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RECOGNIZING GENDER IN HISTORICAL AND ARCHAEOLOGICAL CONTEXTS

The four papers that follow are based upon talks given by members of a panel on: "Recognizing Gender in Historical and Archaeological Contexts," at the annual meeting of the Massachusetts Archaeological Society in Middleborough, MA, on October 24, 1992. Panelists were Barbara Ward, Susan Hautaniemi, Elizabeth Chilton, Michael Volmar, Russell Handsman, and Suzanne Spencer-Wood, discussant. Handsman and Ward did not submit papers for publication, but are included in the discussion.

RACE, GENDER, AND HEALTH AT THE W.E.B. DUBOIS BOYHOOD HOMESITE

Susan Hautaniemi

"Material culture," John C. Barrett writes, "does not so much reflect social conditions as participate in the structuring and transformation of those conditions" (1990:179). Further, "The analytic challenge is therefore not to reveal the structures of a 'society,' but to examine the recurrent ways in which people draw upon the available cultural and material resources to restructure relationships between themselves" (1990:182). What resources are available to people, how they understand themselves in relation to others, where the power lies in those relationships and how it is maintained and resisted are examples of some elements of the contexts in which people live. All individuals that make up a group, be it a "society" or a "social unit of production" are not similarly situated in respect to various aspects of these contexts. Differences may be constructed and understood through ideologies of power, race, age, gender, or class and their concomitant inequalities.

According to H. Martin Wobst, ideological messages received unconsciously are most effective. That is, they are unlikely to be questioned to the degree that they go unnoticed. The most obvious statements about ideology are not necessarily the most loaded or active. When looking at material culture, Wobst encourages us to look for such messages in the material culture of the "natural" or "taken-for granted" (1991, personal communication). Embedding messages of inequality in supposedly silent, everyday objects and in naturalized categories is an example of effective ideology.

This is certainly true in the late 19th century United States. Categories of race, gender and class were all being "naturalized" ideologically, largely through the medium of social Darwinism. The material manifestations of these categorizations are notoriously difficult to uncover archeologically. In this paper, I will look at some everyday objects from the W.E.B. DuBois boyhood homesite in Great Barrington, Western Massachusetts to see what they can contribute to our understanding of gender or race. In particular, I explore how advertising works to embed naturalized ideological messages in everyday objects. I do this by considering patent medicine bottles recovered from the site, the context of patent medicine use, and the advertising used to sell these commodities.
HISTORY AND ARCHAEOLOGY
AT THE DUBOIS HOMESITE

Tom Burghardt, who won his manumission for service in the Revolutionary War, was the first of the Black Burghardts to own the property (Paynter n.d.a: 10). From then until the last quarter of the nineteenth century, the Burghardts farmed the land. DuBois, who lived at the site for a time in early childhood, and in nearby Great Barrington through high school, described the homesite and his family in the late nineteenth century.

I remember three of those houses and a small pond. There were the homes of Harlow and Ira; and of my own grandfather, Othello, which he had inherited from his sister Lucinda.... Here as farmers they long earned a comfortable living, consorting usually with each other, but also with some of their white neighbors (1968:63).

From 1850 to 1870, DuBois' grandfather Othello and his wife Sally farmed the place. Sally kept house for her family, including for a time the young DuBois, and for boarders (Paynter n.d.a:11). By 1880 the property had passed through the female line to DuBois's cousin once-removed, Martha Burghardt Piper, and her husband, William Piper (Paynter n.d.a:14-16). The Pipers rented the property to Mrs. Piper's sister Lucinda, and her husband Edward Wooster (Paynter n.d.a:15). "The living on the farms gradually became less satisfying..." DuBois tells us (1968:63), and by 1880, the men living at the site are recorded as laborers rather than farmers (Paynter n.d.a:16). Mrs. Wooster, however, was keeping house for her family and boarders, as her mother did before her. She may also have taken in laundry, as did her near neighbor (Paynter n.d.a:16). This transformation of productive relations at the site took place in, and was shaped by, larger social, economic and ideological changes.

During the summers of 1983 and 1984, archeological survey and surface collection were undertaken at the DuBois Homesite by the University of Massachusetts at Amherst Department of Anthropology Field School, under the direction of Robert Paynter. Several features were identified at the site, including the house foundation, a well and two middens (Paynter n.d.a:6). The earlier of these two middens is interpreted to be the remains of a barn used as a storage area. The other, later midden, is apparently the remains of the house, which was bulldozed to the back of the lot in the 1950's (Paynter n.d.b:19). Almost all of the 10,000 plus artifacts recovered from the site are from these two middens.

Paynter and Nancy Ladd Muller have analyzed many of the artifacts from the site, including the ceramics, which they discuss elsewhere. My contribution has been analysis of the glassware from the two middens. The vessels represented by the approximately 7,000 glass sherds include plain and fancy tableware, canning jars, inkwells, numerous unidentifiable bottles, pharmacy bottles, and patent medicine bottles. The glassware yielded a date range beginning around 1850 and with a probable end date in the 1930's. The minimum number of embossed bottles was 75. Of these, 14 were identifiable as patent medicine bottles. This admittedly small sample is probably particularly misleading, since the site has not been excavated. All the glass sherds were surface collected.

The patent medicine bottles recovered at the DuBois site include bottles for Ayer's Sarsaparilla, a blood renovator which also claimed to cure scrofulas affections and diseases arising from changes of the season, climate or of life (Fike 1987:214,94). Three Warner's Safe Diabetes Cure bottles were recovered. Warner's stressed the safety of its product in both its name and its advertising copy (Fike 1987:107; Hecht-
linger 1970:131). A Fink's Magic Oil bottle was also discarded at the site. Fink's promised to cure, among other things, colic, cholera, sore throat and neuralgia (Fike 1987:192). PE-RUNA, a cure for catarrh (Fike 1987:62), was also represented, as was Musterole, a commercial mustard plaster for colds and congestion (Fike 1987:174).

NINETEENTH CENTURY HEALTH CONCERNS

These patent medicine bottles represent health concerns. Health in the mid to late 19th century was a matter of great public concern and considerable ideological mystification. Social conditions arising out of laissez faire industrial capitalism contributed to increases in contagion, contamination of water sources, and malnutrition, all factors in increased morbidity and mortality rates. The extent, cause, and nature of the deteriorating health of the United States population were the subjects of extensive public debate. Women, European immigrants, and African-Americans were all seen as particularly subject to ill-health.

The proper role of women in the industrial capitalist society of the late 19th century was partly resolved through an ideology Barbara Welter termed the "cult of True Womanhood" (1978:313). The ideal woman was constructed as too fragile to deal with the hostile, competitive world of commerce and the market. Her contribution was to maintain the home as sanctuary for her husband and to guard the spiritual, moral, and physical well-being of her family. As a consequence of, and response to, this definition of womanhood there arose a "cult of invalidism" (Ehrenreich and English 1978:102). Frail womanhood was diagnosed as suffering from a variety of illnesses characterized by vague and all-encompassing symptoms. The true woman came to be defined as the neuralgic or dyspeptic woman, unable to rise from her chaise lounge.

Conspicuously absent from membership in these cults were working class and poor white women, European immigrants, and women of color. Indeed, since childrearing and maintaining a home required work, and since the middle-class wife/mother was so fragile, it seemed that servants were needed to perform the actual labor associated with the role of idealized woman. A man's ability to afford an idle wife and servants was a form of gender-specific conspicuous consumption by the emerging middle-class. Much of the wealth supporting this lifestyle arose from the appropriated labor of factory operatives -- many of whom were European immigrant women and children. This paradox that juxtaposed frail woman and working woman was boldly explained in terms of ethnicity and race (Ehrenreich and English 1978:103). Immigrant women and women of color were seen as being more genetically fit for hard work (Preston and Haines 1991:10-11).

In the face of this supposed genetic hardiness, the higher morbidity and mortality rates of non-elites had to be explained. Although European immigrants and African-Americans were seen as having the potential to be healthier than American-born whites, they were portrayed as squandering their natural vigor through ignorance, neglect, and immorality. A great deal of literature was published at the end of the 19th and into the 20th centuries that used and fostered the above stereotypes (see Swedlund and Ball n.d. for discussion). In this literature, whites are generally discussed in discrete divisions, sometimes according to ethnicity, but increasingly according to class. By the 20th century, economic status was understood to have a bearing on health. However, no such distinctions are made when whites discussed the health of African-Americans. They were treated as an internally homogenous category, regardless of economic status. The con-
struction of African-American health as distinct from other peoples’ health, and as indistinct between African-Americans in different circumstances, was part of a national debate which essentialized African-American identity.

HEALTH REFORMS AND PATENT MEDICINES

How do patent medicines fit into this description of health and health ideology in post-Civil War United States? There was a boom in the patent medicine market. To understand this we need to look at how changing theories of health affected medical practice and the range of health choices. The social construction of people as unhealthy, in conjunction with their experience of death and disease, created health care consumers. The explanation of why they purchased patent medicines rather than, or in addition to, the services of regular medical doctors has several components.

Physicians in the second half of the nineteenth century were better trained in philosophy than in anatomy (Ehrenreich and English 1978:33). Blood-letting, and purging with dangerous substances such as mercury and calomel, were still the most common forms of treatment (Ehrenreich and English 1978:40-41). As the inefficacy of these treatments became apparent, doctors tried to increase their effectiveness by increasing the frequency or intensity of treatment. No one understood much about the causality and treatment of disease processes. The germ theory of disease ushered in by the Pasteurs was not understood very well by researchers, physicians, or the general public. In addition, the theory was of no practical use in the treatment of disease until the early twentieth century saw the development of a diphtheria vaccine (Preston and Haines 1991:8-9).

As the public lost faith in the so-called heroic measures of regular medicine, there was a strong response in terms of health reform. As one part of this health reform movement, self-doctoring was reinstated as a valid health care model. Self-doctoring ran the gamut of diet and lifestyle changes to re-legitimation of traditional health care, to widespread use of patent medicines (Ehrenreich and English 1978:42-52). Those who purchased patent medicines were taking proactive steps towards dealing with a very real problem in a way that made sense in the context of 19th century understanding of and debate about health and disease.

Patent medicine proprietors fostered and capitalized on the public’s concern about disease and death, on its lack of faith in and distrust of the heroic measures of regular medicine, on the general misunderstanding of the germ theory of disease, and on traditions of self- and community healing. Some companies offered herbal and vegetable compounds, often using images of Native Americans to symbolize traditional, natural healing. Some based their advertisements on claims of safety, in direct response to fears about the ill-effects of medicines prescribed by regular doctors. Other companies played on people’s new-found fear of germs by advertising that their product would eliminate those unseen, but deadly, enemies.

Women. Women were particularly targeted by patent medicine proprietors in their advertising. Cultural perceptions of women had been constructed through the cults of true womanhood and invalidism as inherently sickly and prone to disease. They were also held responsible for their family’s health (see Ball and Swedlund n.d.). Both cults helped to define middle-class white women as primary health consumers. These cults, together with high morbidity and mortality, also helped to create a huge market of poor and black women who could not afford doctor’s fees or who were disillusioned with regular medicine. Many women were in the market for self-doctoring and they were called
upon in patent medicine advertisements to save their husbands from drunkenness, their children from consumption or cholera infantum, and themselves from the diseases peculiar to their sex: female trouble, dyspepsia, and neuralgia, all typically associated with elite women.

