Upper Paleolithic art is one of the most enigmatic aspects of human prehistory. The painted caves and engraved objects at, principally, European sites display a range of animal species crafted with great skill. However, they do not display scenes from nature. Rather, they are of individual animals, occasionally showing some minimal interaction. The recent discovery of painted caves in France upset some long-standing theories, specifically about how the art changed over time. Many theories have been put forward to explain the "meaning" of the art, but it still remains elusive.

Traditionally, the study of prehistoric art meant: the study of prehistoric art in Europe, specifically in southwest France and northern Spain, created during the period 35,000 to 10,000 years ago (the Upper Paleolithic), the end of the Pleistocene Ice Age. (See figure 33.1.) Artistic expression undoubtedly flowed elsewhere in the Old World at this time—in Africa and Australia—but accidents of history and preservation have endowed Europe with a rich record of painted, engraved, and carved images that, properly interpreted,

**FIGURE 33.1** Distribution of art sites in Europe: The limestone caves of Ice Age Europe have preserved a rich legacy of Paleolithic art. Although a certain stylistic continuity characterizes cave painting, motifs in art mobilier display much more variability.
might give some insight into the workings of the human mind at this point in our history.

Recent years have witnessed a number of important developments in the study of prehistoric art, including discoveries beyond Europe, such as an engraved antler from Longgu Cave in China, the first prehistoric art object to be found there, and the engraved ochre at Blombos Cave, South Africa. The most spectacular new finds, however, have occurred in France, with the discovery of Chauvet Cave in the Ardèche, southern France, and Cosquer Cave, on the southern coast near to Marseilles, and in Portugal, at the Côa Valley.

FEATURES OF UPPER PALEOLITHIC ART

The discovery of Chauvet Cave has upset some of the generalities that could be adduced for Upper Paleolithic art. For instance, carved and engraved images were thought to have preceded painted images by at least 10,000 years. Dated by radiocarbon analysis at 32,410 years old, Chauvet, however, is as old as some of the oldest known carved objects, such as the ivory animal figures from Vogelherd, Germany, that date to a little more than 30,000 years. Moreover, the painted wall art consists mainly of large mammals, such as bison, aurochs, deer, horses, mammoth, ibex, and so on; carnivores are rare and usually sequestered in the deepest recesses of caves. This latter fact was interpreted as signaling prehistoric people's fear and respect for a fellow predator. At Chauvet, however, carnivores are prominent among the painted images, and they include a hyena and a leopard, animals not previously seen in prehistoric art.

Birds, plants, and humans are only infrequently represented in Upper Paleolithic art, and the latter are often depicted quite schematically when they do appear. The painted images are often very good, naturalistic representations of single animals or small groups of individuals, but they convey little sense of natural scenes. Again, Chauvet has a scene of two rhinos fighting, a unique depiction of an aggressive scene. Hand stencils—produced by brushing or blowing pigment around the hand while placed on a rock surface—are relatively common, often revealing what appears to be missing fingers. Some archeologists believe that, rather than representing mutilation, these stencils were produced by curling a finger under the palm, perhaps as a signature.

Painted images are usually scattered on rock surfaces in a seemingly random manner, often with one image superimposed partially or wholly on another. Sometimes interspersed among the animal images are simple geometric figures—some as simple as dots, others resembling grids and crescents.

Engraved or carved images, particularly on portable objects such as spear throwers, batons, pendants, and blade punches, often contain more detail in their execution. Overall, they give a sense of a wider representation of nature, including the large mammals seen in wall art (although in different proportions). For instance, birds, fish, and plants are often depicted, sometimes in rich combination; again, this illustration seems not to be the representation of a scene so much as an idea, such as a season. Interestingly, carnivore teeth are present in very high proportion in body ornamentation such as necklaces and pendants, in a striking contrast to most wall art. (See figure 33.2.)

The human image occurs more frequently in carved and engraved images than in painting. Here again, these depictions are often schematic in nature, as in the famous "Venuses." However, one site, La Marche in the French Pyrenees, contained a cache of more than 200 small engraved human faces, completely lifelike and individualistic—a portrait gallery from 20,000 years ago.

When the Ice Age finally came to a close, 10,000 years ago, the art ended as well, at least in the generally naturalistic, representational style that had persisted for 25,000 years. Geometric patterns became predominant, and people apparently no longer sought out deep caves in which to paint. It is quite possible, of course, that people painted just as much as before, but on open-air surfaces from which the images have disappeared.

