# Lectures on the Ice-Age Painted Caves of Southwestern France

## **Clayton Eshleman**

In the spring of 1974, my wife Caryl and I rented a furnished apartment in a farmhouse outside of Tursac, in the French Dordogne. We soon discovered the painted Ice Age caves in the region and after Hallam Movius Jr., a Harvard archeologist who had worked in the region for decades, arranged for us to visit the Lascaux cave, I decided to mount what Charles Olson has referred to as "a saturation job" on the origin of image-making as it could be discerned in the caves of the Dordogne, Lot, and Ariège regions. I completed my work in 1999, after many visits to these areas, and in 2003 Wesleyan University Press published Juniper Fuse: Upper Paleolithic Imagination & the Construction of the Underworld. As I write this Introduction this afternoon, Wesleyan is in the process of producing a second edition of my book.

In 1981 and 1983, Caryl and I took small groups of people to visit some of these caves. After doing the tour on our own twice, we decided it was too much work to publicize and did not do it again until 1996 when Eastern Michigan University sponsored us. Gary Snyder came along that year as guest lecturer. In 2000, Ringling School of Art and Design in Sarasota, Florida decided to sponsor us on an ongoing basis (mainly thanks to Nancee Clark, the Director of Continuing Education there). We have now done seven tours with Ringling. For many years, Mathilde Sitbon has been our French coordinator and tour assistant.

Each year we have visited a half dozen caves (including the Lascaux facsimile, the original having been closed to the public for many decades). Like all visitors, we must go with a guide who mainly, in French or English, points out and comments briefly on the images. In order to prepare our groups for these visits I wrote up lectures for each cave and gave them to our groups usually right before we left our hotel for a particular cave. Over the years I have edited and, in some cases, expanded these lectures, adding information from new books on the subject when appropriate.

Besides Juniper Fuse, I can especially recommend for people who are planning on visiting these caves (all of which are open to the public, although the number of visitors is increasingly limited for preservation purposes) two books that have been around for some time: S. Giedion's The Eternal Present: The Beginnings of Art (Bollingen, 1957) and André-Leroi Gourhan's Treasures of Prehistoric Art (Abrams, 1967). Both of these books are out of print, but can be found online. I also recommend the Michelin Red Guide for hotels and restaurants and the Michelin Green Guide on the Dordogne for cave locations and visiting hours. A car is necessary as all caves are in the countryside.

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## **Approaching the Caves**

When we enter a cave, we leave the world of bird song and blue sky for a world of constricted darkness that can fill us with a mystical enthusiasm.

The caves we will visit not only have some of the earliest image-making of humankind but their own limestone personalities: what we recognize as stalagmites, stalactites and draperies, may have struck Cro-Magnon people as earth organs. The shifting contours of stone walls, with their cracks and ridges, may have suggested animals partially emerging from, or disappearing into, such walls.

We will visit two prehistory museums, the prehistory section of Bordeaux's Musée d'Aquitaine, five caves and the Lascaux facsimile. The original cave has been closed to the public since 1962. Until 2001, a few professionals and dignitaries were allowed to visit Lascaux for forty-five minutes, four days a week. During the research for my book, *Juniper Fuse: Upper Paleolithic Imagination & the Construction of the Underworld*, between 1974 and 1997, Caryl and I visited Lascaux seven times. Because of a white mold outbreak in 2001, and more recently black spots the size of human hands in many of the paintings, the original cave is now closed to everyone. For information on the catastrophic Lascaux situation, go to www.savelascaux.org

The Musée d'Aquitaine has a small prehistoric collection, including four wall sculptures from the Laussel rock shelter, the most famous of which is known as "the Venus of Laussel." I will discuss these works when we visit the museum. Our second museum is the new Regional Prehistory Museum in Les Eyzies. Some of the focus here is on evolution, so we will begin our visit there with one of the museum's guides. I will later make some comments on a few engraved slabs from nearby rock shelters that represent some of the earliest known image-making in the Dordogne. After our visit to the Lascaux facsimile, we will visit our third museum, Le Thot, which has, in facsimile, some paintings from the cave that are not part of the Lascaux facsimile.

Concerning the caves: I will give a lecture on each cave before we visit it, including the Lascaux facsimile, and in these lectures, along with my talk on "Cave Art Theory" (from my book), I will hope to offer you a "crash course" (as we used to say in the 1960s) on Upper Paleolithic image-making in the caves of the Dordogne and Lot regions. After each lecture, we will then, sometimes all together, sometimes in small groups, visit the caves themselves—always, as required by French law, with a French guide, most of whose comments will focus on what we are seeing on the spot. Our travel coordinator, Mathilde Sitbon, will offer interpretations in English of the guides' remarks when the guide does not speak English.

I encourage all of you to take notes, and to write down thoughts occurring to you during my lectures or in the caves themselves. Near the end of our trip, all of you will have a chance to express your feelings about what you have experienced.

Were we to spend hours in cave dark, we might have the sort of experiences that Barbara MacLeod did, during long sits, in the caves of Guatemala and Belize (I quote from a paper she wrote about her cave experiences in *Juniper Fuse*, pages 133-135). For some,

like MacLeod, the cave's sensory isolational atmosphere is experienced as spirit-filled, even as hallucinogenic. For example, grotesque and hybrid cave-images suggest a fusion between consciousness and subterranean "entities." It is as if the soul of an all-devouring monster earth can be contacted in cavern dark as a living and fathomless reservoir of psychic force.

Our cave visits should give us a chance to reflect on how it might have been for Cro-Magnon men, women, adolescents and children to explore them. There is evidence that all ages and sexes visited the caves. The image-making we will see ranges from the childishly crude to the extremely sophisticated. We can imagine that many images, or wandering lines, were made spontaneously, sometimes without hand lamps in total dark, while others indicate planned artistic projects, including the heating of pigments, shading, perspective, and, in Lascaux's case, scaffolding.

Here are a few pertinent remarks by the Canadian literary scholar, Northrop Frye:

In Paleolithic times the liveliest and most spirited paintings of animals were made in caves under incredibly difficult conditions of position and lighting. Doubtless there was some aesthetic motive at work to create a work of beauty, but this would be hopelessly inadequate to account for painting in such conditions. We can add such words as 'religion' and 'magic', but the fact remains that the complexity, urgency, and sheer titanic power of the motivation involved is something we cannot understand now, much less recapture.

The nearest we can come to putting such motivation into words, I think, is to say that the bison and bears portrayed were a kind of extension of human consciousness and power into the objects of greatest energy and strength they could see in the world around them. This is the real function of what appears in words as metaphor: the assimilating of the energy, the beauty, the elusive glory, latent in nature to the observing mind. I speak of 'the mind' as though it were the mind of a separated individual, but of course the community out of which the individual artist emerges guides his hand and controls his speech....

Then again, in the cave drawings we see animal forms with human eyes looking through them, and suspect that we are really seeing a sorcerer or shaman who has identified himself with the animal by putting on its skin....

At the bottom of the primitive in literature is a totally metaphorical world with no consistent distinction of subject and object. Space in such a world is, like dream space, anywhere but nowhere in particular.

And here is a statement by the experimental filmmaker Stan Brakhage that also strikes me as pertinent to the realm that we are about to enter:

Imagine an eye unruled by man-made laws of perspective.... Our whole structure of visual thinking is based on man-made laws of perspective.... But imagine an eye unprejudiced by compositional logic, an eye which does not respond to the name of everything, but which must know each object

encountered in life through an adventure of perception. In other words, everything you see you have to be having an immediate adventure with it. It's not canned in any sense. How many colors are there in a field of grass to the crawling baby unaware of green? Imagine a world alive with incomprehensible objects...shimmering with an endless variety of movements.... There's not a moment of stillness anywhere.... Imagine a world before the beginning was the Word.

Brakhage's comments suggest an explanation for the superimposition of one form over another, as we will see in the Black Fresco at Pech Merle, in some of the engravings in Combarelles, and in the Rotunda at Lascaux, where ponies and cows are superimposed across the legs of the giant aurochses.

Here is some basic information concerning prehistory and the painted caves:

Gouged lines, zig-zags, scratches, and ochre smears on stone now appear to have occurred at different places on the earth during the Lower Paleolithic (2 million to 100,000 years ago). It is not until the Upper Paleolithic, at around 35,000 B.P. (meaning, "before the present," the present being 1950 when radiocarbon dating techniques were perfected), that figurative images in association with signs occur.

The first Cro-Magnon skeletons were discovered in 1868 in a rock shelter of that name in Les Eyzies de Tayac, where we will be spending seven days. Cro-Magnon means "big hole." So these people are the Big Hole People, a term with eerie vibrations in our times.

We can call this image-making "art" as long as we allow for the probability that it did not mean to its makers and viewers what art means to us today. It must have included magical, initiational, and utilitarian aspects that lie outside of our aesthetic considerations.

There are now estimated to be over 320 "decorated" or "ensouled" caves in Western Europe (160 in France, 130 in Spain, 25 in Italy/Sicily, 3 in Portugal). Parietal—or wall—art mainly consists of signs and animals. Such are engraved with flint blades or drawn with manganese, charcoal, or ochre "crayons."

The horse and the bison are the two most depicted animals, usually a side view in outline. Carnivores, with the exception of Chauvet, a cave in the Ardèche, are the least represented.

There are no backgrounds or ground lines. Most animals are presented in isolation.

Many activities that are important to us today are not depicted: there are only a few questionable scenes of intercourse, one possible birth scene, no depictions of people fighting, and—it is important to state—no hunting scenes.

Human figurations occur much less than animal depictions, and they are often less complete, schematic, and are, if they have heads, faceless, or "masked." The most imaginative, from my point of view, are the hybrids (human body with bison or bird head), which may reflect a proto-shamanism and thus the beginnings of poetry. Women

are depicted more often than men. Based on what has been discovered, the most oft-repeated female image are the so-called "Venus" figurines, some 140 of which have been found, from southern France, across Germany, and into Siberia.

Decorated caves do not appear to have been inhabited. Middens are usually found outside, near cave entrances. Thus the notion that such caves were "sanctuaries," or sites of initiation and introspection, is quite reasonable.

Lighting was generated by flickering wicks in oil-pooled stone hand lamps.

The primary painting ingredients—black manganese, red ochre, and charcoal—were mixed with cave water for pigment consistency.

