PICTURING THE PAST: GENDER IN NATIONAL GEOGRAPHIC RECONSTRUCTIONS OF PREHISTORIC LIFE

Author(s): Julie Solometo and Joshua Moss

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PICTURING THE PAST: GENDER IN *NATIONAL GEOGRAPHIC* RECONSTRUCTIONS OF PREHISTORIC LIFE

Julie Solometo and Joshua Moss

Artistic reconstructions of ancient life are powerful blends of archaeological interpretation and imagination. Like other narratives about the past, they can project contemporary gender roles and relations on ancient peoples, and can reinforce or transform ideas about gender in the present. This article examines the construction of gender ideologies in National Geographic *illustrations of prehistoric life. Our analysis of 204 pictorial reconstructions from 1936 to 2007 reveals that women and women's work are significantly underrepresented and undervalued, while exhibiting evidence of temporal change in response to societal factors and editorial influences. A vigorous archaeology of gender has had little impact on the magazine's imagined past; in some respects, the ancient women depicted in the last twenty years are just as scarce, passive, and subordinate as they were in the postwar "backlash" of the 1950s.*

Las reconstrucciones artísticas de la vida en la antigüedad son combinaciones poderosas de interpretación arqueológica e imaginación. Tal cual otras narrativas de la historia, estas pueden proyectar roles genéricos contemporáneos así como el relacionamiento de la gente en la antigüedad, también pueden afirmar o transformar ideas acerca de la gente en cuanto a sus roles genéricos en el presente. Este articulo examina la formación de ideologías genéricas en las ilustraciones de la vida prehistórica aportadas por la revista National Geographic. *Nuestro análisis en base a 204 dibujos reconstruidos desde el año 1936 al año 2007 revela que las mujeres así como el trabajo de las mujeres son significativamente desvalorados y reprimidos mientras que hay evidencia de manifestaciones de cambios temporales en respuesta a factores sociales e influencias de edición. Una vigorosa arqueología genérica en la revista ha tenido un pequeño impacto en la imaginación del pasado en algunos aspectos, las mujeres representadas en la antigüedad en los últimos veinte años son escasas, pasivas y subordinadas a las reacciones en contra de posguerra en los años cincuenta.*

Given the immense public interest in archaeology, interpretations of prehistoric life—and the tacit ideas about gender that they convey—have an impact extending far beyond the profession. Numerous studies document the powerful role played by visual media in establishing and reinforcing ideas about gender in contemporary American society (Berger 1972; Douglas 1995; Gill 2007; Goffman 1976; Lutz and Collins 1993; Traube 1992).

Artists' reconstructions of prehistory, which put the "flesh and bones" on archaeological theories about antiquity, are ubiquitous in museums, textbooks, and in widely read publications like *National Geographic*. They engage the viewer so successfully because they are populated with fully imagined people who participate in useful work, interact with one another, and display emotion, a stark contrast to the "faceless blobs" (Tringham 1991:94) that occupy our imaginations as we consider topics such as adaptation, exchange systems, and state formation (Conkey and Gero 1991). Generations of Americans—including archaeologists—have grown up with these reconstructions, and have internalized what they convey.

Such images necessarily carry much more than just objective information about the past. Because effective, compelling images contain detail and specificity that reach beyond archaeological data (James 1997), their creators are required to exercise their imaginations and "fill in the gaps" in the available evidence. Studies of illustrations of Paleolithic life (Gifford-Gonzalez 1993; Moser

Julie Solometo ■ Department of Sociology and Anthropology, James Madison University, MSC 7501, Harrisonburg, Virginia 22807 (solomejp@jmu.edu)
Joshua Moss ■ 4223 S.E. Division St., Portland, Oregon 97206

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1993; Zihlman 1997) document some effects of artistic license, revealing multiple ways that images communicate current notions of gender roles and relative status.

Here, we examine reconstructions from over 70 years of the *National Geographic Magazine*. These reconstructions are particularly valuable subjects of analysis because, consistent with the magazine's stated commitment to scientific accuracy, they represent the collaboration of artists, magazine staff, and also professional archaeologists. Because they involve consultation with "experts" and are produced for a non-academic audience, they allow us to examine the interplay between public and scholarly interpretations of the past. The many years of *National Geographic* illustrations also provide an opportunity for diachronic analysis. In this study, we asked two central questions. First, do *National Geographic* reconstructions exhibit gender bias, and if so, what form does this bias take? Second, can we detect the influence of cultural change in the ways women and men are depicted in the reconstructions? We expect that the artists and editors at *National Geographic* would be influenced by widespread social norms, of course. However, their stated reliance on archaeological consultants for accuracy suggests that changing trends within the discipline of archaeology would be detectable among representations of ancient women and men.

We first consider the unique properties of reconstructions and how they are produced at *National Geographic*. We then examine elements of gender bias and provide abbreviated gender histories within American society generally, and also within the discipline of archaeology.

Reconstructions at *National Geographic*

Artistic reconstructions of antiquity have several unique properties. First, reconstructions cannot depict abstract processes or ideas; they must depict a moment in time, and place bodies in the frame. Second, because concrete events and people are being shown, reconstructions also eliminate, or at least minimize, ambiguity (James 1999). Reconstructions cannot convey the methodological uncertainties, chains of assumptions, or necessary caution that accompanies archaeological interpretation. Third, images are unquestionably powerful; they "convey universal messages that people grasp instantly and intuitively, though often unconsciously" (Zihlman 1997:108, citing Mayo and Henley 1981; see also Moser 2001:268–269)). Finally, the concreteness of the image guarantees that reconstructions will be inaccurate. As James (1997:25) puts it, "the only certain thing about any reconstruction drawing is that it is wrong. The only real question is, how wrong is it?" To acknowledge this fact, some researchers have used alternative terms such as "simulations" (Hobley in Adkins and Adkins 1989:131), "simulacra" (Gifford-Gonzalez 1993, see also Conkey 1991), and "science-fictions" (Gifford-Gonzalez 1993).

Interviews with three former Art Directors responsible for overseeing *National Geographic*'s artwork from 1974 to 2006[1] indicate that the magazine's explicit goal was to minimize the inevitable inaccuracies inherent in reconstructions. Art Directors oversaw a lengthy process by which artists, *National Geographic* Art Researchers and "fact checkers," and professional archaeologists strove to create scenes that upheld the magazine's "high standards for aesthetics and accuracy" (Sloan 1999:223) through meticulous research and, often, review by multiple expert consultants. Former Art Director Christopher Sloan (personal communication 2008) stated that artists were asked to incorporate "as much information as a scene could bear," including (in some cases) rival hypotheses, without comprising its aesthetic value. For instance, a 1996 John Gurche painting showing Australopithecines travelling through a forest simultaneously illustrates competing theories about *Australopithecus afarensis* locomotion, as well as recent thinking about social group structure, sexual dimorphism, the impact of children on travel, and the nature of the paleoenvironment.

National Geographic makes claims to the scientific legitimacy of their images by highlighting the involvement of experts in article text, by citing them in figure captions, or by crediting them as "consultants" alongside the artist in the image's margin. Artist and staff profiles highlight the extensive research that accompanies each reconstruction.

Another aspect of the images that asserts their accuracy is use of a realistic style. Alice Carter (1999:13), author of *The Art of National Geo-*

graphic, states that realism allows the reconstructions to blend "so successfully with the text and photographs that the reader is often unaware that an image has bypassed the camera's lens and filtered instead through an artist's imagination." While Carter considers this an asset, others argue that the use of realistic art styles in the reconstructions "constitutes a major argument for their believability" (Gifford-Gonzalez 1993:28; see also James 1999; Moser 1998a), and make it hard for viewers to distinguish fact from fiction. Thus, reconstructions done in a realistic style are likely to be more persuasive, but also more misleading.

In what ways are the images misleading? Several studies of artist's reconstructions and museum dioramas of Paleolithic life demonstrate how these media communicate, and thereby naturalize, underlying notions about progress, nationalism, race, the family, and gender in the past (Berman 1999; Jones and Pay 1990; Moser 1992, 1998b, 2003; Zihlman 1997). For example, messages about the centrality and dominance of men are communicated by numerous visual cues (Gifford-Gonzalez 1993; Moser 1993; Zihlman 1997). First, males are represented far more often than women and are more likely to occupy the foreground. Women are shown engaging in a narrower set of activities, activities that in contemporary gender ideology are deemed low status. Women are typically excluded from endeavors considered distinctive to our species, such as ritual, art-making (see also Conkey with Williams 1991:121; Moser 1993:77), and cooperative hunting. A male/active/dominant and female/passive/submissive dichotomy is expressed by sexual dimorphism, the placement of women in lowered postures relative to men, and the greater attribution of motion and tool use to men. Gestures—such as the "nonreciprocal" touch of a smaller, presumably weaker female Australopithecine (Zihlman 1997)—and the difference between the outward male gaze and inward or "unfocused passive" gazes of women (Moser 1993) likewise are argued to communicate the limitations and closed worlds of ancient women.

These studies are a model for our analysis of 204 reconstructions of prehistoric life published in *National Geographic*. Because reconstructions have appeared in the magazine since 1936, we can evaluate changes over time and include a much wider range of cultures than previous studies, which have focused primarily on those of the Paleolithic.

Gender Bias, Gender Histories

In order to characterize gender bias in the *National Geographic* reconstructions, we follow Nelson (2004) and examine the "lenses of gender" identified by Sandra Bem (1993): androcentrism, gender polarization, and biological essentialism. Androcentrism is more than just the notion that men are superior to women; androcentrism holds that "whatever is male is natural, normal, central, and right," and that which is not is inferior, deviant, or "other" (Nelson 2004:12–13). The privileging of male work and the devaluation of women's contributions is an example of androcentrism. The second aspect of gender bias, gender polarization, is the assumption that men and women are fundamentally different, resulting in the "ubiquitous organization of social life around the distinction between male and female" (Bem 1993:80). Gender polarization is visible, for instance, in a strict gendered division of labor, as well as the assignment of gender to items of material culture.

The third aspect of gender bias considered here is biological essentialism. Biological essentialism "rationalizes and legitimizes [androcentrism and gender polarization] by treating them as the natural and inevitable consequences of the intrinsic biological natures of women and men" (Bem 1993:2). For instance, conflation of women as mothers is an example of biological essentialism (Nelson 2004:13), as is the assumption that women lack the strength or perhaps intellectual ability necessary to hunt or make stone tools (Gero 1991; Watson and Kennedy 1991). The notion that pregnancy, breast-feeding, and childrearing results in the "immobilization" of women, tethering them to the home (Brumbach and Jarvenpa 2006; Conkey and Spector 1984:8), is another pervasive example.

Gender Histories: Women and Gender in American Society and the Discipline of Archaeology

Changes in *National Geographic* imagery over time are expected to track broader temporal trends. We expect that the artists at *National Ge-*

ographic would be influenced by changes in the status of women in American society. However, changes within the discipline and practice of archaeology itself may also affect artists' conceptions of the past. The history of gender relations in the United States is often discussed in terms of temporary gains, followed by setbacks, or "backlashes" (Coltrane 1996; Faludi 1991; Hoffert 2003). These gains represent partial rewritings of a persistent gender ideology rooted in biological essentialism, gender polarization, and androcentrism. Temporary inroads assert that women are as capable as and deserving of equal rights as men, but these advances are brushed back by media and legal attempts to redefine women solely in terms of their "natural" abilities as wives, mothers, and homemakers. As this concept implies, cultural definitions of femininity and the valuation of women and their labor are closely tied to the history of women's participation in the (nondomestic) workplace.

