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## Alaskan Analogues and Eastern Uncertainties: Reconstructing Thule Inuit Interaction Networks in the Eastern North American Arctic

### Introduction

Thule archaeology has made great strides over the past several decades. Much has been learned about variability in social organization, settlement patterns, technology, subsistence, and even less visible archaeological phenomena such as gender roles and world view. However, a number of areas remain unclear, one of them being the issue of interaction within and between Thule regional groups. As is the case with all other cultural entities, the Thule tradition in the central Arctic can only be understood fully if the broadest scale of interregional interaction is taken into account. Of course, some attention has been paid to interaction, particularly in the form of trade, with copper, iron, ivory, and other exotic materials commonly reported from Thule sites; and aspects of interaction have been used to explain phenomena as diverse as the original Thule migration (McGhee 2000) and the eventual collapse of Classic Thule (Whitridge 1999a). Less attention has been paid to the issue of how interregional systems of interaction operated at a broader scale, although McCartney (1988, 1991), Savelle (2000), and Whitridge (1999a, 1999b, 2002) have made important contributions in this area. This paper attempts to build on these previous studies, and in particular McCartney's (1991) consideration of Thule interaction, in two steps. First, it will consider existing information on Thule interaction in relation to the ethnographic record of Northwest Alaska, which is usually considered the best analogue for understanding the Thule archaeological record. Second, it will compare the geographic and historical contexts of the two cases (Classic Thule and ethnographic northwest Alaska) as a means of understanding ways in which their patterns of interaction may have differed.

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## Thule Archaeology: a Brief Overview

This paper is centred on understanding the “Classic” Thule period, now dated to approximately cal AD 1250/1300–1400/1500. Conceptually, this period post-dates the initial migration of Inuit from Alaska to the eastern Arctic, and ante-dates the major mid-millennium changes which led to the altered economies, settlement patterns, and social organization which are seen in the diversity of Inuit societies in the 19th Century. For present purposes, the “eastern Arctic” is defined as the region extending from Amundsen Gulf in the southwest to northern Greenland in the northeast, though most of the discussion will be centred on the central Canadian Arctic (Figure 1). For overviews of the archaeology of this period, see Maxwell (1985), McGhee (1984a), Savelle (1980), Whitridge (1999b), and papers in Grønnow (2009).

Classic Thule Inuit were a largely coastal society, relying to a great degree on marine mammals. In many areas they successfully hunted bowhead whales, as indicated in large numbers of bowhead bones on archaeological sites, age ranges of bowhead whales which indicate selective hunting of young individuals, and graphic depictions of bowhead hunting incised on several implements (e.g., McCartney and Savelle 1985; Savelle 2000; Savelle and McCartney 1990, 1994). However, Thule were also accomplished hunters of other marine mammals, including beluga whales, narwhal, walrus, and seal species including ringed, bearded, and harp. Caribou were hunted whenever possible, fishing was practiced to varying degrees, and a great variety of other resources from smaller mammals to many bird species were obtained (Norman and Friesen 2010; Savelle and McCartney 1988; Whitridge 2001). Ultimately, Thule can be characterized as practicing an extreme version of a “delayed return” economy (Woodburn 1980) in which one or a few primary resources were obtained in large quantities and then stored for later use (especially during the long winter); with this focal diet supplemented by a variety of other food sources. Thus, in all regions and regardless of the focal resource, storage was a critical part of the Thule economy (Savelle 1987).

Thule settlement patterns were complex, and included multiple and varied seasonal settlement types (Savelle 1987). Winter sites have received the most archaeological attention due to their high visibility and potential for large, well-preserved artifact samples. Winter was spent in substantial, semi-subterranean sod houses with stone or whalebone frameworks (wood was used in areas to the west, but was not available in sufficient quantities in the eastern Arctic). These winter sites were in many cases near-permanent “central places” probably occupied for well over half of each year, and often reoccupied for generations. During warmer seasons, skin tents or *qarmat* (dwellings intermediate between tents and sod houses) were occupied. Sites occupied during any season could potentially contain one or more communal structures known as *kariyit*.

Thule technology is elaborate and specialized, with a wide variety of tools made from metal, stone, skin, bone, antler, ivory, wood, and other materials.

