A frieze of horses and rhinos near the Chauvet cave’s Megaloceros Gallery, where artists may have gathered to make charcoal. Chauvet
During the Old Stone Age, between thirty-seven thousand and eleven thousand years ago, some of the most remarkable art ever conceived was etched or painted on the walls of caves in southern France and northern Spain. After a visit to Lascaux, in the Dordogne, which was discovered in 1940, Picasso reportedly said to his guide, “They’ve invented everything.” What those first artists invented was a language of signs for which there will never be a Rosetta stone; perspective, a technique that was not rediscovered until the Athenian Golden Age; and a bestiary of such vitality and finesse that, by the flicker of torchlight, the animals seem to surge from the walls, and move across them like figures in a magic-lantern show (in that sense, the artists invented animation). They also thought up the grease lamp—a lump of fat, with a plant wick, placed in a hollow stone—to light their workplace; scaffolds to reach high places; the principles of stencilling and Pointillism; powdered colors, brushes, and stumping cloths; and, more to the point of Picasso’s insight, the very concept of an image. A true artist reimagines that concept with every blank canvas—but not from a void.

Some caves have rock porches that were used for shelter, but there is no evidence of domestic life in their depths. Sizable groups may have visited the chambers closest to the entrance—perhaps for communal rites—and we know from the ubiquitous handprints that were stamped or airbrushed (using the mouth to blow pigment) on the walls that people of both sexes and all ages, even babies, participated in whatever activities took place. Only a few individuals ventured or were permitted into the furthest reaches of a cave—in some cases, walking or crawling for miles. Those intrepid spelunkers explored every surface. If they bypassed certain walls that to us seem just as suitable for decoration as ones they chose, the placement of the art apparently wasn’t capricious. In the course of some twenty-five thousand years, the same animals—primarily bison, stags, aurochs, ibex, horses, and mammoths—recur in similar poses, illustrating an immortal story. For a nomadic people, living at nature’s mercy, it must have been a powerful consolation to know...
that such a refuge from flux existed.

As the painters were learning to crush hematite, and to sharpen embers of Scotch pine for their charcoal (red and black were their primary colors), the last Neanderthals were still living on the vast steppe that was Europe in the Ice Age, which they had to themselves for two hundred millennia, while Homo sapiens were making their leisurely trek out of Africa. No one can say what the encounters between that low-browed, herculean species and their slighter but formidable successors were like. (Paleolithic artists, despite their penchant for naturalism, rarely chose to depict human beings, and rarely chose to depict human beings, and populations didn’t mate or they couldn’t make their leisurely trek out of Africa. No one can say what the encounters between that low-browed, herculean species and their slighter but formidable successors were like. (Paleolithic artists, despite their penchant for naturalism, rarely chose to depict human beings, and populations didn’t mate or they couldn’t make.) Their genomes are discrete, so it appears that either the populations didn’t mate or they couldn’t conceive fertile offspring. In any case, they wouldn’t have needed to contest their boundless hunting grounds. They coexisted for some eight thousand years, until the Neanderthals withdrew or were forced, in dwindling numbers, toward the arid mountains of southern Spain, making Gibraltar a final redoubt. It isn’t known from whom or from what they were retreating (if “retreat” describes their migration), though along the way the arts of the newcomers must have impressed them. Later Neanderthal campsites have yielded some rings and awls carved from ivory, and painted or grooved bones and teeth (nothing of the like predates the arrival of Homo sapiens).

The pathos of their workmanship—the attempt to copy something novel and marvellous by the dimming light of their existence—nearly makes you weep. And here, perhaps, the cruel notion that we call fashion, a coded expression of rivalry and desire, was born.

The cavers were as tall as the average Southern European of today, and well nourished on the teeming game and fish they hunted with flint weapons. They are, genetically, our direct ancestors, although “direct” is a relative term. Since recorded history began, around 3200 B.C., with the invention of writing in the Middle East, there have been some two hundred human generations (if one reckons a new one every twenty-five years). Future discoveries may alter the math, but, as it now stands, forty-five human generations separate the earliest Homo sapiens from the earliest cave artists, and between the artists and us another fifteen hundred generations have descended the birth canal, learned to walk upright, mastered speech and the use of tools, reached puberty, reproduced, and died.