Evidence for genuine antiquity makes use of any or all of the following: parts of paintings covered over and sealed by layers of ancient calcite; objects or paintings covered by archeological deposits; depictions of long-extinct species; stylistic affinities with organic surviving materials from which radiocarbon estimates can be obtained.

The earliest radiocarbon dated painting at this point is a charcoal rhinoceros in Chauvet, dated at 32,400 B.P.

For Hamlet, the question was: to be *or* not to be. I would propose that it was in the Upper Paleolithic, in the caves' womb-charged, absence-saturated dark, that Cro-Magnon may have realized that the real burden was to be *and* not to be.

While inside the Combarelles cave in 1970, I had the intuition that image-making was motivated by a crisis in which Cro-Magnon people began to separate the animal out of their about-to-be human heads and to project it onto cave walls (as well as onto a variety of portable tools and weapons, often made out of the animal themselves).

In other words, the liberation of what might be called "the autonomous imagination" came from within, as a projective response on the part of those struggling to differentiate themselves from, while being deeply bonded to, animals.

Shamanism, or what might be more accurately termed proto-shamanism, may have come into being as a reactive swerve against this separation continuum, to rebind this new human being to the fantasy of a paradise in which humans could converse with animals and thus, if only momentarily, make contact with the world before the separation continuum.

The religious historian Mircea Eliade proposed in his book, *Zalmoxis: The Vanishing God*, that the oldest myth we have access to today might be that of the "Cosmic Dive." This is a creation story of an animal who dives into the depths of the primeval sea to bring up the stuff of which the earth is made. This creature with mud on its paws or claws may be a metaphor for a Cro-Magnon shaman with red ochre on his hands, stuff not simply brought up, but utilized on a wall in cave depths. We now know that the mixing agent for ochre and manganese was cave water. Thus this "oldest myth" may be a cosmogonic tale based on the origins of image-making. See pages 207-209 in *Juniper Fuse* for more thoughts about the "Cosmic Dive."

## The Laussel Bas-relief Sculptures

Halfway up a slope above the Beune River (a tributary of the Vézère; we will have dinner at the Moulin de la Beune in Les Eyzies, by which the Beune flows) is a one hundred yard long rock shelter, some five miles from Les Eyzies, which for thousands of years was a dwelling place for various Cro-Magnon groups. There is good evidence that this shelter was also a fertility shrine inasmuch as it included a group of stone blocks with five human figures and at least five more blocks with phallic and vulvar engravings.

The principle bas-relief figure is known as the Venus of Laussel. She is one of the first efforts (during the Gravettian period, roughly 25,000 years ago) to depict the human figure in relief and may be considered as the prototype of the Great or Mother Goddess. However, I must also mention that the Venus figure in the Chauvet cave, discovered in 1994, is probably 5,000 years older.

The first description of the Venus of Laussel is given by Dr. Lalanne, the Dordogne physician who was her discoverer, in 1911. He writes:

It is a statuette carved into a block of hard limestone; it represents a nude female, holding in her right hand the horn of a bison. The figure is 46 cm (17 inches) tall.... The head, though largely disengaged, presents no traces of a face. Despite this, one can observe that it was carved in profile.... The neck is clearly defined and elongated.... Two long and pendulous breasts, oval in form, grow beautifully out from her chest.... The right arm falls naturally beside the body but the forearm is raised to the height of the shoulder where the hand supports a bison's horn. The whole body is polished except for the head.... The statue was originally painted red.

To this description I can add: the horn has 13 notches which might represent the 13 lunar months of a year. It could also be an obstetrical calendar or a musical scraper. The traces of red ochre, at the time of discovery, were confined to the left breast, lower stomach and the area chipped out between the body and the right arm, possibly indicating menstrual symbolism. The figure may be pregnant or just obese; however, the reverential placement on the belly by the left hand suggests to me pregnancy.

Sigfried Giedion, in *The Eternal Present: The Beginnings of Art*, writes:

The figure and the block are inseparably interlocked. In the position selected by the artist for this relief, the block had a slight overhang, so that the figure swelled forward gently. When seen from the side, the curve appears as taut as a strung bow. It swells up to the extreme point, the maternal belly, then falls away at either end and sinks slowly into the rock, in which the feet seem to melt. The upper part of the body curves gently backward, and the head, resting between two rock projections, seems to be reclining as though on a cushion.

Giedion also comments, concerning the notched bison horn, "This position recalls the

belief, current among some African tribes, that a horn filled with blood is the highest symbol of fertility."

A second bas-relief figure, identified as the Quadrille Woman, is less complete, being broken off from the pelvis down. She also has traces of red ochre, and, while less realized than the Venus of Laussel, has similar characteristics: even more voluminous bulging sack-like breasts, belly with navel, wide buttocks, and a partially destroyed genital triangle. Her left arm is raised somewhat like the Venus's right arm and appears to be holding something. Her left arm, hanging by her side, also appears to be grasping something. Her most distinguished features are the vertical and horizontal furrows covering her face.

A third block has the relief of a standing man. The upper part of his body is turning to the right with the left shoulder advanced. The outstretched left arm is still partially intact, but the right is only a short stump. Scholars have conjectured that he is either an archer or a spear-thrower. His head is badly damaged and it is unclear if it was ever completely sculpted (the same can be said about the head of the Venus of Laussel, the left side of which can be read as long hair; looking at the edge of the right side, which would have been her face I have fantasized a fish face). There are two deep horizontal lines above the male figure's hips which look like a belt or girdle. In comparison to the heavy-set female figures, the male is slender. His outlines are firm and sensitively rendered.

A fourth figure, gouged in another block, is one of the most mysterious in Upper Paleolithic art. The image is about 8 inches high, and appears to depict two figures, with a head above and a head below, mirroring each other, or, in Paul Balm's phrase, "resembling a playing-card." The most precise description of the figures, or figure, is still that of Dr. Lalanne, Laussel's excavator. He describes the possibly interlocked figures as follows:

One of the figures is a woman, recognizable by her large, pendulous breasts.... The belly is represented by a strong, central projection.... The thighs are raised. The arms extend the length of the body and the hands appear to be beneath the lower limbs. The second figure...is in an opposite position but symmetrical to the figure already described. Only the chest is carefully sculpted; the rest of the body disappears beneath that of the woman.

Conjectures by Giedion and others as to what is depicted include copulation, childbirth, a standing Venus figure making use of an earlier unfinished figure, an androgynous figure, two half figures joined at the waist, and a person standing waist-deep in water.

Comparing Giedion's shadowed black and white photo with Bahn's smaller but color photo (presented, it appears, upside down in *Journey Through the Ice Age*), I decided that the best interpretation is copulation: a woman sitting, knees raised, on a man whose lower body is beneath hers and thus, in the engraving, invisible. This interpretation is not without problems, as the lower figure consists of only a head and upper chest. But the lower figure's head is roughly the same size as the upper figure's, suggesting that it is not that of an infant being born.

A fifth bas-relief of a female figure holding out a basket-like object was illegally sold to

a German museum soon after its discovery, and then destroyed during the bombing of Berlin in 1945.

Such bas-reliefs seem to appear, out of the Cro-Magnon night, as liftings into view of the newly emergent human, out of a morass of perception crossing perception. Subconscious trophies, breakthroughs, wrestlings of minds amazed, in pointless exploration of what is and what is not. Hamlet at 30,000 B.P. Out of this vise, the earliest metaphors break through.

## **Rouffignac & Combarelles**

Before discussing the first two caves we will visit, I'd like to make a few remarks about the difference between portable and parietal Upper Paleolithic art.

In contrast to portable art—worked off materials that appear to have been part of an everyday, survival world—deep cave art involved the exploration of an interior and foreign landscape. By drawing in the recesses of a cave, the boundaries of the familiar were extended, and an insideness was engaged, an insideness that with its bizarre and marvelous rock formations may have appeared to be the earth's equivalents of corporeal insides.

Other contrasts abound. Portable art is concentrated and restricted to an object's often very small surface, one that is sometimes round, thus partly unseeable as a person carves. Much portable art was done on material that was once alive, and while such may give a carved piece of deer antler a unique soulful feeling, the antler is also an element of an animal that is assimilated by humans, one that is part of—as well as used by—their bodies.

Cave art takes place on a surface that is relatively flat, sometimes vast, stationary, and not directly related to survival. The size of a figure is often up to the drawer's discretion. While caves are organic, their still and very dark presence is on a much different order of organic life than fauna and flora. At the same time, cave walls form a seamless congruity with the outside world. Cave art is also unframed, and seldom reflects any awareness of horizontality or verticality (in contrast to, say, Egyptian art, which includes the right angle and architecture).

While a ground line is suggested by wall surface contrasts in Lascaux, Upper Paleolithic figures do not seem to ever have been presented in a landscape (other than schematically in a few portable objects). Perspective is utilized in a few caves, but there is no background in the sense that we would say a portrait or a still-life has a background. Many of the animals seem as still as the stone on which they are depicted. Such has led one writer to propose that the "models" for the depictions are dead.

The decoration of Lascaux, for example, required scaffolding, considerable advance preparation (collecting pigments miles away from the cave, heating ochre dioxides to change their colors, fashioning brushes, burins, lamps, etc.), work coordination and, undoubtedly, some kind of apprenticeship. While the paintings and engravings had no visual background, they certainly had an aesthetic one, and a tradition, in that they evolved out of earlier, less sophisticated techniques and images. We are probably closer in time and aesthetics to Lascaux today than the painters of Lascaux were to early Aurignacian engravings within walking distance of the cave.

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We will visit Rouffignac first. It has an electric train which conveys visitors to the

decorated areas to be visited (a justification for the train is that Rouffignac is immense: more than five miles of galleries). It is also a cave of whose paintings the authenticity was seriously disputed in a controversy of the mid-1950s. Speleologists ultimately lost out to archeologists, including the formidable Abbé Breuil and Hallam Movius Jr. of the Harvard Peabody Museum, who in arguing for Rouffignac's authenticity settled the matter for that time.

Today, while most of Rouffignac's paintings are considered authentic, a small but significant number are disputed. There is the frieze of 3 rhinoceroses—speleologists claimed that two of them appeared between September and December 1948, and the third by Easter, 1949. And on the Great Ceiling, there are 11 ibexes, the only ones in the cave, which are drawn as stiff, squarish animals. Such ibex drawings are not to be found elsewhere in Upper Paleolithic image-making. Some people also contest the authenticity of one mammoth there that, again, appears out of character for Upper Paleolithic images.