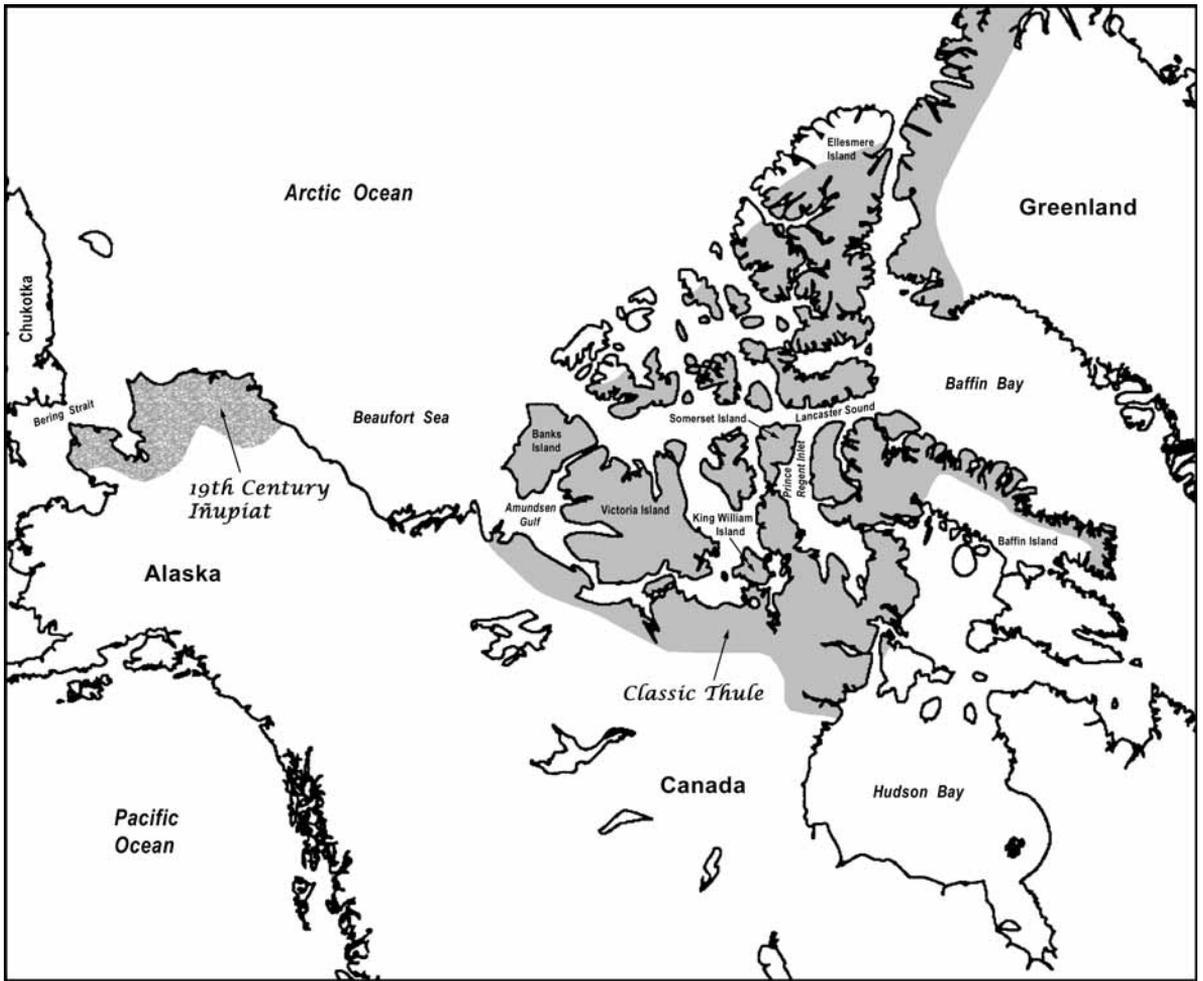


Figure 1. The North American Arctic, indicating extent of occupation by 19th Century Inupiat of Alaska (Burch 2005) and Classic Thule of the eastern Arctic (McGhee 2009).

This specialization is seen in every aspect of material culture, including technologies relating to clothing, dwellings, hunting, fishing, cooking, manufacturing, and personal adornment. Of particular relevance here, evidence for complex transportation technology is common, including kayaks, *umiak* (plural of *umiak*; large open skin boats) and sleds (*qamun* or *uniapaq* in north Alaska; *komatik* in much of the eastern Arctic). The function of most implements can be determined from the Inuit ethnographic record.

Demography and social organization are somewhat more difficult to reconstruct. For example, in the case of winter sites it is not currently possible to determine with certainty the degree of contemporaneity of the various houses (e.g., Park 1997). Winter sites vary in number of houses from 1–57 (Savelle 2000; Whitridge 1999b), and it is a reasonable assumption that some larger sites had 50–100 residents, and perhaps in a few cases even more. During other seasons, site sizes also varied. Socially, there is good evidence in some sites for inter-

household differences, which can reflect social status (e.g., in prestige-related artifacts such as exotic materials, Whitridge 1999b, 2002) and perhaps task specialization (e.g., reflecting different roles in whale hunting crews, Grier and Savelle 1994). Of course, all of these factors varied by region and period, with the largest, most permanent, and most complex sites associated with the most dense and reliable resource locations, especially those associated with bowhead whale and perhaps walrus hunting. Finally, although this topic will be treated in greater detail later in this paper, it is important to note that there is clear evidence for integration of Thule societies in an interregional network of interaction. This is seen in long-distance trade of many materials, and also in the apparent high level of information flow in the Thule world. As with all “culture areas” in the ethnographic or archaeological records, artifact types and styles are shared, and in the Thule case artifact form is virtually identical over a very large area. Furthermore, shared changes over time are seen across much of the region, indicating that similarities are not due only to a common origin (Savelle 1980). Related to this issue is Savelle’s (2000) observation that the spacing and size of Thule sites is consistent with a spatial network which could maximize the regional exchange of information, which in turn led to increased success in hunting bowhead whales.

### Choosing an Ethnographic Analogue for Classic Thule

When their lifeways were first recorded by explorers, missionaries, whalers, and anthropologists, Inuit societies across the North American Arctic were highly variable. They ranged from small scale and relatively mobile groups in the central Arctic such as the Copper and Netsilik Inuit, to the relatively sedentary and densely populated Iñupiat societies of much of coastal Alaska. Given that Thule Inuit were ancestral to all modern Inuit and Iñupiat, from Alaska to Greenland, arctic archaeologists are confronted with a bewildering array of ethnographic analogues which might be useful in interpreting eastern Thule. The question is: which of these many options (if any) is the best analogue for Thule Inuit?

Given that the Thule societies in question here lived in the central and eastern Arctic, it might appear to make sense to use the ethnographically documented societies of this region as analogues. However, the best-understood central Arctic societies, such as the Copper, Netsilik, and Igloodik Inuit, lived demonstrably very different lives from their Thule ancestors (e.g., Balikci 1970; Jenness 1922; Mary-Rousellière 1984). For example, these more recent central Arctic peoples spent much of the year in very small social groups, had relatively high levels of residential mobility, did not rely on storage for as much of their winter-consumed food, used *umiut* much less frequently and in restricted regions, did not hunt bowhead whales in large numbers (in many cases because the groups lived outside the range of whales), and did not frequently live in substantial semi-subterranean houses on land during the winter (though snow houses on the sea ice were similar in many ways, Dawson 2002).

