

# Anthro Notes

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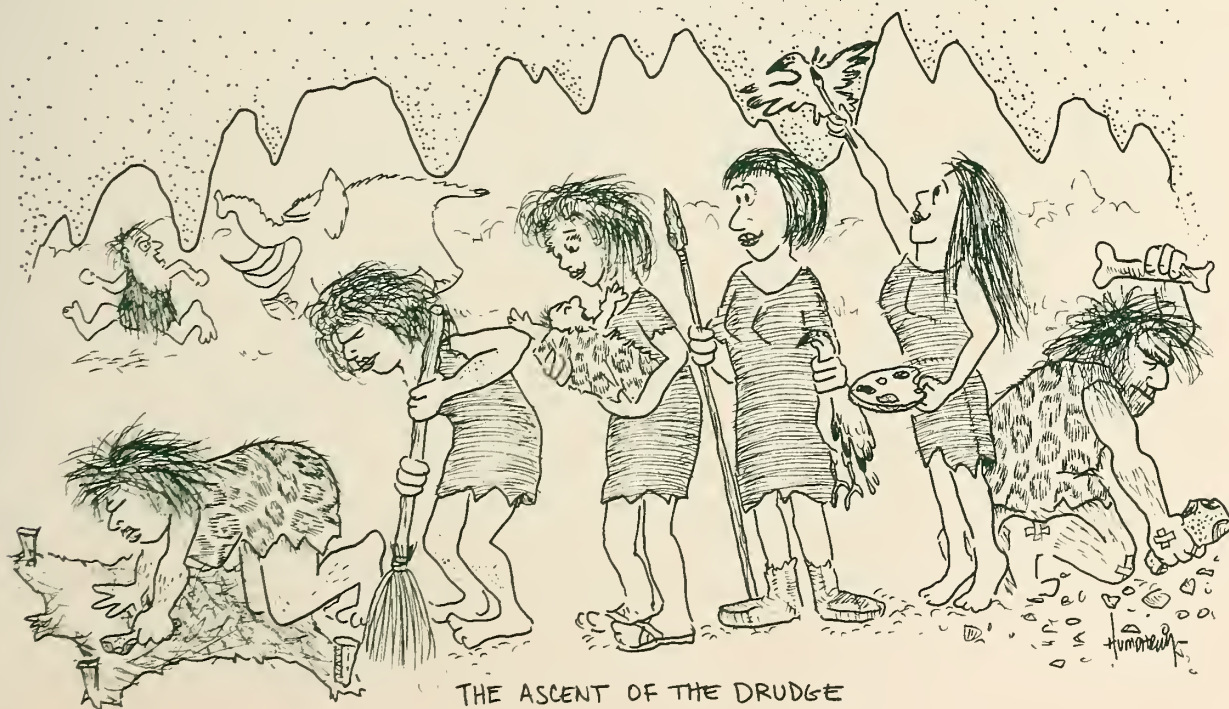
## THE REAL FLINTSTONES? WHAT ARE ARTISTS' DEPICTIONS OF HUMAN ANCESTORS TELLING US?

### THE DRUDGE

You have probably seen her, frequenting the diorama scene at your local museum or in that coffee table book on human evolution. It's likely you've not given her a second glance, she is so much a part of the scenery. She is the Drudge-on-the-Hide; the woman on her hands and knees scraping away at the skin of a large animal, on the margins of the home camp scene. The men are usually center stage foreground, doing something interesting, while she's over there, hiding out. You usually can not see her face; she is looking down, and the artist may not have bothered to sketch in her brows or mouth. She is not talking to anyone; no one is talking to her.

Even in the high-tech Upper Palaeolithic, she never manages to get that skin up on a stretching frame and to work it sitting or standing, as do documented hide workers. The men may be down in the cave, trancing, dancing, and doing art, but she's scraping away, on all fours, same as back in *Homo erectus* times (Eugène Dubois was obviously not thinking of her when he named the species).

Conventionalized representations such as the drudge repeat themselves through the works of various artists, their postures and actions suggesting that artists have drawn from their own fine arts traditions, rather than from ethnographically informed suggestions from their scientist



THE ASCENT OF THE DRUDGE

collaborators. The "Drudge-on-a-Hide," for example, mimics the scullery maid scrubbing the floor in the background of 18th century evocations of bourgeois success.

### THE GUY-WITH-A-ROCK

Another common motif, the "Guy-with-a-Rock" about to hurl a huge rock into a pit containing a large and unhappy beast (mammoth, mastodon, woolly rhino, or cave bear), suggests herculean figures in portrayals of classical myths. Though his hunting mates sport the latest ballistic weapons, this stone-age conservative has a hefty rock as his weapon of choice from two million BC to Holocene bison hunts in Dakota. One can imagine the dialogue:

"Dammit, Og, we told you to leave the rock at home and bring a spearthrower!" "Right, Og, remember last time, when the mammoth threw the rock back and broke Morg's leg?" "Hey! This rock has been in my family for a million years!"

### THE DEER-ON-A-STICK

Homecoming from a successful hunt incorporates the "Deer-on-a-Stick" motif. The massive prey portrayed in most hunt scenes shrinks to a readily transported package, hefted on a pole between two extraordinarily tidy hunters. They are never shown bringing home dismembered animal parts, nor besmirched with gore. If anyone is portrayed close to such nastiness, it's Woman, crouched on a bloody hide. Faced with the lack of fit between ethnographic data on animal butchery and these scenes, one's mind readily wanders down Freudian, rather than archaeological, corridors.

"Man-the-Toolmaker," in fact the most common stereotypic portrayal of men at work, pounds stone on stone in a technique more suitable to smithing than to stone percussion, echoing mythical and quotidian blacksmiths in classic oil paintings. Depending upon where his anvil lies, the Toolmaker risks either blinding or genital mutilation, in which art he often appears jovially inclined to instruct the young.

