

CAVEMAN DIORAMAS to Cut & Assemble

Full-Color Three-Dimensional Scenes of
Neanderthal and Cro-Magnon Life



Matthew Kalmenoff

FIGURE 1. COVER ART, CRO-MAGNON DIORAMA ASSEMBLED, FROM *CAVEMAN DIORAMAS TO CUT AND ASSEMBLE* (KALMENOFF 1985). REPRINTED WITH PERMISSION OF DOVER BOOKS.

YOU CAN HIDE, BUT YOU CAN'T RUN: REPRESENTATION OF WOMEN'S WORK IN ILLUSTRATIONS OF PALAEOLITHIC LIFE

DIANE GIFFORD-GONZALEZ

MORE IS NEEDED THAN A REJECTION OF TRADITION, MORE ALSO THAN AN "INNOCENT EYE." ART ITSELF BECOMES THE INNOVATOR'S INSTRUMENT FOR PROBING REALITY.

— ERNST H. GOMBRICH, *ART AND ILLUSION*¹

FIERCE CRITICAL INTERROGATION IS SOMETIMES THE ONLY PRACTICE THAT CAN PIERCE THE WALL OF DENIAL CONSUMERS OF IMAGES CONSTRUCT SO AS NOT TO FACE THE FACT THAT POLITICS OF DOMINATION INFORM THE WAY THAT THE VAST MAJORITY OF IMAGES WE CONSUME ARE CONSTRUCTED AND MARKETED.

— BELL HOOKS, *BLACK LOOKS: RACE AND REPRESENTATION*²

TO SET THE SCENE

Caveman Dioramas to Cut and Assemble (Kalmenoff 1985) permits an extraordinarily transparent view of what goes on in gendering humans and their actions in the prehistoric past. What are "figures" of interest, what is "background" and what constitutes the sidelines, are clearly labeled. When we literally look into "Cro-Magnon Life" (Figure 1), we meet the background of a Lascaux-like painted cave, and 22 painting, dancing, wisdom-imparting male "Figures" — some themselves labeled "Cro-Magnon Life," plus two famous bison modeled in clay from Tuc d'Audobert, a spear-riddled bear (pulled from an early sketch by the Abbé Breuil), and a stand-alone pile of rocks, with tabs ready to bend and insert into the diorama. The consumer may assemble them in whatever spatial arrangement he or she wishes, but naturally can use only the range of persons and roles presented on the pages of the cut-out book.

Searching for some clue as to the role in Cro-Magnon life of anyone other than men in their prime, we come upon the "Left Side Panel" (Figure 2), where we peer out of the cave mouth toward a distant home encampment, where

thirteen small female and child figures, most of them literally faceless, engage in their own, unlabeled version of "Cro-Magnon Life." The women sew, stretch hides, lead children by the hand, sit in the entrance of a hut. The children hold spear-like sticks, apparently in training for the *real* Cro-Magnon life in the cave. (The Right Side Panel represents the celebrated engraved mammoth from Rouffignac, in considerable facial detail.)

This essay works inward from the Left Side Panel, to re-cut and re-assemble portrayals of gender in artists' representations of prehistoric people. I conceive of this critical *découpage*, or cutting-out, as a kind of *recouvreage*, a recuperation, regaining the imaginary and scientific ground persistently staked out, and monopolized by a narrow range of variations on the themes of gender and class, trading in the pile of rocks for a somewhat more diverse range of actors in the central frame.

Were *Caveman Dioramas* an isolated example of placing children and women at the margins of artists' representations of prehistoric people, this essay would never have been written. However, it is not. It only distills in obvious form patterns of presentation characteristic of the genre as a

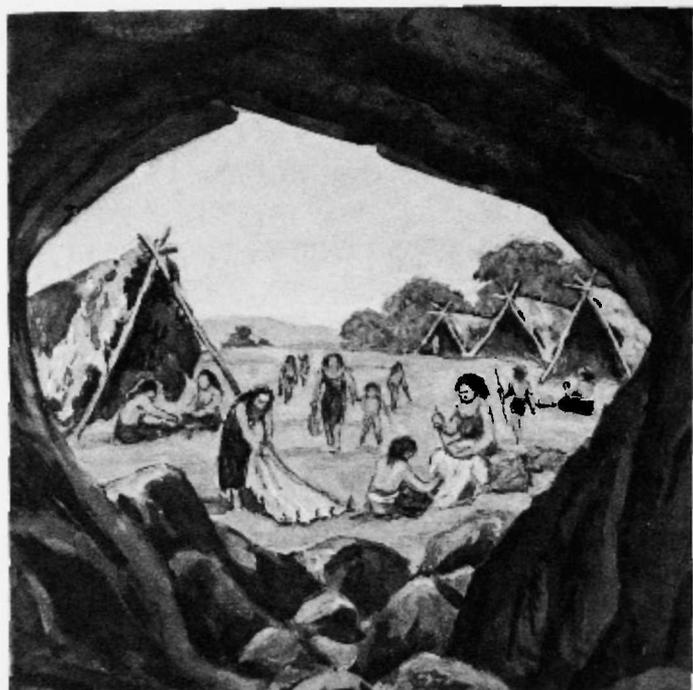


FIGURE 2. "LEFT SIDE PANEL" OF CRO-MAGNON DIORAMA, FROM *CAVEMAN DIORAMAS TO CUT AND ASSEMBLE* (KALMENOFF 1985) PLATE 10. REPRINTED WITH PERMISSION OF DOVER BOOKS.

whole. As a teacher of archaeology and human ecology, I have sought out artists' depictions to help me convey to my students the powerful attractions of working in my field. Repeatedly, I found the worlds represented to be at variance with what I know of recent human societies, from ethnographies and from my own experience in various cultures. As a mother who has lived in other cultures and worked with women there, I found the worlds depicted to be ones that neither my daughter, nor the women and children I know, nor I could stand in.

Moreover, as an archaeologist, I was aware that the range of documented living cultures certainly do not exhaust the possibilities of what modern humans, let alone earlier hominids, might have experienced. Taking an archaeologist's tack, I wanted to assess whether my intuitions about the patterning in these representations held up against the

evidence, and I conducted a survey of a set of depictions of Cro-Magnon people. Results indicate the existence of a self-referencing representational tradition rooted in classical Western art genres. Rather than take advantage of the rich possibilities offered by ethnographic knowledge and informed archaeological research, most artists' representations indeed do persist in projecting culturally particular visions of men, women, elders, and children and their roles into the deep past.

Which people and activities are privileged in artists' representations is not a trivial issue for paleoanthropologists. These depictions construct a parallel, visually based narrative of the human past that must, because of their pervasiveness and communicative potency, be taken seriously. Through their wide use in museums and popular literature, they literally construct much of the knowledge that laypersons have of the prehistoric past. Moreover, as noted by Martin Rudwick (1992) in *Scenes from Deep Time*, artists' representations can work recursively with expert knowledge by influencing scientific practitioners' own perspectives on the past, thus affecting the course of scientific research.

Before reporting results of the survey, I wish to articulate three perspectives which guide my work. First, I intend it to be re-constructive rather than simply de-constructive, because I believe this genre has tremendous potential for challenging viewers to reflect on what it means to be human. Thus, in critically examining representations' themes and structures, I am not arguing that we should give them up, because they have been "biased," or even because they are not wholly "factual." Rather, I assert that they must include more perspectives, a broader range of actors and activities, draw more people into their worlds. Second, although this essay is an explicitly feminist approach to the materials, the representational stakes are everyone's, and I hope to continue to explore other aspects of those stakes in other contexts (e.g. Gifford-Gonzalez 1992). When not one of 231 depictions of prehistoric males shows a man touching a child, a woman, or an older person of either sex, manhood is also being constructed in culturally particular and contestable ways. When no child is ever shown doing useful work, or an elder man or woman acting vigorously, messages about age and social usefulness extend beyond

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gender boundaries.

Third, and most important to me as an archaeologist, recognizing artists' representations as "science fictions" which place scientific ideas in imaginative settings, should in no way compel experts to shun them. As a practicing archaeologist, I see philosophical parallels between the best of these artful representations and what my colleagues and I do as we investigate the unseeable. These parallels are part of the interaction of what Rudwick (1976, 1992) has called the "visual language" of science with its more abstract conceptual and textual expressions. These linkages raise questions about scientific experts' roles as co-creators, viewers, and consumers of these images.

WHY LOOK BEHIND THE SCENES? AND HOW?

Each discipline has a metaphysics and epistemology (viz. Clarke 1972): how practitioners in a field think about correct reasoning procedures, and how they know what they know. Although photographs, site plans and sections, drawings of artifacts and bones, and miscellaneous charts (such as the ones presented later in this essay) permeate paleoanthropological and archaeological discourse, until recently, their role in constituting knowledge was seldom examined (but see Piggot 1978). Standards for credibility in these genres are only now being examined critically (cf. Adkins and Adkins 1989). Rudwick's (1976) work on illustration in geology and paleontology indicates the power of such pre-existing documentary forms in structuring further scientific research and discussion. His more recent (1992) analysis of imaginative reconstructions of "deep time" reveals that they are neither trivial afterthoughts nor passive receptacles of scientific knowledge constituted in other fields of practice. Rather, they themselves constitute a discourse on the credibility of scientific findings. When such scenes contain humans, the question of what is credible becomes even more complex: if humans are represented as social beings, the form that sociality takes is inherently the result of socially grounded choices on the part of fabricators of the scene. Thus, an exploration of their constitution both as artistic statements and as social testimonies is necessary.