Because of these issues, most Arctic archaeologists look elsewhere for a “best” analogue, and since the time of Mathiassen’s (1927, Vol. II: 181) original definition of the Thule culture, Northwest Alaskan Iñupiat have been identified as the closest fit. Northwest Alaska here refers broadly to coastal and near interior regions occupied by Iñupiat from Bering Strait to the Colville River, although in practice Thule archaeologists often place greatest emphasis on coastal, bowhead hunting groups in the more northerly areas from Point Hope to Point Barrow. There are two main reasons why northwest Alaska seems like a good “fit” for Classic Thule. First, it has been clearly established that Thule of the eastern Arctic originally migrated from northwest Alaska or areas immediately adjacent to it; probably during the 13th Century AD (Friesen and Arnold 2008; Gulløv and McGhee 2006; Hollinger et al. 2009; Mason and Bowers 2009; McCullough 1989; McGhee 2000, 2009). Thus, all else being equal, they arrived in the eastern Arctic with a way of life essentially Alaskan in character, though it is important to emphasize that roughly seven centuries elapsed in Alaska between the time of the Thule migration and the recording of the “ethnographic present”, during which time it must be assumed that Alaskan lifeways were not static. Second, many aspects of material culture, subsistence, and settlement appear very similar between the two. At some coastal sites, Alaskan groups successfully hunted bowhead whales and relied on their meat and blubber for a significant proportion of their food. Iñupiat lived in substantial, semi-subterranean houses which resemble those of eastern Thule closely, when one takes into account the fact that the former are made primarily of driftwood, while the latter were made of stone and whalebone due to a lack of driftwood. Alaskans built and used *umiak* for long distance travel, had extremely similar suites of complex material culture made with a similar degree of care as those of eastern Thule, and communities appear to be organized in similar ways, with, for example, *kariyit* (communal structures) the social focus of most permanent settlements.

As a result of these close similarities in realms of behaviour with relatively high archaeological visibility, many archaeologists have extended the analogy with significant success, to issues as diverse as the organization of space at Thule sites (e.g., Savelle 2002; Savelle and Wenzel 2003; Whitridge 1999b), the nature and diversity of social roles in relation to labour, wealth, status, and gender (e.g., Grier and Savelle 1994; Whitridge 1999b, 2002), and aspects of ideology and worldview (e.g., Patton and Savelle 2006; Whitridge 2004). Of course, when archaeologists use Northwest Alaska as an analogue for Classic Thule, they do not generally imply that the two cases are identical. Rather, they are using it as a “best fit”, but one whose applicability to any particular phenomenon must be assessed critically.

The remainder of this paper attempts to answer the question: can the northwest Alaskan analogue be extended to the interpretation of interregional interaction within the Thule world? In order to approach this issue, I will initially provide an overview of Iñupiat patterns of interaction, as manifested in phenomena such as the organization of territories, warfare, and trade. I will then discuss

differences in the geographic and historical contexts of the two groups (Classic Thule and ethnographic Iñupiat), in order to suggest ways in which their patterns of interaction might have differed. Finally, I will attempt to combine these categories of information to address the nature of Classic Thule interaction.

## Territories, Boundaries, and Interaction in 19th Century North Alaska

Northwest Alaska is home to a very high resolution ethnographic record, combining a diverse and fine-grained ethnohistoric data base derived from whalers, traders, and explorers with the more recent ethnographic work of trained anthropologists. The following discussion is based almost entirely on the work of Ernest S. Burch, who has produced a particularly important and comprehensive series of monographs relating to Alaskan Iñupiat in a region centred on Kotzebue Sound (Burch 1998, 2005, 2006; see also Sheehan 1997; Spencer 1959). Burch's reconstruction relates to the first half of the 19th Century, and therefore represents a society which was already impacted to some degree by interactions with the expanding European World-Economy. However, Burch (2006: 2) has made a strong case that those impacts did not lead to overwhelming changes prior to 1848.

Northwest Alaska was divided into what Burch has termed "nations" or "societies", equivalent to the term "regional group", which is more often used in hunter-gatherer studies; I will use this last term throughout the remainder of this paper, in recognition of the possibility that Thule people were regionally organized in a different manner than their Alaskan counterparts. In northwest Alaska, people considered themselves to be part of a particular named regional group, and they were largely (though not exclusively) endogamous (Burch 2005: 18). Regional groups lived in extremely well defined territories with closely maintained and precise boundaries; in fact, individuals caught in a neighbouring territory who were not immediately able to establish a relationship with a local relative or partner risked death (Burch 2005). At the same time, regional boundaries were permeable under certain specific conditions, such as travel for trade, to reach specific traditional hunting or fishing locales, or for ceremonies such as the "messenger feast" (Burch 2006). Of course, not all regional groups were equal; based on their position relative to important resources and trade routes, some had much higher populations and greater wealth. In the 19th Century, populations of most regional groups ranged from 300 to 800, with one outlier of 1300 associated with the particularly advantageous location Tikigaq (Point Hope) (Burch 2006: 7).

Of particular relevance to archaeology is the degree to which membership in particular regional groups was reflected in the material record. Unfortunately, this was extremely limited; the bulk of material culture was shared across the

region without any significant differences, with only a few exceptions (Burch 2005: 24–26). The most noteworthy differences which did exist were in clothing styles, particularly parkas. Visible from a distance, parka patterns would have been important symbols of group membership. However, despite generally excellent preservation in the Arctic, skin clothing does not preserve in great enough numbers to be useful in tracing group membership into the past. Facial tattoos may also have signified group membership, however for obvious reasons they are also not accessible in the past except under extraordinary circumstances. Finally, there is some indication that paddles were decorated, and could allow individuals to be recognized, but again this is not a practical way to indicate social identity in the archaeological record, due to their rarity.

Interactions between Northwest Alaskan regional groups are best described as intense, and occurred in several major categories. Before describing these, though, it is important to note that Iñupiat had access to particularly efficient and effective transportation technology in the form of sleds and *umiat* (open skin boats; while kayaks were also present, they were used primarily for hunting). Sleds, which could be pulled by dogs, people, or a combination of both, had a maximum capacity of 270–360 kg (Burch 2005: 166), and could cover roughly 3–5 km per hour (Burch 2006: 286). *Umiat* had a much greater capacity, with the largest able to carry at least 4500 kg., though most were smaller (Burch 2006: 291). Depending on weather, and whether they were being tracked along shore or sailed, *umiat* could cover between 6–16 km per hour (Burch 2006: 289), though under poor conditions progress could be much slower. Both forms of transport were relatively hardy if maintained skillfully. The presence of these modes of transport had a very significant impact on many facets of Iñupiat society, and in particular those related to interaction (cf., Ames 2002).