### MADONNA-WITH-CHILD

The other common female motif besides the abject Drudge is the "Madonna-with-Child," a youthful woman standing with baby in arms and doing absolutely nothing. Cumulatively, illustrations of palaeolithic women present a contrast to the busy lives of ethnographically documented mothers in hunter gatherer societies. Stone Age woman's life seems to have begun with a placid but immobile young motherhood, rooted decoratively to the spot as camp life swirled about her, followed by dull and dumpy middle age, hiding out on the margins of the fun stuff (still not a whit of social interaction), followed by aged and inactive sitting and watching, waiting for the palaeolithic version of the Grim Reaper to work his way up the valley. It is a wonder women learned to talk at all.

Once you really consider them, palaeolithic figures such as the Drudge and her companions do seem hackneyed and ethnographically uninformed. Anyone with experience of rural life nearly anywhere on the planet can see that they portray the Stone Age through a Western, suburban lens--two steps from the Flintstones.

Archaeologists can readily testify to the difficulties of assigning gender or maturational stage to most of the activities portrayed, in view of humanity's global diversity in cultural practices. Yet the graphic story reaching out from the museum halls and coffee table pages treats men's and women's--and youngsters' and oldsters'--estate as foregone conclusions. When viewed cumulatively, as we would see them in our lifetimes of museum-going and reading, the vast majority of existing portrayals give us a narrow and repetitious view of prehistoric human life.

### THE VISUAL/INFORMATION GAP

Given this repetitiveness, it is easy to fault the artists for a lack of imagination in their mechanical reproduction of earlier motifs. However, the fault is really in the shared vision of artists and experts, archaeologists and palaeoanthropologists such as myself. Our vision in the literal sense has been faulty because we have not seen these stereotypes for what

they are and challenged their perpetuation. In the more abstract sense, our vision has failed, because we experts have not offered artists who seek our expertise better informed and more imaginative alternatives. Ironically, the texts accompanying such illustrations, usually drafted by science writers, often offer up-to-date, ethnographically informed perspectives. This emphasizes the great information gap between many of the artists and the text-based workers, a gap not bridged by scientific experts.

Many scientific experts may literally overlook visual depictions in museums or popular books simply because they are for the general public. Experts are trained to think of scientific communication as written text, and graphics such as illustrations of specimens, maps, and graphs as subsidiary material. Speculative reconstructions of prehistoric life are dismissed by many as "museum stuff," for the general public, and unsuitable for real scientists to use or even to help create.

This is a profoundly mistaken and potentially dangerous perspective. Portrayals of human ancestors present a parallel, visually based narrative of the human past. This visual narrative, because of its pervasiveness and communicative potency, must be taken seriously. Widely used in museums and popular literature, it represents much of the knowledge that laypersons have of the prehistoric past. In the face of *Barnie Rubble* and other enduring icons of pop prehistoricness, museums and educational books strive to impress and convince the viewer of "the real facts" through the power of visual arts. The style in which these portrayals are executed is central to their plausibility and power and merits a closer look.

For Western viewers, naturalistic representation is read as objective reporting, and rigorous naturalism characterizes science illustration. Historian of science Barbara Stafford argues in her book, *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (1991), that this stylistic convention developed over the 17th and 18th centuries, as scientists and explorers strove to present convincing images of newly discovered worlds within the

human body and around the globe. Given our cultural conditioning, the realistic graphic style itself advances claims for the plausibility of what it depicts. It is therefore the style of choice for science fiction graphics and Disneyland, as well as for prehistoric representations in your local museum or coffee table book.

As portrayed in artists' representations, the prehistoric past is enticingly "real" and accessible. Natural details of landscape, vegetation, animal life and the painstakingly reconstructed hominid bodies themselves render the scenes plausible. These people, or near-people, have hands, eyes, facial expressions, and they draw us in toward them. Yet the "naturalness" of the human bodies, their expressions and gestures, serves to subtly support another argument for plausibility that we overlook at our peril: that their social world as depicted was also real. These bodies are gendered, they display the marks of age, and they exist in the scenes as socially identified actors. If their realistic style and context are arguments for their credibility, then what primordial human conditions are conveyed, so powerfully and plausibly?

#### **GENDER/AGE DISCRIMINATION IN VISUAL REPRESENTATIONS**

To further explore this question, I recently analyzed 136 pictures of early modern humans ("Cro-Magnons") of the last Ice Age in books readily available to lay readers in North America, Great Britain, and France (published in "You Can Hide, But You Can't Run: Representation of Women's Work in Illustrations of Palaeolithic Life," *Visual Anthropology Review* 9:3-21, 1993). I documented the types of persons and activities portrayed and commonly repeated motifs, such as the Drudge, looking for the cumulative pattern of artistic choices in portraying different ages and genders. As a whole, the portrayals consistently exclude children and older people from active, useful roles. They represent women's work in patronizing ways, if at all, implying that the real early human story consisted of a suite of male activities, which are themselves really rather limited, too.

Who and what most often fills the frame of these portraits of the past reveal the assumptions of both makers and viewers. Of the 136 pictures, around 85% include young to middle-aged men; only half include women; children appear in slightly over forty percent of the scenes, and elders in less than a fifth. Although scenes depicting men exclusively are common, only 3 of 136 portray women only, and no pictures show only elders or children, or any combination of women, elders, and kids without men. Of the 1076 individual human figures in these pictures, about 49% are men, 22% are women, 23% are children, and around 6%, older persons.