While work outside the home was seen as liberating, even glamorous for young women in the 1920s, the women of the 1930s who entered the workforce to support their families during the Great Depression faced wage discrimination, low status jobs, and a high domestic workload (Coontz 2005). Working mothers were associated "with the father's failure rather than the mother's success" (Coontz 2005:219) and national sentiment, as well as governmental policy, generally opposed most women working outside the home (Chafe 1991; Coontz 2005).

During World War II, women's work was important to the war effort. The media assured women that they would "retain their femininity" despite participating in traditionally male-dominated fields, including government, business, and industry (Hoffert 2003:364). Images of Rosie the Riveter and Wonder Woman, and written media that related household chores to heavy industry tasks, sought to redefine womanhood by celebrating a quality women were previously thought to lack: strength (Faludi 1991; Hartmann 1982; Hoffert 2003:365). Working for wages and doing "men's work" became acceptable for both single and married women.

At the conclusion of the war, however, women were expected to resume their domestic duties, yielding their jobs to returning soldiers. Women were asked to conform to earlier conceptions of femininity, defined again in terms of their fragility and their status as wives and mothers. The media's role in creating this oppressive 1950s "cult of domesticity" for white middle-class American women has been famously described by Betty Friedan (1963:7, 37), who argued that the ideals of the postwar era "narrowed woman's worlds down to the home," where fulfillment could be found "only in sexual passivity, male domination, and nurturing maternal love."[2] Social critics argued that careers and femininity were incompatible, that work drastically reduced the chance of marriage, and was a threat to women's mental health, the lives of their children, and the American family itself (Faludi 1991:52; Lutz and Collins 1993; May 1988).

An era of gains for women in the 1960s and 1970s—including increasing control over reproduction and legislation addressing gender discrimination—provoked another, similar "backlash" in the 1980s, documented by Susan Faludi (1991). "Career women" in film, television, self-help books, and other popular media were depicted as either pitiable or predatory, and ideals of marriage, motherhood, and subordination to men were emphasized.

Characterizing American views of women and constructions of femininity in the 1990s and 2000s is more difficult. Women continued to enter the workforce in large numbers, but media treatments of women presented "inconsistent and contradictory" messages (Meyers 1999:12). Many researchers (see for instance Gill 2007; Meyers 2008; Whelehan 2000) have noted that in the last twenty years ideals of female equality are found alongside traditional and misogynistic notions about women. For instance, sexual appeal to men remains the central attribute of the American female, whether they are a stay-at-home mom, a "career woman," or a superhero.

Changes in the field of archaeology may also affect *National Geographic* images, as professional archaeologists became increasingly aware of, and interested in, issues of gender. Women's participation in the Society for American Archaeology (SAA), for instance, increased dramatically in the 1970s (Patterson 1995), and the number of female Ph.D.s jumped from fewer than 15 percent of all awardees in the 1960s to 50 per-

cent in the early 1990s (Zeder 1997:28, Figure 3.10c). These changes did not translate into an immediate acceptance of gender archaeology, but after the publication of Conkey and Spector (1984), the pace of publication on gender began to increase, and shows no signs of slowing (Nelson 2006:2). The literature is sufficiently ample and diverse that several major reviews of the field, including texts and readers, have been published (Gilchrist 1999; Hays-Gilpin 2000; Hays-Gilpin and Whitley 1998; Nelson 2004; contributions to Nelson, ed. 2006; Wylie 2002).

The impact of women archaeologists and gender archaeology within the discipline as a whole is debated, however (e.g., Gero, 1993; Hutson 1998, 2002). For instance, Hegmon (2003:218) calls the study of gender "almost mainstream in many theoretical perspectives," while others (Nelson 2006; Sørensen 2000) note the ways in which it continues to be marginalized. Others have documented continued gender inequities in employment, publication, and grant success (Gero 1993; Hutson 1998, 2002; Nelson and Nelson 1994; Zeder 1997).

Given this history of widespread change in the role of women in American society, and also their increased contributions to the field of archaeology, we expect to see corresponding changes in the depiction of ancient women in the pages of *National Geographic*.

Examining *National Geographic*'s Imagined Past

We examined each *National Geographic* article on prehistory from 1888 to 2007. Reconstructions of prehistory first appeared in the 1930s, were most common in the 1980s, and are still found today. Our objective was to examine the attribution of gender roles in cultures for which the primary source of information about gender comes from the archaeological record. We therefore excluded images of ancient Egypt, Mesopotamia, and other cultures for which contemporary texts provide considerable information about gender roles and relations. We also excluded a handful of scenes that depict prehistoric events as described in mythology or other texts, such as scenes from the *Popul Vuh*, or scenes whose captions and accompanying text reveal that the artist relied primarily on ethnohistoric information. Finally, we excluded artwork in which people were removed from a living context, such as illustrations of bodies in graves, or models of early hominins that were drawn specifically to illustrate the anatomical features of the species. Our sample thus includes only what Gifford-Gonzalez (1993) calls "dioramic representations," or scenes of ancient life.

The study compiled information on 2,109 individuals from 204 images illustrating 77 articles. For each scene we recorded the article title, artist, artistic style (coded as "realism" or "not realism"), geographic location, and culture type. For ease of coding, the "culture types" recognized were early hominin, hunter-gatherers, agricultural/village, and state/urban. Data recorded for each individual included age and gender, amount of clothing, location in the frame, posture, body and arm motion, physical setting, interaction with other people, and activity. The activities were based on Gifford-Gonzalez (1993) and a pilot coding of 30 images. In order to limit the statistical impact of very populous scenes, such as depictions of crowds or large work crews, we collected data on no more than ten background individuals if they were engaging in the same activity. All foreground and middle-ground figures were recorded.

Patterns in Geography and Culture Type

The images show an overall geographic bias, with New World prehistory accounting for two-thirds of the reconstructions, followed by scenes from Europe (18 percent), Africa (11 percent), Asia (3 percent), and other locations (15 percent). Depictions of prehistoric Africa and Asia focus almost exclusively on early hominins, while more than half of the reconstructions of New World prehistory are of state societies. Prehistoric European cultures are dominated by images of Upper Paleolithic hunter-gatherers and agricultural/village societies (such as Stonehenge and the Ice Man).

State/urban societies are the most commonly depicted culture type (Figure 1), featured in 77 (37.7 percent) of the 204 images; nearly 94 percent of the state/urban images are of New World societies. Gero and Root (1990:33) contend that *National Geographic*'s focus on the state misrepresents the past, suggesting a greater time-depth to this form of political organization. The

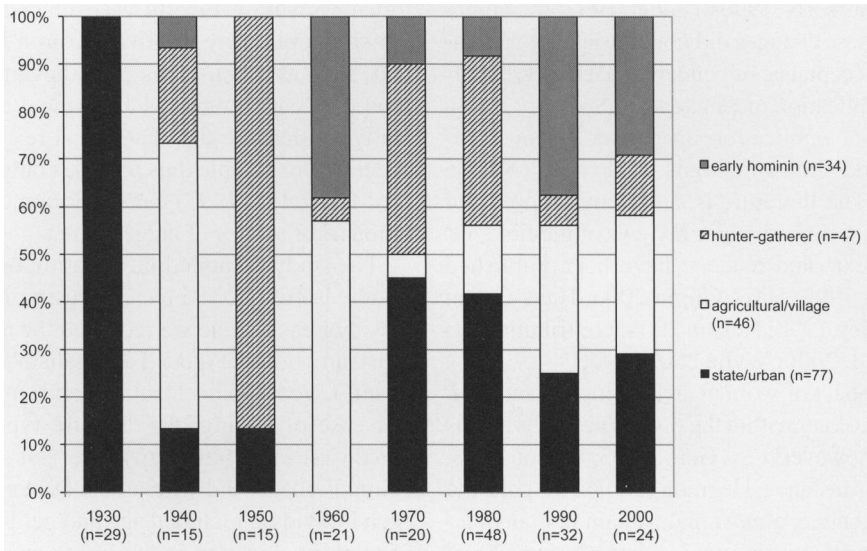

Figure 1. Proportion of reconstructions by culture type, per decade.

result, they argue, is to legitimate the American state, "underwriting a logic that portrays this system of governance as innately human and intrinsic to the human condition" (Gero and Root 1990:33). On the other hand, a focus on the New World state is consonant with the National Geographic Society's long-standing commitment to Maya archaeology (18 percent of all reconstructions), and to the magazine's explicit emphasis on stunning visuals, such as images of large monuments and finely crafted works of art.

Our assessment of temporal change in gendered depictions is complicated by the fact that some of the variables we examine are strongly affected by culture type, and culture types were not equally represented over time (Figure 1). For instance, only state-level societies were depicted in the 1930s, while images of hunter-gatherers dominated the 1950s and were absent in the 1960s. The pace of archaeological discovery and focus of scholarship may be responsible for some of these temporal shifts. Our interviews, however, suggest that the interests of individual staffers, and the need to avoid repetition in the magazine's visual and educational content, also influenced the selection of story topics. To avoid the effect of culture type, when appropriate, we examine temporal trends in the representation of gendered individuals and gender roles within individual culture types.

Trends in Age/Gender Representations

Based on previous research (Conkey and Spector 1984), we expected that most images would be of males. Conkey and Spector's (1984) critical examination of the Man-the-Hunter model of human evolution, for instance, points out the biological essentialism underlying the exclusive association of men with hunting, the uncritical assumption that early hominins had a strict sexual division of labor, and the androcentrism of crediting presumed male activities—combat, hunting, sexual competition over females—as critical variables in our evolution as a species. Archaeologists studying fully modern humans are no less biased, embracing the same topics favored by the white, middle- or upper-class men that once dominated cultural anthropology, such as "leadership, power, warfare, exchange of women, rights of inheritance, and notions of property" (Conkey and Spector 1984:4).

The centrality of men and men's activities in narratives about the past lead us to expect that *National Geographic*, too, has focused on illustrating the activities of men. We anticipated, however, that images of women would increase during those eras in which their work was more highly valued by American society, and also after 1980, when both female archaeologists and feminist critiques of traditional anthropological and ar-

Table 1. Absolute and Relative Frequencies of Individuals in Age/Gender Categories by Culture Type.

	Early Hominin	Hunter-Gatherer	Agricultural/village	State/urban	Total
Adult women	42 (26.9%)	61 (25.5%)	48 (12.3%)	191 (22.7%)	342 (21.0%)
Adult men	81 (51.9%)	137 (57.3%)	278 (71.5%)	584 (69.4%)	1080 (66.4%)
Children and infants					
Female	0 (0%)	4 (1.7%)	2 (.5%)	5 (.6%)	11 (.7%)
Male	4 (2.6%)	1 (.4%)	9 (2.3%)	19 (2.3%)	33 (2.0%)
Unknown	28 (17.9%)	32 (13.4%)	41 (10.5%)	40 (4.8%)	141 (8.7%)
Total	32 (20.5%)	37 (15.5%)	52 (13.3%)	64 (7.7%)	185 (11.4%)
Elderly					
Women	1 (.6%)	1 (.4%)	5 (1.3%)	0 (0%)	7 (.4%)
Men	0 (0%)	3 (1.3%)	6 (1.5%)	3 (.4%)	12 (.7%)
Total	1 (.6%)	4 (1.7%)	11 (2.8%)	3 (.4%)	19 (1.1%)
Total	156 (100%)	239 (100%)	389 (100%)	842 (100%)	1626 (100%)

Note: 479 adults of indeterminate gender are excluded.

chaeological narratives became more common.

