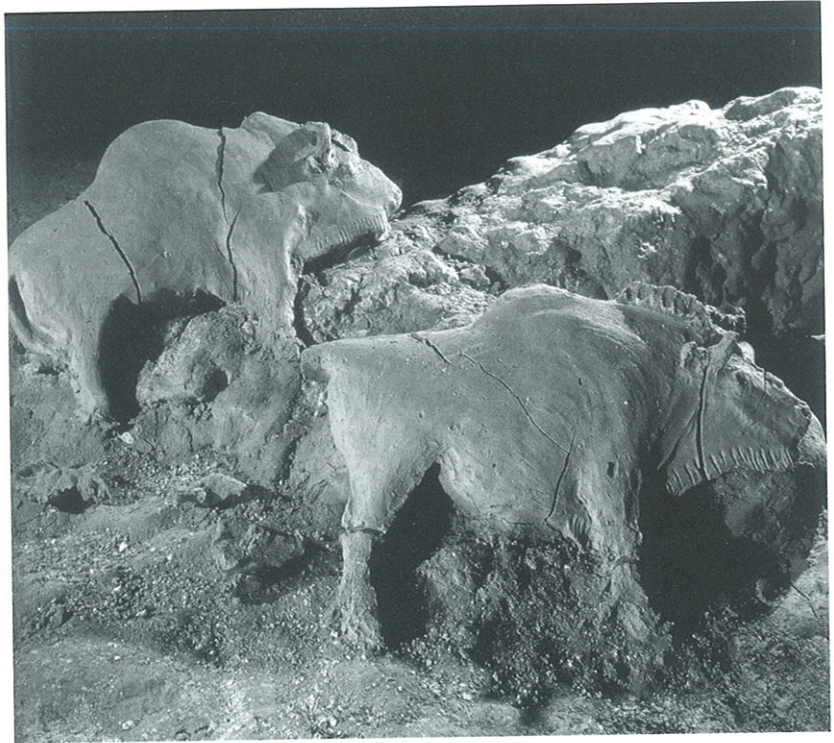
It is notoriously difficult to date rock art at open-air sites, and it may well be that Palaeolithic rock art will be found much more widely. At present, however, the main Palaeolithic cases remain Franco-Cantabria and Australia.

Implications for the human story

This brief, and in some respects superficial survey has set out to document that the development of Franco-Cantabrian cave art represents what was in some respects a unique episode in human experience. The cave art in question and the associated material culture does not represent a general phase in the development of human culture, as has often been claimed.



6.8. 'Venus' of Laussel, France. Carved stone block, height 44 cms. Probably Gravettian (ca. 24,000 BP). (Photo by Jean Vertut. From Bahn, P. & J. Vertut, 1997, *Journey Through the Ice Age*, p. 113)



6.9. Modelled clay bison, Tuc d'Audobert, France. Length 63 and 61 cms. Probably Magdalenian (ca. 15,000 BP). (Photo by Jean Vertut. from Bahn, P. *The Cambridge Illustrated History of Prehistoric Art*, p. 139)

Such a claim can be made for the more modest products of the human revolution, such as are seen at Blombos, and then more widely. And such a claim could perhaps be sustained for the hunter-gatherer rock art so widely seen in the early Holocene period.

This particular creative explosion was something different. But although in its own way unique, as I have sought to emphasise, it may belong to a different class of event or process, which we can recognise at other places and times. For example, at about the time that the many millennia of cave art in Europe were falling into decline, around 10,000 BC, another creative explosion was building up in Western Asia. The very climatic changes that made no longer tenable the hunter-gatherer life mode which had sustained the European Upper Palaeolithic made possible new adaptations in Western Asia, documented for instance by the Natufian culture of the Levant, which soon developed into Pre-pottery Neolithic A, and then the full emergence of sedentism and domestication

in Pre-Pottery Neolithic B. That was, of course, in a different part of the world. Its consequences were even more momentous, since the sedentary life which then developed was sustained by the domestication of wheat and barley, and the rearing of sheep, goat and cattle. This economy proved exceedingly durable, although we do not yet know whether the cycle of growth which it sustained will last as long as the creative cycle of the cave art of Franco-Cantabria.

Of course sedentism and the domestication of plants and animals occurred in different parts of the world also. Each of these might be regarded as a creative explosion in its own right, in what may be termed the 'tectonic' phase of human development (Renfrew 2006). Seen from a distance they were not so numerous (Bellwood 2005). And of course, at a micro level, we might seek to discern more numerous creative episodes, for instance of sedentism and domestication (Barker 2006). We could go on to apply the same approach to the urban revolutions which occurred independently in different parts of the world (Renfrew 2007). In each of



6.10. "Female sex"; carved in bas relief, Abri Cellier, France. Length of block 60 cms. Aurignacian (ca. 28,000 BP). (Photo by Jean Vertut. From Bahn, P. & J. Vertut, 1997, *Journey Through the Ice Age*, p. 104)

these, economic changes were accompanied, or perhaps preceded by spiritual developments, changes in belief systems which sometimes leave very clear traces, even if these are not always easy to interpret.

A notable example is offered by the discovery of what can be claimed as the world's first temple, or first built sanctuary, at Göbekli Tepe in south-east Turkey (Plates XX and XXI). Dating from c. 9000 BC, the buildings there precede the development of domesticated plants and animals (Schmidt 2001, 2006). Indeed the community cannot yet be regarded as fully sedentary, although in retrospect it can be seen that sedentism was on the way.

What is remarkable is that here an entirely new style is born, and seen exercised with great accomplishment on the relief stelae of the sanctuary. This, taken with the other developments in the Levant at this time was certainly another creative explosion.

It may be helpful to see the creative explosion of the European Upper Palaeolithic in this perspective. The notion of punctuated equilibrium has already been thoughtfully applied in prehistoric archaeology (Cherry 1984). Indeed the concept has its counterpart in catastrophe theory, with the 'anastrophe' of sudden creative development (Renfrew 1979). The Franco-Cantabrian creative explosion may be seen as perhaps the first great upsurge in human creativity – in material culture and, one may surmise, in spirituality. There are clear suggestions that a comparable development occurred in Australia at much the same time.

When scholars agree to shift the locus of the human revolution to Africa, as seems now to be widely agreed, the creative explosion documented for the European Upper Palaeolithic does not represent a worldwide phenomenon. It was intense and localised. It was the first of a number of such episodes in the human story. Each of them had its own context of origin and its own particularities. It is from these creative episodes that the human story was created.

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