INTERPRETATIONS OF PREHISTORIC ART

The first systematic study of Ice Age art was undertaken by the great French archeologist, the Abbé Henri Breuil. Throughout the first half of the twentieth century, he carefully copied images from many sites and attempted a chronology based on artistic style. He, and later scholars,

FIGURE 33.2 (opposite) Examples of Paleolithic art: (a) Fragment of reindeer antler from La Marche, France, approximately 12,000 years old. Apparently used as an implement for shaping flint tools, the antler fragment is engraved with a pregnant mare, which seems to have been symbolically killed by a series of engraved arrows. Above the horse is a set of notches that have been interpreted by Alexander Marshack as documenting the passing lunar cycles. (b) A drawing of the surface of the antler, "unrolled." (c) An engraved antler baton from Montgadier, France, dated at approximately 10,000 years old. Perhaps used in straightening the shafts of arrows or even spears, the baton's collection of engraved items suggests a representation of spring. (d) A drawing of the antler baton "unrolled." (e) Vogelherd horse, carved from mammoth ivory some 30,000 years ago and worn smooth by frequent handling over a long period of time. The horse, which is the oldest known animal carving, measures 5 centimeters. (f) The black outline of this horse was painted on the wall of a cave, Peché-Merle, France, approximately 15,000 years ago. Infrared analysis indicates that the mixture of black and red dots was added over a period of time. The black hand stencils are also later additions. Does the Peché-Merle horse, one of two in the cave, indicate the "use" of an? (Courtesy of Alexander Marshack.)
believed that the art would grow more sophisticated through time—hence the notion that the famous Lascaux Cave (dated at 17,000 years old) was the high point of prehistoric art, given its brilliance in color and incorporation of perspective. The discovery of Chauvet has upset this simple idea of progress in execution of images, because it is Lascaux’s equal in these respects and is twice as old.

Breuil developed the hypothesis that prehistoric art was also “hunting magic”—that is, a way of ensuring fruitful hunts and propitiating the victims. Supporting this idea is the presence among the images in many caves of animals apparently impaled by arrows or spears. Even the absence of such weapons does not militate against the idea, because an animal’s image might be impaled symbolically during a ritual performance in front of it. The hunting magic hypothesis does face a problem in that the images painted in the caves very often depicted animals not included in the painters’ diet, as indicated by bones found at living sites. In many cases, these bones show that reindeer were important as food—yet reindeer images are few. The reverse was true for horses and bison. As the French philosopher Claude Lévi-Strauss once observed, certain animals are depicted frequently not because they were “good to eat” but because they were “good to think.”

Breuil’s hunting-magic explanation persisted until his death in the 1960s, when it was replaced by the notion that the art somehow reflected the society that produced it. This thesis was developed independently by French archaeologists André Leroi-Gourhan and Annette Laming-Emperaire. They noted that the inventory of animals depicted was comparable throughout Europe and described the presentation as remaining remarkably stable through time, an observation that contrasts with the much more locally idiosyncratic nature of portable art.

For Leroi-Gourhan and Laming-Emperaire, wall art reflected the duality of maleness and femaleness in society. Certain images were said to represent maleness, while others were female. The cave images were arranged so that female representations occurred at the center, with male representation located around the periphery, thereby reflecting a certain type of social structure. Although the two researchers did not fully agree on which images represented maleness and which femaleness, their work had the important effect of emphasizing social context in interpreting Paleolithic art.

Thus, where Breuil’s explanation required no overall structure of the images within the caves, Leroi-Gourhan and Laming-Emperaire’s very clearly did. Both explanations, however, were essentially monolithic. In recent years, this concept has changed as well. “We are beginning to see a great deal more diversity and complexity in Upper Paleolithic art,” explains Randall White of New York University. “And this affects the way we envisage what was going on during this important stage of human evolution.”

The Upper Paleolithic is divided into different cultural periods, based upon the tool technologies of the time (see unit 30 and figure 33.3). Throughout these different cultures, different aspects of the art changed in various ways, as Breuil noted in his chronology. “It is important not to get the idea this pattern of change advanced on a broad front,” cautions White. “In addition to differences through time, there are differences between regions, real geographic variations.” These spatial and temporal variations in tool cultures are matched by similar variations in the art, although no precise correlation exists between a culture’s technology and its art. Thus, a monolithic explanation of the meaning of the art is impossible.

Hunting magic may well explain some of the images. Ritual of other kinds almost certainly centered on the art as well. Something other than practicality drove Upper Paleolithic people to seek out and decorate deep caves, which appear to be otherwise unused. South African archeologists David Lewis-Williams and Thomas Dowson have suggested that the art is shamanistic—that is, produced by shamans in or after a state of trance. (See figure 33.4.) They base their conclusion on a study of San (Bushman) art of South Africa, which is known to be shamanistic, and on a survey of psychological studies on the hallucinatory images produced during trance.

During trance-induced hallucination, the subject experiences a small set of so-called entoptic ("within the nervous
in bloom, all engraved on a reindeer antler baton, is one such example.