Early last April, I set off for the Ardèche, a mountainous region in south-central France where cave networks are a common geological phenomenon (hundreds are known, dozens with ancient artifacts). It was here, a week before Christmas in 1994, that three spelunkers exploring the limestone cliffs above the Pont d’Arc, a natural bridge of awesome beauty and scale which resembles a giant mammoth straddling the river gorge, unearthed a cave that made front-page news. It proved to contain the oldest known paintings in the world—some fifteen to eighteen thousand years older than the frizees at Lascaux and at Altamira, in the Spanish Basque country—and it was named for its chief discoverer, Jean-Marie Chauvet. Unlike the amateur adventurers or lucky bums (in the case of Lascaux, a pose of village urchins and their dog) who have fallen, sometimes literally, upon a cave where early Europeans left their cryptic signatures, Chauvet was a professional—a park ranger working for the Ministry of Culture, and the custodian of other prehistoric sites in the region. He and his partners, Christian Hillaire and Éliette Brunel, were aware of the irreparable damage that even a few indelicate footsteps can cause to an environment that has been sealed for eons—posterity has lost whatever precious relics and evidence that the carelessly trampled floors of Lascaux and Altamira, both now sealed to the public, might have yielded.

The cavers were natives of the Ardèche: three old friends with an interest in archeology. Brand was the smallest, so when they felt an uplift of cool air coming from a recess near the cliff’s ledge—the potential sign of a cavity—they heaved some rocks out of the way, and she squeezed through a tight passage that led to the entrance of a deep shaft. The men followed, and, unfolding a chain ladder, the group descended thirty feet into a soaring grotto with a domed roof whose every surface was blistered or splintered with stalagnites. Where the uneven clay floor had receded, it was littered with calcite accretions—blocks and columns that had broken off—and, in photographs, the wrathful, baroque grandeur of the scene evokes some Biblical act of destruction wreaked upon a temple. As the explorers advanced, moving gingerly, in single file, Brunel suddenly let out a cry: “They have been here!”

The question of who “they” were speaks to a mystery that thinking people of every epoch and place have tried to fathom: who are we? In the century since the modern study of caves began, specialists from at least half a dozen disciplines—archeology, ethnology, ecol ogy, genetics, anthropology, and art history—have tried (and competed) to understand the culture that produced them. The experts tend to fall into two camps: those who can’t resist advancing a theory about the art, and those who believe that there isn’t, and never will be, enough evidence to support one. Jean Clottes, the celebrated prehistorian and prolific author who assembled the Chauvet research team, in 1996, belongs to the first camp, and most of his colleagues to the second. Yet nobody who studies the caves seems able to resist a yearning for communion with the artists. When you consider that their legacy may have been found by chance, but surely wasn’t left by chance, it, too, suggests a yearning for communion—with us, their descendants.

Two books published in the past few years, “The Cave Painters” (2006), by Gregory Curtis, and “The Nature of Paleolithic Art” (2005), by R. Dale Guthrie, approach the controversy generated by their subject from different perspectives. Guthrie is an encyclopedic polymath who believes he can “decode” prehistory. Curtis, a former editor of Texas Monthly, is a literary detective (his previous book, on the Venus de Milo, also concerned the obscure provenance of an archaic masterpiece), and in quietly enthralling prose, without hurry or flamboyance, he spins two narratives. (The shorter one, as he notes, covers a few million years, and the longer one, the past century.)

I packed both volumes, along with some hiking boots, protein bars, and other survival gear, all of it unnecessary, for my sojourn in the Ardèche. My destination was a Spartan summer camp—
a concrete barracks in a valley near the Pont d'Arc. It is owned by the regional government, and normally houses groups of schoolchildren on subsidized holidays. But twice a year, for a couple of weeks in the spring and the autumn, the camp is a base for the Chauvet team. They, and only they, are admitted to the cave (and sometimes not even they: last October, the research session was cancelled because the climate hadn’t restabilized). Access is so strictly limited not only because traffic causes contamination but also because the French government has been embroiled for thirteen years in multimillion-dollar litigation with Jean-Marie Chauvet and his partners, as well as with the owners of the land on which they found the cave. (The finders are entitled to royalties from reproductions of the art, while the owners are entitled to compensation for a treasure that, at least technically, is their property—the Napoleonic laws, modified in the nineteen-fifties, that give the Republic authority to dispose of any minerals or metals beneath the soil do not apply to cave paintings. Had Chauvet been a gold mine, the suit couldn’t have been brought.) By dusk on the first night, most of the researchers had assembled in the cafeteria for an excellent dinner of rabbit fricassée, served with a Côtes du Vivarais, and followed by a selection of local cheeses. (The Ardèche is a gourmet’s paradise, and the camp chef was a tough former sailor from Marseille whose speech and cooking were equally pungent.) Among the senior team members, Évelyne Debard is a geologist, as is Norbert Ajoulat. He is a former director of research at Lascaux, and the author of a fine book on its art, who calls himself “an underground man.” Marc Azéma is a documentary filmmaker who specializes in archeology. Carole Fritz and Gilles Tosello, a husband and wife from Toulouse, are experts in parietal art, and Tosello is a graphic artist whose heroically patient, stroke-by-stroke tracings of the cave’s signs and images are essential to their study. Jean-Marc Elalouf, a geneticist, and the author of a poetic essay on Chauvet, has, with a team of graduate students, sequenced the mitochondrial DNA of the cave’s numerous bears. They pocked the floor with their hibernation burrows, and, in a space known as the Skull Chamber, a bear’s cranium sits on a flat, altar-like pedestal—perhaps enshrined there by the artists. The grotto is littered with other urines remains, and some of the bones seem to have been planted in the sediment or stack with intent into the fissured walls. (No human DNA has yet surfaced, and Elalouf doesn’t expect to find any.) Dominique Baffier, an official at the Ministry of Culture, is Chauvet’s curator. She coordinates the research and conservation. Jean-Michel Geneste, an archeologist, is the director of the project, a post he assumed in 2001, when Jean Clottes, at sixty-seven, took mandatory retirement.