Interregional interaction was tightly intertwined with local social structures, two aspects of which were particularly important. First, a formal system of partnerships existed between individuals of different regional groups. Partnerships were the conduit through which most trade occurred and information was exchanged, and provided a “safety net” for families forced to leave their home region due to difficulties such as famine (Burch 2005). Second, Iñupiat society was structured around extended families led by powerful men known as *umialiit* (singular, *umialik*). These *umialiit* competed for prestige and wealth, and their positions were in part maintained through redistribution of both staples (e.g., whale meat and fat) and rarer exotic goods (Burch 2006). Thus, interaction was a central requirement for the functioning of the system, as a process which circulated materials and which could be used to convert surplus into other materials (Sheehan 1985). These two aspects of Iñupiat social organization – status differences and partnerships – came together in the tendency for *umialiit* to have significantly more partners than other people did (Sheehan 1995).

Trade was extremely widespread and highly structured. It could occur in many contexts, including at “messenger feasts”, the relatively frequent formal gatherings which brought together members of different regional groups

for feasting, ceremony, information exchange, and trade in the host's community (Burch 2005). However, trade was most prominently represented at special events known as "trade fairs". These were formalized aggregations centred on trade (though many other activities occurred there as well), which occurred at pre-arranged locations, usually on an annual basis. Some trade took the form of "gift giving" between partners, but Burch (2005: 189) indicates that much was "open-market" barter in which individual traders sought the best return for their goods. Events surrounding trade fairs were subject to special rules. For example, hostile interactions were kept to a minimum, and in many cases groups were allowed to travel to trade fairs through otherwise hostile territories.

The largest and best known 19th Century trade fair, at Sisualik on Kotzebue Sound, regularly attracted at least 1,000, and likely closer to 2,000, people, who assembled to exchange a vast amount of goods. Participants came from 15 separate regional groups, and many travelled hundreds of kilometers over a period of many weeks to get to the trade fairs (Burch 2005: 188). Virtually anything could be traded, ranging from high value-to-weight "preciosities" such as labrets, beads, metal, and special skins, to "bulk goods" such as dried meat or fish, whale oil, seal oil, and caribou skins (note that the division between "preciosities" and "bulk goods" is somewhat arbitrary; and that "preciosities", such as metal, can of course be desired for their functional "usefulness" in addition to having value in terms of wealth or prestige). Famously, some regional groups relied on large-scale trade in bulk goods for the effective reproduction of their society; one particularly well known example involves coastal sea mammal oil being traded to interior zones for caribou skins (Spencer 1959). In this connection, it is important to bear in mind the presence of *umiut* and sleds which made exchange in large volumes of these materials practical.

In addition to these forms of relatively "positive" interaction, intergroup conflict was a constant threat in northwest Alaska. Warfare is well represented in oral histories and place names, and there is little doubt that it was a constant reality for early 19th Century Iñupiat. Hostile interactions ranged from spontaneous small scale hostility through small raids to pitched battles potentially involving hundreds of people (Burch 2005). Outside of special circumstances, such as travel to trade fairs, individuals found outside their regional group's territory were at extreme risk of hostility and even death. The proximate cause of much of the conflict was revenge (Burch 2006: 329), and the object in many cases was to kill as many people as possible, up to the entire population of a settlement. On rare occasions, several regional groups might form alliances against others, though most hostilities were simply between two regional groups. Warfare is potentially visible in the archaeological record of Alaska, based on slat armour, special arrowheads, direct evidence of trauma to human skeletal remains, defensive placement of sites, and construction of defensive features (Burch 2005; Mason 2009)

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## Comparing Contexts

Before turning to an assessment of Classic Thule networks of interaction, it is important to assess the degree to which one might *expect* the two cases, Iñupiat and Classic Thule, to be similar, based on their geographic and historical contexts.

### Geographic Context

The regions occupied by the two groups differ in a number of significant ways in terms of constraints on human movement, settlement, and interaction. One important factor is the distribution of key resources. The system of interaction recorded for Alaska was shaped by variable distribution of many materials, ranging from preciosities such as ivory and metal, and latterly Russian trade beads and tobacco, to “bulk goods” such as products derived from sea mammals and caribou. Burch’s (1998) reconstruction of the key resources in adjacent territories shows a patchwork, with, in many cases, adjacent territories having access to very different resources. In terms of preciosities, the situation in the eastern Arctic was similar, with many materials such as native copper, meteoritic iron, soapstone, and walrus ivory being unevenly distributed (McCartney 1988, 1991; Stefansson 1914; Whitridge 2002). Therefore, their acquisition for economic, spiritual, or social reasons would have required long-distance exchange or, less likely, very long trips for direct acquisition. Other, generally bulkier goods were also not evenly distributed. In particular, bowhead whales were not available in all regions, and were available in different densities across their range (Savelle and McCartney 1994). Further north into the Arctic archipelago, caribou are fewer in number, smaller in size (Miller 2003), and subject to periodic population crashes (Miller et al. 2007). Finally, wood was also unevenly distributed, with amounts of driftwood dependent on local coastline form, currents, and length of time since beaches had been collected by earlier Palaeoeskimo peoples (Alix 2009). Fresh wood would also have been available from below the tree line on the mainland (Stefansson 1914), but this, too would have required trade over long distances to reach Thule groups in the middle and high Arctic.

