

Barbora Půta  
Václav Soukup  
(eds.)

THE GENESIS  
OF CREATIVITY  
AND THE ORIGIN  
OF THE HUMAN  
MIND

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## Thoughts on Ice Age Art

INGMAR M. BRAUN

The term Ice Age art generally refers to the artistic activities of our direct ancestors, that is to say of anatomically modern man (*Homo sapiens*), in Europe in the Upper Palaeolithic Period. The Upper Palaeolithic covers the very long period from around 35,000 to 10,000 BP. Scholars long believed that the earliest art was created with the emergence of *Homo sapiens* in Europe at the start of the Upper Palaeolithic. The ability to create art was seen as a fundamental difference between *Homo sapiens* and Neanderthal man. Fortunately, however, this view has now been modified following various discoveries in and beyond Europe in recent years. Although pre-Upper Palaeolithic art differs clearly from Ice Age art, it certainly shows signs of symbolic thought (see, for instance, Floss in this volume, Bednarik 2003, Soressi, d'Errico 2007, Lorblanchet 1999).

The first images that come to mind when we think of Ice Age art are the well-known cave paintings in France and Spain. But there is also a small number of Upper Palaeolithic caves with depictions in Southern Italy in Sicily, and two in the South Ural in Russia. Astonishingly, there were until recently no known cave paintings in Central Europe or the British Isles, although Upper Palaeolithic caves, settlement remains and portable artworks are present. This has now changed. In April 2003 the first Ice Age cave drawings in Britain were all present at Church Hole in Creswell Crags, on the border of Derbyshire and Nottinghamshire (Bahn, Pettitt 2009). In August 2006 engravings were found on the walls of the Mäanderhöhle in Franconia, Bavaria – the cave itself was discovered in 1991. These are the first known Upper Palaeolithic cave drawings in Germany (Bosinski 2011). And in September 2009 Romanian speleologists discovered the first incontestably Palaeolithic cave paintings in Romania at the Coliboaia Cave in Bihor County (Besesek, Radu, Lascu 2010, Clottes, Gély, Ghemis et al. 2011). On the Iberian Peninsula there are also large numbers of Upper Palaeolithic engravings outside caves on free-standing rocks (see Balbín Behrmann 2008). The three most important sites are Foz Côa in Portugal (Baptista 1999), Siega Verde in Spain (Alcolea González, Balbín Behrmann 2006), and Domingo García (Ripoll López, Municio González 1999) also in Spain.

A characteristic feature of Ice Age cave art are the numerous and often very realistic representations of animals. The frequency of the various species depicted varies. The most common are horses and bison. We also find ibex, aurochs, deer, mammoths and reindeer and, more rarely, big predators such as bears and cave lions, as well as birds, fish, wild asses, elks, chamois, foxes, wolves, seals, snakes, saiga antelopes and weasel-like animals. It should be stressed, however, that in some caves certain animals are more numerous than in others. The depictions are not always complete and may be limited to particular but characteristic parts of the body. In other cases the animals may appear to have more than one head, too many legs, or several body outlines – an important point when it comes to understanding and interpreting the images. Of course the species of animals vary depending on region and habitat. In none of the caves, interestingly, not even in open air rock art sites in the Iberian Peninsula, do we find representations of plants or landscapes or scenes from everyday human life.



Fig. 1  
Lascaux is one  
of the worlds  
richest examples  
of cave-art  
with over 1,500  
engravings and  
600 drawings  
having been  
documented.

But human beings do feature in cave art, predominantly female figures. Unlike the animal depictions, those of humans tend to be very schematic, sometimes to the point of caricature. Here, too, only certain parts of the body are often represented, such as the head or the vulva. In some caves hands are reproduced using a positive technique (i.e. application of the pigment using the flat palm), though far more frequently we find the negative technique (stencilling).

A separate group consists of composite creatures or hybrids that have both human and animal attributes, though their occurrence is limited. Similarly, there are hybrids that combine parts of different animals; these are even rarer. Although the cave art of the Upper Palaeolithic is best known for its animal figures, a far larger proportion consists of abstract signs. These display a rich variety of form and are often of a geometric nature. Some signs occur in all regions, while others are typical for particular areas.