Critics of Western art and advertisements have shown that men's and women's bodies are differentially represented in dynamic motion, with women's bodies being placed in lower positions and shown in more static poses than those of men, and that active, "important" activities are in the hands of men (e.g. Berger 1972; Goffman 1976). It should come as no surprise that these portrayals of Cro-Magnon men show upright walking and running more frequently than would be predicted from their proportion in the sample, while the opposite is true of women. Males are also disproportionately depicted with arms in dynamic motion, as when making and wielding tools or lifting loads. Women are less often shown in such dynamic poses, and children, never. Elders are almost never represented upright, much less in motion or doing anything active. Only men of a certain age participate in hunts, carry game home, and conduct rituals. It is mostly men who construct, create art, make tools. Only women scrape hides, hold babies, or touch children.

### THE QUESTION OF RACE

This article does not permit an extended treatment of the equally important question of which racial groups are recruited to visually depict stages of hominid evolution. I invite the reader to engage in a brief examination of magazine covers concerning human evolution, to see which genders and racial features "sell." 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. Discussions of the "African Eve" hypothesis for modern human origins in *Time* and *U.S. News* offered a diluted Africanity in the faces they presented, and "Eve" naturally required a male companion for inclusion on a cover.

Ruth Mathis, a graduate student in archaeology at the University of Massachusetts, Amherst, wrote a compelling indictment ("Race and Human Origins Narratives: Whose Past?," unpublished manuscript., 1991) of traditional visual narratives of human evolution from an African-American viewpoint. Specifically, she pointed to the common practice of presenting dark-skinned australopithecines and light-skinned modern humans as opposite ends of the evolutionary spectrum. One can make biologically-based arguments for portraying the earliest African hominids with heavily pigmented skin, but Mathis notes there is no compelling scientific basis for consistently choosing white people to represent the most advanced species, since non-European varieties of modern humans populated all continents by the end of the Ice Age. She stresses the alienating impacts of these visual narratives on the children of color who visit museums to learn more about human history and view these narratives with their own consciousness of racial stereotypes.

### TOWARD MORE EQUITABLE AND REALISTIC REPRESENTATION

The challenge for illustrators and experts really is not to fashion politically correct portrayals of human ancestors--drawing a Guy-on-a-Hide or a Gal-with-a-Rock--nor to produce accurate but pedestrian ones--daily trips to the waterhole, perhaps. Nor should we throw up our hands and say real scientists should not use such inevitably speculative illustrations anyway. Exciting exceptions to the stereotypic rules of illustration do exist. French illustrator Veronique Ageorges (Ageorges, Veronique and Saint-Blanquat, Henri, *Lascaux et Son Temps*, 1989) and former Smithsonian artist John Gurche (e.g. "Almost Human" by Tom Waters in *Discover*, 1990) have created scenes that reflect a deep appreciation for the rich archaeological and ethnographic resources available. Their human ancestors engage in a range of technically believable activities, and

include strong older persons and capable women and children, interacting with one another in good and ill temper. Women, children, and older persons break the confines of their occupational straitjackets, making art, dancing, fabricating tools, and foraging away from camp. Men wear ornaments, smile, and are idle. Significantly, these artists have built on their own expert knowledge, rather than relying on the testimony of other experts, who, for the most part, have seemed little concerned with the social content of these dioramic scenes.

As a scientist, I see these artists' representations as science fictions--visually mediating the often complex research tactics of specialists for an interested, educable public. When I call these reconstructions science fictions, I mean no slur. In fact, strong philosophical parallels exist between what "real scientists" trying to understand unseeable ancient events do and what a careful artist does in these representations. We each link together points of scientific fact--things we think we know for sure--into narratives of educated guesses and arguments of plausibility. From this perspective, the work of the most thoughtful of my artist colleagues in portraying ancient humans exactly parallels my own struggles to make sense of the evidence actually left behind by them.

Once each acknowledges the social power of the visual assertions about our ancestors that populate our museums and popular books, rich possibilities for collaboration between scientists and artists emerge. As an archaeologist trained in an anthropological view of the past and a citizen of an ethnically and racially diverse nation, I believe we can serve the greater public by expanding the range of possible pasts represented in depictions of prehistoric people. I am not arguing for revising past worlds as they have conventionally been represented using a representational quota system, by which various ages, genders, and races get their fair share of prestige as defined in these works--where women hunt, men scrape hides, old folks run and dance--though all probably did a good deal of these activities. Rather, why not combine

scientific rigor and creativity to offer viewers social arrangements different from any known today, or hominid species with truly different adaptations and behaviors? By picturing unexpected past worlds--inhabited not by mimics or parodies of ourselves but by those who may have been strong, successful, yet very unlike us--we might succeed in actually drawing more viewers into the real problems, possibilities, and pleasures of research on the past.

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#### For further reading:

Berger, John. *Ways of Seeing*. New York: Viking Press, 1973.

Goffman, Erving. *Gender Advertisements*. New York: Harper Colophon, 1976.

"The Way We Were. Our Ice Age Heritage: Language, Art, Fashion, and the Family," *Newsweek*, November, 10, 1986.

Rudwick, Martin A. J. *Scenes from Deep Time*. Chicago: University of Chicago Press, 1992.

Waters, Tom. Almost human. *Discover*, May, 1990:43-44,53.

(continued on page 6)



**TEACHING SUGGESTIONS:**

After reading Gifford-Gonzalez's article, students might engage in the activities discussed below that allow them to conduct their own library research on age and gender representation. While these questions relate to the subject of this article, they can be applied to any topic or historical period and even be extended to magazine ads, television commercials, and posters.

1. Looking through books, including college texts, with illustrations on the Palaeolithic, note what subjects were chosen for the illustrations and why. Who, with regard to age and gender, is situated in the foreground, in the background? Who is standing up, sitting down? What does this imply?

2. Look for standard reference books such as an encyclopedia that usually reserve space for just one illustration to represent a particular topic. What was chosen to illustrate Ice Age people or the human evolution section? What gender is represented and what are they doing? Why do you think the illustration was chosen?