One potentially significant difference between the situation in the eastern Arctic and that in Alaska is the scale over which variability occurs. In many areas in the eastern Arctic, there appears to have been less small scale diversity in major subsistence resources and bulk goods, as seen in differences between adjacent regional groups. For example, in prime bowhead hunting areas around Prince Regent Inlet and Lancaster Sound, bowheads and ringed seals were the primary available resources for all groups. Further south, in areas such as those around Coronation and Queen Maud Gulfs, ringed seal, caribou, and fish were probably the mainstays for almost all local groups. This contrasts with the Alaskan situation, where there appears to have been greater variability in major resources available to adjacent regional groups (Burch 1998), a reaction at least

in part to a somewhat more complex ecosystem. In particular, in Alaska, most coastal regional groups were situated directly adjacent to at least one interior regional group, and vice versa, thus facilitating exchange of materials available in one or the other zone. The net impact may have been that there was less impetus for trade in bulk goods in the eastern Arctic, since in many cases desirable materials had to travel greater distances. On the other hand, assuming comparable *umialik*-based social structures, there would have been a continued desire for long distance trade in preciosities. Some bulkier goods, such as caribou skins and wood, might still have had enough value to lead to their trade despite the costs associated with the great transport distances. While we do not know the actual distances travelled, since we can only speculate as to the precise origin and destination of particular bulk goods trading events, hypothetical distances are within the range of similar events in Alaska. For example, the distance from southern King William Island and adjacent areas of the mainland, both of which contain large Thule sites dominated by caribou bone (Mathiassen 1927; Savelle 1987), to southernmost Somerset Island, which was within the bowhead hunting zone, is approximately 400 km in a straight line. This is near the upper end of Alaskan sled travel distances cited by Burch (2006: 288), and well within the range of known *umiak* voyages (Burch 2006: 291).

A second aspect of the distribution of resources has to do with the degree to which limited optimal locations for resource acquisition existed. In Alaska, a number of advantageous locations existed which allowed privileged access to certain resources. For example, from Pt. Hope to Pt. Barrow, there were a few points of land best suited to bowhead whale hunting (Spencer 1959), due to local ice conditions and distances travelled from land to the ice leads where bowhead whales were concentrated during the critical spring hunt. There is also the particular situation of Point Hope, which had access not only to bowhead and gray whales, but also walrus and seals, leading to a very large population and construction of defensive structures (Burch 2006: 120 ff.). In the eastern Arctic, on the other hand, while there was certainly variability in resource densities and ease of acquisition, it does seem that fairly large areas of coast would have had relatively equivalent access to key resources. For example, Savelle's (1987: 134) high resolution survey data for southern Somerset Island indicate that sites where bowheads were landed and butchered are distributed almost continuously along the coastline, indicating that hunting was not restricted to a few optimal locales (though some stretches of coast contain higher densities of whales). This likely results in part from the fact that the eastern Thule bowhead hunt occurred in open water (McCartney and Savelle 1985), rather than at restricted leads as in Alaska. Thus, to the degree that restricted resource acquisition sites could lead to conflict, the eastern Arctic differed from Alaska.

A final aspect of the geographic context to be outlined here relates to its impact on transportation. As outlined above, eastern Thule people had access to similar transport technologies as Northwest Alaskan Iñupiat, with sled-related artifacts common on Thule sites, and *umiak* represented not only by incised im-

ages, but also by a complete Thule period *umiak* frame found in northern Greenland (Knuth 1951). However, distances and ease of movement were probably not comparable between the two regions. *Umiak* travel was likely significantly easier in Alaska, due to the presence of several long, navigable rivers, the prevalence of flat beaches ideal for tracking boats, lagoons adjacent to the ocean in many areas which facilitated travel in windy or stormy weather (Burch 2005: 168), and generally longer open-water seasons in Alaska (though ice conditions would have been variable and unpredictable in both regions). Furthermore, in the eastern Arctic the open water travel period would have presented a direct scheduling conflict with the bowhead whale hunting period, while in Alaska bowhead whales were generally hunted during the spring or fall (though other scheduling issues would have existed). On the other hand, sled travel would likely have been as easy in the eastern Arctic as in Alaska, due to large stretches of smooth first year ice ideal for sled travel. In this connection, it is important to note that, in the ethnographic period, *umiat* were no longer used in much of the central Arctic, and most trade and long distance travel occurred in the winter on sleds (Stefansson 1914). It is also noteworthy that artifacts associated with sleds and dog traction are relatively common on eastern Thule sites.

#### Historical and Social Context

Also of critical importance in assessing the potential similarity of the two cases is a comparison of their respective historical contexts. In particular, it is important to note that the Alaskan case might be considered “mature”, in that it was the product of centuries of *in situ* development, with most territorial boundaries having significant time depth (Burch 1998). The Classic Thule case, on the other hand, was relatively “new” and therefore subject to greater uncertainty. Rather than dealing with a profoundly structured cultural landscape with centuries of place names, stories, and spatial relationships, Classic Thule were in a position to create a new, idealized cultural landscape. In particular, they were still developing their understanding of group territories and boundaries, which of course did not exist before they were negotiated by early Thule in the region. They were also dealing with uncertainties about the land, probably including basic issues relating to the productivity and reliability of major resources in each region. Ultimately, one might expect particularly high levels of interaction aimed at exchange of information and creation and maintenance of partnerships, as well as at least some flexibility in territorial boundaries, in a case such as this.

This leads tangentially to the issue of demography. While it is beyond the ability of current archaeological techniques to reconstruct population sizes precisely, it is now clear that the entire Classic Thule period is relatively short (Friesen and Arnold 2008; McGhee 2009), and therefore it is reasonable to assume that in the eastern Arctic most regions were not near to the “carrying capacity” of their local environments, at least initially (cf., McGhee 2009). Thus, the impacts of population packing and potential resource shortages as factors

potentially leading to conflict would be less important in the eastern Arctic, though of course these are not the only potential reasons for conflict and warfare (e.g., Maschner and Maschner 1998). Instead, with lower relative populations, there may have been more need for cooperative interactions designed to maintain a social safety net during hard times.

Another aspect of historical context which must be reemphasized is the fact that the Alaskan ethnographic case relates to peoples who had been impacted by the expansion of the European World Economy for some time. Since this impact was, by its nature, based on interaction, it must of course be assumed that it had particular impacts on the patterns of interaction of Alaskan Iñupiat. Burch (2005: 234) has considered this fact, and in fact has concluded that there were impacts, but that they were of particular kinds. It is indeed likely that the introduction of so many new trade goods, from iron to tobacco, resulted in more intensive trade (though the trade network as a whole had much greater time depth (Hickey 1979)). At the same time, Burch (2005) makes a strong case that the increase in European trade actually led to a *reduction* in warfare, since conflict served as an impediment to trade. So, all else being equal, the ethnographic record in Alaska probably represents somewhat higher levels of trade, and perhaps other categories of interaction, but lower levels of warfare, than existed in earlier centuries.