The artists who created the cave art of the Upper Palaeolithic employed three basic techniques: painting, engraving and relief carving. They occur either separately or in combination, and in many caves we find all three together. Often the Upper Palaeolithic artists integrated the natural texture of the rock into their work or modified it to suit their needs. Sometimes, especially with engravings, the images do not occur singly but are superimposed, often in several layers, making them difficult to discern and decode. Upper Palaeolithic painters used three basic colours: yellow, red and black. Further nuances of tone could be achieved by mixing the pigment or applying it in different ways. The pigment was often made from mineral compounds: yellow from limonite or goethite; red from iron oxide, especially hematite; black from manganese oxide or from charcoal. Studies at Niaux cave in the French Pyrenees, for example, have analysed a number of pigment compounds typically used by artists of the Magdalenian period (Clottes, Menu, Walter 1990). The pigment was applied either as a surface coating or in linear form. Various application techniques were developed (see e.g. Lorblanchet 1997). Generally the motifs are rendered in one (monochrome) or two colours (bichrome), though in some cases the painting is polychrome. Sometimes the natural colour of the cave wall was used or modified as required – for example by scraping.

Engraving, on the other hand, is a technique that requires the removal of material. Lines were drawn on the hard cave wall using a sharp instrument, usually of flint. Some engravings are very fine and delicate; others are strong and deep. In caves where the walls are soft or coated with clay the lines are often drawn with the fingers or a soft object such as a wooden stick (see e.g. Sharpe, Lacombe, Fawbert 2002). Most commonly, for example at Niaux cave and Montespan in the French Pyrenees, the engravings (including those of animals) are made on a clay surface. The relief technique, in which figures stand out starkly from the background, uses surface incisions to create an almost sculptural effect. The use of relief is less common and tends to be found in rock shelters (*abris*) rather than in caves. Recent studies as well as accounts at the time of their discovery indicate that most of these figures, (e.g. in the Abri du Cap Blanc or the Roc-aux-Sorciers) were originally painted (Roussot 1994). An even more surprising technique can be seen in three caves in the French Pyrenees – modelling. The most famous example is the two bisons fashioned from clay, each approximately 60 cms. long, in Le Tuc d'Audoubert cave (Bégouën, Fritz, Gilles et al. 2009). Thanks to their sheltered location deep inside the cave and the constant climatic conditions, these models have survived for around 14,000 years to the present day. A further positive factor is that since their discovery in 1912 the owners, the Bégouën family, have never opened the cave to the public or attempted to turn it into a tourist attraction (Bégouën 1981).

Another very important category of Ice Age art is portable art. Unlike cave art portable art (as it is known) has been found over large parts of Europe and even as far as Siberia. As the name suggests it is movable and portable – the French and English terms *art mobilier* and 'portable art' are far more appropriate than the German *Kleinkunst*. It is most often found in Upper Palaeolithic settlements. Portable art includes engravings of animals, humans, or abstract signs on materials such as antler, bone, ivory and stone. It also refers to animal or human statuettes made of various materials, as well as to hybrid figures like the famous Lion Man statuette from the Aurignacian period found in the Hohlenstein-Stadel cave in Southwest Germany. The majority of the human figures, especially the statuettes, are female. While Gravettian female statuettes typically have plump bodies and exaggerated sexual characteristics (vulva and breasts) and are complete with head, their Magdalenian counterparts are still very schematic, abstract and headless. As with cave art the depictions of humans lack clear and distinctive facial features. There is one exception, however. At La Marche in Southwest France a large number of human portraits engraved on stone was found (see Pales, Saint-Péreuse 1976). Also absent in the portable artworks are depictions of everyday life, and plant-like motifs are rare. Certain techniques are limited geographically or chronologically. A good example is the distribution of clay, which in Moravia and Lower Austria in the East Gravettian (Pavlovian) region was used to model animal and human figures which were then fired. Often articles of everyday use were decorated. We thus find engraved perforated batons (*bâtons percés*), or sculptured spear throwers.

Fig. 2  
The perforated batons in the Magdalenian are often decorated with animal designs. This example shows a fine engraving of a reindeer. Kesslerloch cave (Switzerland).



1) These theories relate mostly to cave art rather than to portable art.

