

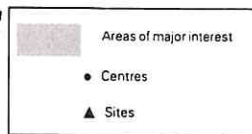
## Architecture 35,000–8000 BC

Early man's nomadic hunting life did not encourage permanent settlements. People most likely made do with scanty shelters which they constructed for protection against rain and sun. Rock shelters with overhanging ledges and caves were utilized but probably formed only a very small proportion of residences. The control of fire was necessary to empty deep caves of predators and in many regions caves were rare or non-existent.

Later, the Advanced Hunters made much greater use of caves. Shelter was necessary for survival in the harsh conditions of the last Ice Age and caves were a convenient source. Surprisingly, their use was only seasonal even at this time. However, we know more about cave dwellings than any contemporaneous hut because they are so easily found. While their inhabitants might have made only minimal structural changes (such as the addition of hearths and wind-breaks), the food refuse, discarded tools and by-products of flint and bone working found on cave floors furnish us with most of our archaeological evidence in this early period.

Few of the earliest man-made structures have survived. But some early buildings have been uncovered, notably in Eastern Europe and Palestine. The hide and bone huts of the mammoth hunters and the twig and daub ones in the more temperate climates exhibit a surprising sophistication. On their evidence we would probably be safe in assuming that huts were built in all inhabited areas.

It is difficult, however, to evaluate these buildings as architecture. Until more have been discovered and investigated we are unable to speculate accurately on the relationship of these structures to their surroundings. Were those buildings the end products of long development within their respective societies or was each a response to the immediate problems of the community, the site, and the available raw materials? Whatever the answer, these huts, poor though their remains are, were the true beginnings of architecture.



Cave

### The Americas

Natural caves are the only known dwelling sites in the New World at this time. Though there must have been temporary camps in the open, they have yet to be found.

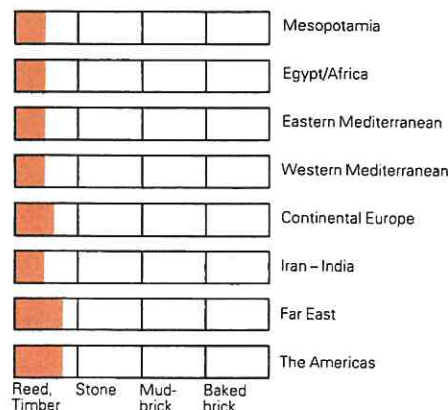
### Western Mediterranean

Caves were used extensively, being widely distributed in the limestones of the area.



Cave

### COMPARISON OF MATERIALS IN USE



**Continental Europe**

Some examples of tent-like huts have been found in central and eastern Europe and similar structures must have been much more widely distributed than the few excavated examples suggest. There is evidence for this in the huts occasionally depicted in cave paintings.



Mammoth bone hut, Mezhirich

Skin tents, Pushkari

▲ Pushkari

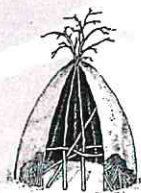
▲ Mezhirich



Cave

**Egypt/Africa**

Good examples of occupied caves are known from the Mediterranean coastlands, but they occur much less widely south of the Sahara. As no buildings survive, we can only guess at huts.



Reed shelter

**Mesopotamia**

No caves are present in the plains and the scanty evidence that exists suggests light shelters of reeds as the likeliest housing.

**Far East**

Scattered examples of elaborate tent-like huts have been found as far as central Asia. There must have been others, perhaps of different materials throughout the region. A few occupied caves are known from Australia.



Skin tents

SIBERIA

**Eastern Mediterranean**

Natural caves are quite common here, and built huts are also known in the Natufian area of Palestine and Syria. These huts had circular stone footings with light superstructures, probably of twigs and daub.



Stone and mud huts



Cave

**Iran - India**

Both caves and huts are known along the line of the Zagros between Iran and Iraq. The huts were probably of stone with a perishable covering as in the Eastern Mediterranean.



Stone and mud dwellings



Cave



Cave



# MEZHIRICH

RIVER DNIEPER, UKRAINE

GAZETTEER P. 147 - MAP REF. M5

THE MAMMOTH-BONE HOUSES discovered at Mezhirich, in the Ukraine, were located on an extensive open-air site next to the Dnieper River and probably represent the world's oldest architecture. The site is believed to have been the base camp of a small group of hunter-gatherers, who would have traveled around the region, using different sites throughout the year, while still returning to Mezhirich on a regular basis. The site has been dated, using radiocarbon dating, to a period over 18,000 years ago. Archaeologists have found evidence for five houses at the site, each one built of mammoth bones and containing hearths, work areas, and large amounts of debris. The bones were used to provide a solid frame, which probably would have been covered with hides. Essentially, they were built as strong tents rather than as houses, and the careful arrangement of bones would not have been visible from the outside.

