11

GENDER, HOUSEHOLDS, AND THE MATERIAL CONSTRUCTION OF SOCIAL DIFFERENCE

METAL CONSUMPTION AT A CLASSIC THULE WHALING VILLAGE

PETER WHITRIDGE

DESPITE ATTEMPTS TO DISPEL THE STEREOTYPE of the egalitarian band (e.g., Collier and Rosaldo 1981; Dunning 1960; Flanagan 1989; Speth 1990; Testart 1988a), the smallest-scale societies, predominantly hunter-gatherers, continue to be marginalized in archaeological discussions of the emergence of social inequality. The notion that social differentiation based minimally on gender and age is somehow consistent with "egalitarianism" and is unrelated to the differences in wealth and privilege found in ranked and stratified societies represents a naturalization of cultural categories and an ethnocentric foreclosure of interest in the social life of "simple" societies. By ignoring variability in the construction of social difference in small-scale societies, we also exclude from analysis the incipiently complex social formations that logically precede the markedly complex and inegalitarian ones that have dominated archaeological research on social change.

On closer inspection it is evident that even such epitomes of the egalitarian band as the Copper and Netsilik Inuit exhibited complex patterns of symbolic and material differentiation that include, but are not limited to, asymmetries based on gender and age (e.g., Jenness 1922:90–94; Rasmussen 1931:26, 146, 193, 195). Although potentially of great theoretical interest, the modest differences in wealth and status that occur widely in Inuit and other hunter-gatherer societies may be difficult to

discern archaeologically, especially in the absence of clear analytic signposts directing us to the most worthwhile research avenues. The extremely well-preserved archaeological record of Eastern Thule culture (C. A.D. 1000–1600) is promising in this regard (for overviews, see Mathiassen 1927; Maxwell 1985; McGhee 1984b).

Between about A.D. 1200 and 1400, relatively sedentary Classic Thule communities based mainly on surplus harvesting of large sea mammals flourished in the Central Canadian Arctic. Although clearly ancestral to historical Inuit groups and sharing numerous features of socioeconomic organization and material culture with them, the greater size and permanence of Classic Thule settlements and greater productivity of the related harvesting economies appear to have been associated with greater differentiation of economic role, social status, and material wealth. Differentiation was neither as great as that typically found among groups labeled *complex hunter-gatherers* nor as elusive as what one might expect among more mobile foragers (including their historical descendants). Classic Thule thus appears to represent one of the "not-quite-so-egalitarian" (Diehl 1996) cases needed to broaden the scope of social archaeology and provide an analytic bridge to the least differentiated societies.

The present work reports part of a larger research project on the construction of social difference at the Classic Thule site of Qariaraqyuk (PaJs-2), a large winter village in the major Thule whaling region of southeast Somerset Island in the Central Canadian Arctic (Figure 11.1; Whitridge 1999a). The investigation was especially concerned with the interplay between gender and household status, on the premise that artifactual, architectural, and behavioral markers of gender difference would have been mobilized in the construction of broader social inequalities with a shift toward increasing competition and differentiation among households. The analysis reported here concentrates on one such medium of social differentiation—patterns of consumption of exotic metals—using both direct and indirect indicators of access to metal for tools and ornaments. Following a brief theoretical prelude and outline of Thule social relations, the Qariaraqyuk data are introduced, Thule metal use is reviewed, the data are presented by gender and dwelling, and the results are discussed in terms of the broader pattern of wealth consumption and social differentiation at Qariaraqyuk.

MATERIAL CULTURE AND SOCIAL IDENTITY

For many years the conventional starting point for archaeologies of gender was the observation that gender is a cultural construct rather than a natural mode of being female or male (or something else). The

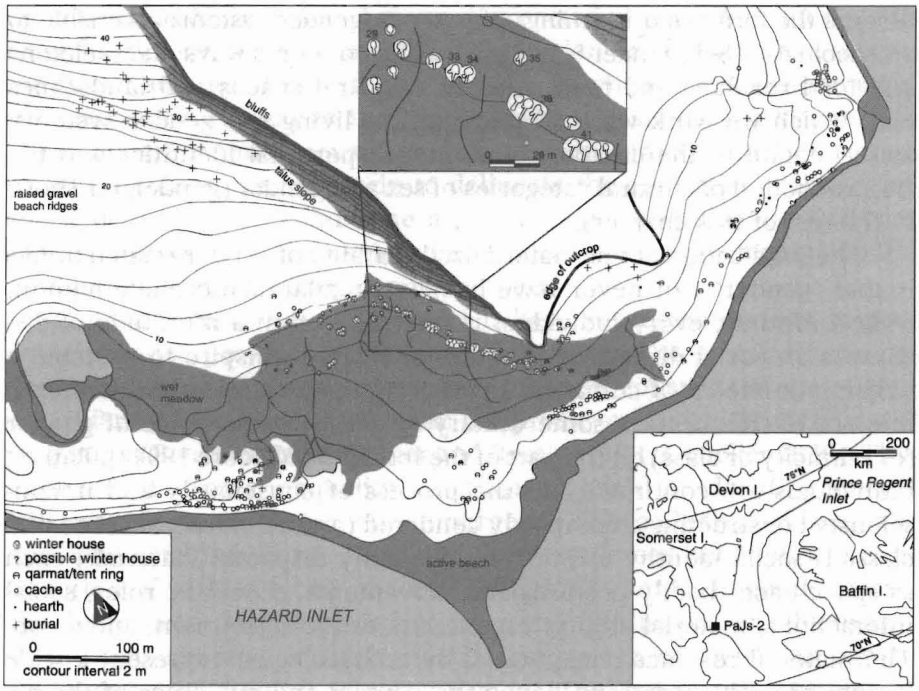

Figure 11.1 Map of Qariaraqyuk (PaJs-2), southeast Somerset Island, Nunavut, based on 1992 survey

term *sex* was reserved for the biological ground of female-male difference and was thus inadequately problematized in the rush to document past cultural variants of the gender system. It has now become apparent that this dichotomization of the cultural and the natural creates as many difficulties as it was expected to resolve. Not only cultural models of gender but also material, "biological" modes of embodiment can be considered constructed, perpetually emergent within a distinct social historical setting (see, e.g., Butler 1993; Fausto-Sterling 2000; Oyama 2000).

In retrospect it should have been obvious to archaeologists, long familiar with the interpretation of biographical information read from skeletal remains, that the social/cultural and the material/biological were so thoroughly intertwined as to be irreducible to one or the other pole. Indeed it is precisely this hybrid (Latour 1993) or cyborg (Haraway 1991) quality of social being—always simultaneously and inseparably material and ideal, subjective and objective, natural and cultural, and so on—that

renders the forms and meanings of past sex/gender systems accessible to archaeologists. Sex/gender is materialized in countless ways; the skeletons and food residues and tools and architectural spaces and landscapes with which we work were all once part of living sex/gender systems, were integral to the creation of embodied personal identities and the (re)production of cultural categories of sex and gender (gender, for short, in the rest of this chapter).

One implication of this materialized plurality of gender-related things is that "gender" can never have been a singular, static phenomenon. Over a lifetime, every individual is inserted within a multitude of discourses on social difference that do not simply conspire to promote a hegemonic model of culturally appropriate gender (or ethnic or class) roles or overdetermine some unitary subjective experience of gender (or ethnicity or class) on the part of the individual (Moore 1994a). Rather, individuals are continually in the process of consciously and unconsciously constructing a complexly gendered (and ethnically marked and classed) social identity out of fundamentally disparate materials, such as speech acts, bodily postures and movements, economic roles, social interactions, material culture production, dress, adornment, and so on. The material residues encountered by archaeologists represent a wide variety of such media and hence the context and outcomes of the actions of particular individuals in the past who created and deployed material culture in the course of negotiating a situationally contingent and historically fluid social identity.

Gender is only one of the themes that inflects material culture, although it is usually one with particularly profound implications for social practice. In a given cultural context archaeologists may discern systems of correspondences—a gender field—among the expressions of gender produced within the various discursive domains, but there is no single, essential category of interior experience or social practice to which these material discourses are intrinsically and exclusively addressed. The production of a particular element of material culture—such as the decoration of a pot—as much as one's speech or actions toward others, is invariably a complex social act. The particular object or act will be perceived as conforming to some norm or perhaps as resisting or rejecting or improving upon the expected outcome, or it may not impinge upon other individuals at all. The choices an individual makes, whether unconscious or deliberate or constrained by external factors, are socially meaningful to the extent that that element of material culture, or that behavior, is in some detectable relation of difference or similarity to what others have done before. It may at once represent, however, an identification with

or subversion of the types of practice expected of women or men, adult or child, rich or poor, the member of one clan or another, or one community or another. By specifying the ways in which various elements of material culture (such as the exotic raw materials discussed later) or behaviors are simultaneously implicated in several such discourses on social difference, we can begin to delineate the operation of the larger social field at a particular time and place (see Bourdieu 1984). From there we proceed to the exploration of cross-cultural patterning in the production of social difference in the past.