A final point of comparison relates to interaction with non-Inuit groups. Iñupiat regularly interacted in trade, warfare, and other ways with a range of people from other ethnic and linguistic indigenous groups, including Athapaskan First Nations, Chukchi, and Yup'ik peoples. Thus, an Iñupiat regional group bordering a non-Iñupiat regional group would interact with the latter in similar ways to a neighbouring Iñupiat regional group, and relations between the two would probably be fairly predictable, if often involving conflict (Burch 2005). Classic Thule of the Central Arctic would also have come into contact with "other" peoples, including Late Dorset Palaeoeskimos at various places throughout the Thule range (though the extent and nature of interaction between Thule and Dorset remains controversial (e.g., Friesen 2004; Park 1993)), Norse farmers, fishers, and traders along their eastern margins, and Athapaskan or Algonquian regional groups on their southern flanks. The nature of the potential interactions are extremely difficult to reconstruct, however the one common element would be that each set of interactions in the eastern Arctic would be relatively "new" and unpredictable. Unlike the Alaskan ethnographic situation, these would not be long-term patterns, but rather evolving relationships fraught with uncertainty. Arguably, all of these aspects of the "newness" of the Thule social structure would impact interaction, and many of them might lead to a desirability for heightened cooperative interaction between Thule regional groups, and greater social flexibility.

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## Thule Inuit Interaction in the Eastern Arctic

I will now return to the central question of this paper: to what degree did the eastern Thule pattern of intersocietal interaction resemble that of ethnographically-known Northwest Alaska? This will be considered in three areas which are not equally archaeologically visible: territorial organization, trade, and warfare.

### Territorial Organization

A particularly difficult question concerns how Thule of the central Arctic were organized territorially, in terms of regional groups. Recall that Alaskan Iñupiat were organized into tightly bounded regional territories, with occupants self-identifying as belonging to a particular territory; with interactions *between* these groups qualitatively and quantitatively different from those occurring *within* each group. Ethnographically known Inuit groups from the 19th and early 20th Century eastern Arctic were also organized into regional groups, though in many cases they were somewhat more flexible and more variable in terms of scale and organization. Regarding Classic Thule, then, it is virtually certain that regional groups would have become formalized in the eastern Arctic at some point following the initial migrations (cf., McCartney 1991: 37). However, asserting that regional groups existed does not help in defining the location and extent of specific regional group territories. Material culture does not help us here, because there is no frequently occurring material evidence which can serve as a proxy for group membership. Hypothetically, central Thule regional groups may have indicated their membership in elaborate patterns of skins on parkas, in facial tattoos, in *umiak* or kayak paddles, or in other media. Each of these categories is occasionally encountered in the eastern Arctic, but in order to delineate regional group territories, we would need large numbers of these from many sites, to understand where differences occur. This is clearly not a realistic expectation.

In the absence of material culture markers, perhaps the only other way we might reconstruct regional territories is through interpretation of the distribution of known sites, especially winter sites. For example, in areas where high resolution regional survey has occurred, uninhabited “gaps” in settlement might be interpreted as likely boundaries between regional groups, and territories might be centred on particularly large sites or site clusters, as they were in several Northwest Alaskan cases (Burch 2006). However, the problems with this procedure are numerous. For example, in the Alaskan ethnographic record, the largest winter villages in a given territory were not the *only* winter villages – rather, within most territories a number of winter villages were occupied. So, how would one know, archaeologically, which “satellite” villages are associated with which principal villages, other than taking educated guesses based on proximity (ie., assuming that small villages are allied with the large villages closest to them)? One would also need to make assumptions about contemporaneity of

sites, and that relative site size reflects the relative size of the original population (as opposed to larger sites having been occupied longer, with sequential building of small numbers of houses).

James Savelle (2000: 78) has in fact proposed that Thule winter site clusters across much of the prime bowhead hunting region of the central Arctic are analogous to “historic North Alaskan whaling society village systems”. For the most part, they are separated from one another by large gaps without winter villages (though other Thule site types usually occur in these “gaps”), and in most cases they incorporate one or two larger villages, as measured in numbers of houses, *kariyit*, and bowhead bones. Given the high quality of the survey data (Savelle 1987), and these aspects of settlement pattern, Savelle’s suggestion that these represent regional group territories is reasonable, and may be the closest we can get to actually defining them in the eastern Arctic. At the same time, it is also quite possible that any number of these clusters might be a part of the same regional group, especially given the distances involved. For example, on southeastern Somerset Island area, three well defined site clusters are spread across approximately 100 km of coastline from Creswell Bay to Hazard Inlet. This entire stretch of coast could easily fit within any one of the three coastal regional group territories in North Alaska, from Point Hope to Point Barrow (Burch 2005: 37), each of which contained more than one significant winter village. So, regrettably, here again we are stymied by the resolution of the archaeological record which does not allow any certainty regarding territorial boundaries. However, given the numbers of houses recorded at Thule winter sites in the central, bowhead hunting area (Savelle 2000: 81), and recognizing that it is extremely unlikely that all houses within sites or site clusters were occupied simultaneously, even if some regional groups incorporated more than one site cluster it seems likely that most Thule regional groups had somewhat lower populations than those in northwest Alaska.

## Trade

Since Mathiassen (1927) first defined the Thule culture, arctic archaeologists have noted direct indications of trade, including items made of iron, copper, ivory, soapstone, and amber; as well as indirect indications such as blade slots in implements which are too narrow to have held any material other than metal. Metal has received particular attention, with McCartney (1991) referring to Thule society as “epi-metallurgical” based on the ubiquity of indications of metal use. McCartney (1991) went on to suggest that Classic Thule trade in metal and other materials should be considered within a Northwest Alaskan social framework, as driven in part by *umialiit* using trade to accrue prestige and wealth, and advocated further research along those lines in relation to inter-household variation (cf., McGhee 1984b). Whitridge (1999b) has gone much further along these lines, making a strong and nuanced case for trade being structured along Northwest Alaskan lines, based on intrasite distributions of exotic goods at the very large

Thule site of Qariaraqyuk on Somerset Island. Exotic materials were found in higher concentrations in households which, based on multiple criteria, could be considered “high status”, and this was interpreted as analogous with the Northwest Alaskan situation in which wealthy *Umialiit* were able to convert whaling surpluses (especially oil) into prestige (Whitridge 1999b). The large size of Qariaraqyuk, and its presence within a zone which saw the highest level of access to bowhead whales (Savelle 2000) makes this site an ideal test case for Thule social organization at its most complex.