A book published in 1953 based on visits to the cave in the 1940s showed the rhinoceros frieze, but at the same time did not mention any paintings in the text. When the author was queried, he said that the paintings were not mentioned because they were of recent origin. As early as 1907, Rouffignac had been visited and documented with no mention of paintings. Between the discovery of Font-de-Gaume in 1901 and that of Lascaux in 1940, no one commented on Rouffignac as a cave with paintings (and the area during those years was crawling with speleologists and archeologists). Then in June, 1956, two archeologists—Louis Nougier and Romain Robert—returned to Rouffignac, discovered around 230 paintings, and declared them authentic. In their report, they quoted from a 1575 document that mentioned "paintings in many places." To further complicate matters, Paul Bahn points out that Nougier and Robert were wrong, and that there is not a single mention by anyone of paintings in Rouffignac until the mid-twentieth century.

Breuil's argument for authenticity is mainly based on stylistic comparison, which we now know is shaky. However, in the mid-1950s, Breuil's word carried enormous weight. Movius, in backing up Breuil, commented that certain paintings were faded precisely as one would expect from weathering, inasmuch as they were located near a hole that wind went through. Evan Hadingham mentions that there was a chemical analysis of pigment samples based on the 1956 discovery. He gives no details and one is left to assume that the analysis supported authenticity. Recently, Bahn wrote that the multiple analyses and tests called for had never taken place. In a letter to me, he mentioned that the graffiti entangled with some of the animals on the Great Ceiling has been cleaned off by the owners so that it is no longer possible to tell if it was under or over the paintings. Bahn said that the only hope now is to test the organic material, if there is any, in the paintings. In the 1960s, Leroi Gourhan accepted absolutely the authenticity of Rouffignac and proposed that the Great Ceiling was comparable to the Altamira ceiling and the Salon Noir in Niaux.

In my opinion, the animals on the walls look ancient, but on all of our visits to the cave in the 1970s and 1980s, many of the animals on the Great Ceiling looked "funny." Some looked like stiff, schematic copies of other animal depictions, though I've never been able to identify which specific paintings they may have been based on. It is possible, of

course, that such models do not exist and that the suspect animals on the Great Ceiling were done on the basis of a generalized memory of what Upper Paleolithic animals should look like.

In all fairness, it should be pointed out that there are nearly inaccessible places and sub-levels of Rouffignac that have paintings. One wonders whether forgers would have gone to the trouble of placing paintings in such places. And Leroi-Gourhan points out that it is possible in caves to pass certain details time and time again without seeing them. Some engravings in other caves are so subtle that a right-hand light will expose them while a left-hand light will make them disappear.

Rouffignac is also known as "The Cave of 100 Mammoths" (there are actually around 150). This huge and magestic animal, whose hump was ten feet above the ground, lived in the glacial steppe and tundra. As a catch, it represented an enormous reserve of meat and fat. It is said that a single mammoth kill could by itself support a group of 25 people for 43 days, and if such meat constituted only 50% of their diet, those days can be doubled. Mammoth tusks provided a large supply of ivory, from which Paleolithic people made all sorts of implements. In the Ukraine, cabins built enitrely of mammoth bones have been excavated and reconstructed. The end of the Würm glaciation, 10,000 years ago, brought about a terrific climatic upheavel and Europe became covered with thick forests. The mammoths, needing a cold climate, migrated north and are said to have died by the thousands in the enormous snowstorms triggered by the rise in humidity caused by the post-glacial thaw.

The second most prominent animal in Rouffignac is the rhinoceros, of which there were only a dozen in all of Upper Paleolithic art until the discovery of 65 in Chauvet. Like the mammoth, the wooly rhinoceros is extinct. However, we know quite a bit about them as whole carcasses have been found preserved in the ice in Siberia, with even the stomach contents intact. They were up to 11 feet long and 5 feet high, so powerful and dangerous as to nearly be invincible. They fed on steppe plants, branches, and leaves, and because other game was plentiful and much easier to obtain, they were probably seldom hunted. Until Chauvet, the most notable rhinoceros depiction was the one in the Shaft at Lascaux.

The Rouffignac train will take us into the two main corridors, the north corridor, called the Breuil Gallery, and the northwest corridor with the Great Ceiling.

In the Breuil Gallery, on the left hand wall, there are a number of engravings of horses, bison, and mammoths. On the right hand wall are a number of black paintings: the frieze of rhinoceroses all facing in the same direction, and a frieze of mammoths arranged in two facing groups.

Only at the Great Ceiling will we be allowed to get off the train and walk around (the original floor here was 6 feet higher than the current one, which was deepened to allow visitors to stand under the Ceiling and view the animals). According to Leroi-Gourhan, the Great Ceiling contains 15 mammoths, 11 ibexes, 9 bisons, 7 horses, and 3 rhinoceroses. A total of 45 animals. In contrast, Ann Sieveking finds 37 animals here, and John Pfeiffer finds "over 60." As seems typical at Rouffignac, no one seems to agree

with anyone else!

When we ride through the various corridors, we will see cave bear wallows. Bears appear to have been in Rouffignac as early as 40,000 years ago. The walls and even the ceilings are sometimes covered with claw scrapings, leading me to write in one poem, "bear claw hut rain," with the thought that bear claw lines may have been seen as hut or rain shapes by Cro-Magnon.

While there are very few man-made signs in Rouffignac, a gallery we will not visit is covered with thousands of crisscrossing finger-traced meanders in the soft, reddish clay, suggesting thousands of individual acts of participation.

Rouffignac is dated—only stylistically at this point—at around 13,000 B.P., between the Middle and the Late Magdalenian. "B.P." as I've mentioned before means "Before the Present." The "present" has been arbitrarily fixed at A.D. 1950 because absolute radiocarbon dates were first obtained in the early 1950s. By "absolute" I mean dates obtained by laboratory analyses of ancient remains or deposits. Stylistic analysis only offers relative dates.

Jean Clottes has written that "Radiocarbon dating is an important method for obtaining accurate dates for fossils and artifacts made of organic material. At death, the quantity of carbon-14 present in each living organism starts decreasing at a regular rate. It is possible to arrive at the age of death and obtain a date by measuring the amount of radiocarbon left in the sample. There is, however, a statistical uncertainty linked to the date. 20,000 B.P.  $\pm$  300 means that the organism died between 20,300 and 19,700 years before 1950; moreover, the chances of the date's being within this range is 67%. To have a 95% chance of accuracy, one must double the uncertainty."

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Our second cave is Combarelles. Based on the 1984 carbon-14 dating of bones in archeological layers from a midden at the entrance to the cave, the art inside has been dated between 13,680 and 11,380 B.P. The cave itself is a 300 yard tunnel whose walls are as furrowed as elephant hide, making it, one would think, extremely resistant to engraving. Combarelles, however, is a nearly totally engraved cave, with over 600 figures and signs now identified (there are also 2 red tectiforms, 2 painted animals, and a negative hand print in black, suggesting that engraving was done by choice).

The floor has been lowered by a yard to enable visitors to walk comfortably through tunnels that are hardly wider than an adult's outstretched arms. We will thus have to go through Combarelles in groups of five, not only because it is difficult for more than five people to cluster around a guide pointing out a difficult-to-identify engraving, but also for preservation reasons: human warmth provokes condensation on the walls which in turn produces a white pulverulence (or dustiness) in the calcite deposits on the walls. Because the number of visitors is limited per trip and by day (100 as of 1996, and 70 as of 2004), the cave is able to clean itself out at night, and in guide Claude Archambeau's opinion will not face the serious deterioration problems that nearly destroyed Lascaux in the early 1960s—which I will go into when I discuss Lascaux.

Claude and his wife, Monique, now retired, were the main guides and caretakers at Combarelles for many years. Monique did her Ph.D. dissertation on the cave in which she determined the chronological situation of some 50 human figures, describing them in detail and arguing that they are regularly associated with the horse—the most frequently depicted animal in Combarelles. Over the years, the Archambeaus have discovered many new engravings unknown to other people who have commented on Combarelles. Sieveking, writing in the late 1970s, stated that there are 250 engravings. André Leroi-Gourhan's apparently detailed map of the cave identifies only a small portion of the figures.

While Combarelles has been described as "serpentine," it is less undulant than angled. We will walk for around 70 yards before seeing any engravings—the first of which is a geometric human face. At this point, engravings of all sorts begin to swarm the walls, crisscrossing the natural furrows and fissures (which makes them without proper lighting very difficult to make out). While I cannot be sure what we will be shown, I will mention several memorable engravings and assume that you will see at least one or two of them. To see everything in Combarelles would take a lifetime.

After Lascaux—with 355—Combarelles has more horses than any other Upper Paleolithic cave, around 120 I believe. The horse is the most frequently depicted of all animals throughout Upper Paleolithic art (the bison is the second, and unlike the horse, is sometimes associated with hybrid and proto-shamanic imagery). The most frequently represented species appears to be the Przevalski horse (so named after the traveler who discovered it in 1881) which today is found in the wild only in Mongolia. The Przevalski horse, which came close to extinction in the 1950s, is small and broad-backed, with a fat, low belly and short legs. The brush-like mane only rarely falls to one side. The coat is short in summer, long and thick in winter, pale yellow to bluish grey. This animal must have been difficult to hunt because of its strength, speed, and agressiveness. Do not try to feed them!

In Combarelle's first area of engravings, on the right-hand wall, there is a mammoth with two trunks, its body outline partly buried in the scarred rock.

A bit further on, to the left, there are three headless female figures in profile, one with strokes down through her buttocks who will remind you of the female profiles on the slab from La Roche Lalinde in the Les Eyzies Prehistory Museum. According to the Archambeaus, there are around 100 human or humanoid figurations in Combarelles—considerably more than Monique included in her study—the largest number on the walls of any Upper Paleolithic cave.

Shoftly after the three female figures comes the first turn in the engraved area of the cave. There are more humanoids at this point, including a somewhat obscure frieze showing an ithyphallic male possibly in animal disguise leaning toward a woman also possibly disguised as an animal; superimposed on the rear portion of the male figure is a smalller hominid whose gender is impossible to determine.