This essay now turns to some basic questions about the construction and context of artists' representations. For whom are depictions of prehistoric life composed? By whom and in what context? What grants credibility to portrayals that obviously blend scientific inference with artistic fiction? It then moves to results of the survey and asks more about the social content of the representations.

Which persons and activities do they privilege? Which do they render invisible? What cultural meanings are brushed into the images presented? Finally, how can we best look toward reconstituting the production — and consumption — of such images?

THE WORK OF ARTISTS' RECONSTRUCTIONS

Artists' depictions of prehistoric people are a didactic device, conveying a distillation of expert knowledge to the general public. Like their close kin, museum dioramas, they render the "stones and bones" of palaeolithic archaeology vivid and intelligible to the knowledge-seeking child or adult who visits a museum or pages through a book. They thus purport to render fact and expert opinion to a general audience. However, in contrast to dioramas depicting living faunas and exotic cultures, neither scientific expert, artist, nor viewing public can delude themselves for a moment that depictions of palaeolithic life *literally* represent nature and human experience.³ Embodied direct experience of the situations and people portrayed, as is at least theoretically possible with wildlife or ethnographic dioramas, is impossible. Everyone producing and consuming these prehistoric representations thus knows that they are imaginative blends of scientific knowledge and artistic creativity.

The fundamental "direct experience" for this genre is the esoteric knowledge of physical anthropologists, archaeologists, geologists, paleontologists, and other scientists. Specialists' experiences with the three-dimensional geographic loci they call archaeological sites and with the stones, bones, and other objects found in these places are mediated by epistemics and philosophical systems not apparent to the layperson. This non-transparency of the source materials poses special problems for didactic portrayals of prehistoric humans. Hardly any knowledge-seeker needs to be persuaded that African savannas or Amazonian rain forests exist, but many may approach prehistoric pictures unconvinced that Ice Age humans existed. The epistemological inaccessibility of both evidence and method in prehistoric research has for over a century provided space for alternative prehistories (e.g. Atlantis, Mu), for Creationist resistance to evolutionary narratives, and for the skepticism with which the average person greets prehistoric accounts, whether textual or visual.

Artists working in this genre must therefore effect a double mediation. They first must grasp enough of the knowledge behind relevant expert testimony to render it visually intelligible. Additionally, they must create from

that visual information a convincing spectacle, in fact advancing arguments for the credibility of the scientific knowledge through the visual language. Thus, when artists create portrayals of prehistoric scenes, they engage in a different process of representation from that enacted by their counterparts depicting contemporary biological or geological specimens. They are not simply using their art to match perceptible, worldly objects, to use Ernst Gombrich's (1960) term for realist approaches to representation in art. Instead, they are mining arcane specialist knowledge to make simulacra, realistic images of things that don't exist in the present world. Depictions of prehistoric humans, like those of other vanished species, are thus much more literally "science fictions" than are wildlife dioramas, which in themselves have been shown to be highly culturally charged constructions (cf. Haraway 1989).

Martin Rudwick (1992) has described how late 19th century scientists and artists collaborated to produce a visual language in which earth and life histories were effectively rewritten for amateurs and professionals alike. To this day, books and museum exhibits on these topics incorporate a variety of tactics to argue for the credibility both of the scenes represented and of the science that engendered them. Yet, these stratagems reflect the tension between the facts and the fictions of their fabrication. From one perspective, the artists and those who use their work are caught in a conundrum of credibility. Scientific experts provide artists with highly technical details of human existence in ancient, radically different contexts, with the expectation that the artists' representations will convince non-expert viewers of the plausibility of those humans' existence. But because the experts' esoteric knowledge is, in laypersons' terms, open to question, the visual representations also become an argument for the credibility of the scientists' inferences.

Of particular relevance to this essay are comments by Stephanie Moser (1992), on reconstructions of Neanderthals. She contends that these portrayals are themselves self-contained theories, not so much supporting textual arguments as visually constituting them in a more detailed and compelling form. Her historical review notes that subsequent, textual revisions of Neanderthals' status may have little effect in re-constituting the visual field. She observes that transformations by various artists of earlier visual representations appear to have a life of their own, truly comprising a parallel visual language. As we shall see, Moser's observations on the partial independence of visual from textual discourse holds true in representations of early human lifeways.

The connection between expert knowledge and artistic creativity in fabricating dioramic portraits of early hominids has not yet been fully explored. Moser's (1992) work on the role of visual images in shaping discourse on Neanderthals shows that the link between artist and expert can be very close. In the first decade of the century both Marcellin Boule and Arthur Keith worked very closely with individual artists to produce widely disparate images of Neanderthals. Boule and the artist Kupka put extreme emphasis on Neanderthals' non-modern, ape-like features (Moser 1992: Figure 1), while Keith and Forestier presented a much more human, thoughtful, toolmaker (Moser 1992: Figure 2). At present, however, we have few cases testifying to the extent to which scientific experts direct the creation of the artistic products, their influence over details of composition and content, and the range of variation in their influence. Moreover, the roles of editors and directors of exhibits in shaping the final form of dioramic representations have not been thoroughly investigated, although numerous anecdotes testify to their strong influence in shaping the presentation of race and gender to the public. These areas must be investigated further before we have a clear vision of the actual process by which images are produced and reproduced.

However, my study of representations suggests that artists have recruited images from artistic genres of which they, rather than scientific experts, would have had expert knowledge, and that composition and detail of these scenes are largely at the discretion of the artist. Motifs drawn from fine arts paintings, recurrent patterns of figure placement within the frame, and consistent privileging of certain activities and actors in works by multiple artists, all support the view that this is a genre with a common set of conventions. By extension, this implies that artists are given a certain amount of direction and scientific content by experts but that, as long as their product produces that content acceptably *and* conforms to the cultural expectations of themselves and their reviewers (scientific expert, editor, museum administrator), they have freedom to compose as they will. Inasmuch as these details of composition have considerable symbolic content, artists must be seen as active agents in creating cultural meaning in these representations.

ANATOMICAL RECONSTRUCTIONS VERSUS DIORAMIC REPRESENTATIONS

Although it is common for archaeologists and physical

anthropologists to refer to all portrayals of ancient humans as "reconstructions" (e.g. Moser 1989, 1992), it is useful to distinguish two varieties of images, because each incorporates a different level of credibility in the eyes of their creators and the viewers. First, there are *anatomical reconstructions*: the painstakingly built-up anatomical renderings of soft tissues in three dimensions, inferred from details of evidence of the bones. Anatomical reconstructions often begin as a life-sized, three-dimensional sculptures built up on a copy of a skull, precisely the same as produced in forensic facial reconstructions of crime or disaster victims (Gerasimov 1971; Waters 1990). Similar reconstructions feature the entire body, again using biomechanical reasoning to work from bone to muscle complex. From the three-dimensional models, sketches of the face and figure in action are made. Anatomical reconstructions intimately link three-dimensional museum dioramas and the two-dimensional representations in magazines and books drawn from them. Since some of these reconstructive techniques and the theory behind them literally hold up in court, the educated viewer may readily be convinced of their credibility as applied to ancient hominids.

It can be argued that anatomical reconstructions of ancient humans are themselves embodied narratives, positioned at least implicitly within the evolutionary story of the journey from animal to human (viz. Conkey and Williams 1991) and usually bearing diacritical marks of species, race, and gender. Texts accompanying these reconstructions often state that details of fat distribution, skin color, hair color and texture are more arguable products of an educated imagination than is the musculature. However, the musculoskeletal substrate is rendered "scientifically sound" by virtue of links with strong, uniformitarian anatomical relationships and the oft-cited standards of criminal evidence.

The other group of images may be called *dioramic representations*. I use the term "dioramic" here to emphasize the close link between the three-dimensional assemblages of figures found in museums and the two-dimensional compositions of reconstructed bodies in social groups and hypothetical scenes from daily life. For all the richness of their multiple actors and activities in "natural" settings, dioramas lack the same clear arguments for their credibility as possessed by anatomical reconstructions. For example, a diorama could conceivably include a group of anatomically correct Neanderthals repairing an automobile (and similar dioramas are deliberately constituted in amusement parks because of their absurdity). In such a case, the anatomical veracity of the bodies would hardly serve to counteract viewer incredulity. Viewers intuitively know that the

stories told by dioramic reconstructions are more questionable, and a variety of tactics are commonly deployed to buttress dioramic representations against viewer skepticism. At the same time, dioramic representations of prehistoric humans, like wildlife and ethnographic dioramas, are especially laden with cultural meanings. Therefore, the cross-cutting influences of expert knowledge, context, content, and style in supporting their credibility merit closer scrutiny.

PUSHING PLAUSIBILITY: CONTEXT AND CONTENT

The plausibility of dioramic representations is simultaneously supported by details of their context of presentation, by expert knowledge, by specific content, and by their style. Most obviously, the contexts of visual representations authorize them as credible, either architecturally, through entry into the demarcated space of the museum (where expert testimony and scientific truth are by definition offered) or textually, through induction into a literary world of scientific truth.