## SEASONAL SHELTERS

Each house at Mezhirich had a unique architecture, utilizing different patterns of bones to create the dome shape. The large quantities of bones used to build them and the labor involved indicate that they were important structures. One house alone used the mandibles of 95 mammoths, and archaeologists have estimated that each house would have taken 10 people 5 or 6 days to build.

Many objects were also found, reinforcing the idea that it was an important site or base camp.

Decorated objects and figurines indicate a rich material culture and possible ritual or symbolic beliefs. Jewelry was also found, including fossilized shells, perforated for wearing, that came from 187 mi (300 km) away, and amber from the Baltic, over 62 mi (100 km) away. In addition to this, analysis of the tools found has shown that the stone used to make them was imported from some distance.

From the structure of the houses and the artifacts found, we can build up a much richer picture of the lifestyle of the people who

used them than is usually possible for hunter-gatherers. The houses suggest socially organized groups, capable of remarkable architectural achievements, while the objects provide us with a glimpse of a society with ritual and artistic facets. The artifacts transported from great distances suggest wide-ranging contacts, although archaeologists can only guess about their nature and significance.



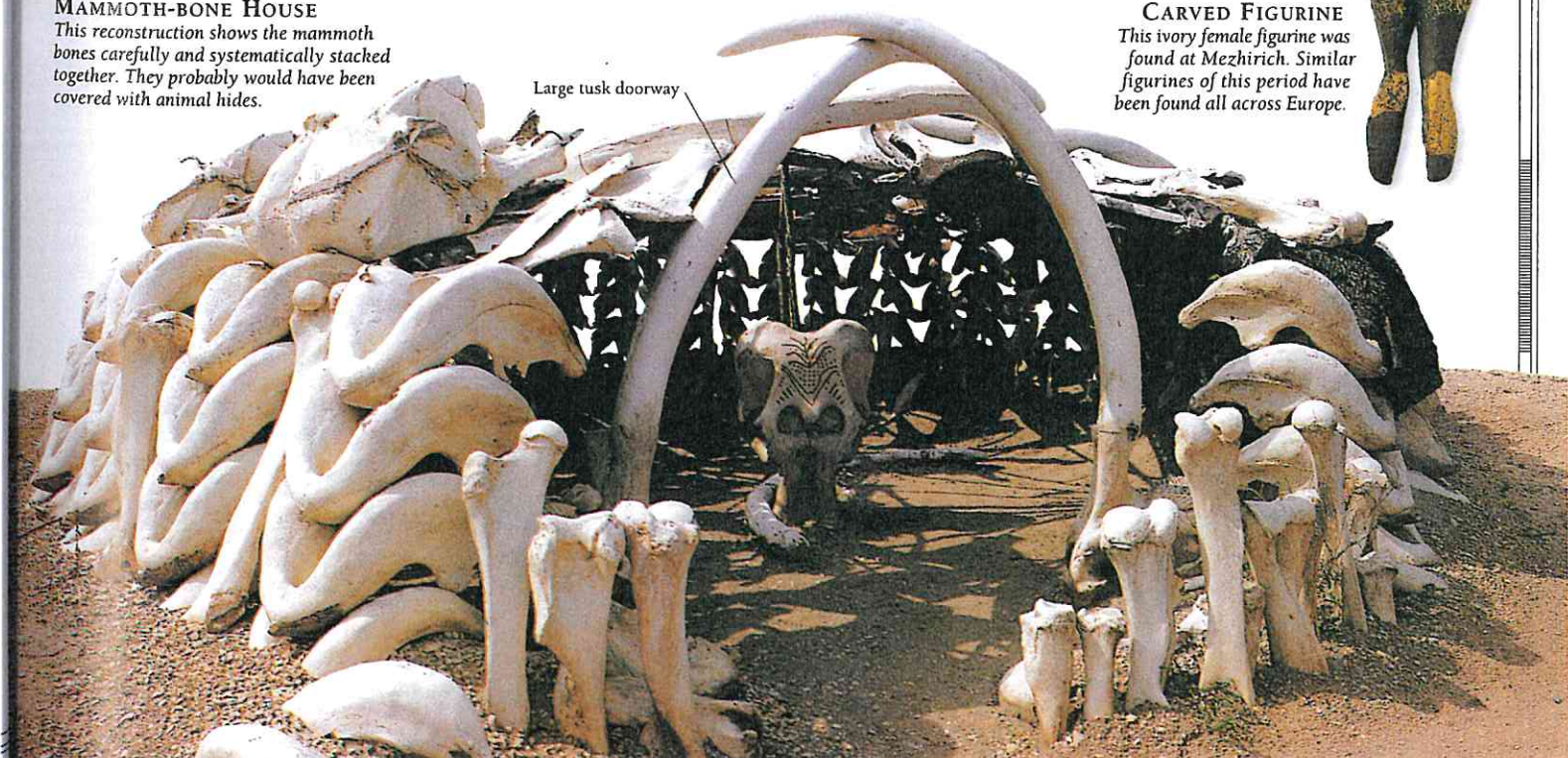
## MAMMOTH-BONE EXCAVATIONS

The excavations at the site revealed each house as a heap of mammoth bones, as shown above. Systematic removal of the bones one by one, and careful recording of the position of each bone in relation to the others, have enabled archaeologists to reconstruct the structure of each house before it collapsed.

