REGIONAL COMPARISON OF THULE HARPOON HEADS

THROUGH THICK AND THIN:
A REGIONAL COMPARISON OF HARPOON HEADS FROM THULE SITES IN NUNAVUT, CANADA

By

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Abstract

In 1969/70 Robert McGhee first suggested the existence of regional social groups in Thule culture. Under the assumption that such social groupings would be reflected in the distribution of material culture, this study aims to investigate McGhee's hypothesis using one artifact class of Thule culture: harpoon heads. The study looks at harpoon heads from all published Thule sites from across the territory of Nunavut, in arctic Canada. The harpoon heads are broken down into individual attributes, and the regional distribution of each attribute is considered in an attempt to find patterning across space. Rather than confirming the existence of regional social groupings, the patterns discovered suggest a culture continuum moving from west to east across the Canadian arctic. This research is preliminary in nature, and opens a new forum for debate in Canadian arctic archaeology.

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I
Introduction

Over one thousand years ago, a new marine-adapted culture arrived into what is now the territory of Nunavut, in arctic Canada. Thule culture, as it was named in 1927 by archaeologist Therkel Mathiassen, would ultimately evolve over the last millennium to become the richly diverse Inuit culture that we know today. Archaeologists have long portrayed Thule culture as a uniform cultural entity, bound together by a common adaptation to an isolated and barren ecological niche. However, modern Inuit are proud of their cultural diversity, and frequently refer to local social group names, such as 'Netsilik' and 'Iglulik', to describe their sense of group affiliation. In an earlier work (Megginson 1997), I argued that these vast social entities were a creation of the enthnographers of the late nineteenth and early twentieth centuries who lived with and studied the Inuit. The extremely mobile lifestyle of the protohistoric Inuit precluded the existence of such large social groups, and group affiliation occurred at a much smaller level, often centred around the maximal winter band of about one hundred people. This is not to say that these groupings do not have meaning today: as the hunter-gatherer lifestyle became less prominent in the lives of the Inuit, a more sedentary lifestyle and centralisation into town centres became more common. This more sedentary lifestyle brought people into contact with a larger group of people on a day-to-day basis, and thus the wide cultural terms seem to have been appropriated by the modern Inuit to serve these new needs.

With all of the changes that have occurred from the protohistoric period to the

present day, one begins to wonder what the social situation might have been like in prehistoric times. Could it be possible that Thule culture was not the uniform entity it has always been thought to be? Without the luxury of written accounts that are at the disposal of the ethnohistorian investigating the protohistoric period, the prehistoric archaeologist must often rely on material culture in such an investigation. If one can make the assumption that social group affiliation would be reflected in material culture, then it seems to follow that one could make a systematic analysis of Thule material culture in an attempt to find evidence of discrete social groupings. The purpose of this thesis is to test the hypothesis that Thule culture was uniform across the Canadian arctic, and this will be achieved through an analysis of geographical variation in harpoon head technology.

Background

Many archaeologists have argued for the *in situ* transition from Thule culture to historic Inuit cultures (e.g. Mary-Rousselière 1979; McGhee 1969/70, 1972; Taylor 1965). According to such an approach, during the centuries that followed the initial expansion of Thule, their way of life became modified to adapt to local conditions and in response to the progressively deteriorating climate (Burch 1979: 190). The result was increasing regional diversification in Thule culture:

> The uniform stratum of early Thule culture then developed regional variants, and these variants eventually developed into the various local populations of the historic Inupik-speaking Eskimo (McGhee 1969/70: 173).

McGhee relates the development of these regional variants to climatic changes that have occurred in the Canadian arctic over the past one thousand years. While the climate changes themselves were probably not dramatic enough to have produced significant

cultural change, their influence on the annual and seasonal distribution of sea ice, and by association, the annual and seasonal availability of sea mammals, would have caused crucial changes in Thule subsistence strategies (Ibid.: 175). The Thule expansion occurred during the Neo-Atlantic Episode (900-1200 A.D.), during which mean summer temperatures were one to two degrees Celsius warmer that at present, and there was a general retreat of pack ice throughout the arctic (Ibid.). However, this was soon followed by a period marked by a deteriorating climate, the Pacific Episode (1200-1550 A.D.). The Thule people adjusted their patterns of adaptation to meet this changing climate, but the kind and nature of these changes varied from region to region:

> After 1200 A.D., Thule culture probably did not constitute the highly uniform cultural horizon suggested by early excavations. With further work, we may be able to distinguish and define regional 'tribes' on the Thule level, differing from one another to about the same extent as the various tribes of historic Inupik-speaking Eskimo (McGhee 1969/70: 180).

McGhee suspects that further investigation will reveal 'tribal' separation in the following regions of the Canadian arctic: Amundsen Gulf, Foxe Basin, Baffin Bay, Labrador, and Hudson Bay. He defines the first of these groups on the basis of their extensive use of pottery and copper, and their preference for Thule Type II harpoon heads with lashing slots.[1] Baffin Bay Thule, on the other hand, are defined by their reliance on the hunting of Greenland whales, their preference for flat harpoon heads with drilled lashing holes, and the frequency of dolls with top-knot hairstyles (McGhee 1969/70: 180).

McGhee's main concern in proposing this model is to support his theory of *in situ* culture development in the Canadian arctic:

> Some of these 'tribal' differences on the Thule level may continue through time and serve as distinguishing characteristics between

[1] This refers to Therkel Mathiassen's harpoon head typology, defined in 1927. The definitions of each type will be discussed in a later chapter.

> historic Eskimo tribes, implying geographical stability of these tribes relative to one another for the past 400 to 800 years (McGhee 1969/70: 180).

This model is most frequently applied in terms of the ethnographically described cultures of the historic period: Copper, Netsilik, Caribou, Iglulik, and Baffinland Inuit. Such an approach, however, is based on the assumption that the Inuit of the historic period can be divided into discrete social groupings. This assumption is based on the early ethnographic research done by such eminent anthropologists as Knud Rasmussen, Therkel Mathiassen, Kaj Birket-Smith, Franz Boas, and Diamond Jenness during the latter part of the nineteenth century and the beginning of the twentieth century.

Contributions of the Research

Robert McGhee, who first suggested the possible existence of regional variation in Thule culture (1969/70), was probably influenced by his strong belief in *in situ* prehistoric-historic development in the Arctic, and also the general acceptance of discrete social groupings as having existed in the ethnographic period. As yet, no archaeologist has undertaken a systematic investigation of McGhee's original suggestion. This will be the first research that will look for Thule regional variation without assuming unilinear development from Thule 'tribes' to historic period 'cultures', and as such, it will aim to avoid the biases inherent in past archaeological research in the Canadian Arctic. This research suggests a new perspective for hunter-gatherer archaeology as a whole that does not assume the existence of discrete social groups. Sites are compared on a *local* level rather than through more general regional survey, and in this way, one can avoid the danger of grouping sites together into 'cultures' that have no social or archaeological meaning. Archaeologists have never been able to agree upon the extent to which we can

reliably link material culture to specific social groups. This research will work on the assumption that this link is possible, and thus this work can contribute to the debate in the form of a case study. Broader issues concerning ethnicity and ethnic boundaries can also be addressed by considering Barth's (1969) discussion of these matters while looking for regional variation in the archaeological record.

If my research shows that a culture continuum is evident in the Thule archaeological record, then the theory of *in situ* development will be supported in terms of the theory of historic period culture continuum. If, however, McGhee was right in suggesting that regional 'tribes' can be identified in the archaeological record, new questions must be asked as to why and how there was a change towards cultural uniformity through time. A consideration of subsistence strategies would probably be of importance in answering these questions - cooperative hunting strategies, such as those required by whale hunting, would assist in the creation of discrete social groups, as large, sedentary winter villages were the norm. In historic times, however, hunting groups were much smaller and spread out, thus reducing the possibility of the recognition of affiliation with a larger social entity. This could be argued to have led to increased uniformity in the stylistic attributes of artifacts throughout the Arctic, thus creating a culture continuum. These changes in subsistence strategies are most often explained in terms of climatic change, using a perspective borrowed from cultural ecology.

II
Background

Thule Culture - An Introduction

Thule culture was first defined in 1927 by Therkel Mathiassen. Having undertaken an excavation of *Naujan*, perhaps the most famous Thule site investigated to date, located at Repulse Bay, just north of Southampton Island - he concluded that the remains he had found differed sufficiently from the more modern populations of the region to justify calling it a separate culture. Furthermore, the complete absence of any artifacts of European manufacture and the deteriorated state of the house ruins led him to conclude that this culture was about a thousand years old (Mathiassen 1927a: 86-89). He saw striking similarities between this site and one that had been investigated near Thule, Greenland - enough similarity to conclude that they represented the same culture.

> As the first find of this culture was thus found at Thule by members of the Second Thule Expedition and the second find, at Naujan, was made by the Fifth Thule Expedition, I consider it warrantable to *attach the name of Thule to the old Central Eskimo culture as represented by the Naujan find* (Mathiassen 1927a: 89).

Thule culture has variously been defined based on chronology, artifact typology, dwelling types and economy. In its most general form, it can be defined as including "...all the midden-building, polished-slate-making, lamp-burning, kayak- and umiak-paddling Eskimos...who extended from Kodiak Island to Greenland (Dumond 1977: 118). Any definition of Thule culture is, by necessity, concerned with determining the criteria by which this culture can be differentiated from what we know of the ethnographically described modern Inuit. This differentiation cannot be determined through exact means,

and the line between the two groups is often very blurry. Part of the reason for this is that the transition appears to have occurred slowly, and at different times across the arctic.

Origin of Thule Culture

The first inhabitants of the Canadian arctic were those associated with the Arctic Small Tool Tradition (ASTt) of the Paleoeskimo phase of arctic prehistory. These hunters originated in the Bering Sea region and migrated east to Greenland sometime between 4500 and 4000 years ago (Irving 1962; Giddings 1964). The Pre-Dorset of the ASTt evolved into what is known as Dorset culture in Canada by 500 B.C. (Taylor 1968), and in Alaska it developed into the Norton Tradition by 800 B.C. The Norton Tradition includes the cultures known as Choris, Norton and Ipiutak, and lasted 2000 years in Alaska (Dumond 1977).

The Paleoeskimo stage is differentiated from the Neoeskimo stage of arctic prehistory by the appearance of harpoon float gear, which for the first time allowed for open water sea mammal hunting (Morrison 1983: 4). The oldest cultures classified as Neoeskimo are known as Okvik and Old Bering Sea, and they probably developed from the Norton Tradition in Alaska (Dumond 1977). In northwestern Alaska , these cultures developed into Birnirk culture by A.D. 500, and on St. Lawrence Island and the Siberian coast, they developed into Punuk culture (Morrison 1983: 5).

The strong resource base provided by the increasing reliance on the hunting of sea mammals from skin boats allowed for population growth (Arnold 1986: 4). This emphasis on open water hunting increased, and Birnirk eventually evolved into the whaling culture that is now known as Thule culture (Ibid.). This Birnirk-Thule transition

was complete by A.D. 1000 (Yorga 1979: 287), and within two centuries they had spread over most of the inhabitable regions of the arctic, as far east as Greenland. The rapid rate at which this migration occurred is supported by linguistic evidence, as Inuktitut, the language spoken by the modern Inuit, varies little from the Bering Sea region to Greenland (Morrison 1983: 6).

Many reasons have been proposed for this quick migration, but the reason most commonly evoked is climatic change. At about this time, the arctic climate was undergoing a warming period; which led to a reduction of pack ice in the Beaufort Sea, which in turn led to an increase in the numbers and distribution of certain species of marine mammals, including the large bowhead whales. According to many theories of expansion, this climatic warming rendered traditional Alaskan methods of hunting whales in ice-leads ineffective, which in turn led to the adoption of new open water hunting techniques linked with the use of large skin boats called *umiaks*.

It is often argued that the Thule followed the whales into their new feeding grounds in the Canadian arctic archipelago (McGhee 1969/70; McCartney 1977). Such a theory assumes the Thule economy was strongly based on the hunting of bowhead whales. This supposed focus on whaling was first articulated by Therkel Mathiassen:

> *Whaling* has apparently been one of the principal occupations; this is proved both by the construction of the houses, in which whalebone play such a great part, and by the material used for the implements, whalebone and baleen apparently being the most important; in particular, however, the composition of the refuse heap, the large masses of baleen and whalebones which appear especially in the lower strata, indicate that whaling has been one of the most important means of livelihood of the population (Mathiassen 1927b: 85).

This postulated whale-based economy is often used as the main criterion by which one can distinguish Thule culture from the culture of the modern Inuit, and it has

many proponents (e.g. Mary-Rousselière 1979; McCartney 1980; Savelle 1987; Savelle & McCartney 1994). It may be inadequate for many reasons. The strongest argument for the importance of whales in the Thule economy are the whalebone houses found throughout the Canadian arctic and the whaling equipment found in association with these sites. However, the large harpoons and floats interpreted as being used exclusively for the hunting of whales could have just as easily been intended for use with other large sea mammals, such as walrus. Also, one should be cautious to differentiate between whale bone *utilisation* and whale *hunting* (Freeman 1979: 279). These bones could have been scavenged from beached whale sites as a substitute for driftwood in the construction of houses.

In more recent years, the reliance on cultural ecology as an explanation for the rapid migration has been challenged as being too simplistic (e.g. Morrison 1999), and alternative explanations have been offered. One such explanation suggests the migration was spurred by the desire for iron (McGhee 1984). The Cape York meteorite in northwest Greenland provided a large deposit of meteoric iron, and this theory assumes that the Thule in Alaska heard rumours of these deposits from the local Dorset populations. One obvious problem with this theory is that it presupposes a degree of cultural interaction between Dorset and Thule for which there is no proof[2] (Morrison 1999: 140). Other explanations for the rapid migration rely on demographic motivations, such as population pressure, over-hunting, or warfare (e.g. McCullough 1989: 300-303; Morrison 1983: 271-272).

David Morrison has effectively demonstrated that the Thule did not follow bowhead whales as has been suggested in earlier theories, pointing out that evidence from the field of biology (Dyke et al. 1996 in Morrison 1999: 146) has shown that the Pacific

[2] For an interesting perspective on the Dorset-Thule transition, see Park (1993).

and Atlantic whale populations have not met since the Holocene. Morrison, however, does not deny that whaling played an important role in Thule culture, and identifies at least two migrational episodes, which he refers to as the 'Natchuk Phase' and the 'Ruin Island Phase'. Although the migration of earlier groups may have been motivated by whale hunting, Morrison asserts that the later migrations may have differed in their motivations and the routes taken (Morrison 1999: 151).

Regardless of how and why Thule people migrated across the Canadian Arctic, it is generally agreed that this event began about one thousand years ago. Thule chronology is often broken down into three periods: Early Thule, Classic Thule, and Modified Thule. Although the dates for each of these periods vary by region, the general agreement is that Early Thule falls between 900 and 1100 A.D., Classic Thule is the period between 1100 and 1200 A.D., and Modified Thule is the period between 1200 and 1600 A.D. (McCartney 1977: 219).

Archaeology and Social Boundaries

An analysis of variability in material culture in an attempt to delineate regional variation requires an important assumption: that the degree of stylistic similarity between assemblages is directly related to the degree of social contact, and therefore social relatedness, between the groups in question (McGhee 1984: 87). This assumption has led to some controversy in the history of archaeology (e.g. Binford & Binford 1966; Bordes & Bordes 1970; Mellars 1970), and so a brief discussion of the issues surrounding the linking of archaeology and social boundaries is necessary at this time.

McGhee's original hypothesis regarding regional variation in Thule culture (1969/70) used the term 'tribe' in defining these units. The term 'tribe' can be defined as

"...a social group speaking a distinctive language or dialect and possessing a distinctive culture that marks it off from other tribes. It is not necessarily organized politically" (Hoebel 1958: 661). This term is now outdated and its link with evolutionary ideas of culture renders it ethnocentric. However, the entity which the definition describes is vital to a study of this sort.

Others have provided definitions for a different level of social grouping, called 'bands'. A 'band' is defined as "...an explicit community comprising a small population in constant face-to-face interaction, sharing life in a locality, although usually wandering about some restricted range, camping together. Being exogamous, each band must maintain at least some relations of affinality with one or more adjacent counterparts, but these gossamer ties do not constitute any significant alteration of the independent nature of the group" (Sahlins 1961 and Service 1962 in Fried 1968: 11). By this definition, 'tribes' are a higher level of social organisation, consisting of a number of 'bands' connected by complex social institutions and sharing the common goal of defending their territory in wars with other tribes. By many definitions, a 'tribe' must be a discrete unit with well-defined boundaries (e.g. Sahlins 1961: 343, n.3), a requirement that cannot be met in the real world as the ethnographic record has shown us that the boundaries between tribes are often no clearer than those between bands (Fried 1968: 13). The term 'social group' will be adopted in an attempt to capture the meaning originally intended by the above definitions without carrying any of the negative connotations with which the terms are now linked.

Ethnicity

Ethnicity, most simply defined, "...signifies a self-perception of common social

identity expressed in a people's shared traditions, ideology, and common history as a people" (Fitzhugh 1987: 141). Although the idea of a 'social group' within a wider culture is not equivalent to the idea of 'ethnicity', some of the major concepts described by the term apply here. Raoul Naroll (1964: 284) lists six criteria for defining an ethnic unit. The first criterion considers the distribution of traits being studied. These traits should be relatively uniform within the area occupied by the ethnic unit, and should differ from those traits found outside of this area. Secondly, an ethnic unit should be expected to be found in an area of territorial contiguity. The third and fourth criteria listed by Naroll concern language and political organisation, both of which would be expected to be uniform throughout the territory in question. The final two criteria involve the specific ecological adaptation expressed by the group, and the local community structure found there. It is apparent that not all of these criteria are accessible archaeologically, and the model is of questionable value in certain areas of the world (Greaves 1982: 7-8). While ecological adaptation may prove to be of vital importance to a study of Canadian arctic archaeology, it has been shown that "...*where ecologically homogeneous areas were larger than the annual cycles of the local groups could encompass, the social groupings were multiple within the area*, and the societies were marked by cultural and linguistic diacritica, even when following ecologically identical subsistence patterns" (Graburn 1979: 186). This is the case for Thule culture, where almost all groups relied on the exploitation of sea mammals to the virtual exclusion of other species.