Decorated blocks make up a third category of Ice Age art, separate from cave art and portable art. Although technically transportable, their size and weight means they cannot be regarded as 'portable'. So far they have only been found at settlement sites in Southwest France. Blocks dating from the Aurignacian period are typically deeply engraved (or incised) with animals, phalli, and in particular vulvae. Magdalenian blocks often have very realistic animal engravings, as found in the Abri de la Madeleine and at Limeuil.

Since the existence of Ice Age art was officially recognised a number of theories have been put forward as to its origin and meaning.<sup>1</sup> I will now outline briefly the most important of these before discussing my own ideas. The first is the 'art for art's sake' or *l'art pour l'art* hypothesis. This theory was current in the second half of the 19<sup>th</sup> century and related only to the portable artefacts, as the cave artworks had not yet been discovered. It was assumed that in the Upper Palaeolithic people had enough time to devote to art (Cartailhac in Rousset 2002). When cave art was officially recognised, however, and more caves containing artworks were discovered, this theory was rejected as it was hard to imagine Upper Palaeolithic human beings going deep into dark caves simply to pass the time or 'for the passion of art', as Cartailhac called it.

With the emergence of ethnology, the scientific study of native peoples, and the continuing founding of colonies in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, ethnological methods came to be applied to the study of prehistory. Some ethnic groups such as the Bushmen (now called the San) or the Australian Aborigines, who largely still subsisted as hunter-gatherers, were regarded as living 'Stone Age peoples' and their way of life and belief systems were projected onto Upper Palaeolithic society (Laming-Empeaire 1962).

It is thus not surprising that subsequent interpretations of Ice Age art, particularly of cave art, were influenced by such ethnological comparisons. Salomon Reinach saw a link between the depictions of animals in cave art and totemism (Laming-Empeaire 1962). Later Max Raphael also established a connection between cave art, totemism and the clan system (Raphael 1945). Reinach was the first to see an analogy between animals that were painted and animals that were hunted, suggesting that magical practices were necessary to ensure day-to-day survival (Laming-Empeaire 1962). This theory, further developed by Émile Cartailhac, Henri Bégouën and Henri Breuil, was substantiated by cave depictions of animals that appeared to be wounded or pierced with arrows. Underlying it was the idea of sympathetic magic described by James George Frazer in his 1890 study of mythology and religion, *The Golden Bough* (quoted in Laming-Empeaire 1962).

Critics of the hunting magic theory point out that few of the animals in cave art are depicted as wounded, and that the most commonly hunted species, the reindeer, appears only very rarely. It is also open to question, in my view, whether the 'arrows' are indeed arrows.

The animal-man hybrids were interpreted by Breuil and Bégouën variously as hunters disguised for the hunt, sorcerers who conducted hunting ceremonies in the caves, or semi-human, semi-animal spirits (Bégouën, Breuil 1934). The famous *Dieu cornu* (Horned God) figure from Les Trois-Frères, for example, which combines human legs with animal features, is construed by Henri Bégouën as a divinity or sorcerer (Bégouën 1920).

The notion of fertility magic is comparable to the hunting magic theory. Some animal scenes in both cave art and portable art can be seen as mating rituals between females and males. There are also depictions of female animals that appear to be pregnant. While earlier studies, particularly by Henri Breuil, had considered the representations in isolation, it was Max Raphael who first looked at them as a whole and drew attention to the spatial arrangement of the images and their structural composition (Raphael 1945). In this he paved the way for future researchers such as Annette Laming-Empeaire (1962) and André Leroi-Gourhan (1965), who were doubtless also influenced by the structuralist approach of Claude Lévi-Strauss. Leroi-Gourhan, in particular, refuted ethnology-based parallels in the interpretation of Ice Age art. According to Leroi-Gourhan (1965) the cave is divided into different areas and the figures stand in a particular relation both to each other and to the part of the cave they are in. Both writers classify the various animals and signs as belonging to either the female or the male principle: "All the motifs, be they animals or signs,

are male or female symbols.” (Lorblanchet 1997: 81) Interestingly they do not assign the animals to the same categories, leading Laming-Empeaire (1972) to the conclusion that both are wrong. Today the theory that the artworks are ‘sexualized’ and relate to specific parts of the caves has little support. However, they are still generally seen as compositions and as standing in some relation to each other.