At the end of this short passage, one makes a right turn into what is called the Middle Gallery (one is now walking parallel to the first area of engravings, called the Front

Gallery). Near the end of this gallery, on the left, is a lioness following a lion whose tail can barely be made out. The lioness's head is one of the masterpieces of Magdalenian engraving. On the basis of such engravings, S. Giedion declared that "the richest find of engravings showing a structural treatment of the body surface is to be found at Combarelles."

A little further, at the second turning (which serves as the rear section of the Middle Gallery), to the right, is a remarkable engraving of a reindeer with lowered, outstretched head, apparently drinking from a fissure in the wall. The reindeer's antlers leap up like flames. There is a mastery of outline from the tip of its muzzle to the root of its tail. As I stared at it years ago, the fissure became a void, and the composition a Magdalenian vision of the engraver and the animal drawing nourishment from the unknown.

On the right wall of the rear section, there is one of Combarelle's 19 bears. This one gives the impression of being hung, like a hide, on the wall, or sort of shuffling along, head and tail down. It is generally described as a cave bear because of its bulging forehead (in contrast to the European brown bear with a flatter forehead).

The rear section then turns again to the left, becoming the Inner Gallery, an area not open to the public: it has no wire-mesh walkway and once when I visited the floor was rocky and waterlogged. In this gallery, there are a number of humanoid heads in profile, seemingly bending forward. All are animalized, or beast-featured, leading to one theory that male depicitons in Upper Paleolithic art are generally masked (there are exceptions to this throughout cave art, including Combarelle itself: at the beginning of the engravings there is an isolated male head facing the viewer, with staring blank eyes). However, none of these so-called "masks" have discernible fasteners or indicators of something placed on or around an otherwise human head. During the exploration of Chauvet in 1994, a figure was discovered with a bison head and a human body bending over a black downpointing triangle—as if the origin of the Minotaur was incipient at 30,000 B.P.

In 2002, the Italian scholar Massimo Bacigalupo published a selection of drafts of *The Cantos*, from Ezra Pound's manuscripts, typescripts, and magazine publications. In this selection, he included the following poem, apparently a rejected version of what is now Canto 2, which was pointed out to me by Robert Creeley in 2005:

Dissatisfaction of chaos, inadequacy of arrangements,
At les Eyzies, nameless drawer of panther,
So I in narrow cave, secret scratched on a wall,
And the last reader, with handshake of departing sun
drifts from sorrowful horizon, patient thus far, now impatient
e tu lettor, with little candle long after,
have pushed past the ruined castle, past the underbrush
tangled and netted
past the ant-hive, in narrow dark of the crevice
On the damp rock, is my panther, my aurochs scratched
in obscurity.

While this fragment appears to be undated, it is probably a response to Pound's walk-

ing tour through the Dordogne in 1912. The engravings in Combarelles were discovered in 1901 and it is probably this cave that Pound visited and responded to. I think his "panther" is the engraved lioness in the second section of the cave. Pound refers to the cave as "narrow," and since Combarelles is indeed quite narrow, this is another reason for believing that the poet was there.

#### Font-de-Gaume

Discovered by Denis Peyrony in 1901, Font-de-Gaume is a narrow and very high "corridor-sanctuary," about 165 yards long. The ensouled area, which begins 65 yards from the entrance, consists of a Main Gallery with Two Side Galleries. Many of the paintings have deteriorated and are now difficult to "read" (prompting Giedion, in the late 1950s, to tell readers that for Font-de-Gaume they should rely upon the reconstructions—actually, elegant drawings—by the Abbé Breuil, a complicated matter I will discuss later).

Calcareous deposits line the walls, proliferating into some of the paintings, giving them a cloudy, white overcast. There is, in addition, some graffiti, easy to recognize as such, but depressing to contemplate. Since Font-de-Gaume had an open, accessible entrance for hundreds of years before the paintings were discovered by Peyrony, the graffiti was probably done by visiting local people who either did not even see the paintings or, if they did, had no idea of their significance.

Deterioration is, of course, after Lascaux, associated with tourist access and over the past few years such access has been, in a few cases, increasingly restricted—even in Combarelles which has no paintings to speak of. A few years ago, 700 people were permitted to visit Font-de-Gaume; in 1996 this figure had shrunk to 200 people per day. Combarelles is now down to 70 a day in groups of 5. None of the caves open to the public in the Lot and Ariège Departments has of this date placed a limit on the number of visitors.

Font-de-Gaume is recognized as a Late Magdalenian cave, based on stylistic comparisons, with its paintings spanning 13,000 to 11,000 B.P. It has many tectiforms and bison—80—among its 200 animals and signs.

The Upper Paleolithic bison (*Bison priscus*), which became extinct with the spread of forests at the end of the last glaciation, had a height of 6 feet 6 inches, a hump at the shoulder level, long horns, and a powerful jaw with pronounced forward-jutting beard. In winter it was covered with thick, dark, woolly fur which moulted in the spring, leaving in its place a much lighter-colored coat (possibly depicted by the red swath across one of the hindquarters-crossed bison in Lascaux's Nave). Every killed bison represented a windfall for an Upper Paleolithic tribe: 1,000 to 1,500 pounds of excellent meat, fat to be used in the preparation of skins or as fuel for lamps, the skeleton for bones to be engraved, or used as winter fuel, and of course the skin for clothing, boots, or floor coverings.

The bison at Font-de-Gaume are painted on the remains of deep engravings and on a well-scraped surface. Some have massive, mammoth-like humps that give them a distinctive Font-de-Gaume identity (in contrast to some of the bison in the Salon Noir of Niaux, in the Pyrénées, which are humpless and quite streamlined). The Font-de-Gaume bison are outlined with a fine, engraved line, reinforced by a heavier line of black paint, and then colored in with red, or a darker tone of mixed red and black. Font-de-Gaume and Lascaux are the only caves in the Dordogne with polychromatic paintings. The dorsal lines of the Font-de-Gaume bison are often determined by an undulating

crevice in the rock. The animals are positioned on the wall in such a way that they appear to pull uneven surfaces into an undulating pattern. In a half dozen figures a specific contour in the rock is used to develop the animal's body—as if the entire body mass is stimulated by the appropriation of the contour. In one case a deep crevice is used as an outline of the back of a bison's forelegs and their fusion with its body. In another, a bison's belly is stretched to an unnatural length by wrapping it across a long, horizontal fault. While these bison in profile make use of flatly uneven or slightly curved wall space for the most part, the contour appropriations throw, on one hand, a visual torque into the entire body (making it seem to writhe and bristle at the same time that it is static), and, on the other, evoke an inward, dimensional depth. All in all, the multi-directionality of these various stresses result in an intense, specific and generic bison presence.

There are 19 obscure signs in Font-de-Gaume known as "tectiforms." The word comes from the Latin, "tectum" meaning "roof." Those in Font-de-Gaume generally have a tent-shape, possibly representing a dwelling or hut (the Abbé Breuil referred to them as "spirit houses"). They also look like squat arrows pointed upward, attached to a solid horizontal base (curiously, several such signs appear in de Kooning's 1950 painting *Excavation*, to be found in the Chicago Art Institute).

Painting or engraving a tectiform on a bison strikes me as similar, in one respect, to engraving a vulva across an engraved horse neck, as one finds on a slab from Abri Cellier, now displayed in the Les Eyzies Prehistory Museum. Such a juxtaposition implies a narrative relationship. One could call it a proto-metaphor. Something appears to be equated with something else, as if to imply that horse head power is equal to vulva power, or that in Font-de-Gaume a bison is a tectiformal bison, or even a tectibisonform.

Most of the 19 tectiforms to be found in the cave do look very much like huts, or lean-tos, and are put directly onto the bodies of the bison—one bison has three tectiforms—or placed around them. One possible way to read such bison/tectiform combinations is to think of the bison bones as material to be used in manmade shelters. While no evidence for such has been discovered in the Dordogne, sites with communal dwellings constructed on a frame of mammoth bones have been unearthed in Russia and the Ukraine.

It is also interesting to note that *concave* wall surfaces appear to have been chosen for bison compositions at Font-de-Gaume in contrast to the *convex* ceiling formations used for bison at Altamira in northern Spain.

Another comparative point: the animals in Font-de-Gaume, for the most part, are static and peaceful—in marked contrast to the leaping, trotting, and falling animals of Lascaux and Pech Merle.

At the conjunction of the Main and second Side Gallery, there are a few compositions worthy of attention. On the right wall of the Side Gallery there is a bounding horse whose hind legs and rump are formed by stalactitic folds. Giedion suggests that it is a stallion in pursuit of a mare. However, it appears to me that the animal has a distended belly. Does such distension indicate pregnancy, making it a mare? Or is this

distended belly part of a stylistic convention?

On the wall of the Main Gallery facing the Side Gallery is a reindeer whose head has apparently worn away. A fine, running line across the reindeer's body separates the dark and light portions of its hide. Such refinement and shading is traditionally associated with the Late Magdalenian. Thus the bison following this reindeer, whose interior shading seems less sophisticated, is placed by Giedion in the Middle Magdalenian.

Another fascinating scene near the headless reindeer: two long, black, curving antlers appear with a hump and back line moving horizontally away from them. The antlers belong to a stag which is bending over and nuzzling the head of a doe kneeling before him.

On the left, a little further along the Main Gallery, is a small chamber called the Apse, or Chamber of Small Bison. Its recessed, arching dome appears to have been rubbed, or primed, with red ochre before the animal outlines were painted. It contains the remains of three aurochses, some quadrangular and tectiformic signs, and around a dozen small bison with exaggerated manes and beards. Cloudy calcite formations make the animals hard to see: some of them have been completely opaqued by the calcite. Oddly enough, a few of the bison are enhanced by the calcite, which one can imagine swirling about the animals like a blizzard.

Beyond the Chamber of Small Bison there is an extensive terminal fissure, which progressively narrows. Because of the squeeze, potential claustrophobia, and possible smearing of paintings, non-professionals are not taken beyond the bison chamber. The paintings in the terminal area lack the finesse of many of the paintings in roomier areas of Font-de-Gaume, but they are all interesting in their own way and some are very hard to identify. Besides several bison, bovines, and horses, there is a stag, a rhinoceros, and a feline. There are also two schematized human profiles and a hominidesque "ghost." Right before the dead-end there are 7 red strokes.