Clottes is a hero of Gregory Curtis’s “The Cave Painters,” one of the “giants” in a line of willful, brilliant, and often eccentric personalities who have shaped a discipline that prides itself on scientific detachment but has been a battleground for the kind of turf wars that are absent from the caves themselves. No human conflict is recorded in cave art, although at three separate sites there are four ambiguous drawings of a creature with a man’s limbs and torso, pierced with spearlike lines. More pertinent, perhaps, is a famous vignette in the shaft at Lascaux. It depicts a rather comical stick figure with an avian beak or mask, a puny physique, and a long skinny penis. He and his erect member seem to have rigor mortis. He is flat on his back at the feet of an exquisitely realistic wounded bison, whose intestines are spilling out. The bison’s glance is turned away, but it might have an ironic smile. Could the subject be hubris? Whatever it represents, some mythic contest—and the struggle of prehistorians to interpret their subject is such a contest—has ended in a draw.

Curtis profiles a dynasty of interpreters, beginning with the Spanish nobleman Marcelino Sanz de Sautuola, who discovered Altamira in 1879—it was on his property. (Parts of Niaux and Mas d’Azil, two gigantic painted caves in the Pyrenees, had been known for centuries, but their decorations were regarded as graffiti made in historic times, perhaps by Roman legionaries.) He was accused of art forgery, and his scholarly papers on the paintings’ antiquity were ridiculed by two of the era’s greatest archeologists, Gabriel de Mortillet and Émile Cartailhac. Sautuola died before Cartailhac repented of his skepticism, in 1902. By then, the art at two important sites, Les Combarelles and Font-de-Gaume (which contains a ravishing portrait of two amorous reindeer), had come to light, and, in 1906, Cartailhac published a lavish compendium of cave
painting that was subsidized by the Prince of Monaco. The book's much admired illustrations of Altamira were the work of a young priest with a painterly eye, Henri Breuil, who, in the course of half a century, became known as the Pope of Prehistory. He divided the era into four periods, and dated the art by its style and appearance. Aurignacian, the oldest, was followed by Perigordian (later known as Gravettian), Solutrean, and Magdalenian. They were named for type-sites in France: Aurignac, La Gravette, Solutré, and La Madeleine. But Breuil's theory about the art's meaning—that it related to rituals of "hunting magic"—was discredited by subsequent studies.

During the Second World War, Max Raphael, a German art historian who had studied the caves of the Dordogne before fleeing the Nazis to New York, was looking for clues to the art's meaning in its thematic unity. He concluded that the animals represented clan totems, and that the paintings depicted strife and alliances—an archaic saga. In 1951, the year before Raphael died, he sent an extract of his writings to Annette Laming-Emperaire, a young French archeologist who shared his conviction that "prehistory cannot be reconstructed with the aid of ethnography." Beware, in other words, of analogue reasoning, because no one should presume to parse the icons and figures of a vanished society by comparing them with the art of hunter-gatherers from more recent eras. In 1962, she published a doctoral thesis that made her famous. "The Meaning of Paleolithic Rock Art" dismissed the various, too creative theories of its predecessors, and, with them, any residual nineteenth-century prejudice or romance about the "primitive" mind. Laming-Emperaire's structuralist methodology is still in use, much facilitated by computer science. It involves compiling minutely detailed inventories and diagrams of the way that species are grouped on the cave walls, of their gender, frequency, and position; and of their relation to the signs and handprints that often appear close to them. In "Lascaux" (2005), Norbert Aujoulat explains how he and his colleagues added time to the equation. Analyzing the order of superimposed images, they determined that wherever horses, aurochs, and stags appear on the same panel, the horse is beneath, the aurochs in the middle, and the stag on top, and that the variations in their coats correspond to their respective mating seasons. The triad of "horse-aurochs-stag" links the fertility cycles of important, and perhaps sacred or symbolic, animals to the cosmic cycles, suggesting a great metaphor about creation.