## MAMMOTH-BONE HOUSE

This reconstruction shows the mammoth bones carefully and systematically stacked together. They probably would have been covered with animal hides.

Large tusk doorway



## CARVED FIGURINE

This ivory female figurine was found at Mezhirich. Similar figurines of this period have been found all across Europe.





# Concept

## Portable Art

*A sense of design and beauty*

The aesthetic sense that appeared during the Upper Paleolithic with the arrival of fully modern humans was expressed in a variety of forms. Carving, sculpting, and molding of various materials, including clay, antler, wood, ivory, and stone, is evidenced throughout this period (Figure 4.46). The decoration of artifacts and other objects occurred throughout the Upper

Paleolithic beginning about 35,000 years ago. There is remarkably little evidence for the nonpractical modification of equipment and utensils before the appearance of *Homo sapiens sapiens* in Europe. Only a handful of decorated objects have been found in Middle Paleolithic contexts.

Beginning in the Aurignacian some 35,000 years ago, however, bone be-

**Figure 4.46** Examples of Upper Paleolithic decoration of bone, antler, ivory, and wood objects. Such decoration was applied to a variety of pieces, some utilitarian and others more symbolic.





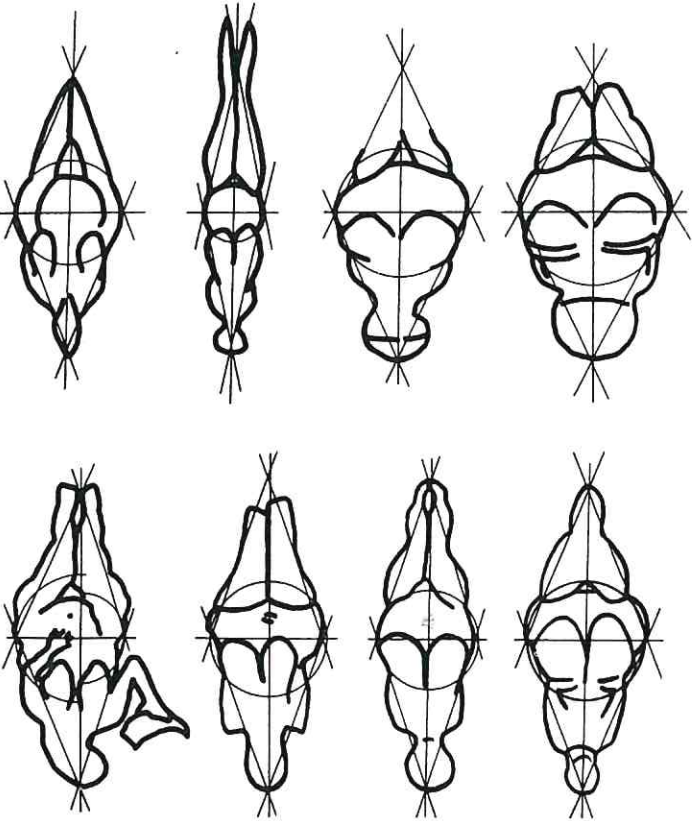
came a common material for human use, modification, and decoration. For example, a variety of bone points date to this early period. Initially simple and plain, such points had become heavily barbed and decorated by the end of the Upper Paleolithic. At the same time, carved bone and antler figurines of both humans and animals began to appear in the archaeological record.