For example, some social theorists have suggested that sex or gender difference provides a model for other kinds of social difference, that distinctions in status or rank are somehow constructed out of gender difference, as if the latter were the prototype for all forms of social inequality (Bourdieu 1990; Collier and Rosaldo 1981; Godelier 1986). This implies that gender inequality, or at least marked gender differences, will precede or accompany the emergence of broader social inequalities. The establishment of parallels or resonances between the construction of various forms of social difference—based on gender, class, age, household, kin group, ethnicity, ritual affiliation, or whatever—should thus generate insights into the emergence of social complexity while also providing an important point of access to past systems of meaning by illuminating symbolic homologies among different conceptual domains.

A number of domains of Thule material culture and practice in which gender and household status were demonstrably intertwined are found at Qariaraqyuk, such as the use and marking of dwelling and community space, participation in ritual, and access to raw materials (Whitridge 1997, 1999a). Especially noteworthy, given the site's distance from known sources, metals of both Native and Norse extraction are unusually abundant in Qariaraqyuk dwelling assemblages and point to the strategic importance of exotic trade goods in the largest and wealthiest Classic Thule communities (see McCartney 1991 for a far-reaching analysis of the socioeconomic context of Thule metal exchange). Even among their purportedly egalitarian Netsilingmiut descendants, metals and other exotic or scarce raw materials figured in the material demarcation of social position: "there was a sort of halo about the man who owned a knife [of iron] or a sledge of wood, and the woman who could sew her husband's clothing with a needle of iron or steel was the envy of all her sisters" (Rasmussen 1931:26–27). Raw material utilization provides an archaeological vantage on the field of Thule social differentiation.

ANALOGIES FOR THULE SOCIAL RELATIONS

The Classic Thule colonists of the eastern Arctic differed from their modified Thule and historic Inuit successors in the degree to which they relied on communal harvesting of large mammals to generate a storable surplus that subsidized sedentary winter settlement (Whitridge 2002). With the onset of the Little Ice Age at about A.D. 1400 (Kreutz et al. 1997), many groups abandoned large-scale storage and land-based winter villages for mobile ringed seal hunting from temporary snow house camps on the sea ice, a shift in subsistence-settlement systems identified with the Classic-modified Thule transition. One of the best illustrations of this economic reorganization is found along the channels of the Central Canadian Arctic, which were densely settled in Classic Thule times. Winter villages with dozens of sod houses are associated with flensing beaches that stretch for kilometers, lined with caches for storing whale products and littered with the bones of hundreds of bowhead whales (see Savelle 1996; Savelle and McCartney 1994, 1999; Whitridge 2001 for some recent overviews of Classic Thule whaling). During modified Thule times the area was progressively abandoned to permanent settlement and by the historic period had been transformed into a little-used frontier (Savelle 1981). Even in Low Arctic regions where sporadic bowhead whaling continued, the scale of Classic Thule settlement and whaling success was never equaled. Economically, many Classic Thule groups are more akin to the historic Inupiat whalers of North Alaska (with whom Classic Thule shares an early Western Thule ancestor) than historic Canadian Inuit, and in important archaeological details they also appear to have had patterns of community organization similar to the North Alaskan (McCartney 1991).

One of the hallmarks of North Alaskan social relations was the role played by wealthy individuals, called boat owners, or *umialit* (singular *umialik*), in sponsoring and coordinating the cooperative harvesting of whales and walrus, and caribou in the interior (Burch 1975, 1981, 1988; Cassell 1988; Murdoch 1988 [1892]; Rainey 1947; Sheehan 1985, 1997; Spencer 1959, 1972). Coastal *umialit* assembled boat crews for sea mammal hunting, rewarding crew members with commodities obtained through the interregional trade network and a share of the harvest in what amounted to a swap of resources for labor. *Umialiks* accumulated substantial surpluses of food, fuel, and other commodities in the process, which they were expected to distribute generously within the community.

The unequal flows of resources from wealthy *umialiks* and crew members to poorer households resulted in differential relations of gift-incurred debt and ultimately grades of status. Big Man-like *umialit* occu-

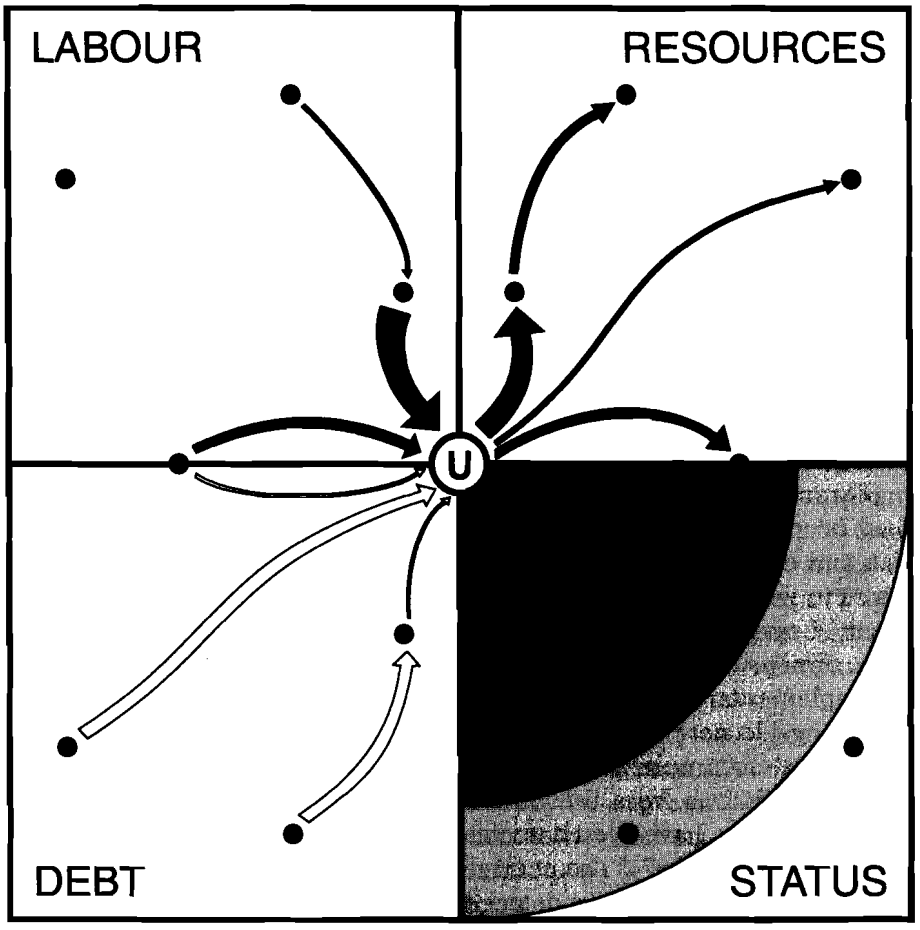

Figure 11.2 Model of Thule social relations; gradients of social status (bottom right) *based on differential participation in the* umialik-*sponsored whaleboat crew* (top left)*, differential access to harvest shares and exotic commodities distributed by the* umialik (top right)*, and differential accumulation of symbolic debt/capital consequent on receipt/disbursement of "unearned" resources*

pied the pinnacle of this system of informal wealth- and prestige-based ranks (Figure 11.2). The architectural expression of the whaling crew was the *qargi,* or men's house, in which crew members assembled to socialize and gear up for the whaling season and in which all important community feasts and ceremonies were held (Larson 1995). (For more

on the use of the men's house, see Chapters 3, 5, 7, this volume.) Functionally analogous structures occur widely in large early Classic Thule settlements (e.g., Habu and Savelle 1994; McCullough 1989), so the *qargi* complex appears to have been part of the original cultural repertoire of Thule migrants. There is also evidence for extensive long-distance trade in Classic Thule times and, as discussed later, differential access to the exotic or locally scarce commodities that moved through the network. Classic Thule whaling communities were as dependent as their North Alaskan counterparts on flows of wealth for underwriting the entrepreneurial, *umialik*-led whaling system.