Within museums, eye-catching displays of introductory text, captions, subsidiary discourses on scientific methods, and recorded tape tours work to support the plausibility of dioramic representations. One common contextual move spatially links step-by-step narratives of "real" scientific inference to the imaginative dioramic representations. Visual models or photographs are employed to lead the viewer through the application of little-understood analytic methods, such as radiocarbon dating. The sample is shown being removed with care from its archaeological context and then being processed according to strict procedures in the lab (in an aside, the physicochemical principles of the method are graphically depicted); the radiocarbon determination is made and a date and its ranges of error produced (with another aside on standard deviations). In books, these discussions are often literally on the margins of the main narrative (e.g. Howell 1969). In museums, they are smaller, denser panels between more expansive dioramic representations. The borders of scientific detail frame the life-sized (or larger) dioramic centerpiece, with the aim of convincing the viewer that scientific knowledge is not capriciously derived; its methods are simply unrevealed secrets from the world of experts. Light shed by the texts on arcane scientific endeavors refracts upon the persistently obscure "truths" of the social relations visually depicted.

The dioramic representations' authority is often supported by recruiting the scientific reliability of the *anatomical reconstructions*. This move may be carried out

both by contextual narratives surrounding a dioramic representation and by inclusion of such reconstructions as content (automotive Neanderthals aside). In either case, the illustrator's own expert knowledge is cited as a necessary ingredient of the accuracy of the visual representations. An example is citation of John Gurche's work in popular science texts' and video documentaries. Gurche, formerly with the National Museum of Natural History, combines a scholarly background in physical anthropology and anatomy with his artistic skills. In popular presentations, he is shown working like a forensic scientist to construct the anatomically correct muscle groupings which underlie faces of earlier hominids ("Mysteries of Mankind," Nova; Lewin 1988; Waters 1990). Such accounts of an artist's expert knowledge (see also citation of Gerasimov in Howell 1965) are "true," in the sense of giving an accurate description of the person's skills and activities. However, narratives featuring such citations often move on to presenting depictions of prehistoric human life, without discussing the difference between anatomical reconstructions and more speculative representations of prehistoric humans lifeways.

Another tactic for achieving plausibility in dioramic representations entails incorporating real-world content. Identifiable, one-of-a-kind artifacts and parietal art, or real geographic locales are portrayed in the dioramic representation, re-placing them in an imaginary human social milieu, as was the case with the Tuc d'Audobert bison or Rouffignac mammoth in *Caveman Dioramas* (Kalmennoff 1985). In a similar strategy, reliably inferred activities such as a specific type of stone tool making are portrayed. Placing the real into the hypothetical was taken to a logical extreme in a recent French popularization, *Lascaux et son Temps* (Ageorges and Saint-Blanquat 1989), in which mapped layouts of specific archaeological sites served as the ground plans for some dioramic depictions.

MAKING IT REAL: THE ROLE OF STYLE

While the scientific facts bordering dioramic representations and the real objects in them help persuade viewers of the depictions' plausibility, the realistic style in which they are executed itself constitutes a major argument for their believability. To the enculturated Western eye, realistic renderings appear "natural," and their pervasive use in prehistoric dioramas is consonant with broader practices in scientific illustration. Among dioramic representations, the drive for credibility through visual realism was taken most literally in the Time-Life series on "The Emergence of Man," in the 1970s. "Real world" backgrounds, an African waterhole, for instance, were photographed (Edey 1972:

22), and bodies and visages of early hominids executed in photographic detail were superimposed on the photographs, effecting a transformation of the present landscape into the past through the magic of commercial artistry.

Because realism counts as a major argument for the plausibility of what is depicted, we can benefit from a brief examination of classic interrogations of this style. Gombrich (1960) has cautioned that realism should not be construed as a "natural" result of the progress of Western (or human) artistic perception, but rather as the historically situated result of an intentional set of choices concerning the representation of objects. It is, he notes, a strategy that concentrates on matching the image created with an object as visually perceived (illusionism), at the expense of other possible, and sometimes equally informative, modes of representation (his image "making").

For most viewers, and here I would include scientific experts, realism is read as objective truth. As Gombrich (1960) noted over thirty years ago, even ostensible breaks with the realist representational tradition in 19th century fine arts have not necessarily destabilized the underlying cultural epistemics linking illusionism with objective veracity. Thus, as a form of scientific discourse, the style persists in advancing its truth claims, despite surrealist and other challenges.

A rigorously schooled naturalism characterizes science illustration, which Barbara Stafford (1991) argues was developed and codified in response to scientists' and explorers' needs to present credible images of newly discovered worlds within the human body and around the globe. Thus, the realist graphic tradition from which prehistoric representations derive itself began as an argument, in culturally specific terms, for the credibility of objects not accessible to the common senses of the viewer. Its use to depict temporally inaccessible objects is simply an extension of the original strategy.

In popular art traditions, realism is consistently mobilized to depict the novel or un-natural.⁴ It is the dominant mode in science fiction illustration, where space stations, the red planet, and humanoids are rendered in plausible, "real life" terms. Thus, in everyday Western culture, illusionist styles of representation (cf. Gombrich 1960) serve as an argument for plausibility, if not for truth.

The more we contemplate reconstructions of prehistoric humans, the more they highlight, in almost surrealist form, their paradoxical mediation of fact and fiction. Besides validating the plausibility of the dioramic representations themselves, realism visually authorizes the factuality of the contextualizing science that frames them. Obviously posed photos of "real people in the lab" begin to blur into photographic-style portraits of early hominids in

the dioramas. Examined closely, text, visual representation, and context work in fluid and ambiguous ways, as scientific facts are represented in fictionalized modes, and the fictions of the representations are made compellingly factual by their style.

But realism does more than make the *object* represented credible. In his thoughtful analysis of E. O. Wilson's *Sociobiology*, Greg Myers (1990) argues that Wilson places the most realistic graphics in his profusely illustrated book precisely at points where especially contestable or abstract theories are presented in the written text. He points out as well that the most clearly labeled "speculative" representations, one, a dynamic moment in dinosaur life, the other, a hassle over a carcass between pugnacious early hominids and other carnivores, are rendered in the same exceptionally detailed, realistic style. Myers notes that Wilson and his illustrators naturalize charts presenting abstract scientific data by inserting realistic renderings of biological forms, for example, putting an ant's body into the corner of a Cartesian coordinate graph.

Myers (1990: 241-242) states that incorporation of such "gratuitous detail" into science illustrations is actually a major visual device for buttressing the plausibility of textual arguments. While these naturalistic embellishments may at first appear irrelevant to the main point of the graphic, as delineated by caption or textual citation, Myers argues that their inclusion creates in the viewer a cognitive context for accepting as "real" the arguments presented by the graphic and even by the text.

The concept of gratuitous detail is especially useful for analyses of dioramic representations of prehistoric people, because these and other "scenes from deep time" may fairly be viewed as predominantly composed of such touches. The wealth of naturalistic contextual detail in dioramic representations is what sustains most of the argument for the credibility both of the scene depicted and of the science behind it. The embellishments are thus the central rhetorical device in what Rudwick and Moser have characterized as the visual language of science.

Realizing the rhetorical power of gratuitous detail in dioramic representations enables the viewer to begin analyzing their content as the product of deliberate choices by their makers. Patterns of composition, of design elements and of their symbolic content may be examined as arguments for the naturalness of the scene — and hence its reality. But the dioramic representations are composed of two very different kinds of arguments for plausibility. The first is the "natural" detail of landscape, vegetation, and animal life that serve as the context for the human figures. As such, these are the kind of gratuitous detail which Myers describes. The second set of elements are the human bodies, the

central actors themselves. These people, or near-people, have hands, eyes, facial expressions, and they draw us in toward them, their bodies another focus of familiarity in the composition. As portrayed in artists' dioramic representations, the "real" world of the prehistoric past is thus enticingly accessible both in its natural details and in its humanity. Yet the familiarity of human bodies, their expressions and gestures, serve to support others kinds of argument for plausibility: that their social world is also real. These bodies are gendered, they display the marks of age, and they exist in the scenes as socially identified actors. If their realist style and context are arguments for their credibility, than we must ask what relations are naturalized, what primordial human conditions are constructed, in such a visually plausible voice?

In his now-classic *Ways of Seeing*, John Berger (1972) argued that realism in Western fine arts has served to make "natural" inherently contestable social relations: of property and authority, of sexual and racial domination. Berger's discussion ranges from the difference between foregrounding female nudes and doing the same with fully clothed figures in the formal portrait, from the social content of illusionist representations of landscapes and their owners to those of the African servant crouching below her white mistress. Berger's arguments cut across the ingrained consciousness with which viewers educated in fine arts conventions read such works, to unveil the relations of inequality the works simultaneously mask and support.

Berger's work forms a good platform from which to launch an analysis of dioramic representations, in part because they depend on many stylistic and schematic devices first developed in the fine arts. When we examine many such depictions, we begin to see, as Berger did in working through fine arts, that this "real" world has a specific social shape, expressed in the placement and activities of persons of different genders and ages. While differentiation in social roles by age and gender appears to be a feature of modern human societies, the particular shape of the prehistoric social world replicates aspects of inequality and privileging charted by Berger. The balance of this essay works through the visual messages about power, class, and gender to be found in dioramic representations, with the aim of not only calling them into question but also accounting for the patterns in cultural terms.