Laming-Emperaire had an eminent thesis adviser, André Leroi-Gourhan, who revolutionized the practice of excavation by recognizing that a vertical dig destroys the context of a site. In twenty years (1964-84) of insanely painstaking labor—scraping the soil in small horizontal squares at Pincevent, a twelve-thousand-year-old campsite on the Seine—he and his disciples gave us one of the richest pictures to date of Paleolithic life as the Old Stone Age was ending.

A new age in the science of prehistory had begun in 1949, when radiocarbon dating was invented by Willard Libby, a chemist from Chicago. One of Libby's first experiments was on a piece of charcoal from Lascaux. Breuil had, incorrectly, it turns out, classified the cave as Perigordian. (It is Magdalenian.) He had also made the Darwinian assumption that the most ancient art was the most primitive, and Leroi-Gourhan worked on the same premise. In that respect, Chauvet was a bombshell. It is Aurignacian, and its earliest paintings are at least thirty-two thousand years old, yet they are just as sophisticated as much later compositions. What emerged with that revelation was an image of Paleolithic artists transmitting their techniques from generation to generation for twenty-five millennia with almost no innovation or revolt. A profound conservatism in art, Curtis notes, is one of the hallmarks of a "classical civilization." For
Jean Clottes is a tall, cordial man of seventy-four, who still attends the biannual sessions at Chauvet, conducting his own research (this April, he and Marc Azéma found a new panel of signs), while continuing to travel and lecture widely. The latest addition to his bibliography, "Cave Art," a luxuriously illustrated "imaginary museum" of the Old Stone Age, is due out from Phaidon this summer.

Clottes's eminence in his field was never preordained. He once taught high school English in Foix, a city in the Pyrenees, near the Andorran border, which is an epicenter for decorated caves. He studied archeology in his spare time, and earned a doctorate at forty-one, when he quit teaching. He had been moonlighting in a job that gave him privileged access to new caves, and an aspiring calling card—as the director of prehistory for the Midi-Pyrenees—but a nominal salary. The appointment was made official in 1971, and for the next two decades Clottes was usually the first responder at the scene of a new discovery.

The most sensational find, before Chauvet, was Cosquer—a painted cave near Marseilles that could be reached only on a clifftop in the Massif des Maures. There, three divers had drowned. Like Altamira, Cosquer was, at first, attacked as a hoax, and some of the press coverage impeached Clottes's integrity as its authenticator. He could judge its art only from photographs, but, in 1992, a year after Cosquer was revealed, carbon dating proved that the earliest paintings are at least twenty-seven thousand years old. That year, the Ministry of Culture elevated him to the rank of inspector general.

At the base camp, Clottes bunked down, as did everyone, in a dorm room, and braved the morning hour of frost for a dash to the communal showers. There is a boyish quality to his energy and conviction. (At sixty-nine, he learned to scuba dive so that he could finally explore Cosquer himself.) One evening, he showed us a film about his "baptism," in 2007, as an honorary Tuareg, the North African nomads crowned him with a turban steeped in indigo that stained his forehead, and he danced to their drums by a Saharan campfire. Among his own sometimes fractious tribesmen, Clottes also commands the respect due an unusually vigorous elder, and it was hard to keep pace with him as he scammed on his long legs up the steep cliff to Chauvet, walking with verve the entire way.

The path skirts a vineyard, then veers up into the woods, emerging onto a corniche—a natural terrace with a rocky overhang on one side, and a precipitous drop on the other. "En route to Chauvet, the painters might have sheltered here or prepared their pigments. Looking at the valley and the river gorge, they saw what we do," Clottes said, indicating a magnificent view. "The topography hasn't changed much, except that the Ice Age vegetation was much sparser: mostly evergreens, like fir and pine. Without all the greenery, the resemblance of the Pont-d'Arc to a giant mammoth would have been even more dramatic. But nothing of the landscape—clouds, earth, sun, moon, rivers, or plant life, and, only rarely, a horizon—figures in cave art. It's one among many striking omissions."

Where the terrace ended, we plunged back into the underbrush, following a track obstructed by rocks and brambles, and, after about half an hour of climbing, we arrived at the entrance that Jean-Marie Chauvet and his partners discovered. (The prehistoric entrance has been plugged, for millennia, by a landslide.) A shallow cave at the trailhead has been fitted out as a storeroom for gear and supplies. From here, a wooden ramp guides one along a narrow ledge, shaped like a horseshoe, that was formed when the cliffs receded, to a massive metal door that's as well defended—with voice alarms, video surveillance, and a double key system—as a bank vault. Some members of the team relaxed with a cigarette or a cold drink and a little aperitif, while others, like the Chamber of the Bear Hollows, where an adult has to kneel or crawl. Twenty-six-thousand years ago (six millennia after the first paintings were created), a lone adolescent left his footprints and torch swipes in the furthest reaches of the western horn, the Gallery of the Crosshatching.