This model of the social economy of whaling has numerous archaeological implications for settlement systems, site structure, and feature assemblages. Whale-reliant communities are expected to be large and internally structured and to possess one or more *qariyit* used for whaling ceremonials and preparations. Multi-dwelling compounds, or *upsiksui,* may be present and associated with *qariyit.* Dwellings should vary in size and complexity, and the corresponding assemblages reflect differences in whaling activity, access to scarce and exotic materials, deployment of symbols of social status, and involvement in ritual. Many of these dimensions of household status differentiation are expected to have a complementary expression in the field of gender difference.

Alongside new social and ideological mechanisms legitimating the differential accumulation of wealth, an increasing cultural preoccupation with whaling from the Birnirk-Thule transition, around A.D. 900–1000, appears to have been associated with a reorganization of domestic labor (Whitridge 1997). The central hearth typical of late Birnirk winter houses was displaced into a detached kitchen wing in early Thule times, concealing and marginalizing a major locus of women's activities. Simultaneously, the *qargi* replaced the family dwelling as the major architectural locus of men's activities, much as the *qargi*-based boat crew replaced the household as the core socioeconomic institution in the new social order. This co-optation of domestic symbols and practices may have resulted in a decline, or at least a realignment, of women's status and authority (for a differing view of status and the use of a primarily male space, see Chapter 3, this volume). Evaluations of power relations between women and men in historic Inuit and Inupiat societies, however, vary enormously (see, e.g., Ager 1980; Bodenhorn 1990; Briggs 1974; Ellanna and Sherrod 1995; Giffen 1930; Guemple 1986, 1995; Kjellström 1973; Matthiasson 1979; McElroy 1979; Reimer 1996; for Yupik gender relations see Ackerman 1990a; Jolles 1997; Jolles and Kaningok 1990; Lantis 1946; Chapters 4, 7, this volume).

There are some compelling indicators of gender inequality or hierarchy in Inuit societies, the most often cited being the control exercised over women's sexuality through spouse-exchange partnerships contracted between men. Ethnographic reports also exist of marriage by abduction or purchase, rape, polygyny, wife beating, restrictive behavioral taboos related to menstruation and childbirth, predominantly male inheritance, female infanticide, and preferential treatment of male children. Balancing this are reports of an overall parity of authority within the household, occasional polyandrous marriage, female shamans, women's participation in trading and hunting, and the important symbolic role accorded women in procuring the harvest. Economic complementarity of women's and men's roles appears often to have been explicitly recognized, and in most groups women exercised significant authority with respect to the household's stores. According to Diamond Jenness (1922:162): "Marriage involves no subjection on the part of the woman. She has her own sphere of activity, and within that she is as supreme as her husband is in his." This condition of gender heterarchy among the Copper Inuit is generally consistent with reports from other Inuit and Inupiat groups (Briggs 1974; Guemple 1986, 1995), although men seem to have possessed greater overall decision-making authority, thus exercising, in Ernest Burch's (1975:91) words, a "benevolent despotism."

The complexity of Inuit gender relations should lead us to expect complex patterning in the Thule archaeological record. The existence of distinct spheres of activity and power may be expressed in the nature and degree of architectural segmentation at the dwelling and community levels, the segregation of gendered refuse, and divergent patterning in the organization of men's and women's material culture assemblages (toolkits, dress and adornment, ritual paraphernalia, and similar items). A hierarchical inflection to gender relations might be expressed in such things as differential access to raw materials for tools and dress; asymmetries with respect to the size, location, and symbolic marking of gendered dwelling and public spaces; and differential participation in core community ritual—all of which can potentially be assessed through the nature and distribution of gender-specific artifacts and refuse. These were among the expectations that shaped the collection and analysis of data at Qariaraqyuk.

RESEARCH AT QARIARAQYUK

Qariaraqyuk is situated near the southeastern tip of Somerset Island on the north shore of Hazard Inlet. Although several kilometers from the extensive flensing beaches of the open Prince Regent Inlet coast (see

Savelle and McCartney 1988), the site is sheltered from winter winds and has commanding access to productive fast ice and polynya environments for ringed seal hunting (Finley and Johnston 1977). Based on a 1992 survey, the site consists of a row of at least fifty-seven semi-subterranean winter house (including *qariyit*) depressions, the remains of dozens of less substantial tents and *qarmat* that would have been occupied during the warm seasons, and numerous caches, exterior hearths, burials, and isolated artifacts (Figure 11.1). Close to 3,400 bowhead whale bones are scattered across the 30 ha survey area, most in close association with the winter houses, representing a bowhead Minimum Number of Individuals of 261.

A *qargi* (House 41) and five dwellings (Houses 29, 33, 34, 35, and 38) were excavated in 1993 and 1994 within a restricted portion of the site, with the dwellings selected to maximize morphological variability in the sample. The easternmost excavated house (38) and the *qargi* (41) are directly adjacent to a sheet midden that contained elevated frequencies of bowhead elements derived from ethnographically prized carcass portions (Whitridge 2002). Based on calibrated ^{14}C dates and artifact seriation, occupation of the excavated portion of the site spanned approximately 250 years, with feature construction beginning around A.D. 1200 and abandonment beginning shortly after A.D. 1400 and progressing throughout the fifteenth century. The evidence is consistent with substantial occupational overlap of the excavated houses during the fourteenth century and perhaps also the late thirteenth and early fifteenth centuries.

THULE METAL USE

METAL SOURCES AND TRADE

A variety of materials with restricted sources and wide archaeological distributions in the eastern Arctic indicates extensive trade networks in Classic Thule times (McCartney 1988, 1991; for accounts of late prehistoric and early historic trade, see Anderson 1974–1975; Burch 1970, 1988; Morrison 1991; Savelle 1985; Stefansson 1914). Besides the native and Old World metals discussed later, amber, soapstone, slate, nephrite, and pyrite all appear to have been exchanged over long distances. Possible occurrences of exotic pottery and coal may represent items that accompanied early Thule migrants from Alaska (Arnold and Stimmel 1983; Kalkreuth, McCullough, and Richardson 1993; Kalkreuth and Sutherland 1998). The commodities that traditionally accounted for the majority of intersocietal trade—especially sea mammal oil, caribou hides, walrus or bearded seal hides, and wood (and to a lesser extent ivory and horn)—

were actually quite widely distributed but might be locally scarce or difficult to procure in quantity because of scheduling conflicts. Unfortunately, these materials also have relatively low archaeological visibility and are difficult to source. Trade between neighboring regions in these bulky goods was almost certainly important prehistorically but requires much additional research. Metal, however, survives reasonably well in Thule deposits and is easily identified as of nonlocal origin.

Although native copper and meteoritic iron were utilized prehistorically in several parts of North America, Classic Thule groups were exceptional in their degree of reliance on metal for a wide variety of implements and ornaments (McCartney 1988, 1991; Morrison 1987). Numerous sources of native copper are found in the eastern Arctic, but large drift deposits on Victoria Island and the adjacent mainland (Franklin et al. 1981; Morrison 1987) appear to have been the most important prehistoric sources (Figure 11.3). The Cape York meteorite in northwest Greenland has been an important source of extraterrestrial iron since at least late Dorset times, and telluric iron, which occurs naturally as nodules in basalt flows in West Greenland, was used by local groups but probably not traded widely (Buchwald and Mosdal 1985; McCartney 1991; McCartney and Mack 1973). Asian iron has been traded east across Bering Strait for as much as 2,000 years (e.g., Collins 1937; Larsen and Rainey 1948) but has not been specifically identified at sites in the Canadian Arctic. Smelted iron, copper, and occasionally bronze do occur on a large number of Classic Thule sites but were most likely obtained from the Norse colonies in Greenland, with which Thule groups are known to have interacted (McGhee 1984a).

ARTIFACTUAL EVIDENCE

Metal occurs in small quantities in most large Thule assemblages but was highly curated and so is usually abundant only at sites adjacent to major sources, such as those on Coronation Gulf and southwestern Victoria Island (McGhee 1972; Morrison 1983). Based on the actual metal pieces recovered, copper and iron were substituted for ground stone (usually slate) for the bits of gravers, adzes, and drills; the blades of side- and end-slotted men's knives and women's *ulus*; and the end blades of harpoon heads, lance heads, and arrowheads (bone was sometimes used for harpoon-head end blades). Metal was also occasionally used for needles, fishhooks, leister prongs and barbs, and gaffs and for ornaments such as bracelets and brow bands (Morrison 1987).