Barth's definition of an ethnic group (1969: 10-11) is much more general, and therefore more universally applicable. For him, such a group is biologically self-perpetuating, shares fundamental cultural values, composes a field of communication and interaction, and finally, this unit must identify itself and be identified by others as

constituting a distinguishable category. While this definition is appealing for its generality, only the second criterion is accessible archaeologically, as one would expect that shared cultural values would lead to a unity in cultural forms, expressed at the level of the artifact.

In an ideal world for an archaeologist, social groups would always be marked by sharp boundaries, and a self-awareness of membership in a particular social group would lead to uniformity of material culture within the boundary, and a marked discontinuity with material culture outside of this boundary. Unfortunately for the archaeologist, human behaviour is far too complex to allow for this ideal situation. Boundaries are often blurred, with intermarriage, trading and migration common throughout the territory in question. One must also ask whether one can use 'social group' as a meaningful archaeological unit if it didn't have meaning for the people themselves. A perfect example of this occurs in the historic era of the central Canadian arctic, where ethnographers of the late nineteenth and early twentieth centuries (e.g. Birket-Smith 1929a, 1929b; Boas 1888; Jenness 1922; Rasmussen 1929, 1931, 1932) delineated Inuit culture into five discrete 'culture areas' that bore little resemblance to the complex spheres of social interaction which marked Inuit culture at that time[3].

Tyranny of the Ethnographer

Using a perspective borrowed from H. Martin Wobst, it can be argued that the informants on which ethnographers usually rely tend to dichotomise the continuum of space into a bounded unit with predictable behaviours on the inside and unpredictable behaviour on the outside (Wobst 1978: 305). This spatial construct is then translated by the ethnographer into a bounded cultural unit containing a finite set of individuals with

[3] See Megginson (1997).

shared behavioural patterns. As a consequence, ethnographic work often divides a spatial process of hunter-gatherers into populations surrounded by boundaries, whether or not these boundaries have behavioural significance. As spatial variability is reduced, pattern and homogeneity are artificially produced or exaggerated, and cultures or societies are created (Ibid.: 306). Wobst has termed this process the 'tyranny of the ethnographer', and it can be shown to have been active in the central Canadian arctic, where the largest meaningful social units, at least prior to 1960, were the winter settlements of about one hundred people (Maxwell 1979: 85). An examination of Thule regional adaptations in terms of these artificially created social groupings, therefore, would perpetuate this 'tyranny' and bias the results.

Wobst is not unique in his identification of a problem with the creation of ethnographic 'cultures':

> Boundaries of social groups are often obscure in living societies and probably were equally unclear in prehistoric ones, not to speak of their uncertainty in archaeological remains (Fitzhugh 1987: 141).

Fitzhugh thus addresses an issue not specifically discussed by Wobst - the fact that social groups fluctuate in the living world, yet classic ethnographic studies and archaeology based on the idea of culture history describe the relationship between material culture and ethnicity in static terms (Fitzhugh 1987: 141). Fitzhugh cautions the archaeologist that 'tribal' ethnic units are not always equivalent to archaeological culture units, and that the only way to reliably extend historic social divisions into a prehistoric sequence is through a direct historical approach (Ibid.: 142). This approach, though, must work on the assumption that these ethnographically derived 'cultures' are real, discrete entities, a concept which this author is not ready to accept. Regardless of whether or not Fitzhugh's suggestions are followed in their entirety, his cautions regarding the limits of

archaeological data must be accepted when he asserts that the data with which an archaeologist must contend "...represent specific events which archaeologists are too frequently tempted to interpret as long-standing patterns" (Fitzhugh 1987: 149).

The Meaning of Style

Returning to the work of Wobst (1977), he has further suggested that stylistic behaviour should be considered in terms of the life history of an artifact and its *function* as a means of information exchange. All human behaviour involves the potential for information exchange, and therefore the context of transmission is as diversified as human behaviour. The artifactual mode of transmission is one such context. The types of information that are best transmitted through stylistic content are messages of emotional state, identification of ownership and authorship, religious and political affiliation, and ethnic affiliation (Wobst 1977: 324). The utility of style for conveying a message decreases as the emitter and potential receivers become more closely acquainted with one another - it is at this point that the message becomes redundant. The amount of stylistic behaviour, then, should positively correlate with the size of the social networks in which the individuals participate (Ibid.). Such a correlation should allow us to make hypotheses concerning changes in the extent and nature of social networks as reflected in stylistic change.

Variation in artifacts can be caused by a variety of interconnected factors. One such factor is the personality of the individual artisan:

> If different people are given the same task, under similar physical conditions and using similar materials, results of their activities are distinguishable (Clegg 1977: 60).

A second influencing factor is the medium used to produce that artifact, as certain raw

materials can be characterised by technological constraints. Another factor is the function for which an artifact will be used once completed, as certain traits may only be advantageous for particular functions. A final influencing factor concerns the culture within which the artifact is being produced. This type of variation can be identified when "...the artifacts in question are different though made by the same means from the same material, and for the same function" (Ibid.: 60).

As this study proposes to identify regional differences in harpoon head attributes, the fourth factor listed above will be of primary importance. Clegg gives the following advice for isolating culture as a cause of artifact variation:

> If we want to know about cultural differences, we should look at artifacts made in the same medium, for the same function, by people of the same personality, but from *different* cultures, thus examining the effects of one variable at a time (Clegg 1977: 60).

This statement is problematic for many reasons, one of which is Clegg's failure to clarify what is meant by the term 'culture'. A very loose definition states that a culture is marked by "...people living in one place at one time" (Clegg 1977: 60), but this is too vague to be of any use to a study looking for variation on a local and regional level. Also, while the medium with which the artifact is produced is easily controlled for in archaeological research, functional differences are not always as easy to determine from artifact analysis alone[4] . As for the personality of the manufacturer, it is unclear how this could ever be accurately accessed through archaeological inquiry. Clegg's suggestion is that idiosyncrasies caused by differences in personalities can be simply treated as 'noise', and left to cancel themselves out (Ibid.), but this is of limited value in a culture in which each site only contains a few specimens of each artifact type. Clearly, Clegg's model cannot be adopted without significant revision, though the general concepts with which it

[4] See discussion concerning the debate over harpoon head functions in Chapter IV below.

is concerned will be used throughout this study.

The Uses of Style

A stylistic analysis of artifacts must first pose the question, what is 'style'? Wobst (1977: 317) has argued that while style is integral to most archaeological research, it lacks meaning. By this he is arguing that style is most often treated as a negative category - artifact variability that cannot be attributed to other factors, such as function, is labeled 'stylistic', and not subjected to any further testing. Style is most frequently treated in isolation from other factors, with little awareness of how it articulates with other cultural variables or the adaptive advantages it may bestow on the artifact (Ibid.). Style is described as being an *a*functional aspect of artifact variation, and as such, it is inaccessible archaeologically.

Style should, Wobst argues, be seen as an important conveyer of communicative information. The maintenance of a particular style can be explained as a product of homeostasis in communication processes, and the uniformity of this style over geographic space can be interpreted as implying high levels of communication between people living within this area (Ibid.: 318). Alternatively, a break in the continuity of style could indicate a break in communication density, and therefore a separate socio-cultural unit. Wobst argues that archaeologists can measure the degree of communicative equilibrium directly through analysis of the temporo-spatial distribution of stylistic form (Ibid.: 319).

Style can be defined as formal variation in material culture that relates to the role of artifacts in processes of information exchange (Ibid.: 321). Information exchange refers to all communicative events in which a message is emitted or received. Although a message will not be emitted unless there is a potential receiver, the emitter and receiver

can be separated both spatially and temporally (Ibid.). Artifact style will tend to convey simple messages, such as emotional state, ownership, authorship, or religious and political affiliation (Ibid.: 323). The utility of style for conveying a message decreases as the emitter and potential receivers become more closely acquainted with one another. Stylistic messages are of maximum value if the potential receivers are unlikely to receive the message through any other means, yet are still close enough to receive it (Ibid.).

Wobst argues that the amount of stylistic behaviour should positively correlate with the size of the social networks in which the individuals participate, such that band societies are not expected to show much stylistic behaviour (Wobst 1977: 325). Although it is apparent that Thule culture will not show the same amount of variability as would be found between state societies, it has been argued that style can be expressed at many different levels of ethnic resolution, from great culture-historical complexes to clans in a region, to kin groups within settlements (Sackett 1990: 33). To define regionally distinct social groups in Thule culture using an analysis of artifact style, then, does not seem an impossible task.

Wobst's approach remains an important source of information that will allow one to predict which artifacts are most likely to be used as conveyers of communicative information, and thus will show the most stylistic variability. The less an artifact is visible to members of a group, the less likely it is to carry a stylistic message (Wobst 1977: 328). By this, one would predict that those artifacts which never leave the household, such as kitchen tools, will be the least likely to show stylistic variation. In contrast, those items which are potentially visible to all members of a social group, such as outer layers of clothing or house styles, are more likely to show a specific expression of style (Ibid.: 329). However, this stylistic signal can only be expected to differ from

that of surrounding groups if its function is to explicitly broadcast social group affiliation and is active in the process of boundary maintenance (Ibid.).

A similar opinion, based on the idea of a culture-historical approach, is expressed by Glynn Isaac:

> Experience up to now suggests that the peculiarities of the most highly 'designed' components of stone tool industries provide the best markers of idiosyncratic 'phases' and 'provinces' within the culture transmission system - and of continuity and interchange between phases and provinces (Isaac 1977: 8).

Unfortunately, Isaac does not provide a definition for 'designed components', nor does he explicitly state how one would determine which artifacts would be most sensitive to 'stylistic' and 'fashion' differentiation (Ibid.). Isaac suggests a study of style be restricted to stylistic attributes, and a study of function should be restricted to functional attributes (Ibid.), but Wobst has stated that these categories are not mutually exclusive (1977: 317).

While the social structure of Thule culture is merely inferred from ethnographic analogy, enough is known to allow us to test Wobst's theory. One would predict that household objects, such as those most commonly identified with women, would be the least likely to show regular stylistic variation, while house styles and men's tools, both visible over a wider area, would be more likely to show this variation. Harpoon heads are generally classified as a men's tool, and so according to Wobst's theory, they would be expected to be good indicators of social affiliation.

Another argument in favour of the use of artifact style in determining social boundaries is put forward by Sackett (1990), using the concept of *isochrestic variation.* This term, a neologism from Greek translating as 'equivalent in use', is based on the idea that there is a spectrum of equivalent alternatives for attaining any given end when making

or using material items (Sackett 1990: 33). Artisans are aware of a few options at their disposal, and their choices are dictated by the technological tradition to which they belong. These choices tend to be consistent within the group, but are subject to change over time due to exposure to alternative options from outside influences. The implication of this is that "...each social group or unit of ethnicity tends to possess its own distinctive style, and the overall degree of stylistic similarity represented by two groups' material cultures taken as wholes can be regarded as a direct expression of their ethnic relatedness" (Ibid.). In other words, stylistic distance is equivalent to social distance.

According to Sackett, isochrestic variation can manifest itself anywhere. The most obvious source of stylistic data is decoration on artifacts, and it has infinite possibilities because it is not constrained by functional considerations. Decoration is considered an *adjunct* form because it is added to an artifact once it is complete. *Instrumental* form, however, is also a good source of style data - choices must be made regarding such things as raw material and production techniques (Sackett 1990: 33).

While Wobst (1977) sees style as a multidimensional entity, varying too randomly to be properly analysed, Sackett (1990) sees style as varying in regular and patterned ways. The whole idea of isochrestic variation is that style is governed by a finite number of choices on the part of the person doing the manufacturing. This is an appealing idea since it would facilitate the interpretation of style as a marker of social identity. If style is simply idiosyncratic as Wobst would have us believe, this study would be an exercise in futility. Perhaps any findings resulting from this study will contribute to this seemingly endless debate.

III
Methodology

Methodological Problems

Thule culture offers a virtual cornucopia of artifact types over which an archaeologist may pore. Therkel Mathiassen's 1927 treatise alone defines eighty-seven basic functional categories of Thule artifacts (Mathiassen 1927b: 4-6), each divided into numerous subcategories, and this number is constantly being expanded (e.g. Morrison 1983; McCartney 1977). The functional categories were defined in reference to the toolkit used by the historic Inuit and observed in ethnographic study, and while some proposed analogues may be questioned from time to time[5], almost all arctic archaeological monographs to this day are modeled on Mathiassen's work. However, rarely does an archaeologist have an entire toolkit available for analysis. A number of factors in arctic archaeology make artifact analysis difficult, and each of these factors will be discussed in turn.

Thule sites are ubiquitous in the Canadian arctic, large tracts of coastline are often covered by a series of small sites, sometimes so close together that it is difficult to tell where one site ends and the other begins (e.g. McCartney 1977). Partly due to this abundance of sites waiting to be examined, and partly due to the shortened field season and often impermeable permafrost in the arctic, Thule sites are rarely, if ever, excavated in their entirety. Arctic archaeologists often frame their research on a regional survey scale, doing test pits and mapping surface features at a number of sites, with only a few houses

[5] e.g. see (Morrison 1983) for an interesting reanalysis of what Mathiassen (and almost all archaeologists to follow him) have called 'snow knives'.

being excavated out of the multitude of houses located. Nor are these houses chosen in a random way: archaeologists will choose which features to excavate based on their specific research design, such that a researcher studying issues of initial Thule migration would specifically target those houses which, by outward appearance, seem the oldest:

> The large winter houses, well preserved and lavish with whale bones, were not touched.... They would probably yield much data, but such structures require, for their detailed excavation, more time than the small field party could afford them. More importantly, the more worn-down houses give at least some hint of being older and early Thule information was a prime goal of the work. Possibly, those less prominent houses were rather temporarily occupied or occupied during transitional seasons. They might also be less conspicuous only because much of their building material had been removed to make the prominent houses whose age might be only slightly less old (Taylor & McGhee 1981: 11).

Another problem in Thule sites is the probability that many houses were reoccupied periodically, in some cases perhaps spanning hundreds of years. Stratigraphy is often disturbed by periodic cleanings by house occupants, and so artifacts showing chronological differences thought to be separated by centuries may be found side-by-side. It is almost impossible to control for these chronological differences as most arctic chronologies are based on the seriation of artifact styles and thus are quite relative and subjective. Radiocarbon dating is unreliable in an arctic environment due to the 'marine reservoir effect' (Arundale 1981; McGhee & Tuck 1976), which causes dates obtained from sea mammal bones to be much earlier than the actual age of these bones due to the recycling of fossil carbon into the marine food chain. Although correction curves have been developed (e.g. Stuiver & Pearson 1986), this curve does not take into account regional variation in marine reservoir effect, and even if this were possible, the migratory nature of sea mammals would render it inaccurate (Tuck & McGhee 1983: 9). Due to

these seemingly unsolvable problems, many archaeologists today have followed Tuck and McGhee's recommendation (1983) that no attempt should be made to derive radiocarbon dates from sea mammal bone. Dates obtained on some types of wood in the arctic have also been called into question (e.g. Schledermann & McCullough 1980: 840), largely due to their likelihood to become saturated with sea mammal oil, although some naturally occurring factors have also been considered (Maxwell 1985: 253).

The problems that are introduced at the data collection stage of archaeological study in the arctic are perpetuated at the analytical stage. Stylistic differences in artifacts are generally attributed to chronological differences. Therkel Mathiassen developed a general chronology of artifact attributes based on a general progression from simple to complex, and inferences made regarding the age of particular sites based on elevation above sea level (1927a: 2). This latter technique requires the assumption that sites were always placed near the shoreline, and that subsequent isostatic rebound has raised these sites to higher elevations. While isostatic rebound is certainly an important factor in the placement of some sites in the arctic, this has been shown not to hold true for the entire arctic. Allen P. McCartney (1977) has convincingly shown that sites on the coast of northwestern Hudson Bay were consistently placed on high elevations with panoramic views, regardless of age. Despite this, Mathiassen's chronology is now often accepted without question, with archaeologists deeming a site 'Early' or 'Late' based on Mathiassen's criteria (e.g. Savelle 1987; Schledermann 1975, Taylor & McGhee 1981). His site chronology is accepted without question, despite of the fact that these same archaeologists would never use Mathiassen's criteria for determining the age of artifact styles (Park 1994: 32).

Seriation as a dating technique requires two assumptions: that styles changed over

time in a directional manner, and that time is the only factor causing this variation (Park 1994: 31). In an interesting study, Robert W. Park (1994) compared the perceived relative age (based on Mathiassen's estimations) of individual harpoon head attributes from seventeen sites across the arctic with radiocarbon dates collected from those same sites. It was found that many attributes considered to be 'Early Thule' were found just as frequently in sites deemed to be 'Late Thule'. This calls into question the entire sequence of Thule occupation that has been proposed for the arctic, and leads one to consider the possibility that some of the variation in artifact attributes can be explained through *regional* rather than temporal variation:

> The diversity of Thule adaptations has long been recognised (e.g. Taylor 1966; 1968) but when we encounter variability in the archaeological record we usually attribute it to particular types of change over time without examining the possibility of synchronic differences (Park 1994: 44).

From the above, it is apparent that arctic archaeologists are plagued with small and selective sample sizes and with a largely undefined chronological framework. What is a researcher to do? There is no simple answer to such a complex conundrum. One cannot completely eliminate the bias inherent in a regional study of Thule artifacts. Statistical analysis seems inappropriate in a field where random sampling is rarely if ever practiced. Small sample sizes are another factor that render statistical analysis difficult, as a given site assemblage may contain over a hundred functional or stylistic classes, each represented by only one or two specimens (Morrison 1983: 7). Despite these difficulties, some minor quantitative investigations will be attempted in this thesis.

It is apparent that it would be an impossible task to attempt to control for chronology in a study of Thule archaeology. For the purposes of this study, sites classified as belonging to all three periods of Thule Culture (Early, Classic *and* Modified)

will be considered in the analysis. If stylistic differences are identified between sites, these sites will then be cross-referenced with their generally accepted chronological classification to determine whether the perceived stylistic difference is due to chronological or regional factors.

The Study Area

Thule culture covered a vast area of the arctic, from Alaska to Greenland, and south along both sides of Hudson Bay. The large size of the Thule culture area makes it very difficult to select a specific area for analysis. The fact that this study aims to discover regional differentiation requires that a large area be examined, but it would be far beyond the scope of this work to make an attempt to investigate the entire arctic. Ideally, the study area would comprise regions with slightly different local environments, and containing the traditional lands of more than one traditional Inuit social group . Because only one artifact type has been selected for study, this area will in fact be larger than the absolute minimum required by the study, in order to maximise the potential of the analysis to find regional trends.