3. In books on paleolithic art, who created the art (males or females)? How do or could we know people's roles of that time? Why do we come to these conclusions? (In a multicultural class, you may find the students' answers differ, based on their own cultural values and experiences.)

4. From the books you have reviewed, what is not illustrated? For example, have you found illustrations of butchered animal parts, people bloody from butchering animals or from injuries incurred from hunting or from everyday living? Do you see children playing, parents expressing affection, people chatting? Are children doing anything useful (babysitting, gathering)?

5 Do you think the illustrations you have come across provide a full portrayal of life in the past? If you were from another planet, what would you learn? Some questions you may wish to ask are: Who are the most important people? The least?

Who are the responsible members of the group? What do their daily activities consist of?

6. Students might look at their own family stories and discuss what their grandparents did as children and as adults, In their own households, who makes dinner, who takes part in childcare? How have the times changed regarding the roles of women and men today? How might family roles differ for students from different cultural backgrounds?

The Time-Life Emergence of Man Series would be useful for this exercise:

Constable, George. *The Neanderthals*. New York: Time-Life Books, 1973.

Edey, Maitland N. *The Missing Link*, 1972.

Howell, Francis Clark. *Early Man*, 1973.

Prideaux, Tom. *The CroMagnons*, 1973.

White, E. and Brown, D. *The First Men*, 1973.

**About the Author:****Diane Gifford-Gonzalez**

I have always been fascinated with history, and I still read books on history for fun. I am sure that part of this fascination stemmed from poring, in those pre-television days of my childhood, over my parents' collection of old *National Geographic* magazines, featuring artists' portrayals of daily life in ancient Sumer and Egypt. In the university, I bounced around from art history to Near Eastern languages, and on to physical anthropology before finally landing in prehistoric archaeology and receiving a Ph.D. in anthropology in 1977 from the University of California, Berkeley.

For the last twenty years plus, I have worked in Kenya and Tanzania, investigating the early uses of introduced livestock by Africans and conducting a variety of research projects aimed at better understanding archaeological materials--especially animal bones.

(continued on p.9)

## MOVIE REVIEW: *POCAHONTAS*

*Pocahontas* is a typical Disney fairy tale, a modern descendant of Disney's 1937 *Snow White*. The earlier romances were all animated versions of fairy tales or fiction for children: *Cinderella*, *Beauty and the Beast*, *The Little Mermaid*, *Aladdin*, *Peter Pan*, and *Sleeping Beauty*. But this one is based on a true story, or rather, is a fictionalized elaboration of some ideas about what happened between some real people in Virginia in 1608-1609. There really were individuals there called Pocahontas, John Smith, Powhatan, Ratcliffe, and Kocumom. But the story in the film is actually less well-founded in historical and ethnographic reality than is the often told story about George Washington and the cherry tree.

The movie presents a budding romance between two protagonists. Pocahontas is a beautiful, buxom, tan young woman with long black hair, oriental eyes, and an "Indian" nose in profile (but lacking a bridge in full-face), who has a tasteful tattoo on her upper right arm and wears a skimpy off-the-shoulder dress of fringed leather. Captain John Smith is a handsome, tall, muscular, clean shaven, young white man, with long blond hair and blue eyes. Perhaps a mixture of Richard Gere and Tom Cruise, he wears tight trousers, high loose boots, shirt sleeves turned up, and vaguely 17th century helmet and cuirass. The two exchange a few words in mock Indian (taken from the vocabulary in

Strachey's history of the Jamestown colony), but Pocahontas immediately speaks impeccable English to Smith. Other ethnographic details are hardly more realistic. A few bits have been taken from the historical record on Virginia Indian culture of the period, but these are mere fragments of local color, and most of them are not convincing. One example among many is the robe that Powhatan briefly dons. This is based ultimately on "Powhatan's mantle" in the Ashmolean Museum in Oxford, but the version

we are shown comes from an inaccurate, simplified copy that is now exhibited at Jamestown. In addition, informed scholarship has long held that the shell-decorated hide panel in Oxford is not a mantle and cannot be surely associated with Powhatan, although it did originate among the Indians near the Jamestown settlement.

Other elements of Indian-ness in the movie are based on positive features in the modern stereotype. For example, the animated tree called "grandmother willow" tells Pocahontas, "All around you are spirits, child. They live in the wind, and the water, and the sky. If you listen, they will tell you." Powhatan tells his daughter, "Let the spirits guide you." He greets her

with the remark "My heart soars," quoting Dan George in *The Little Big Man*, perhaps the finest feature film on the Indian-White experience. The Indians are fundamentally good and right, although ill-informed about the English. The English, and especially Ratcliffe (here their leader, but not in reality), are caricatured as mad gold seekers, ill-informed about the Indians. It may be aspects like these that have led Russell Means, the old activist



*Matoaka als Rebecca daughter to the mighty Prince Powhatan Emperour of Ananoughkomock als virginia converted and baptized in the Christian faith; and wife to the wor<sup>th</sup> M<sup>r</sup>. John Rolfe. Compen Holland excu*

for Indian rights, to comment that "It [Pocahontas] is the finest feature film ever done in Hollywood on the Native American experience." But perhaps his judgment was affected by his own employment by Disney to provide the voice of Powhatan in the movie. It does seem significant that this love story does not have a happy ending in the film. After Pocahontas saves Smith, persuading her father Powhatan not to kill him, the romance ends as the wounded Smith sails for England, while Pocahontas stays in Virginia, feeling she belongs with her own people.