The extent of metal use by Thule and other prehistoric Arctic peoples is even more frequently indicated, however, by the occurrence of very

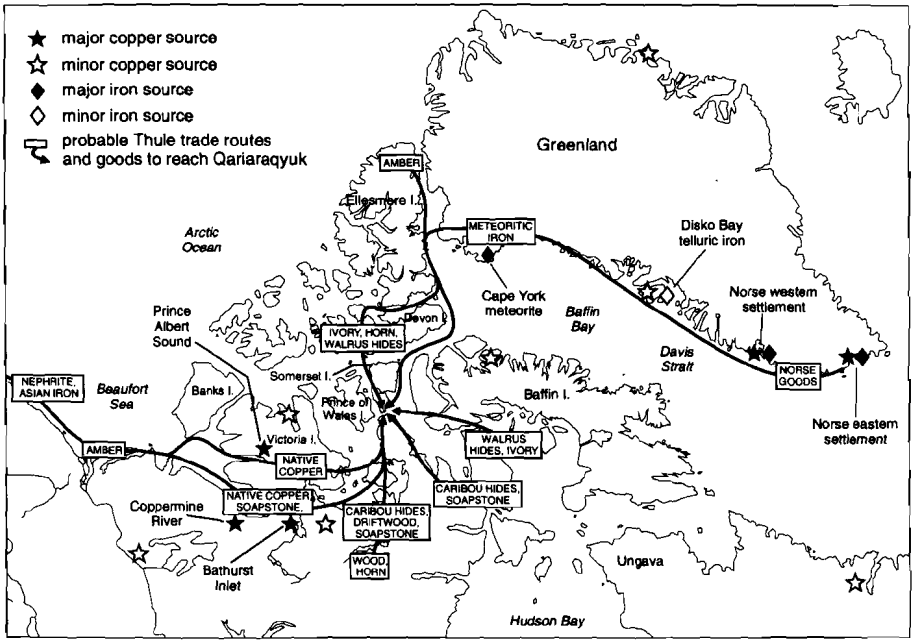

Figure 11.3 Map of Eastern Arctic showing metal sources and probable routes by which trade goods reached Qariaraqyuk during Classic Thule times

thin slots in the surviving bone, antler, or ivory portions of composite tools (Blaylock 1980; McCartney 1988, 1991). Tools that likely once held metal blades are commonly recovered with very narrow, but empty, blade slots or sockets, and sometimes the slot area is damaged from the original blade having been pried or cut away. These blade or bit hafts were discarded at a greater rate than the metal they contained, and so they potentially provide a more accurate picture of metal use than the metal artifacts themselves, to the extent that metal- and stone-bladed hafts can be discriminated. In addition, recovered metal pieces are often too fragmentary to be functionally identified and so may be relatively uninformative. Of 98 metal specimens recovered in excavations at Qariaraqyuk, only 33 (34%) could be identified to a functional class more specific than "blade." In contrast, 226 measurable blade or bit sockets occurred on functionally identifiable whale-bone, antler, and ivory artifacts.

SLOT WIDTH ANALYSIS

Slot widths have been inconsistently reported by Arctic archaeologists in the past, beyond the observation that some blade slots are very narrow and some are relatively wide. Measurements of some slots from a collection, or mean widths for entire collections, have been reported, but data on all individual specimens are rarely found. Slot widths of about 1 mm (Collins 1937:145–146; Larsen and Rainey 1948:82; McCartney 1991:30) or sometimes 1–2 mm (Blaylock 1980:171; McCartney 1977, 1988:59) have been considered diagnostic of metal blades, with some variation in reported width modes likely resulting from variability in artifact function (i.e., a metal adze bit must be thicker than the blade of a fine engraving tool). A. P. McCartney (1988:71, 1991:30) suggested that knife handles (the most common thin-slotted artifacts at Qariaraqyuk and elsewhere) with slots between 0.5 and 1.5 mm likely held metal blades, whereas those about 2.0 mm and greater held ground stone blades. Although borne out by the present analysis, this proposition is difficult to evaluate against published Thule assemblages, which tend to be reported to the nearest whole millimeter when any slot measurements are provided.

Slot dimensions were recorded to the nearest 0.05 mm for the 226 measurable slots from Qariaraqyuk. Maximum and minimum measurements were taken, and an average value was calculated for each slot, but patterning turned out to be strongest for the maximum slot width. It appears that this is the result of both the design of slots and postdepositional deformation. Some hafts have become desiccated and the slot prongs warped, with the result that minimum measurements are occasionally close to zero. This is consistent with the anecdotal observation that slots possessing in situ blades tend to be wider than slots lacking blades. This is occasionally because of the formation of an oxidation rind around iron blades but is likely also attributable to the contraction of the thin distal portions of the prongs of bladeless slots.

Many tools, however, appear to have been intentionally designed to hold blades that were thicker than at least the distal portion of the manufactured slot, the blades being inserted by prying the prongs apart or heating the haft so the slot expanded. Franz Boas (1964 [1888]:110) described the latter procedure: "the bone is heated and the blade is inserted while it is hot. As it is cooling the slit becomes narrower and the blade is firmly squeezed into the bone handle." To accomplish this more easily, some complete blades—particularly of ground stone—have wedge-shaped stems that could have been jammed into a relatively narrow slot

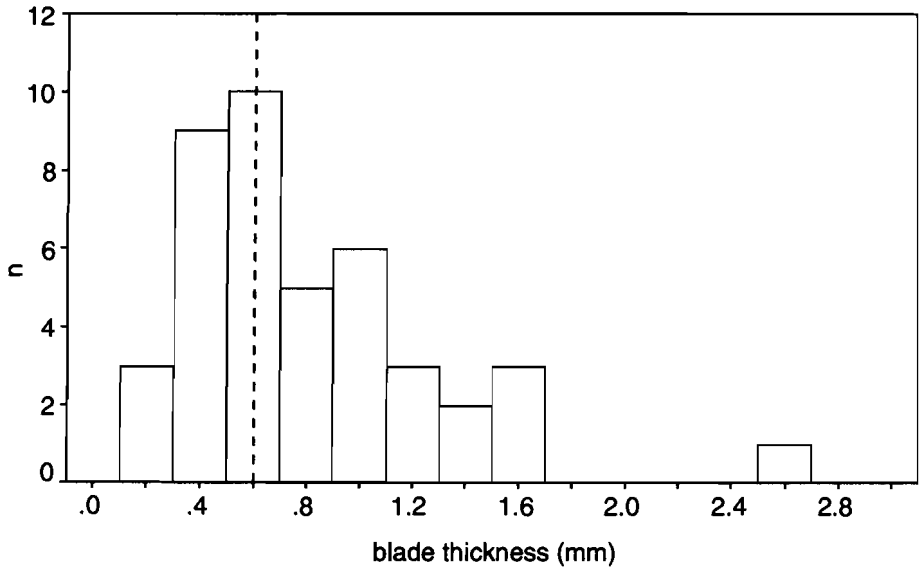

Figure 11.4 Distribution of blade thicknesses for 42 Thule blades (39 copper, 3 iron) from Qariaraqyuk, Deblicquy (Taylor 1981), Brooman Point (McGhee 1984c), and Skraeling Island (McCullough 1989)

to more effectively hold the blade in place. The less efficient alternative is to wedge packing material (wood chips, hide, baleen, and similar substances) into the space between the blade and the prong, or to tie the blade to its haft through lashing holes, both of which are observed on some specimens with in situ blades and relatively wide slots. Use of the packing technique, perhaps in combination with others mentioned earlier, may be indicated by the measurements on forty-two actual metal blades from Qariaraqyuk and other Thule sites (Franklin et al. 1981; McGhee 1984c; Taylor 1981). Blade thickness has a right-skewed distribution with a mode at about 0.6 mm, which is thinner than virtually all measured slots (Figure 11.4). It thus appears both that relatively narrow slots sometimes held thicker blades and that wide slots sometimes held thin blades. It is assumed here, however, that there would have been a tendency to manufacture relatively narrow slots for thin (i.e., metal) blades and wide slots for relatively thick (stone or, more rarely, bone) blades, since very narrow slots could not hold most stone blades and very wide slots would be highly inefficient for fastening thin metal blades.