DIORAMIC REPRESENTATIONS OF CRO-MAGNON LIFE

My survey focuses on dioramic representations of "Cro-Magnon" people from Europe during the last Ice Age, named after the first find-site of Ice Age representatives of

modern humans, near the town of Les Éyzies, in southwestern France. Most depictions of “anatomically modern humans,” as they are known in paleoanthropological circles, are in fact of Cro-Magnons.

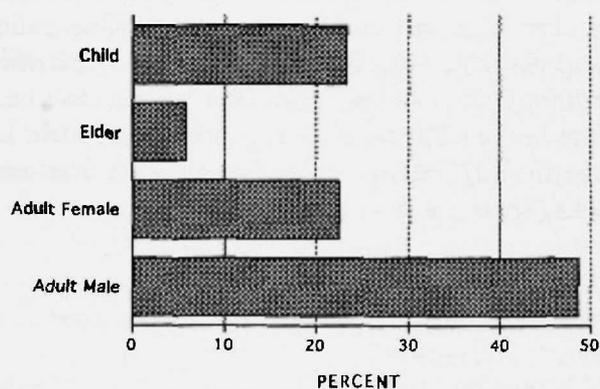
Before addressing the survey, certain issues implicit in representations of Cro-Magnons should be examined. These pictures present white people with European features. Physical anthropologists tell us that skeletons of the Ice Age representatives of *Homo sapiens sapiens* in Europe most closely resemble skeletal samples from recent Western European populations. It thus makes sense to represent Cro-Magnon people with European facial features.⁵ But these scientific facts are also cultural properties, and an uneasy relationship exists between narratives of scientific plausibility and those of social domination. For example, U.S. magazine representations of “the way we were” (*Newsweek* 1986) show “our” ancestral modern human as white, male, and in his prime. Contemporary French popularizers have no epistemic problems in recruiting Cro-Magnon people of 20,000 to 30,000 years ago as “*Les premiers français*” (e.g. Saint-Blanquat 1989).⁶ It is, however, beyond the scope of this paper to explore how nationalism and race are configured in these representations (see Moser 1992; Gifford-Gonzalez 1992). I will focus instead on issues of power, gender and class within a corpus of dioramic representations of Cro-Magnons.

With my assistants, I systematically surveyed a sample of eighty-eight artists’ dioramic representations of Cro-Magnons found in publications accessible to the public, including college textbooks, books for the general public, and postcards in English and French. The Cro-Magnon survey is part of a wider study of anatomical reconstructions and dioramic representations of various hominid species currently under way. The sources surveyed cannot be said to be an exhaustive list, but they do include many publications readily accessible to the interested public, such

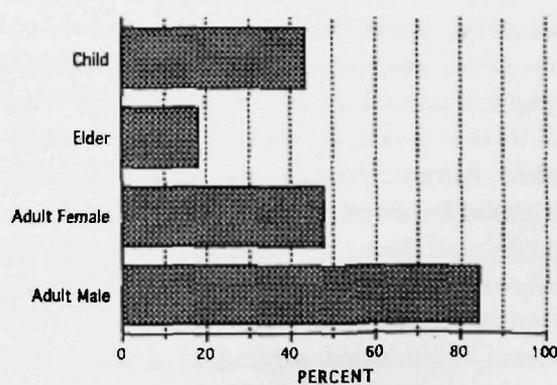
as the Time/ Life Early Man book (Howell 1965) and the later “Emergence of Man” series by the same publisher, as well as Lewin’s more recent *In the Age of Man* (Lewin 1988). Three popular books available at archaeological site museums in France are included. To obtain a reasonable sample of accessible literature, we surveyed the University of California’s Melvyl® bibliographic database and the Tozzer Library listings in archaeology for current and older popular books which might contain such images. Recent textbooks in physical anthropology and archaeology were also checked for such illustrations. About three sources were checked for every one that yielded images used in the survey (see Appendix 1 for list of source publications). The present sample will be expanded with addition of other publications; for example, Augusta and Burian’s (1960) *Prehistoric Men* was not accessible and therefore not included in this survey, and some older sources must be visited in special collections.

Over 60% of the illustrations date to the 1980s, with another 15% published in the 1960s and 1970s. The illustrations were created by Czech, French, English, and U.S. authors. For each illustration, the following data were documented: publication, author, year, country of publication, artist, nationality of artist. For each dioramic representation, its putative geographic location, locale (simply divided into camp, landscape away from camp, and deep cave), numbers of persons, and types of activity depicted were recorded. Each individual depicted in a scene was assigned to one of five age and gender categories: adult male, adult female, gender-ambiguous adult, older adults (including male, female, ambiguous), and children (including male, female, ambiguous), in the basis of bodily signs supplied by the artist (e.g. facial hair, breasts, gray hair, wrinkles, etc.). In effect, we made as transparent an “insider’s” cultural reading of the figures as possible, although the gender-ambiguous adults immediately presented us with interpretive paradoxes.⁷ For each individual figure we

PROPORTIONS OF AGE AND GENDER CLASSES



PROPORTIONS OF PICTURES WITH AGE AND GENDER CLASSES



FIGURES 3A AND B. PROPORTIONS OF AGE AND GENDER CLASSES IN SURVEYED DIORAMIC REPRESENTATIONS OF CRO-MAGNONS: LEFT FIGURE SHOWS PROPORTIONS OF INDIVIDUALS; RIGHT FIGURE, PROPORTIONS OF PICTURES FEATURING INDIVIDUALS OF VARIOUS CLASSES. FROM EIGHTY-EIGHT ARTISTS’ DEPICTIONS OF CRO-MAGNON LIFE.

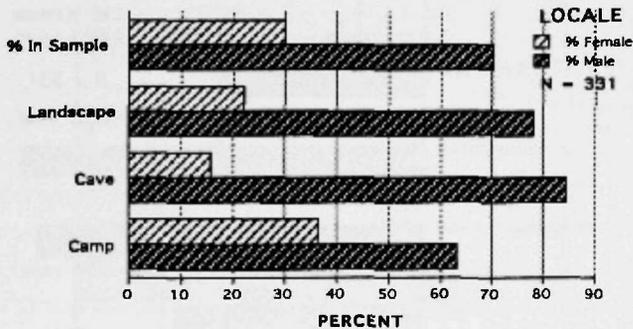


FIGURE 4. PROPORTIONATE REPRESENTATION OF MALES AND FEMALES OF ALL AGES IN THREE LOCALES: CAMP, LANDSCAPE AWAY FROM CAMP, AND DEEP CAVES. PROPORTIONAL REPRESENTATION OF MALES AND FEMALES IN THE OVERALL SAMPLE OF 331 FIGURES GIVEN FOR COMPARISON.

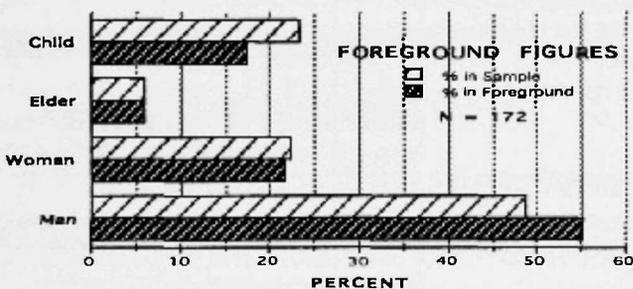


FIGURE 5A. PLACEMENT OF AGE AND GENDER CLASSES IN THE FRAME: FOREGROUND. "PERCENT IN SAMPLE" INDICATES THE PROPORTION OF PERSONS IN THAT AGE AND GENDER CLASS IN THE OVERALL SURVEY SAMPLE OF 444 INDIVIDUALS.

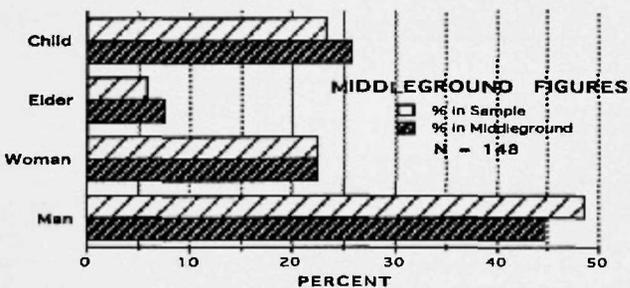


FIGURE 5B. PLACEMENT OF AGE AND GENDER CLASSES IN THE FRAME: MIDDLE GROUND. "PERCENT IN SAMPLE" INDICATES THE PROPORTION OF PERSONS IN THAT AGE AND GENDER CLASS IN THE OVERALL SURVEY SAMPLE OF 444 INDIVIDUALS.