Questions about the accuracy of the movie may be answered in several ways. One might begin by saying that this is in no sense a documentary, that accuracy was not a high priority for the writers and artists. If it had been, what sources could have been used? There is little reliable direct evidence on the details of Virginia Algonquian culture, material or non-material. The most appropriate sources are: (1) John White's watercolors representing the Indians of Roanoke (prepared 50 years earlier and 100 miles away) especially for such things as houses, clothing, weapons, music and dance; a source only sparingly used by the Disney artists. (2) Archaeological evidence from the Jamestown area, which was not used. (3) Materials on other Indian cultures of neighboring areas in the 18th century when reliable evidence was recorded and objects were collected. Little was used here. Anthropologists and modern Indian people also have ideas about appropriate attitudes and behavior, but these can only have a rather remote relation to the long-lost reality of life in Virginia about 400 years ago.

One is on slightly firmer ground in evaluating the historical accuracy of the basic story line. It is clear that when Pocahontas and Smith first met, she was 11 or 12 years old and he was 27. Her appearance, other than her age, is documented only by a rather uninformative engraved portrait done in 1616. But Smith is known to have been rather short and stocky, sporting a bushy full beard. Smith left for England in October, 1609. Pocahontas was often in the Jamestown settlement thereafter, and acted in some respects as an intermediary between her

people and the English, until she was captured by the English in 1613. Kocoum, who in the movie is her fiance and is killed by the English, in fact is said by one historical account to have married Pocahontas in 1610. Then on April 5, 1614, she married the Englishman John Rolfe, when she was 19 or 20 years old. Their son Thomas Rolfe was born in 1615, and the next year the family went to England where Pocahontas died in March, 1617.

There is very little evidence for any romantic relationship between Smith and the young girl that Pocahontas then was. The well known story has her saving him from execution just at the time that they first met, in January, 1608, when he was brought as a captive before her father, Powhatan, the paramount chief of the area. One difficulty is that Smith is the only source of the story, and he did not introduce it in his earliest writings on Virginia, but waited until several years later. Another problem is that, according to Smith, several times during his earlier adventures in Turkey and the Balkans, a woman of high status saved his life or helped him escape captivity. This is, of course, an old element of folklore, which at best influenced Smith's dramatic accounts of his life. Even if some such event actually occurred when he was taken captive by the Virginia Indians, it is possible that Smith misinterpreted a dramatic mock execution that was part of an adoption ceremony, in which Pocahontas played the traditional role (perhaps assigned by her father) of a woman who adopted as son or brother a prisoner of war who would otherwise have been killed. This deduction is based on evidence of type (3) above, for the custom is not documented for the Virginia Indians but is recorded for Indian tribes to the north. The rescue is of course the central feature of the traditional history (or myth), but it fills a rather different position in the plot of the Disney story. The message of Disney's historical myth is one of interethnic conflict, based on greed and ignorance, that was defused by an intelligent young Indian woman in search of romance. This may have some slight basis in real history. It is certainly true, although rarely recognized, that intermarriage between Indians and Europeans (and Africans) in the first centuries of contact was an important



mechanism for peaceful solution of interethnic conflicts. One may wonder whether it is only for dramatic effect that Disney's retelling omits the miscegenation that actually occurred between Pocahontas and Rolfe. That marriage provides another reason, besides her supposed rescue of Smith, for her continuing fame and significance in American history. The movie can be recommended for its simple, dramatic plot; its wonderful, artistically sophisticated animation, and its use of classic Disney animal characters, who play their traditional comedy roles as well as emphasizing the supposed closeness of Indians to the natural world. It is a fairy story with a fundamentally positive message about Indian-White relations. It is not a useful document about Virginia Indian culture.

Viewers whose interest is aroused can be referred to *Pocahontas and her World* by Philip L. Barbour (Boston: Houghton, 1970), for a reasonable reconstruction of Pocahontas's life story, including her relations with the English and her position in her native society. For information on Virginia Algonquian culture of the time, the best places to begin are Christian F. Feest's article "Virginia Algonquians" (pp. 253-270 in vol. 15, *Northeast*, Bruce G. Trigger, ed., 1978, of the *Handbook of North American Indians*. Washington, DC: Smithsonian Institution), and Helen C. Rountree's *The Powhatan Indians of Virginia: Their Traditional Culture* (Norman: University of Oklahoma Press, 1990). On the Pocahontas myth (but not on its relation to ethnography or history), see Robert S. Tilton, *Pocahontas: The Evolution of an American Narrative* (New York: Cambridge University Press, 1994). A very different, and amusing, version of the relation between Pocahontas and Smith was invented by John Barth, for his novel *The Sot-Weed Factor* (New York: Doubleday, 1960)--probably not to be recommended for high school or younger students.

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[Rountree recently published a children's book titled, *Young Pocahontas in the Indian World*, available from Helen Rountree, c/o J & R Graphic Services, Inc., 124 Production Dr., Yorktown, VA 23693.]



(About the Author: Diane Gifford-Gonzalez, continued from page 6)

A question that seems to underlie a lot of my research is: How do we know what we know about the past? This question has moved me to do studies in ethnoarchaeology and experimental archaeology and to write on the limits and potentials of animal bones in archaeology. My research on the messages implicit in artists' portrayals of human ancestors may seem far removed from my other professional interests at first sight. However, I think I am asking, in a different register, how we know what we think we know about the past. Specifically, I am trying to uncover what influence these depictions have on our understandings of the past, both as laypersons and as professionals.

I am delighted to expand my readings into recent work in art history and to come full circle, in a way, returning to the illustrations that drew me as a child into wondering about what it was like to be alive in the remote past.



The November/December 1995 issue of the free publication *Art to Zoo* features "**DeCoding the Past: The Work of Archaeologists**" that includes lesson plans. Write: Office of Elementary and Secondary Education, *Art to Zoo*, Arts and Industries Bldg. 1163, MRC 402, Washington, DC 20560.