Blacks. Images of blacks do not appear in patent medicine advertisements, but this absence of African-American images in patent medicine advertising is misleading. There was an African-American market for patent medicines. DuBois decries patent medicine use by blacks in *The Philadelphia Negro* (1973:114). We have the bottles from the DuBois site, and pharmaceutical bottles have been recovered from other African-American sites (see Orser n.d.). Personal care products specifically developed for the African-American market were advertised with the same images of refined white women as were patent medicines, with the notable exception of Madame C.J. Walker's products, which were advertised with her own likeness (Bundles 1991). Yet, at the same time, negative, racist images of black stereotypes were used to sell many products. Helan Page posits that this type of advertising served as a constant reminder to whites of their superiority over African-Americans, and as a constant reminder to African-Americans that their race made them unacceptable and negligible (n.d.:28-29). As such, it was an effective tool in what DuBois refers to as the increasingly hostile definition of the color line in post-Emancipation United States. Advertising helped construct a monolithic African-American identity. This essentialized identity was defined in strongly negative terms and images, which were increasingly legitimated and enforced through job, housing, and social discrimination, and acts of covert race prejudice.

WHAT CAN THE PATENT MEDICINE BOTTLES TELL US?

In the context of the above, what can the patent medicine bottles tell us about health, gender, or race at the DuBois site? DuBois, in his autobiographies, writes about his family and their experiences in the Great Barrington of his childhood. From his description, the Burghardts' social identity was not solely based on race. Social standing was based on longevity in the community - and the Burghardts were among Great Barrington's oldest families (DuBois 1968:80). DuBois writes, "The colored folk were not set aside in the sense that the Irish were, but were a part of the community of long standing; and in my case as a child, I felt no sense of difference or separation from the mass of townspeople" (1968:83). Until about 1880, the Burghardts made their living in the same manner as other community members. "Here as farmers," DuBois writes, "they long earned a comfortable living, consorting usually with each other, but also with some of their white neighbors" (1968:63). Mrs. DuBois belonged to the Temperance Union and the Congregational Church, along with white women. There was a nearby group of African-Americans with whom the Burghardts did not associate because they had no community or family connections. DuBois writes "We knew little of them but felt above them because of our education and economic status" (1968:83). The Burghardts and other black members of the established community were astonished when newcomers from the South built an African Methodist Zion Church (1968:83). DuBois writes, "The color line was manifest and yet not absolutely drawn" (1968:96). It was a social construction in which the Burghardts were active, if unequal, participants.

The occupants of the site during most of the time period represented by the patent medicine bottles, about 1880 through the 1920's, were Edward Wooster, Lucinda Burghardt
Wooster, their children and boarders. In the 1880 census, the men living on the site are no longer listed as farmers, but as laborers. When the farm would no longer support the family, and the men were drawn into wage labor, most jobs were closed to them, including those at the local woolen mills (Paynter n.d.a: 13). In terms of employment, the color line in Great Barrington was clearly drawn. Mrs. Wooster, on the other hand, continued to contribute to household production in the same ways her mother had.

From the presence of patent medicine bottles in the middens of the site, we can infer that someone was experiencing ill-health, and that they choose self-doctoring as part of their health care strategy. Did Mrs. Wooster, in her role as wife and mother, purchase the patent medicines? How did she respond to the advertising used to sell the products she bought? The advertisements of at least three of the products recovered at the site, PE-RU-NA (Hechtlinger 1970:124, 218), Ayer’s Sarsaparilla (Hechtlinger 1970:76), and Warner’s Safe Diabetes Cure (Hechtlinger 1970:131), featured idealized white women, one reclining on the requisite chaise lounge (Hechtlinger 1970:237). Did these images evoke for her the double-consciousness that DuBois speaks of in his writings?

It is a peculiar sensation, this double-consciousness, this sense of always looking at one’s self through the eyes of others, of measuring one’s soul by the tape of a world that looks on in amused contempt and pity (DuBois 1961:3).

Black selves reflected in advertising were either invisible or derogatory caricatures. Did Mrs. Wooster receive the message that, as a black woman, she was invisible or unacceptable? Did she resist this essentialization? Mrs. Wooster’s economic strategies of continued productive labor at the site can, perhaps, be viewed as her resistance to the only other income possibility open to her as a black woman, that is, work as a servant in the homes of white elites. Farming, had it still provided a feasible alternative, would have presented an avenue for the Wooster men to resist an imposed, racially based definition of their abilities and opportunities as African-Americans. Perhaps it had served that function for earlier occupants of the site.

For historical archeologists, the material culture at this site presents something of a problem. There is nothing particularly unique or unusual about the medicines used at the site, nor are they unusual artifacts to find on a site of this time period. If anything, patent medicine use was so widespread that their absence would be much more surprising. The rest of the material from the site is typical for a Western Massachusetts farm in the late nineteenth and early twentieth centuries (Paynter n.d.a: 25). There are certainly no "Africanisms" there (Paynter n.d.a:4-5). It shouldn’t surprise us that this is so. Ideological messages about gender and race are hidden in the everyday objects recovered at the site. The images with which patent medicines were sold carried a message that is not obvious to historical archeologists, and which needs to be uncovered through examination of the contexts of the Burghards’s lives.

CONCLUSIONS

Gender and race at this or any site can only be looked at in terms of the relationships of the individuals at the site to these social constructs with an understanding of the historical, social, and economic contexts of the day. We also need to evaluate critically the contexts within which we do historical archeology. We need to challenge the categories and typologies we use to understand the archeological record, and question how we use the data we have.

DuBois knew that race is a culturally-constructed variable -- different in the South than in the North, in small villages than in large
cities, different in 1910 than in 1870. We can use his insight to move away from an essentialized view of race, to understand race as articulating with, as well as informing and transforming, other variables. We need to treat race, and all other ideologically constructed categories, such as health and gender, as historically situated, contextual, and contested.

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IN SEARCH OF PALEO-WOMEN: GENDER IMPLICATIONS OF REMAINS 
FROM PALEOINDIAN SITES IN THE NORTHEAST 

Elizabeth S. Chilton

ABSTRACT

The attribution of gender in Northeastern Paleoindian archaeology is often either absent or implicit. This paper will demonstrate this through an examination of the treatment of gender in thirteen of the major reports on Paleoindian sites in Northeastern North America, paying particular attention to tool representation and inferred activities and implied gender. This paper will suggest that attribution of gender at Paleoindian sites must be made indirectly through the interpretation of site plans and inferred activities, rather than directly through the representation of particular tool types.

INTRODUCTION

This paper came about as a result of the realization that when most of us think of Paleoindians we think of hunters. Correspondingly, when we think of hunters, we think of men. Because it is projectile points that we use to identify Paleoindian sites, it is no wonder that this is the case. The goal of this paper is not to question the assumption that it was primarily men that were hunting; that is a topic for another paper. Rather, this paper outlines the need for attention to other activities carried out by Paleoindians -- many of whom were necessarily female.

ACTIVITIES AT PALEOINDIAN SITES

In most of the site reports that I just named, the implicit assumption is that Paleoindians were hunters and any evidence to the contrary is treated as exceptional. The assertion that Paleoindians relied on hunting as their main subsistence strategy warrants careful evaluation, in terms of both the implicit theory and the evidence claimed to support it (Meltzer 1988). In fact, a specialized subsistence strategy would be surprising in the patchy and unstable environment of the early post-glacial period. For the Debert site, MacDonald (1985) reports that projectile points comprise just over two percent of the total artifact assemblage, while endscrapers comprise roughly 35 percent. He concludes that killing and butchering comprised four and a half percent of the activities on the site, while the processing of food and the manufacturing of clothing and shelter
comprised 63 percent. His evaluation of these data is that "hunting activity is definitely underrepresented among a population that existed by hunting" (MacDonald 1985:110). To support this statement he asserts that there must be other kill sites that have not yet been found.

MacDonald is not alone in the predilection of his interpretations; for the Vail Site, Gramly (1982) seems unusually preoccupied with fluted points and hunting. Although endscrapers are nearly ten times as numerous (731) as fluted points (79), he spends roughly one-fourth as much text discussing them. Since the site is interpreted as a hunting camp a priori, endscrapers and other non-fluted artifacts are not afforded comparable analysis. He finds it sufficient to say, in concluding his short interpretation of endscrapers, that "whatever the use of endscrapers, it is evident that the motion of the tool was carefully controlled" (Gramly 1982:35). In his equally brief discussion of sidescrapers, he states that "the role of sidescrapers in the Paleo-Indian tool-kit is a mystery" (Gramly 1982:37).

For the Corditaipe site, Funk and Wellman (1984) also note that the endscraper is the predominant tool type, which they interpret as being used to work bone or "some other hard material." Due to the predominance of endscrapers they propose a specialized function for the site. However, the activities that they infer from the tool types represented are "hunting, butchering, hideworking, woodworking and flint knapping" (Funk and Wellman 1984:76). Since these activities are not listed in alphabetical order, nor in order of decreasing percentage, one wonders why this order was chosen. Why in the conclusion of this report do they refer to Paleoindians as the "Early Hunters at Corditaipe" instead of the "Early Scrapers"?

I conclude that the use of the term "Paleo hunters" or "Early Hunters" is problematic. We know for a fact that however much they relied on hunting, it is indisputable that Paleoindians must have done other things, and in fact there were women, children, and elderly people there to participate in these activities. Even if Paleoindians did subsist primarily by hunting, one would not expect to find much direct evidence of hunting at domestic sites.

MAN-THE-HUNTER

Where do these "Man-the-hunter" presumptions come from? Primarily from three sources. The first is ethnographic analogy, which is inextricably related to our gender images for Paleoindians. The use of ethnographic analogy in the reports I read was selective and/or implicit. Analogies are often made to existing or historic populations, supposedly from analogous environments and with similar technologies. Recent research has shown that there are no direct environmental analogues to the Northeast in the 11th millennium B.P. (see Curran and Dincauze 1977; Kutzbach 1987; Jacobsen et al. 1987). Also, no historically known population had the vast socially unconstrained expanse of territory available to the Paleoindians; this would have put very different constraints on social networking, especially mating networks, if the population were to survive. Assuming a low population density, at least initially, the availability of neighboring groups with a detailed knowledge of local resources could not be relied upon (Kelly and Todd 1988:231). The Paleoindians may have only been able to expand the frontier on a generational basis, as population grew (Dincauze 1993). Also, the use of high quality lithic raw materials, reliance on a bifacial technology, an apparently limited use of caves and rockshelters, and a low level of food storage all may be indicative of a subsistence technology which would have been unlike that of any modern hunter-gatherers (Kelly and Todd 1988:231).

An example of the abuse of ethnographic analogy comes from the Debert site (MacDonald 1985). MacDonald chooses the Naskapi-Montag-
nais of Northern Quebec and Labrador as the closest analog to Paleoindians. In this analog "every man and woman is capable of manufacturing needed items, and there are no specialized craftsmen. Sexual division of labor is minimal..." (MacDonald 1985:130). Having said this, however, he later states that certain areas within the site were reserved for male activities. He bases this on the fact that the quantity of debitage seems to increase from east to west, while skin-working tools increase west to east. He asserts that the men could therefore spot the game moving up the ridges and the women could keep their households free of chipping debris. MacDonald is asserting gender roles which contradict his own model that asserts little division of labor.