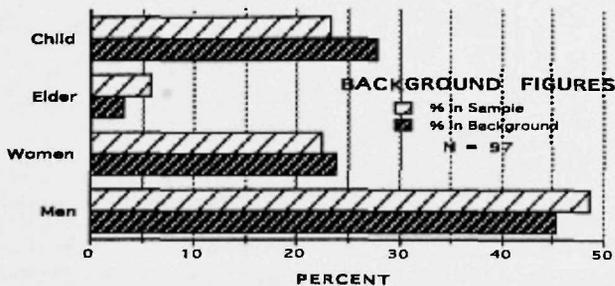


FIGURE 5C. PLACEMENT OF AGE AND GENDER CLASSES IN THE FRAME: BACKGROUND. "PERCENT IN SAMPLE" INDICATES THE PROPORTION OF PERSONS IN THAT AGE AND GENDER CLASS IN THE OVERALL SURVEY SAMPLE OF 444 INDIVIDUALS.

recorded the following data: locale (landscape setting), placement in the frame (foreground, middle ground, background), activity, posture, whether arms and legs were in motion, degree of nudity.

PATTERNS OF AGE AND GENDER REPRESENTATION IN THE PREHISTORIC DIORAMAS

Whom the viewer is allowed to see, and where they are placed in the frame relative to the viewer, reflect choices regarding who is typical and important, in other words, patterns of privileging. Of 444 individuals (excluding the 141 gender-ambiguous adults) surveyed, about half are adult males, less than a quarter are adult females, slightly more are children, and less than 6% are elders (Figure 3a). Fifteen of the 103 children depicted are actually infants in arms, whom I read more as signifiers of the "womanhood" of the persons holding them than as representations of distinct individuals. Thus, the proportion of intentionally depicted children is about 20%.

Numerical dominance of males in the dioramic representations is even more strikingly reflected in the tally of the *number of depictions* portraying individuals in these various age and gender classes (Figure 3b). Fully 84% of the pictures include adult males, while under half show women, 43% contain children, and 18% portray elders. Whereas half the representations are men-only, women-only pictures total eight. There are no elder-only or child-only pictures. The cumulative message appears to be that where adult men aggregate and act is worth viewing, and those places where they do not may be overlooked.

The three locales presented in these scenes Cro-Magnon life narrate a tale of gender-differentiated access to certain parts of the landscape (Figure 4). Men are somewhat over-represented in the landscape, relative to their proportion in the overall sample, and under-represented in camp. They significantly dominate caves. Women are somewhat under-represented in forest and field, relative to their overall proportions in the sample, usually shown carrying burdens between camps, not engaged in gathering, butchery, or other active endeavors. Of the nine women placed in deep caves, eight are from a single book with a female illustrator, *Véronique Ageorges* (Ageorges and Saint-Blanquat 1989) and the other from a deliberately revisionist painting overseen by Margaret Conkey. To those of us conversant with thirty years' hunter-gatherer studies and with feminist critiques of "Man the Hunter" (e.g. Tanner and Zihlman 1972; Conkey and Spector 1984), the cumulative perspective on women and men in the landscape bears a peculiarly Western, woman's-place-is-in-the-home, cultural stamp.

Every diorama assembles individuals in the frame deliberately, foregrounding some and backgrounding others (Figures 5a, 5b, 5c). Deviations from the overall rates of representation in the total sample are in most cases not statistically significant, but indicate a cumulative tendency to put men of prime age in the foreground (Figure 5a), to place children in the background (Figure 5c), and put women anywhere but the foreground. Although analysis of the data is ongoing, it already appears that these overall patterns of placement by age and gender may mask more striking ones featuring gender-specific activities and recurrent schematic figures (see SCHEMATA, below).

Provocative patterns emerge when we examine specific activities enacted by men and women (Figure 6). Only men hunt, carry game home, and conduct rituals. Mostly men construct, create art, make tools. Only women hold babies or touch children. Only women scrape hides. It is intriguing to note that four of five depictions of women making tools come from two books with female co-author/illustrators, separated by nearly 70 years (Ageorges and Saint-Blanquet 1989; Quennell and Quennell 1921). Of twenty-eight depictions of the creation of palaeolithic art, only two show a woman artist (Ageorges and Saint-Blanquet 1989; Conkey 1987).

Body posture and motion are key symbolic media for communicating social position. Berger in *Ways of Seeing* (1972), Goffman in *Gender Advertisements* (1976) and later critics of Western visual culture have shown that men's and women's bodies are differentially represented in dynamic motion, women's being more static than those of men. Surveying all age and gender classes in the dioramic representations, we see that men are portrayed walking or running proportionately more than they appear in the overall sample of individuals (Figure 7a). Women are highly unlikely to be shown walking or running, relative to their proportionate representation in the sample. In the existing sample, which I acknowledge is by no means comprehensive, the difference between depictions of women and men walking and running and their proportions in the sample as a whole is highly statistically significant.⁸ Elders especially are much more often portrayed as stationary.

Men are more frequently depicted moving their arms in a dynamic way, as when wielding or fabricating tools, lifting loads, and so forth (Figure 7b), while women and especially children are not characterized by dynamic arm motion as much as they are represented in the sample as a whole. Again, the difference between depictions of women and men displaying dynamic arm motion and their proportions in the sample as a whole is statistically significant.

Goffman (1976) also explored gender differences in posture in advertisements, noting that women were much

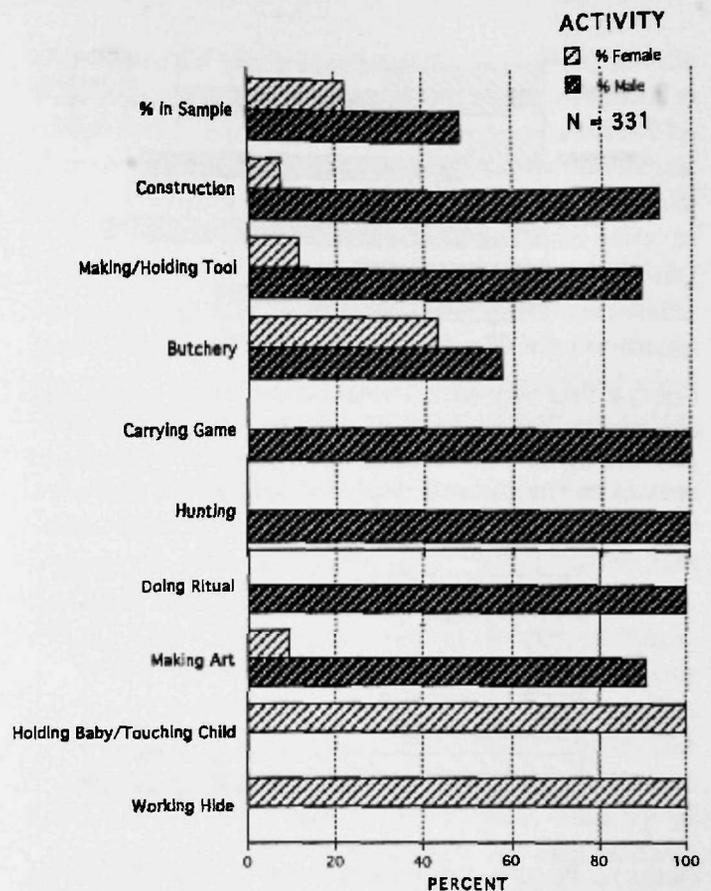


FIGURE 6. ACTIVITIES ACCORDING TO GENDER, COMPARED TO EACH GENDER'S REPRESENTATION IN THE SAMPLE AS A WHOLE. MALES AND FEMALES EACH INCLUDE ALL ADULTS, ELDERS, CHILDREN OF THAT SEX.

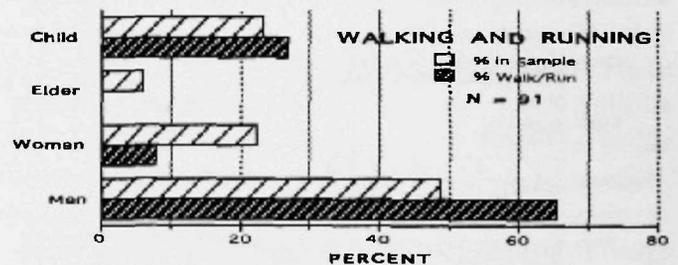


FIGURE 7A. DYNAMIC MOTION: PERCENTAGES OF AGE AND GENDER CLASSES WALKING OR RUNNING, RELATIVE TO THEIR REPRESENTATION IN THE SAMPLE AS A WHOLE. "N = 91" IS THE TOTAL NUMBER OF WALKING AND RUNNING INDIVIDUALS. FROM A SAMPLE OF 444 FIGURES IN THESE AGE AND GENDER CLASSES.

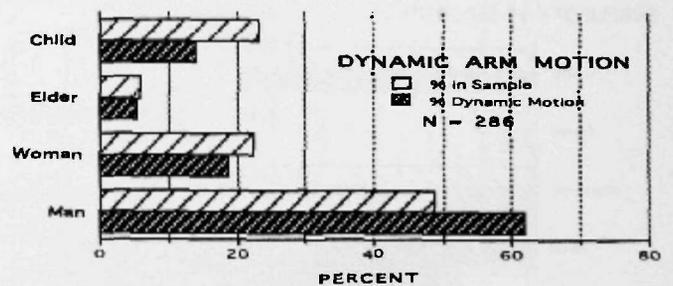


FIGURE 7B. DYNAMIC MOTION: PERCENTAGES OF AGE AND GENDER CLASSES DISPLAYING DYNAMIC ARM MOTION, RELATIVE TO THEIR REPRESENTATION IN THE SAMPLE AS A WHOLE. "N = 286" IS THE TOTAL NUMBER OF INDIVIDUALS DEPICTED WITH DYNAMIC ARM MOTION. FROM A SAMPLE OF 444 FIGURES IN THESE AGE AND GENDER CLASSES.