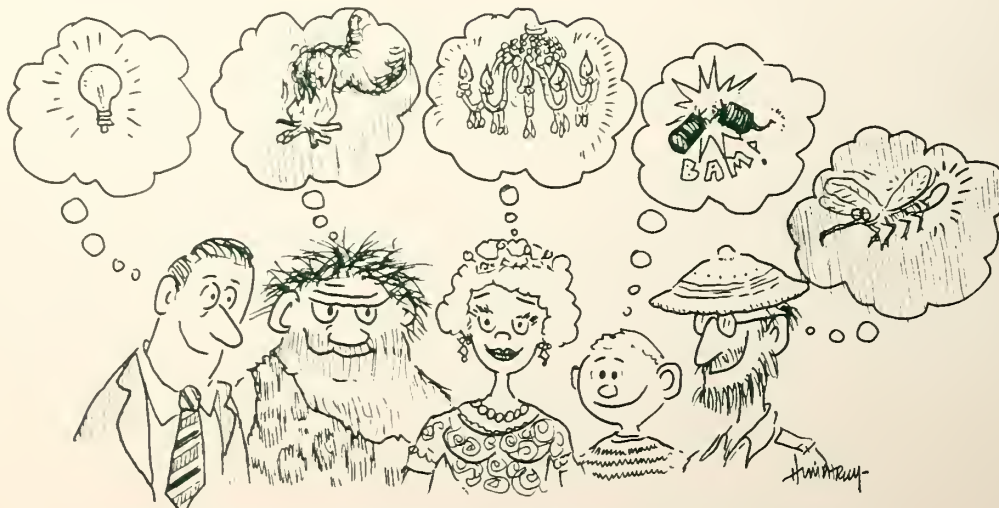
## CULTURAL BIAS IN TESTING: AN ANTHROPOLOGIST'S VIEW

Anthropologists often object to "Multiculturalism" when it focuses only on the trappings of different cultures--like food or music. Real multiculturalism goes deeper. It is harder to grasp, and more threatening; it addresses our intolerance, but it holds the key to real understanding and rich cultural exchange.

As anthropologists know (but few others understand), cultures differ not just in their obvious trappings but in more basic and subtle ways: patterns of thinking; logic, perception, construction of categories, goals, and values; ideals, morals, rhythms, emotions, and probably even psychological structure. To make a simple analogy to language, cultures do not just differ in vocabulary; they also differ in sound and grammar. Cultures have varied deep structures underlying their superficial differences just as languages have grammars that underlie their vocabularies. The differences are mostly learned, not genetic. A human baby can grow up functioning in any culture its caretakers teach, just as it can grow up speaking any language it is taught.

Most of these cultural behavior rules are arbitrary. All cultures must conform to nature to ensure survival. If you don't eat, reproduce, avoid biological damage and manage illness correctly (often within broad limits), you do not survive. But much behavior--from food choices to poetry--is simply arbitrary convention, things that we agree to do a certain way for the sake of consistency and predictability, much as neighbors agree to speak a particular language although any shared language would do.

These arbitrary cultural differences run surprisingly deep. Culture, not biology, says that adult American women can cry but men should not. Culture, not biology, says that men lust after the sight of women's breasts. (In many cultures they do not.) Much of our "logic" is also culturally derived. The "socialization" of children is largely a process of teaching them the arbitrary rules. We teach them what NOT to do. (In our society, for example, boys but not girls are taught not to cry. In many cultures all children are taught this.) All cultures limit freedom of action, expression, and even thought in the name of consistency and predictability. Cultures, including our own, are blinders that keep people looking in the "right" (i.e. the agreed) direction.



SOME CULTURAL DIFFERENCES IN PERCEIVING INTELLIGENCE

Comprehending how much of our own cultural system is arbitrary is perhaps the hardest lesson. Just as learning English as a baby makes some sounds seem natural and others unnatural, so being raised in middle class American society makes it hard to comprehend other peoples' thinking and behavior. Worse, socialization can make us blind to the very existence of alternatives, reducing tolerance of other cultures and our ability to think critically about our own assumptions.

Contemporary standardized tests demonstrate many of these points since they include many items that still demonstrate serious naivete about what people in other cultures are familiar with. One is asked, for example, to notice that a cute suburban house has an incomplete chimney. But not all youngsters have seen such a house. More important, how many have lived near (or in) such houses enough to make them objects of real interest? The mere existence of such structures somewhere in the general environment is not enough, if they have no meaning to the individuals being tested. We all learn things better when they have real meaning for us. Also note that people need not be completely ignorant of such items to be penalized on the test. They will also do badly if they are slow because their responses are less automatic.

This is only one example of the many questions posed in standardized tests in which the cultural content, the specific items, of the question, is biased. Well meaning testers try to correct these by using more culture neutral items (if such exist!). But the biases also extend beyond the content or the items selected to other arbitrary American cultural rules and assumptions that are built into the questions. It is these biases that destroy the validity of even the "fairest" test. Apparently, few people understand this.

Often the form of the questions themselves is culturally biased as for example when conventional drawing styles are used. Consider a test question showing a drawing of two cats silhouetted in front of the sun/moon. One is supposed to note that one

cat has no shadow. But to get the question right, you have to know what the simple drawn figures stand for--our drawing of the sun and moon are particularly conventional, not accurate--and that a squiggly line below one cat is actually a shadow behind it. The graphic style is unknown to many cultures or even to anyone reared on television rather than on picture books.



Consider analogies; we think that analogies test simple logic. But analogy problems are questions about the categories in which we put things. The categories determine logic. An analogy exists only if pairs of items can be put in the same group. But categories are cultural conventions, not revealed "truth." Other cultures categorize things in different ways and therefore would set up different analogies and get our test questions wrong or find them nonsensical. (Remember, we categorize objects in many, often conflicting, ways: by size, color, material, function, place of origin, or (as in a sewing basket or workshop) by things that complement each other or operate on each other in certain tasks like a needle, thread, and a torn shirt. Different classifications are useful in different situations, but no way exists to say that one is obviously "correct" in the abstract. The only way to know which categorizing scheme applies in a particular context is to be initiated into the local culture.