As expected, adult, non-elderly men accounted for the vast majority (66.4 percent) of all illustrated people of identifiable gender (Table 1).[3] One or more adult males is shown in 91 percent of all images containing people of determinate gender ($n = 201$) and 45.3 percent of images contain adult males only. In contrast, adult, non-elderly women constitute 21 percent of all coded individuals and appear in 48.3 percent of all images; adult women are found without men in just 7.5 percent of images, and appear without any other people (children, elderly women) in 3.0 percent of images. When adult women and adult men appear together ($n = 82$), the men are more numerous 62.1 percent of the time, and the genders are equally represented in 17.1 percent of these reconstructions. Children and infants account for 11.4 percent of all people pictured and appear in 38.3 percent of all images. Elderly people, identified by gray hair and/or wrinkles, constitute a smaller minority of images, making up just over 1 percent of all illustrated individuals and appearing in 8.0 percent of the reconstructions.

Culture type affects the relative proportions of age and gender categories (Table 1). Adult (non-elderly) women and children are slightly overrepresented in depictions of early hominin and hunter-gatherers, where scenes of group foraging and camp life are more common. These images generally date to the late 1970s and early 1980s, when debates among archaeologists about fossil hominin subsistence were most prevalent (Moser 1993). Adult women are underrepresented in state/urban and agricultural/village societies, and they are outnumbered by children playing in village scenes. Elderly people are rarest in hominin and state/urban societies, but can be found in scenes of camp and village life.

There are clear temporal trends in the relative proportions of men, women, and children, regardless of culture type (Figures 2 and 3). Men outnumber women in every decade examined, but the relative proportion of adult women peaked at 31.5 percent in the 1940s. At this time, when American females entered in the workforce in large numbers, ancient women were also imagined as laboring and worshipping alongside men. Women and images containing women declined in the 1950s, during the "post-war backlash," and reached a low in the 1960s with women accounting for just 14.1 percent of all people depicted. In these decades, scenes of monument construction and hunting predominated. By the 1980s, however, the proportion of women reached its highest post-1940s peak at 26.5 percent, a trend seen across all culture types. In this decade, a handful of images by a female artist appeared and included a high proportion of women. During the 1980s, women populated market scenes, illustrations of burial ritual, scenes of camp life, and depictions of hominin foraging. Men still hunted and conducted male-only rituals, but activities normally considered "women's work" were also shown.

Whether a delayed societal backlash, or a backlash against feminist critiques (see Zihlman 1997), the gains of the 1980s were lost in the

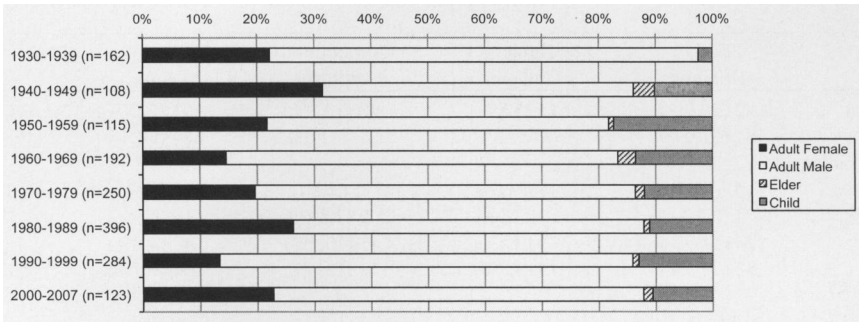

Figure 2. Proportion of age/gender categories per decade. Adults of unidentifiable gender excluded.

1990s, when adult women appeared more infrequently than in any other decade, constituting just 13.4 percent of all people. Large numbers of men were shown instead, conducting rituals, constructing monuments and buildings, engaging in combat, hunting, and foraging. There are relatively few "domestic" scenes that might be used to showcase the assumed activities of women. During the 2000s, the relative proportions of women in scenes of state/urban society remained low due to a continued focus on male-dominated activities in ritual and construction. On the other hand, the proportional representation of women is high for scenes depicting all other culture types.

When we reconsidered the data using only the presence/absence of men and women in images, rather than *counts* of people in images, we found a similar pattern (Figure 3). The proportion of images with women peaked in the 1940s, but fell in the 1950s and 1990s; overall, however, there is an upward trend. This is not matched by a corresponding decline in the propotion of images with men. The proportion of images with children, interestingly, peaked and surpassed the proportion of images with women in the "backlash" decades of the 1950s, 1960s, and 1990s. In these decades scenes included comparatively fewer women, and fewer images with women, but children were relatively ubiquitous.

The Ancient Division of Labor

Androcentric narratives about the past are

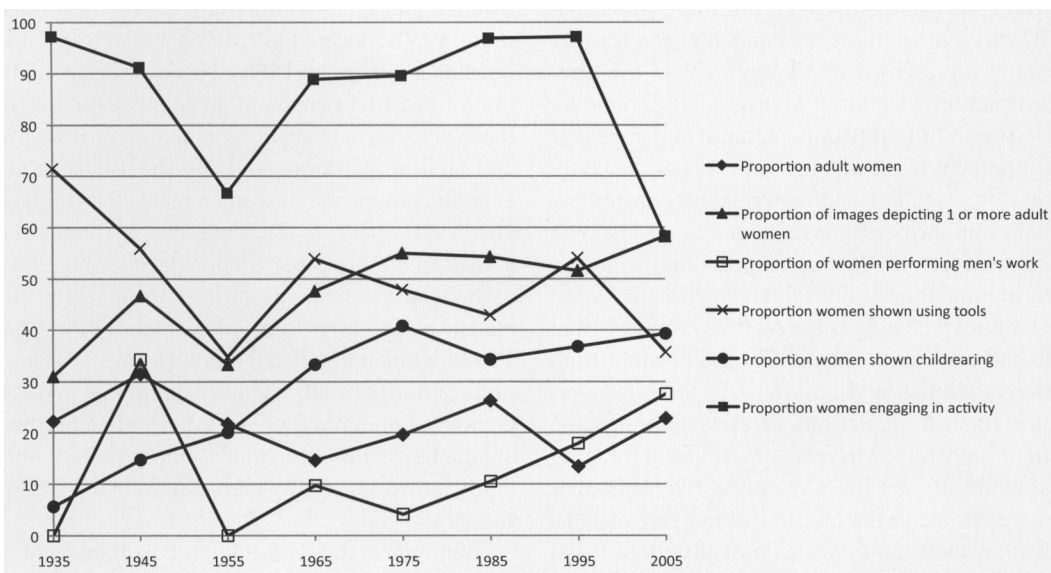

Figure 3. Temporal trends in the depiction of women and women's activities.

founded on the twin biases of gender polarization and biological essentialism, which argue that men and women are fundamentally different and possess differing (and unequal) capabilities. These differing capabilities mean that men and women are suited to different types of work, and consequently inhabit different spaces (Nelson 2004). For example, women's activities are supposedly limited by their reproductive biology, their lack of physical strength, and their presumably nurturing temperament. Projecting this contemporary gender ideology on the past, the assumption is that women's work was confined to the "drudgery" of cooking, maintaining the household, and looking after children. In this androcentric model, men live their lives in the public domain, where they engage in the cooperative, creative, and exciting work of hunting, leading, building, conducting ritual, and creating "civilization."

Critiques of this view include (1) challenges to the universality of a strict sexual division of labor among pre-industrial societies (Conkey and Spector 1984; Draper 1975; Hochschild 1973), (2) challenges to the direct association between women and motherhood and women and the domestic realm (Moore 1988), and (3) challenges to the cross-cultural validity of the public/domestic dichotomy itself (Rosaldo 1980). Some critics have exposed the androcentric methods (for instance, the privileging of male informants) and interpretations in earlier ethnographic research (Slocum 1975; Weiner 1976), while others have considered the transformative effects of colonialism and capitalism on observed gender relations in non-industrial societies (Draper 1975; Etienne and Leacock 1980; Ferguson 1992; Helms 1976; Leacock 1975; Silverblatt 1988).

We expected that the *National Geographic* reconstructions, as narratives of antiquity made visible, would include this androcentric bias, depicting a strict gendering of tasks, and spatial segregation. However, we also expected that this bias would be partially mitigated by broad temporal changes, such as women's participation in the workplace during World War II, and later by the feminist archaeological critique in the 1980s and beyond. We tested this expected temporal change by examining the activities performed by men and women, the location of those activities, and the spatial positioning of men's and women's work in the image.

Our analysis demonstrates that the reconstructions depict a strict gendered division of labor. The majority of the activities we coded are strongly gendered (Figure 4) and gender attributions show remarkable conformity with androcentric stereotypes, despite recent critiques (Conkey with Williams 1991; Gero 1991; Nelson 1990, 2004; Wright 1991). Men were depicted more frequently engaged in construction activities, and in serving elite persons as guards, attendants, or litter bearers. Men were disproportionately engaged in hunting/fishing, leading and observing rituals, and performing secular administrative tasks such as overseeing construction and quarrying of building stone. Not surprisingly, men dominated scenes of combat. Men also dominate stone tool production and artistic performance (including oratory, music, and painting), although the departure from expected values based on representation within the sample as a whole is not statistically significant.[4]

As expected, women are disproportionately shown in scenes of trading or shopping, gathering wild plant foods, and processing plant foods. Women also disproportionately perform domestic tasks, including cooking, weaving, hide-working, and pottery manufacture.

Even activities that are not strongly gendered according to our analytical categories *would* be gendered had those categories been more finely drawn. For instance, while both men and women were shown performing agricultural tasks, a division of labor is apparent in that women were shown harvesting while men used digging sticks. Women shown processing animal foods were rarely shown in the act of butchering large animals. Instead, they prepare jerky, soup, or fish. Both men and women gather "other" non-plant items, but women are shown retrieving (dead) wood and water, while men quarry stone and carry construction timbers.