If you have seen rather elegantly drawn animals from Font-de-Gaume in books on prehistory, chances are you have seen the Abbé Breuil's copies, originally published in 1910 by the Prince of Monaco, Prince Rainer's father, who was a great supporter of prehistorical research. Breuil was a talented artist, and based his drawings on tracings (no longer done, as they can damage the art) done in La Mouthe (1900), Altamira (1902), and Marsoulas, Font-de-Gaume, Combarelles, and Les Trois Frères in the following years.

While we owe Breuil a real debt of gratitude for all this work, it has become increasingly evident that a Breuil *copy* is a Breuil *version*, and much more subjective than may appear (in a way that literary translations often reflect a modeling or reshaping of the original material by the translator, making it conform to what he feels it should become in the second language). Breuil's versions, in fact, are more in evidence, via illustrated books, than the originals themselves.

Because Breuil believed that Upper Paleolithic "art" was based on hunting magic, he tended to concentrate on animals as individual forms, filling in missing parts at times

and rounding out shading to offer, as in the case of his Font-de-Gaume bison, bloom-like, elegant creatures. When he came upon lines that seemed to have no relevance to animal outlines, he often left them out (calling them "parasitic lines," as if they had maliciously attached themselves to, or were infesting, otherwise intact and "healthy" animals). He would sometimes lift several predominant figures—such as the bison-headed man dancing behind two capering or fleeing animals in a Trois Frères engraving—out of a complicated composition involving lines, whole and partial figures, as if he were releasing clear-cut forms from a kind of sketchbook redundancy (it would be like reducing a Giacometti drawing to a single outline, and treating the overdrawing and redrawing as superfluous). Today, in contrast to what new techniques in copying tell us, Breuil's drawings look too perfect, too clean. In contrast to his aesthetically refined work, contemporary drawings of Upper Paleolithic paintings and engravings often show the Cro-Magnon creator as being unsure of himself, of redoing line after line, and of being at the mercy of poor lighting or of an already-fractured wall surface that resisted his intentions.

Utilizing infra-red and ultraviolet lamps, Alexander Marshack's and Jean Vertut's photography have picked up layers of paint below the final layer, sometimes indicating that a painting was retraced/repainted again and again. It seems that earlier paintings were reinvigorated by newcomers to a cave who put their fingers or burins into a power source, as it were, and recirculated its mystical electricity.

Vertut, the foremost photographer of European cave imagery, who died suddenly in 1985, aged 56, pioneered an effort to recreate the ambience of the cave environment; he sought to capture three-dimensional space that could not be registered in flat photographs. In the 1960s, he photographed the clay bison in Le Tuc d'Audoubert using four lamps, and in the 1980s re-photographed the same bison using six lamps to enhance the three-dimensional rendering. Via steroscopic photography Vertut was able to display not only the bison but the low-ceilinged chamber in which they were positioned. Finally, he documented them in photogrammetry, and then via a computer he helped construct a model of the bison for an exhibition at the Musee de l'Homme in Paris.

#### Lascaux

Lascaux, the most famous of the decorated Upper Paleolithic caves and, until the recent (1994) discovery of Chauvet, unquestionably the most beautiful, is part of a karstic network. It is hollowed out of limestone and consists of an upper level (the accessible, decorated part) and probably a lower level which is today impenetrable. Even before it was painted, Lascaux was very beautiful. It is under a layer of impermeable marl which has prevented the formation of stalactites and stalagmites. Most of its paintings are on surfaces covered with coarse, glistening, calcite crystals. The engravings, and engraved paintings, are on bare, ochre-colored, granular limestone.

Lascaux was discovered on September 12<sup>th</sup>, 1940, primarily by 17 year old Marcel Ravidat and 15 year old Jacques Marsal, both of whom—Marsal especially—became the caretakers and guides of Lascaux. Several days earlier, Ravidat and other friends had discovered a hole created by a toppled juniper. The boys dropped some stones into the hole and heard them hit far below. On the 12<sup>th</sup>, Ravidat returned with Marsal, equipped with a lamp made from an old oil-pump, and a big knife. He widened the hole so that he could squirm in five or six yards, at which point he tumbled to the cave's floor into what is now known as the Rotunda. With Marsal and two other boys he explored the cave and discovered the paintings.

For many years a story was told in which it was said that Lascaux was discovered by Ravidat's dog, Robot. There is some basis for this, as during the first trip Ravidat had been drawn to the toppled pine hole by the barking of Robot who had become entangled in its brambly overgrowth. However, it appears that Robot was not around when the boys went down through the hole.

The most recent dates for the decorating of Lascaux come from Norbert Aujoulat's 2005 book on the cave, *Lascaux*: *Movement*, *Space*, *and Time*. Aujoulat was in charge of Lascaux from 1989 to 1999. The oldest date is 18,600 B.P. based on the 1998 radio carbon dating of a reindeer antler at the foot of the Shaft. A second set of dates from the late 1950s, based on pieces of charcoal taken from the Shaft and Passageway, yield 17,190 B.P. and 16,000 B.P. dates. The most recent date, 15,500 B.P., calculated in 1951, is also based on charcoal taken from the Shaft. Except for a bit of charcoal found in the head of a horse from the Rotunda, no paintings in Lascaux have been found that contain charcoal. We must keep in mind that charcoal dates are based on when the wood was burned, not when it was applied to the wall in a painting.

The cave is dominated by large aurochses. However, in southwest France no aurochs bones have been found between 26,000 and 11,000 years ago. Aujoulat states that temperature fluctuations could have resulted in north-south migrations, possibly explaining the elusive presence of aurochses in the Dordogne. Paul Balm, noting stylistic resemblances between some Lascaux figures and those of Spanish Levantine art, dated between 10,000 and 7,000 B.P., proposes that some of the Lascaux art may be Mesolithic.

Following the extremely cold Solutrean period, the landscape of the Early Magdalenian had changed completely, with the onset of a mild, fairly humid climate comparable to that of the Dordogne today. In the sheltered bottoms of valleys hazels, limes, walnuts,

oaks, and junipers grew. There were grass prairies, salmon and trout in rivers swollen by melting glaciers, and pools with aquatic birds. Mammoths and megaloceroses (giant elk) seem to have disappeared (there are none depicted in Lascaux), to be replaced by great herds of herbivores. Reindeer continued to migrate and provided the Magdalenians with virtually all of their essential needs: 88% of the bones found in Lascaux are reindeer and every bit of that animal could be made use of, including antlers, skin, offal, meat, tendons, ligaments and bones (there is, however, only one reindeer depicted in the cave).

The Magdalenians of Lascaux were smaller than the big Cro-Magnons of the earlier Aurignacian period. Along with the aforementioned fauna and flora, they had access to wild boars and hares, as well as currants, strawberries, and blackberries. It appears that they frequented Lascaux during the summer, bringing plants into various areas perhaps as stuffing for skin-covered cushions.

There are 605 identifiable animals in Lascaux (including one humanoid): 364 horses, 87 aurochses, 90 red deer stags, 3 red deer hinds, 20 bison, 35 ibexes, 7 felines, 1 bear, 1 reindeer, 1 rhinoceros, and possibly 1 musk ox. There are also over 400 identifiable signs (most caves have no more than a few dozen), which include straight, parallel lines, star-shaped signs, branching shapes, nested convergent lines, tectiforms, claviforms, quadrangles, and composites. There are also over 100 dots, often arranged in undulating rows. In terms of fauna, there is a discernible "Lascaux style," especially in the depiction of horses: swollen bellies, small heads, short, lively legs, with coats often indicated. The most well-known are referred to as the "Chinese horses," presumably because they resemble horses in classic Chinese paintings.

Below the calcite-crystal-covered surfaces, there is a brown ledge which acts as a kind of ground level for the paintings in the Rotunda and the Axial Gallery. While the ground on which the animals move is never directly indicated, it is implicit throughout part of the cave via this ledge, which gives the illusion of multidirectional processions of animals (that is, they do not appear to be arbitrarily placed like paintings on the walls of an art gallery). One recurring theme is the association of large bovines (aurochses or bison), and troops of small horses strung out in a line, walking, trotting, or frisking in the opposite direction.

One should keep in mind that image-making in the Dordogne region originated prior to 30,000 B.P., so that the transcription of three-dimensional nature to a two-dimensional plane was ancient history for the Lascaux Magdalenians. Unlike the Aurignacians of their region, they appear to have been intent upon making species recognizable, anatomically accurate, and, at times, fantastic. To do this they developed (or possibly inherited *and* developed) several methods of perspective. They sometimes depicted the head and body of an animal in profile but drew horns and/or hooves in a three-quarters frontal view (what the Abbé Breuil called "semitwisted perspective"). Sometimes hooves are depicted in a circular manner, as if observed from above; at other times, the ungulae are split pincer-like as if seen from below. A three-dimensional effect is created by the superimposition of figures—some overlap the silhouettes of their neighbors, putting them on a closer plane to the viewer. Another three-dimensional effect is created by allowing a strip of calcite between the

body of an animal and one of its legs, backgrounding that leg in contrast to the other leg which has no strip of "distance," as it were, between it and the body to which it is attached.

There is a sureness of execution in Lascaux that argues strongly for the idea of masters and apprentices with coordinated painting activities. It appears that scaffolding was constructed in those areas where paintings or engravings were created beyond human reach (some are 13 feet from the ground; the Lascaux Magdalenians were around 5 feet tall). In the Axial Gallery scaffolding holes have been found packed with incrusted clay and traces of wood chips.

The principle pigments used in the paintings were a wide range of iron oxides (ochres, haematite, black and grey magnetite), silicates, manganese, black ochre, and charcoal. Most of the pigments had to be gathered in their natural state—as deposits containing coloring matter in quarries and outcrops—sometimes as far as 25 miles away from Lascaux. By heating iron oxides it was possible to change their original colors. At 1,832° F, ochre gradually darkens and changes from yellow to yellow-brown, to red, to red-purple, and finally from red to black (a fascinating variation on the medieval alchemical series of transmutations, from black to white to yellow or red). Lascaux research indicates that the best binding agent was water of the cave itself, rich in salts and dissolved calcium. Crayons made of dense, compressed coloring matter were probably used for drawing outlines. In the past, it was thought that figures were probably filled in by dabbings or spoonings, or by brushes made of animal hair and vegetal stems tied together. We know they had mastics strong enough to fix flint to handles, so it seems unlikely that putting a brush together would have been a problem. The Abbé Glory, who worked in Lascaux in the 1950s and 1960s, found 158 fragments of mineral pigments and 20 bone tubes containing colored powder.