Cross-cultural studies in psychology (Cole and Scribner 1974; Cole, Gay, Glick, and Sharp 1971) have shown that the way people classify things depends on many variables including the situation; the question asked; the types of objects presented;

the familiarity of the objects; and the amount of formal, literate, Western schooling people have had. And they show how what appears initially to be an inability to classify in a certain way can disappear once the tester learns the cultural rules of the group or asks the right question.

North American-trained doctors have often had trouble communicating with Latin American patients. The doctors are trained to work with the categories "germ" and "antibiotic." But many Latin Americans faced with knowledge of diseases and antibiotics have a classification system that they consider more fitting: the opposition of "hot" and "cold." Some diseases and some antibiotics are classified together as hot, some as cold. The critical principle is to oppose a hot antibiotic to a cold disease and vice versa. Their logic comes from different categories, which we have great difficulty understanding, so we are uneducated and perhaps unintelligent by their standards. If they constructed an analogy test, we would be expected to recognize immediately that the most important categorizing principle was the "temperature" of items. Perhaps our classification is "better" because it is more "scientific" (although germ theory, too, persists despite being inaccurate in many of its applications). But even if the Latin American system is less accurate, people are socialized into it.

Consider a question that involves identifying one of two famous scientists, Albert Einstein or G. W. Carver. The question involves an obvious (but too simple) gesture toward "fairness" by permitting identification of a Black scientist or a White one. But it is hardly "fair," because the category "scientist" itself is a more significant category in White American culture than in Black culture. (Several of my Black associates consider Carver a "White man's Black hero" because he did "White" things.) Whites are therefore culturally more likely than Blacks to recognize a scientist of any color.

But this example also has at least one more bias that is much more subtle. (It may or may not apply to Black/White differences but surely applies more

broadly.) There are various ways of "knowing" things or people. This question favors people who "know" visually and utilize portraits and picture books. In a culture in which parents told stories rather than reading aloud from picture books, and oral tradition was important, people might know a person like Carver or Einstein very well but be less familiar with pictures.

And, consider a question involving two sets of cartoon figures in which one is supposed to notice whether any figures from the first set are repeated in the second. The answer is "no" because, although two pseudo-human figures are very similar, the diagonals on their tunics are reversed.

The use of cartoon figures supposedly eliminates cultural bias. But what is actually tested? The key question is whether one perceives and considers it worth noting that the diagonals are reversed. Anyone from a culture in which sex was indicated by the diagonals on peoples' clothing would get this right because their culture taught them to focus on this distinction. But most of us have been taught by our culture to tune out such distinctions. Think about earrings on males. Most of us probably pay no attention to whether a man's earring is in his right or left ear. We tune out the distinction. Yet some Americans notice because to them the distinction conveys important information about sexual preference..

In order to simplify the bewildering array of information reaching us, we all learn to tune out things that have no cultural significance. This is why unsocialized children often "notice" things their elders ignore. Different cultures teach different rules about what to tune out, just as we learn to tune out the subtle distinctions in vowel sounds that French speakers are taught to hear or just as Inuit (Eskimos) see many distinctions within what we lump together as "snow. So this question, too, is a test of cultural habits not intelligence.

The point is that even if we look beyond the obvious cultural content of tests, the questions can readily be shown to be culture bound at a multitude

of additional levels like the layers of an onion. And, like an onion, peeling away the layers of bias leaves nothing. No matter how hard we try, we are testing cultural awareness, not intelligence. There is no such thing as measuring pure thinking ability because all tests (and probably all thought itself) build on cultural categories just as all language builds on conventional grammar rules. I personally have been able to dissect every test question I have seen in this manner and I invite you and your students to try. It is a real learning exercise. Ask yourselves what unspoken American assumptions each question makes beyond its obvious cultural content.

Awareness of the real depth of cultural differences is both frightening and exhilarating. It is frightening because it raises the specter of greater complexity in dealing with others and greater humility and flexibility about our own assumptions. The excitement comes from contemplating how our lives could be enriched. Think of how dull our food, our music or our dress would be without the enormous recent influx of foreign influence. Is that all that other cultures have to offer? Medical anthropologists and doctors are discovering important new (to us) ways to think about and treat disease processes and illness by looking at traditional healers in other cultures. And, for all of our emphasis on "family values," we have much to learn (including new ways to think) from cultures in which families and the associated values play a far larger role. Imagine the ways that other aspects of our lives and thoughts could be enlarged if we opened ourselves to real multiculturalism.

Cole, Michael and Sylvia Scribner. *Culture and Thought*. New York: Wiley, 1974.

Cole Michael, John Gay, Joseph A. Glick and Donald W. Sharp. *The Cultural Context of Learning and Thinking*. New York: Basic Books, 1971.

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## BOOK REVIEW:

*GIVE AND TAKE OF EVERYDAY LIFE: LANGUAGE SOCIALIZATION OF KALULI CHILDREN* by Bambi B. Schieffelin (Cambridge: Cambridge University Press, 1990).

In an ethnography about the Kaluli, a Papua New Guinea group, Bambi Schieffelin expertly and thoughtfully shows how much can be learned about a culture from observing, recording, and analyzing the ways mothers socialize their children through language. Schieffelin's fieldwork occurred in 1967-8, 1975-7, and 1984. Her husband, their young son, and she stayed in Sululib, a community of 101 individuals on The Great Papuan Plateau in the middle of Papua New Guinea, off the northwest coast of Australia.

As a woman, Schieffelin was given "privileged access to the activities of women and children. No man could have sat in the women's section or gone bathing with small children" (p. 23). Since she was also a mother, she was viewed as an adult. Early on she recognized she could not be an impartial observer. The Kaluli brought her into their world giving her kinship or relationship names. They drew lines, however; she was referred to as yellow-skinned and different.