In recent independent investigations, Denis Vialou, of the Musée de l'Homme in Paris, and Henri Delport, of the Musée des Antiquités Nationales, near Paris, conclude that less overall uniformity of structure connects the painted caves than originally envisaged by Leroi-Gourhan and Lamming-Emperaire. The discovery of Chauvet reinforces this point. Vialou and Delport acknowledge that most of the caves follow some kind of structure, but caution that each cave should be viewed as a separate expression.

Diversity, then, begins to emerge as a more realistic interpretative lens through which to view the Upper Paleolithic—a diversity of people, a diversity of cultures, and a diversity of the art. Paleanthropologists have now shifted from trying to understand what an individual image or set of images might mean to attempting to understand the social context in which those images were produced. Most of all, an attempt is being made to divest modern interpretations of the bias inherent in modern eyes and minds. As Conkey says, "Perhaps we have closed off certain lines of inquiry, simply by using the label 'art.'" (See figure 33.5.)

**PRECURSORS TO UPPER PALEOLITHIC ART**

A persistent question in archaeology relates to the dynamic of the origin of symbolic image making: Were hominins less advanced than *Homo sapiens* capable of symbolic expression? Archeologists remain divided over the evidence and over its interpretation. (As we saw in unit 30, this issue is intimately tied to the question of the origin of modern humans.)

A decade ago, two anthropologists at the University of Pennsylvania, Philip Chase and Harold Dibble, surveyed the evidence for artistic and symbolic expression in the Middle to Upper Paleolithic transition, with the expressed purpose of determining the mode of the transition. Their conclusion was quite firm: "The most striking difference between the Middle and Upper Paleolithic is the contrast between the rich and highly developed art found in the latter period and the almost complete lack of it in the former." John Lindly and Geoffrey Clark, of Arizona State University, strongly disagree. In their examination of the archeological record, Lindly and Chase see that the Middle to Upper Paleolithic transition, as far as artistic expression is concerned, is a gradual, not a punctual, event. According to the two researchers, the complexity of artistic expression in the Upper Paleolithic increases with time, with the Magdalenian being more developed than the Aurignacian.

Randall White disputes Lindly and Chase's contention that the Aurignacian is somehow poorer artistically than later periods in the Upper Paleolithic. "I have been struggling to understand the rich body of Aurignacian and Gravettian
evidence, especially body ornamentation, from Western, Central, and Eastern Europe,” he says. “The quantity of material is staggering.” Others, including Paul Mellars, of Cambridge University, support White’s view that the origin of symbolic art was punctuational.

Some evidence has been gathered to indicate the existence of image making earlier than the Upper Paleolithic, but it is very limited: a fragment of bone marked with a zigzag motif, from the Bacho Kiro site in Bulgaria, somewhat earlier than 35,000 years ago, for example; a carved mammoth tooth, worn smooth with use and marked with red ochre, from the 50,000-year-old site of Tata, Hungary; the inscribed ochre from Blombos Cave, South Africa, some 77,000 years old. Oldest of all is an ox rib engraved with a series of double arcs, from the French site of Peche de l’Azé, dated as being some 300,000 years old. Ochre has been found at several ancient living sites, including the campsite of Terra Amata, in southern France, which is dated to approximately 250,000 years ago. Nevertheless, argue Chase and Dibble, none of this art betrays modern human symbolism at work, merely weak glimmerings of its eventual development. They deem many of the supposed elements of evidence of Neanderthal mythology, such as the Cult of Skulls, to be the products of the overinterpretation of equivocal evidence by eager investigators.

More recently, Robert Bednarik, of the Australian Rock Art Association, has been promulgating the cause of pre-Upper Paleolithic art, arguing that it has not been recognized because archeologists believed it to be nonexistent (but see unit 34). He has reported a crude figurine from the banks of the river Draa, in Morocco. Dated at 400,000 years, it would be the oldest known figurine. Some scholars are skeptical, however, arguing that the piece was not made by humans, and instead is the result of fortuitous natural weathering. Marshack has been applying microscopic analysis to incised flint pieces from the 54,000-year-old site of Quenitra, Israel, and a shaped piece of volcanic tuff from the Acheulean site of Berekhat Ram, which is between 233,000 and 800,000 years old. He has concluded that the incisions and the shaping represent the work of human hands. Although his findings may well be correct, many archeologists remain resistant to the notion that nonutilitarian artifacts prior to the Upper Paleolithic in Europe signify substantial symbolic, or abstract, expression.
KEY QUESTIONS
- In what ways are modern interpretations of paleolithic art most likely to be biased?
- How would one test the hypothesis that, in some cases at least, paleolithic art is a form of hunting magic?
- What possible interpretations are there for the relative rarity of carnivore images in wall art compared with the extensive use of carnivore teeth in body ornamentation?
- Can the art of another culture ever be completely understood by those outside it?

KEY REFERENCES
Extensive information, including virtual visits to major sites, can be found on: http://witcombe.sbc.edu/ARTIIprehistoric.html.