A second reason for the focus on hunting is an implicit evolutionism among Paleoindian researchers. MacDonald, for example, refers to sexual division of labor as not being highly developed "at this stage" (1985:133). Likewise, Kelly and Todd (1988) assert that understanding the settling of the New World in comparison to colonizations in other parts of the world by other "pre-Homo sapiens...may help us understand more general problems of human evolution." Because the Paleoindians were the first humans in North America, they are often portrayed as primitive -- the beginning, the bottom of the ladder. But it is important to remember that Paleoindians were colonizing North America at the same time that other humans were domesticating plants and animals in the Old World. They were genetically fully modern, with fully developed cultural and technological traditions. Therefore, they should be thought of as pioneers and not primitives.

The final source of Man-the-hunter images is Western ideals of masculinity. Paleoindians are seen as heroic -- somewhat akin to our historic explorers such as Columbus or Lewis and Clark -- moving into uncharted territories with only the crudest of technologies.

**INDIRECT APPROACHES TO GENDER ATTRIBUTION**

Given the bias of the interpretation of the extant archaeological record for Paleoindians, what can be done in the future? First of all, exposing and making explicit the biases that exist is an essential first step; it makes researchers cognizant of what they’re up against and "up to." But this is not enough. What is needed is a shift in focus away from a preoccupation with hunting to the broad range of possible activities occurring at Paleoindian sites. Analysis of stone tools from the Shawnee-Minisink site (McNott 1985) showed that they were used for a variety of purposes. In some cases stone tools may be used to make bone or shell tools, which have not preserved (Lacy 1979).

**AN ECONOMIC MODEL**

It will take more than a simple focus on what things are found at Paleoindian sites in order to reconstruct activities and inferred social dimensions. Spatial patterns and particularly the recognition and interpretation of activity areas is perhaps the area of inquiry that will contribute the most. First, we need to become aware of the vast complexity of activities taking place at Paleoindian sites. We then need to consider economic variables influencing the personnel who would participate in certain activities. For example, which activities take place at domestic sites versus procurement or non-domestic sites? This is by no means a simple task. Yellen (1977) states that:

the most parsimonious way to understand the relationship between a specific activity and where it occurs is to distinguish first between areas that belong jointly to everyone in a camp and those that are the property of a single nuclear family. Next, to
draw a sharp line between 'nuclear family areas' and areas where special tasks take place.

Of the sites that I considered, only the Michaud site report (Spiess and Wilson 1987) successfully attempted such a rigorous interpretation. Although the authors do not try to infer gender, they have made interpretations of activity areas that relate to incoming and outgoing raw materials, and "interior" (domestic) versus exterior activities. They propose evidence for two different groups at the site, as well as difference in activities within each group.

As a means to explore the economics of activities evidenced at Paleoindian sites and the personnel taking part in these activities, I have constructed a table of domestic site versus procurement/non-domestic site activities (see Figure 1). These activities would certainly overlap to some degree. The model I present here is just that -- a model. It is not an hypothesis of what I think was "really going on" in Paleoindian society. It is not the correctness of the model which is at issue here. Rather, it is this type of heuristic model that is needed in order to indirectly model gender roles, so that it can be tested against existing data.

As long as Paleoindians remained more or less nomadic, the only efficient interacting size would have been the band (Wood 1979). Births would have to have been widely spaced in such groups, in order that children born into a nonsedentary life could receive the care they would require (Wood 1979). Under these conditions, the population size of each group would remain fairly stable as a result of both the relative sterility that would accompany extended lactation, and the tendency for small groups to fission off when the band approached a size that the immediate social or natural environment would not support (Wood 1979). Since Paleoindians did not necessarily have the option of "turning to their neighbors" (Kelly and Todd 1988:231), it would have

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**DOMESTIC SITE ACTIVITIES:**
- local small-scale hunting and fishing
- small scale butchering
- processing of plant foods
- food preparation
- social activities (daily)
- child rearing
- sleeping
- construction and maintenance of dwellings
- secondary lithic reduction and resharpening (depending on proximity to source)
- bone and wood-working (for various utensils and ornaments)
- hafting and re-hafting bone and lithic tools

**NON-DOMESTIC/PROCUREMENT SITE ACTIVITIES:**
- large scale hunting and butchering
- gathering of specific plant foods (others may be available at the domestic site)
- lithic procurement and primary reduction (contingent on source location)
- lithic tool resharpening
- wood gathering (this will be carried out farther away as site duration increases)

**UNKNOWN:**
- disposal of the dead
- childbirth
- ceremonial activities

Figure 1. Economic model of Paleoindian lifeways.
been essential to maintain high fertility within the group. Sound nutrition and adequate body fat percentage are essential to the maintenance of fertility in women, as well as the survival of young children. Therefore, I suggest that the fertility of women and the well-being of both women and children were essential parameters in the determination of site duration, division of labour, and the utilization and distribution (within the group) of resources.

In the model I present here, women and children would more frequently participate in domestic site centered activities, such as the local gathering of plant foods, processing of plant foods and products, construction and maintenance of dwellings, secondary lithic reduction and resharpening, bone working, and the hafting of lithic and bone tools. In this model, women would need to be able to produce and repair tools expeditiously, and would participate in the hunting of small animals around the domestic site. Activities centered around the domestic site would also include local wood gathering; the longer the site occupation, the more wood-gathering would tend to become a procurement activity. Other activities at the domestic site would include the preparation of hides for clothing, clothing manufacture, the drying and preparing of meats, and the creation and maintenance of a hearth.

In this model, men would more frequently participate in procurement activities, which may have required long distance travel. Particularly, these activities would include hunting and butchering, lithic procurement, and gathering of specific plant resources not available near the domestic site. The degree of butchering and lithic reduction would depend on distance to the domestic site; both of these activities would increase in proportion to distance from the domestic site, due to the difficulty in transporting heavy loads long distances. Hunting would be constrained by the availability of animal resources, as well as cultural notions of which animals are edible and desirable. Hunting parties would likely be away from camp only for a day or few days, since human population pressures were probably not sufficient to seriously diminish animal populations. There is no evidence for frequent major forays to lithic sources from domestic sites, at least in the initial colonization period. This is probably due to the fact that raw material was used conservatively and obtained en route along the frontier (Dincauze 1993).

Women and men of all ages might be involved to some degree in food preparation. Both women and men would also be involved in the domestic site activities such as daily social activities, the construction and maintenance of dwellings, secondary lithic reduction and resharpening, bone and wood-working, and hafting of bone and lithic tools. To sort out these activities archaeologically, one would have to be able to discriminate between nuclear family areas and special task areas (see Spiess and Wilson 1987), and then relate these special task areas to domestic or non-domestic site activities.

This model is tentative and necessarily analogical, since neither economy nor biology is free of cultural constraints. Sexual division of labor is culturally defined and not inherently obvious. Therefore, this heuristic model needs to be tested. Such a model can be used to re-examine Paleoindian site plans to begin to tease out activities and social dimensions, both within and between sites. To do this, site plans would need to be recorded and published on a scale that would permit such analysis.

CONCLUSION

Engendering the past is much more than a matter of simply finding women and men (Gero and Conkey 1991:14). The most important contribution of the topic of gender in reference to
Paleoindians is that we begin to see them as human beings -- not "just like us" and not over-romanticized hunters, but men and women, young, old, and middle-aged. With the help of knowledge gained from fields such as sociology, economics, ethno-archaeology, and demography, and from perspectives such as Marxist and Feminist theory, we can begin to think about variables other than hunting that influenced site location and duration, such as availability of plants, health and fertility, and social and ideological processes. These questions and others will guide us in the quest for an anthropology of Paleoindians.

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EFFIGY PESTLES FROM MASSACHUSETTS

Michael A. Volmar

INTRODUCTION

Effigy pestles are pestle-like artifacts with some sort of sculptured representation on one end or along the sides. Usewear analysis, linguistic information, and Algonquian folklore suggest that what are called "effigy pestles," "uninterpreted notched and grooved pestles," and "pestles without ornamentation" are functionally distinct categories. Archaeological evidence suggests that effigy pestles are Contact Period artifacts usually associated with women in burial contexts. This paper presents a study of effigy pestles and uninterpreted notched and grooved pestles from Massachusetts. I focus on Algonquian lifeways, folklore and mythology to interpret the effigy forms.

Few archaeologists have attempted to interpret effigy artifacts from southern New England. While there are many examples in old collections, these artifacts have not been found very frequently in recent archaeological excavations.

How often today, with a great deal of excavation going on, do we encounter even a fragment of such specimens? How are we to understand this? Are the lovely old objects frauds? Have most of the sites been dug over at least once, and the best things removed, so that we are only picking up leavings? Has an entire class of sites been destroyed without record? Do we have a clue as to the choice among possible answers? (Dincauze 1993:36)

In this article I will present some archaeological data concerning one class of atypical artifacts, effigy pestles. Over the last two years I have spent a considerable amount of time researching effigy pestles from the northeast. In this paper I will summarize the effigy pestle data from Massachusetts. First, I will define effigy pestles and draw a distinction between them and other types of pestles. This discussion is based on a literature review and also relies on some of my own ideas about pestles and effigy pestles. Secondly, I use Algonquian mythology, folklore and linguistics, archaeological contexts and chronology, and usewear analysis to explore the functions of effigy pestles. In the Appendix, I summarize the effigy pestle data from Massachusetts.

PESTLES, EFFIGY PESTLES, AND UNINTERPRETED PESTLES

"Pestles...with ornamented ends have been commonly reported throughout New England" (Hadlock 1949:70; see Table I and Figure 2). Sculpted ends on pestles can assume a variety of different shapes or representations, which can be divided into two basic categories, effigies and non-effigies. Effigy pestles are long cylindrical stones with a sculpted representation of a human or animal on one end (Figure 1), i.e., zoomorphic (for example, "the head of some animal" [Saville 1919:9]; see Table I, 1-8), anthropomorphic (typically a human face; see Table I, 9). Phallic representations have also been reported (at the Robbins Museum and elsewhere, but, as of this writing, I have only seen one from New York State) and may be
Figure 1. Effigy pestles, reproduced from Willoughby ([1935] 1973:150). Massachusetts: a, Concord River Valley; b, Middleborough; e, from grave at Revere; h; i; g, from grave at Winthrop; j, Essex County. Maine: c, Damariscotta; f, Vassalboro. Vermont (after Perkins): d. a,c,g,h,j, Peabody Museum, Cambridge; e, Peabody Museum, Salem; f, Kennebec Historical Society, Augusta; b, National Museum.
included in the effigy category. I caution people against imposing Western interpretations on these objects. Oftentimes animal and human effigies are subtle representations of eye orbits, ears, jaw lines and faces that are not immediately discernable. Non-effigy pestles include notched and grooved pestles that do not resemble recognizable shapes, and pestles without ornamentation (Volmar 1992; Willoughby 1935:153b,c,f; Table 1, 15-22).