In this Kaluli community she studied, some lived in long houses made from bark and leaves; others lived in separate family dwellings. They hunted in the bush for small animals, fished, and gathered wild edibles, but most of their food came from gardens tended by the women. The primary foods were sago (a starchy foodstuff derived from the soft, interior of the trunk of various palms and cycads), greens, and scrapings from long cobs of pandanus (a plant of the genus Pandanus). Schieffelin studied primarily three families and selected four children: Meli (a female), Wanu (a male), Abi (a male) and SueIa (a female). She chose them because they were already using single words or just starting to use syntax and because the mothers were willing to explain the recordings she

made and the interactions with Schieffelin. She had a total of eighty-three hours of naturalistic interaction between children and their mothers, siblings, relatives, and other villagers.

Schieffelin's choice of families also reflected the social change affecting the village from the late 1960s to the 70s and 80s. SueIa and Abi, 25 months, lived in a family with a mother, father, and two older sisters. The parents were the most traditional, practicing strong food and post-partum sex taboos; having a strong belief in witches; and procuring food through hunting, fishing, gardening, sago making, and gathering. They also lived in a long house and had almost no interaction with Christian missions. Wanu, 24 months when the study started, also lived with a mother, father, and two older sisters. The males wore traditional simple pubic coverings, and the girls donned skirts made of string and inner bark. At Christian events such as weddings, the parents and children wore Western clothes that they purchased at mission stores. The family feared witches, and the mother followed menstrual taboos and went to a menstrual hut during her period. Finally, Meli, aged 24 months, came from the least traditional family. She was the first born, and her brother, Seligisc, was 7 months old. They lived with their mother and father in a single family house in a Christian area. Both parents, baptized Christians, were members of the Evangelical Church of Papua. They wore Western clothes, did not believe in witches, and did not follow any of the food, menstrual, or post partum sex taboos that effectively spaced children about 32 months apart. Also Ali's mother did not have time for sago making.

In the Kaluli society, face-to-face interactions are key, because they express cultural values. In her study, Schieffelin assumed "the process of acquiring language is deeply affected by the process of becoming a competent member of a society. The process of becoming a competent member of society is realized to a large extent through language, by acquiring knowledge of its functions, social distribution, and interpretations in and across socially defined situations. . ." (p. 15). She

concluded that a person does not "acquire culture"; a person "acquires a set of practices that enable one to live in a culture" (p. 15).

According to the Kaluli, children do not learn language by babbling or waiting for a genetic program to start. Instead, they must be "shown" language in order for them to learn it. Interactive and cumulative learning are key. Language begins when the young child says "no" meaning my mother and "bo" meaning breast. A child may have used other words but these two words are culturally essential. Children who do not talk, who have not yet said "no" and "bo" are not part of the everyday sharing and reciprocity. Thus very few demands are made on children who do not use language to share or cooperate. The mother is the primary teacher since she shows language to a child. The mother-child relationship also underscores the social view of language because the first social relationship a person has is between mother and child, mediated by food from the breast (p.74). According to Schieffelin, "the giving and receiving of food is a major means by which relationships are mediated and validated" (p. 74).

Understandably then, baby talk is not encouraged. "The goal of language development is to produce speech well-formed and socially appropriate, enabling individuals to establish and maintain sociable relationships" (p.105).

Interestingly, monologues do not exist in Kaluli life, even children talking to themselves in imaginary play. When Schieffelin's son did this he was considered "really different." In Kaluli society, people are rarely alone. To be alone is to be vulnerable to negative forces such as witches. If a person is alone, he is suspect.

Interdependence is also evident in the word "ade." An ade relationship between siblings, especially an older sister and younger brother is the most important bond between men and women outside marriage. Food sharing is frequently from an older sister to a younger brother, and he feels "owed." Ade then conveys expectations of nurturing,

sharing, and giving compassion. An older sister is expected to share food. Through language children learn to ask in an assertive Kaluli manner and through adequate relationships to feel sorry for and give to others. As readers, we now understand how children learn a contradiction and live with it. Each is an individual and negotiates with others for food and other objects. At the same time, each child also learns that he must be and is interdependent.

Schieffelin also shows ably through language how gender roles are reinforced. Threatening demeanor and aggressive actions are not tolerated in girls, even from an early age (p.203). Girls are encouraged to be compliant and nurturing. Even though mothers may express frustration and anger toward sons, they treat them in a preferential manner giving them more food, especially more meat and attention than they give daughters. They treat the daughters far more abruptly and critically. These contradictory attitudes make sense to Kaluli mothers because daughters grow up, get married, and move to other villages to live with their husband's families. Boys, on the other hand, belong to the mothers. If their husbands die, the sons would take care of them.

Gender then is reflected in the way family members interact verbally in terms of reciprocity. Who asks, who receives, and who is refused? Schieffelin concluded that brothers could always ask their sisters for food or assistance, but sisters could not make the same demands on their brothers. Men also display the exuberant self; they are "hard" and assertive. They, however also appeal, especially to women. No matter how they ask, they expect to be given to and easily "felt owed." Women are most often in the giving position. Finally men display a greater range of emotions and are generally more likely to have tantrums, angry rituals, and spontaneous weeping. Women are more steady in everyday and formal situations.

In her readable and insightful ethnography, Schieffelin shows her reader how studying the way mothers teach their children to use language and how they interact with each other can reveal the important themes and values in Kaluli society. These are autonomy versus interdependence, authority, and the importance of gender and reciprocity. Focusing on the connections between language and socialization, the stuff of everyday life, can give us more accurate insights into another culture, even our own.

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KALULI MEN DISPLAY A GREATER RANGE OF EMOTIONS THAN WOMEN

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