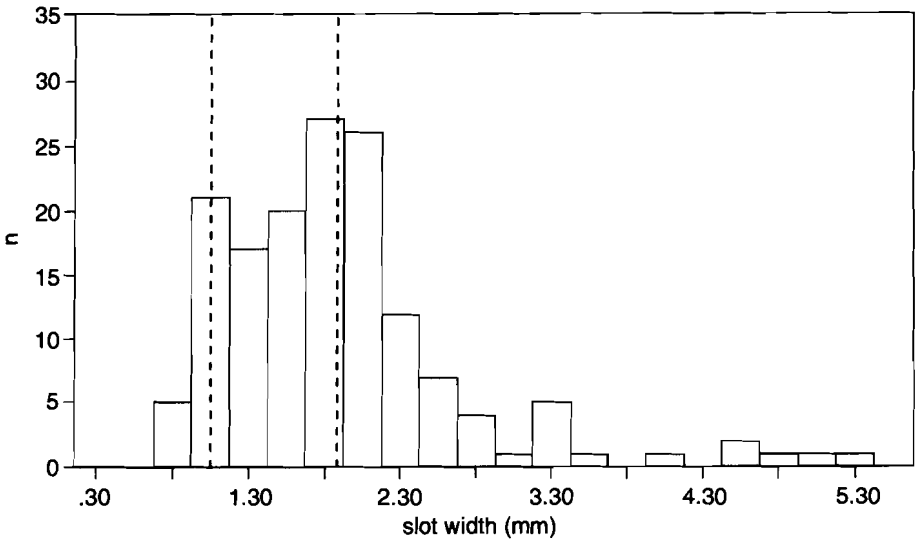

Figure 11.5 Distribution of slot widths for all knives from Qariaraqyuk (n = 152)

The ideal expression of such a tendency would be bimodal slot width distributions.

In fact, the Qariaraqyuk slot width distributions are consistently bimodal for all classes of tools, although the specific modal widths are not identical across artifact types. The tools can be divided into three groups based on slot width modes. Knife slots—including end- and side-slotted men's knives, composite knives used for grooving bone and antler, and crescent-bladed women's knives, or *ulus*—have modes at about 1.0 and 1.9 mm (Figure 11.5), corresponding closely to McCartney's suggested 1 and 2 mm modes. End-bladed "projectiles," consisting of lance heads, harpoon heads, and arrowheads, have the strongest modes at 1.45 and 1.80 mm (Figure 11.6). A small sample of twenty-two gravers and adzes has modes at 2.65 and 4.65 mm (Figure 11.7). These patterns hold up for individual artifact types within these three classes, such as for the three major types of men's knives in Figure 11.8—each of which exhibits modes, albeit of different shapes and sizes, at about 1.0 and 1.9 mm. A crude prediction of the intended blade material for each specimen can thus be produced by assigning each slot to one or the other mode, based on splitting the distribution at the midpoint: 1.45 mm for knives, 1.63 mm for projectiles, and 3.65 mm for heavy-duty manufacturing tools.

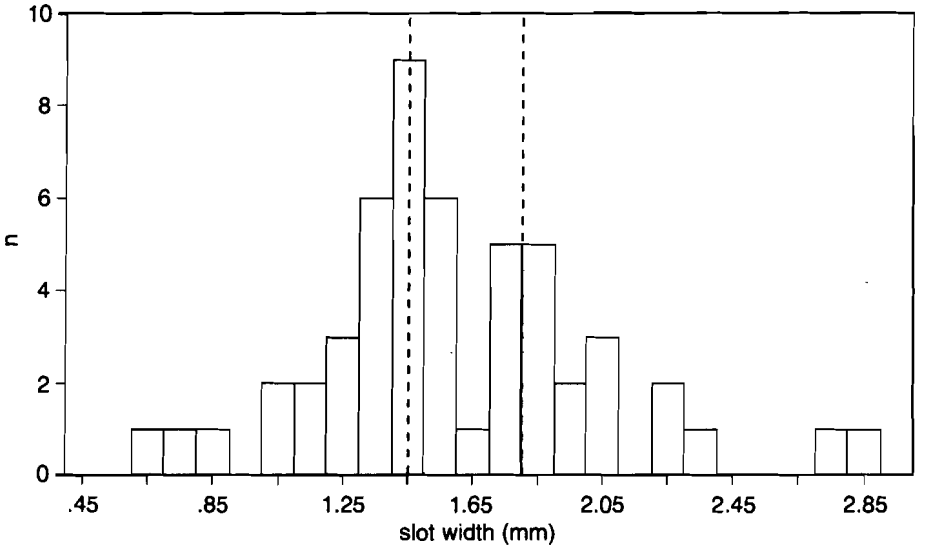

Figure 11.6 Distribution of slot widths for all projectiles from Qariaraqyuk (n = 52)

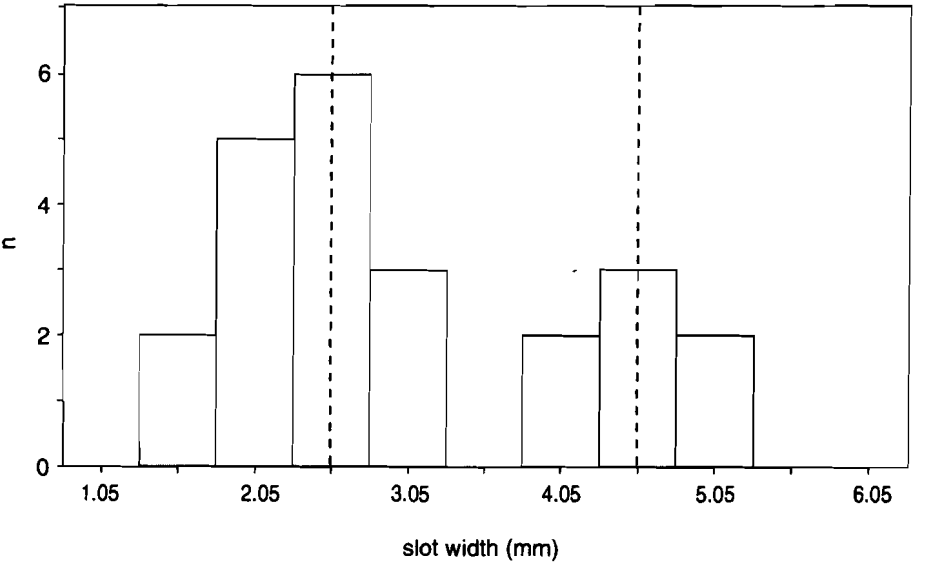

Figure 11.7 Distribution of slot widths for all heavy-duty manufacturing tools from Qariaraqyuk (n = 22)

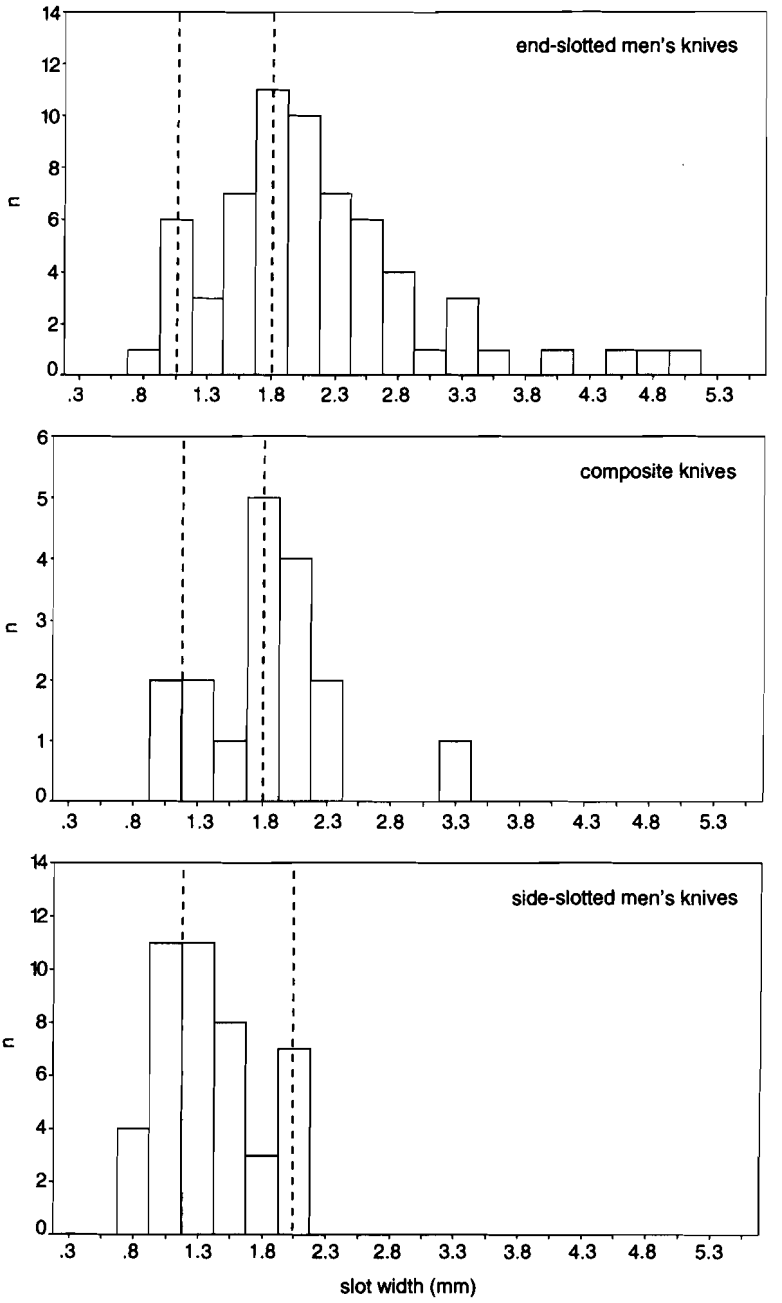

Figure 11.8 Distribution of slot widths for men's end-slotted (n = 64), composite (n = 17), and side-slotted knives (n = 44) from Qariaraqyuk