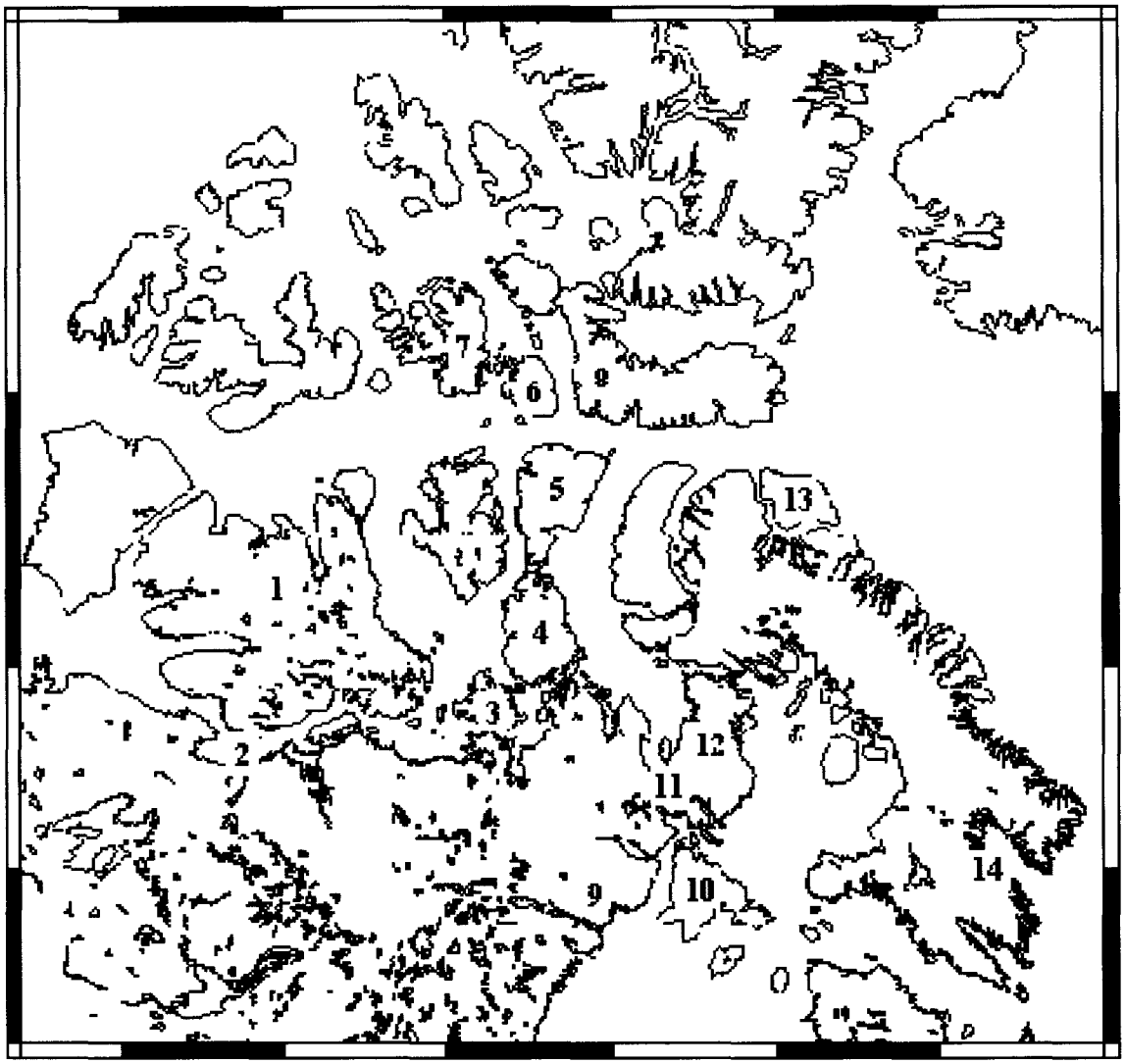
The central Canadian Arctic is the area of focus for this study. This region extends from 65°W to 115°W, and from 63°N to 80°N. Additionally, the study area will include land no further south than 63°N, and no further north than 80°N. This area comprises the land claimed by the following Inuit groups: Baffinland Inuit, Iglulik, Sadlermiut, Netsilik, Copper Inuit and the Caribou Inuit[6] , and spans an area that contains many different ecological zones. The study area will be described in terms of three divisions: Western, Central, and East.

[6] There is much debate over how long the Caribou Inuit have inhabited this region (e.g. Clark 1977; Burch 1978).

Western Central Arctic

The western central arctic comprises Victoria Island, Banks Island, and the mainland surrounding Coronation Gulf. This area is less known archaeologically than the eastern arctic, but a few important archaeological studies have taken place here. Diamond Jenness visited this area during the Canadian Arctic Expedition of 1913-1918, and described the Copper Inuit who reside there in a volume published in 1922. William E. Taylor, Jr. visited the area in 1963, and published a full report of his findings in 1972. Finally, Robert McGhee has done much work in the western central arctic, with works being published in 1970 and 1972 based on his excavations in the Bloody Falls region and western Victoria Island.

Three sites on the western Coronation Gulf coast are considered in this analysis. *Clachan* (NaPi-2) is located on a small bay south of Cape Hearne on the western coast of Coronation Gulf. It contains three houses located on a high point of land, but one of these houses demonstrates evidence of previous disturbance. Because these three houses were found to cluster rather tightly, it was possible for the researchers to excavate the entire site in sixty-two contiguous two metre squares (Morrison 1983: 47-49). The *Beulah* site (NcPf-2) is located on the western coast of the peninsula. This site is much larger, containing twelve houses in a line parallel to the sea, and three to five metres above sea level. Only one house was chosen for excavation at this site as time was limited (Ibid.: 68-72). The latter two sites are both located near the junction of Dolphin and Union Strait and Coronation Gulf, the strong current from which does not allow for the production of thick ice. These rare conditions allow for an abundance of sea mammals such as bearded seal and ringed seal. Caribou also appear to have been abundant in the vicinity (Ibid.: 69). A total of one thousand eight hundred fourteen artifacts were found



1-Victoria Island
2-Coronation Gulf
3-King William Island
4-Boothia Peninsula
5-Somerset Island
6-Cornwallis Island
7-Bathurst Island
8-Devon Island
9-Chesterfield Inlet
10-Southampton Island
11-Repulse Bay
12-Melville Peninsula
13-Bylot Island
14-Frobisher Bay

Figure 3-1: Map of Nunavut, showing some of the geographical features mentioned in the text.

such as bearded seal and ringed seal. Caribou also appear to have been abundant in the vicinity (Ibid.: 69). A total of one thousand eight hundred fourteen artifacts were found at these three sites, the majority of which originate from the most completely excavated site, Clachan.

A large scale regional site survey between Cape Parry and Cambridge Bay was undertaken by William E. Taylor, Jr. in 1963, resulting in the mapping of numerous archaeological sites dating from the Pre-Dorset occupation to that of the historic Copper Inuit. Only those sites which produced Thule artifacts are considered in this study. One of these sites, *Lady Franklin Point*, was thought temporarily to be the source of the Semmler collection of Thule artifacts, discussed in an earlier publication by Taylor (1963: 458). This site is located on western Victoria Island, and contains twenty-one Thule houses. Excavation was limited to nine test cuts in probable midden areas, and the resulting artifacts showed that this site was of much more recent age than the Semmler collection, the source of which remains to be found (Taylor 1972: 35).

More Thule sites were found further east on Victoria Island, near Cambridge Bay. The *Pembroke* site (NgNc-2) was found to contain a total of twelve tent rings and Thule houses on a small knoll which overlooks a creek bank. One house was excavated, and fifteen artifacts were recovered (Ibid.: 44). The *Clare* site (NgNc-3) is also found in the vicinity of Cambridge Bay, and it contains seven oval tent rings arranged in a row. A test cut made within one of the tent rings, yielded a few Thule artifacts (Ibid.: 46, 49). Finally, the *Bell* site (NiNg-2) is located slightly to the west of the former two sites, in the Ekalluk River area of Victoria Island. This site contains sixteen Thule houses, only one of which was investigated. Both Dorset and Thule artifacts were found in the two test cuts made in this house (Ibid.: 54).

During the summers of 1966 and 1968, Robert McGhee investigated several sites in the western Victoria Island region, as well as in the vicinity of Kugluktuk[7] on the mainland. Two of these sites concern the Thule period of occupation and so are of importance to this study. *Memorana* (OdPq-1) is located on the Amundsen Gulf coast of western Victoria Island, nine miles southeast of Holman, in an area that enables very productive seal hunting. Four small Thule houses were found here, and all four were excavated, as well as 90% of the midden deposits. The shallow nature of the middens suggested this site was occupied for a relatively short period of time[8] (McGhee 1972: 21, 23).

Another Thule site discussed by McGhee is the *Bloody Falls* site (MkPk-3), located on the western bank of the Coppermine River, adjacent to Bloody Falls, the location of the famous massacre of Inuit by Chipewyan Indians recounted by Samuel Hearne in 1771 (Hearne 1972: 98-104). Caribou and musk-oxen are rare sightings in the region, but the falls have been an important fishing spot for various hunting groups for over three thousand years (McGhee 1972: 39). Nearby is an important source of native copper, which was traded throughout Thule territory. Two of the five large Thule houses are found at this site were completely excavated. The artifacts recovered reflect the poor preservation of organic material found at this site (Ibid.: 39-40).

[7] This settlement was formerly known as Coppermine.

[8] Based on dry bone weights of the fauna recovered, McGhee estimates that five individuals, each consuming about two pounds of meat per day could have survived four months at this site. Taking into account the amount of food likely consumed elsewhere, he suggests the faunal findings are consistent with a single winter occupation of this site by a group of about twenty people (McGhee 1972: 23).

WESTERN REGION •

Mainland W.
1-Beulah, Nuvuk
2-Clachan
3-Bloody Falls

Victoria I.
4-Memorana
5-Lady Franklin Pt.
6-Bell
7-Pembroke, Clare

CENTRAL REGION •

King William I.
8-Malerualik
9-Pelly Bay, Kangerarfigssuaq

Boothia/Somerset
10-Spence Bay
11-Nudhukta
12-Levesque Harbour
13-Fort Ross
14-Creswell Bay
15-Learmonth, Quoak

EASTERN REGION •

NW Hudson
21-Sihumiut
22-Kamarvik
23-Kuk
24-Naujan

Melville P.
25-Lyon Inlet, Vansittart
26-Pingerqalik, Igloolik

N Baffin I.
27-Nunguvik
28-Button Point
29-Qilalukan
30-Mittimatalik

S Baffin
31-Niutang (Q)
32-Anamitung (A-1)
33-B-1
34-Crystal II

High Arctic
16-M1, M2, M3, Lake
17-Brooman Point
18-Deblicquy
19-Port Refuge
20-Porden Point, RbJr-7

Figure 3-2: Map of Nunavut, showing sites being used in this study.

The Central Region

The central region of the central Canadian arctic is perhaps the best known archaeologically. This area contains Devon Island, Somerset Island, Boothia Peninsula, and King William Island. It is here that we begin to enter the territory explored by Therkel Mathiassen, though the bulk of his sites will be reserved for the discussion of the eastern central arctic. *Malerualik* is located on the southern coast of King William Island at Simpson Strait, between McClintock Bay and Douglass Bay. This is a very large site, containing sixty-eight house ruins and over one hundred tent rings and other features. Thirteen of the houses were excavated by Knud Rasmussen in the summer of 1923, and two hundred ten artifacts were recovered. This site is located near an important caribou migration route (in fact, the name means 'the place where one follows the caribou'), and also boasts good sealing and salmon fishing (Mathiassen 1927a: 305-307).

Many sites are located in the Boothia Peninsula-Somerset Island region. Two thousand artifacts were collected by L.A. Learmonth, a post manager at Fort Ross, between 1939 and 1949. These artifacts have been described in a report by James W. VanStone, published in 1962. While the trained archaeologist may consider such a collection of artifacts questionable because of unskilled collection techniques and inexact provenience recording, VanStone justifies his report as follows:

> Ordinarily, the value of a report of this kind might be considered dubious, and this would certainly be true in an area that is well known archaeologically. This can by no means be said about the central arctic....(VanStone 1962: 2).

In 1962, VanStone's comments regarding the paucity of archaeological information in the central region were not exaggerated; other than Mathiassen's 1927 report, very little work had been done here. Although this situation has happily changed in the decades that have

passed since VanStone's study, his report will still be considered in this study.

The *Levesque Harbour* site, which contains four whalebone houses, is located on the northeastern tip of Boothia Peninsula, just south of the entrance to Bellow Strait (VanStone 1962: 8). Three sites at *Creswell Bay* will be considered as one unit, and all are located on the southeastern side of the bay near Cape Garry. Each site contained twenty to thirty whalebone houses (Ibid.: 15). *Nudlukta* is a site located on a small stream that connects Nudlukta Lake and Nudlukta Inlet, sixteen miles north of Levesque Harbour. An unspecified number of Thule houses were found here, of which five were excavated (Ibid.: 18). The *Fort Ross* site is located near an old Hudson Bay Company post on Brentford Bay, on a peninsula that juts from southeastern Somerset Island close to the entrance of Bellot Strait. Five Thule houses were located at this site, but the artifacts were recovered mainly through surface collection (Ibid.: 23). The *Spence Bay* site is located at Netsilik Lake, and the artifacts here were also recovered through surface collection (Ibid.: 28). VanStone also describes artifacts found at historic grave sites, but these will not be included in this study as they fall outside of the Thule period.

VanStone's archaeological work in the Somerset Island/Boothia Peninsula region was continued by William E. Taylor, Jr. and Robert McGhee in 1979, who investigated three sites along eight kilometres of shoreline at Creswell Bay, Somerset Island. The *Learmonth* site (PeJr-1) is located on the north shore of the bay (93°48'W, 72°47'N), in an area with abundant sea mammals, migratory birds and caribou. This site contains seventy-eight dwelling structures in total, twenty-eight of which have been defined as Thule houses. Eight trenches were dug in possible midden areas, and resulted in the collection of four hundred fourteen artifacts identified as being of Thule origin (Taylor &

McGhee 1979: 5, 8-11, 22).[9] A nearby site was named, quite suitably, the *Near* site (PeJr-2). Forty house ruins were found here, none more than ten metres above sea level. Little time was spent investigating this site, with only eight Thule artifacts being collected from the surface, and no excavation taking place (Ibid.: 49). Five kilometres from the Near site is the *Quoak* site (PeJq-1), at which were found fifty-five house ruins, twenty-nine of which were classified as being of Thule origin. These houses lie between three and six metres above sea level, and they are arranged into three rows. Excavation at Quoak consisted of surface collection and six test cuts, all of which were limited to a depth of twelve centimetres due to permafrost. One hundred three artifacts were recovered (Ibid.: 51-52).

While many other archaeological investigations have taken place in the central region of the Canadian arctic, most of these have centred on high arctic locations. The earliest of these were conducted by Henry B. Collins, who investigated four Thule villages located near the Resolute weather station on Cornwallis Island. Three of these sites are known as *M1, M2* and *M3*, and will be discussed together as the sample size from each site is very small, and the sites are all located very close together[10] . M1 contains twelve Thule houses, of which three were excavated in 1949. Two of nine houses have been excavated at M2, and at M3, located on the southern side of Cape Martyr, only one of five houses was excavated (Collins 1952: 48-49). A final site in this region investigated by Collins is known as the *Lake* site. This site is located between two lakes, a half mile inland, and a quarter mile from the weather station. Nine house ruins were discovered here, of which three were chosen for excavation (Ibid.: 49-50). The total

[9] Taylor and McGhee also found two hundred ninety-six artifacts which they termed 'culturally non-specific' (1979: 22) which are not included in this study in an attempt to maintain a small degree of chronological control.

[10] M1 and M2 are separated by only 280 yards (Collins 1951: 50).

number of Thule artifacts recovered from the four sites was one thousand one hundred specimens (Ibid.: 51).

On Bathurst Island, there are two sites which have undergone major excavation. The first of these sites, *Deblicquy* (QiLe-1), is located on the central east coast of Bathurst Island (75°29'N, 97°29'W), one hundred kilometres from the Collins sites discussed above. This site, excavated by William E. Taylor Jr. and George R. Carruthers in July of 1961, contains twenty-four house ruins, located twenty-two metres above sea level and two hundred fifty metres inland. Three houses were excavated at this site, yielding a total of three hundred forty-seven artifacts (Taylor & McGhee 1981: 1-11, 25). The second major site on Bathurst Island, *Brooman Point* (QiLd-1), was excavated during the summers of 1976, 1979 and 1980 by Robert McGhee. This Thule village appears to have been built on a former Late Dorset settlement, and contains twenty houses designated as Thule. Ten houses and one midden were excavated, resulting in the recovery of six hundred fifteen identifiable artifacts (McGhee 1984: 2, 8, 41).

Three sites located on the Grinnell Peninsula, Devon Island complete this discussion of the central portion of the central arctic. These sites, excavated by Robert McGhee in the summers of 1972, 1976 and 1977 have been reported in great detail in a Masters thesis written by Robert Park in 1983. The first site is known as *Porden Point Brook Village* (RbJr-1), and is located on the southeastern corner of the Grinnell Peninsula, on the western tip of Porden Point (76°15'N, 93°40'W). This site straddles a brook, and contains nine Thule houses in two rows on either side of the brook. Two houses were excavated here, resulting in two hundred thirty-two artifacts (Park 1983: 1, 11). *Porden Point Pond Village* (RbJr-4) is located one hundred sixty metres southwest of the former site. Three Thule houses were located here, and one was excavated. Eighty-

eight artifacts were collected (Ibid.: 77-83). The final Thule village on the Grinnell Peninsula is *Port Refuge* (RbJu-1), located thirty kilometres west of Porden Point on the southern coast of the peninsula (76°17'N, 94°45'W) (Ibid.: 1). Five Thule houses were found here, all of which showed some evidence of previous disturbance. Two houses and part of a midden were excavated, resulting in one hundred ninety-seven artifacts (Ibid.: 117). A cache (RbJr-7) found in this region was also excavated. It is located two kilometres west of the tip of Porden Point, at an elevation of twenty-two metres. Sixty-six artifacts, mostly hunting equipment, were collected from this cache (Ibid.: 101).