Perhaps the most spectacular portable objects from the Upper Paleolithic are the "Venus figurines." These small sculptures appeared throughout most of Europe during a brief time around 25,000 years ago. The figures were engraved in relief on the walls of caves; carved in the round from ivory, wood, and stone such as steatite; and modeled in clay. The female characteristics of these statuettes are usually exaggerated: breasts, hips, buttocks, and thighs are very large; the head, arms, hands, legs, and feet are shown only schematically (Figure 4.47). The pubic triangle is sometimes outlined; one figurine has a detailed vulva. Some of the figurines appear to be pregnant, and others are displayed holding a horn, perhaps a cornucopia or horn of plenty, to imply fertility, bounty, and reproduction.

Probably 80% of the prehistoric art known today comes from the last stage of the Upper Paleolithic, the Magdalenian. Objects with a short life were decorated in a cursory fashion, whereas more important pieces with a longer life expectancy were heavily ornamented. Spearthrowers were decorated elaborately, with carved animals serving as the counterweight and end-hook. Engraved bone was common, and such portable art was often painted as well. Body adornments, including necklaces, bracelets, and pendants, also appeared in the Magdalenian.

Portable art was more common in the larger settlements than in smaller ones. This pattern suggests a connection between art and the ritual activities that likely occurred when larger groups of people came together. Hunter-gatherers commonly aggregated in a larger group at a certain time each year

to exchange raw materials and learn new information, to find mates, and to celebrate important events, such as marriage and initiation into adulthood. Rituals and ceremonies provided a common bond in both the physical and psychic realms; dance, trance, and the reaffirmation of common beliefs were important aspects of such gatherings. Decorations in the form of masks, face and body painting, costumes, and the like were probably used during such ceremonial occasions (see "Contemporary Hunter-Gatherers," Chapter 5, p. 194).



**Figure 4.47** Venus figurines in various shapes and sizes. The individual holding the horn or cornucopia (top row, far right) supports the interpretation of these figures as symbols of fertility, nature's bounty, or "Mother Earth."

One of the more intriguing features of becoming fully modern is the evidence for jewelry and self-adornment. Artifacts such as beads, pendants, and decorated batons suggest that individuals were distinct, that egos were emerging. Why is such behavior an important part of being human?



# PALAEOLITHIC CAVE ART

**D**on Marcelino Sanz de Sautuola (1831–88) was a gentleman landowner in Santander Province, northern Spain, who had become a well-known collector of antiquities. In 1878 he visited the Paris Universal Exhibition, and was deeply impressed by the Palaeolithic portable art on show there (see p. 56). In 1879 he returned to the cave of Altamira where, a few years earlier, he had noticed black painted signs on a wall. In November, while he was digging in the cave floor, searching for prehistoric tools and portable art, his little daughter Maria was playing in the cavern. Suddenly she spotted the cluster of great polychrome bison paintings on the ceiling.

Her father, at first incredulous, became more interested when he found that the figures seemed to be done with a fatty paste, and noticed the close similarity in style between these huge figures and the small portable depictions he had seen in Paris. He

**Although by no means the world's oldest art, or the only Ice Age art in the world, the decorated caves of Europe have long held a special place in archaeology, largely because of the early date at which their existence and antiquity were established and because of the spectacular nature of much of their imagery.**

therefore deduced that the cave art was of similar age, but his attempts to present his views and his discovery to the academic establishment met with widespread rejection and accusations of naivety or fraud: at the 1880

International Congress of Anthropology and Prehistoric Archaeology in Lisbon, his claims were dismissed contemptuously by Emile Cartailhac, a leading French prehistorian who had been forewarned by the virulently anti-clerical prehistorian Gabriel de Mortillet that some anti-evolutionist Spanish Jesuits were going to try to make prehistorians look silly. (De Sautuola died prematurely in 1888, a sad and disillusioned man.)