For several reasons I draw a distinction between effigy pestles and uninterpreted notched and grooved pestles or pestles with no ornamentation. First, Algonquian mythology and folklore supports the conclusion that the presence of identifiable facial or bodily features of humans or animals invokes supernatural powers. Uninterpreted pestles with grooves or notches do not seem to share this distinction. Second, effigy pestles from known archaeological contexts are typically Contact Period artifacts (Volmar 1992). This is not the case for uninterpreted pestles which seem to date as early as the Early Archaic (Bolian 1977), or pestles without ornamentation. Therefore, I do not consider effigy pestles to be the same artifact class as uninterpreted notched and grooved pestles or pestles without ornamentation. I include uninterpreted notched and grooved pestles in Table 1 simply to supply the data for others to use in their own research.

A readily apparent distinction exists between effigy pestles and non-effigy pestles. Usewear analysis of effigy pestles and non-effigy pestles clearly shows that these two categories are functionally distinct. Effigy pestles were not used as domestic or utilitarian artifacts like non-effigy pestles (Volmar 1992:9). Archaeological evidence (Hadlock 1949:67; Kraft 1978:68,77; Pfeiffer and Malcarne 1989:61; D.Ritchie 1980; Volmar 1992:16; Wilder 1905:299; Willoughby 1924:2; see Table I, 3, 4, 7) suggests that effigy pestles are a Contact Period artifact associated with women in burial contexts.

Both Beauchamp (1897:34) and Cross (1956:93) describe how pestles may have been used by Native Americans. Beauchamp (1897:34-39) states that stone pestles are:

found everywhere...but were very sparingly used by the Iroquois, who preferred their wooden pestle and mortar. The Jesuit missionaries among the Huron (suggest that pestles were)... used as rolling pins... (for) mixing paints...(and) pounding (Beauchamp 1897:34).

Cross expands the number of uses:

Many pestles have been employed for secondary uses. Several are battered on the ends and a few bear pits on the shaft, evidently the result of being used as hammerstones or small anvils. Some pestles have one side of the shaft flattened and slightly smoothed, one has two sides so modified, and one has a wide groove along the shaft, indicating their use as whetstones. One of these also has grooves over one end, possibly where sinews have been drawn over it (Cross 1956:93).

Standard interpretations suggest that effigy pestles were also used for pounding and grinding. Usewear on effigy pestles does not match that generated by typical pestle use (Volmar 1992: Table 8 and 9). Most surface abrasions on effigy pestles are suggestive of pecking, grinding, and polishing. These marks are characteristic of ground stone manufacturing techniques. They are found on many types of ground stone objects. I must admit it is difficult to tell grinding from usewear, but generally pestle ends look much different from effigy pestle ends.

Concurrently, linguistic information reveals that the word "pestle" is more functionally specific than the corresponding Algonquian word. For instance the word for "pestle" in Pequot is gwunsnog, "gwunsnog (gwunsnag) = Noun, quinahsin, literally a long stone, from qunni + assun" (Prince and Speck 1904:29). The
English word pestle may imply a uniformity of function and interpretation which is unjustified. The functional descriptions provided by Beauchamp and Cross concur; a "long stone" or "gwunsnog" served many purposes in Algonquian society. The designation of all "long stones" as "pestle" may be inappropriate. Therefore, the term "effigy pestle" may need reconsideration.

FOLKLORE AND MYTHOLOGY

I rely specifically on Algonquian folklore and mythology to interpret effigy pestles. There is a complex interrelationship between effigy artifacts and New England Algonquian mythology and folklore (and possibly tattoos, see Willoughby [1905:499]). I will briefly outline several documented Algonquian beliefs which helped me understand what animal or human effigies on pestle-shaped objects might represent.

First, Hobbamock was the principal Algonquian deity who appeared in dreams and visions. Winslow reported that "Hobbamock appear(ed) in a variety of forms including the shape of a man, a deer, a fawn, an eagle, etc. but most ordinarily a snake." Hobbamock is also associated with the color black (Winslow [1649] 1834). A great celebration was held if a person had a vision or dream in which Hobbamock appeared in the form of a snake. During the festivities the person recounted the dream and was ever after considered a powwow (Wilson [1647] 1834:20). Apparently dreams of Hobbamock were uncommon. Hobbamock was an ambivalent spiritual force that gave powwows their power. I assume that Hobbamock also supplied effigy objects with some kind of spiritual force. The nature of that force is related to the shape of the effigy. As previously stated, the most frequent incarnation of Hobbamock was a snake, and the color most readily associated with Hobbamock was black. Therefore, objects which resemble black snakes particularly, and other animal or human shapes generally, may be representations of Hobbamock.

Second, Algonquian folktales suggest that inanimate objects could be charged with spiritual power, pawwawnomas, manetowin, or manit. Algonquians from eastern Canada to New Jersey believed that spirits could inhabit not only animals and humans but also stone, metal, and wood (Volmar 1992:52). The Lenape had a class of images which "represent(ed) the human form... (and) were supposed to possess life" (Harrington 1921:45). These figures, called O'das or Nanitis (Unami and Minsi respectively), "usually represented the female figure, (and)... were kept as a rule by women" (Harrington 1921:46). The belief that objects had souls has also been convincingly attested among the seventeenth-century Algonquians of eastern Canada (Simmons 1970:57). This suggests that objects like effigy pestles may have been stone creatures possessed with pawwawnomas (manetowin), much like the O'das or Nanitis.

Lastly, an Algonquian "community maintained its integrity through good collective relationships with those spiritual powers capable of affecting its fate" (Salisbury 1982:44). Algonquian spiritual leaders, known as powwows, were essential in this regard. Some descriptions of powwows by colonists and later scholars suggest that both men and women were spiritual leaders in Algonquian society. Other reports suggest that the most effective mediators with the spiritual realm were women (Snow 1976:283; Speck 1919:246; Tantaquidgeon 1972:11).

It may not be surprising that pestles are associated with women in Algonquian folklore. For example, the spirit of a deceased Gay Head woman was said to have startled her husband because he gave her pestle to another woman (Vanderhoop 1904). A western Niantic woman, named Mercy Nunsuch Mathews, told Frank Speck the following story. A band of Niantics retreated into a ridge of rock called Devil's Den to escape from some Mohawks. Fortunately,
expecting a siege, the Niantic carried some mortars and pestles with them, but they had no corn. The enemy, unable to dislodge them, settled down outside to starve them out. Soon, however, they heard the sounds of corn pounding and merriment from in the cave and thinking the Niantic were provided with grain they gave up the siege and left. Local tradition attributes mystery noises in the cave to the devil (Speck 1909:210).

In this narrative pestles provide protection from enemies and are associated with well-being. It is interesting to note the subtle connection between Hobbamock (the devil) and pestles revealed in this story. Native Americans who heard this tale during the early twentieth century, when Speck was told this story, may have been reminded of their ancestral heritage. Both Hobbamock and pestles are important elements in that heritage.

Speck collected many stories during the first decade of the twentieth century (Speck 1909). One tale concerns a man, Chahnameed, who lives upon an island. Chahnameed was smitten one day when he saw a woman collecting shells on the mainland. He asked her to come live with him. After some consideration, she agreed and returned to her village to get her mortar, pestle, and some eggs.

Chahnameed spent much time away from home hunting. This upset the woman, now his wife, so she decided to leave him. Before doing so, she placed several dolls (inanimate objects) around the house to aid her in escape. As she left, the woman took only her mortar, pestle, and eggs. Then she went down to the shore and paddled away in one of Chahnameed's canoes.

When Chahnameed returned home, he was attacked by the dolls the woman had placed around the house. He quickly pursued her in his other canoe. Eventually, she evaded pursuit by using the manit of the mortar, pestle, and eggs to slow Chahnameed's advance and killed him with an enchanted strand of her hair.

While Speck interprets the Tale of Chahnameed as lore which survived from before Europeans came, Handsman suggests that it is a story about women's resistance, gender relations, and continuing traditions (Handsman 1990:4). Most important to the arguments I propose here, this story reaffirms the importance of pestles as symbols of the power of women in Algonquian society. This story also illustrates several functions of inanimate objects charged with pawwawnomas.

In the latter half of the twentieth century, Leyland (1884) collected several Algonquian folktales about women. The first tale concerns how two girls were changed into water snakes. The "two young Indian girls had a strange habit of absenting themselves all day every Sunday.... They were wanton, witch-like girls, liking eccentric and forbidden ways". Then one day they were seen by a man who discovered that they were secretly transforming themselves into snakes with very long black hair. Because they had been seen by the man, the girls could never again assume human form (Leyland 1884:268). The Passamaquoddy also have several versions of a tale about a woman and "At-o-sis" the serpent. Again, it is interesting to note the subtle connection in these tales between women and the serpent or Hobbamock.

Similarly, other Contact Period reports describe somewhat surreal events in which black snakes act aggressively towards Christian symbols and recent converts. A Mashpee tradition tells of an occasion when a group of black snakes attacked Deacon Nauhaught (Simmons 1986:79). Blacksnares were also said to have invaded the Wampanoag church at Herring Pond in the eastern part of Plymouth (Simmons 1986:88). Black snakes frequently retained negative symbolic associations with shamanism (Simmons 1986:261). The snakes in these stories can be viewed as representations of Hobbamock, and thus may be interpreted as symbolic Native cultural resistance to European beliefs, especially
Christianity. Since Algonquian women were often spiritual leaders it is not surprising to note again their connection to traditional symbols of spiritual power.

SUMMARY

As previously stated, there are two categories of "pestle" shaped artifacts: effigy pestles and non-effigy pestles. Non-effigy pestles are either ambiguously notched and grooved or have no ornamentation, and seem to have been used as domestic or utilitarian devices for at least several thousand years. Effigy pestles typically represent animal heads and human faces. They were not used as typical grinding pestles and are found almost exclusively in women's burials of the Contact Period. Effigy pestle forms remind the viewer of several common motifs in Algonquian symbolism. The general shape of effigy pestles is very close to that of a pestle, reminding people that women produce much of the food which is consumed daily and traded periodically. Simultaneously, effigy pestles are objects that had spiritual power (manit) relating to Hobbamock, a spiritual familiar, or an animal with mythological significance. The traditional female occupations as both food producers and spiritual leaders are expressed in the symbolism inherent in effigy pestles. These objects may have marked a woman as important to her community's relationship with the spiritual world. Such a woman could have used the effigy pestle to heal the sick, divine the future, or threaten and possibly attack those whom she perceived as dangerous. Archaeological evidence suggests that upon death, these women were interred with their effigy pestle, which was a personal possession for use in the afterworld.

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Figure 2. Effigy and uninterpreted notched and grooved pestle distribution (for key, see Table 1).
TABLE 1. EFFIGY PESTLES AND UNINTERPRETED NOTCHED AND GROOVED PESTLES OF MASSACHUSETTS (see Figure 2).

1. Beaver Pond site, Franklin, Massachusetts. An engraved pestle, on one side is the pecked out form of a serpent...on the opposite side appears a chevron design, 29.7 cm long, 5.7 cm wide (Fowler 1969:26).