Jean Clottes and David Lewis-Williams (1996) see a link between shamanism and cave art. For both authors an important element is the altered states of consciousness achieved by certain individuals within the group – shamans – during the performance of rituals. The representations on the cave walls correspond to various figures as perceived in a trance or trance-like state. The shamans summon spirits, often in animal form, to help or protect the group. A key element of shamanism is the belief that there exist at least two worlds – the earthly world and an under- or overworld. However, Clottes’ and Lewis-Williams’ ideas have been widely criticised (e.g. by Lorblanchet, Le Quellec, Bahn et al. 2006).

Clottes and Lewis-Williams (1996) were not the first to establish a link between cave art and shamanism. Kirchner (1952) interpreted the famous shaft scene in the Lascaux cave as a shamanistic invocation of spirits, with shaman, assistant spirit, and sacrificial beast. Lommel (1965) saw in the above-mentioned *Dieu cornu* at Les Trois-Frères a shaman in ritual costume. Smith (1992) also believed there was a link between Ice Age art and shamanism.

As noted above all these theories with the exception of the first (art for art’s sake) are concerned almost exclusively with cave art. Fewer interpretations of portable art have been attempted, although there are a number of theories about the human statuettes, especially the female figures from the Gravettian, which Saccasyn-Della Santa (1947) summarizes as follows: 1. image of reality; 2. aesthetic ideal; 3. fertility symbol; 4. priestess; 5. portrayal of an ancestor.

In the following I will present my own ideas on Ice Age art and its possible interpretations. First I believe it is important to realise that any interpretation of Ice Age art can only be a hypothesis, as the depictions cannot ‘speak’ and no written records from that period exist. I also believe that the background to the creation of both portable art and cave (or parietal) art was certainly not always the same, bearing in mind that the phenomenon of Ice Age art covers a period of at least 25,000 years. We should always be aware that even in one cave the different motifs may have been the result of different situations and motivations, and no single interpretation is likely to apply to all. This we can refer to as a ‘multiplicity of levels’ of possible interpretation. It must be assumed that in many cases the figures on the cave walls were not created in one ‘batch’, however homogenous they may appear. On the other hand it is of course striking how frequently the same motifs occur, both in cave art and portable art, despite not only the long time intervals but in many cases the geographical distances that separate them. In fact I do not believe we will ever know exactly why Upper Palaeolithic people produced the cave and rock paintings and portable art that we call Ice Age art, though it is of course tempting to theorize about their meaning.

Let me first consider the phenomenon of cave art. For me caves are points of intersection between this world and another world. Biedermann saw caves as “*secret gates to an underground world (...) the object of many symbolically potent cults, myths and sagas*” (Biedermann 2000: 199). When looking at Upper Palaeolithic cave art with our own modern light sources we should bear in mind that the people of those distant times saw them, quite literally, in a very different light. Today our light sources are predominantly static; in those days people saw by the flickering light of grease lamps and torches. Since many of the depictions incorporated the natural relief of the rock, the figures were often not static but, because of the flickering light seemed to be moving and consequently alive. Studies by Marc Azéma have shown (2010) that many of the animals in cave art are portrayed in motion. Apart from cases where use was made of the uneven surface, there are examples of animals with more than four legs, or what appears to be more than one head or more than one tail, which also, given the light sources available, would have created an impression of movement. For this reason Upper Palaeolithic cave art is for me first and foremost kinetic rather than static. Another effect we find is rows of animals one behind the other, which also seems to simulate a sequence of movements, as we see in the frieze of horses at the Abri de Lagrave in Lot department in Southwest

France (Azéma 2011). These can be compared with the sequences of photographs of animals and people in motion taken by Eadweard Muybridge in the 1870s and 1880s.

The central question remains as to what impelled the people of the Upper Palaeolithic to make images of animals, people and various signs and marks on the walls, ceilings and floors of caves, sometimes deep inside, during the long time span from around 35,000 to 10,000 BP. In many cultures caves are seen as the womb of mother earth. I believe the depictions in the caves could represent an iconization of orally transmitted myths. Perhaps Upper Palaeolithic human beings believed that all living creatures come into this world through caves – the womb of mother earth? It is an idea that can still be found in the origin myth of the Zuñi people in the Southwest USA. Perhaps this is why there are so many depictions of animals in caves, and why so many of them seem to be in motion. It may well be that besides their use as a source of food and objects of utility, animals played an important part in the lives of Upper Palaeolithic people.