Michel Lorblanchet, an archaeologist who has reproduced some of the paintings in Pech Merle, however, believes that the painted figures of Lascaux were essentially sprayed—by mouth or with a tube. Tubes produce denser and tighter marks. Occasionally a swab was used, which produced an imprint with a very clear edge. Lines were sometimes prolongations of dots. Stencils held a few inches away from the wall appear to have been used to delimit an area of color.

Natural, modified, and shaped lamps were used for lighting. Glory found 23 palettes made of limestone or schist, 4 crushers, 1 pestle, 2 pots, and 60 lamps with charcoal. All were turned over, so that surfaces with soot or paint smears faced the ground. Lamps and palettes were always found in close approximation. Fuel appeared to come from the fatty tissue of large animals. Lichen, fungus, and especially juniper were used as wicks. A painter would have needed several lamps going at once to illuminate a working area (another argument for coordinated activities). Even with minimal lighting, a modern visitor sees much more of a gallery than would have been visible to Upper Paleolithic people.

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I have gone into some detail about Lascaux for two reasons: there is much more information on Lascaux than on any other decorated cave or site. Secondly, a significant

amount of the information on Lascaux can probably be applied to other caves for which we have much less information. While the kinds of animals depicted vary considerably, and while no wall surfaces that I know of are the same as Lascaux's, painting as an organized effort, tricks in perspective, the use of pigments and lighting, all took place under similar conditions for most of the caves discussed here. A lesson that one learns from the Lascaux archive is that Upper Paleolithic imagery, at its best, is an extraordinary mixture of keen observation, playful fantasy, selected details, and mannerisms associated with a particular location. While it was done by people we think of as hunters/gatherers, it seems to have represented, especially in the long Magdalenian period, the culmination of thousands of years of apprenticeship and experimentation. From what we now know, this "art"—which was quite possibly not an art at all if judged by modern or even medieval standards—seems the far point of an advance in the conscious organization of experience and communication. Leroi-Gourhan is said to have commented near the end of his life that he believed the people at Lascaux came very, very close to having an alphabet. The combinations of figures and signs probably communicated instantly to those present at Lascaux while its walls were being "ensouled."

As many of you know, the world nearly lost Lascaux. By the early 1950s, Ravidat and Marsal spent most of their time underground orchestrating the flow of tourists that quickly became international—up to 2,000 per day. While archeological excavations continued, the cave's floor was altered to accomodate tourists, making any further research there impossible. By the late 1950s, the carbon dioxide emitted by the visitors filled the cave and the temperature more than doubled. Water vapor condensed and ran down the walls. So a machine was installed to dehumidify the air, and pipes were inserted in the new floor to channel in outside air. It had not been realized that the visitors were also bringing in pollen and algae which the new air machine also dispersed everywhere, leading to the proliferation of whole colonies of algae (subsequently referred to as "the green leprosy") on the walls in the paintings. At one point, the "falling horse" at the rear of the Axial Gallery was said to be disappearing in a prairie of greenish algae.

The cave was closed to the public in 1963. Antibiotics and diluted formalin eradicated the "green leprosy." However, the increase in the levels of carbon dioxide, humidity and temperature caused by the presence of the visitors had also led to the development of opaque crystals of calcite on the walls (known as the "white disease") and it was deemed necessary to try to return the cave to its previous, undiscovered condition—which meant closing it to the public for good. Slow air currents were reintroduced, a low temperature was maintained, and the carbon monoxide (which continually seeped into the cave via the Shaft) was pumped out. At this point, Lascaux seems to have been stabilized. However, many paintings are not as bright today as they were upon discovery.

Work on the replica of the cave known as Lascaux II began in the early 1970s and was completed in the early 1980s. It opened in 1983. The replica is situated in an enormous concrete block frame sunk into a hill about 200 yards from the original cave. The two sections of the cave reproduced in the replica are the Rotunda and the Axial Gallery—which represent about one-third of the total extent of Lascaux and contain the majority of the paintings.

Aujoulat reports that in 2001 the technician in charge of supervising the site reported mould in the air locks of the entrance. This mould was identified as a fungus. At the same time, he noticed that a white blanket of fungus filaments was spreading out on the cave's floor and along the ledges of all the decorated sections. Quicklime spread over infected areas temporarily stopped the proliferation of the fungus. At this point, all special visits to the cave were canceled and they have not, to my knowledge, recommenced.

Later, still in 2001, dark, circular patches of fungus appeared from the air locks toward the Apse.

In 2002 and 2003, the mould, despite treatment, continued to proliferate. A new program commenced that involved cleansing surfaces. Sediments deposited on ledges, which had become collection gutters for organic material, were removed.

As of 2004, the last date Aujoulat gives, a clear improvement was recorded. He also notes that there is no way to determine if such improvement is permanent or temporary. As I mentioned earlier, as of 2007 there were new and very serious problems with the cave, including large black spots on many of the paintings. As far as I know, no one in France has taken responsibility for what appears to be a catastrophic situation. Attempts to get UNESCO involved have been rebuffed by those in charge of the cave.

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The Rotunda measures about 30 feet across and is 100 feet deep. It is somewhat horseshoe-shaped, with the curved end of the shoe at the far end of the entrance; it is penetrated at more or less the furthest point of its curve by the entrance to the Axial Gallery, a gently winding narrow corridor about 60 feet long which turns abruptly and becomes an impenetrable tunnel (the "falling horse" which is upside down is wrapped around this turn). The Rotunda (I prefer this name over "Hall of the Bulls" because of its association with the alchemical *rotundum*) is dominated by one of the great friezes in art: four colossal aurochses, the longest of which is over 18 feet. The two on the left face each other; the two on the right face left. Fragments of two more aurochses have been found indicating that originally there were six aurochses in The Rotunda.

The aurochs is the ancestor of most breeds of domestic oxen, notably of the fighting bulls of Spain. Another way to describe it would be to call it a large, longhaired wild ox. The prehistoric aurochs often measured 6 feet 6 inches at the shoulders and weighed up to 2,800 pounds. The first historical mention of the animal is by Julius Caesar who called it an *urus*; much smaller than the prehistoric aurochs, the urus became extinct in 1627. In prehistoric times, it appears to have been less hunted than the bison, not only because of its ferocity, but because its habitat of grasslands and marshes was less favorable for hunting than the bison's steppes.

Among the aurchoses in the Rotunda are a number of much smaller animals: horses, red deer stags, an almost totally concealed bear, and a cow and her calf. At the beginning of the procession, far left, is a grotesque or hybrid creature, curiously known as the "Unicorn" even though it has two long, antennae-like horns (but no ears). It has squat rear

limbs, a swollen, sagging belly, and six oversized jaguar-like spots. It seems to be bumping up against the rump of the horse in front of it. Across the creature's hind-quarters is the thin red outline of a small horse; there are possibly two more earlier-drawn animals under this creature now blurred beyond recognizability. It has been called a Tibetan antelope, a Russian rhinoceros, and the skin of an animal patterned with eyes concealing two hunters. If you block out the tip of its snout, its profile becomes that of a bearded man.

The Axial Gallery is painted on both walls and curved ceiling. As one enters, looking up, the animals in the compositions seem to be revolving around the dome-like corridor, the drastically foreshortened animals abstracting out into a kind of Magdalenian "action painting." Once one is inside the corridor, the compositions seem to be arranged in two compartments, with a slight bottleneck between. On the north or left-hand wall, one discovers the so-called "Cow with a Collar," with a black head and neck, and a beautiful ochre body modeled on the rock wall. In the second compartment, the most spectacular figure for me is the Great Black Aurochs preceded by a ghostly red horse with a black trident-shaped sign across it. At the end of the Axial Gallery is the upsidedown horse I mentioned before, its legs beating the air, the lower part of its body wrapped around the wall as it turns and narrows into the terminal tunnel—as if the horse were being sucked into the blackness.

Walking back toward the Rotunda, one passes, on the south wall, two ibexes confronting each other, and a large black cow that looks as if she is skidding to a halt before a trap-like sign. Under the skidding cow, a procession of five ponies trots along right above the imaginary ground level. Just before reaching the Rotunda again, there is a magnificent roaring stag, with large, fantastic antlers.

This is the extent of Lascaux II. In addition, two frescos that are not part of the replica are reproduced at Le Thot, a small prehistory museum and animal park several kilometers from the cave.

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Were we in the original Lascaux, after returning to the Rotunda, we would walk past the two largest aurochses on the left, and turning left again pass through an airlock into the longest gallery in the cave (about 210 feet), made up of four sections: Passageway, Apse (bulging off to the right, and leading to the entrance of the Shaft), Nave, and Chamber of the Felines. The Passageway was originally covered with calcite on which polychrome figures were painted. Sometime later, erosion occurred, and the calcite fell off in patches, causing most of the painted figures to disappear. The bare walls were then covered with engravings, most of which are very difficult to see today (they are more like scratches than engravings in terms of depth). The Apse has also suffered from erosion; it is even more engraved than the Passageway—over 1,000 small horses, deer, aurochses, ibexes, and signs are packed next to each other, and across each other, with no apparent design around the walls and ceiling.

The Shaft today is around eighteen feet deep and contains the most spectacular narrative scene in Upper Paleolithic art: a bison with its entrails hanging out, its rump crossed by a spear, hovers over a bird-headed ithyphallic male figure who appears to be

falling backward. Below the man's outstretched right arm is a bird-headed staff and a hooked sign with a cross at its base. Slightly below and to the left of the falling male figure is a woolly rhinoceros—its tail raised. Behind its anus are six black dots arranged in pairs, as on a die. There are two essays in *Juniper Fuse* with abundant commentary on the Shaft "scene." I have with me a short essay on this scene I will be happy to share with you one evening after dinner.

I mentioned before that there are more than 400 identifiable signs in Lascaux. Related to signs and dots are finger tracings, handprints, and hand stencils, none of which occur in Lascaux.