The Megaloceros Gallery—a funnel in the eastern horn named for the huge, elklike herbivores that mingle on the walls with rhinos, horses, bison, a glorious ibex, three abstract vulvas, and assorted geometric signs—is the narrowest part of the cave, and it seems to have been a gathering point or a staging area where the artists built hearths to produce their charcoal. Dominique Baffier, the curator, and Valérie Feruglio, a young archeologist who arrived at the base camp during my visit with her newborn baby, were moved to write in "Chauvet Cave" (2001), a book of essays and photography on the team's research, "The freshness of these remains gives the impression that . . . we interrupted the Aurignacians in their task and caused them to flee abruptly." They dropped an ivory projectile, which was found in the sediment.

From here, one emerges into the deepest recess of Chauvet, the End Chamber, a spectacular vaulted space that contains more than a third of the cave's engravings and paintings—a few in ochre, most in charcoal, and all meticu-
lously composed. A great frieze covers the back left wall: a pride of lions with Pointillist whiskers seems to be hunting a herd of bison, which appear to have stampeded a troop of rhinos, one of which looks as if it had fallen into, or is climbing out of, a cavity in the rock. As at many sites, the scratches made by a standing bear have been overlaid with a palimpsest of signs or drawings, and one has to wonder if cave art didn't begin with a recognition that bear claws were an expressive tool for engraving a record—poignant and indelible—of a stressed creature's passage through the dark.

To the far right of the frieze, on a separate wall, a huge, finely modelled bison stands alone, gazing stage left toward a pair of figures painted on a conical outcropping of rock that descends from the ceiling and comes to a point about four feet above the floor. The fleshy shape of this pendant is unmistakably phallic, and all of its sides are decorated, though only the front is clearly visible. The floor of the End Chamber is littered with relics. In order to preserve them, the catwalk stops close to the entrance, and the innermost alcove, known as the Sacrifice, remains to be explored. But one of the team's archaeologists, Yanik Le Guillou, rigged a digital camera to a pole, and was able to photograph the pendant's far side. Wrapped around, or, as it appears, straddling, the phallic is the bottom half of a woman's body, with heavy thighs and bent knees that taper at the ankle. Her vulva is darkly shaded, and she has no feet. Hovering above her is a creature with a bison's head and hump, and an aroused, white eye. But a line branching from its neck looks like a human arm with fingers. The relationship of these figures to each other, and to the frieze on the adjacent wall, is among the great enigmas in cave art. The woman's posture suggests that she may be squatting in childbirth, and the animals, on a level with her loins, seem to be streaming away from her. Gregory Curtis, who fights and loses a valiant battle with his urge to speculate, admits in "The Cave Painters" that he can't help reading a mythical narrative into the scene, one that relates to the Minotaur—the hybrid offspring of a mortal woman and a sacred bull "who lived in the Labyrinth, which is a kind of cave." Art on the walls of Cretan palaces depicts the spectacle of youths leapfrogging a charging bull, and that public spectacle—in the guise of the bull fight—has, he points out, endured into modern times precisely in the regions where decorated caves are most concentrated. "European culture is most concentrated. "European culture largely represents the experiences of shamans or initiates on a vision quest to the underworld, where spirits gathered. The caves served as a gateway, and their walls were considered porous. Where the artists or their entourage left handprints, they were palping a living rock in the hopes of reaching or summoning a force beyond it. They typically incorporated the rock's contours and fissures into the outlines of their drawings—a horn, a hump, or a haunch—so that a frieze becomes a bas-relief. But, in doing so, they were also locating the dwelling place of an animal from their visions, and bodifying it forth.

This scenario has its loose ends, particularly in the art's untrancelike fidelity to nature, but it fits the dreamlike suspension of the animals in a vacuum, and it helps to explain three of the most sensational figures in cave art. One is the bison-man at Chauvet; another is the bird-man at Lascaux; and the third, known as the Sorcerer, looks down from a perch close to the high ceiling at Les Trois Frères, a Magdalenian cave in the Pyrenees. He has the ears and antlers of a stag; handlike paws; athletic human legs and haunches; a horse's tail; and a long, rather elegantly groomed wizard's beard.

Clottes was hurt and outraged by the rancor of the attacks that greeted "The Shamans of Prehistory" ("pschedelic ravings," one critic wrote), and the authors defended themselves in a subsequent edition. "You can advance a scientific hypothesis without claiming certainty," Clottes told me one evening. "Everyone agrees that the paintings are, in some way, religious. I'm not a believer myself, and I'm certainly not a mystic.
But *Homo sapiens* is *Homo spiritualis*. The ability to make tools defines us less than the need to create belief systems that influence nature. And shamanism is the most prevalent belief system of hunter-gatherers.