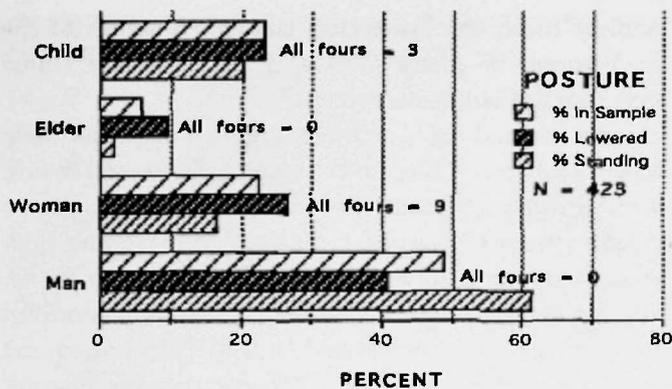


FIGURE 8. POSTURE: SHOWING THE PROPORTIONS OF AGE AND GENDER CLASSES IN STANDING AND IN LOWERED (BENT OVER, SQUATTING, SITTING, KNEELING, RECLINING, ALL FOURS) POSTURES, RELATIVE TO THEIR REPRESENTATION IN THE SAMPLE AS A WHOLE. NUMBER OF INDIVIDUALS ON ALL FOURS NOTED FOR EACH AGE AND GENDER CLASS. "N = 423" IS THE NUMBER OF INDIVIDUALS OUT OF A TOTAL OF 444 IN THESE AGE AND GENDER CLASSES WHO COULD BE ASSESSED FOR POSTURE.

more often represented in lowered postures (bending over, squatting, kneeling, sitting, or reclining) relative to men. The dioramic representations more often portray men standing, and less often in lowered postures, than men's actual rate of occurrence in the sample as a whole (Figure 8). Women display the inverse pattern, as do elders, who

are almost never represented in erect posture. Women's and men's representation in standing position differs from that of their proportions in the sample as a whole at a statistically significant level.

SCHEMATA: EVIDENCE FOR ARTISTS' DISCRETION IN CREATING DIORAMIC REPRESENTATIONS

The dioramic representations contain several motifs representing women and men that fit Gombrich's (1960) description of a schema: a conventionalized representation of an object replicated from one composition to another, with little variation in fundamental form. As Gombrich notes, schemata are the hallmarks of a shared artistic culture. Because some artists' work is heavily represented in my survey sample, I should stress that these conventional representations appear in different artists' compositions and are not simply the product of a single person's mechanical reproduction of his or her earlier work. The existence of schemata in dioramic representations created over decades by a variety of artists thus testifies to the existence of a genre. Moreover, most of the schemata are clearly derived from fine arts, reflecting the artists' deployment of visual content and gratuitous detail from their own reserve of graphic



FIGURE 9. SCHEMATIC GRAB-BAG IN PREHISTORIC PÉRIGORD, FRANCE. DRUDGE-ON-A-HIDE BEHIND MAN-THE-TOOLMAKER. MADONNA-WITH-CHILD ANTICIPATES ARRIVAL OF SUCCESSFUL MALE HUNTERS (WITH DEER-ON-A-STICK) OFFSTAGE, AND A STATIC JOLIE FEMME ORNAMENTS THE FOREGROUND. DETAIL OF PAINTING BY PATRICK AMBLEVERT, IN *PRÉHISTOIRE EN PÉRIGORD* (ARMAGNAC 1989), p. 7. REPRINTED WITH PERMISSION OF ÉDITIONS DU SUD-OUEST.

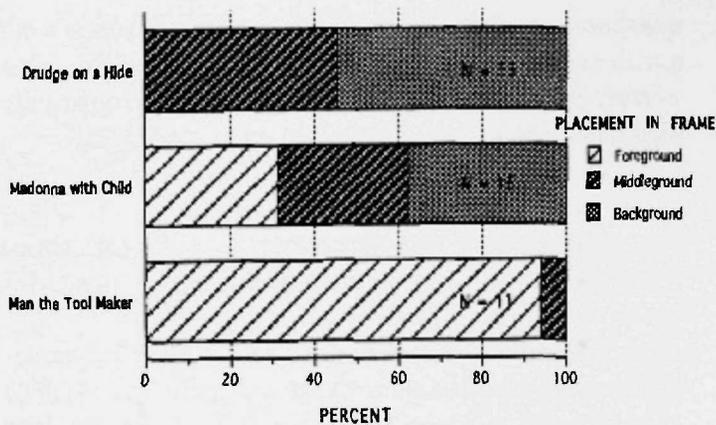


FIGURE 10. PLACEMENT OF THREE SCHEMATA IN THE FRAME, FROM SURVEY OF EIGHTY-EIGHT ARTISTS' DEPICTIONS OF CRO-MAGNON LIFE

tradition, rather than from suggestions of their scientist collaborators. Their presence illuminates that partly independent process of re-production of visual paradigms Moser (1992) discusses in her article on the visual language of archaeology.

Schemata in the dioramic representations feature both male and female adult figures. "Man-the-Toolmaker," a jovial fellow pounding stone on stone in a fashion more suitable to blacksmithing than to stone flaking,⁹ is the most common male schema (16 illustrations by four artists, see Figure 9). Women, children, and elders of either gender are never found in this pose, which originates in fine arts depictions of mythic and everyday blacksmiths. A "Beast-in-the-Pit" motif is found seldom in this sample, (two cases, by two different artists) but is more common in representations of other species of hominids. It portrays groups of men in heroic struggle with a quarry of monstrous size, often incorporating a Herculean "Guy-with-a-Rock" as part of the team. Links with mythological themes in Italian Renaissance and later painting are obvious. Homecoming from a successful hunt incorporates a "Deer-on-a-Stick" motif. Here, the huge prey portrayed in the hunt scenes is magically shrunk to a readily transported package, hefted on a pole by two extraordinarily neat hunters. The "Deer-on-a-Stick" schema is so common in Western art, and so rare in ethnographically documented cases of animal butchery and transport, that its non-anthropological roots are clear (see also Gifford-Gonzalez 1992).

Schemata incorporating females are "Madonna-with-Child," a youthful woman holding a baby (16 cases, eight artists, see Figure 9), and "Drudge-on-a-Hide," an often faceless woman on all fours, scraping or preparing to scrape a hide (13 cases, five artists, see also Figure 9). The "Drudge-on-a-Hide" motif is drawn from that of the

scullery maid, the lower-class laborer painted into the background of many 17th and 18th century realist evocations of bourgeois success.¹⁰

As implied by the foregoing descriptions, these schematic forms are more than simply conventional physical arrangements of human bodies, they are icons, potent condensations of cultural meanings. By inserting such evocative symbols from mainstream Western art traditions, artists allow the schemata to tell pre-existing, gendered tales of heroism, motherhood, and drudgery to the enculturated Western viewer. Putting prehistoric men and women into such culturally particular forms advances an argument for the eternal existence of Western gender archetypes, in the deep past as well as the present. Textual popularizations of prehistory have done the same, and have been critiqued for it, for some years (e.g. Tanner and Zihlman 1972; Conkey and Gero 1985).

The schemata thus speak to the viewer about gender, age, and potency. Those involving males reveal active achievers in the prime of life. Those involving women show idealized, static mothers and anonymous drudges. As is the case with schemata in their original art traditions, there are no gender cross-overs in these visual motifs. Men are men, women are women. Or, to be more precise, men are Man, in the universalized sense, and women are Woman.¹¹ An example may clarify the point. The Madonna-with-Child condenses definitions of womanhood in multiple ways. All these women are young; older mothers are never portrayed holding infants. Carrying the baby should not be read as "woman's work" within this cultural context, as it betokens instead an organic relationship. In the system of meanings evoked here, child-bearing, in both senses of the word, is not work, in its general sense, but rather an emblem of true womanhood (viz. de Lauretis 1984). The Madonnas are the only ones who hold babies; men, elders, and children never do, a "fact" wildly at variance with cross-cultural understandings of child rearing practices. Like their fine arts counterparts, palaeolithic Madonnas are static; they never walk or gesture, engage in work. The Child in arms by definition makes it impossible for a Woman to cook, arrange objects, do anything useful.

The relative placement of the three most frequent schemata in the frame permits us to discern strong patterns of privileging men's versus women's work. Figure 10 shows the placement of "Man-the-Toolmaker," "Madonna-with-Child," and "Drudge-on-a-Hide." Male labor (the activity study cited above stresses that tool making and use is generally a male activity) is nearly always foregrounded. Female labor never is foregrounded, occupying instead the middle and background. The static young Madonna with



FIGURE 11. FACELESS *HOMO SAPIENS SAPIENS* FEMALE SCRAPES HIDES IN THE BACKGROUND, MOUNT CARMEL. ART BY GIOVANNI CASELLI IN *THE JOURNEY FROM EDEN* (FAGAN 1990). REPRINTED WITH PERMISSION OF GIOVANNI CASELLI.

tranquil (if not inert) child may be placed anywhere in the frame, since her lack of “doing” does not distract from the real work being foregrounded (see Figure 9).