The Eastern Region

A discussion of the eastern region of the study area must begin with the most famous Thule site, *Naujan*. This site is located on the northern coast of Repulse Bay, which separates Melville Peninsula from the mainland. During the summer of 1921, Naujan was excavated by Therkel Mathiassen, and was the basis for his definition of Thule culture. A total of twenty Thule houses were observed at this site, and twelve of these were excavated. By modern archaeological standards, this excavation was far from being thorough since for most of the two months the site was being excavated, Mathiassen was working alone (Mathiassen 1927a: 4). It would be a logistical impossibility for a solo excavator to fully excavate twelve houses and a large patch of midden in two months, yet this site remains the generally accepted Thule type site, and researchers working across the arctic continue to draw comparisons between their findings and those of Mathiassen. A total of three thousand specimens were discovered here by Mathiassen, of which 800 were deemed unfinished or indeterminable (Ibid.: 5).

A nearby site published in the same seminal work by Mathiassen (1927a) is

known as *Kuk*. This site is located in Duke of York Bay, on an estuary of the Thomsen River on northern Southampton Island. This bay is rich in a variety of sea mammals, and the river is abundant in salmon. Three groups of Thule houses were discovered here, totaling twenty-one ruins. Eleven of these houses and seventy-six square metres of midden were excavated by Mathiassen between August 20th and September 6th of 1921, and the resulting find consisted of seven hundred eighty artifacts (Ibid.: 223).

The region of northwestern Hudson Bay contains many more sites, few of which have been published in any detail. The work of Allen P. McCartney in this region is an exception to this trend. In 1962, McCartney led a large regional site survey of the western coast of Hudson Bay between the western coast of Roes Welcome Sound and Chesterfield Inlet. Many sites were located, but only a few were excavated (McCartney 1977: 36). *Silumiut* (KkJg-1) is located on an island north of Cape Silumiut (63°41'N, 90° 05'W), and contains twenty-eight Thule house ruins. Seven houses were excavated here, and six middens were tested. The resulting collection (not including the thousands of quartzite flakes recovered) was about six hundred artifacts (Ibid.: 6-7). The *Kamarvik* site (LeHv-1) is located further north along the coast, on a peninsula that juts into Hudson Bay just south of Wager Bay (64°45'N, 87°19'W). This site contains sixteen houses arranged into three distinct clusters. Two houses were excavated here, and one house was tested, resulting in seventy-eight artifacts (Ibid.: 152-170). A site known as *Igluligardjuk* was also excavated, but as no diagnostic artifacts were found here (Ibid.: 327), it will not be included in this study.

Between the region referred to as northwestern Hudson Bay and northern Baffin Island, is a strip of land called the Melville Peninsula. Mathiassen (1927a) refers to artifacts from a number of sites in this region, and they will be considered in this analysis.

Two of these sites are located just to the east of Naujan, and they are Vansittart Island and Lyon Inlet (Mathiassen 1927a: 124). Only one harpoon head is known from the former site, six from the latter. Further to the north are Pingerqalik and Igloolik, from which one and two harpoon heads were found, respectively. The artifacts from these sites were not excavated by Mathiassen himself, so little information is given regarding these sites, many of which are simply listed as 'scattered finds' (Ibid.). Some of these harpoon heads appear to be from grave sites, and this difference will be considered in the analysis.

Two more sites that were excavated by Therkel Mathiassen during the Fifth Thule Expedition were *Mitimatalik* and *Qilalukan*, both located on northern Baffin Island, near the modern settlement of Pond Inlet. These two major sites, as well as several minor sites in the vicinity were excavated during the summer of 1923, aided in part by fellow researcher Peter Freuchen. Mitimatalik is smaller than most of the sites examined by Mathiassen, with only two Thule houses, and two 'autumn houses'. One house was excavated, as well as four square metres of midden (Mathiassen 1927a: 133-134). Qilalukan (the name means 'narwhals') is located three kilometres from Mitimatalik, and has a total of nineteen Thule houses. Five houses were excavated by Mathiassen and Freuchen, as well as thirty-two square metres of midden (Ibid.: 136-139). The total number of artifacts recovered from the Pond Inlet region was two thousand eight hundred specimens: one thousand nine hundred of there were from Qilalukan, two hundred fifty from Mitimatalik, two hundred fifty from graves in surrounding Qilalukan, and four hundred from Button Point (Ibid.: 132). Also on northern Baffin Island is a site excavated by Guy Mary-Rousselière, and known as *Nunguvik*. This is one of the largest Thule sites, containing fifty Thule houses as well as many Dorset ruins. Three houses were

excavated, but only a general discussion of the findings has been published (Mary-Rousselière 1979).

Southern Baffin Island is the most easterly region being considered in this study, and four sites will be discussed. The first of these is known as *Crystal II*, excavated between July 17th and August 21st, 1948 by archaeologist Henry B. Collins. This site is located at the head of Frobisher Bay, and contains four houses, all 140-200 feet from the riverbank and twelve feet above sea level. Two of these houses had already been excavated by soldiers stationed at the nearby Air Base, but the remaining two were excavated by Collins, as well as the middens adjacent to the former two houses. A total of six hundred artifacts were recovered from this site (Collins 1950: 18-19), but descriptions are limited to those considered 'diagnostic' by Collins.

During the summers of 1971-1973, Peter Schledermann conducted an intensive site survey in the area of Cumberland Sound, and mapped twenty-three Thule sites. Of these, three were chosen for excavation (Schledermann 1975: 15, 34). The first of these is known as *Niutang* (MbDc-1) or simply site *'Q'*. This site is located in a small valley on the eastern side of Kingnait Fjord, and was first recorded by Franz Boas in 1888. Sixteen houses were found here, nine of which were selected for excavation based on availability of undisturbed areas and location within the clusters thought to represent different components. A total of one hundred five artifacts were found (Ibid.: 53-55). The second site is known as *Anarnitung* or *A-1* (MbDj-1), and it is located on an island near Bon Accord. Fifteen houses were found here, but most had already been disturbed before excavation began. Excavation centred on a midden area (Ibid.: 66-68). Finally, site *B-1* (LlDj-1) is located to the south of Anarnitung, and also contains fifteen houses. Three houses were tested, and four houses and a midden area were excavated, resulting in one

thousand two hundred fifty artifacts (Ibid.: 68-71).

Chronology of Sites

Although radiocarbon dating is unreliable in the arctic, for reasons already discussed, each of the above sites has been tentatively placed within the three phase system of Thule chronology, based on the few carbon dates on substances other than sea mammal bone, and the commonly accepted (though problematic) harpoon head seriation. Of these sites, M1 on Cornwallis Island, Brooman Point on Bathurst Island, Nunguvik on northern Baffin Island, Crystal II on southern Baffin Island, Naujan in Repulse Bay, and Malerualik on King William Island have all been placed in the period referred to as 'Early Thule'. The sites that fall within the 'Classic Thule' period are the later occupations at Naujan, Qilalukan and Mitimatalik on northern Baffin Island, Kuk on Southampton Island, Levesque Harbour on Boothia Peninsula, and Learmonth on Somerset Island. Labelled as 'Modified Thule' are the later occupations at Kuk and Cumberland Sound (Park 1983: 8).

It must be kept in mind that Thule chronology is far from being definite, and its problematic nature dictates that all Thule sites be investigated regardless of their placement within this chronology. Many sites were occupied continuously for the entire Thule sequence, and regional variation may be obscured by an imperfect chronology which has very little basis in absolute dating. Attributes that have been deemed 'early traits' may be shown to be a factor of space rather than time, and so they will all be considered in this analysis.

Selection of Artifacts

An analysis of all artifact categories in Thule material culture would be beyond the scope of a Masters thesis, and so much care has been taken in the artifact selection process. Ideally, we will rule out those artifacts which result from minimal modification and whose form is strictly dictated by function. Some examples of such artifacts are awls, probes, and wedges. Also not included are those artifacts which show remarkable uniformity in appearance throughout the Arctic, and finally, those artifacts which vary both within and between sites to such a large extent that the differences must be regarded as idiosyncratic and void of cultural meaning in the larger sense.

Upon consideration of the entire range of Thule artifacts, harpoon heads were the only category selected for analysis, based on their wide distribution across the study area, and their perceived potential to show regional variation, based on the criteria discussed above. For the purposes of this study, each harpoon head will be broken down into a finiate number of attributes or variables. The values for each variable will be recorded for each artifact, and these data will then be analysed at the site level to look for site-specific trends, and the local level to look for regional patterns, and finally, at the level of the entire study area. This final level of analysis will compare various regional trends to look for regional variation.

Mathiassen's seminal study was not limited to a mere description of the thousands of artifacts recovered through the Fifth Thule Expedition, it also included the grouping of these artifacts into stylistic 'types' within each functional category (Mathiassen 1927b). These types are still commonly used in site reports to this day, with the unfortunate result that many archaeologists delve no further in their descriptions

of the artifacts[11] (e.g. Collins 1951; Taylor 1972). In an attempt to avoid the bias inherent in Mathiassen's typology, this study will go beyond the categories provided by the commonly accepted typology, and artifacts will be analysed at the level of individual attributes. The assertion is that Mathiassen's 'types' are too general to reveal the subtleties of regional variation.

The time constraints imposed on the present study permit that only published sources be considered for analysis. An aideal analysis would include consideration of the many site reports that have never been published in any complete form. Many of the sources cited above were intended merely as preliminary reports of the findings from particular sites (e.g. Collins 1951), or were meant only to provide an overview of the general findings (e.g. Mary-Rousselière 1979), and as such, individual artifacts are often not reported in any detail. This study will focus on those artifacts for which there are adequate and detailed descriptions, preferably accompanied by photographs of the artifacts under discussion. In the few rare instances where no descriptions of specific artifacts exist (e.g. Collins 1950, 1951, 1952; Taylor 1972) , the analysis will be based on observations I have made from the pictures alone. Any individual attributes not clearly indicated will be given the value 'unknown' in the analysis, rather than assuming these attributes based on the classification of the artifact into one of Mathiassen's (1927b) 'types'.

[11] This refers particularly to Mathiassen's harpoon head typology, which divides Thule harpoon heads into five general 'types' (1927b: 12-13).

IV
Harpoon Heads: An Introduction

Introduction

Harpoon heads are perhaps the most studied class of artifact in arctic archaeology. The quest for the perfect harpoon head typology has had a long history, beginning with Mathiassen's 1927 scheme, and continuing to this day. Harpoon heads are ubiquitous in Thule sites, vary in regular ways, and the presence or absence of particular attributes has long been used to support theories of cultural affiliation or temporal phases:

> Harpoon heads appear in a multitude of forms and variations and, as they furthermore are among the most frequently occurring objects in older Eskimo finds, they are better than any other element of Eskimo culture for showing cultural connection and chronology in the Eskimo culture (Mathiassen 1927b: 11).

For these reasons, the analysis of the distribution of harpoon head attributes across the arctic will play a vital role in this study.

In historic times, harpoon heads were one of the essential tools to Inuit survival. The hunting of seals and other sea mammals seems to have played a vital role in the economies of both the Thule and historic Inuit people, and so it is not surprising that the harpoon heads used for this purpose are frequent archaeological finds. A harpoon head is composed of four main parts: a wooden shaft, a socket piece, a foreshaft, and a harpoon head. The head is attached to the shaft by way of a line running through a hole on the head to a tension piece on the shaft itself. The head is designed to separate from the shaft once it is embedded in the animal being hunted. Thule harpoon heads were made of a

variety of organic materials, including bone, ivory and antler. All harpoon heads have a socket, by which the head is attached to the foreshaft of the harpoon. This socket can be either open or closed, and the open socketed forms normally have some sort of provision for lashing the harpoon head to the foreshaft, such as drilled lashing holes, lashing slots, or a sunken lashing bed. Some specimens have sharp points and/or lateral barbs, and were intended to be used as is, others have a slot in one end for the insertion of a separate blade.

Harpoon Head Typology

Therkel Mathiassen was the first archaeologist to create a typology of harpoon heads (1927b: 11-27), and this typology is still used in almost every Thule study to this day. Mathiassen established a 'type' system, based on his observation that harpoon heads seemed to vary in regular ways, with certain attributes consistently co-occurring. At its most basic level, his typology breaks down all harpoon heads into five 'types' based on the following attributes: position and alignment of the line hole; whether the shaft socket is open or closed; whether there is an inserted blade; and if so, whether the slot is aligned parallel or perpendicular to the line hole; and the number and position of barbs, and the number and shape of spurs.

Thule Type I harpoon heads are defined as being very thin, with the line hole positioned straight through from one face to the other, one aslant dorsal spur, an open shaft socket, and no barbs or separately inserted blade (Mathiassen 1927a: 24). Thule Type II harpoon heads are described as being similar to Type I, but with two powerful, opposite barbs (Ibid.). Thule Type III harpoon heads are again very similar to Type I, but differ in having a slot for blade insertion positioned parallel to the plane of the line

hole (Ibid.: 25). Thule Type IV harpoon heads are described as being thin, with a line hole going direct from one face to the other, with a closed socket and a blade slot positioned perpendicular to the plane of the line hole (Ibid.). Finally, Thule Type V harpoon heads have a more rounded cross-section than the above types, have two dorsal spurs, no barbs, and a blade slit parallel to the plane of the line hole (Ibid.: 26). The Type V specimens also generally have a curved line hole, with both openings on one face of the specimen.

For the purposes of his analytical volume (1927b), Mathiassen offered a more detailed typology, perhaps after recognising that the five-type system was not adequate to describe much of the variation he was observing. The following breakdown of harpoon head attributes can be used to describe almost any Thule harpoon head:

A. Thin; the line hole runs directly from side to side.
    I. Open shaft socket, which is closed by a lashing; one slanting spur.
        a. Neither barb nor inserted blade.
        b. With barb; no inserted blade.
            1. Two opposite barbs.
            2. One barb.
            3. Several barbs.
        c. Without barbs; inserted blade.
            1. Blade parallel with line hole.
            2. Blade at right-angles to line hole.
        d. Both barbs and inserted blade.
            1. One barb, blade parallel to line hole.
            2. One barb, blade at right-angles to line hole.
            3. Two barbs, blade parallel to line hole.
            4. Two barbs, blade at right-angles to line hole.
    II. Closed shaft socket. One or two spurs.
        a. Neither barbs nor inserted blade.
        b. With barbs; no inserted blade.
        c. Without barbs; inserted blade.
            1. Blade parallel to line hole.
            2. Blade at right-angles to line hole.

d. Both barbs and inserted blade.

B. Flat; the line hole having a curved path, with both openings on the upper side.

I. Open shaft socket. Mostly two spurs.

a. Neither barbs nor inserted blades.

b. With barbs; no inserted blade.

c. Without barbs; inserted blade (parallel to line hole).

d. Both barbs and inserted blade.

II. Closed shaft socket. Mostly two dorsal spurs.

a. Neither barbs nor inserted blade.

b. With barbs; no inserted blade.

c. Without barbs, with inserted blade.

1. Almost round.

2. Very flat.

d. Both barbs and inserted blade.

(Mathiassen 1927b: 12-13)

It is clear that some definitions are in order here, thoughtfully provided by Mathiassen himself. By 'thin' harpoon head, Mathiassen was referring to those specimens for which the greatest width was found perpendicular to the plane of the line hole. Conversely, by 'flat' he meant harpoon heads in which the greatest width was *parallel* to the plane of the line hole. The term 'spur' specifies a barb that is found at the proximal end of the artifact, as opposed to 'barbs' which are always found at the side of the artifact (Mathiassen 1927b: 12). Many other typologies of harpoon heads have been proposed (e.g. Collins 1937; Ford 1959; Holtved 1944; Wissler 1916), but most of these are based on Mathiassen's categories, with accompanying elaboration on specific distinctive attributes (Schledermann 1975: 105).

Thule Type V harpoon heads belong to the class of 'flat' harpoon heads, and are defined by Mathiassen as "...[r]ound or slightly flattened, so that the back is the natural resting surface; 2 dorsal spurs, no barbs; blade slit parallel with the line hole" (1927a: 26). This type, which Mathiassen observes to come from later site components (Ibid.: 27), is

comparatively rare in Thule sites. In fact, absolutely no specimens are reported from either the western or central regions of our study area. The strong presence of this type in the eastern region may be biased by the fact that the majority of the sites in this region were published by Mathiassen, who may have included many specimens of historic origin within his Thule types. Indeed, sixteen of the Type V specimens reported come from sites excavated by Mathiassen (1927a: Pl. 2(3), 40(2,4,6,11), 67(2), 69(6), 72(5), Fig. 18). The remaining eleven specimens all come from Schledermann's Cumberland Sound sites (1975: Pl. 3a-f,h,i; Pl. 4a-h).

Individual specimens belonging to the flat variety of harpoon head will not be discussed in this study because they seem to vary idiosyncratically, and because their inclusion would make it too difficult to control for chronology. This study will focus on Mathiassen's Types I through IV, but will not be limited by these categories in the descriptions of individual artifacts. If someone could effectively demonstrate that all of these specimens are prehistoric, or at least protohistoric, their restricted distribution could be very meaningful. Is it possible that what has been known as 'Thule Type V', based on Mathiassen's findings at Naujan could actually be a product of a regional social group centred in the eastern region of the central Canadian arctic? This question must be left for future research.

Function

Mathiassen's basic categories of harpoon head types remain the basis for most descriptions of Thule assemblages, but the question of whether these types reflect functional categories, chronological changes or regional styles has never been satiisfactorily answered. Mathiassen also considered the question of function based on

his ethnographic experiences with contemporary Inuit, surmising that the blunt point and large barbs of Type II would make it suitable for an animal whose skin was easily penetrated, but also subject to easy tearing, such as seals or white whales. The small size and sharp inserted blade of Type III would be suitable for use on an animal with strong hides, such as walrus (Mathiassen 1927a: 26). In his work with the Iglulik Inuit, Mathiassen observed that type AIIc2 harpoon heads were used for walrus, types BIIb and BIIc for narwhal and white whale, and type AIIa for salmon fishing (Mathiassen 1927b: 14).