Less well understood than trade in “preciosities”, for reasons of archaeological visibility, is the degree to which long-distance trade existed in “bulk goods”, such as sea mammal oil, caribou skins, walrus skins, and wood; a pattern which is expected if Classic Thule interaction resembles that of Northwest Alaska. One aspect of this question relates to the degree that these materials can be considered “necessities”, as opposed to luxuries. The analogous situation in North Alaska indicates that a number of regional groups actually relied on exchange of bulk goods, and might have been in trouble without them; particularly coastal sea mammal fat traded to the interior as a dietary supplement, and interior caribou skins traded to the coast for production of superior winter clothing (Spencer 1959). It is currently an open question whether large quantities of these materials might have been moving around in the Classic Thule world, though it does seem likely that some were. In particular, it is probable that the relatively large populations in some central Arctic areas, for example in the bowhead hunting areas surrounding Prince Regent Inlet, Barrow Strait, and Lancaster Sound, would have required more caribou skins than would have been available from the relatively small regional caribou populations, and more wood than would have been available as local driftwood. However, this leaves open the question of what materials might have been exchanged for them. For example, it is not clear that “peripheral” areas, especially those to the south which would have had greater access to wood and caribou, would have required large amounts of sea mammal fat, since most had greater access to seals than was the case for most interior Alaskan peoples.

One final aspect of trade which must be considered if a comparison to northwest Alaska is made relates to the circumstances in which trade actually occurred. Specifically, did aggregations resembling Iñupiat “trade fairs” exist in the Classic Thule world? The presence of trade fairs in Classic Thule times is potentially important, since many aspects of the broader “system” of interregional interaction in Alaska were closely connected to them. In this connection, it is worth noting that smaller scale but similar aggregations did occur in the eastern Arctic at certain times and places, with for example Inuit from multiple regions travelling to “Akilunik” on the Thelon River (Stefansson 1914); leading to the possibility that this represents a continuity of a Thule pattern (though not necessarily at the same locations). Here, once again we run up against the shortcomings of the archaeological record. The question is, how do you demonstrate the existence of a trade fair? There are many problems, including a) the fact that

large sites cannot be considered automatically to represent large occupations due to issues of contemporaneity; b) that since the ethnographic cases are summer sites, they have lower archaeological visibility and poorer preservation than many sites occupied during other seasons; c) the fact that it is not completely clear how they would be structured spatially, though some high degree of formal structure would be expected, as it was at Sisualik (Burch 2005: 187); and d) despite the expectation of heightened trade, it is not clear that trade goods would occur in high numbers in the archaeological record, if they were being handled carefully and then carried away to traders' home territories. To my knowledge, no trade fair sites have been formally proposed for Classic Thule, though in this context Savelle (1987: 184) noted the significance of a very large summer site (43 tent rings and two *kariyit*) which was located almost exactly midway between two major Thule winter house site clusters. It is not clear if this was an aggregation site for members of one or both of these two groups, or a site with broader regional implications. In summary, the fact that no convincing trade fairs have been identified in the Classic Thule world may simply mean that they remain to be found, or that they are archaeologically invisible. Equally, it may mean that they did not exist, and that trade was conducted in a somewhat different fashion in east and west.

## Warfare

A final prominent aspect of the North Alaskan record of interaction is warfare. However there is little evidence for warfare in the eastern Arctic. In Alaska, perhaps the "best" commonly available artifact category associated with warfare is armour, given that arrowheads intended for warfare can be difficult to differentiate from those used for hunting, if any differences exist (e.g., Mason 2009). In Alaska, armour is known from a number of later prehistoric sites, and given the fact that a single set of armour can contain dozens of individual slats, it would be expected to be recovered, if it was present. To my knowledge, armour slats have not yet been identified in the eastern Arctic, which is surprising as they might be expected in low frequencies even if warfare was not common. Another class of material evidence which may indicate warfare is defensive site placement or defensive structures such as rows of sharpened stakes as existed at Tikiqag in Alaska (Burch 2005). However, even in Alaska this was extremely rare, and certainly none of the sites in the eastern Arctic clearly indicate defense. Finally, one unique artifact relevant to this topic is a Thule bowdrill handle from Baffin Island which depicts conflict (Maxwell 1983). In fact, there are two images on this object, one on each face, depicting individuals with bows and arrows pointed at each other. However, it must be noted that a single depiction does not necessarily indicate the presence of widespread warfare – it could refer to oral histories of warfare or to mythological conflict; and, at least hypothetically, could have been made in Alaska and brought to the eastern Arctic. Thus, we are left without being able to say much definitively about warfare in the eastern Arctic.

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## Future Research

Before proceeding, it is worth noting that several future research directions might be brought to bear on some of these unresolved issues relating to Thule interaction. Evidence for conflict might be sought by looking through existing eastern Thule collections for armour slats, which might have been overlooked. Future regional surveys might reveal sites which are good candidates for Thule trade fairs, despite the many caveats outlined above. Finally, trade in bulk goods can be approached through further sourcing studies. For example, trade in caribou skins and in whale oil (presumably transported in sealskin “pokes”) might be approached indirectly through skeletal element frequencies (assuming that a limited range of elements are attached to a traded caribou skin or seal skins used as pokes). However, stable isotopes from appropriate bones have the potential to yield more definitive results (e.g., Britton et al. 2009; Hedman et al. 2009). Strontium and oxygen isotope ratios are known to vary by region, and thus by analyzing levels in caribou or seal populations from known regions today, isotopic analyses of archaeologically recovered bones could, at least in theory, provide direct evidence for directions and distances of trade in seal or caribou. Likewise, more detailed analysis of wood could provide further insights into exchanged wood vs. locally collected driftwood (Alix 2009), especially given the historical trade in wood collected by Copper Inuit from the mainland south of Coronation Gulf (Stefansson 1914).