Yet even members of the Chauvet team feel that Clottes's theories on shamanism go too far. The divide seems, in part, to be generational. The strict purists tend to be younger, perhaps because they came of age with deconstruction, in a climate of political correctness, and are wary of their own baggage. "I don't mind stating uncategorically that it's impossible to know what the art means," Carole Fritz said. Norbert Aujoulat tactfully told me, "We're more reserved than Jean is. He may be right about the practice of shamanism in the caves, but many of us simply don't want to interpret them." He added with a laugh, "If I knew what the art meant, I'd be out of business. But in my own experience—I've inventoried five hundred caves—the more you look, the less you understand."

For an older generation, on more intimate terms with mortality, it may be harder to accept the lack of resolution to a life's work. Jean-Michel Geneste, a leonine man of fifty-nine with a silver mane, told me about an experiment that he had conducted at Lascaux in 1994. (In addition to directing the work at Chauvet, he is the curator of Lascaux, and last winter he had to deal with an invasion of fungus that was threatening the paintings there.) Geneste decided to invite four elders of an Aboriginal tribe, the Ngarinyins—hunter-gatherers from northwestern Australia—to visit the cave, and put them up at his house in the Dordogne. "I explained that I would be taking them to a place where ancestors had, like their own ancestors, left signs and paintings on the walls, so that perhaps they could explain them," he said. "They're your ancestors? they asked. I said no, and that stupid reply made them afraid. If we weren't visiting my ancestors, they wouldn't enter their sanctuary, and risk the consequences. I was terribly disappointed, and finally, as good guests, they agreed to take a look. But first they had to purify themselves, so they built a fire, and pulled some of their underarm hair out and burned it. Their own rituals involve traversing a screen of smoke—passing into another zone. When they entered the cave, they took a while to get their bearings. Yes, they said, it was an initiation site. The geometric signs, in red and black, reminded them of their own clan insignia, the animals and engravings of figures from their creation myths."

Geneste agrees with their reading, but he also believes that a cave like Lascaux or Chauvet served many purposes—the way a twelfth-century church did. "Everyone must have heard that these sanctuaries existed, and felt drawn to them. Look at the Pont d'Arc; it's a great beacon in the landscape. And, like the art in a church, the richness of graphic expression in the caves was satisfying to lots of different people in different ways—familial, communal, and individual, across the millennia—so there is probably no one adequate explanation, no unified theory, for it."

For the next week, I climbed the hill to Chauvet once a day. A guardian, Charles Chauveau, who, by law, has to be present when the scientists are underground, took me hiking, and we scaled the cliffs to sun our faces on a boulder, watching the first rafters of the season negotiate the river and pass under the Pont d'Arc. Only a few members of the team enter the cave at a time, each to pursue his or her research, though because of potential hazards, especially carbon-dioxide intoxication, no fewer than three can ever be alone there. "In the old days, when you sometimes had Chauvet to yourself, it was awesome and a little frightening," the geologist Evelyne Debard said. But Aujoulat felt more intimidated at Lascaux. "I used to spend a solitary hour there once a week," he said. "I rehearsed all my gestures, so I wouldn't lose time. But after a while it became oppressive: those huge animals staring you down in a small space—trying, or so it feels, to dominate you."

Those who have elected to stay behind spend the day in a prosaic annex next to the camp parking lot which was built to provide the team with office space and computer outlets. Marc Azéma, who has collaborated with Clottes on books about Chauvet's lions (he also filmed the Tuareg baptism), gave me a virtual cave tour on a big monitor. Of necessity, Fritz and Tosello spend more time Photoshopping their research than conducting field work. (Henri Breuil made tracings directly from cave walls—an unthinkable sacrilege to modern archeologists.) They digitally photograph an image section by section, print the picture to scale, and take it back underground, where Tosello sets up a drawing board as close as possible to the area of study. The digital image is overlaid
with a sheet of clear plastic, and he traces the image onto the sheet, referring constantly to the original painting as he does so. This dynamic act of translation gives him a deeper insight into the artists' gestures and techniques than a mere reading would. He repeats the process on successive plastic sheets, each one focussed on a separate aspect of the composition, including the rock's contours. Then he transfers the tracings (as many as a dozen layers) onto the computer, where they can be magnified and manipulated. Describing the detail in a monumental frieze of horses between the Megaloceros Chamber and the Skull Chamber, Fritz and Tosello wrote, in "Chauvet Cave":

Once again, the surface was carefully scraped beneath the throat, which suggests to us a moment of reflection, or perhaps doubt. The last horse is unquestionably the most successful of the group, perhaps because the artist is by now certain of his inspiration. This fourth horse was produced using a complex technique: the main lines were drawn with charcoal; the inlaid, colored sepia and brown, is a mixture of charcoal and colored sepia and brown, is a mixture of charcoal and sepia and brown. The last horse is unquestionably the most successful of the group, perhaps because the artist is by now certain of his inspiration. This fourth horse was produced using a complex technique: the main lines were drawn with charcoal; the inlaid, colored sepia and brown, is a mixture of charcoal and clay spread with the finger. A series of fine engravings perfectly follow the profile. With energetic and precise movements, the significant details are indicated (nostril, open mouth). A final charcoal line, dark black, was placed just at the corner of the lips and gives this head an expression of astonishment or surprise.