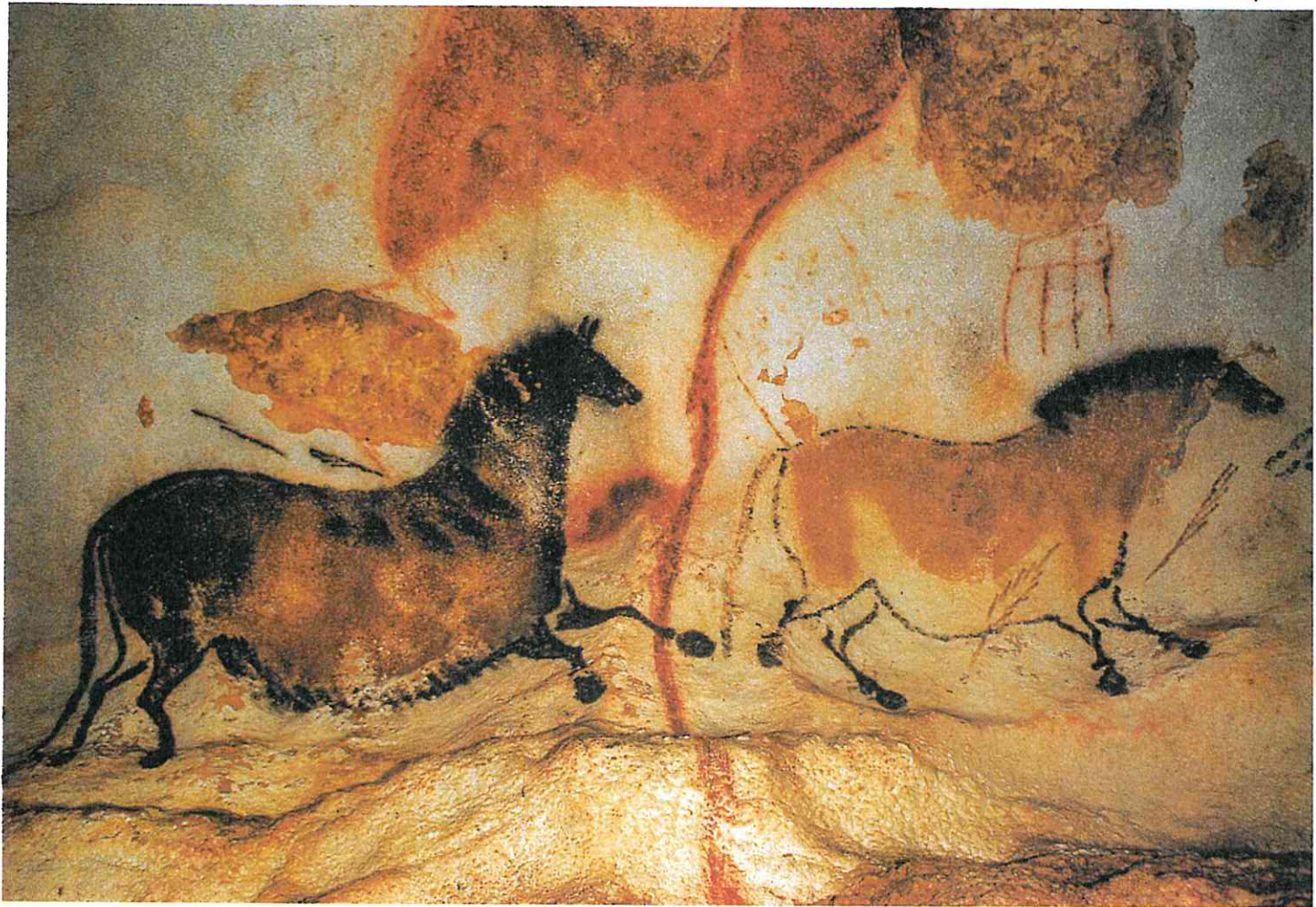
Figures had also been noticed on the walls of some French caves in the 1860s and 1870s, but their dates, and therefore their

**One of the remarkable polychrome bison painted on the low ceiling of the cave of Altamira, northern Spain, and dating to about 12,000 bc.**



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significance, remained unknown. The breakthrough came in 1895 at the cave of La Mouthe, Dordogne, where the removal of sediments containing Palaeolithic material exposed an unknown gallery with figures engraved on its walls: these were clearly very ancient. Discoveries followed in other French caves, culminating in those of Les Combarelles and Font de Gaume in 1901. By 1902 the 'prehistoric establishment' had officially accepted the existence and authenticity of Palaeolithic cave art; Cartailhac published his famous article, '*Mea culpa d'un sceptique*', in which he openly (though somewhat grudgingly) admitted his earlier mistake; and de Sautuola was vindicated. A new 'gold rush' like that for portable art was now triggered, and a great number of decorated caves were discovered in the early twentieth century.