More recently, Robert Park discussed the weak arguments that have been made for the function of specific harpoon head styles, stating that archaeologists often ascribe function based on the size of the artifact because of the lack of related ethnographic information, citing as an example Allen P. McCartney's 1977 report, in which it is argued that Thule Types III and IV were used for seal, walrus, and beluga. Park notes that if these two types are specialised for the same function, as McCartney argues, then we would not expect them to co-occur as frequently as they do in Thule sites (Park 1983: 171). Park points out the need to clarify the issue of function before these artifacts are used in chronological interpretations, to determine whether particular styles reflect functional differences, individual preferences, or chronological phases (Ibid.: 176). As individual preferences may be due to social group affiliation, this distinction is also important to this study, and so the idea of function and chronology as factors also causing variation will be considered, mostly in terms of the authors' own interpretations of the collections they are describing.

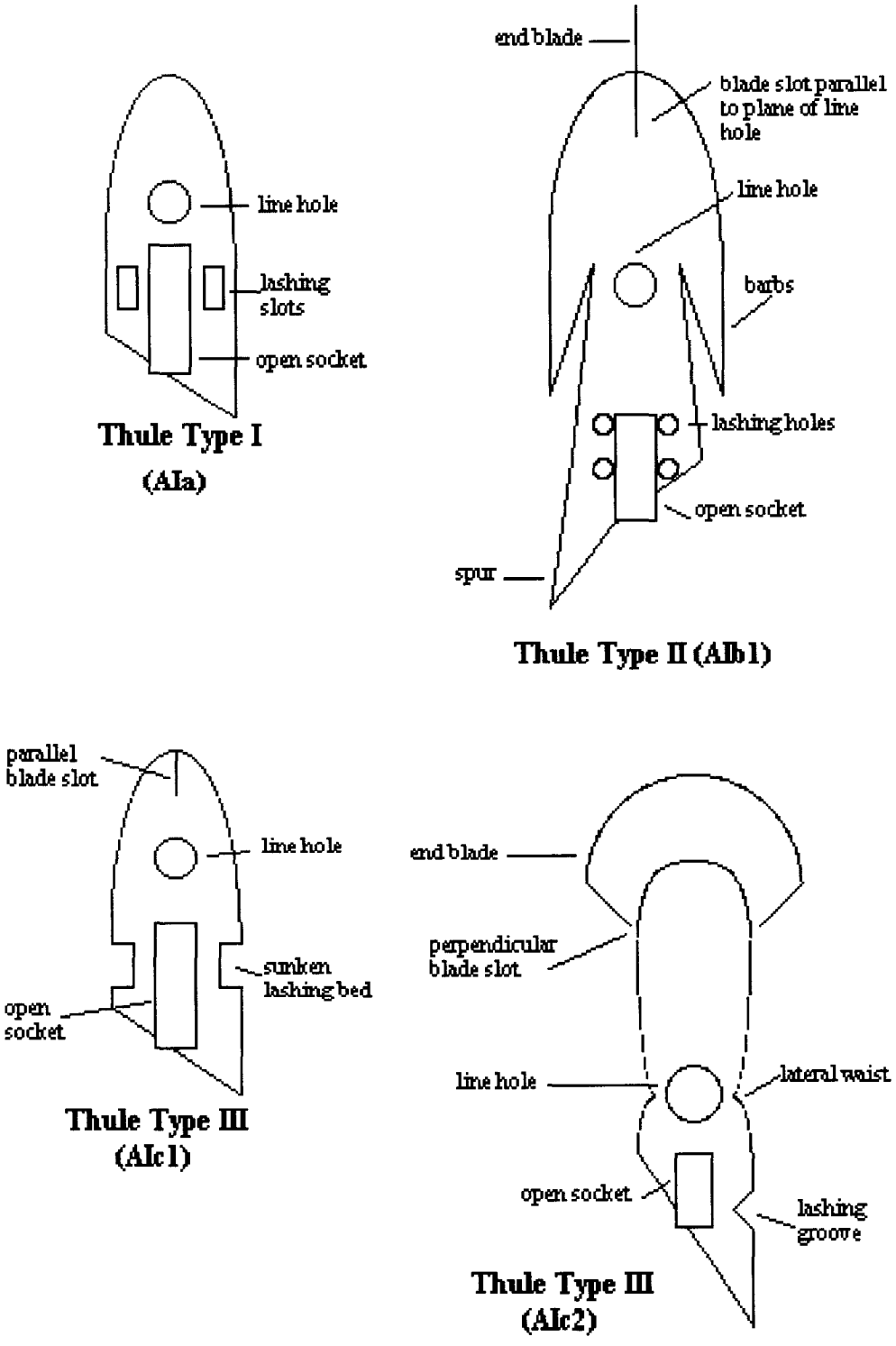


Figure 4-1: Harpoon Head Types and Attributes.

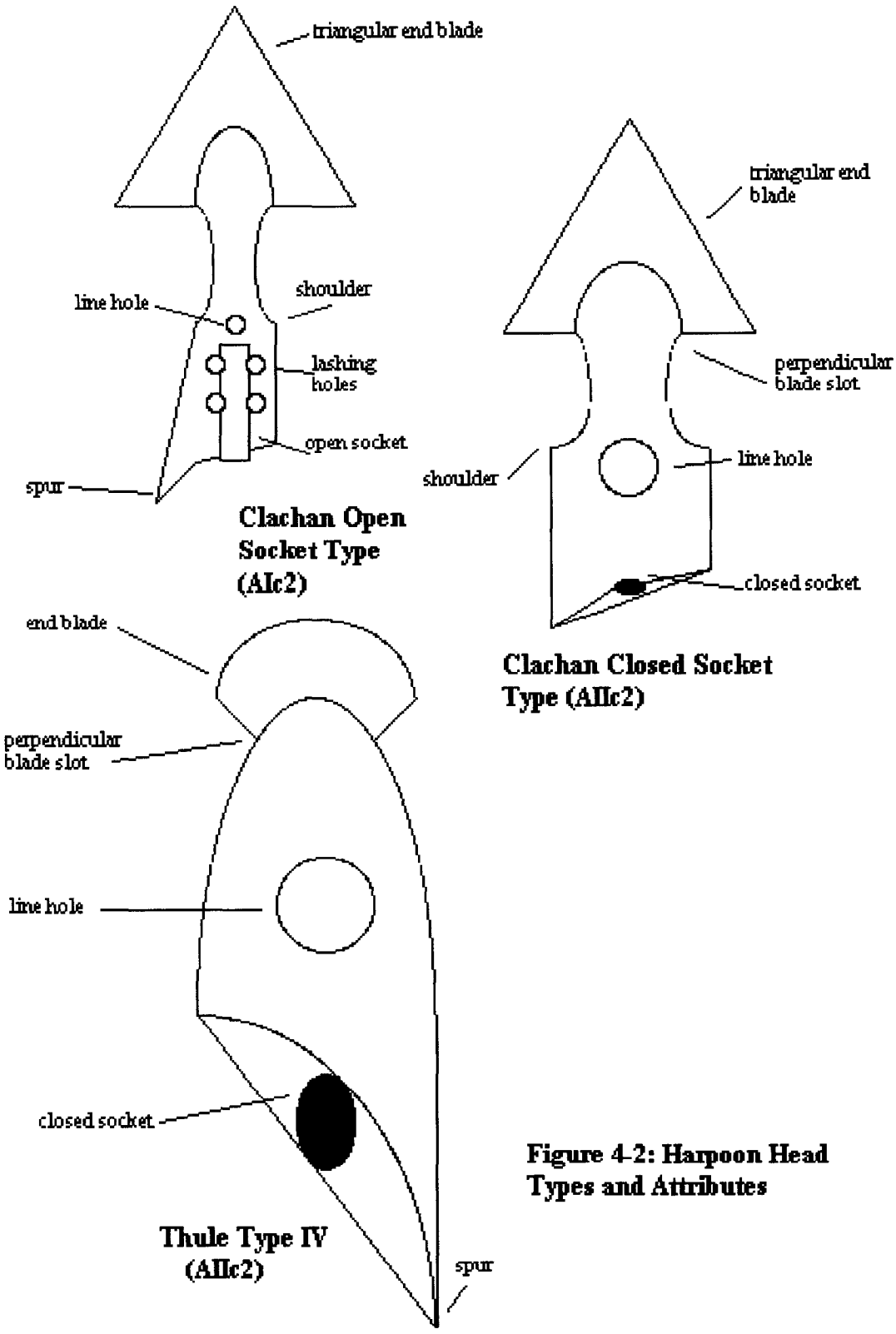


Figure 4-2: Harpoon Head Types and Attributes

Chronological Issues

A number of harpoon head attributes have been used to derive a chronology of Thule sites. A classic example of this can be found in Peter Schledermann's 1975 report of his archaeological work around Cumberland Sound. Among the early Thule harpoon head attributes listed are lashing slots or sunken lashing grooves, sharply angled base spurs, incised Y-line decorations, and lateral ridges at the base (McCartney 1977: 226-227; Morrison 1983: 84-87; Schledermann 1975: 241). Perhaps the most frequently cited chronological marker is the type of perforation used to facilitate lashing to the harpoon foreshaft - lashing slots are consistently seen as an earlier trait than drilled lashing holes (e.g. Collins 1937; Jenness 1928; Maxwell 1985; McCullough 1989; Morrison 1983). Robert Park tested this assumption in 1994 by seeing if sites dominated by harpoon heads with lashing slots were indeed occupied at an earlier period. He found that harpoon heads with drilled lashing holes were more often from sites with earlier radiocarbon dates than sites dominated by lashing slots (Park 1994:
40). Park also tested the correlation between radiocarbon dates and some of the other commonly accepted early traits, to find that there was no pattern for either lateral ridges or spur configuration. Only incised decoration seemed to originate from sites with consistently early radiocarbon dates, but only when compared with dates at the house level - not when dates from the entire site were considered (Ibid.). He also looked at the radiocarbon dates associated with certain harpoon head 'types', and found that type AId3 is more recent than type AIb1, type AIIc1 is older than type AIIc2, and the Sicco harpoon heads are older than AIc1 (Ibid.: 44).

Morrison had earlier also called into question the use of some harpoon head attributes as chronological markers, noting that such 'early' traits as square-cut spurs and

sockets continue throughout the Thule sequence in some western Thule sites, such as Clachan (Morrison 1983: 84-85). The findings of Park and Morrison demonstrate that one should be cautious when using individual attributes as chronological markers, and perhaps further research will show that some of these attributes vary regionally rather than temporally.

Methodological Issues

While Mathiassen's attribute list (1927a, 1927b) is very thorough and covers most of the harpoon head attributes that can be observed, there are a few attributes missing from this list which may or may not be significant to a study of regional variation. Some examples of these attributes are the raw material from which the harpoon head was constructed, the presence of various types of lashing provision, and the presence or absence of decoration.

Not all harpoon heads from the sites under investigation were considered for analysis. Those harpoon heads not included were ones for which insufficient information was given in the original site report, those which showed considerable evidence of reworking subsequent to the initial manufacturing stage, and those listed as 'probable' harpoon heads in the literature. Added to this list will be those fragmentary harpoon heads, for which fewer than fifty percent of the selected diagnostic attributes remain intact and available for observation. Unfinished specimens for which the above applies will also not be included in the study, and for those that are included, the *presence* of attributes will be considered as more significant than the *absence* of attributes, assuming that these attributes could have been added at a later stage of manufacture. While these discriminating criteria will further shrink the already small sample size, this measure is

considered necessary in order to maximise the informative potential of this study.

The data will be discussed in terms of the five Thule types defined by Mathiassen (1927a: 24-26). Although one of the purposes of this study is to show that these categories are not sufficient to describe variation in harpoon heads across space, th the use of Mathiassen's typology is justified as a means of organising the data in a comprehensible way which will facilitate the discovery of regional patterning of traits *within* each Thule type. Each type will be broken down into Mathiassen's subcategories (1927b: 12-13), and each specimen will be described in terms of individual attributes.

V
Data Analysis

Thule Type I Harpoon Heads

The harpoon head data is presented in tabular form in the appendix, but these data will be analysed here. It is apparent that Thule Type I is the rarest type of harpoon head, with only twenty-seven specimens reported across the entire study area, 6% of the total sample available for study. They are rarest in the western sites, and seem to become more frequent as one moves east, with a peak at Spence Bay, which was dominated by Type I specimens, making up 46% of its harpoon head assemblage.

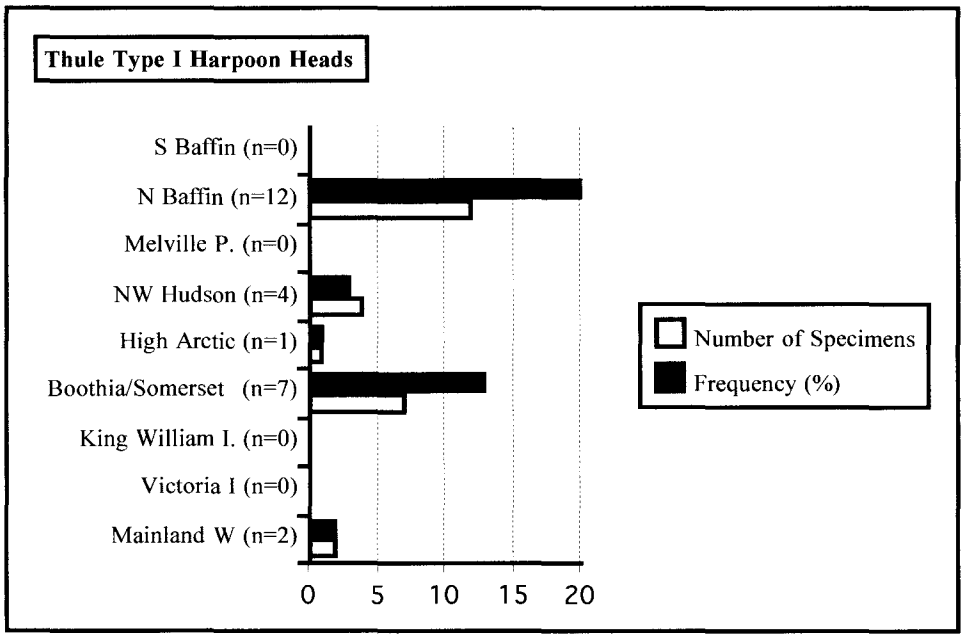


Figure 5-1: Distribution of Thule Type I harpoon heads in Thule sites, both in terms of the number of specimens reported from each region, and the frequency of Type I within the assemblages in question.

Type I harpoon heads are also frequent at Qilalukan, where the ten specimens comprise

26% of the assemblage. It is interesting to note that these two sites are in contiguous regions of the Canadian arctic, both in the general vicinity of the Gulf of Boothia, though the northern Baffin Island specimens differ from the Spence Bay specimens in having a flat base rather than a well-defined spur. This attribute is only known from Qilalukan and Button Point, and could represent a functional difference, as suggested by Mathiassen (1927a: 148).

Very little speculation has been offered regarding the function of Thule Type I harpoon heads, but Mathiassen hypothesised that the blunt pointed specimens at Qilalukan might have been used for salmon fishing. If the same function could be proposed for all of the Type I specimens, perhaps their abundance at Qilalukan is related to the function (or season of occupation) of that site, and their relative obscurity in the western sites is related to a decreased dependence on salmon at those sites. This theory would be appealing but for the absence of this style of harpoon heads at the Bloody Falls site, an important location for salmon fishing near the mouth of the Coppermine River (McGhee 1972: 39-52).

Thule Type I harpoon heads from the central region of the Canadian arctic are relatively uniform in their style. All belong to type AIa, and only two Type I specimens from the entire study area exhibit any form of decoration: one from Clachan has ornamental side slots (Morrison 1983: Pl. 5b), and one from Naujan has a groove running from the line hole to the point (Mathiassen 1927a: 24). The only major stylistic difference are the flat-based specimens from northern Baffin Island discussed above. Raw material does not seem to be a factor in determining the form of Type I harpoon heads, as the western specimens, all of antler, do not vary significantly from the Boothia Peninsula specimens, all of which are made of

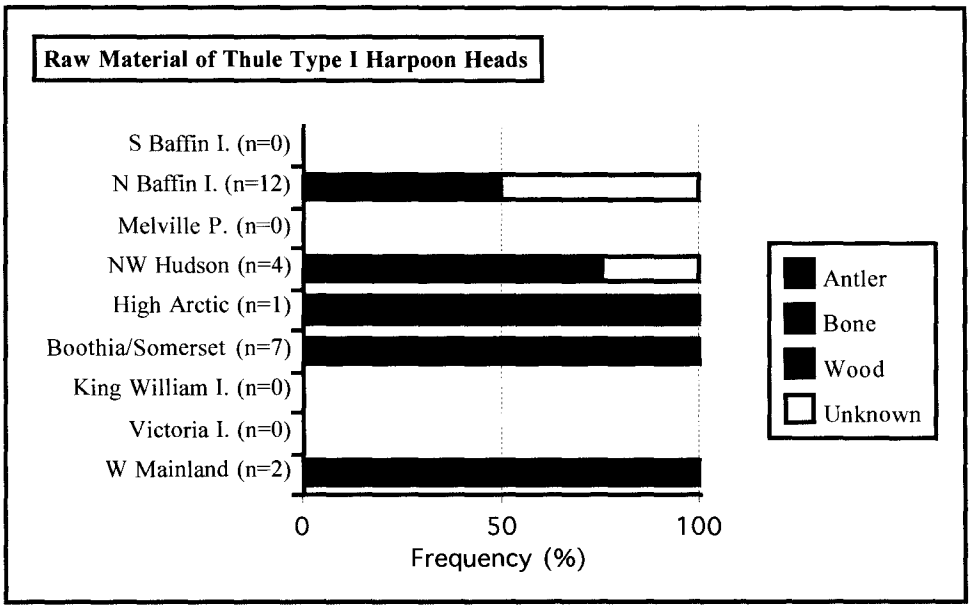


Figure 5-2: Raw Material of Thule Type I Harpoon Heads, By Region.

bone. The only high arctic specimen is made of wood, and is presumably a toy, while antler once again dominates in the eastern region, being the raw material for 89% of the specimens for which raw material was identified.

The type of lashing provision does vary across space, but this does not seem to be dependent on the raw material used. Lashing slots only occur on the western specimens, while drilled lashing holes are the most common form in the Boothia Peninsula/Somerset Island region and northwestern Hudson Bay. On Baffin Island, lashing beds, grooves and holes are all found in almost equal numbers. Very little sense can be made of these data, other than the possibility that lashing slots on Type I harpoon heads are a western trait, while lashing holes, grooves and beds are more common in the east, however, one must be cautious making this generalisation with such a small sample size.