## Discussion

To sum up, 19th Century Alaskan Iñupiat and Classic Thule Inuit of the central Arctic were similar in many ways, including aspects of housing, technology, economy, and social structure. Both cases exhibited some level of social status differentiation, which can serve as a driver for trade in exotic goods, and as with all hunter-gatherer societies, both had an underlying need to maintain relationships with individuals or groups in neighbouring regions which could be operationalized in times of need. Furthermore, in both cases there were notable regional differences in access to preciosities (e.g., iron, copper, and ivory) and potentially important bulk goods (e.g. caribou skins, sea mammal oil, and wood).

However, the review of what we know about Classic Thule interaction in the eastern Arctic reinforces the fact that our understanding is imperfect, at best. We have clear data relating to information flow, trade in high value materials, and site distributions, but cannot yet be sure about how the overall system was integrated and reproduced. For example, we do not have good information on the relative intensity or extent of bounded regional groups, warfare, trade in “bulk goods”, and formal trade fairs. All of these phenomena are challenging to reconstruct in archaeological contexts, leading to the tendency for archaeologists to

emphasize trade in exotic materials. However, it is precisely these phenomena – warfare, trade in bulk goods, and trade fairs - which must be understood if we are to make the case that the Classic Thule pattern closely resembles the North Alaskan ethnographic analogue.

Despite these issues, after reviewing the data it seems likely that the eastern Thule system of interregional interaction was quite different from that of north-west Alaska. In other words, we are missing evidence for warfare, bulk trade, and trade fairs in the eastern Arctic not simply due to issues of low archaeological visibility, but rather because these phenomena were absent or not strongly developed. The eastern case must have been profoundly impacted by the fact that the Classic Thule system of interaction developed quickly in an initially foreign social and geographic landscape, without pre-established regional group territories. Equally important is the fact that recent re-dating of early Thule sites indicates that the entire Thule phenomenon in the eastern Arctic played out over a much shorter period than previously believed, lasting a maximum of 200 years and probably less in many regions (Friesen and Arnold 2008). This short occupation duration, combined with the fact that the initial Thule population must have been fairly small (McGhee 2009), means that the Classic Thule system of regional groups and interaction networks was a rapidly evolving and possibly more flexible system which was essentially “coming into being” during the entire Classic Thule period, as opposed to a stable long-term arrangement. Of course, the Alaskan situation was also subject to change over time, as evidenced by the development and changing frequency over time of trade fairs, intensive interregional trade, and warfare (e.g., Hickey 1979; Mason 2009; Sheehan 1997).

The lack of evidence for warfare in the eastern Arctic may result from the facts that a new and unknown land required a greater level of cooperation, that populations were relatively low and therefore there was room to expand or move if conflict broke out, and that at least in some cases, the presence of unknown “others” such as Dorset Palaeoeskimos led to increased cooperation among Thule groups and/or aggressive tendencies being directed outward rather than within Thule society. Importantly, there would also have been a shorter political history during which feuds and conflicts might have developed, thus reducing the primary cause of conflict that existed in the Iñupiat case. This does not mean that disputes and feuds did not exist in Classic Thule, but rather that there may have been a reduced scale and frequency of interregional conflicts.

The lack of evidence for trade in bulk goods must, to some degree, result from a lack of visibility. However, it probably also reflects lower actual levels of exchange, due to distances and difficulty of travel, the likely emphasis on sleds as the primary means of conveyance in many areas (as opposed to higher-capacity and often faster *umiats*), and the spatial distribution of bulk goods, with potential trade goods rarely situated in adjacent “territories”. In particular, in many of the prime bowhead-hunting regions, the principal locally-available bulk materials which might be exported were those derived from whales. However, while sea mammal oil was a major, in fact dominant, exchanged material among

some Alaskan groups, it is not clear that there would have been a strong “market” for it in the eastern Arctic, particularly given the often great distances over which it would have to travel. This leaves baleen and whale bone (in addition to preciosities such as ivory) as potential exports from bowhead hunting areas. These materials have some technological advantages, and could conceivably have been tied to status, but it is unlikely that they would have been as critical to trade as oil was in northwest Alaska. As a final extension of this line of argument, if less bulk trade occurred, the need for formal trade fairs would also have been reduced.

These potential differences in interregional interaction must have impacted many aspects of social relations within Thule regional groups. In particular, the role of *umialiit* may have been affected, given less emphasis on trade for bulk staples and reduced requirement for leadership in warfare. Despite this, exotic goods were widely circulated, and presumably redistributed within a local-level social system which resembled that of northwest Alaska (e.g., Grier and Savelle 1994; Savelle and Wenzel 2003; Whitridge 1999b). Thus, in the eastern Arctic perhaps *umialiit* achieved a greater proportion of their status and influence by functioning as middlemen, retaining and redistributing significant proportions of high value trade goods as they exchanged them between different external regions (see Burch (2006: 17) and Kaplan (1985) for accounts of the relationship between middleman status and individual wealth and authority in Alaska and Labrador, respectively). Of course, such a status would be embedded within all of the other complex requirements of leadership, including organization of subsistence production, storage and redistribution within the local group. Ultimately, this would mean that Thule *umialiit* were still relatively wealthy and influential leaders, but their authority came more from management at the local and regional level than from commerce and politics at the interregional level.

In conclusion, ethnographic analogy, and particularly the “direct historical approach” which uses ethnographic information from direct descendent groups to understand prehistoric lifeways (Trigger 2006: 510), remains a powerful tool for archaeological interpretation. However, analogies must be applied creatively and with caution, taking care to avoid the assumption that ethnographically observed behaviours can be imposed uncritically on the past (e.g., Friesen 2002; Wylie 1985). In the present case, the ethnographic record of northwest Alaska remains the closest ethnographic analogue for many aspects of Classic Thule society in the eastern Arctic. However, in the specific case of interaction networks, the fit does not seem to be particularly close. Instead, when considered in relation to differences in geographic and social contexts between west and east, the northwest Alaskan pattern serves not as a direct analogue, but rather as a high resolution starting point for a more indirect reconstruction of Classic Thule patterns of interaction.

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