Unsurprisingly, this gendered division of labor leads to gendered spaces. Men are significantly overrepresented in depictions of the natural landscape (where hunting occurs) and in ritual contexts, where they constitute 82.8 percent and 85.7 percent of all adults, respectively. Women are significantly overrepresented in scenes of the home or camp, where they make up 53.8 percent of all depicted adults, and they are also signifi-

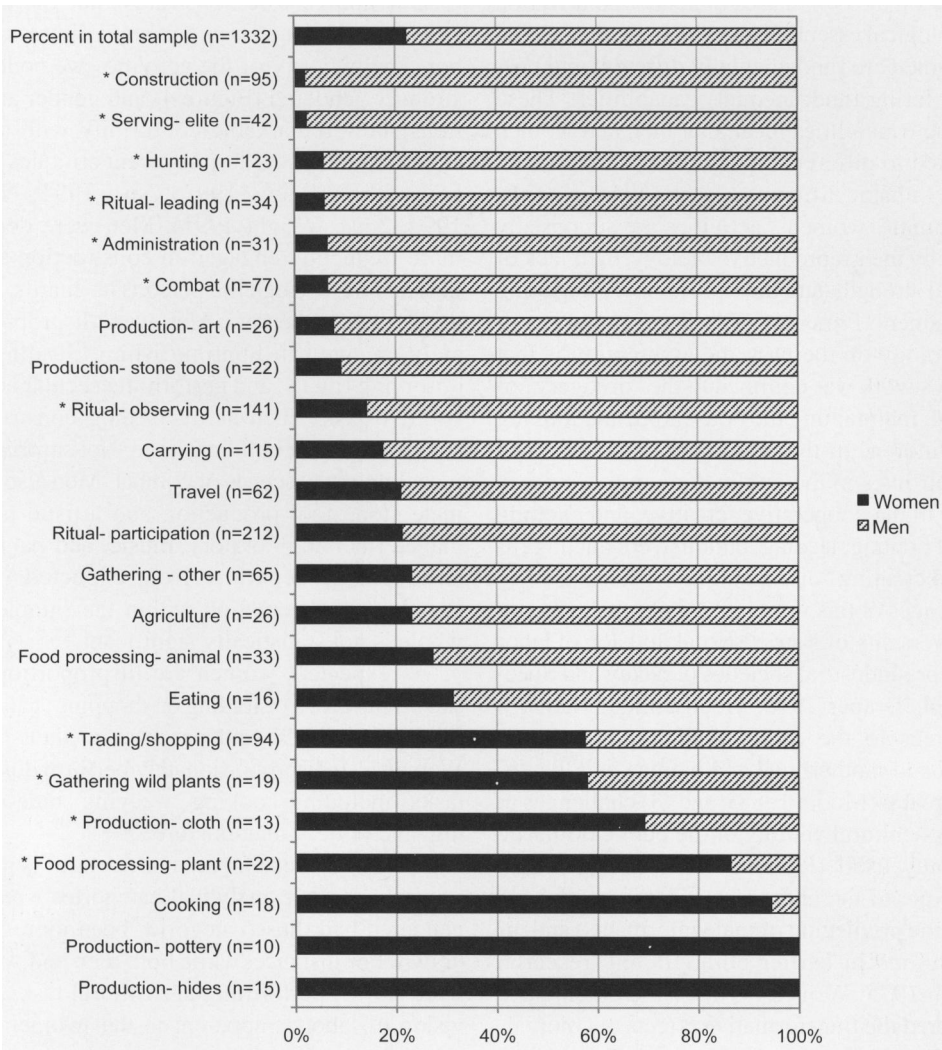

Figure 4. Proportional participation in activities by adult and elderly women and men, compared to their representation in the entire sample. Activities marked by an asterisk are dominated strongly by one gender according to the Chi Square goodness-of-fit test, $p \leq .05$. Note: images with activities involving fewer than 10 participants are excluded.

cantly more common in secular public settings, where they perform domestic tasks in extramural workspaces, or shop or sell their wares in large urban markets.

The division of tasks by gender found in *National Geographic*'s reconstructions of prehistory communicates, naturalizes, and universalizes the "traditional" gender ideology of American society. But what value do the reconstructions place on women's labor? Gifford-Gonzalez (1993) argues that work culturally classed as "drudgery" is more likely to be found in the background, while the visual focus remains on "men's work" in the foreground.

Images in the pages of *National Geographic* adhere to this expectation. Only 35 percent of the 114 women doing stereotypical women's work such as cooking, hide working, gathering, and plant processing were placed in the foreground, while nearly half of the small number of women ($n = 42$) engaging in stereotypically male activities were located in the image foreground. Some tasks clearly associated with women, such as making pottery and cloth, take place most of-

ten in the foreground. In many instances it appears that the artist is highlighting this work because the products are emphasized elsewhere in the article. For instance, in an article from 1964, an ancient female Pueblo potter is shown in the foreground of a reconstruction that follows several photographs of excavated vessels.

Interestingly, after 1991 stereotypically "women's work" is almost entirely absent in depictions of modern *Homo sapiens* women. After this time, women may do nothing, or engage in gender-neutral tasks, or perform men's work. This trend may indicate the artists' heightened awareness of androcentric biases, but we suspect that the absence of women's labor is due, at least in part, to deliberate editorial decisions. Depictions of households were a regular part of series of images of "everyday life" in ancient cultures, and were the norm before 1950 and appeared with regularity into the 1980s. However, such scenes came to be seen by *National Geographic* editors as "old fashioned" and "formulaic" (Christopher Sloan, personal communication 2008). Since the 1990s, therefore, the magazine has moved away from illustrating ancient cultures with a series of snapshots of daily life. Instead, the editors typically include just one or two reconstructions that show either aspects of daily life that do not include women's work (such as hunting, making art or projectile points) or unusual, dramatic, events such as an instance of human sacrifice or combat. Women sometimes appear in these scenes, as assistants or spectators, but they do not do household chores.

Our study also shows evidence for change over time in the participation of women in traditionally male tasks (Figure 3). The proportion of women depicted who engage in typical male activities (as measured above) shows a remarkable correspondence to societal and disciplinary trends, reaching its apex (34.3 percent) in the 1940s (during World War II), followed by sharp decline to 0 percent in the 1950s, then a gradual increase after the 1970s. While the reconstructions do indicate a strict division of labor, by the 2000s gender roles had loosened sufficiently that just over a quarter of depicted women were engaging in "men's work." In addition, while men are always shown engaging in a greater variety of activities than women, women are shown participating in a larger share of depicted activities over time, from 39 percent of all coded activities in the 1930s to over 60 percent of all coded activities after 1980. This evidence indicates that conceptions of men's and women's work—and perhaps their perceived capabilities—increasingly overlapped over time, signaling a weakening of gender polarization.

At first glance, these data suggest a social trend acknowledging women's equality in ability or contribution, including some relaxing of a gender ideology that looks on women's contributions and abilities as inferior to those of men. However, we found that even those women who participate in stereotypically male work are limited in the kinds of tasks they perform. Biological essentialism and androcentrism are still apparent in the women's tasks. These tasks are less physically and mentally demanding, and are shown as secondary to the work of their male counterparts in the scene. Often, there are other pictorial cues to women's inferiority. For instance, a woman may be classified as "producing art" at Lascaux, but she does so by holding a lamp to shed light on the work of a male artist. Similarly, a scene showing a woman engaged in art production is in fact engaged in breaking up a mastodon tusk behind two men who do the finer work of decorating and hafting ivory points. Among the Maya, women may act as rulers, but one placid Maya queen is depicted behind and nearly hidden by her more active king. Even more telling, a female Flores "hobbit" that we coded as "engaging in combat" is in fact depicted as crouched and apparently hiding from an upright male *Homo sapiens* who is on the verge of discovering her.

Examination of the few instances in which women hunt or fish is also revealing. First, of the six women coded as "hunting or fishing," four are fishing and two are shown shortly after net hunting. In contrast, the vast majority of men that we classified as engaging in hunting or fishing are shown with large game, consistent with a narrow definition of "hunting" (Brumbach and Jarvenpa 2006:505). Only one woman is shown in the act of killing an animal: a woman about to spear a fish. The significance of this event is undermined, however, because it takes place in a narrow, black-and-white border panel beside a much larger, full-color scene. In addition, unlike her two male

Figure 5. Artist's depiction of European hunter-gatherer group making art 20,000 years ago. Painting by Gregory Manchess, *National Geographic* July 2000, pp. 108–109 (National Geographic Stock 653600). See Supplemental Figure 1 for color image.

companions, this woman must hold her spear with two hands.

Two women shown net hunting also have their economic contribution undermined by their placement in the scene as a whole. In this case, their attention, and also the viewers', focuses on a dramatic confrontation between spear-wielding men and a bear in the image's middle-ground. It is ironic that this image, as its caption states, is intended to question prevailing narratives of the Paleolithic "macho Hemingwayesque big-game hunter" (Olga Soffer, quoted in Gore 2000:98).

In these and other cases, the artist or editor undermines ancient women's potential contributions. For instance, a scene depicting a female healer (coded as a "ritual leader") takes up the bottom half of the last page of an article introduced by a two-page image of a male hunter and his quarry. In a Neanderthal story, the significance of a woman producing stone tools is literally diminished by the size of the scene, just 2.5 x 2.5 inches. A final example is a 2000 scene of European hunter-gatherers. Here, a woman near the left margin seems to be addressing a small group of those present (Figure 5). Christopher Sloan, Art Director at the time the painting was commissioned, said that he and the artist, Gregory Manchess, imagined her to be a shaman. While *National Geographic* had heretofore depicted religious leaders as male, Sloan and Manchess reasoned that since shamans might be male or female, this was an opportunity to depict a woman in a position of authority (Christopher Sloan, personal communication 2012). Unfortunately, this message was undermined by other aspects of the illustration. First, no one in the scene appears to be looking at her or listening to what she says. Second, the authors of the image's caption—a separate department at *National Geographic*—referred only to the centrally placed male artist in the scene. Both choices diminish her presence and her importance.

In fact, we found only two images in which women perform typically male activities that convey a sense of equal status. Given the comparatively early attention that archaeologists gave to exposing gender bias in artistic and other treatments of early human ancestors (Dahlberg 1981; Zihlman 1978; Zihlman and Tanner 1978), perhaps it is no coincidence that both scenes depict hominins. In an April 2005 article describing recent finds at Dmanisi, the artist (John Gurche) de-

picts a female *Homo erectus* holding a rock, taking a lead role in repelling hyenas from the hominins' freshly killed deer. While the woman is shown in the middle ground and her face is less visible than two of her three male companions, she is nevertheless the only one to hold a weapon. She is also shown in an obviously aggressive and active stance.

The second image appeared in a 1985 article reviewing developments in research on hominin evolution. It depicts a standing Neanderthal female addressing a small group, including one seated adult male. This woman is in the foreground and her audience is apparently listening intently. Moser (1998b:165–166) describes this image as a conscious reaction to the "entrenched stereotypes" of human ancestors. In retrospect, however, this depiction of female authority remains a fairly unique case; no comparably unequivocal images of female authority appear elsewhere in the magazine.

Gender and Childrearing

Contemporary gender ideology equates "woman" with "mother" (Moore 1988), and adequate mothering is deemed incompatible with work outside the home. The assignment of women to the domestic arena and to full-time childrearing is implicit in narratives about the past (Conkey and Spector 1984), despite ample ethnographic data showing that other individuals—including older children, grandparents, and even fathers—may be the primary caregivers (Coltrane 1996; Moore 1988). Following Gifford-Gonzalez's (1993) study of images depicting the Paleolithic, we expected that *National Geographic*'s ancient women would be the exclusive caretakers of children and would frequently be depicted with them. We also expected, however, that the emphasis on mothering would vary over time in response to societal changes and to anthropological critiques. In addition, presentist definitions of masculinity, which include aggression, competitiveness, and emotional detachment (Alberti 2006), would suggest that males would be infrequently imagined as parents. We expected that ancient men would fit the American stereotype of the distant, authoritarian father (Coltrane 1996; Townsend 2002).

As anticipated, women were shown in childrearing activities significantly more often than men, given their representation in the sample. Of adults shown with older children, 80 percent are women. All of the infants in the sample ($n = 36$) are exclusively cared for by women. Among older children, a surprisingly high proportion of parents (20 percent) were men. However, only 2.5 percent of all men are shown actually interacting with children. In contrast, mothering was a central attribute of ancient womanhood. Nearly one-third of all depicted women are shown engaged in childrearing, but this frequency is strongly affected by culture type. While 22–23 percent of state/urban and agricultural/village women are shown caring for children, 38.7 percent of hunter-gatherer women and a majority (60.5 percent) of hominin women are shown as mothers. This difference is likely due to the tendency for hunter-gatherer and hominin women to appear in camp scenes, where the entire social group is depicted, as opposed to public (e.g., ritual and market) contexts in village and urban life where children may be less common, or may play on their own. For these same reasons, hominin men are slightly more likely to be shown childrearing (4.9 percent are shown parenting), while only 2–3 percent of men in other culture types are depicted with children.