3. Indian Hill site, Hadley Massachusetts. Springfield Science Museum, W.S.Rodimon Collection (I-5, 19-HS-294). Bear's head effigy pestle, 64.2 cm long, 6.7 cm wide. Polished. This site is a Contact period burial place (Wilder 1905).

4. Winthrop site, Winthrop, Massachusetts. Zoomorphic (whale) effigy pestle in burial of a 3-5 year old child, 26.7 cm long, 4 cm wide (Willoughby 1924:14).


10. Merrimackport, Massachusetts. Peabody Museum, Andover #62113. Zoomorphic effigy pestle, 8.9 cm long, 2.3 cm wide.

11. Concord Antiquarian Museum. Eel headed effigy pestle, identified by Slow Turtle, 22.8 cm long, 4-5 cm wide (Blanke and Robinson 1985:26).

12. Bartlett Farm, Boxford, Ipswich, Massachusetts. Peabody Museum, Salem #E52275. Zoomorphic effigy pestle, 82 cm long, 4.2-5.7 cm wide.

13. West Street, Beverly, Massachusetts. J.W. Andrews Collection, Peabody Museum, Salem #52277. Zoomorphic effigy pestle, 51.4 cm long, 5.7 cm wide.

14. Newburyport, Massachusetts. Moulton Collection, Peabody Museum, Salem #50579. Effigy pestle, 51 cm long, 5.6 cm wide.


22. Mansion Inn site, Wayland, Massachusetts. Uninterpreted notched or grooved pestle (Dincauze 1968:plate XVII,1).

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I really enjoyed these papers presented by Chilton (1993), Handsman (1992), Hautaniemi (1993), Volmar (1993), and Ward (1992), because they not only deal with issues in recognizing gender, but also address feminist questions and issues in a variety of contexts. Theory determines what is considered important to research, the questions we ask, and our interpretations of the meaning(s) of these data. As a feminist, my question of these gender papers is: What feminist issues did they address, whether explicitly or implicitly (Spencer-Wood 1992)? I hope that making the feminist issues in these papers explicit will be useful in understanding the shared themes that unify across the diversity of cultures and time periods addressed in these papers.

Feminist Critiques of Androcentric Biases in Archaeology and History. These authors would clearly agree with feminists such as Englestad (1991:118), Harding (1983:312), and Wylie (1991-1992:18), who have pointed out the need to research gender as a fundamental cultural construct that structures all social relationships. Hautaniemi points out that both gender and race are cultural constructs, thus distinguishing the social meaning of these categories from biological or physical differences. The papers in this session also implicitly agree with feminists that gender cannot simply be added to sexist constructions of the past (cf. Conkey and Gero 1988:4). Instead, these papers view the past through women's experiences and viewpoints, thus critiquing and correcting androcentric (male-centered or sexist) biases in archaeological and/or historical constructions of the past.

The most fundamental male biases in archaeology and history involve the complete lack of consideration of gender, or the portrayal of men's roles as more important than women's roles. Ungendered text facilitates both of these biases, since men's viewpoints and behaviors are often presented as cultural norms, either completely excluding women from the past, or dismissing their views and behaviors as deviant exceptions (Spencer-Wood 1992). The tradition of neglecting gender in archaeology is indirectly critiqued and corrected by the focus on gender in all these papers. Chilton has explicitly critiqued the widespread bias of emphasizing the cultural importance of romanticized male roles, as in Man the Hunter, while giving little or no consideration to the importance of women's roles or non-hunting tools. Chilton also correctly critiques the idea that the Man the Hunter construction of the past is an evolutionary advance over no sexual division of labor. Chilton follows Gero in connecting such sexist biases to the male-controlled reproduction of archaeological knowledge (Gero 1991).

The other papers less explicitly critique the widespread androcentrism resulting in a neglect of historic and prehistoric women. Handsman contrasts a construction of historic Mohegan culture in terms of male hierarchies and an ungendered Marxist construction emphasizing resistance to male hierarchy, with a gendered account about women's resistance to male dominance.
comparison of possible constructions of the past demonstrates how Mohegan women's viewpoints and experiences are different from men's, resulting in very different constructions of the past. Ward points out how the male bias in historical documents has led historians to emphasize the importance of men's patterns of inheriting land over women's seldom documented inheritance of personal property. Volmar points out how effigy pestles have been trivialized as peculiar, unimportant domestic artifacts. These are both examples of the sexist bias of devaluing women's symbols and sources of power, which is part of the devaluing of women in modern western culture (Spencer-Wood 1992).

Empowering Constructions of the Past: Domination and Resistance. These papers also take a feminist approach in rejecting the universal projection of modern gender stereotypes onto past cultures, particularly the sexist view of women as powerless and passive (Spencer-Wood 1991a, 1992). Instead these authors found that women resisted male dominance. Hautaniemi analyzed documentary data indicating how Mrs. Wooster resisted the white cultural image of African-American women as domestic servants and supported herself by working at home. In addition, it seems worth pointing out that working at home, as most women did in performing housework, taking in laundry or boarders, or doing factory out-work, makes it clear that the ideology of a public wage-work sphere separated from a domestic leisure sphere is a male middle- and upper-class view. Handsman found evidence that Mohegan women were not passive, but powerfully resisted male dominance, paralleling the Mohegans' resistance to domination by the colonialists. Volmar found evidence of the use of Algonquian woman's effigy pestles to successfully resist male domination in marriage, and further, their use by a band of Niantic to resist capture by the Mohawk. Ward presents evidence of one woman's successful resistance to her father's will that required her to put her father's initials on some inherited silver candlesticks. Instead she inscribed her own initials. Domination and resistance is a Marxist framework originally developed to analyze class relations, but also usefully extended to analyze the oppression of other social groups, such as ethnic groups by colonialists, and women by men (e.g., McGuire and Paynter 1991).

Empowering Feminist Constructions of the Past. Beyond resistance, most of these papers at least hint at sources of women's power. Volmar recounts the legend about how Niantic women's effigy pestles had the power to protect an entire band from being captured by enemy Mohawks. He further points out that the legend about the Algonquian woman who used the magical powers of her personal property, including effigy pestles, to evade and kill her neglectful husband, is not only about resistance, but about women's power in that society. Legends and myths encode cultural norms and expected behavior. I interpret the cultural message of this myth as follows: If a man does not meet his obligations to his wife she is justified in leaving him, and the community supports this by not pursuing her, and by creating a myth about women's greater magical powers than men in these situations.

This type of interpretation is further supported in Handsman's account of women's resistance to the creation of patriarchal elites by emphasizing traditional Mohegan cultural values of obligation and communal mutuality. These traditional values of mutuality seem to be related to the interdependence Handsman described between some Mohegan women's and men's roles. Handsman also noted the egalitarian communal values represented in women's pottery designs. Further, he discussed how women increased their power by strengthening their symbolic and material association with, and control over, the essential resource of corn. Beyond resistance, this seems to me evidence that Mohegan women increased their corn
power to balance men's increasing trading power during colonialization.

A possible feminist interpretation of interdependence and some balance of power between men and women is suggested by these papers. Handsman noted that Mohegan women controlled corn, and men controlled deer. Volmar researched how Indian women had magical powers in some cases greater than those of men. Ward shows how women inherited personal property needed for men to set up a working household in the houses or on the land they inherited. Ward found evidence that inheritance through the female line was a cultural tradition that was important both to women and men. Hautaniemi found that the W.E.B. DuBois farmstead was passed down through the female line, a tradition that made women powerful in this family. These cases indicate that women had some sources of power to counterbalance men's sources of power. These cases, along with Chilton's emphasis on variation in men's and women's roles, suggest that a feminist model of interdependence and negotiation of a power balance in gender relations may be appropriate (Spencer-Wood 1991b).

Another aspect of a feminist approach supported by these papers is a rejection of the post-processual idea that a feminist view is just an "alternative reading," that is no more valid than an androcentric reading of the past. Most of the papers implicitly reject the idea that all readings of the past are equally valid by critiquing and correcting androcentric biases in constructions of past cultures. Feminism is more valid because it is more comprehensive than androcentrism. That is, feminists must explicitly or implicitly discuss androcentric models in order to critique and correct them. Further, feminist critiques eliminate or correct androcentric biases, thus creating less biased constructions of the past (Spencer-Wood 1992). All the papers in this session have corrected sexist biases with information about women's roles that was previously excluded from models of the past.

These papers implicitly reject monolithic sexist constructions of women and men and support feminist constructions that are more valid by being more inclusive of the diversity of experiences of both women and men. Handsman mentions diversity in the behaviors of both Mohegan women and men, Ward discusses the variety in colonial European women's experiences, Chilton discusses flexibility in prehistoric gender roles and multiple uses of tools, and Volmar discusses multiple powerful uses and significances of Algonquian women's effigy pestles.

Hautaniemi addresses diversity by examining the intersection of race and gender at the W.E.B. DuBois site. Documentary data make it clear that the Burghardts did not associate with other nearby African-Americans because, as one of the oldest families in town, they identified themselves with families of higher socio-economic status. They associated with long-term white residents, and Mrs. DuBois belonged to a white church and white temperance society. This identification with the high status white community may explain Mrs. Wooster's consumption of patent medicines picturing white women, the lack of any specifically African-American material culture, and her resistance to working as a low status domestic servant, an occupation that became 40% African-American by 1920 (Hayden 1981:172). Also, Hautaniemi may find it useful to connect the diabetes patent medicine bottles with the prevalence of this disease among African-Americans.

The temporal dimension of diversity and change in gender roles is also discussed by these papers. Handsman discussed how European contact increased Mohegan men's trading power, destabilizing the pre-contact gender power balance, such that Mohegan women sought to increase their corn power to maintain the balance of gender
interdependence. Ward discussed changing gendered inheritance patterns, and Hautaniemi discussed changing gender roles mostly related to subsistence and means of economic support. The evidence in these papers supports the feminist argument for rejecting essentialist constructions of women and men and analyzing diversity and flexibility in gender roles (Spencer-Wood 1992). While an inclusive feminist theoretical approach is congruent with these papers, none of them discusses this explicitly.

Methodology in Recognizing Gender. In proposing an inclusive model of the complex variety and overlap in gender activities at paleoIndian sites, Chilton faces the common problem of trying to identify women's and men's artifacts without documentary records of gender roles. It is necessary to make some assumptions that are difficult or impossible to test. The assumptions that Chilton makes about women's activities being close to domestic sites, including local hunting, seem reasonable, and she correctly stresses that these assumptions are not universal, but will vary based on artifact patterns and knowledge about cultures. For instance, in some cultures women's activities are not all close to domestic sites, as when women among the !Kung bushmen go gathering as far as 5 miles from camp in the dry season (Lee 1968). Further, in a number of cultures women hunt either with men or alone at some distance from home sites (cf. Estioko-Griffin and Griffin 1981; Leibowitz 1978:198; O'Kelly 1980:85,91-2). And of course not all cultures will have nuclear families as in Chilton's model. Extended family structures have been identified on the basis of size and number of hearths.