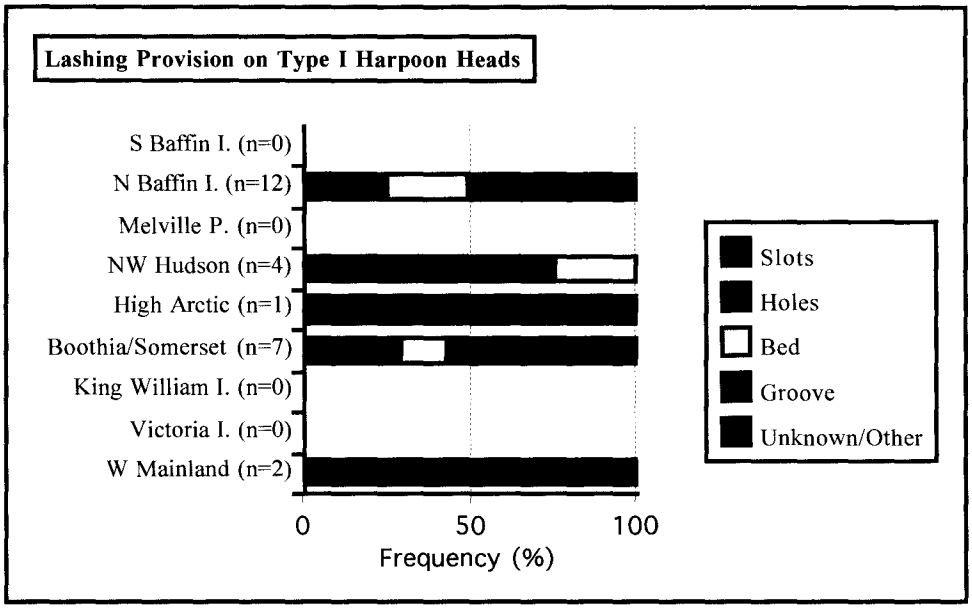


Figure 5-3: Frequency of Occurrence of Various Lashing Provision Types on Thule Type I Harpoon Heads.

It is difficult to detect any patterning in the western region, since Thule Type I specimens are only known from one site there, and the two specimens have very different styles. Waisted specimens are generally rare in the Canadian arctic, only occurring at Clachan, Spence Bay, and Qilalukan. No sense can be made of such a wide distribution, and so Morrison's contention that this is a western trait (1983: 97) must remain to be tested where sample size is greater. Another attribute listed by Morrison as being an eastern style are off-centre line holes (Ibid.). This attribute is only present at Qilalukan, though it dominates there, being found on at least 60% of the Type I specimens. As no Type I harpoon heads are known from the more easterly sites, this restricted easterly distribution must remain to be tested.

It is interesting that Mathiassen regarded this as an early type of harpoon head (1927a: 26), as of the sites where this type is found, only Brooman Point is generally known as an early Thule site (Park 1983: 8). Also, only two of the Thule Type I

specimens, from Clachan (Morrison 1983: Pl. 5a,b), exhibit the lashing slots so long argued to be the more primitive form of lashing provision. One of the Clachan specimens did have one of the traits usually argued to be a marker of early Thule: vestigial side blade slots (Ibid.: Pl. 5b). This site has been dated extensively, but all of the radiocarbon dates obtained were rejected by Morrison, who thought that they were being affected by sea mammal oil contamination. He postulates that the site was occupied from 1150-1450 A.D., and thus outside of the range of 'Early Thule'. It is clear that Thule Type I harpoon heads cannot be used as chronological markers according to the presently accepted seriation of harpoon head attributes.

Thule Type II Harpoon Heads

Thule Type II harpoon heads are the most common type in the central Canadian arctic, accounting for 42% of the total sample being studied.

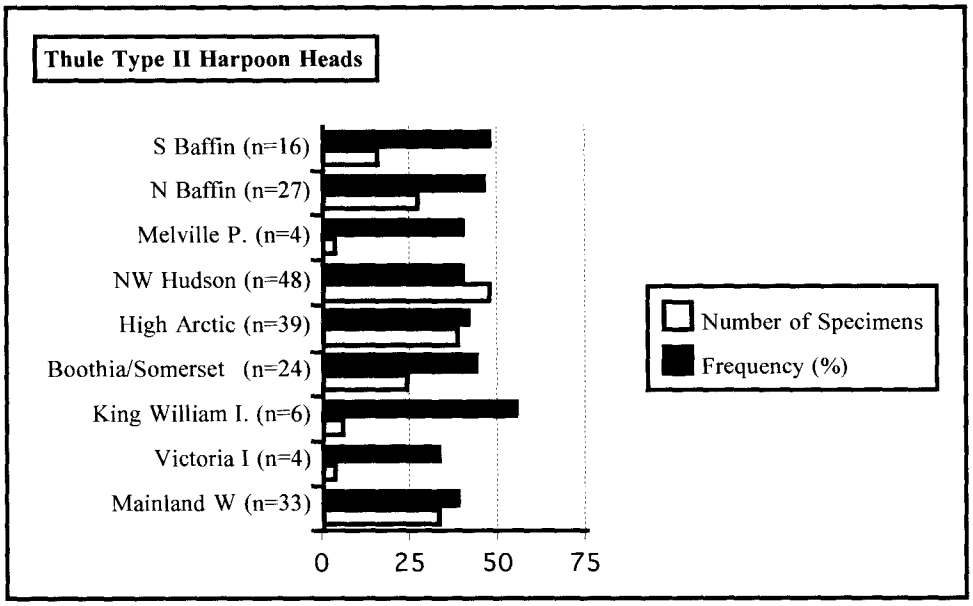


Figure 5-4: Distribution of Type II harpoon heads, both in terms of number of specimens, and frequency of that type within the region.

Type AIb1 is by far the most common variety of Thule Type II harpoon heads across

the Canadian arctic, making up the majority of the sample in all regions but Northern Baffin Island and the Melville Peninsula in the eastern region, and Victoria Island in the western region. In fact, not one AIb1 specimen is found in the region of Melville Peninsula. This discrepancy can be explained with reference to the very small sample size in this area (a total of four Type II harpoon heads are reported here) *and* to the different nature of these sites. Almost all of the Thule sites on the Melville Peninsula are graves, and thus would be expected to provide different sorts of artifacts from the winter dwellings from which most of the other harpoon heads being discussed here were taken.

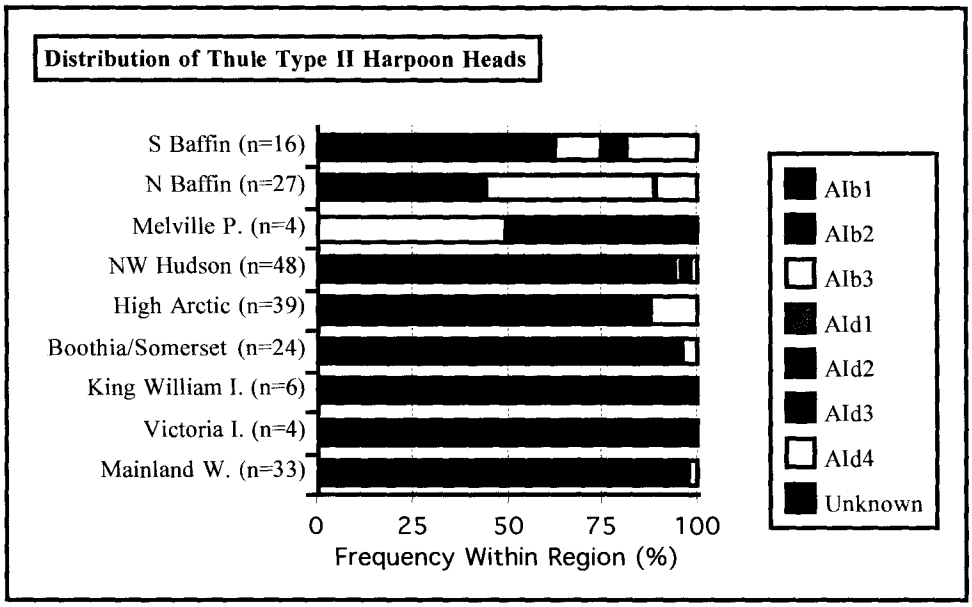


Figure 5-5: Relative Frequencies of Thule Type II Harpoon Head Forms, By Region.

The Thule Type II specimens in general seem more varied at the eastern sites when compared to the central and western regions. Northwestern Hudson Bay has the largest number of identified varieties, and is the only area where type AId1, with one barb and blade slot parallel to the line hole, is found. Type AId2, with one barb and perpendicular blade slot, is only found in the area of southern Baffin Island, at B-1, where

only one specimen was found (Schledermann 1975: Pl. 1e), 11% of the sample from that region. Multibarbed forms (type AId3) are very common on Baffin Island, especially at Qilalukan (Mathiassen 1927b: 147, Pl. 39(3,4)), where they make up 56% of the sixteen Type II harpoon heads reported. Mathiassen seems to think this is a later derivative of Thule Type II harpoon heads, and so we would not expect to find them at sites deemed to belong to the Early Thule period. This holds true for Crystal II, M1, Nunguvik, Malerualik, and Brooman Point, all sites which have been argued to be Early Thule (Park 1983: 8). Qilalukan, where most of these multibarbed forms were found, is considered to be a Classic Thule site, like Naujan (Ibid.), but here not one of the thirty-one Thule Type II harpoon heads is multibarbed. At Learmonth, only one of the nine Thule Type II harpoon heads is multibarbed, and at Kuk and Levesque Harbour, also both said to be Classic Thule (Ibid.), not one multibarbed form is found. Only one type AIb3 specimen is found each at A-1 (Schledermann 1975: PL. 1a) and B-1 (Ibid.: 106), much further to the south on Baffin Island than Qilalukan. Clearly some factor is at play here other than chronology. Perhaps the abundance of multibarbed forms at Qilalukan is related to a northern Baffin Island regional social grouping. Excavations at Qilalukan also provided one unique specimen which Mathiassen's typology is unable to categorise: it belongs to type AIb1, but rather than having the bilaterally positioned barbs, the two barbs on this specimen are unilateral (Mathiassen 1927a: 147; Pl. 39(2)). The fact that this type is found nowhere but the region of northern Baffin Island could also be taken as an argument in support of a regional social grouping.

Type AId3, with two barbs and a blade slot parallel to the line hole, also seems to have a restricted distribution. This type is only found in the central study region: three specimens from the Boothia Peninsula/Somerset Island region (Taylor & McGhee 1979:

Pl.. 2c, 63; VanStone 1962: Pl. V17), and two specimens from the high arctic (Taylor & McGhee 1981: Pl. 1d; Park 1983: Pl. 1a). Type AId4 seems to be restricted to the central and eastern study regions. Five such specimens were found in the high arctic (Collins 1952: Pl. X5; McGhee 1984: Pl. 1f, g; Park 1983: Pl. 23e,i), 13% of the total number of Type II harpoon heads from this region.

Finally, type AIb2, with only one barb and no separately inserted blade, seems to have a more western distribution, being found in all areas of the western and central Canadian arctic, and being found in smaller numbers in only two parts of the eastern study region: northwestern Hudson Bay, and northern Baffin Island. Four AIb2 specimens are found in the former region, two of which are possible toys, and were found at Naujan (Mathiassen 1927a: 26, Pl. 2(5)), the other two of which are from Kuk (Ibid.: 234, Pl. 69(2)). Only two specimens were found on northern Baffin Island, one at Qilalukan (Ibid.: 147) and the other at Button Point (Ibid.: Pl. 61(17).

Thule Type II in general is nearly equally common in all three study regions. In the eastern study region, ninety-five of the two hundred twenty-three known Thule harpoon heads, or 43%, belong to Type II. In the central region, there are sixty-nine Type II specimens, 44% of the total sample of one hundred fifty-eight harpoon heads from this area. Finally, in the western region, only thirty-seven Type II specimens are known, 39% of the ninety-six harpoon heads known from this region.

Raw material once again varies from region to region, and some patterns in this variation may be observed. Antler dominates in the western region of the study area, being the chosen raw material for at least 95% of the Type II harpoon heads found there. While upon first inspection of the graph presented in Figure 5-6 below may seem to indicate that antler is not nearly as dominant on Victoria Island as in the other areas of the

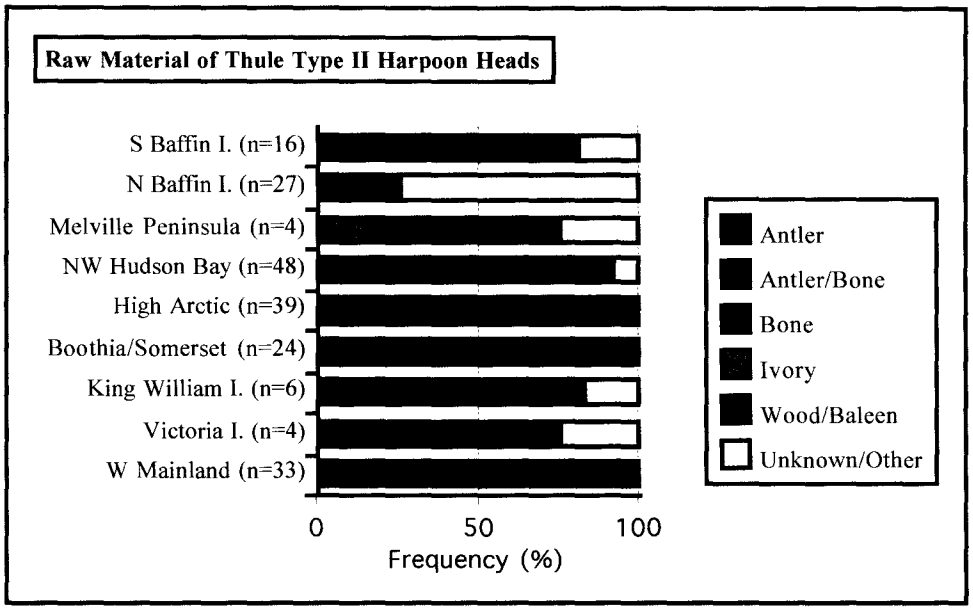


Figure 5-6: Distribution of Raw Material of Thule Type II Harpoon Heads, By Region.

western central arctic, it must be realised that many (if not all) of the harpoon heads for which raw material is given as antler/bone are likely to be made of antler. Antler holds a place of dominance as a raw material for Type II harpoon heads throughout the Canadian arctic, though perhaps nowhere else so strongly as it does in the western region. In fact, antler is the most commonly used raw material in all regions but one: Melville Peninsula. Once again, we must note that not only is the sample size from this region very small, but almost all of its harpoon heads come from graves rather than whalebone houses.

Bone seems only to have been important as a raw material in the central region of the Canadian arctic, being the chosen raw material for 26% of the high arctic specimens, and 25% of the Boothia Peninsula/Somerset Island specimens. King William Island, though described as belonging to the central group for the purposes of this paper, conforms much more to the western group, with all of the harpoon heads for which raw material is indicated being made of antler. A few isolated bone specimens are also known

from Silumiut on northwestern Hudson Bay (McCartney 1977: Pl.1C), Qilalukan on northern Baffin Island (Mathiassen 1927a: Pl. 39(6)), and site B-1 on Cumberland Sound, southern Baffin Island (Schledermann 1975: Pl. 1e,h), but this raw material does not seem to have held a place of importance here for Type II harpoon heads.

One raw material that seems to have had a restricted distribution, perhaps due to its limited availability, is ivory. Ivory Type II specimens are only found in the central and eastern study regions, and are most frequent on the Melville Peninsula and northwestern Hudson Bay, where it is the chosen raw material for 75% and 35% of the specimens, respectively. The high proportion of ivory specimens from the Melville Peninsula may be related to the fact that most of these sites are graves, as ivory could likely have been a prestige item, either due to limited availability, or to religion.[12] Ivory is the chosen raw material for 21% of the Type II harpoon heads in the high arctic and 19% of the southern Baffin Island specimens, but only 4% of the specimens from each northern Baffin Island and the Boothia Peninsula/Somerset Island regions are made of this material. It is not found at all in the western study region, nor on King William Island, in the western part of the central study region. Much of this distribution is probably related to the distribution of the walrus from which this raw material was procured.

At least 54% of the thirty-seven Thule Type II harpoon heads from the western region of the Canadian arctic exhibit lashing slots for attachment to the harpoon foreshaft, with a distinct possibility that some of the twelve specimens for which lashing provision was given the value 'unknown' also exhibited lashing slots at one time. Drilled lashing holes are completely absent on Type II specimens from the western region, but 11% have a sunken lashing bed, and 3%, or one specimen, has a lashing groove. Lashing slots continue to dominate in the central region, with 38% of the specimens found there

[12] See McGhee 1977 for an interesting theory linking raw material choice with religious beliefs.

exhibiting this form of lashing provision. This dominance, however, is not consistently

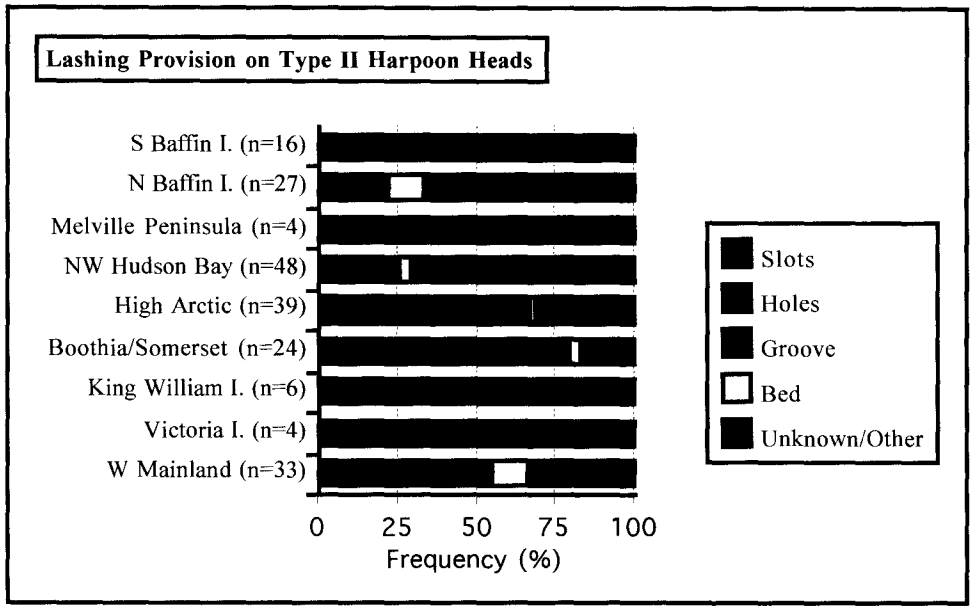


Figure 5-7: Relative Frequency of Lashing Provision Forms on Thule Type II Harpoon Heads, By Region.

found at the local level for the sites of the Boothia Peninsula/Somerset Island region, where only 29% of the Type II specimens have lashing slots, while lashing grooves and drilled lashing holes are found on almost the same number of specimens, 29% and 21% respectively. Lashing slots are found on roughly half of the specimens found in both the high arctic and King William Island, with lashing holes and grooves being much less common.