Henri Breuil's talent for drawing Piette's finds (see p. 57) eventually brought him to the attention of Cartailhac, with whom he began to study the newly discovered cave art of La Mouthe, Altamira, etc. By his own reckoning, Breuil spent over 700 days underground, copying cave drawings. Until the end of his long life he dominated not only the field of Palaeolithic art but the whole study of prehistory.

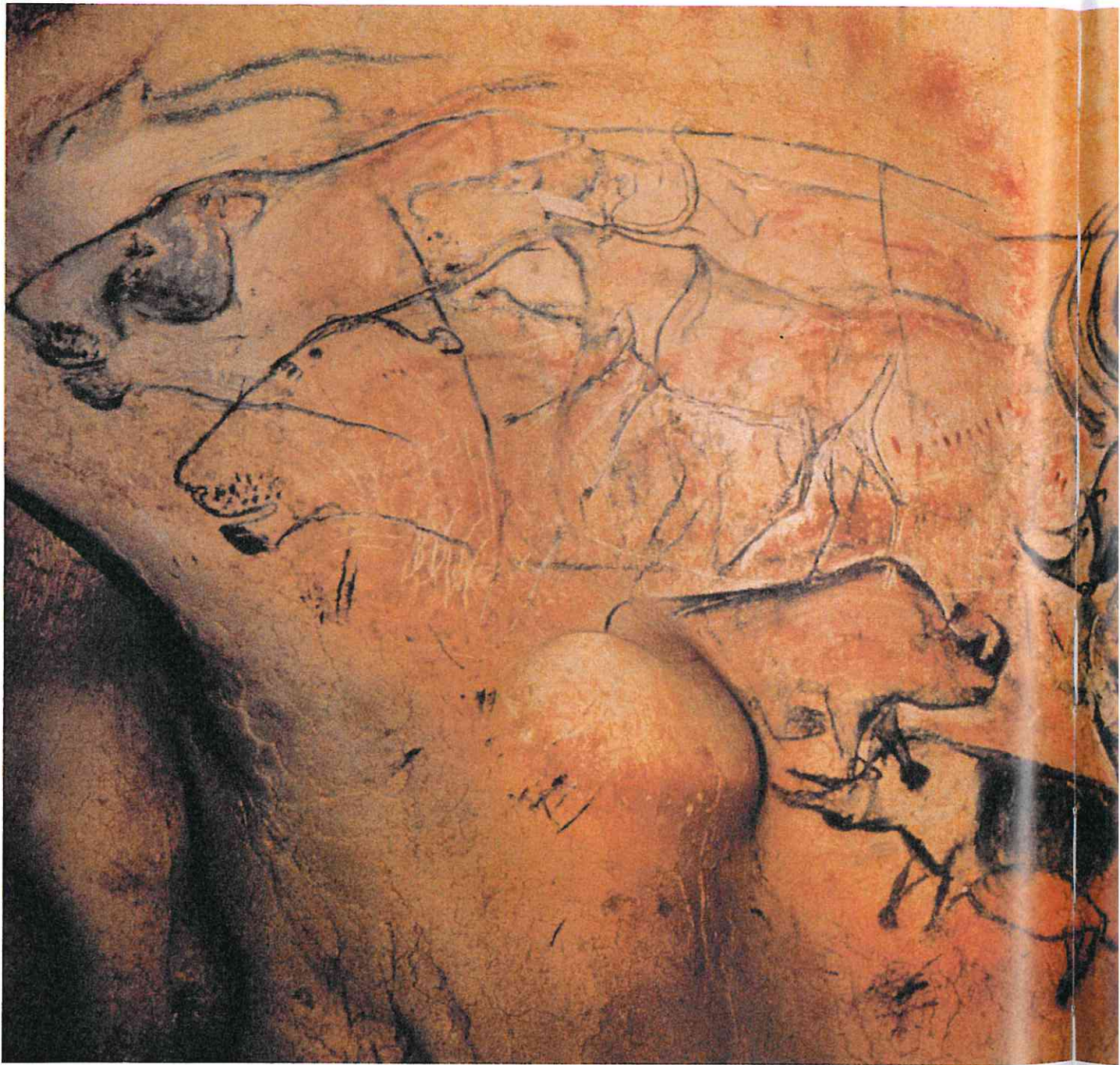
Whereas Palaeolithic portable art was generally explained as simple decoration, it was the acceptance of cave art at the turn of