When the sample is examined as a whole, the percentage of women shown parenting increases steadily through the 1970s, reaching a maximum of 40.8 percent, after which it remains in the 30–40 percent range (Figure 3). Given the uneven representation of culture types over time, however, we also examined evidence for change in the frequency of parenting within each culture type. Small sample sizes restricted us to defining just two periods, before and after 1970. Both men and women are shown acting as a parent with increasing frequency after 1970, with the single exception of female agriculturalists, who parent slightly less. Twice as many hominin and hunter-gatherer women are shown parenting after 1970 (from 33.3 to 71 percent and from 25 to 50 percent of all women, respectively), while the percentage of state/urban women engaging in parenting increases threefold from 8.8 to 27.6 percent. It is surprising that women do little parenting in the predicted "backlash" years of the 1950s; all the 1950s women are hunter-gatherers and only a few are found near children; the rest are engaged in productive tasks (or are young,

topless, and motionless) while children play elsewhere. While the frequency of male parenting increases after 1970, it should be noted that 42.3 percent of *all* male parents are found in just two reconstructions of life at the Maya site of Tikal, dating to 1975. These cartoon-style drawings show men bringing their older male children to market and to observe a ballgame. It is perhaps notable that virtually no men are shown parenting throughout the 1990s and 2000s (1.5 and 0 percent, respectively).

Men not only parent less frequently than women, but they parent differently. While the majority of male and female parents simultaneously perform other activities, a much larger proportion of mothers (19 percent of women vs. 4.2 percent of men) are shown engaging in parenting alone. Multitasking mothers are often shown carrying out domestic or marketing tasks, while men parent during moments of leisure, such as at meals, or while watching public ceremonies. Men tend to interact with older children, especially boys, and as noted, none care for infants. Instances of parent-child touching also show men maintaining physical and emotional distance from children. Children may reach to touch men as well as women, but only women carry or reach for children. When men reach for children it is to save them from danger. In sum, *National Geographic*'s reconstructions increasingly have defined women as busy, even affectionate, mothers, but have generally portrayed men as infrequent and distant parents.

The Passive Female: Pictorial Expressions of Power and Dominance

The passive female/active male dichotomy is a cornerstone of Western gender ideology (Conkey and Spector 1984; Moore 1988) and is based in part on presumed biological differences between the sexes, including greater male aggressiveness, intellect, and strength (Bem 1993; Fausto-Sterling 1985). Women are passive in that they are supposed to engage in activities considered less physically and mentally strenuous, including child-rearing, and to perform work that is more stationary, more repetitive, and more likely to be confined to the domestic realm.

Gifford-Gonzalez (1993), inspired by Berger's (1972) study of Western art conventions and Goffman's (1976) study of American advertisements, found that images of Paleolithic women generally adhered to American gender stereotypes of passivity. She found that women were less often shown in motion and were depicted in lowered poses more often than Paleolithic men. We wondered if early studies such as Berger (1972) and Goffman (1976) had an impact on the artists and editors at *National Geographic*. Our results show that women in these images overall are not as submissive as those in Gifford-Gonzalez's Paleolithic sample, but nonetheless suggest different levels of activity. For instance, *National Geographic*'s ancient women are just as likely as men to be shown walking or moving their arms, or in lowered postures that Gifford-Gonzalez interprets as expressing submission. However, women are significantly less likely than men to use tools, run, or stand. Women also are more likely to be shown in a seated pose or as idle.

The passive/active dichotomy is most clearly expressed in scenes of hunter-gatherer and early hominin life. While hunter-gatherer and hominin men are always actively engaged in some task, whether hunting, defending the group, or making stone tools, women are more often portrayed as motionless. Women may be idle, watching men, or else rooted in place by fear. Even male gazes are more "active" than women. For instance, in John Gurche's depiction of a travelling group of *Australopithecus afarensis*, a muscular male looks watchfully into the distance, while a female, with a rounded, possibly pregnant belly looks up at him.

Rather unexpectedly, this gendered association of women with passivity remains fairly constant across time (Figure 3). In the 1950s, images of hunter-gatherers dominate the magazine illustrations, and thus it may not be surprising that women in this decade are more likely to be motionless, engage in no productive tasks, and use tools less frequently. However, it is surprising to find almost the same pattern after 2000. Despite at least two decades of scholarly critiques of the Man-the-Hunter hypothesis, the universality of male dominance, and the role of visual media in expressing gender inequality, women are just as passive in the 2000s as they were in the 1950s. In the 2000s, women may be included in scenes of activities gendered as male, such as combat, executions, or art-making, but they are spectators, not partici-

pants. Their inclusion reminds us that women were present in prehistory, but when they just watch the action (sometimes in fright) the images assert their subordination and relative weakness.

Nudity

National Geographic's photography has earned the magazine a reputation as a source of information on "the geography of foreign women" (Gero and Root 1990:21). Lutz and Collins's (1993) study of the magazine's photography found that 11 percent of the non-Western women in their sample were depicted as partially nude, most often topless. Nudity without shame or stigma is seen as a defining attribute of traditional or "non-civilized" societies, leading the magazine to defend the inclusion of bare-breasted, non-white women as "in the interest of science" (Lutz and Collins 1993:115). One critique of the magazine, however, is that these claims to scientific accuracy are just an excuse, a cover to disguise the pleasure derived from viewing women's nude bodies. Lutz and Collins (1993:172) argue that because only non-white women's breasts are depicted in the magazine's photography, the effect is to support the belief that black women are "exuberant and excessive in their sexuality" (Lutz and Collins 1993:172). The magazine's photographs, Lutz and Collins assert, communicate a correlation between the lightness of a woman's skin, her degree of "civilization," and her amount of sexual restraint.

Just as Westerners have written their own preoccupations about sex and sexuality into depictions of contemporary non-Western women, some (male) archaeologists have projected a presentist "attitude toward women as sex objects" (Nelson 2004:127) on ancient people. Most famously, Nelson (1990, 2004) and Conkey with Williams (1991:121) demonstrate how archaeologists of the European Paleolithic have interpreted some kinds of highly ambiguous images as female genitalia, or in the case of the Venus figurines, as pregnant or hyper-sexualized women. Male archaeologists have also assumed these images to be the product of male artists, intended for male use, to achieve male goals. The analysis of Paleolithic art, then, brings to the surface androcentric assumptions about ancient women, whose function in life is to "satisfy men's desires and to produce children" (Nelson 2004:128).

Given the association between clothing, modesty, and civilization, we expected many ancient women, particularly those from societies with little political complexity, would be depicted unclothed. We also anticipated that the number of inactive nude women portrayed would change over time. This expectation is based on Lutz and Collins's (1993:137, 172) argument that commercial photography after the mid-1960s emphasized women as sensual objects, more often in repose than active. Based on our interview data, we further hypothesized that the frequency of female nudity might decline after Lutz and Collins's (1993) critique, of which *National Geographic* was well aware.

We found that just under half of all adult, non-elderly women were depicted as topless or nude, a significantly higher frequency than the photographed contemporary women in Lutz and Collins's analysis. As expected, perceived cultural complexity influenced the frequency of female nudity. While all hominin females were nude or topless, just 34.8 percent of state/urban women were partially clothed. Even within the state/urban category, the more complex Maya, Aztec, and Inca were shown clothed more often than the women of Jenne-Jeno, Etowah, and Hopewell cultures. The hunter-gatherer and agricultural/village data defied expectations, however, with 54.1 percent and 44.7 percent of women fully clothed, respectively. Climate appears to be the major causal factor, however, as these images focus on late Pleistocene hunter-gatherers in the Arctic, who tend to be shown in winter apparel, and scenes of villagers generally depict warm-season agricultural activities.

Temporal change is evident in the frequency of depictions of clothed women within these two culture types, however, suggesting editorial sensitivity to critiques of the magazine's depiction of nudity. Before 1980, just 13.8 percent of hunter-gatherer women were shown fully clothed, but after 1980, 90.6 percent of hunter-gatherer women were depicted as clothed. A similar increase in clothed women (from 21.2 percent to 100 percent) is evident in depictions of agricultural/village women, although the change comes a decade later, after 1990.

But do the images depict prehistoric women as sexual objects? Lutz and Collins (1993:175) ar-

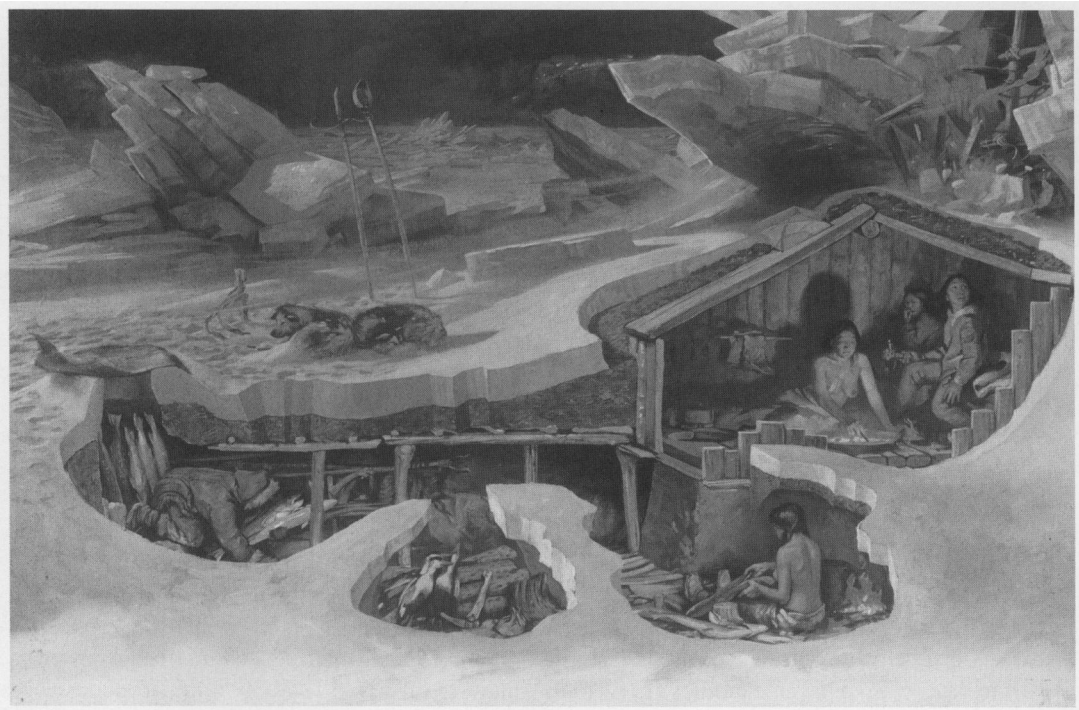

Figure 6. Nude women and clothed juveniles in a reconstruction of a 500 year-old Arctic home. Painting by James M. Gurney, *National Geographic* June 1987, pp. 824–825 (National Geographic Stock 416906). See Supplemental Figure 2 for color image.

gued that sexualized photos of women in *National Geographic* emphasized women who met the cultural ideal of "young, large, round, but not sagging" breasts. The majority of topless ancient women fit this description; in fact, the artists appear to take care to clothe or hide the breasts of elderly women, at least until after 1990, when the breasts of some hominin women are allowed to show the effects of age. Thus, while *National Geographic* may portray prehistoric women's breasts out of concerns for scientific accuracy, the breasts themselves conform more to modern American aesthetics than reality.