A striking aspect of the depictions of humans in Ice Age art (with the exception of the finds from La Marche) is their lack of realism and the absence of individuated facial features. In my view this may be because of some unknown taboo. In some cases it might also be because the beings portrayed are the spirits that inhabit the cave. The hybrid creatures, especially the animal-human figures, could be mythical beings. The famous *Dieu cornu* from Les Trois-Frères, for example, occupies a higher, dominant position relative to the other mostly animal figures. In view of its special location within the cave and the fact that it combines features of different animals, it could, in my opinion, represent the Lord of the Animals. A very different interpretation could be given to the *Sorcerer de Gabillou*, which occupies the innermost section of the Gabillou cave. This 37-cm-high engraved figure has human legs and the head of a bison (Gausson 1964) and stands in a typical human



Fig. 3  
The so-called Sorcerer  
of Le Gabillou, a being  
with human legs and  
a bison head.

posture. What appear to be two thong-like attachments hang down over the right thigh from the extended line of the back, giving the impression of a person wearing a buffalo hide and head. Catlin<sup>(2)</sup> (1982), travelling in the North American Plains in the first half of the 19<sup>th</sup> century, describes two different bison dances he encountered among the Mandan, a branch of the Sioux tribe, in which certain men would wear a bison scalp complete with horns and a long strip of hide cut from the whole length of the animal's body and including the tail. One was performed to honour or invoke the spirit of the bison. The way the legs are bent in the Gabillou figure could be consistent with a dance. The figure might also represent a shaman in a trance dressed in shamanic costume, which often includes parts of one or more animals.

Over the years the animal-human hybrids in the Ice Age art found in French caves have been interpreted in a number of ways. An even greater challenge is how to interpret the often very numerous non-figurative signs in cave art. Another question we should consider is who the cave artists were and who were their target audience. I assume that not everyone was allowed to make images and signs on the cave walls, and that the right to do so was restricted to a selected few, perhaps in a ritual context. The way the depictions are arranged on the walls also suggests that not all members of the community were permitted to view all of them. This could have been the case in Lascaux, where the Hall of Bulls can accommodate a large number of people, whereas the 'shaft scene' is in a very confined space. How often, by whom and for what purpose the caves were visited and decorated is, and I believe will always remain, an open question.

The portable art is no easier to interpret. Most of these objects were found in settlement sites. Can we therefore assume that their use was profane? Or might they have had a function in rites and ceremonies? As with cave art there are striking similarities between motifs in portable art found in different parts of Europe, although there are, of course, geographical and chronological limitations. Aurignacian ivory statuettes, for example, have been found only in the Swabian Alb region of Southwest Germany (see Floss in this volume), while Gravettian fired clay figurines of humans and animals only occur in Moravia and neighbouring Lower Austria.

The animal statuettes were possibly fetish figures used for transmitting the animal's power to the bearer, similar to those we know from Zuñi culture (Cushing 1990). This would also explain their small size. They could have been carried about in pouches or, since some of them are pierced with a single hole (such as the one of the mammoth figurines from the Vogelherd cave of the Swabian Alb), worn as amulets.

The female statuettes are especially interesting as those of the Gravettian period are noticeably different from those of the Magdalenian (see above). The Gravettian figures, on account of their plumpness and emphasis of the secondary sexual characteristics, could have some connection with fertility.

Is it possible that the animals depicted in portable and cave art are bound up with myths – with the belief that after their ascent from the underworld animals would live with humans in harmony and speak the same language? (see above, Zuñi myth) Could these animals be the ones who have already come from the underworld and now live in this earthly world? Whatever the truth, I am convinced that humans in those times felt a very different bond with animals from what we experience today – the kind of relationship we know only from numerous paradise and creation myths.

I believe it is quite conceivable that many of the portable art objects were of a purely aesthetic nature and were decorated simply out of a sense of beauty. That the people of those times had an aesthetic sense is beyond doubt – witness their use of various decorative objects such as perforated animal teeth and fossils. I would therefore like to conclude my thoughts on Ice Age art with a quotation from Henri Breuil: “[...] *these artists loved their works and went to great lengths to create images of beauty which still move us profoundly*” (Breuil in Rousset 2002: 123).

2) George Catlin (1796–1872) travelled among many native North American tribes in the first half of the 19<sup>th</sup> century.

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