Overall, 43 percent of tool slots fall toward the thin mode in their respective category and can tentatively be considered to have held metal blades.

HOUSEHOLD METAL CONSUMPTION AT QARIARAQYUK

As a result of variable preservation of some organic materials, especially such perishables as feathers and hide, relative frequencies of metal are best evaluated with respect to other inorganic artifact finds. The distribution of these finds by house is presented in Table 11.1 (excluding chipped stone material likely of Paleoeskimo origin). Metal accounts for 16 percent of all inorganic materials in the Qariaraqyuk assemblage, with copper making up just over three-quarters of this total. Based on overall metal frequency, the House 41 *qargi* appears to have been the most important locus of metal artifact production, loss, and discard; dwellings, on the other hand, fall into two groups: those with values close to the sitewide mean (Houses 33, 34, and 38) and those with much lower values (Houses 29 and 35). Unfortunately, the House 35 sample size is inadequate; based on binomial probabilities, the frequency of metal items is not significantly less than that expected by chance ($p = 0.165$). The slot width results are slightly different (Table 11.2). Houses 33, 34, and 38 again fall above the sitewide mean, House 33 markedly so, whereas House 29 falls well below. House 35 is well above the mean, but this is impossible to evaluate on a sample of only four measurable hafts. Hafts discarded or lost in *qargi* contexts are less often thin slotted than expected, perhaps reflecting the use of this facility by individuals with and without privileged access to exotic trade goods.

Houses 29 and 35 are both small and lightly constructed and do not belong to a shared mound house group, or *upsiksui*. House 29 is spatially isolated and relatively remote from the high-status/ceremonial neighborhood centered on House 41 that was revealed in the surface whalebone distribution, suggesting reduced access to the community surplus consumed there and social distance from the *qargi* owners or sponsors. Although House 35 is also freestanding, it is not far from the House 33–34 pair and an *upsiksui* that may contain a *qargi*, and it abuts the high-status/ceremonial sheet midden. House 29 had little whaling-related gear, elevated frequencies of terrestrial hunting and fishing gear, and low frequencies of bones from prized bowhead carcass portions, whereas House 35 had no whaling gear (complicated again by small samples) but fairly abundant prestige whale bone.

It is possible that superficial architectural similarities between Houses 29 and 35 are masking important social differences. Although both house-

Table 11.1—Distribution of inorganic finds at Qariaraqyuk, by house

	H. 29		*H. 33*		*H. 34*		*H. 35*		*H. 38*		*H. 41*		TOTAL	
	count	*%*	*count*	*%*	*count*	*%*	*count*	*%*	*count*	*%*	*count*	*%*	count	%
amber	—	—	—	—	—	—	1	5.3	3	1.3	1	0.5	5	0.8
chert (Thule)	—	—	—	—	1	1.4	—	—	3	1.3	—	—	4	0.7
clay	—	—	—	—	—	—	—	—	8	3.4	—	—	8	1.3
copper	2	3.4	—	—	7	10.0	1	5.3	30	12.8	35	17.4	75	12.5
diabase	9	15.5	1	5.3	8	11.4	5	26.3	12	5.1	43	21.4	78	13.0
dolostone	2	3.4	—	—	1	1.4	—	—	—	—	1	0.5	4	0.7
gneiss	1	1.7	—	—	—	—	—	—	—	—	—	—	1	0.2
iron	2	3.4	3	15.8	3	4.3	—	—	2	0.9	13	6.5	23	3.8
limestone	3	5.2	—	—	3	4.3	—	—	7	3.0	3	1.5	16	2.7
mica	3	5.2	7	36.8	7	10.0	1	5.3	60	25.6	50	24.9	128	21.3
misc. ground stone	9	15.5	2	10.5	1	1.4	—	—	8	3.4	3	1.5	23	3.8
misc. stone	10	17.2	—	—	6	8.6	1	5.3	13	5.6	4	2.0	34	5.7
nephrite	—	—	—	—	—	—	—	2	0.9	—	—	—	2	0.3
phyllite	—	—	—	—	—	—	—	—	1	0.4	—	—	1	0.2
pottery	3	5.2	1	5.3	14	20.0	1	5.3	55	23.5	27	13.4	101	16.8
pyrite	—	—	—	—	—	—	2	10.5	—	—	—	—	2	0.3
quartz	1	1.7	1	5.3	—	—	—	—	—	—	2	1.0	4	0.7
quartzite	2	3.4	—	—	4	5.7	—	—	1	0.4	1	0.5	8	1.3
sandstone	1	1.7	2	10.5	7	10.0	3	15.8	14	6.0	9	4.5	36	6.0
sandstone (Norse?)	1	1.7	—	—	—	—	—	—	—	—	—	—	1	0.2
schist	3	5.2	—	—	—	—	—	—	—	—	—	—	3	0.5
shale	1	1.7	—	—	—	—	—	—	—	—	—	—	1	0.2
siltstone	—	—	—	—	1	1.4	—	—	1	0.4	—	—	2	0.3
slate	1	1.7	—	—	4	5.7	2	10.5	13	5.6	6	3.0	26	4.3
soapstone	4	6.9	2	10.5	3	4.3	2	10.5	1	0.4	3	1.5	15	2.5
TOTALS	58	99.7	19	100.0	70	99.9	19	100.1	234	100.0	201	100.1	601	100.1

Table 11.2 Inferred blade/bit material for Qariaraqyuk hafts based on slot width analysis, by house and artifact class (M = metal, S = stone)

	House 6		*House 29*		*House 33*		*House 34*		*House 35*		*House 38*		*House 41*		*Site*		%
Artifact Type	*M*	*S*	*M*	*S*	*M*	*S*	*M*	*S*	*M*	*S*	*M*	*S*	*M*	*S*	*M*	*S*	*Metal*
arrowhead	—	—	—	1	2	—	1	—	—	—	—	—	1	—	4	1	80.0
harpoon head	—	—	1	1	2	1	4	5	2	—	4	3	4	4	17	14	54.8
lance head	—	—	1	—	6	—	—	—	—	—	1	1	2	5	10	6	62.5
men's knife, end slotted	—	—	—	7	2	2	1	3	—	1	1	7	9	31	13	51	20.3
men's knife, side slotted	—	—	—	2	8	1	2	2	—	—	6	1	14	8	30	14	68.2
composite knife	—	—	—	—	—	—	1	1	—	—	3	—	—	12	4	13	23.5
ulu	—	—	—	5	1	—	1	4		—	—	1	1	14	3	24	11.1
graver/drill chuck	—	—	—	—	1	1	—	—	—	—	1	—	2	3	4	4	50.0
adze head	—	—	—	—	—	—	1	—	1	—	—	1	9	2	11	3	78.6
TOTAL	0	0	2	16	22	5	11	15	3	1	16	14	42	79	96	130	42.5
HOUSE %	n/a	n/a	11.1	88.9	81.5	18.5	42.3	57.7	75.0	25.0	53.3	46.7	34.7	65.2	42.5	57.5	

holds seem to have been resident in the village on a relatively temporary seasonal basis (likely during late fall/early winter), House 35's occupants may have been relatively wealthy or high-status visitors with primary residence in another large winter village, whereas House 29's occupants appear to have deliberately pursued a nonwhaling economic strategy that likely involved high residential mobility (e.g., residence on the sea ice for most of the winter).