Lashing slots cease to dominate in the eastern region of the study area, and drilled lashing holes become more common, being found on 53% of the specimens for which lashing provision is indicated. Five of the ninety-five specimens from the eastern region have sunken lashing beds, five have lashing grooves, and five have lashing slots. In northwestern Hudson Bay, 56% of the Type II harpoon heads for which lashing provision is identified exhibit drilled lashing holes, and on the Melville Peninsula, this

number rises to 100%. On northern Baffin Island, lashing provision is only indicated for nine of the twenty-seven Type II specimens, and of these, 33% exhibit lashing holes, 33% exhibit a lashing bed, 22% have a lashing groove, and a mere 11%, or one specimen, has lashing slots. Drilled lashing holes are found on 55% of the nine southern Baffin Island specimens with known lashing provision, and slots and grooves each on 22% of the specimens.

A pattern can be detected from these data, which suggests a continuum from west to east, with lashing slots becoming less common, and drilled lashing holes more common. The type of lashing provision does not seem to be dependent on raw material, as antler dominates in both the eastern and western regions, though, as we have seen, lashing provision varies greatly between these two regions. If this pattern can be shown to hold true for each of the other Thule Types, then the situation could be argued to be one of culture continuum rather than discrete social units.

Many Thule Type II harpoon heads exhibit incised decoration, and as this attribute may be found to be socially meaningful, it will be investigated here. The western portion of the study region has the most decorated Type II specimens, with twenty-six, or 70% of the sample of thirty-seven. Most of these come from Clachan, where eighteen of the nineteen Type II specimens were decorated, and seventeen of these had the same motif: an inverted incised triangle. Two more decorated Type II specimens from Victoria Island also exhibit this motif: one from Lady Franklin Point (Taylor 1972: Pl. VIa), and one from the Pembroke site (Ibid.: Pl. VIIIu). The final decorated Clachan specimen has a Y-line motif[13] , as do three of the six decorated Type II specimens from Memorana. All six of the Memorana specimens also have single or double converging lines on the ventral face.

[13] A Y-line motif is an incised 'Y', normally inverted and located above the line hole: e.g. 

In the region of King William Island, only one of the six Type II specimens is decorated. This specimen is from the site of Kangerarfigssuaq, and its motif is unique: it has an incised longitudinal line above the line hole, and also has knobs on the sides of the harpoon head at the level of the line hole (Mathiassen 1927a: 322). The region of Boothia Peninsula/Somerset Island has an even lower frequency of decorated specimens, with only one specimen out of twenty-four Type II harpoon heads carrying this attribute. This specimen is from Learmonth, and the decoration takes the form of an incised 'V' anterior to the line hole (Taylor & McGhee 1979: 64-65).

In the high arctic we find many more decorated harpoon heads, with a total of at least seventeen out of thirty-nine Type II harpoon heads, or 44%. Most of these are found at Brooman Point, where McGhee reports that two specimens have incised triangles extending to lines, four have Y-lines, one has oblique lines accentuating the barbs, five have the central ends of the lashing slots extended by lines into lateral buttresses, and 'most' have lines demarking a bed from the line hole to the lashing slots (McGhee 1984: 45). It is difficult to tell from McGhee's description whether or not all Type II specimens are decorated, but it seems safe to assume that at least twelve are decorated in some way. Four other decorated specimens are reported from the high arctic, two with a Y-line motif, one with a modified Y-line[14], and one with an incised triangle.

Of the forty-eight Type II harpoon heads from the region of northwestern Hudson Bay, sixteen specimens, or 33% of the total, were decorated. Ten of these are from the site of Naujan, and the Y-line motif dominates here, being found on seven of the decorated specimens. However, two of these specimens carry an additional motif: one has oblique lines accentuating the barbs, and on the other the Y-line extends into a

[14] For the purposes of this paper, a modified Y-line will refer to any Y-line motif to which extra lines are added: e.g. 

triangular hatched field. This triangular hatched field is also found on the three remaining decorated specimens from Naujan. Five of the six remaining decorated Type II harpoon heads from northwestern Hudson Bay carry a Y-line motif, though on one specimen from Kuk, this motif is modified in that three parallel lines become a 'Y', and the other side of the specimen is decorated with a bifurcated line in front of the line hole, and two rows of dots on each side (Mathiassen 1927a: Pl. 72(1)). The final decorated specimen from this region comes from the graves in the vicinity of Naujan, and it simply exhibits a central incised line in addition to oblique lines accentuating the barbs (Ibid.: Pl. 37(9)). Only one decorated Type II specimen is found in the region of the Melville Peninsula (Ibid.: 124), and this has Y-line motif much like the nearby Naujan specimens.

Incised decoration becomes much less common as one moves further east onto northern Baffin Island. Here, only two of the twenty-seven known Type II harpoon heads carry any sort of decoration. One of these specimens, from Qilalukan, has the incised triangle motif so common in the western study region (Mathiassen 1927a: Pl. 39(6)), and the other specimen, from Button Point, has a simple longitudinal groove above the line hole (Ibid.: Pl. 61(17)). In southern Baffin Island, a total of three decorated harpoon heads are found, all belonging to Thule Type II, and all originating from the site of Crystal II on Frobisher Bay. Two of these exhibit a simple Y-line motif (Collins 1950: Pl. V9, 10), and the third has a longitudinal incised line above the line hole (Ibid.: Pl. V14).

From the above information, then, it would seem that there are at least three concentrations of incised decoration: Clachan, Brooman Point, and Naujan. While the triangular hatched field motif reigns supreme in the west, the Y-line motif dominates in the east. In the high arctic, both motifs seem to be equally common, suggesting an east-west continuum, a distribution that was observed by Morrison in his work (1983: 87). It

must be noted that the three sites for which incised decoration is most common are all considered to belong to either the Early Thule Period, or the Classic Thule Period. Crystal II, the only site from southern Baffin Island to produce decorated harpoon heads, also belongs to the Early Thule period. As incised decoration on harpoon heads is often cited as an early trait (e.g. McCartney 1977: 226-227; Morrison 1983: 84-87; Schledermann 1975: 241), these areas of concentration may be a factor of site age rather than social grouping distribution. This will be discussed further below.

Thule Type III Harpoon Heads

Thule Type III harpoon heads are almost as common as Thule Type II, with one hundred sixty-six specimens, comprising 35% of the total sample of four hundred seventy-seven harpoon heads being investigated in this study. This type is most common in the western study region, where it makes up 49% of the total sample of Thule harpoon heads, whereas in the central and eastern regions Type II makes up 32% and 30% of the sample, respectively. This type varies in different ways than Thule Type II. By definition is is unbarbed, so the number and configuration of barbs, which was the most important varying attribute for Type II does not apply here. What will be seen to be important for Type III will be raw material type, lashing provision, incised decoration, and whether or not the specimen has a lateral waist. The Clachan Open Socket variety of Type III will be treated as a separate type for the purposes of analysis, following the definition provided by Morrison (1983: 76), and described below.

The distribution of the different types of Thule Type III harpoon heads across the Canadian arctic is rather striking. The most common form of Thule Type III, by far, is type AIc1, with one hundred twenty-four specimens, or 75% of the total number of

Type III specimens known from the study area. This dominance is strongest in the

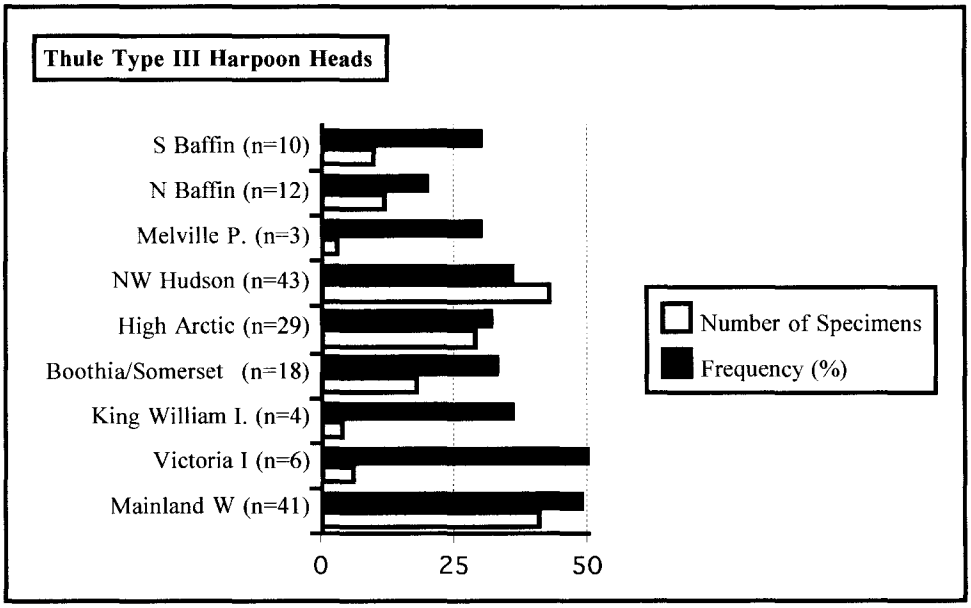


Figure 5-8: Distribution of Type III harpoon heads, expressed as the total number of specimens from each region, and the frequency of that type within each region.

eastern portion of the study region, Baffin Island, where type AIc1 is found to the exclusion of all other varieties. A similar pattern is found on King William Island, but the absence of other varieties from this area could be due to the extremely small sample size, with only four Type III harpoon heads being reported from that region. This is the variety that defined Type III for Mathiassen (1927a: 25), which is not surprising since it is virtually the only variety found in the two regions where most of his sites were found: northwestern Hudson Bay and northern Baffin Island.

The Clachan Open Socket type seems to have a restricted distribution in the western part of the central arctic, particularly Clachan, where 56% of the Type III specimens belong to this sub-type (Morrison 1983: Pl. 1a-k). This type technically belongs to Mathiassen's AIc2 category (1927b: 12-13), but Morrison asserts that it is different from the eastern variant of this type, which is derived from Type III (e.g. Taylor

& McGhee 1979: Pl. 1d; VanStone 1962: Pl. X10). The Clachan Open Socket type is thought to have derived from Thule Type II, with its long neck and marked shoulders at the level of the line hole (Morrison 1983: 76). They will be considered as a derivative of Type III in this study for comparative purposes. A single specimen reported from Tysoe Point (Taylor 1972: 27-28), just outside of the study area, seems to fit into this category, as do specimens from Bloody Falls (McGhee 1972: Pl. VIa) and Lady Franklin Point (Taylor 1972: Pl. VIa; 1963: 458). Two specimens belonging to this type have been reported from outside of this region - a specimen from Deblicquy (Taylor & McGhee 1981: Pl. 1e) is probably a toy, and one from Silumiut (McCartney 1977: Pl. 1c)

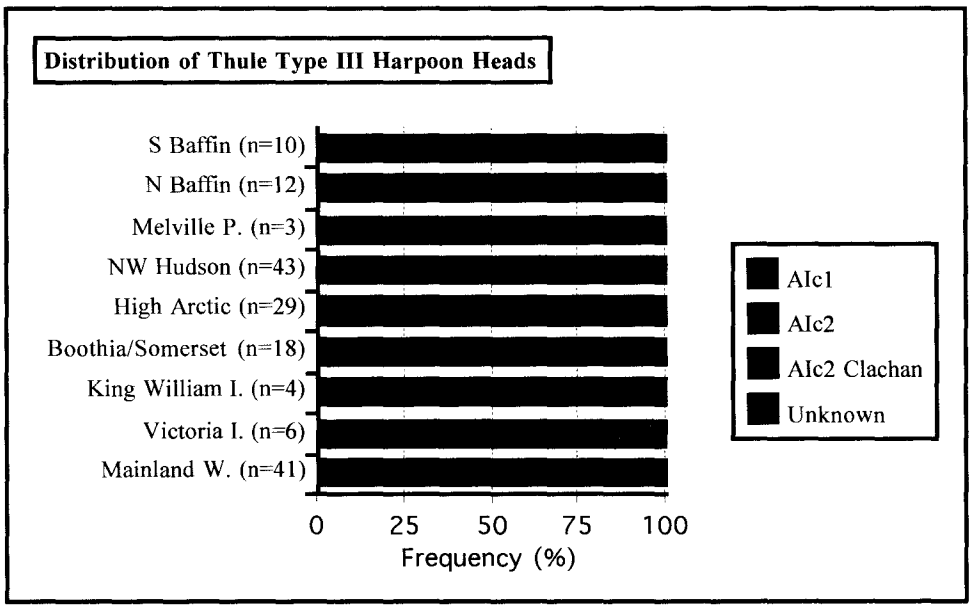


Figure 5-9: Relative frequency of styles of Thule Type III harpoon heads, by region.

is probably a reworked Type 2 specimen (Morrison 1983: 79). The significance of this restricted distribution was not lost on Morrison:

> The Clachan open socket type, then, appears to be an important stylistic marker, and one which points to a cultural connection to the West. Few if any Thule harpoon head types have so discrete a geographic distribution (Morrison 1983: 79).

Those harpoon heads belonging to type AIc2, but not exhibiting the characteristics of the Clachan variety, seem relatively rare in the Canadian arctic. The large number of these specimens reported from Victoria Island may be skewed by the fact that many of these were not illustrated, meaning that there might have been many more Clachan Open Socket specimens from these sites than thought. Small numbers of this type are also reported from the central region of the arctic, and also the Melville Peninsula area of the eastern region, but not one specimen is known from northwestern Hudson Bay or Baffin Island, where some of the most famous Thule sites are found.

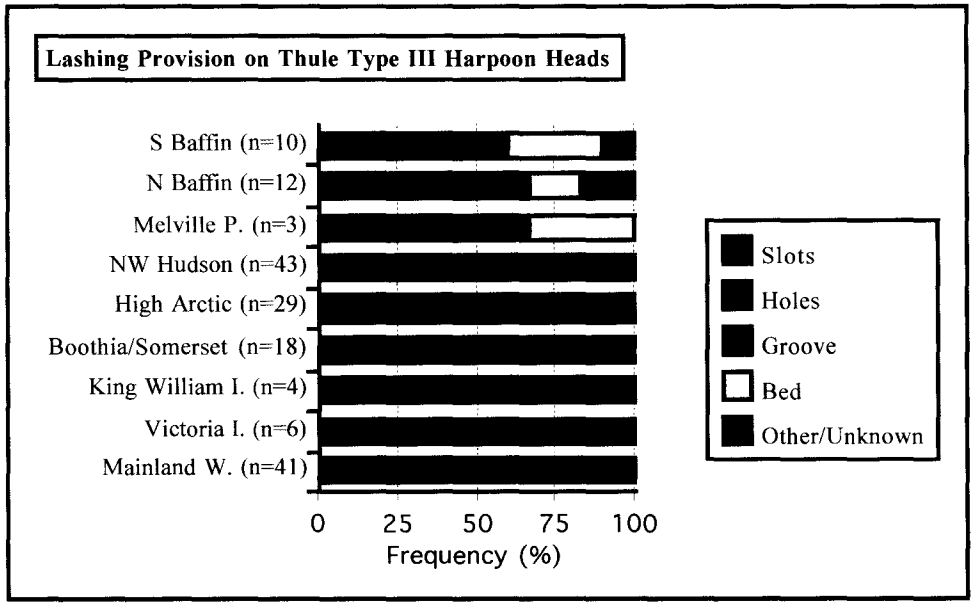


Figure 5-10: Relative Frequency of Lashing Provision Types on Thule Type III Harpoon Heads, By Region.

Lashing provision seems to vary across the arctic on Thule Type III specimens as well. On the mainland of the western region of the study area, lashing slots predominate, occurring on 65% of all specimens for which lashing provision is indicated. Of the remaining specimens, 31% have lashing holes, and 4% have no provision for lashing, and

may be incomplete. Lashing provision is only known for three specimens from Victoria Island, and two of these (67%) have lashing holes, the third having lashing slots. For the western portion of the study region, then, lashing slots seem to predominate, with drilled lashing holes being about half as common.

On King William Island to the east, 75% of the four known specimens have four drilled lashing holes, and the remaining 25%, or one specimen, has lashing slots. Lashing holes again predominate in the Boothia Peninsula/Somerset Island area, being found on eight specimens, or 62% of the harpoon heads for which lashing provision is indicated. Fifteen percent of the remaining specimens from this area exhibit lashing grooves, and 23% have lashing slots. The predominance of lashing holes, however, tends to lose ground as one moves into the high arctic. In the high arctic, lashing slots once again predominate, accounting for 68% of the twenty-two Type III harpoon heads with known lashing provision.

In the eastern region of the study area, drilled lashing holes predominate. In northwestern Hudson Bay, 68% of the specimens with known lashing provision have drilled lashing holes, 27% have lashing slots, and a mere 5% have lashing grooves. On the Melville Peninsula, 67% of the three known Type III harpoon heads with known lashing provision exhibit drilled lashing holes, and the remaining 33%, or one specimen, has a sunken lashing bed. On northern Baffin Island, 60% of the Type III specimens for which lashing provision is known have drilled lashing holes, and the remaining 40% is divided equally between lashing slots and a sunken lashing bed. Lashing holes no longer dominate on Type III harpoon heads from southern Baffin Island. Only 33% of these harpoon heads have drilled lashing holes, 33% have a sunken lashing bed, 22% have lashing slots, and the remaining 11% have a lashing groove.