While the team was at work, I often stayed on the cliff with Chauveau, reading Dale Guthrie's book at a picnic table. Guthrie, a professor emeritus of zoology at the University of Alaska, specializes in the paleobiology of the Pleistocene era. Not only is he an expert on the large mammals that cavort on cave walls; he has spent forty years in the Arctic wilds hunting their descendants with a bow and arrow. In that respect, perhaps, he brings more empiricism to his research than other scholars, though he also brings less humility. "The Nature of Paleolithic Art," as its title suggests, aspires to be definitive.

It is a handsome, five-hundred-page volume composed, like a mosaic, of boxed highlights, arresting graphics, and short sections of text that distill a wealth of multi-disciplinary research. The prose, like the layout, is designed to engage a layman without vulgarizing the science, or, at least, not too much. Guthrie, who sounds and looks, in his author's photograph, like an earthy guy, has fun with occasional rib-nudging subtitles ("Lesbian Loving or Male Fantasy?"; "Graffiti and Testosterone"), but they promote a premise at least as audacious as that of Clottes and Lewis-Williams: that our biology, expressed in our carnal appetites and attractions, including an attraction to the supernatural, is a "baseline of truth" for the cave artists' symbolic language.

Nearly all the illustrations are Guthrie's own renderings or interpretations of Paleolithic imagery (there are no photographs). A number of prehistorians are and have been, as he is, gifted draftsmen and copyists. But unlike the devout Breuil, or the cautious Tosello, Guthrie is a desacralizer. He admires the creative "freedom" of cave art—an acuity of observation coupled with, in his view, a nonchalance of composition. He stresses its erotic playfulness, even straining to discern evidence of dildos and bondage, despite the rarity of sexual acts depicted on walls or artifacts. "(No Sex, Please—We're Aurignacian" was the title of a scholarly paper on the period.) The reverence with which certain researchers—including, one infers, the Chauvet team—treateven the smallest nick in a cave strikes him as a bit too nice, and, where they perceive an elaborate, if obscure, metaphysics, he sees high-spirited improvisation. "Some Paleolithic images identified as part man and part beast may simply be artistic groopers," he writes. (But the artists sometimes did correct their work, Azema told me, by scraping the rock's surface.)

Paleobiology is, in part, a science of scientific modelling, and, analyzing the handprints in the caves, Guthrie argues that many, perhaps a majority, of the artists were not the "Michelangelo" of Lascaux or Chauvet but teenage boys, who, being boys, loved running and rumbling and, in essence, went on tagging sprees. It is true that among the masterpieces there are many fine drawings, including pubic triangles, that seem hasty, impish, or doodle-like. In Guthrie's view, prehistorians have imported their mandarin pieties, and the bias of a society where children are a minority, to the study of what, demographically, was a free-wheeling youth culture.

Guthrie is both provocative and respected—Clottes wrote one of the cover blurbs on his book—but some of his methods make you wonder how much of the light that he throws onto the nature of the art owes to false clarity. By calling examples of erotica from a huge catchment area without noting their size, date, or position, he distorts their prevalence. His cleaned-up drawings minimize the art's bewildering ambiguity and the contouring or the cave architecture organic to many compositions. As for the bands of brothers
speaking on a dare, and leaving what Guthrie calls their "children's art" to bemuse posterity, the life expectancy for the era was, as he notes, about eighteen, since infant mortality was exorbitant. But those who lived on could, thanks to the rarity of infectious diseases and the abundance of protein, expect to survive for thirty years more—considerably longer than the Greeks, the Romans, or the medieval peasants who built Chartres. Can puérilité as we know it—horny, reckless, and transgressive—be attributed to a people for whom early parenthood and virtuosity in survival skills were, as Guthrie acknowledges, imperative? Rash speleologists die every year, yet no human remains have been discovered in the caves (with the exception of a single skeleton, that of a young man, at Vilhonneur, near Angoulême, and those of five adults who were buried at Cussac, in the Dordogne). That is a staggering testament to the artists' sureness of foot and purpose, if not to their solemnity.