Houses 33 and 38 are large and complex dwellings and produced elevated frequencies of whaling gear and prestige bowhead elements, whereas House 34 is intermediate in these respects. All belong to a shared mound house group and are reasonably close to one or more *qariyit.* These houses were occupied by individuals who participated actively in bowhead whaling, perhaps including *umialit* at times during the dwellings' use lives. The assemblages tended to contain high relative frequencies of items of bodily adornment (beads, pendants, brow bands, and similar items), suggesting wealth display or heightened involvement in ritual or festive occasions that called for elaborate dress. Consumption of exotic metals is thus correlated with other markers of household wealth, status, and economic orientation.

GENDER AND METAL CONSUMPTION AT QARIARAQYUK

The distribution of metal artifacts by functional class is provided in Table 11.3. These have been provisionally divided into types predominantly associated with women, with men, or of uncertain gender affiliation based on ethnographic patterns of tool use and adornment. Although most of the assignments can be considered very strong conjectures based on direct historical analogy and marked cross-cultural regularities in the gender division of activities among Inuit and Yupik groups from Siberia to Greenland (e.g., Ager 1980; Bodenhorn 1990:59; Guemple 1986; and see especially Giffen 1930 for a thorough review of ethnohistoric and early ethnographic data on gendered activities), they are open to modification by future archaeological research. Further, women and men might have used each other's tools and performed each other's conventional tasks as circumstances dictated (e.g., Jenness 1922:88). This does not, however, efface the fact that many elements of Inuit material culture were so intimately bound up with gendered practice that they had acquired a kind of iconic status, such as the lamp, pot, *ulu,* scraper, and sewing kit associated with women and the harpoon, bow and arrow, bow drill, kayak, and men's knife for men.

Twice as many of the identifiable metal objects from Qariaraqyuk fall into the men's group as into the women's group. If the unidentified

Table 11.3—Distribution of metal finds at Qariaraqyuk, by artifact class and gender category

	Iron	*Copper*	*Total Metal*
WOMEN'S ARTIFACTS			
bracelet	—	1	1
brow band	—	2	2
needle	—	2	2
scraper	—	1	1
ulu blade	3	2	5
TOTAL	3	8	11
MEN'S ARTIFACTS			
adze bit	2	1	3
arrowhead end blade	1	—	1
baleen shave blade	2	—	2
end-slotted knife blade	5	1	6
engraving tool bit	1	—	1
graver bit	1	1	2
harpoon head end blade	—	1	1
rivet	—	2	2
side-slotted knife blade	4	—	4
TOTAL	16	6	22
GENDER AFFILIATION UNCERTAIN OR NEUTRAL			
miscellaneous blade	2	27	29
miscellaneous slotted object	1	—	1
nugget	—	5	5
sheet	—	1	1
unidentifiable fragment	1	28	29
TOTAL	4	61	65

blade fragments were assigned proportionately to the identified blade categories, this imbalance would be accentuated. Furthermore, metal was one of the "hard" raw materials that traditionally fell within the male manufacturing sphere (Birket-Smith 1929:235). Since the uncertain category likely consists mainly of by-products from manufacturing and repair, most of these items can plausibly be considered men's refuse, further skewing the gender proportions. Qualifying these results is the fact that far more artifact types and specimens of all materials are associated with men than with women. Although it is interesting that men apparently consumed a greater *quantity* of a precious commodity, it is difficult to ascertain from these data alone whether they consumed metal

at a higher per artifact *rate* than women, since tools or tool parts made of substitute materials will often have followed different taphonomic pathways.

Theoretically, rate of consumption can be inferred from the slot width results, since taphonomic factors are effectively held constant (i.e., the only thing distinguishing metal- and stone-bladed handles is slot form). Since women and men traditionally used different styles of knives, rates of metal consumption can be compared directly for these functionally equivalent tool classes (Figure 11.9). Only 11 percent of twenty-seven *ulus* had narrow slots, the lowest rate for any slotted tool type. About twice as many of the men's end-slotted and composite knives and over six times as many of the side-slotted knives held thin blades. Overall, 38 percent of 125 slots on men's knives (and 47% of all 199 slots on men's tools) fell toward the narrow mode, or significantly more than women's *ulus* ($X^2 = 7.06$, $p = 0.008$). Since some Thule *ulus* have in situ metal blades and metal was rapidly adopted for all *ulu* blades at contact, it is unlikely that this is the result of functional constraints.

The association of *ulus* with ground stone blades and of men's knives with metal blades receives striking semantic support. The word *savik* refers simultaneously to various types of men's knives (most often the side-slotted "crooked knife," but also to men's knives in general) and to iron in a number of dialects of Inuktitut (Murdoch 1988 [1892]:157; Rasmussen 1930:70; Schneider 1987:348), whereas slate was referred to as *uluksa,* meaning "material for an *ulu,*" in the Barrow dialect (Murdoch 1988:60): iron is to men's knife is to man as slate is to *ulu* is to woman. This echoes the results of Robert McGhee's (1977) classic analysis of the gender symbolism adhering to the selection of antler and ivory as raw materials for Thule hunting implements.

It is also noteworthy that the relative frequencies of copper and iron are precisely reversed for men's and women's objects. Iron is rarer than copper in the Qariaraqyuk assemblage and is more "exotic" in having come from a greater distance. It is also functionally superior to copper, since it is harder and will hold an edge longer without needing resharpening (Morrison 1987). Demand for copper was low where access to iron was good (Morrison 1991:240; Stefansson 1914:13). Iron was thus likely more valuable than copper, lending a superordinate inflection to the pattern of gender access to metals. These substances, however, also have deeper symbolic resonances that overlap, but need not be reduced to, their functional and pecuniary qualities. Copper was considered a red metal (Schultz-Lorentszen 1927:113) and iron a white metal (Schneider 1987:280, 348), which implies a gender alignment by virtue

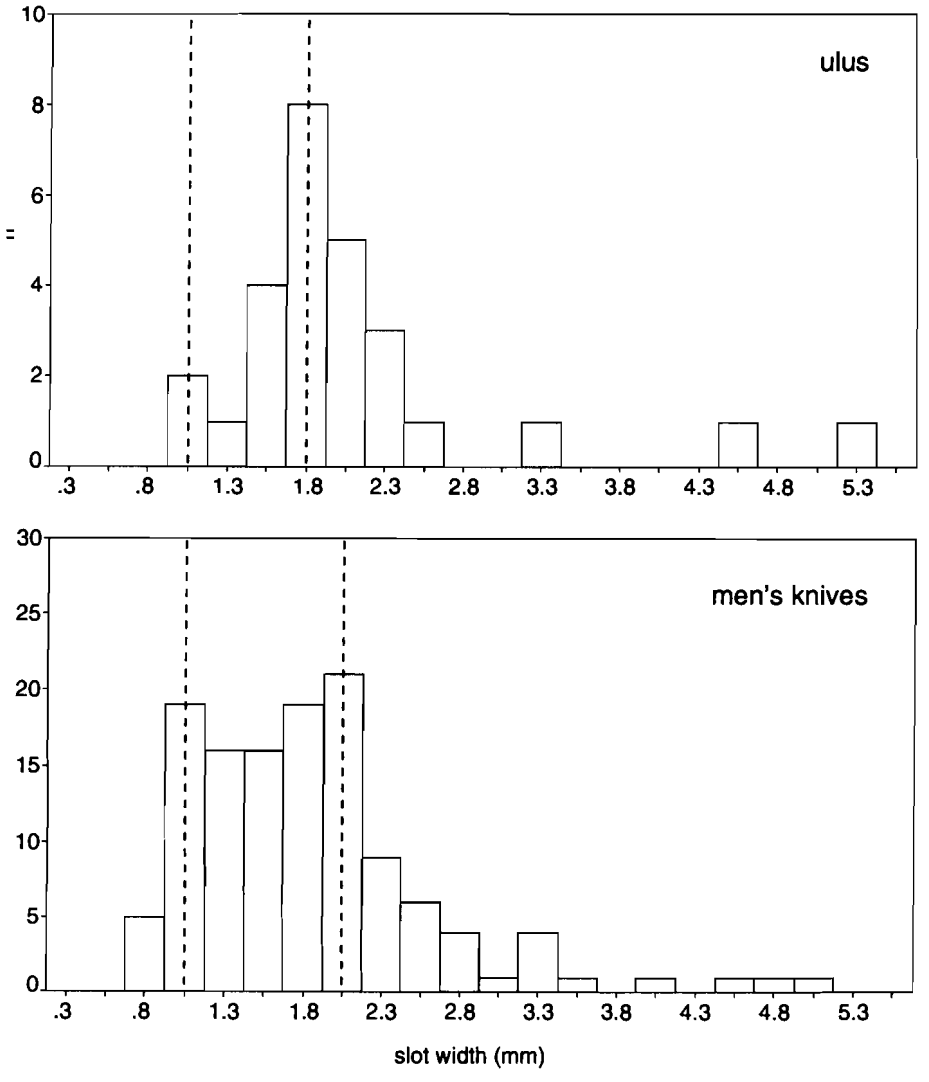

Figure 11.9 Distribution of slot widths for ulus (n = 27) and men's knives (n = 125) from Qariaraqyuk