Overall, the dioramic representations show that productive, vigorous activities, either away from camp or in

it, are men’s province, as are the literally deepest rituals of Cro-Magnon life. Tool making, tool use, and the hunt, the greatest single symbol of male achievement, are nearly exclusively reserved to men in their prime. Elders are tied to the hearth, bent or sitting. Women are absent from ritual spaces and only touch animal prey when men bring them home. They rarely gather. Women (and never men, oldsters, or bigger children) hold babies, touch children, engage in fundamentally uninteresting background pursuits. Children may scamper and spectate, but they do not work. Women work hides. They almost never run.

THE DRUDGE-ON-THE-HIDE: A PERVERSIVE ICON

Woman the hide-worker is an extraordinarily potent icon of primordial womanhood and female labor, an “original narrative” on gender and class, and as such deserves careful attention. Examples of this motif can be found in depictions of earlier, Neanderthal or *Homo erectus* females (Figure 12). It is more than simply a schema, in Gombrich’s (1960) sense. It embodies a swirl of significations which we may examine in terms of composition, details of rendering, and, finally, in terms of the posture.

As noted above, the hide-working woman is nearly always in the background or middle ground (Figure 11) though she may be “framed” by male activities or background detail, to assure delivery of the icon to the



FIGURE 12. AN EARLIER, *HOMO ERECTUS* FEMALE AT THE GROTTTE DU LAZARET, IN PRESENT-DAY NICE, DOES HER PART IN THE NARRATIVE OF WOMAN’S WORK. PAINTING BY PIERRE JOUBERT IN *LA PRÉHISTOIRE: LES HOMMES DU PALÉOLITHIQUE* (MONNIER 1986), p. 12. REPRINTED WITH PERMISSION OF DOCUMENTAIRES OUEST-FRANCE.

viewer (Figures 9, 11). The *Homo erectus* female in Figure 12 differs from all the Cro-Magnons in being foregrounded and forward facing, probably less to indicate her work than to offer her youthful nudity to the viewer's gaze. The customary distance of hide-working women from the viewer may be read several ways: on the immediate, synchronic plane of the viewer-in-the-picture, women are distant, the details of their work dull and perhaps, in the case of hides, repugnant — best kept at a distance. The viewer's curiosity is never aroused; women on their hides are, as in the *Caveman Dioramas*, a feature of the scenery, a side panel. Women hide-workers do not engage in social interactions, save in one depiction by a woman artist (Ageorges and Saint-Blanquat 1989: 24). Their work is curiously isolated, apart from men's sociable labors.

Details of the women's faces, bodies and actions are often blurred or lacking (Figures 9 and 11). On closer scrutiny, other paradoxes of representation emerge. Hide-scraping requires tools: ethnographic accounts describe the use of stone, metal, and bone tools to work hides. Technology is conspicuously absent in dioramic representations of woman the hide-worker. Only a third of these depictions show tools in women's hands (Figures 9 and 12). Ethnographies also attest that hide-workers, female and male, often stretched hides by lashing them to wooden frames and then scraped from standing or sitting positions. Hides are never stretched on frames in these portrayals, and the women never sit or stand.¹² They crouch on all fours or kneel in preparation for crouching, confronting the hide with almost no technological mediation. Thus, depictions of an activity requiring tools do not provide them. Moreover, the female actors are never depicted fabricating them as the need arises (see discussion of activities and Figure 6, above).

This image has endured for a long time in dioramic representations, and we may ask about the shifting meanings of this as an icon of woman's work from the 19th century to the present. Nineteenth Century artists and audiences probably had a more compelling sensual experience of the allusion to hide-working as a repugnant "woman's place" than do we in our more insulated 20th Century lives. The tannery's flyblown environment, its stench of uncured skins and noxious chemicals, were much more likely to intrude upon the sensibilities of even the most refined folk. For the Victorian middle class contemplating human evolution, these sensory correlates were supplemented by widely shared stereotypes of women's status in contemporary "primitive tribes." Depictions of hide-workers may be seen as mutated renderings of European accounts of Plains Indian women, whom early ethnologists portrayed as "slaves and beasts of burden" (viz. Albers and Medicine 1983;

Weist 1983).

Finally, what does the posture signify? The all-fours pose of Drudge-on-a-Hide is a woman's position, in every sense of the words. It simultaneously defines the abstraction, "Woman," her primeval work role, and her modern "place." Men and older persons are never in 256 depictions portrayed on all fours (Figure 8); only women and the occasional child assume this position. In their respective discussions of the visual semiotics of gender, Erving Goffman (1976) and Teresa de Lauretis (1984) mobilize Gombrich's concept of schemata to deal with posture. Their perspectives provide a useful background to this analysis. In different ways, each asks how representations of women reveal social relations of dominance: both specifically focus on how women's images reflect the male/ adult/ potent gaze on the female/ child/ powerless Other. Goffman discerned the power of the male gaze from advertising subtleties — light touches, bent knees, inclined heads. If the capitalist advertising which Goffman surveyed is the omnipresent Muzak of gender asymmetry, then prehistoric representations, especially in the guise of Drudge-on-a-Hide, are semiotic Heavy Metal. Detailing some of the multiple meanings of the Drudge's posture can support this claim.

Since medieval times, bipedality has been a fundamental signifier of humanity in the Western intellectual tradition and endures as a central marker of the Hominidae in paleoanthropology (Cartmill 1983; Cartmill et al. 1985). Two-legged stance equals human, four-legged stance equals animal (or at least infantile, not-yet-human). Using this gloss on the posture, we have one of two alternatives. Either "woman" in her ancient and natural state is less-than-human, or the original work of "woman" reduced her to an animal condition. Note again that the only other class of individuals found on all fours are children.

In the spirit of play, I extend this first gloss on woman-as-animal along lines outlined by de Lauretis (1984: 103-157) in her discussion of the narrative structures of mainstream film. De Lauretis argues that nearly all film stories recount the oedipal story, in which male protagonists change from boys to men by virtue of confronting worldly dangers, with women both the dangerous and amorous objects of their actions. The frequent juxtaposition of woman-the-hide-worker and the opening of a cave or hut invites construction of a parallel narrative involving Drudge-on-a-Hide and her male schematic partners. Men journey out from the maternal cave, kill beasts, become men, bring them home to the Other Anima[l] at the hearth, who, unlike Man, never gets to make the journey herself. She must then perforce labor on the bloody skins of his victims, transforming [t]he[i]r animal exteriority, Nature, into a

cultural product to covers the nakedness of his and her own skins.

The second reading displaces Freud in favor of Marx, in a discourse on the natural state of female labor. The posture renders "woman's work" as abject, anonymous, animalistic, unacceptable to those who can stand on their own two feet. But some deeper questions persist. Why is heavy, servile work consistently represented in this genre as hide-scraping on all fours, and not, for example, by the

submission is conveyed by the image of a woman crouched on all fours. The deep, servile crouch conveys complete social submission in many modern cultures. In our own milieu, it also signifies anonymous sexual availability, another kind of abject animality. Pornographic films commonly present women for male penetration in this posture, both for the cinematic opportunities it offers the male gaze, and its simultaneous assertion of male power. The cinematic rapes scenes in two films on palaeolithic life, "Quest for Fire" and "Clan of the Cave Bear," both feature an unwilling, screaming female victim in this, rather than any other, position.¹³ The animality and primitiveness blended in such cinematic representations of sex is also, I contend, evoked in the Drudge's posture.

To end my exploration of iconicity, I offer another image of woman the hide-worker, a photograph by Carol Beckwith, of a modern Maasai woman (Figure 13). This representation does not reject the possibility that women may scrape animals' hides, at some times, in some places. The image of the Maasai woman preparing a cattle hide in her yard is even anonymous: we don't see her face, and we can't see the tool in her hand. Yet the image brings a woman to her feet and into a social world, with children around her, looking on. It defines her as an active agent of technological solutions to problems of everyday life, central in the frame. Seeing her working, we can imagine other worlds, modern and ancient, in which women work hides, but don't hide, socially, or from the wide world. They move with power in the frame, they act willfully, they speak, they might even run.

TO RE-SET THE SCENE

When Margaret Conkey, a specialist in European palaeolithic art, was asked to write an essay on the topic for World Book's *Science Year, 1987*, she was able to have an illustration made to accompany her text. As a feminist redirection of the man-as-artist, woman-as-object narrative, she asked the artist to depict a woman painting and a man holding a lamp. He objected that this would not be an accurate portrayal, because men had been the artists (M. Conkey, personal communication, 1992).

This anecdote directs our attention back to the recursive relationship between knowledge and fabrication in dioramic representations, and to the questions originally raised



FIGURE 13. MAASAI WOMAN WORKING A HIDE ON A STRETCHING RACK, CHILDREN LOOKING ON. PHOTOGRAPH BY CAROL BECKWITH, IN *MAASAI*, BY TEPILIT OLE SAITOTI AND CAROL BECKWITH (1980), P. 218. REPRINTED WITH PERMISSION OF ROBERT ESTALL.

Biblical lot of Ham, drawing water and hauling wood? In fact, women are shown hauling loads of wood only twice in ninety-nine representations, and are never seen carrying water.