Chilton's strategy of differentiating shared family activity areas from special task areas would certainly be helpful in possibly suggesting gender roles. Features are particularly useful in identifying tool assemblages used in different activities, which might be assignable to women or men as Chilton suggests. Community-wide activity areas also need to be identified, as these suggest community-wide participation. I suggest pushing more in the direction of the diversity and flexibility of women's and men's activities, which Chilton mentions but has difficulty building into a model that must make generalizations about sex roles. There is an unavoidable conflict between the desire to ascertain diversity in gender roles, and the necessity of generally assuming some gender roles when they are not documented. My question is whether it would be possible to look more at how tasks are interrelated and from this begin to infer interdependence in women's and men's roles and relationships. The spatial relationships among activities that can be identified through features or activity areas may facilitate this. It might be possible to analyze the different tasks involved in these activities. Analyzing the relationships among tasks, and task sequencing involved in activities, followed by relationships among activities suggested by spatial proximity of remains, may permit further inferences of interrelated gender roles. Spector's feminist "Task Differentiation" method may also be useful in analyzing how gendered aspects of subsistence strategy are interrelated (Conkey and Spector 1984).

Hautaniemi had a similar problem identifying the gendered use of medicine bottles from a dump used by a household of men and women, family and boarders. This shows how, even at historical sites, documentation is often inadequate to associate particular artifacts with either men or women. An either/or approach to gendering artifacts is often difficult to impossible, except at single gender sites. Hautaniemi correctly notes that the difficulty in gendering artifacts doesn't mean that nothing can be learned about gender at a site. In fact, the lack of some gendered artifacts can be a source of information. For instance, the absence of patent medicines specifically for women's ailments suggests that Mrs. Wooster did not subscribe to middle- and upper- class ideologies of
the frailty of women and particular liabilities assigned to women's physical differences from men. This along with the documentary evidence that Mrs. Wooster worked in her own home rather than in elite women's homes, suggests that this African-American woman rejected elite white gender ideologies of women's inherent weakness and dependence, for an ideology emphasizing economic independence and female strength. That the Burghardt women were powerful is indicated by the family property being passed down through the female line, and Mrs. DuBois' membership in the Temperance Union.

Further, feminist historians have recently identified a variety of gender ideologies besides the Cult of Domesticity that were subscribed to by diverse 19th century women. For instance, both domestic reformers and Lowell millgirls praised the nobility of work and criticized the elite Anglo ideal of the idle decorative domestic wife because it glorified the sin of idleness (e.g., Preston 1987). Feminist historians have recently identified two other alternative middle-class women's gender ideologies: The Cult of Real Womanhood, which advocated physical health, careful marriage, and educating women in case they had to support themselves and their families (Cogan 1989); and The Cult of Single Blessedness, which supported women in remaining single and economically independent, as did an unusual proportion of women from the late 18th century through the 19th century (Chambers-Schiller 1984; Spencer-Wood 1991b). Many 19th century women, including reformers such as the temperance crusaders, subscribed to these ideologies that advocated women's ability to support themselves and their families.

**Conclusion.** In sum, these papers take similar feminist approaches in explicitly or implicitly critiquing sexist constructions of the past and correcting male biases from the viewpoint of women's experiences in the past. These papers don't simply deconstruct male-focused models of gender, they also construct more inclusive models of the diversity in women's and men's roles and activities across a wide variety of different cultures and time periods. I hope that all of us can continue to correct the sexist frameworks hampering archaeology and history in order to gain greater insight into the diversity of gender ideologies, identities, roles, and relationships in the past.

**Acknowledgements:** My thanks to Freddie Dimmick and Toni Wallace for inviting me to comment on the interesting gender session that they organized for the 1992 MAS meeting. And I'm very grateful to Elizabeth Little for editing this paper for the Bulletin. Any remaining errors are my responsibility.

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Reference citations in the text should include the author’s name, date of publication, and the page or figure number, all enclosed in parentheses, as follows: (Bowman and Zeoli 1973:27) or (Ritchie 1965: Fig. 12). References cited should be listed in a final section alphabetically by author and presented as follows:

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All illustrations, called figures, should be submitted as originals. Each figure with its caption should fit within the space available on a Bulletin page, which is 17 cm by 23 cm (6 & 1/2 x 9 inches), allowing for margins. Full, half or quarter page figures should be planned carefully. If figures are to be reduced, be sure to start with appropriately large lettering. Figures must be referred to in the text and are to be numbered in their order of reference, with their number placed lightly on the margins of their reverse sides. Every item in each figure and each person should be identified. All lettering must be clear and legible and have high contrast; dry transfer letters available at any stationery store are fine. Photos must be glossy prints with high contrast. Scales with dimensions should be included in all figures for which they are appropriate. Captions, not a part of the illustrations, should be typed on a separate sheet in order and numbered to correspond to the figures.

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Radiocarbon ages should be reported as radiocarbon years ± sigma B.P. Please state whether 813C-corrected (give 813C) or uncorrected and what material was assayed. Calibrated ages may be added, with reference to the method of calibration.

Anthony R. Philpotts

Throughout most of the world, prehistoric people used chert more than any other lithic material for making tools. Archaeologists should therefore know as much as possible about this prized material. Unfortunately, the data on chert are spread not only through the archaeological literature, but through journals dealing with geology, materials science, and engineering rock mechanics, which for many archaeologists is unfamiliar territory. In An Archaeologist's Guide to Chert and Flint, Barbara Luedtke has brought together almost all of this information and presented it in a manner that can be easily understood, despite some of its technical nature. Luedtke begins the book by clearly defining chert and considering the various materials that can be classified under this general heading (e.g., flint, jasper, novaculite, and chalcedony). Next she goes on to consider the geological environments in which each of these types of silica is formed. This sets the stage for the next chapter covering the chemistry of chert, where we learn that the composition of this rock is strongly influenced by its mode of origin. This is of particular importance to archaeology because, in many cases, it allows us to source the chert on the basis of composition, or at least to narrow our search. Cherts are highly variable in appearance, and the causes for these variations at both the macro- and micro-scales are discussed at some length. Finally, Luedtke introduces the reader to the mechanical properties of chert and how they are measured, which is probably the most technical part of the book, but she does it in a way that will keep the attention and interest of even readers with the strongest phobia for things quantitative. This is an important part of the book, for the strength of chert largely determines its knapping quality and thus its desirability for making tools. The book ends with appendices that are crammed with data on various well known cherts, and a glossary of important terms.

Chert is formed by the precipitation of silica mainly in sedimentary rocks and to a lesser extent in volcanic rocks and fault breccia. The main requirement for its formation is a flux of fluid (essentially hot water) that can transport and precipitate the silica (SiO$_2$). The solubility of silica under most conditions is rather low, so large fluxes of fluid are required to form significant chert deposits. Luedtke explains how the solubility is affected by such factors as temperature, pH, and other ions in solution. She then describes how the concentration of the solution and the precipitation rate control the crystallographic form of the silica precipitated—colloidal, opal-A, opal-CT, chalcedony, and micro crystalline quartz. With burial, this precipitate ages over millions of years to form the micro crystalline quartz of most cherts. During this period cherts develop their characteristic textures, which control their mechanical properties. These textures are described in terms of their appearance in hand specimens, under the polarizing microscope and in the scanning electron microscope.

Although chert is composed essentially of micro crystalline quartz, it is highly variable in composition. This variability is due in large part to inclusions of the surrounding sediment that are incorporated during formation. Thus,
cherts in limestone typically contain carbonate inclusions, whereas those in shales contain clay minerals. These inclusions are the main source of trace elements, which may give the chert a characteristic chemical signature. The book does not attempt to give a comprehensive listing of the chemistry of all known chert sources, but an appendix does give these data, along with other descriptive properties, for a number of well known localities. These include, in alphabetical order, the Amherstburg chert, Arkansas novaculite, Bald Eagle jasper, Bayport chert, Bois Blanc chert, Brush Creek chert, Burlington chert, Cordell chert, Coxsackie chert, Delaware chert, English chalk flint, Flint Ridge chert, Indiana Hornstone, Kettle Point chert, Knife River flint, Lambrix chert, Limerock jasper, Petrified Forest silicified wood, Plum Run chert, Put-in-Bay chert, Serra Geral agate, Stevens flint, Stoney Creek chert, Tenmile Creek chert, Upper Mercer chert and Zaleski chert. Even though your favorite chert may not be included, the list does give a very good idea of the chemical data that are available or that can be collected.

Chapter 6 leads the reader carefully through the rather technical field dealing with the mechanical properties of chert. The author discusses the different ways in which strength, elasticity, and hardness are measured and some of the commonly used units. A tabulation of this information for many well known cherts shows at a glance the relations between the Callahan grade for ease of workability, crystallinity index, grain size, grain surface area, density, H2O content, Young’s modulus, Poisson’s ratio, compressive strength, tensile strength, toughness, and hardness. Considerable space is devoted to discussing how these various measurements relate to the workability of chert in tool making.

The properties of chert can be significantly altered by human or natural processes. Heat has the biggest effect, and Luedtke describes many thermal procedures that have been used to improve the workability of chert. These processes inadvertently provide a means of dating cherts by thermoluminescence, because the heating rezeros the electron clocks. The surface of chert is also altered by the slow process of weathering, which is strongly dependent on the environment. It is important for archaeologists to recognize these weathering effects so that they can be distinguished from cultural modifications of the surface of artifacts.

Throughout the book abundant references are given to the literature on chert, and the lengthy bibliography will allow the reader to delve further into the related fields of geology and materials science.

The author points out that she had three main goals when starting the book—to show that the various properties of chert are interrelated; to determine which of these properties are the most important; and to find a simple way of determining the key properties. Although none of these was achieved completely, the book represents a major step in that direction. Chert is far too complex and valuable a material for these relations to fall out of a small data set, which will have to be expanded considerably before these goals are fully realized. Toward that end, Luedtke proposes the setting up of a chert data base that would not only bring needed uniformity to the way in which we describe cherts and measure their properties, but it would also provide archaeologists with a systematic way of trying to determine the source of any given chert.

This book contains a wealth of information about chert and the template through which future studies of this most important lithic material should be conducted, and as such, this book belongs on every archaeologist’s shelf.
Sometimes, Fate follows a peculiar path in selecting the chroniclers of her history. An uneducated seaman turned undertaker, confined by his heart trouble, seems an unlikely candidate for an historian. Warren Sears Nickerson, the youngest of a family of nine boys and three girls, was born in East Harwich, Massachusetts, December 5, 1880.  

My father Warren Jensen Nickerson, married Mary Atkins of Chatham, who was the daughter of a deep-water sea captain, Captain Joshua Atkins. They set up housekeeping in the old Enos Rogers house northwest across the swamp from grandfather Nickerson’s. The house where mother and father lived and where I was born is now (1949) owned by a Mr. Hubbard. It was built in 1807 during the ‘Embargo’ and the wide boards for its floors and panelling were run in through the blockade.  

Since Pleasant Bay is central to his writings, being both source and inspiration for much of his work, it is important to note Nickerson’s observations about The Bay:

From the front door...I can overlook the whole length and breadth of The Bay. From there I see the mid-summer sun break up out of the eastern rim of the Atlantic and peer in through The Narrows as through an open window, to waken its sleeping waters. At sundown I watch the smoky sou’wester roll its blanket of fog down out of the Head of The Bay to put its waves to sleep again. And through the stillness of the night there comes up to me the soft lullaby of the incoming tide on its sandy shore.  