People have attached varying meanings to signs ever since the discovery of the caves. The meaning is adjusted to fit the interpreter's theory of the meaning of cave art in general. For the Abbé Breuil, whose all-over theory was hunting magic, all long and angular signs were arrows, and claviforms were clubs. For Leroi-Gourhan, whose theoretical approach was based on gender pairing, all long signs were male, i.e., phallic, while solid signs—ovals, triangles, squares—were female, vulvar. When Breuil could not recognize a symbol in a sign—as in the case of thousands of wandering lines that do not appear to be directly related to the figures they cross or surround—he declared that they were of no value. As I mentioned earlier, he called them "parasitic lines" and generally ommited them in his tracings. For Leroi-Gourhan, these same indeterminate lines were referred to as "unfinished outlines, and the product of inferior artists." The problem with such negative evaluations is that no one today is in a position to declare that these lines were meaningless to their makers or to the people who saw them at the time they were made. Would any authority today eliminate all the so-called meaningless lines from a Pollock "drip" painting and declare that what was left was the meaning of that particular painting?

Using microscopic techniques in the 1960s, Alexander Marshack proposed that lines across animals earlier described by Breuil as spears were actually ferns or grasses. In some cases, Marshack seems to be right, but as usual no theory holds for everything in Upper Paleolithic art. There are many marks on animals that cannot be read as vegetation any more than they can be confirmed as lances.

While most of the hunting magic hypothesis that Breuil subscribed to has been dismissed, an expert on animal drives in North America has recently proposed that much of the artistic layout in Lascaux constitutes a diagram depicting an animal drive. For Thomas Kehoe, rows of dots and the rectangles represent drive lines, blinds, and corrals. The barbed signs near certain animals are interpreted as brush barriers which help to funnel animals into a corral. The so-called "Unicorn," for Kehoe, is a man draped in hides to enable him to sneak up on the herd. All of this is fascinating, but it assumes that the cave was decorated by a single group of painters all with a common end in mind, and it does not address the most complexly decorated area in the cave—the Apse—nor the cave's single most mysterious composition—the "scene" in the Shaft.

## Cougnac

Cougnac is actually two caves, discovered in 1952 after an amateur dowser named Lagarde declared that there was a vast cavern under the earth two kilometers north of Gourdon. Jean Mazet investigated and discovered one cave filled with a fairyland paradise of stalactites and stalagmites (with no imagery) and another cave, thirty yards away, with a couple of dozen figures and as many dots, lines, and tectiforms. The most impressive work in Cougnac is set forth on a thirty-five foot long wall. The mural, which gives the impression of having been constructed in panels, includes 3 megaloceroses (until the discovery of Chauvet, with 5, the most in any Upper Paleolithic cave), and 2 humanoids which are painted on the body of one of the megaloceroses and a mammoth respectively. Unlike most of the decorated Upper Paleolithic caves, the painted area of Cougnac is open and convenient (Paleolithic people, it is believed, broke many of the columnar formations in front of the mural, creating a space that would have accomodated a crowd).

After showing us some signs—including 6 so-called "brace-shaped" signs—the guide will take us around to the mural. I am not happy with the term "brace-shaped," as such a term evokes a shaped piece of metal, a bitstock, or a buckle, all of which were unknown to Cro-Magnon. Over my work desk I have a photo of a wolf spider charging across a dining-room table toward the camera. The spider image reminds me of these particular signs—which is to say they look like schematized versions of something moving toward the viewer, like an insect or arachnoid with multiple legs, its head like a little turret raised above. I will have more to say about these arachnoid forms when I discuss Pech-Merle.

Of the 3 megaloceroses depicted in the mural, 2 are male and 1 female. The megaloceros, or giant elk, is one of the most magnificent antlered animals ever to walk the earth. They were all over Europe during the Upper Paleolithic and became extinct at the end of the Würm glaciation. Their antlers, resembling enormous hands with the fingers held apart, had a span of up to ten feet and weighed up to 150 pounds (for years the skeleton and antlers of a megaloceros have been on display in a glass case in the National Museum of Prehistory at St.-Germain-en-Laye). The megaloceros lived on the great glacial prairies and fed on grass and broad-leafed bushes. At Cougnac, there is no firm evidence of the depiction of horses (which is quite unusual—Cougnac is the only major cave with no horses). One might get the impression that in Cougnac the megaloceros replaced the horse.

To the right of the shoulder of the largest megaloceros, over the beginning of its belly, is an upper-body-less humanoid (traditionally called female on no evidence at all) pushing forward, as if running, but without feet. This figure appears to have been struck, while in motion, by three long, curving lines, one in the crack of the ass, one in the loins, and one in the lower back. If we read this scene as representing literal assault, it would seem that the figure was struck from behind by projectiles. However, there is no indication of an assailant, and no sign of pursuit or combat. It is perhaps significant that also depicted on the side of the megaloceros is a small stag, an ibex, and the dorsal line of a bison (or possibly a horse). The four figures on the megaloceros's side, taken as a unit, remind me

of the nodal points of a constellation. Were one to draw lines between the four, the image of a slightly flattened diamond would emerge.

I mentioned that the lines apparently striking the running figure are curved. This may also be significant, as they are probably too long for arrows (and they have no feathers or vanes), and they are not straight enough for lances. Looked at carefully, they seem to be coming out of the figure's body more than they seem to be going in, for there is no sign of bodily penetration.

Drawing on a range of shamanic lore, Giedion proposes that the lines are magic projectiles involved with the initation of a shaman, during which the initiate may be symbolically tortured and dismembered. Sometimes, it is said, shaman ancestors pierce an initiate with symbolic arrows until he or she loses consciousness and falls to the ground.

Until quite recently, all the art in Cougnac had been attributed to the Early/Middle Magdalenian, around 14,000 B.P. Very recent carbon-14 dating reveals that the female (or second megaloceros) is 25,120 years old, and that the large male (the one with the struck figure) is 19,500 years old. In other words, six thousand years after the female was depicted, the large male was added. A black fingermark in the cave has been dated at 13,810. If these new datings hold up, then we have a multiphasic decoration for Cougnac spanning over 10,000 years.

The new dating also raises questions about the figures drawn on the male megaloceros. If the humanoid can also be dated at 19,500 B.P., then it should be read in conjunction with the megaloceros. Like the mammoth under a tectiform at Bernifal, one could propose that this is a scene involving a megaloceros and a wounded humanoid. If it turns out that the humanoid is dated later or earlier than the megaloceros, then it may be reasonable to treat the figure as everyone has done up to now—simply as a wounded, truncated figure, more or less in isolation. Again, we have a total of five figures here: the megaloceros, and within its bounding line the humanoid, the stag, the ibex, and the dorsal line. While the composition is not as dramatic (in our terms) as the "scene" in the Lascaux Shaft, it evokes to me a constellation, or a blazon—with more potential information in it than in the so-called "blazons" in the Apse at Lascaux. Perhaps the composition is a statement relating to megaloceros lore. However, these figures do not seem to interact; they are all in the same vicinity and at the same time in isolation—as are most of the animals in Upper Paleolithic compositions. The difference here is that four figures are *contained* by the outline of the megaloceros's body.

Multiphasic decoration raises new questions. To what extent should the datation intervals affect how a composition should be read? Imagine an Egyptian sarcophagus visited by Picasso who sketches in a bull in a previously unworked space. Do we say that because Picasso comes from a different culture, in time and in mind, that his addition is, in effect, graffiti? Or do we notice that the presence of the bull adds to the information concerning the soul bird or the dead king's soul painted earlier on the object? We live in an aeon of the multiphasic—juxtaposition of the dissimilar in the collages of Max Ernst or Jess Collins are read as complex interactive maps which argue for the simultaneous presence of the erudite and the vulgar, the sacred and the profane. If we think of Upper Paleolithic images as the manifestation of a newly forming

world psyche, then perhaps "additions" should be accepted as "stages" in the evolution of a composite image.

Some fifteen feet to the right of the large megaloceros is an even stranger composition: draped across the side of the head and shoulders of a mammoth is another naked humanoid, with penguin-wing-like arms. He appears to be falling forward while twisting his snout-like head around. I say "he" because there is some suggestion of a penis. The figure has a short tail, and is struck in the chest, the back, the thigh and the stomach by seven or eight mostly-straight lines. The hybrid, grotesque nature of the figure makes an even stronger argument than in the case of the humanoid or megaloceros for shamanism. Below the pierced humanoid is the heavy outline of a small mammoth, depicting only head, back, trunk and chest. It seems to be aligned with the humanoid.

In contrast to the cartoonish ibexes on the ceiling at Rouffignac, the ibexes in the Cougnac mural are well-conceived and drawn. Curves and undulations of the rock wall have been incorporated in their outlines, as well as the fleece dangling from the stomach of one. The positioning of such an animal seems predetermined, as if it were starting to emerge on its own and needed only an artistic bounding line to release its semi-submerged form.

There is also said to be a third humanoid to the left of the mammoth with the pierced humanoid. Mazet, Cougnac's discoverer, describes the figure as follows:

The oldest figure is that of a human being in brownish coloring. The head is bowed. The feet hover in the air like those of a bird wounded to death and about to plunge down to earth. The face which ends in a duck's bill is that of an animal. The body is pierced by three arrrows. Two are in the breast, one in the back. The figure appears to be wearing a kind of mantle reaching to its feet.

Mazet appears to be the only commentator who has seen this figure. I have seen some smudges and marks where Mazet claims it is, but that is all.

#### **Pech Merle**

The cavern known as Pech Merle was discovered in 1922 by André David, a boy at the time (it is worth noting here that other major caves were discovered by teenage boys, including Lascaux, and Les Trois Frères). After two years of clearing out a tight, subterranean tunnel, David discovered paintings 417 yards from the entrance.

Pech Merle consists of a network of passages about a mile and a quarter in length, 130 yards of which are decorated. In the center of the decorated area, there is a high, vaulted hall-like space with immense and fantastic columnar formations. Until the discovery of Lascaux, Pech Merle was the most beautiful and magical of the French caves, one for which such terms as "sanctuary" or "cave-temple" seem appropriate. Until recently, it was thought to have been decorated in two phases, the earliest being around 17,000 B.P. and the latter at 13,000 B.P. recent carbon-14 datings of charcoal from one of the spotted horses revealed a date of 24,640 B.P., suggesting that like Cougnac, with which it has stylistic affinities, the decorating of Pech Merle also took place over a span of some 10,000 years.