The critical point is the posture itself. Social and sexual

about the nature of the genre. For anthropologists who have read three decades of hunter-gatherer studies and feminist critiques of "Man the Hunter," these contemporary dioramic representations of prehistoric people make antique and culturally specific assertions about the gendered nature work and social roles. In these landscapes, men make themselves by hunting and art, heal themselves and the world by ritual, by themselves. Woman is possibly, briefly, beautiful, but the heavy burden of her work then renders her a drudge in the background. Children and elders, few in number, stay around home, do little useful work.

Do artists creating dioramic representations of early humans deliberately select subjects and viewpoints that marginalize children, elders, and adult women? Have they, along with the experts they consult, a vested interest in keeping these visual theories of the original human condition in place? Or do at least some of them, by mechanically following long entrenched artistic and iconographic conventions, recreate a set of social relations and privileges they themselves might upon reflection call into question? Based on my survey, I suspect that the latter is more often the case, as was suggested to me by John Gurche (personal communication, 1993). The presence of schemata and a narrow range of viewer perspectives tell us we are dealing with a tradition which may, if followed unthinkingly, replicate more than simply formal conventions.

The visual narratives embodied in many representations are rooted in didactic missions of 19th and early 20th century middle class social theory. Modern illustrators, to the extent that they unconsciously use older visual perspectives and themes, reproduce cultural content they may resist in their everyday lives. Moreover, we experts on prehistory have not encouraged illustrators to consider alternative visions of humanity offered by ethnographic accounts or our own speculations about past societies. As image consumers, archaeologists and paleoanthropologists have let too much pass unquestioned. Most of us would be quick to point out an anachronistic artifact or the wrong-shaped cranium in such scenes, but how many of us have scrutinized them for their cultural content and offered anthropologically derived alternative visions? How many of us have truly challenged and educated editors and museum administrators about the scenes they may insist remain invisible?

My own perspective on this art tradition is loving and complex, the product of my multiple viewpoints as anthropologist, archaeologist, mother, woman, once-

enchanted child. When young, I was drawn toward deep time by the magic of artists' imagined worlds. In critically examining their themes and structures as an adult, I am not arguing that we simply dismiss them. Far from it.

From my standpoint as a viewer, I assert that the reconstructions need to include more perspectives, a broader array of actors, and that they should esthetically challenge their viewers to think about the past, about what it means to be human. Moreover, I share with Teresa de Lauretis (1984) the idea that critical analysis should aim not for the abolition of pleasure in spectating, but rather for enabling more pleasure, more widely shared, among a more diverse range of spectators.

From a scientist's standpoint, I see artists' representations of prehistoric humans as science fictions that visually mediate the inferences and reconstructive tactics of research specialists to an interested, educable public, in a realistic yet speculative way. In labeling these reconstructions science fiction, I mean no slur. In fact, I mean to convey that the field is rich in possibility for self-critical practice for both scientist and artist, once each acknowledges the social and recursive nature of visual discourse. Philosophical parallels exist between what I do as a scientific observer of unseeable events and what a careful artist does in dioramic representation. We each link together points of scientific fact — things we think we know for sure — in narratives of educated guesses and arguments of plausibility (e.g. Gifford-Gonzalez 1991). From this perspective, work of the most thoughtful of my artist colleagues in portraying the past is of a piece with my own struggles to account for the material evidence of past peoples.

More reflective collaboration between scientists and artists can radically expand the range of possible pasts represented in depictions of prehistoric people. I am not arguing for a representational quota system, in which various ages and genders get their fair share of past worlds as conventionally represented, where women hunt, men scrape hides, old folks dance. Rather, I am advocating that a truly diverse range of possibilities be offered to viewers, with the scope that we as scientists and artists can imagine may have existed, where social arrangements different from any known today, and hominid species with truly different adaptations and behaviors reside. By drawing others into pictures of those past worlds, we can draw more of our viewers into the real problems and pleasures of our work.

Year	Author	Publication	Place of Publication	Artist	Artist's Nationality	Number of Figures
1921	M. & C. H B. Quennell	Everyday Life in the Old Stone Age	England/U.S.A.	M. Quennell	England	12
1933	M. C. Burkitt	The Old Stone Age	England	M. Forestier	England	1
1943	R. W. Murray	Man's Unknown Ancestors	U.S.A.	C. R. Knight	U.S.A.	2
1943	R. W. Murray	Man's Unknown Ancestors	U.S.A.	not credited	unknown	1
1965	F. C. Howell	Early Man	U.S.A.	Z. Burian	Czechoslovakia	2
1973	T. Prideaux	Cro-Magnon Man	U.S.A.	B. Silverman	U.S.A.	3
1973	T. Prideaux	Cro-Magnon Man	U.S.A.	C. Jezierski	U.S.A.	4
1973	E. Hadingham	Secrets of the Ice Age	U.S.A.	C. Laplante (1870)	France	1
1973	E. Hadingham	Secrets of the Ice Age	U.S.A.	H. Breuil	France	1
1973	E. Hadingham	Secrets of the Ice Age	U.S.A.	E. Bauard	France	1
1973	E. Hadingham	Secrets of the Ice Age	U.S.A.	not cited*	France	1
1983	B. Klima	Dolni Vestonice	Czechoslovakia	K. Absolon	Czechoslovakia	1
1984	J. Gowlett	Ascent to Civilization	U.S.A.	not credited	U.S.A.	1
1985	A. Weissman	Caveman Dioramas to Cut and Assemble	U.S.A.	M. Kalmennoff	U.S.A.	5
1986	J.-L. Monnier	La Prehistoire: les hommes du paleolithique	France	P. Joubert	France	4
1987	H. de Saint-Blanquat	Les Premiers Francais	France	Paul Jamin (1903)	France	
1988	A. Stuart	Life in the Ice Age	England	N. Arbor	England	1
1989	V. Ageorges & H. de Saint-Blanquat	Lascaux et son temps	France	V. Ageorges	France	30
1989	S. Trevino	Graincollection	U.S.A.	A. Martin	Mexico	2
1990	A. Armagnac	Prehistoire en Perigord	France	P. Amblevert	France	11
1990	B. M. Fagan	Journey From Eden	U.S.A.	G. Caselli	Italy	2
1991	Wm K. Hartmann	The History of Earth	U.S.A.	R. Miller	U.S.A.	1

APPENDIX 1. SOURCES OF ILLUSTRATIONS SURVEYED IN THE STUDY.

NOTES

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1. Ernst H. Gombrich, *Art and Illusion: A Study in the Psychology of Pictorial Representation*, p. 324.

2. bell hooks, *Black Looks: Race and Representation*, p. 5.
3. Wildlife and ethnographic dioramas have been shown to have their own fictions and socially mediated structures. For example, Haraway (1989: 26-58) has unveiled the underlying visions that shaped Carl Akeley's "habitat groups" in the American Museum of Natural History. She shows these dioramas to be the outcomes of Akeley's dual obsessions with creating the most literal representations of natural objects and obtaining unblemished, gendered animal bodies. The alert, protective mature male, a few dependent females and their young are unfailingly assembled as a "truthful" peephole into natural order.
4. I am indebted to Shelly Errington for directing my attention to this perspective on realism.
5. We have no way of knowing whether Cro-Magnon people were light-skinned or not, or what the color and texture of their hair was. Paleontologist Björn Kurtén played with this issue in his novel, *Dance of the Tiger* (1980), assigning the Cro-Magnons, whom he assumes recently entered Europe from the south, the very dark skins that would have protected them in sunnier regions.
6. Such chauvinist invasions and appropriations of the past are not solely Western practices. Chinese scholars make their own claims on Ice Age hominids from

Zhoukoudian and elsewhere, literally putting an Asian racial face on reconstructions originally made Slavic by a Soviet physical anthropologist (viz. Jia and Huang 1991, versus Gerasimov 1971).

7. Of 572 adult figures, 141 were found to be gender-ambiguous, solely on the basis of their physical characteristics. Many such portrayals are barely discernible background figures, but some are in the foreground. Although the context and activities of physically gender-ambiguous persons often seems intended to ascribe them gender, some remain enigmatic. Significantly, such individuals never perform a featured activity in the frame.

8. Women vs. men, N in whole sample versus N depicted walking or running: $\chi^2 = 8.272$, $df = 1$, $p = .004$; women vs. men, N in whole sample versus N depicted with dynamic arm motion: $\chi^2 = 4.284$, $df = 1$, $p = .038$; women vs. men, N in whole sample versus N depicted standing: ($\chi^2 = 45.293$, $df = 1$, $p = .021$).

9. Most representations of tool-making, like those of butchery, clearly indicate a lack of first-hand experience on the part of the artists and whomever reviews their work. The poses in which stone-workers and their raw materials are depicted are almost invariably recipes for self-mutilation, ranging from blinding to castration, depending on the level at which the materials are about to be pounded together.

10. I am grateful to Whitney Davis for pointing out this link to me.

11. Gender-ambiguous persons are never depicted in schemata.

12. Véronique Ageorges (Ageorges and Saint Blanquat 1989: 47) does show a small hide stretched in such a way, with a gender-ambiguous person seated before it, in a winter scene of Cro-Magnon life.

13. The resourceful and civilizing (if piquantly nude) woman character played by Rae Dawn Chong in the French film, "Quest for Fire," effects cultural revolutions on the three hapless males she leads to salvation by introducing fire making technology, oral sex, and, significantly, the missionary position.

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