Other evidence for highly sexualized female bodies include the very first *National Geographic* reconstruction, from November 1936, in which a wide-eyed, fair-skinned Mayan "maiden," her white dress clinging to every contour of her body, is thrown into a cenote while darker skinned men look on. In this image, the woman's youth, light skin, and voluptuousness highlight the horror and titillation of this exotic ritual. A male-centered aesthetic is also shown by the inclusion of several "decorative" women: young, partially nude females who are prominently featured by the artist, yet are motionless or otherwise do little to advance the story of the reconstruction. Such "decorative females" are most common in the 1950s and 1960s, but do not appear after 1990, suggesting some sensitivity to gratuitous nudity by the magazine's staff.

One instance of female nudity deserves special mention. In the June 1987 issue, a reconstruction of the interior of a 500-year-old Inupiat winter dwelling excavated in Barrow, Alaska shows two topless women, two clothed juveniles, and a clothed adult (who presumably had just entered) (Figure 6). The scene depicts the household hours before all five inhabitants were killed in their sleep by a surge of sea ice. Initially we were struck by the image of half-nude women in the Arctic; however, Inupiat ethnography reveals that house interiors were often uncomfortably warm (Simpson 1875:257). Removal of clothing at the entrance was apparently customary (Murdoch 1892:112, 420). The author, Albert Dekin, Jr. (1987:835), suggested that the two women, whose remains were well-preserved and unclothed, slept

nude to avoid the "serious danger" of accumulating moisture in their clothes that could freeze when leaving the structure. Why then did the artist choose to clothe the children? In our view, the choice to depict only adult female nudity in images such as these supports Lutz and Collins's (1993:172) thesis that *National Geographic*'s visuals suggest greater sexual license among non-Western, primitive, or ancient women (Lutz and Collins 1993:172).

Partial male nudity, it should be added, is a perennial feature of *National Geographic* reconstructions (Figure 5). Male musculature is emphasized, no matter the decade or culture type; in fact, hunter-gatherer men are more likely to be fully clothed than state/urban men, of whom 71 percent are shown shirtless. Among state/urban men, class determines which men are clothed and which are not. Ritual leaders, elites, and servants are most often shown fully dressed, while the armies of workers that build monuments (a favorite subject) are scantily clad. The idea that ancient "civilization" was built on male brawn is forcefully communicated by these depictions.

Summary and Discussion

Our analysis of over 2,000 people in 204 images indicates that gender bias is pervasive and persistent in *National Geographic*'s pictorial reconstructions of the past. The images reinforce stereotyped Western views of biological essentialism, gender polarization, and androcentrism and exhibit surprising conformity to American gender ideology. For example, assignment of tasks by gender varies little over time and across culture types, visually reinforcing the universality of traditional definitions of men's and women's work. The scenes most frequently chosen for illustration—hunting, combat, construction—as well as the artists' close attention to male musculature, communicates that men's strength and men's work underwrite the division of tasks, and are responsible for human evolution and the making of civilization. Ritual leadership and observation are also strongly gendered male. In *National Geographic*, ancient men have almost exclusive dominion over ceremonial matters, and their rituals are active, even strenuous, involving large-scale spectacles such as ballgames and sacrifices of humans and animals. All activities gendered male are repeatedly given center stage.

Women's physiques are not emphasized, apart from their breasts, which command attention especially in images prior to 1980. Women, children, and the elderly have no place in scenes of demanding physical labor, but appear primarily in domestic and market scenes and occasional ritual events. Tasks that are commonly assumed to be women's work are consistently de-emphasized by relegation to the background or, as in the 1990s and 2000s, through their complete omission. However, when women participate in men's work, or produce highly valued (and archaeologically visible) craft items such as ceramics, they earn a place in the image foreground.

Not surprisingly, the depiction of men and women in the pages of *National Geographic* changes with trends in American society and archaeology (Figure 3). Reconstructions published in the 1940s, mirroring contemporary propaganda used to enlist women in the war effort, assert the value of women's contributions to society. Images from this decade contain the highest percentage of adult females, the highest percentage of women doing "men's work," an unusually high incidence of women using tools, and also a relatively low frequency of women engaging in childrearing. During the postwar backlash against working women in the 1950s, fewer women and more children are shown in scenes of ancient life. Signs of male dominance and female weakness are greatest in this era; when present, women are often depicted as idle and attractive. One might interpret this trend as the result of assumptions of greater gender inequality among hunter-gatherers in particular (who dominate the 1950s images). Later depictions of hunter-gatherers are not as uniformly sexist, however, suggesting that the 1950s images indeed reflect prevailing attitudes about the role and status of American women. In the 1960s and 1970s, the number of images that include at least one woman increases, but the number of women relative to men in these images decreases further. Women become minority members in a wider variety of scenes. Most do only "women's work"; over a third of women depicted in these decades are shown caring for children. The improving social reality of American women, including substantial gains in equal rights in education and em-

ployment, is thus not mirrored in archaeological reconstructions of women in the past. The reasons for this contradiction are unclear, but the artists may have been influenced by now-weakened (and much critiqued) archaeological concepts such as the Man-the-Hunter model and cultural evolution, which measures the "increasing concentration of power and prestige in the hands of fewer and fewer men" (Nelson 2004:152).

In the 1980s, women appear in relatively large numbers in scenes of the marketplace and in camp and village life. A female leader is depicted for the first time (!), and the magazine published the first reconstructions by a female artist,[5] scenes that give equal, if not greater, weight to the work of women. Although American popular culture may have been waging a war against "career women" in the 1980s (Faludi 1991), *National Geographic* did not apparently participate in this social trend. Perhaps this favorable era has more to do with the increasing number of female archaeologists in the profession.

In the 1990s and 2000s, depictions of men and women were affected by two major developments. First, our interviews suggest that *National Geographic* became increasingly self-conscious about gender. Awareness of scholarly critiques, declining subscription rates, and increased attention to reader feedback likely contributed to greater reflexivity at the magazine. Second, a decision was made to depart from the formula of illustrating ancient cultures through a series of "snapshots" of everyday life, which often included a ritual event, a view of the marketplace, and scenes of subsistence, craft production, and the household. Under editorial pressure, reconstructions decreased in number and sought to present new visions of the past, through changes in the moments selected for depiction, and in the composition of the scene itself (e.g., with fewer figures in the middle-ground).

Sensitivity to gender at the magazine included an increased caution in the illustration of nude women, with artists requested to avoid what former Art Director Christopher Sloan (personal communication 2008) termed "unnecessary" nudity. It also entailed a renewed flexibility in the depiction of women doing "men's work." In the absence of archaeological evidence to the contrary, Sloan, Art Director from 1996 to 2006, encouraged artists to include women in the kinds of scenes traditionally populated by men. As a result, images from the late 1990s and early 2000s depict a Moche priestess catching the blood of a sacrifice victim, mothers working bone, and elderly female shamans and healers.

Showing women engaged in tasks traditionally gendered male in American society was an important shift in art making at *National Geographic*, which ran counter to the strict sexual division of labor and spatial segregation of men and women typical of earlier images. Questioning of gender polarization and of the division of labor by sex is a central goal of gender archaeology (Conkey and Spector 1984; Nelson 2004), and the argument that women can do "men's work" has been a persistent part of American gender discourse. However, despite these changes, ancient women illustrated in the last 20 years have not achieved the status of equal players. They remain a minority in a man's world; although shown increasingly performing male tasks, women are actually scarcer in the 1990s depictions than for any other decade, with few scenes containing more than one or two women.[6] Second, they are more passive; in the 2000s ancient women are more often motionless and engage in less productive work than in any other decade. They use tools less frequently than in every decade but the 1950s. The women who do engage in men's work are also subordinate, either assisting men or engaging in labor that is devalued through pictorial and editorial choices. Finally, when *National Geographic* decided not to include "old-fashioned" scenes of domestic life, important aspects of women's lives—women working independently, women interacting with other women—were also discontinued. No longer in command of their own (albeit backgrounded) domestic labors, women in the 1990s and 2000s are painted into men's worlds as assistants or spectators. Indeed, were women not incorporated into the male-dominated combat, ritual, and hunting scenes of the 1990s and 2000s, they would have been nearly absent altogether.

The results of our analysis raise two major questions that deserve greater attention. First, the decline in the relative number of women and the depiction of women's activities in the past two decades suggests a possible "backlash" against recent archaeological work demonstrating the con-

tributions of females to prehistoric life. If this backlash is real, its source is unclear. Could it come from the rejection of female-centered interpretations and increased attention to the assumed domains of women (e.g., household archaeology, archaeology of childhood) within portions of the scholarly community, as Zihlman (1997) has argued for paleoanthropology? Or is it introduced by *National Geographic* editors in story selection and by artists populating images? Could *National Geographic*'s response to the transformation of gender roles in our own society involve reasserting prehistory as a conservative place where "traditional" American gender roles were the norm? If this is so, then it is all the more intriguing that conservative, conventional gender relations share the stage with editorial emphases on the "bizarre social practices" (Gero and Root 1990:35) of ancient peoples, like human sacrifice. Ancient people may have strangled, decapitated, and stabbed people to appease their gods, but women knew their place.

Second, why has gender archaeology had so little impact on *National Geographic*'s pictures of the past? The deletion of domestic scenes since 1990 means that the images have not even met gender archaeology's initial objective, to "add women and stir" (Nelson 2006:4). Nor do recent reconstructions suggest a sincere attempt by *National Geographic* to uncover women's contributions to past cultures, despite the involvement of at least some female archaeologists, including ones with explicitly feminist perspectives on the past, in the research the magazine presents.

Conclusion: Sources of Bias, Suggestions for Change

National Geographic has provided pictorial reconstructions of prehistory for over 70 years. The wide readership of the magazine and its reputation for reporting current archaeological research ensure that these images significantly shape the American public's perception of ancient cultures. Despite the *Geographic*'s commitment to absolute accuracy, reconstructions must go beyond the interpretive limits of archaeological data in order to meet the magazine's high aesthetic standards, which emphasize realistic portrayals of active bodies at dramatic moments. Once the artist puts gendered people in a scene, however, he or she cannot avoid making and transmitting inferences about past gender attributes, roles, and relations. Our analysis shows that all too often these inferences reinforce present-day androcentrism and gender polarization by the depiction of a strict division of labor by sex, a focus on male activities, and an imagined world where active men far outnumber passive women. Although feminist critiques had some impact after the 1980s, *National Geographic*'s prehistory is still a man's world.

Given the collaborative nature of the process of producing and publishing the reconstructions, gender bias can enter the images from multiple sources and at multiple points of the process, from the selection of a story to the placement of the reconstruction on the page. *National Geographic* staffers and its readers (whose feedback is increasingly heeded in the competitive magazine market of the last two decades) are involved in story selection, which privileges archaeological finds and events traditionally associated with males, such as monument building, violence, ritual, and hunting. To the extent that *National Geographic* seeks to cover cutting-edge archaeological research, the discipline of archaeology itself also bears responsibility, given the overwhelming focus in archaeology upon activities attributed to men, as numerous studies since Conkey and Spector (1984) have demonstrated.