The current entrance, after a steep flight of steps, puts the visitor directly into the main decorated chamber which, because of the amount of rock formations, fallen boulders, and alcoves, appears labyrinthine. It is basically oval in shape, with murals as well as isolated figures and signs around the outer walls surrounding the interior formations. Before commenting on several of the most interesting areas of Pech Merle imagery, I want to mention that, after we descend the steps, off to the right is an area called Le Combel, which is not shown to most visitors, as seeing the paintings involves stooping low and crawling through some tight openings. Le Combel has lots of large ochre red dots, and several paintings of fantastic animals. There is a piece on this area in *Juniper Fuse*.

The first set of paintings we will see are to be found in a shallow recess around 21 feet long and 7.5 feet high. An extraordinary panorama of animals unfurls in staggering bursts of momentum and calm, displaying the Upper Paleolithic line at its finest. This mural is variously known as "The Large Black Fresco" or "The Chapel of the Mammoths." On the extreme left, a knot of animals seem to be tumbling into an abyss: two aurochses fall head-downward followed by a mammoth whose trunk and long body-hair sweeps across the hind-quarters of another backward-sliding aurochs. Slightly above this scene, as if sprung out of it, another mammoth appears to be leaping up and away so that its body is stretched across the rock face in a bizarre elastic arch. The French poet André Breton visited Pech Merle in the 1950s (he had a home nearby in St-Cirq-Lapopie), and upon doubting the mural's authenticity, the director of the Surrealists tried to rub away the color at the tip of this mammoth's trunk. He was not only reprimanded but fined.

To the lower right of this assembly is a mammoth depicted solely by the outline of its dome-like head and hump. The creature is facing left, but the shower of red dots across its head and where its body is implied to be creates an illusion of eyes looking backward. An indescribable ghostliness permeates the creature. To the upper right of this mam-

moth is another assembly centered by the outline of a large, still horse, whose lines are intersected by the outlines of a mammoth and two bison. Above this close-knit group are the dorsal lines of a mammoth and a bison, floating like mountain ridges on the wall. No animal erases another. They overlap and interpenetrate in curving, graceful lines that on one hand resonate with emptiness and, on the other hand, evoke animals becoming mountains becoming animals simultaneously coming in and passing out of view. This interplay of emptiness and substances, and their mysterious reciprocity, calls to mind the Buddhist doctrine of *sunyata* (emptiness) and *tathata* (suchness, or materiality), formulated thousands of years later.

At the lower right-hand side of the mural are two more mammoths, hoofless, legs intermingling with the long, hanging hair of their pelts. They have a curious ascendant feeling, as if rising like corporeal steam directly out of the earth. They offer an asymmetrical sense of balance with the left-hand side of the mural's animals in descent. From time to time the drapery-like stalactitic formations in Pech Merle suggest the shape of long, trailing mammoth coats. Like the straggly, intersecting bear claw scrapings on the walls of Rouffignac, such formations may have stimulated Upper Paleolithic people to see living forms in the contours and surfaces of organless stone.

The Lot-based paleo-archeologist Michel Loblanchet memorized every mark in the Black Fresco and then reproduced it on an equally smooth panel of similar dimensions in another cave, lit by a lamp in his left hand. Each figure took between one and four minutes to paint. The whole Fresco required about one hour, including sketching with a stick.

Seemingly unrelated to the Black Fresco, and dated much earlier, on a nearby ceiling—some twenty feet up, and very hard to read—is a complex tangle of finger tracings. Making use of the drawings by the Abbé Lemozi who worked in Pech Merle in the late 1920s, there appear to be three female figures (all in profile) in this entanglement, two of which are associated with animals. I have made copies of two of these figures (reproduced in Giedion's *The Eternal Present*). The first is headless (her neck is capped, indicating that her head was not simply left out), and her body (with large buttocks that recall certain Venus statuettes) appears to be loaded on the back of a completely drawn mammoth. The second female has long, drooping breasts and tiny, pointed arm-stubs. She appears to be pregnant. She may be bird-headed, but if so, the beak is pointed to the rear—leading me to think that the "beak part" might be her hair. Winding across her body is a huge, serpentine form that in context is definitely phallic.

On the far side of this columnar hall, one of the most interesting figures is a male who was described in the 1920s as "an archer armed with bows, equipped with a mask, and his arrows or javelins." Because this figure is so difficult to see (one must crouch and then look up at the underside of the slab he is sketched upon), I have copied for you a photo of him from Giedion's book. He is more pierced by arrows (or magical forces) than carrying them. As at Cougnac, the arrow-like lines are curved, but here they enter and emerge from the body at four points, and look more like thongs or strands, as if the figure is strung up or caught up in some large network. He has a muzzle-shaped or bird-beaked profile, miniscule arms (resembling the flippers of one of the Cougnac figures), a long tail and a dangling penis. Touching his head is the extended outer vertical line of what is referred to as a "brace-shaped sign" by Leroi-Gourhan, a "large

and curious symbol" by Evan Hadingham, and a "distinctive geometrical sign" by Jean Clottes. This sign is nearly identical to the "brace-shaped" signs at Cougnac, which I suggested look more insectile than metallic or geometric.

In an essay called "Companion Spider," I envisioned this strung-up man in conjunction with a schematized spider, having previously proposed that the labyrinth is one of the oldest and most complex designs of the creative process, a design that draws upon spiderwebs with the female poised at the center. In the Cretan maze, which appears to be a variation on the web with its centered female and intruding male, the Minotaur is found at the center, and the role of the male spider is played by Theseus. In the bitter conflict at the center, spider copulation is replaced by a life/death Minotaur/Theseus struggle. See page 80 in *Juniper Fuse* for Anton Ehrenzweig's perceptive commentary on labyrinth as metaphor for the creative process. At the end of my essay, with the Pech Merle image in mind, I wrote: "The male's body is slack, as if strung upon the lines passing through. Caressing the figure's head is what appears to be the tip of one leg of a schematically drawn spider. Might the traversing lines be magic projectiles, as in shamanic dismemberment? I take this bird-headed figure to be an initiate depicted at a crucial stage of his transformation."

In the same area of the cave with this figure is another set of partially concealed figures that are unfortunately even more difficult to make out. Leroi-Gourhan has readable photos of them in *Treasures of Prehistoric Art* (five are reproduced on page 164 of *Juniper Fuse*). Here is a brief description of these figures: at the top of the rock face, there appears to be a small leaping bison, head and forelegs merged into a single line. Below it is an enigmatic figure that may be an obese female leaning over; she is blurred and part of a scattering of twenty red dots. Below these dots is a schematic outline of a small mammoth, and several more figures that appear to be hybrids: leaping bisons that are also obese female figures. They look as if they are studies exhibiting the transition from bison outline to that of female outline. For example, it is impossible to tell if one is looking at schematized bison forelegs or pendulous breasts. If we read them as women, they appear to be further examples of the obsession in Upper Paleolithic image-making with female figures in profile, footless (like most of the Venuses), with pushed-back buttocks, moving forward as if leaning or dancing. Sometime such figures have no heads at all; here the heads are like curved hooks. Leroi-Gourhan, in a statement that is now contested by other archeologists, wrote that what he called "the bison-women of Pech Merle furnish perhaps the most striking evidence of the abstract character of Paleolithic art."

The last mural-like image complex we will see in Pech Merle is on a low stone wall, around ten feet long, and six feet high. Two horses are painted in broad black outlines, their bodies (except for heads and necks) sprinkled with black dots. The necks and heads are solidly filled in with black. Facing in opposite directions, the horses' hind-quarters are superimposed on each other. The horse to the right—with charcoal in it that carbon dates at 24,640 B.P.—seems to have been placed where it is because the upper right-hand corner of the rock wall is vaguely horse-head shaped. Thus the painted bird-head-shaped horse head fits nearly inside the rock's outline. The effect is that the rock shape becomes the aura of the tightly-tapered painted head. There are also black dots below both horses' very filled-out—possibly pregnant—bellies. Across the back of the right-hand horse a fish of the pike family has been sketched in red (it is quite faded, but

there). This "red theme" is picked up by a smattering or red dots interspersed with the black dots. Six left and right hands, stenciled in black, snugly frame the animals. In the body of the left-hand horse there are four small horseshoe shapes. According to Michel Lorblanchet, who has also recreated this entire composition, all of it was produced by spitting pigment.

The visual impact of this composition is more fantastic than realistic: in contrast to their swollen bodies, the horses have tiny, pointed heads which are treated as a tapering of their cowl-like manes and necks. They could hardly begin to walk on their stubby, stick-like legs. The dots do not seem to indicate pelts, but, like the hands, give a magical emphasis to the horses. Taken as a whole, the composition is somewhat abstract, with the swaying tube-like bodies dislodged from naturalism by the framing hands and the plethora of black and red dots.

## **Addenda: Three Poems**

Combarelles

The horse showing through the cave wall showing through the horse. Goal of engraving:

to arrive

As reciprocity.

\*

A limestone lightning rod for the new mind's animalflashing borderless rinks, in-bordered with a line scraped between me and the thee of cosmic indivisibility.

\*

The fine sand of creature life poured through the mind's riven mesh.

\*

In the jigsaw puzzle of creation, the desire is not to just fit, but to allow, through sudden aperture, the hiss of the shuddering other.

[Les Eyzies, 2007]

# Cougnac

The mutilated man shall mount the mammoth, shall mount and shall enter the mammoth's head.

The man's head shall pierce the mammoth's brain, the man's head and mutilated body shall become the mammoth's animating soul and a lance shall now spit mammoth soul and skull.

This is how we get into animals, how we project ourselves as versa into the vice of animal stone. This is how we lance our otherness on the winch of vice versa.

The self, pupa run through six times, penguin-finned, in its mammoth head chrysalis.

The self, hybridizing amoeba jerking to its wounds, peering forth from its mammoth cradle as if off the planet's edge.

What a drop 25,000 years compose! What a Fall from man exterior to mammoth to man lodged mutilated in this hybrid head.

[Gourdon, 2007]

## Eternity at Domme

Between the junipers flows the Dordogne. My home is near, as close as gone—identity in the archaic region of the soul. Between the junipers flows the Dordogne.

Sunlit crags with chestnuts, lindens overgrown. What chambers, what cavalcades engraved— I'll never reach the pillowed rock Laussel arranged. Between the junipers flows the Dordogne.

Can arrival at yearning's core be said to dress out home? Is home my immured animality, the phantom lurking in my stain?

I'm ancient as never before this afternoon, charged with karstic urge, fully born. Between the junipers flows the Dordogne.

[Domme, 2007]