From my front door I can also see the hills over The Bay under the lee of which my immigrant ancestor built his pioneer cabin. He was the first white man to settle in the Land of Monomoyicks. His house stood at the head of Ryder’s Cove in Chathamport next door to the wigwam of the Old Sagamore from whom he bought his land [in 1656]. Here they grew old together, the white man and the red, good neighbors always.

Almost every foot of land from the West Shore of The Bay around Great Point and so on down the harbor to the Bars can trace its title to the deeds from the Monomoyick Sachems to William Nickerson and his children....For nearly three hundred years and through ten consecutive generations straight down to me, the children and children’s children of the Immigrant and his wife Anne have lived, loved, and with one exception been buried in the lands bordering The Bay.  

Leaving The Bay and his tenth grade education at Orleans High School, Nickerson for almost twenty years sailed the Seven Seas and touched at most of the major ports of the world in the days of the square-rigger. After his years as a sailor, he returned to Harwich to become a steeplejack, an occupation that he followed for a couple of years.
He married on September 1, 1918, Miss Donna May Corliss (1893-1973), a girl from Wolfeboro, New Hampshire, who had attended Mount Holyoke on a four-year scholarship to study to be a secondary teacher in Latin and English. He greatly admired his wife's being college educated, and she was very supportive of his writing. He told a potential publisher, I will have my wife go over the text and correct my slips in punctuation, paragraphing, as well as general grammatical errors. She is a Mt. Holyoke graduate and a language teacher, while I got my A.B. as able seaman in a school where a split main-top sail was of much more concern than a split infinitive.

They had three children: Mary A. Marble, Jean C. Primavera, and Dorothy N. Ross (deceased). Nickerson had had two children by his first wife: Mary Atkins Nickerson (deceased) and Elizabeth W. Eldridge.

Turning his back on the sea for a living, Nickerson picked what he thought was to be the final profession of his life. He took a course at the Massachusetts School of Embalming. He then built a successful undertaking business in Harwich. He served on his home town's Board of Selectmen (city council), was treasurer of the Cape Cod Chamber of Commerce, a director of the Cape Cod Trust Co., and took part in all local Masonic, civil, and religious affairs. He was Master of the Masons. He said one reason he was successful at the polls as a Harwich Town official was because half of the voters were named Nickerson. "So how could I be defeated on election day?"

Shortly before 1930, he had a heart attack, and it was then the doctor told him he would have to move to warmer weather, to relieve the cold weather strain on his heart or he wouldn't live six months. The need for leading a quiet life led Nickerson to move to Daytona Beach, Florida. With time on his hands after his heart attack, he took up genealogy and Indian research as a hobby. From his interest in his own genealogy coupled with his sea-going knowledge, he wrote a book published in 1931 by Houghton Mifflin Company, entitled Land Ho! 1620 A Seaman's Story of the Mayflower, Her Construction, Her Navigation and Her First Landfall.6

Other than the writing that resulted from his personal genealogical research, his extensive study of native American genealogy and culture made him the unquestioned authority of the Lower Cape Indians. A Thanksgiving Day 1954 letter to his nephew Josh7 who was trying to get the Chatham Historical Society to publish his papers on the Lower Cape Cod Indians best describes his work in that area. His summary follows:

I use the term 'Lower Cape' to signify the terrain from Bass River to Provincetown. I have identified about thirteen hundred Indians by name in this territory, assembled them into families where possible, and grouped the families into the three Tribes into which they seem naturally to fall, namely The Monomoyicks, The Nawsets, and The Sauquatucketts. What I have learned about each individual is authenticated by references to old deeds, documents, court records, military lists, and the like. Taken as a whole, my Papers give a complete picture of Indian Life on the Lower Cape from the landing of the first white man until the last half-breed Indian hit the final trail to Mashpee or Gay Head....

After the death or disappearance of Sachem Aspinet of the Nawsets in the abortive Indian plot of 1623 to wipe out the white colonists, Mattaquason, who was about the only Indian sachem between Boston and Provincetown not implicated in the plot, became the dominant leader of
the Lower Cape Tribes. On the confirmation deed of the Nawset Purchase, signed by all the 'Ancient Indians,' his name alone was honored by the title 'Sagamore.' The disintegration of the Nawsets and Sauquatuckets as tribal entities was swift and complete, and Mattaquason gave their dwindling ranks a sanctuary out of his Tribal Lands in what we know today as South Orleans. Here they hung on for a while and became known as the Potnuicut Tribe....

Mattaquason became known as The Old Sagamore, and my notes give a completely documented history of him and his family from the time of his birth, circa 1600, down to the death of his great great granddaughter Hosey Ralph in 1800. She was the last of his blood-kin to live and die on the ancestral Tribal Lands, as well as the last full-blooded Indian woman on Lower Cape Cod. She was born, lived, died, and was buried within a stone's throw of your [Josh's] house in East Harwich. This two hundred year period covers the whole story of the Monomoyicks after the landing of the white men.

I have my notes grouped under three covers. "Group I, The Monomoyicks," made up of about one hundred and fifty single-spaced, typewritten sheets...containing about sixty-four thousand words and listing the names of some two hundred and seventy Monomoyick Indians. These are assembled into families as far as possible; the information on each individual is documented by reference notes at the bottom of each page, and each volume is indexed.

"Group 2, The Nawsets," contains about two hundred sixty-seven sheets, one hundred and twelve thousand, five hundred and seventy-five words, and the names of seven hundred sixty-five Nawset Indians, arranged, documented, and indexed as above. "Group 3, The Sauquatuckets," contains about seventy sheets, twenty-nine thousand, eight hundred and fifty words, and the names of two hundred and seventy Sauquatucket Indians, arranged, documented, and indexed in the same manner.

This sums up to approximately four hundred and eighty-seven sheets, two hundred and six thousand, four hundred and twenty-five words, including a general introduction, explanatory maps and indices, and covers the lives of one thousand, three hundred and five Lower Cape Cod Indians.

Nickerson devoted much of his life to finding a publisher and/or a depository for his native American research. The Peabody Museum of Archeology and Ethnology, Harvard University, currently has two papers: "Micah Rafe," and "The Old Sagamore." Nickerson failed in his effort to deposit material at the Museum of the American Indian Heye Foundation in New York. Likewise, he didn't succeed in 1945 in getting the New England Historic Genealogical Society to publish a piece in their Register although William Carroll Hill, the editor, in 1945 suggested the Society would like to be a depository for Nickerson's genealogical material, which, indeed, did occur. He sent Stephen T. Riley, librarian of the Massachusetts Historical Society, a copy of "The Old Sagamore, Mattaquason of Monomoyick", which appears to have disappeared.

Nickerson's nephew, Josh, worked very hard for several years especially with the Chatham Historical Society and the Robert S. Peabody Foundation for Archaeology in Andover, trying to help his uncle achieve publication.

Nickerson, following his own leads, was finally to find a publisher for two of his articles
with the Massachusetts Archaeological Society. Maurice Robbins, the Museum Director, wrote him April 21, 1957,

You should not depreciate your abilities as a writer, the papers you sent along are excellently written, indeed, they could be published with a minimum of editing I assure you. Most important they are largely new information resulting from your own research, well documented, and excellently organized. These should by all means be published as the information they contain should be available to scholars. I knew Frank Speck very well (he is now deceased) and I know that he was not at all satisfied with his Cape Cod work. Were he alive he would be the first to welcome new information which would correct and amplify his brief study of the Cape Indians. If such material is not available in print the writers will do just as I did and copy Speck. We are all of us very glad when someone like yourself speaks up to correct us.

...We have a circulation of about 600 and cover the entire country. About seventy-five of the larger institutions of learning are among our subscribers.

In the meantime, Josh was "checking out" the Massachusetts Archaeological Society. The middle of May, Josh quoted Douglas Byers:

Indeed I do know about the Massachusetts Archaeological Society, having been one of those who assisted at the accouchement. It is [a] bunch of amateurs, some of whom consider themselves archaeologists, but most of whom are passively interested in 'Indians.' They have more than 500 members, but no spare money in the till. All their cash goes to publishing their quarterly Bulletin, except for a small bit used to run the Society, and some which they contribute to keep a rather nice museum going in Attleboro.

Robbins was president for a time, then editor, and has been active for many years; however, he is no long editor. That post is now filled by Leaman F. Hallett, 31 West Street, Mansfield, Massachusetts. He is a stockbroker by trade, but from the point of view of intimate knowledge of the Indians of New England, not only as individuals but also as regards their habits and history, is probably more well informed than anyone in New England since Gookin, who was the Indian agent in 1670 or thereabout.


Nickerson was not working in a void on Native American history and culture. He had a number of people as sources, giving both material and emotional support. Cleon Crowell and Stanley W. Smith were unquestionably his most notable contacts. His correspondence with his friend, Stanley Smith, a collector of documents, was heaviest in the 1930's. Cleon S. Crowell had a rare collection of all kinds of Indian artifacts from Eastham, Chatham, Harwich, and Brewster. He had found skulls of bears, moose, and wolves. Among his collection he had arrow heads, a tobacco pipe, a bone fish harpoon, stone spears, a stone breast ornament, a bone comb or hair ornament made of a deer's antler, and enough Indian pottery to enable him to trace the evolution of pottery making. Nickerson, himself, became a collector of arrowheads, always poking with his cane in search of one.
There were others: Frank Smith, Howard Torrey, and John H. Paine were partners in excavations. Gilbert R. Payson of Orleans, who had interviewed old gunners' and haymakers' descendents concerning place names, wrote him March 11, 1933,

Save your eyes for your studies of the Indian histories, which are much more important. I shall continue to pass along anything I can find which may interest you....

Nickerson started in October 1928 a correspondence with Warren K. Moorehead, Director of the Department of American Archaeology at Phillips Academy, Andover, Massachusetts. Also among Nickerson's colleagues was Russell H. Gardner (Great Moose), Wampanoag historian, who corresponded with Sears in the early 1960's; Sears said that he would have to leave Gardner the task of working on the Indians of the Upper Cape.

While it is true that Nickerson left the work on the Indians of the Upper Cape to other hands, he has left us a wealth of research on the Lower Cape Cod Indians, on the Mayflower, on some of its descendents, and on the history of the first encounters among the Native Americans and Europeans in New England.

ENDNOTES

1. He died in January 1966. This article draws on material in the introduction to Early Encounters -- Native Americans and Europeans in New England: Selected Papers of W. Sears Nickerson, by Delores Bird Carpenter, with permission of the Michigan State University Press, in press. Unless otherwise noted, the letters quoted in this article are from the Papers of Warren Sears Nickerson in the Archives of the Cape Cod National Seashore, South Wellfleet, Massachusetts.


3. Ibid., p. 6.

4. Ibid.

5. Ibid., pp. 7-8.

6. The information on Nickerson's occupations and family life come from an article by Ed Fulke, "Success Story--1880-1952" (Daytona News Journal, Oct. 12, 1952) and from Nickerson's daughter, Jean C. Primavera.

7. Joshua A. Nickerson, Sr. (1902-1990) was a Cape businessman and a Cape benefactor as well as the author of Days to Remember. There are several copies of this letter. I used the one in the possession of E. C. Nickerson, brother to Joshua Nickerson. The research described in this letter is in the Papers of Warren Sears Nickerson in the Archives of the Cape Cod National Seashore, South Wellfleet.