**The so-called 'Chinese horses' of Lascaux Cave, Dordogne, France. Discovered in 1940, it is one of the richest of all Ice Age decorated caves, with about 600 paintings and nearly 1,500 engravings. (Note how perspective is suggested by the far-side limbs being left unconnected to the body.)**

the century, together with emerging ethnographic accounts from Australia that in 1903 led Salomon Reinach, director of the Musée des Antiquités Nationales, to replace the 'art for art's sake' theory with the concept of hunting magic (see p. 57) which, through Breuil's influence, was to dominate for decades, until replaced by French ethnologist André Leroi-Gourhan's theories (now largely abandoned in their turn) of sexual symbolism and of caves decorated according to a standardized blueprint.

Once the authenticity of the cave art had been proved, discoveries snowballed of caves and rockshelters containing engravings, paintings, bas-relief sculpture or even work in clay. In southern France there was a whole series of decorated caves of huge importance – for example, Niaux (1906); Le Tuc d'Audoubert (1912) with its clay bison; Les Trois Frères (1914); Pech Merle (1922), with its famous panel of 'spotted' horses; and Montespan (1923) with its clay statues including a large, sphinx-like bear.



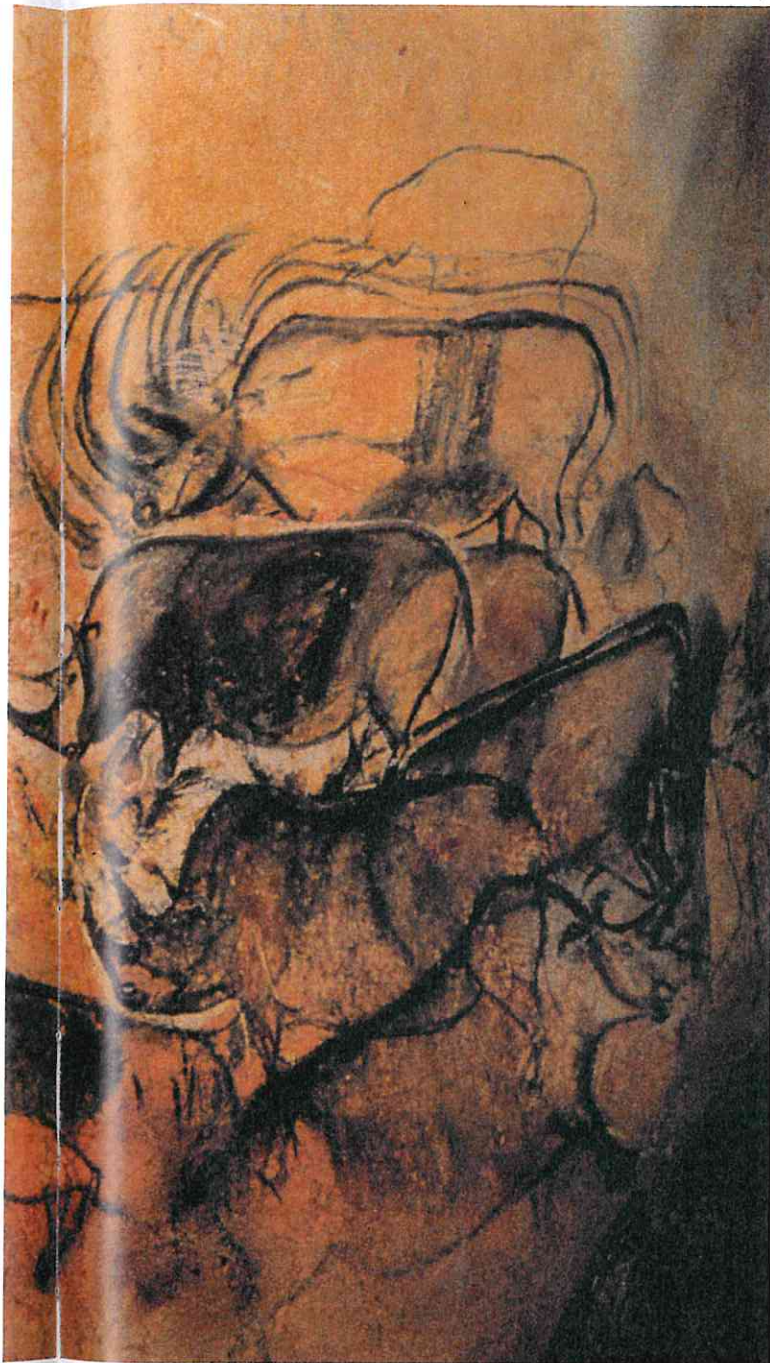


Likewise in northern Spain, Hermilio Alcalde del Río, a professor from a vocational school who had worked with Cartailhac and Breuil at Altamira, discovered art in a whole series of caves, such as El Castillo, Covalanas and Pindal.

The best known find of all was the cave of Lascaux, still the most spectacular and magnificent gallery of Ice Age art ever discovered. Located near Montignac in Dordogne, it was found in 1940, in wartime, by four teenage boys exploring a hole they had discovered in some woods. Once deep inside, they lit a lamp and

began to notice colour on the walls: what they had stumbled upon was an incredible collection of 600 paintings and nearly 1500 engravings, preserved in astonishing clarity. The art is generally seen as a composition of around 17,000 years ago, but in fact it probably comprises a large number of artistic episodes from different phases. The great 'Hall of Bulls' is dominated by four huge black bulls up to 5 m (16 ft 5 in) in length, the biggest figures known in Palaeolithic art. The cave also has numerous horse and deer figures; and one narrow passage with paintings on its





high walls and ceiling still preserves sockets that held beams for scaffolding.

The cave was opened to the public in 1948, but ten years later it became obvious that the 100,000 annual visitors were damaging the art with their breath, body heat and, especially, the algae and pollen carried in on their shoes: green patches were growing, and white crystals were forming on the walls. In 1963 Lascaux was closed; the algae were virtually eradicated, and the crystals kept in check, but the public could never again be allowed in en masse.