Archaeology's long inattention to issues of gender, and the limited impact of gender archaeology on the discipline (Nelson 2006), means that *National Geographic* art researchers and the Research Department's fact checkers might not readily encounter alternative interpretations of gender in the past, or might view treatments of the subject as unrepresentative of the field as a whole, and discard them. The archaeologist-consultant asked to review the reconstructions may have missed opportunities to question how men and women are depicted, or simply avoided such questions as of marginal concern. In sum, the reconstructions appear to be significantly influenced by biases present in the discipline of archaeology, and share with archaeology a general disinclination to challenge traditional interpretations of gender relations in the past.[7]

National Geographic's emphasis on scientific accuracy may also be responsible for the repro-

duction of contemporary gender roles and relations. We suspect that *National Geographic* artists, asked to create highly dynamic imaginings of the past in a realistic style, yet still lay claim to "scientific accuracy," must aim to make the necessarily speculative aspects of the reconstructions seem plausible. Thus, the actions of depicted men and women should be as "neutral," uncontroversial, and as palatable as possible to the modern viewer. In some instances, plausibility may mean assuming continuity in appearance, gender roles, and gender relations with descendant peoples. When direct ethnographic parallels are unavailable, assuming universal female subordination on the basis of (flawed, androcentric) ethnographic evidence (Moore 1988), results in the view of the past most plausible to the largest number of people. The reconstructions seem "true" and believable because they achieve modern political resonance (Wylie 2002:187).

Of course, not all artists have consciously thought about gender roles; they may rely on their own assumptions and/or the archaeological "facts" conveyed by the magazine's art researcher. When Gifford-Gonzalez (1993:37) notes a male illustrator's insistence that all prehistoric artists were men, bias in archaeological research surely shares the blame. Artists may be enacting conventions of representation familiar to students of Western fine arts (Gifford-Gonzalez 1993) or from previous reconstructions (Moser 1998, 2003). No matter the origins of their ideas about gender, artists—by placing people in the image, positioning them relative to one another, and choosing the mix of men, women, and children to illustrate—introduce subtle, yet powerful messages of male dominance.

Although artistic reconstructions convey biased views of the past, we nonetheless believe they are a vital part of archaeological interpretation in museums, in *National Geographic*, and other media. Reconstructions are important because they humanize the past, counterbalancing archaeology's and the *National Geographic*'s necessary attention to things, methodology, and interpretive ambiguities. Further, recent scholarship tells us that many archaeological careers began with the fascination inspired by these images (Gifford-Gonzalez 1993; James 1997; Moser 1993), and we too discovered the past initially in the pages of *National Geographic*. Following Gifford-Gonzalez (1993), we suggest that reconstructions could be improved by expanding the tremendous creative effort of artists and *National Geographic* staff to encompass new imaginings of men's and women's place in the past. *National Geographic* staff and archaeologist-consultants should seize the opportunity to encourage artists "to consider alternative visions of humanity" (Gifford-Gonzalez 1993:38), perhaps even to share gender archaeology's focus on ancient social relations as just as worthy of attention as hunting, ritual, and violence. Gender relations themselves may be framed as a major goal of archaeological inquiry, and space allotted in reconstructions to the results of research aimed explicitly at teasing out the intersections, overlaps, and divisions in gender relations in specific social contexts in the past. Where archaeological support exists, androcentric perspectives could be countered by reintroducing "women's work" to the images and by making pictorial arguments for its importance. Following some archaeologists (Hollimon 1997, 2006; Nelson 2004), the reconstructions could explore alternate genders, or challenge essentializing viewpoints of women by examining social difference among females along other dimensions, such as age and class.

The reconstructions could go further in challenging assumptions of the universal division of labor by sex. For example, women could be principal actors in such scenes, rather than assistants, or they could simply be shown doing the same activities as men. They could appear in equal numbers, and be given equal pictorial emphasis relative to their male counterparts. Men also could be shown doing "women's work," including active and willing involvement in childrearing. Artists could consider subtle indicators of female subordination—the placement of women just behind men, in lowered or more static poses, gazing inward or at men—that influence how viewers "read" their work. Other people involved in production, including the people writing the captions and laying out the articles, also need to be aware of their roles in producing gender bias.

Another visual strategy is to blur or obscure the gender of individuals, or to depict similar clothing and hairstyles on all people in the frame. Even though the readers' own viewpoints may

then gender the scene, this bias would not be directly conveyed by the artwork. In contexts where it is appropriate, the reconstructions might lead some viewers to see "people" rather than men and women. In fact, we have seen more use of this strategy over time: while gender is most clearly marked in the sexist 1950s images, the highest proportion of people of indeterminate gender occurs in the more female-friendly 1980s.[8]

Further, artists could acknowledge the unknown and embrace the creative, active role that their pictorial representations necessarily play in the discourse on gender. Archaeologists themselves are confused, and often debate the topic—why should *National Geographic* pretend otherwise? If gender is problematized in the artwork—that is, brought into the open as a key goal of the reconstruction, instead of a tacit assumption—the reader is required to think more deeply about gender relations in the past. Another way to confront, rather than obscure, the unknown would be to present multiple alternative truths—possible truths, with archaeological and ethnographic support—rather than laying claim to one truth whose ultimate validity remains uncertain (see James 1999). This strategy might even entail offering contradictory visualizations of a single past.

In related fashion, the finality of interpretation conveyed in any one reconstruction might be reduced artistically by employing styles other than strict realism. *National Geographic* has occasionally presented artwork in a more two-dimensional, even "cartoonish" style and recently featured a series of images of the Maya using a style having much in common with graphic novels. Lacking some of the precision and gravity of the realistic images, these reconstructions convey that a *story* is being illustrated, inviting readers to appreciate that speculation is involved.

We feel it is imperative that archaeologists reclaim prehistory as a place where, in the absence of evidence to the contrary, gender roles and the relationship between the sexes remain an open question. *National Geographic*'s reputation has been built on its claims to reporting cutting-edge research, yet the critiques of gender archaeology and feminist anthropology have had only a minor impact on one of its most powerful tools for portraying the past. We recommend that archaeologists and those who collaborate to produce *National Geographic*'s reconstructions use pictorial means to leave the roles of ancient men and women open to question, acknowledge uncertainty about gender arrangements in the past, and embrace the notion that "foreign" gender relations are likely one of the past's many wonders.

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References Cited

Adkins, L., and R. A. Adkins
1989 *Archaeological Illustration*. Cambridge University Press, Cambridge.

Alberti, Benjamin
2006 Archaeology, Men, and Masculinities. In *Handbook of Gender in Archaeology*, edited by Sarah M. Nelson, pp. 401–434. AltaMira, Walnut Creek, California.

Bem, Sandra L.
1993 *The Lenses of Gender: Transforming the Debate on Sexual Inequality*. Yale University Press, New Haven, Connecticut.

Berger, John
1972 *Ways of Seeing*. Penguin, London.

Berman, Judith C.
1999 Bad Hair Days in the Paleolithic: Modern (Re)Constructions of the Cave Man. *American Anthropologist* 101:288–304.

Brumbach, Hetty Jo, and Robert Jarvenpa
2006 Gender Dynamics in Hunter-Gatherer Society: Archaeological Methods and Perspectives. In *Handbook of Gender in Archaeology*, edited by Sarah M. Nelson, pp. 503–536. AltaMira, Walnut Creek, California.

Carter, Alice
1999 *The Art of National Geographic: A Century of Illustration*. National Geographic Society, Washington, D.C.

Chafe, William H.
1991 *The Paradox of Change: American Women in the 20th Century*. Oxford University Press, New York.

Coltrane, Scott
1996 *Family Man: Fatherhood, Housework, and Gender Equity*. Oxford University Press, New York.

Conkey, Margaret W.
1991 Contexts of Action, Contexts for Power: Material Culture and Gender in the Magdalenian. In *Engendering Archaeology: Women and Prehistory*, edited by J. Gero and M. Conkey, pp. 57–92. Basil Blackwell, Oxford.

Conkey, Margaret W., and Joan Gero
1991 Tensions, Pluralities, and Engendering Archaeology: An Introduction to Women and Prehistory. In *Engendering Archaeology: Women in Prehistory*, edited by Joan Gero and Margaret Conkey, pp. 3–30. Basil Blackwell, Oxford.

Conkey, Margaret W., and Janet Spector
1984 Archaeology and the Study of Gender. In *Advances in Archaeological Method and Theory*, vol. 7, edited by Michael B. Schiffer, pp. 1–38. Academic Press, New York.

Conkey, Margaret W., with Sarah Williams
1991 Original Narratives: The Political Economy of Gender in Archaeology. In *Gender at the Crossroads of Knowledge: Feminist Anthropology in the Postmodern Era*, edited by Micaela di Leonardo, pp. 102–139. University of California Press, Berkeley.

Coontz, Stephanie
2005 *Marriage, A History: How Love Conquered Marriage*. Penguin Books, New York.

Dahlberg, Frances
1981 *Woman the Gatherer*. Yale University Press, New Haven, Connecticut.

Dekin, Jr., Albert A.
1987 Sealed in Time: Ice Entombs an Eskimo Family for Five Centuries. *National Geographic* 171: 824–836.

Draper, Patricia
1975 !Kung Women: Contrasts in Sexual Egalitarianism in Foraging and Sedentary Contexts. In *Toward an Anthropology of Women*, edited by R. R. Reiter, pp. 77–109. Monthly Review Press, New York.

Douglas, Susan
1995 *Where the Girls Are: Growing Up Female with the Mass Media*. Random House, New York.

Etienne, Mona, and Eleanor Leacock
1980 *Women and Colonization: Anthropological Perspectives*. Praeger Scientific, J. F. Bergin Publishers, New York.

Faludi, Susan
1991 *Backlash: The Undeclared War against American Women*. Crown, New York.

Fausto-Sterling, Anne
1985 *Myths of Gender: Biological Theories about Women and Men*. Basic Books, New York.

Ferguson, R. Brian
1992 A Savage Encounter: Western Contact and the Yanomami War Complex. In *War in the Tribal Zone: Expanding States and Indigenous Warfare*, edited by R. B. Ferguson and N. Whitehead, pp. 199–227. School of American Research Press, Santa Fe.

Friedan, Betty
1963 *The Feminine Mystique*. W. W. Norton and Company, New York.

Gero, Joan
1991 Genderlithics: Women's Roles in Stone Tool Production. In *Engendering Archaeology: Women in Prehistory*, edited by Joan Gero and Margaret Conkey, pp. 163–193. Basil Blackwell, Oxford.
1993 The Social World of Prehistoric Facts: Gender and Power in Paleoindian Research. In *Women in Archaeology: A Feminist Critique*, edited by Hilary du Cros and Laurajane Smith, pp. 31–30. Occasional Papers in Archaeology, No. 23. Department of Prehistory, Research School of Pacific Studies, Australian National University.

Gero, Joan, and Dolores Root
1990 Public Presentation and Private Concerns: Archaeology in the Pages of National Geographic. In *The Politics of the Past*, edited by P. Gathercole and D. Lowenthal, pp. 19–37. Routledge, New York.

Gifford-Gonzalez, Diane
1993 You Can Hide, But You Can't Run: Representations of Women's Work in Illustrations of Paleolithic Life. *Visual Anthropology Review* 9(1):21–41.

Gilchrist, Roberta
1999 *Gender and Archaeology: Contesting the Past*. Routledge, New York.

Gill, Rosalind
2007 *Gender and the Media*. Polity Press, Malden, Massachusetts.

Goffman, Erving
1976 *Gender Advertisements*. Harvard University Press, Cambridge Massachusetts.

Gore, Rick
2000 The Dawn of Humans: People Like Us. *National Geographic*. July 2000:90–117.