8. The New England Historic Genealogy Society has three boxes. Boxes I and II contain Nickerson family genealogy; box III is miscellaneous.

A PETROGLYPH FROM WHITE’S ISLAND, MONPONSETT POND, HALIFAX, MA,
AND SOME HISTORICAL AND ARCHAEOLOGICAL NOTES ON THE SITE

Russell Herbert Gardner

Islands by their very nature are special places. When this mystique includes evidence of historic and prehistoric human activity, plus a well documented record of the historical events related directly to King Phillip’s War, it becomes of great interest to the history and archaeology of this region.

White’s Island (Figure 1; Figure 2), located astride the 42nd parallel in the center of Monponsett Pond, Halifax, Massachusetts (Baker 1976:172) and close by the geographic center of Plymouth County, Massachusetts, is just such a place. It is a true island of approximately twelve acres (Peirce 1878:199). Since 1859, a causeway and bridge across 527 acre Monponsett Pond has connected the Island, north and south, with the lakeshores (Baker 1976:107). The Island was named for one Joel White, who operated a ferry on the lake prior to the construction of the 1859 causeway. The properly descriptive Algonquian name, Monponsett, means Island Crossing Place, and so it still is as a part of today’s Route 58.

The Island’s documented and traditional history indicates its importance in events leading to King Phillip’s War and its closing episodes. Monponsett Pond is one of the very few documented sites where dugout canoes were constructed in colonial times (Robbins 1984:5), in this case by Wamsutta, son of Massasoit (Ousamequin). Physical evidence of this activity in the form of a concentration of fire-cracked cobbles, such as were used in the dugout making process (Champlain 1604), occurring here on the adjacent neck of land just north of the Island, still gives mute testimony today (Gardner, personal observation). As late as 1877, the Island scenery was described by Capt. Ephraim B. Thompson of Halifax as "still most wild and romantic" (Peirce 1878:199). It was developed as White Island Park in the year 1921 and divided into 29 house lots. This 29th lot was to produce a most fascinating artifact as will be seen.

It is well documented that Monponsett Pond along with Raynham’s Fowling Pond and Titticut in Bridgewater-Middleboro were locations favored by the Pokanoket sachems (Peirce 1878:41). A hunting house of Massasoit and his family was traditionally located on the southwestern side of the Island (Peirce 1878:199). Physical evidence of prehistoric or contact period use of the island was recently unearthed by the author at the Island’s center. Two pestles (Figure 3), the larger...
being some 12 inches by 4 inches (30 cm x 10 cm), the smaller some 7½ inches by 3 inches (19 cm x 8 cm), were found, indicating a regularly occupied campsite there.

It is worth noting here that one of the latest-utilized stone implements by the local Indians was the pestle. In fact, during King Phillip's War Indian camps were located by the pounding of a pestle in a mortar (Speck 1928:61).

Following his father's death in 1660, Wamsutta, or Alexander, eldest son of Ousamequin and brother of Metacomet, or King Philip, had become Sachem of the Pokanoket, or Wampanoag, confederation of Indians. In 1662 he was called to account on a flimsy pretext and, as he didn't immediately respond, was apprehended by Major Josiah Winslow at Wamsutta's hunting house at Monponsett Pond (Peirce 1878:41). "He was there getting canoes," wrote Rev. John Cotton in a letter to Increase Mather, quoting Major William Bradford, one of the participants (cited by Robbins 1984:5). He was then taken to Marshfield where he became gravely ill. Though released to return to Pokanoket, he did not survive. It was believed by Phillip and others that he had been poisoned (Robbins 1984:1-6), an incident, "said to have precipitated King Phillip's War," according to the Halifax Historical Society's 1934 commemorative plaque on White's Island.

Coincidentally, in August of 1676, shortly after the killing of King Phillip's uncle Akkompoin and the capture of his wife and son, Capt. Benjamin Church, having word of a band of Indians taking refuge on White's Island at Monponsett Pond, hastened thence. Stationing some of his men on the southern lakeshore, he and others approached by way of the neck of the northern shore wading across to the Island, thus trapping the 120 Indians between them (Baker 1876:107). From there they were taken to Clark's Island in Plymouth Harbor (Forbes 1941, 2:60-61).

The Records of the Colony of New Plymouth show that as early as February 29, 1676, the Council of warr now assem­bled doe order that the Namassakeesett Indians be speedily removed to Clarke's Island, and there to remain, and not to depart from thence without lycense from authoritie upon paine of death (Forbes 1941, 2:60-61).

This was the very band taken from White's island the following August. These were definitely not
hostiles, yet they were treated as such, marched to Plymouth and imprisoned with those taken with Phillip’s wife and son.

Such is the colonial history of White’s Island, but there is ample evidence of prehistoric man here as well. This writer’s firsthand knowledge of this place, spanning over sixty years since the early 1930’s, can attest to the many Archaic and Woodland Period artifacts found about the shores of Monponsett Pond including ulus, gouges, plummetts, grooved axes, pestles and chipped forms (Seamans, 1992, personal communication). Shortly after locating at the northern tip of White’s Island in 1987, it became evident to me that prior to the construction of the 1859 causeway, there was formerly a ledge of extensive proportions at the northern point of the Island, now lot 29. This outcrop was of a hard sedimentary rock of dark gray color with a greenish-yellow line of material, different in consistency, running through it. It can probably be identified as graywacke (Baker 1976:15).

The base of the ledge remains in place, sporting evidence of both buring and drilling, indicating both wedging and blasting were employed to break up the rock ledge, probably for a local source of suitable material with which to build the original causeway. All along the lakeshore below are scattered chunks of ledgerock of various sizes, among which was found a possible abrader (Figure 4). Here, on one of the chunks, was found in late 1987 the most remarkable petroglyph (Figure 5), pecked, ground and incised into what had been a part of the ledge-face. It appears to depict a bird-like figure, the three thin lines of about six by seven inches, or 15 cm x 17 cm, with a wider and smoother streak of nine inches or 23 cm. Although most petroglyphs are undated, similar bird-like examples from the same

Figure 3. Two pestles found at White’s I.

Figure 4. Possible abrading stone (grooves enhanced) from White’s I.

Figure 5. Petroglyphs (grooves enhanced) found in 1987 at north end of White’s I.
general region, including Duxbury, Wareham and the Narragansett Bay drainage, have been assigned an Archaic provenience of some 4,300 years (Fowler 1966:43-45). Among possibly related artifacts from the lakeshore immediately below the ledge-face were several small hammerstones and a possible graver (Figure 6) of an exotic black flint material.

Figure 6. Possible graver and two small hammerstones found at White’s Island.

Is this petroglyph a prehistoric representation of thunder and lightning, the most dramatic demonstration of natural elemental forces? Some have suggested a human figure with a spear. There was a fishing station with a stone weir nearby (Fig. 2; Baker 1976:149). Certainly at this point in time we can but speculate. There is, however, a local legend among descendants of both native Indians and colonial settlers of the Dighton area of the Taunton River basin, describing an incident purported to recount the first meeting of native Indians and Europeans there and the natives interpretation of what they saw. According to the legend, the European sailing ship appeared to them as a great bird and, after an episode of hostage-taking and a subsequent skirmish, thunder and lightning came from the great bird. This was an obvious reference to cannonfire from the ship (Kendall 1809, Simmons 1986:70).

The natives’ impression would have been a natural one. The recent parade of tall ships serves as a contemporary parallel to what they would have seen. We may never learn, but just consider these facts. The White’s Island site is located in the northeasterly quadrant of the 530 square mile Taunton River basin. The historic native people who came to the Monponsett Pond to fish and make canoes regularly traversed the entire Taunton River, its tributaries and upland trails. Could the White’s Island petroglyph be a record in stone of that epic event or one like it with thunder and lightning emanating from the great bird? There will always be questions.

Whatever the interpretation, the petroglyphs and legends remain, memorials of time and events which would be otherwise unknown to us—traces of a people, a race, a culture, that existed here when this land was pristine—and remarkable though it may seem, through their petroglyphs and legends, from their age to ours, they still speak to us.

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IN MEMORIAM: Byron E. Dix (1942-1993)

James W. Mavor, Jr.

Byron E. Dix, 50, died suddenly of a heart attack in April. He was known for his work in New England archaeoastronomy and his co-authorship of MANITOU, The Sacred Landscape of New England’s Native Civilization (1989, Inner Traditions International, Rochester VT). Byron is survived by his wife, Dianne Dix and three children, Maia, Will, and Laureen. Byron was born in Tucson, Arizona, but his family soon moved to Los Angeles and then to Frankfurt, Kentucky. Early interests in rocketry, telescopes, and the cosmos were developed during a two-year army stint and attendance at the University of California, Berkeley. During several years at Space Research Corporation he worked on the design of the long gun for launching satellites into orbit. On the staff of the Air Force Geophysics Laboratory, Byron developed telescopes for a detection and ranging system that uses laser technology.

I knew Byron for 15 years. We met in Vermont at a conference and almost immediately decided that we had more important things to do. We dashed off to Calendar One and Two (large bowls among Vermont’s mountains containing possible astronomical stone structures) and became fast friends and colleagues. Later, I came to consider Byron as a brother. Byron was like that; he readily became one of the family. He influenced deeply the lives of many people. He certainly influenced me. I retired from engineering two years after we met so that I could help fulltime to continue the work that he has started. Byron was young, enthusiastic, optimistic, and also wise.

The times I shall remember best are those years when we worked and camped at Calendar One. Dianne was part of that. There was the time when we surveyed the equinox sunrise sight line from the chamber and had to climb down an icefall in the dark to get a light up on the east ridge before dawn, and the times we hauled our equipment into the bowl by sled, when no motor vehicle had ever been there.

Byron pioneered archaeoastronomy in New England. After I joined him in this work, all aspects of ancient New England became a consuming passion for both of us. When it became evident that most of what we saw on the landscape had native origins, our primary goal became understanding native America and how the natives interacted with non-natives. We focused on universal behavior to draw cultural comparisons, and decided that astronomy is one of the most powerful tools available for reconstructing the past.

Byron was an engineer. He was not only innovative, imaginative, meticulous, and knowledgeable, but he had genius. He saw important things in the woods before others did and had an uncanny sense for discriminating between the more and less important.

Byron wanted others to follow up on the ideas put forth in MANITOU. He hoped that the results of his research will have a beneficial social effect, that the Indian way will enter the mainstream of American society, that native peoples will be more supported in their efforts to keep their ways intact, that more Americans will consider the native people’s history as part of their own.

Most of the work of Byron and myself has been about the spiritual life of native people. The traditional beliefs and wisdom are sacred and respected because they help to maintain the balances in nature that must be if we are to avoid destroying alternatives, making it more difficult to adapt to change.
CONTRIBUTORS

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SUSAN HAUTANIEMI received her Master’s degree in anthropology from UMass, Amherst, in 1992. As part of this work she analyzed the glassware from the W.E.B. DuBois Boyhood Homesite in Great Barrington. She is currently working on her doctorate at UMass with research at Historic Deerfield's Moors House, under the direction of Robert Paynter.

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