of the association of women with the color red and men with white (Saladin d'Anglure 1977) and perhaps alludes to the bodily gender metaphors of menstrual blood and semen. An affinity between copper and blood can also be seen as a symbolic overlay on the functional disposi-

tion of metals for men's artifacts. Where copper and iron are both present, copper appears to tend to be used for the points and blades (and associated rivets) of hunting and fishing implements that come in contact with flesh and blood, whereas iron appears to be used for knives used especially to work hard materials such as antler, bone, and ivory. This was the case among the Copper Inuit historically (Stefansson 1962:249), whereas at Qariaraqyuk the ratio of iron to copper among men's manufacturing implements was 5.0, versus 0.3 for harvesting-related implements.

DISCUSSION

The results of the comparisons of metal finds and slot widths by household and gendered tool types are consistent with expectations for privileged access to the most precious trade goods by men and whaling households. Additional categories of data—such as access to other exotic or scarce materials and the size, complexity, and location of roofed spaces—indicate that a variety of material media were similarly mobilized in discourses on gender and household status; different kinds of social difference were constructed with similar symbolic resources. Just as revealing as these parallels in the material production of hierarchical difference are parallels in the way in which the latter was subverted or defused. For example, the close association of women's tools and refuse with dwelling interiors recalls the close association between women's bodies and houses reported ethnographically (Nuttall 1992; Saladin d'Anglure 1977; Therrien 1982). The house in turn is symbolically marked as a microcosm of the Inuit world (Fortescue 1988) and hence a sacred space. Furthermore, most of the kitchens at Qariaraqyuk, quintessential women's spaces, incorporated bowhead skulls in their wall construction, linking women to whaling symbolism and evoking the important role of *umialit* wives in ritually ensuring a successful whale harvest (Bodenhorn 1990). Women's manufacturing refuse and tools are also closely associated with personal objects (amulets, pendants, mica mirrors, ornaments) of potential ritual significance.

The identification of men with public ritual and celebration (because of the function of the *qariyit* as both men's workshop and the principal site of communal whaling festivals, shamanic rites, feasts, games, and performances) was thus counterbalanced by the identification of women with ritual and magic sited at the levels of the dwelling and the body. This is broadly analogous to the situation of House 29, which produced elevated frequencies of ritual paraphernalia and, although metal-poor, two out of three specimens of Norse metal (Corbeil 1995, 1996; Corbeil

and Powell 1995). Although lacking elaborate architectural symbolism and remote from the major sites of community ritual, the occupants of House 29 appear to have had access to esoteric domains of ritual and geographic knowledge.

An interesting contrast also exists in the nature of the artifacts for which women and men employed metal. Two out of five metal artifact classes assigned to women and 27 percent of specimens are items of bodily adornment as opposed to tools or tool parts, whereas all nine metal artifact classes and twenty-two specimens assigned to men are elements of manufacturing or harvesting gear (a similar pattern holds for objects made from locally scarce ivory). This divergence in patterns of metal use hinders strict analytical comparison of women's and men's artifact assemblages, just as it may have helped to undermine invidious intergender comparison in past Thule social settings. Women and men deployed their preciosities in different discursive genres, competing, in effect, for different kinds of cultural capital. As Jean Briggs (1974:287) indicated, "Men and women each have their own realm . . . and prestige accrues to excellence in each." In a similar fashion, House 29's inventory of raw materials is not impoverished but rather diverse and idiosyncratic, and its harvesting gear assemblage is aligned toward a wholly distinctive resource suite.

The practical effects of these differences in women's and men's material culture, however, may not have been as dissimilar as would at first appear. With little harvesting activity during the cold and dark months of midwinter, men probably passed much time in the *qargi,* as reflected in an enormous accumulation of manufacturing refuse adjacent to House 41. On this charged social stage metal-bladed tools would have been highly visible, silently signifying the wealth and trading prowess of their possessors. Again, judging from refuse distributions, much of women's traditional work (food preparation, hide processing) occurred in relative isolation in family dwellings, although women may have gathered in groups to socialize while sewing, as described historically (Issenman 1997a; Oakes and Riewe 1995). In fact, sewing paraphernalia is the most elaborate component of women's toolkits, often including finely finished items decorated or made out of ivory, whereas other women's tools are more simply (even expediently) made out of relatively mundane materials. The greatest elaboration of women's material culture, however, occurred on the field of the body. The vast majority of the ornaments from Qariaraqyuk correspond to types usually worn by women ethnographically (rigid brow bands, bracelets, pendants, beads, combs, hair sticks) and would likely have been part of the

elaborate dress put on for public events held in *qariyit*. The *qargi* thus represented a performative arena in which different genres of women's and men's material culture were displayed to the community and so contributed in parallel fashion to the demarcation of wealth- and status-based fractions of the social field.

Conclusion

At the height of Classic Thule bowhead whaling during the thirteenth and fourteenth centuries A.D., large Central Canadian Arctic communities like Qariaraqyuk consumed substantial quantities of metal for tools and ornaments. The abundance of metal and other exotic or locally scarce materials implies that the occupants of Qariaraqyuk were exporting goods of corresponding value, in all likelihood the surplus whale oil (and perhaps other bowhead products, such as baleen, bone, and *muktuk*) that was also the ultimate basis of wealth in traditional North Alaskan whaling villages. In fact, the year-to-year operation of the whaling economy in North Alaska and, inferentially, at Qariaraqyuk was reflexively bound up with the health of the larger trading sphere. On the one hand, the labor alliances forged by *umialit* depended heavily on prestige-enhancing gifts to crew members, supporting kin, rival *umialit*, and the community at large. Trade was necessary to obtain the useful or merely beautiful things that were used to mobilize the desire of others and so secure their labor and support. On the other hand, without a conversion mechanism for disposing of surplus whale products, no rationale would have existed for overproduction in the first place (Whitridge 2002).

Metal, at once useful, beautiful, portable, and rare, was an ideal currency of the interregional and intracommunity exchange systems—iron in particular being universally prized and traded over greater distances than any other commodity. Like other substances small-scale societies have repeatedly adopted as exchange goods in the past (shell, amber, ivory, jet, nephrite, obsidian, turquoise, fur, oil, and similar products), metal was a multivalent medium that could be inserted simultaneously into a variety of material discourses on social difference and identity. By virtue of this intertextual quality or symbolic resonance, such materials (the same applies to architectural spaces) tend inevitably to produce homologies among the different categories of social difference in which they figure. Thus, a residue of gender meanings and practices clings to metals even when they are deployed in the representation of household economic status, and vice versa. Maurice Godelier's (1986:126) suggestion that social hierarchies echo gender asymmetry "and plunge

their roots into it" is apt but too narrow. In fact, the complex imbrication of a host of asymmetries based on such things as gender, age, economic role, ritual activity, and household wealth provides the fertile ground in which hierarchy takes root in small-scale societies.

ACKNOWLEDGMENTS

Research at Qariaraqyuk was made possible by permission of the Resolute Bay Hamlet Council and was supported by grants from the National Science Foundation, Wenner-Gren Foundation for Anthropological Research, and the Department of Anthropology, Arizona State University; logistical support from the Polar Continental Shelf Project, Energy, Mines and Resources Canada; and a doctoral fellowship from the Social Sciences and Humanities Research Council of Canada (SSHRC). Completion of this manuscript was made possible by a postdoctoral fellowship from SSHRC. Thanks to Max Friesen for his help during the tenure of this award at the Department of Anthropology, University of Toronto. Kate Spielmann and the other members of my dissertation committee—George Cowgill, Keith Kintigh, Allen McCartney, and Chuck Merbs—provided valuable comments on earlier versions of this analysis. Thanks also to Lisa Frink, Rita Shepard, Greg Reinhardt, Hetty Jo Brumbach, and Robert Jarvenpa for thoughtful comments on the manuscript.