Hartmann, Susan
1982 *The Home Front and Beyond: American Women in the 1940s*. Twayne Publishers, Boston.

Hays-Gilpin, Kelley
2000 Feminist Scholarship in Archaeology. *Annals, American Academy of Political and Social Sciences* 571:89–106.

Hays-Gilpin, Kelley, and David S. Whitley (editors)
1998 *Reader in Gender Archaeology*. Routledge, New York.

Hegmon, Michelle
2003 Setting Theoretical Egos Aside: Issues and Theory in North American Archaeology. *American Antiquity* 68:213–243.

Helms, Mary W.
1976 Domestic Organization in Eastern Central America: The San Blas Cuna, Miskito, and Black Carib Compared. *Western Canadian Journal of Anthropology* VI (3):133–163.

Hochschild, Arlie R.
1973 A Review of Sex Role Research. *American Journal of Sociology* 78:1011–1025.

Hoffert, Sylvia D.
2003 Femininity in the Twentieth Century (1920–1975). In *A History of Gender in America: Essays, Documents, and Articles*, edited by S. Hoffert, pp. 360–374. Prentice Hall, Upper Saddle River, New Jersey.

Hollimon, Sandra E.
1997 The Third Gender in Native California: Two-Spirit Undertakers among Prehistoric Native Americans: The Chumash of California and the Arikara of the North Plains. In *Exploring Gender through Archaeology*, edited by Cheryl Claassen, pp. 81–88. Prehistory Press, Madison, Wisconsin.
2006 The Archaeology of Nonbinary Genders in Native North American Societies. In *Handbook of Gender in Archaeology*, edited by Sarah M. Nelson, pp. 435–452. AltaMira, Walnut Creek, California.

Hutson, Scott R.
1998 Institutional and Gender Effects on Academic Hiring Practices. *SAA Bulletin* 16(4):19–26.
2002 Gendered Citation Practices in *American Antiquity* and Other Archaeology Journals. *American Antiquity* 67:331–342.

James, Simon
1997 Drawing Inferences: Visual Reconstructions in Theory and Practice. In *The Cultural Life of Images*, edited by B. Molyneaux, pp. 23–48. Routledge, London.
1999 Imag(in)ing the Past: The Politics and Practicalities of Reconstructions in the Museum Gallery. In *Making Early Histories in Museums*, edited by N. Merriman, pp. 117–135. Leicester University Press, Leicester.

Jones, Sîan, and Sharon Pay
1990 The Legacy of Eve. In *The Politics of the Past*, edited by P. Gathercole and D. Lowenthal, pp. 160–171. Routledge, New York.

Leacock, Eleanor
1975 Class, Commodity, and the Status of Women. In *Women Cross-Culturally: Change and Challenge*, edited by R. Rohrlich-Leavitt, pp. 601–616. Mouton, The Hague.
Lutz, Catherine, and Jane Collins
1993 *Reading National Geographic*. University of Chicago Press, Chicago.
May, Elaine T.
1988 *Homeward Bound: American Families in the Cold War Era*. Basic Books, New York.
Mayo, C., and N. Henley
1981 *Gender and Nonverbal Behavior*. Springer-Verlag, New York.
Meyerowitz, Joanne
1994 Beyond the Feminine Mystique: A Reassessment of Postwar Mass Culture, 1946–1958. In *Not June Cleaver: Women and Gender in Postwar America, 1945–1960*, edited by Joanne Meyerowitz, pp. 229–262. Temple University Press, Philadelphia.
Meyers, Marian
1999 *Mediated Women: Representations in Popular Culture*. Hampton Press, Cresskill, New Jersey.
2008 Women in Popular Culture: All Sexed Up and Global to Go. In *Women in Popular Culture: Representation and Meaning*, edited by Marian Meyers, pp. 3–28. Hampton Press, Cresskill, New Jersey.
Moore, Henrietta
1988 *Feminism in Anthropology*. University of Minnesota Press, Minneapolis.
Moser, Stephanie
1992 The Visual Language of Archaeology: A Case Study of the Neanderthals. *Antiquity* 66:831–844.
1993 Gender Stereotyping in Pictorial Reconstructions of Human Origins. In *Women in Archaeology: A Feminist Critique*, edited by H. du Cros and L. Smith, pp. 75–92. Department of Prehistory, Research School of Pacific Studies, Canberra.
1998a The Dilemma of Didactic Displays: Habitat Dioramas, Life-Groups and Reconstructions of the Past. In *Making Early Histories in Museums*, edited by N. Merriman, pp. 65–116. Cassell, London.
1998b *Ancestral Images: The Iconography of Human Origins*. Stroud, Ithaca, New York.
2001 Archaeological Representation: The Visual Conventions for Constructing Knowledge about the Past. In *Archaeological Theory Today*, edited by Ian Hodder, pp. 262–283. Polity, Cambridge.
2003 Representing Human Origins: Constructing Knowledge in Museums and Dismantling the Display Canon. *Public Archaeology* 3:1–17.
Murdoch, John
1892 The Ethnological Results of the Point Barrow Expedition. *Ninth Annual Report of the Bureau of American Ethnology*, Washington, D.C.
Nelson, Sarah M.
1990 Diversity of the Upper Paleolithic "Venus" Figurines and Archaeological Reality. In *Powers of Observation: Alternative Views of Archaeology*, edited by Sarah M. Nelson and Alice Kehoe, pp. 11–22. Archaeological Papers 2. American Anthropological Association,Washington, D.C.
2004 *Gender in Archaeology, Analyzing Power and Prestige*. 2nd ed. AltaMira Press, Walnut Creek, California.
2006 Introduction: Archaeological Perspectives on Gender. In *Handbook of Gender in Archaeology*, edited by Sarah M. Nelson, pp. 1–27. AltaMira Press, Walnut Creek, California.
Nelson, Sarah M. (editor)
2006 *Handbook of Gender in Archaeology*. AltaMira Press, Walnut Creek, California.
Nelson, Sarah M., and Margaret C. Nelson
1994 Conclusion. In *Equity Issues for Women in Archaeology*, edited by Sarah M. Nelson, Margaret C. Nelson, and Alison Wylie, pp. 229–235. Archaeological Papers No. 5. American Anthropological Association, Washington, D.C.
Neuhaus, Jessamyn
1999 The Way to a Man's Heart: Gender Roles, Domestic Ideology, and Cookbooks in the 1950s *Journal of Social History* 32:529–555.
Patterson, Thomas
1995 *Toward a Social History of Archaeology in the United States*. Harcourt Brace College, Fort Worth, Texas.
Rosaldo, Michelle Z.
1980 The Use and Abuse of Anthropology: Reflections on Feminism and Cross-Cultural Understanding. *Signs* 5:389–417.
Silverblatt, Irene
1988 Women in States. *Annual Review of Anthropology* 17:427–460.
Simpson, John
1875 The Western Eskimo. In *A Selection of Papers on Arctic Geography and Ethnology*, pp. 233–275. John Murray, London.
Sloan, Christopher
1999 Afterword, The Art of Adventure: Behind the Scenes at *National Geographic*. In *The Art of National Geographic: A Century of Illustration*, by Alice Carter, pp. 223–229. National Geographic Society, Washington, D.C.
Slocum, S.
1975 Woman the Gatherer: Male Bias in Anthropology. In *Toward an Anthropology of Women*, edited by R. R. Reiter, pp. 36–50. Monthly Review Press, New York.
Sørenson, Marie Louise Stig
2000 *Gender Archaeology*. Blackwell, Malden, Massachusetts.
Townsend, Nicholas
2002 *The Package Deal: Marriage, Work and Fatherhood in Men's Lives*. Temple University Press, Philadelphia.
Traube, Elizabeth G.
1992 *Dreaming Identities: Class, Gender, and Generation in 1980's Hollywood Movies*. Westview Press, Boulder, Colorado.
Tringham, Ruth
1991 Households with Faces: The Challenge of Gender in Prehistoric Architectural Remains. In *Engendering Archaeology: Women in Prehistory*, edited by Joan Gero and Margaret Conkey, pp. 93–131. Basil Blackwell, Oxford.
Watson, Patty Jo, and Mary C. Kennedy
1991 The Development of Horticulture in the Eastern Woodlands of North America: Women's Role. In *Engendering Archaeology: Women in Prehistory*, edited by Joan Gero and Margaret Conkey, pp. 255–275. Basil Blackwell, Oxford.
Weiner, Annette B.
1976 *Women of Value, Men of Renown: New Perspectives on Trobriand Exchange*. University of Texas Press, Austin.
Whelehan, Imelda
2000 *Overloaded: Popular Culture and the Future of Feminism*. Women's Press, London.
Wright, Rita P.
1991 Women's Labor and Pottery Production in Prehistory. In *Engendering Archaeology: Women in Prehistory*, edited by Joan Gero and Margaret Conkey, pp. 194–223. Basil Blackwell, Oxford.

Wylie, Alison
2002 *Thinking from Things: Essays in the Philosophy of Archaeology*. University of California Press, Berkeley.
Zeder, Melinda A.
1997 *The American Archaeologist: A Profile*. AltaMira, Walnut Creek, California.
Zihlman, Adrienne
1997 The Paleolithic Glass Ceiling. In *Women in Human Origins*, edited by Lori Hager, pp. 91–113. Routledge, New York.
1978 Women in Evolution: Part II, Subsistence and Social Organization in Early Hominids. *Signs* 4:4–20.
Zihlman, Adrienne, and Nancy Tanner
1978 Gathering and the Hominid Adaptation. In *Female Hierarchies*, edited by Lionel Tiger and Heather Fowler, pp. 163–194. Beresford Book Service, Chicago.

Notes

1. The former Art Directors we interviewed and their terms of service are Howard Paine (1974–1991), Allen Carroll (1991–1996), and Christopher Sloan (1996–2006).

2. This image of the 1950s is pervasive and resonated with millions of women, but subsequent studies of postwar media suggest that a more complex set of messages were being sent in mass media, including expressions of "deep ambivalence" (Neuhaus 1999:531) about postwar gender norms (Meyerowitz 1994; Neuhaus 1999).

3. For the purposes of these calculations, both elderly and non-elderly adults whose gender could not be determined were excluded. All children and infants, whose gender could be determined only 24 percent of the time, were included. A total of 479 or 22.7 percent of all individuals examined were adults of unknown gender. *National Geographic* artists provided a number of physical clues to gender that we used as the basis of our coding, including the presence of breasts, heavy musculature, and facial hair, as well as distinctive kinds of clothing, hairstyles, and ornaments.

4. Using the Chi Square goodness-of-fit test and .05 as the threshold of significance.

5. Only two of the 40 artists responsible for the reconstructions in this study are female. Despite efforts to find female artists, two former art directors stated that they could not find women interested in creating historical reconstructions. Female artists are more likely to illustrate the natural world, suggesting a gendered division of artistic labor.

6. The average number of women per reconstruction was 2.5 in the 1970s, 2.3 in the 1980s, 1.3 in the 1990s, and 1.2 in the 2000s.

7. It remains possible that *National Geographic* selectively excludes feminist or even female archaeologists from the consultation process. Unfortunately there are no reliable data on this point, although female archaeologists are certainly cited in article text. An examination of the gender of specialists cited in the text versus the participation of men and women in the field would be a welcome addition to this study.

8. When individuals from only the foreground and middle ground are considered, the gender of 97 percent of depicted adults can be determined in the 1950s, while in the 1980s gender can be determined for only 77 percent of adults.

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