**RIGHT:** Aurochs head hammered into a rock in Portugal's Côa Valley, the most extensive site of open-air, Palaeolithic-style figures.



**LEFT:** Discovered in December 1994, the Chauvet Cave in Ardèche, France, contains hundreds of figures, and is particularly notable for the unique abundance of depictions of rhinos and big cats. Radiocarbon analyses of charcoal from 2 rhinos and a bison figure in the cave have given results of more than 30,000 years ago - if valid, this makes them the world's oldest dated paintings.

Instead a superb facsimile, Lascaux II, which enthralls hundreds of thousands of visitors every year, was opened nearby in 1983.

New finds continue to be made: an average of one new cave per year is still found in France and Spain, though caves are also known in Italy, and there are two in the Russian Urals. Most recently, the spectacular Grotte Cosquer was discovered by a diver near Marseilles - its entrance, on dry land at the time when the art was produced (27,000-18,000 years ago), was drowned by the rising sea-level at the end of the Ice Age. And at Christmas 1994 in the Ardèche there was the discovery of the remarkable Grotte Chauvet, whose early dates, forty-seven rhinoceroses and thirty-six large felines have forced a radical change in theories about cave art, which was previously thought to be dominated by horses and bison. Chauvet confirms, if confirmation were needed, that Palaeolithic cave art has nothing to do with hunting in any direct sense. It has complex meaning, probably religious in nature, or linked to mythologies.

In recent years, detailed analyses of pigments used in cave paintings have detected the frequent use of organic materials such as charcoal, and these can be directly dated by the radiocarbon method. The results, obtained in eight caves so far including Altamira, reveal a far greater complexity than had been thought. The caves are not random collections of individual images, nor are they single homogeneous compositions. Instead they seem to comprise episodic accumulations of compositions from different periods of the Ice Age, with retouching of images and re-use of panels.

In the 1980s and 1990s a series of discoveries have revealed that 'cave art' was also produced in the open air. Indeed this was probably the commonest form of art production in the Ice Age, but the vast majority of it has succumbed to the weathering of many millennia, leaving us with the figures that survived better inside caves. Only six sites are known so far, in Spain, Portugal and France, but they comprise hundreds of figures, mostly hammered into rocks, which by their style and content seem Ice Age in date. ■