A few days before Easter, I left the camp and drove southwest, over the mountains, stopping at the town of Albi, where the Toulouse-Lautrec Museum, in a thirteenth-century palace off the cathedral square, has a small gallery of Stone and Bronze Age artifacts. I wanted to see the museum's tiny Solu­tréan carving, in red sandstone, of an obscene woman with impressive buttocks. She seemed well housed among Toulouse-Lautrec's louche Venuses. By the next evening, in a thunderstorm, I had reached Jean Clottes's home town of Foix, and found an old-fashioned hotel that he had recommended. From a corner table in the dining room, I could watch the swollen Ariège River flowing toward a distant wall of snow-covered peaks—the Pyrenees—that were black against a livid sunset. The Neanderthals had come this way.

Pascal Alard, an archaeologist, met me the next morning at Niaux, where he has conducted research for twenty years. It is one of three caves (with Chauvet and Lascaux) that Clottes, who had arranged the rendezvous, considers paradigmatic. I had driven south for about forty minutes, the last few miles on a road with hairpin turns that wound up into flinty, striated hills. The site was nothing like Chauvet. There was, for one thing, a parking lot at the entrance, deserted at that hour, a bookshop, and an imposing architectural sculpture, in Cort­ten steel, cantilevered into the cliff. (It is supposed to represent an imaginary prehistoric animal.)

Niaux's Magdalenian—its walls were decorated about fourteen thousand years ago—and it was one of the first caves to be explored. Visitors from the seventeenth century left graffiti, as did pranksters for the next three hundred years. In 1866, an archeologist named Félix Garri­gou, who was looking for prehistoric relics, confessed to his journal that he couldn't figure out the "funny-looking" paintings. "Amateur artists drew animals here," he noted, "but why?"

Niaux's enormity—a network of passages that are nearly a mile deep from the entrance gallery, which was used as a shelter during the Bronze Age, to the Great Dome, at the far end, branching like a cactus into narrow alcoves and low-ceilinged funnels, but also into chambers the size of an amphitheatre—helps to give it a stable climate, and small groups can make guided visits at appointed times. But when Alard had unlocked the door, and it closed behind us, we were alone. He had two electric torches, and he gave me one. "Don't lose it," he joked. He told me that he and some colleagues, all of whom know the cave intimately, decided, one day, to see if they could find their way out without a light source. None of them could.

The floor near the mouth was fairly flat, but as we went deeper it listed and swelled unpredictably. Water was dripping, and sometimes it sounded like a sinister whispered conversation. The caves are full of eerie noises that gurgle up from the bowels of the earth, yet I had a feeling of traversing a space that wasn't terrestrial. We were, in fact, walking on the bed of a primordial river. Where the passage narrowed, we squeezed between two rocks, like a turnstile, marked with four lines. They were vines of a finger dipped in red pigment that resembled a bar code, or symbolic flames. Further along, there was a large panel of dots, lines, and arrows, some red, some black. I felt their power without understanding it until I recalled what Norbert Ajoult had told me about the signs at Cussac. He was the second modern human to explore the cave, in 2000, the year it was unearthed, some twenty-two thousand years after the painters had departed. (The first was Cussac's discoverer, Marc Delluc.) "As we trailed the artists deeper and deeper, noting where they'd broken off stalagmites to mark their path, we found signs that seemed to say, 'We're sanctifying a finite space in an infinite universe.'"

Beyond the turnstile, the passage widens for about six hundred feet, veering to the right, where it leads to one of the grandest bestiaries in Paleolithic art: the Black Salon, a rotunda a hundred and thirty feet in diameter. Scores of animals were painted in sheltered spots on the floor, or etched in charcoal on the soaring walls: bison, stags, ibex, aurochs, and, what is rarer, fish (salmon), and Niaux's famous "bearded horses"—a shaggy, short-legged species that, Clottes writes in his new book, has been reintroduced from their native habitat, in Central Asia, to French wildlife parks. All these creatures are drawn in profile with a fine point, and some of their silhouettes have been filled in with a brush or a stumpmg cloth. I looked for a little ibex, twenty-one inches long, that Clottes had described to me as the work of a perfectionist, and one of the most beautiful animals in a cave. When I found him, he looked so perky that I couldn't help laughing. Alard was patient, and, since time loses its contours underground, I didn't know how long we had spent there. "I imagine that you want to see more," he said after a while, so we moved along.

Every encounter with a cave animal takes it and you by surprise. Your light has to rouse it, and your eye has to recognize it, because you tend to see creatures that aren't there, while missing ones that are. Halfway home to the mortal world, I asked Alard if we could pause and turn off our torches. The acoustics magnify every sound, and it takes the brain a few minutes to accept the totality of the darkness—your sight keeps grasping for a hold. Whatever the art means, you understand, at that moment, that its vessel is both a womb and a sepulchre. *