Very few regular patterns can be observed in the distribution of lashing provision types across the Canadian arctic. Lashing slots seem to occur in all regions, with the exception of the Melville Peninsula, though the sample from this region is both small and of a different nature than most of the other regions in that almost all of these sites are graves. Lashing slots are most common in the high arctic, followed closely by the mainland region of the western portion of the arctic. Site age could be a determining factor in this distribution: if, as has been argued by many archaeologists (e.g. McCartney 1977: 226-227; Morrison 1983: 84-87; Schledermann 1975: 241), lashing slots are chronologically older than drilled lashing holes, then we would expect to find this type of lashing provision to be more common along the initial Thule migration route. However, Clachan, where most of the slotted specimens are found, is a Classic Thule site dated from A.D. 1150-1450 (Morrison 1983: 203-204). The sites of M1, Brooman Point, among others in these two regions, are generally considered to be Early Thule, and so the high frequency of lashing slots at these sites could be explained in this way. Drilled lashing holes are present in all regions, and outnumber lashing slots in all areas except the high arctic and the mainland western arctic. This attribute is found on over 50% of the specimens from two regions: King William Island, and Melville Peninsula, but when the specimens with an unknown form of lashing provision are removed from the sample, lashing holes predominate in all of the central and eastern regions, except the high arctic. Interestingly, they are also the most frequent form on Victoria Island in the west, though it must be kept in mind that the sample size is very small, with only six Type III specimens. The only lashing form which seems to have a restricted distribution are sunken lashing beds. This type of lashing provision is *only* found in the extreme eastern region of the Canadian arctic: Melville Peninsula and Baffin Island. Lashing grooves are

only found in five of the ten regions discussed, but no geographical patterning can be discerned, with each of the three major geographic subdivisions (west, central and east) represented.

In general, the pattern of distribution for different forms of lashing provision for Thule Type III is very similar to the pattern discussed for Type II. Lashing slots dominate in the western study region, and lashing holes dominate in the southern part of the central region, as well as the eastern study region. Also, lashing provision in general seems to take a greater variety of forms as one moves from west to east.

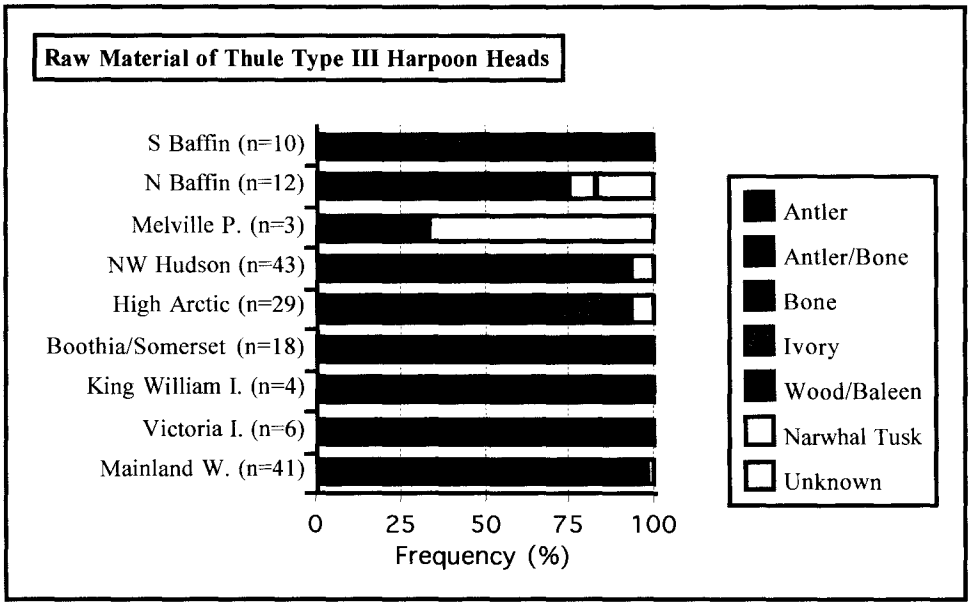


Figure 5-11: Raw Material of Thule Type III Harpoon Heads, By Region.

The raw material from which Thule Type III harpoon heads are made seems to vary more regularly through space. Antler dominates in the western sites and high arctic, while bone tends to be more common in the eastern sites. Antler is used to the virtual exclusion of all other raw materials in the contiguous regions of King William Island and the mainland western region. Bone holds an extreme position of dominance in only two regions: Somerset Island/Boothia Peninsula, and northern Baffin Island - areas separated

only by the Gulf of Boothia and Prince Regent Inlet. Ivory seems to have only been used commonly as a raw material in a few areas. It was the chosen raw material for about half of the specimens from Melville Peninsula for which this quality is identified, and about a third of the specimens from northwestern Hudson Bay. A small number of ivory Type III specimens are known from the high arctic as well. Ivory is the most common raw material for Type III harpoon heads in southern Baffin Island, being found on 70% of all specimens reported from there. This is a similar pattern of distribution to that discussed for Type II above, with antler dominating in the west and high arctic, bone in the southern part of the central region, and a tendency for more variety in raw material use in the east.

Lateral waists are a common attribute on Thule Type III harpoon heads, but they is not equally common everywhere. When viewed at a regional level, no pattern in the

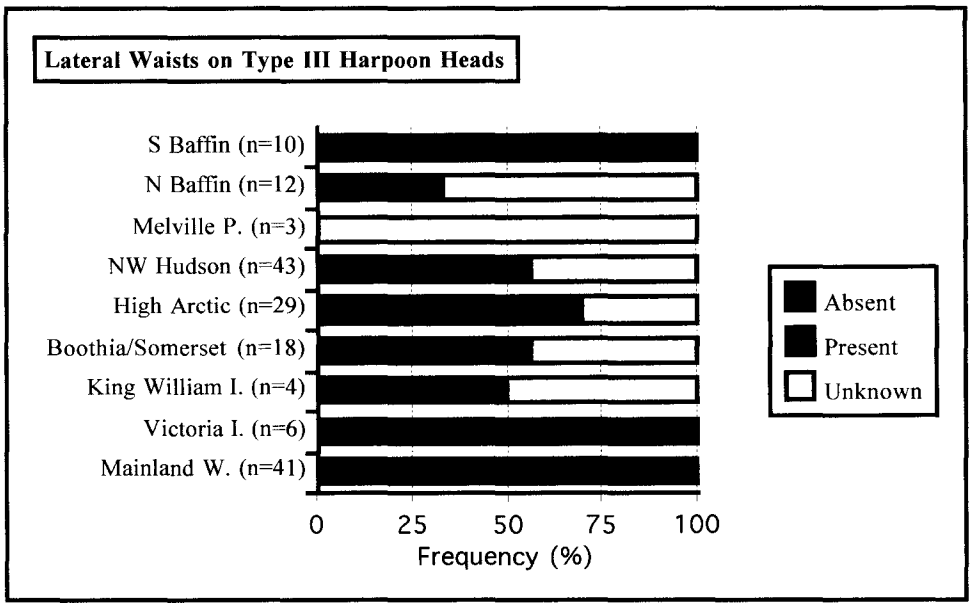


Figure 5-12: Relative Frequency of Lateral Waists on Type III Harpoon Heads.

distribution of lateral waists is immediately apparent. Perhaps more can be learned by looking at the data at the site level. Clachan, in the mainland western study region,

provided the most waisted Type III harpoon heads in the western region, with ten specimens. No sites in the regions of Victoria Island, King William Island, or Boothia Peninsula/Somerset Island produced a significant number of waisted specimens, but Brooman Point in the high arctic had eight waisted Type III specimens. Not one site in northwestern Hudson Bay provided a significant number of waisted Type III specimens, with a total of three from the entire region. On Baffin Island, the only site to produce more than one waisted specimen is Crystal II, where at least three of the four Type III specimens were waisted. It may be significant that these three sites were also among those with a higher proportion of decorated harpoon heads. Perhaps lateral waisting, like incised decoration, could be a chronological marker rather than a geographical marker. Regardless, we are again seeing a situation where the high arctic resembles the western study region more than the adjacent regions to the south.

Incised decoration is more difficult to report with any accuracy, as this attribute is not always discussed in the text of archaeological reports unless the motif is considered noteworthy, and it is often difficult to see in any illustrations provided. Decoration in general seems most common in the western region of the arctic, with at least twenty-three of the ninety-six specimens reported having incised decoration of some form. The most common motif in the western region is an incised triangle, which is found on at least 83% of the decorated specimens. Not one Type III specimen from this area exhibits a Y-line motif. Most of the decorated specimens in the western region are from the mainland, where at least twenty-one decorated Type III harpoon heads are found. Vestigial side slots are relatively common on these specimens, and at least one, from Clachan, also has a vestigial second spur (McGhee 1972: Pl. 1h).

Incised decoration is less common in the central region of the Canadian arctic,

where only six of the fifty-one known Type III harpoon heads are decorated. No decorated Type III harpoon heads are known from the region of King William Island, and only one is known from the Boothia Peninsula/Somerset Island region, decorated with a Y-line motif. Decoration is more common in the high arctic, with five decorated Type III specimens. Four of these have a vestigial side slot, two have an incised triangle (including one of the former specimens), and one specimen has parallel curved lines flanking the line hole, in addition to its vestigial side slot.

In northwestern Hudson Bay, eighteen specimens, or 42% of the known Type III harpoon heads, are decorated. By far the most common motif in this region is the incised Y-line, occurring on at least 50% of the decorated specimens. Two of these has the modified Y-line described above, another has three parallel Y-lines above the line hole. Three specimens, all from Kuk, have longitudinal lines on the sides in addition to the Y-line. Only one specimen, from Naujan, has the triangular hatched field so common in the west, but a total of seven specimens from this site have a vestigial side slot.

Only one decorated Type III harpoon head is known from the Melville Peninsula, and it is a Y-line motif (Mathiassen 1927a: 126). Not one decorated Type III specimen is known from Baffin Island. The general trend to be observed, then, is a decrease in the frequency of decorated harpoon heads as one moves from west to east, with triangular hatched fields being the most popular motif in western sites, and the Y-line motif being more popular in central-eastern sites, with the highest concentration at Naujan on Repulse Bay.

Thule Type IV Harpoon Heads

Thule Type IV harpoon heads are generally less common than Types II and III,

with only eighty-four specimens in the sample, or 18% of the total number of harpoon heads being investigated. Some patterns in the distribution of the sub-types can be

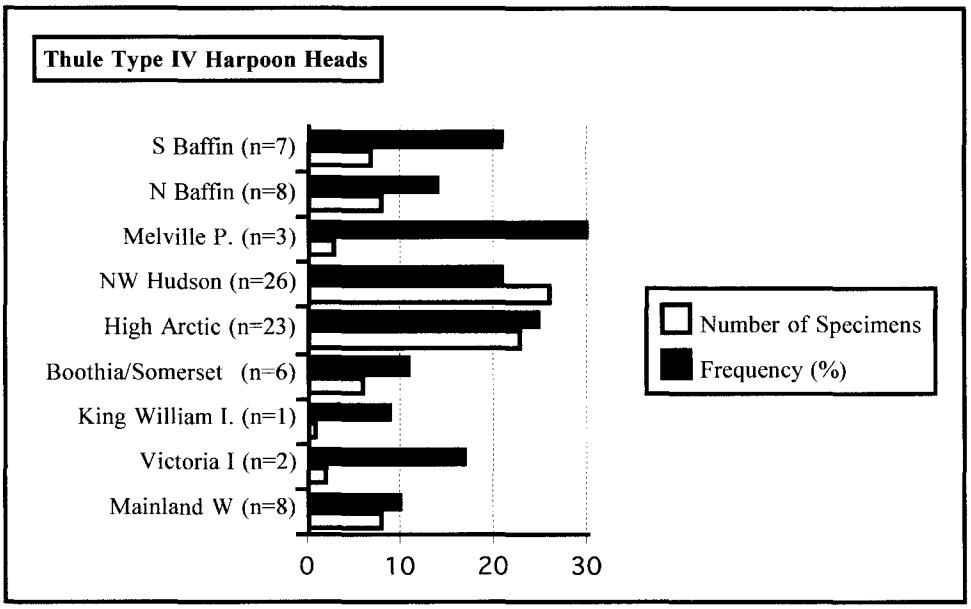


Figure 5-13: Distribution of Type IV harpoon heads, both in terms of number of specimens and in terms of frequency within each region.

observed. The Clachan form of type AIIc2, like its open socketed counterpart, has a very restricted distribution. This type is only known from the site of Clachan, and so can be considered a local variety. The only other form of Type IV found in the western study region is type AIIc1, with parallel blade slots. This form also dominates in the southwestern half of the central study region - in the region of King William Island, it occurs to the exclusion of all other Type IV forms, and in the region of Boothia Peninsula/Somerset Island, it accounts for 67% of the six Type IV specimens.

Type AIIc2, with perpendicular blade slots, becomes the dominant form as one moves east, making up 81% of the Type IV harpoon heads from the region of northwestern Hudson Bay, 88% of the sample from northern Baffin Island, 71% of the sample from southern Baffin Island, and 100% of the rather small sample from the

Melville Peninsula, located between Baffin Island and Northwestern Hudson Bay. Types

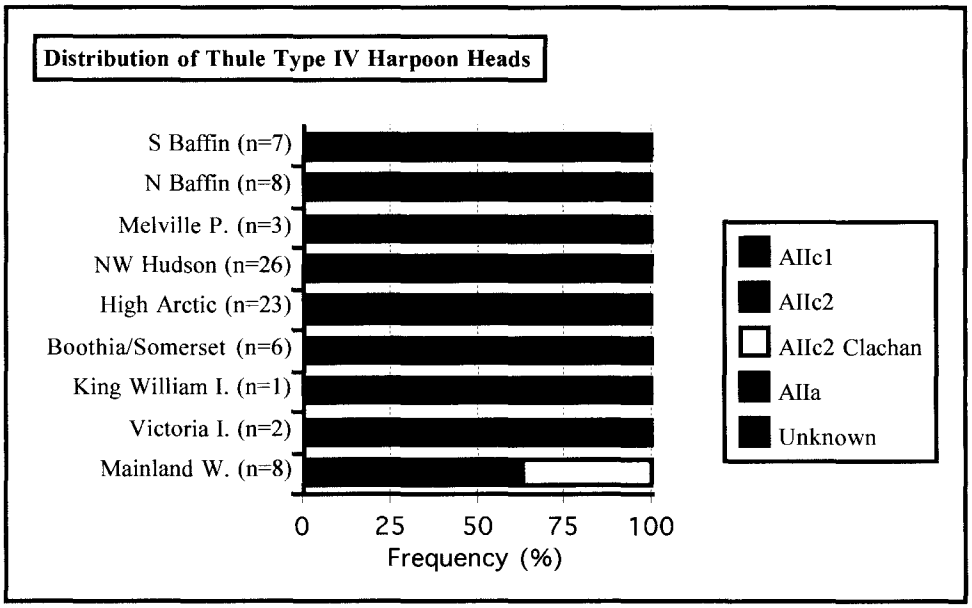


Figure 5-14: Distribution of Sub-Types of Thule Type IV Harpoon Heads, By Region.

AIIc1 and AIIc2 occur with relatively equal frequency in the high arctic. This could be explained as being a transitional zone between the type AIIc2-dominant eastern sites and the type AIIc1-dominant western sites.

Type AIIa is the rarest form, and is only found in a few central and eastern sites. Three of these regions are geographically contiguous: the Boothia Peninsula/Somerset Island region, the high arctic, and northwestern Hudson Bay, and they are only separated from the fourth region where this type is found by Melville Peninsula, which has a very small sample (three specimens) that may not be representative of the harpoon heads types that were used there. The sites where it is found are: Learmonth, Brooman Point, and Kamarvik. Each site only has one specimen belonging to this type, and so it is the rarest of the Thule Type IV forms. Mathiassen called these 'salmon harpoon heads' (1927b: 20), and notes that a similar form was used by the Netsilik Inuit during his stay

with them. Interestingly, the distribution of this type in Thule sites overlaps the traditionally recorded territories of both the Iglulik and Netsilik Inuit.

The relative frequencies and distribution of the use of various types of raw material in manufacturing Thule Type IV harpoon heads is represented in Figure 5-15:

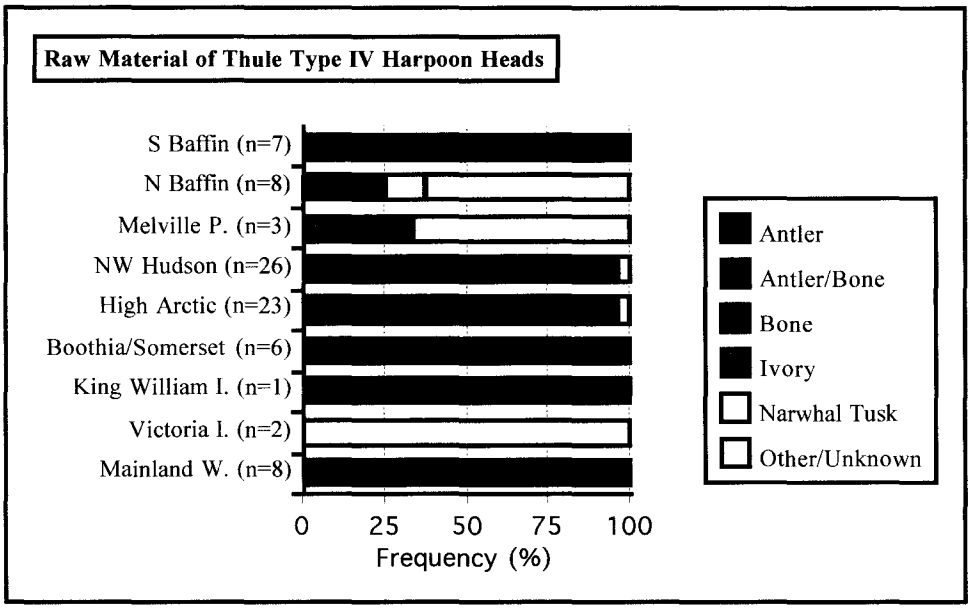


Figure 5-15: Raw Material Distribution for Thule Type IV Harpoon Heads, By Region.

Once again, we find that antler dominates in the west to the virtual exclusion of all other raw materials, bone as a raw material dominates in the central region and northern Hudson Bay, and ivory becomes very common in the east. Narwhal tusk is only used as a raw material in one region: northern Baffin Island, and it did not seem to hold any importance as a raw material as it is only represented by one Type IV specimen. This is more likely due to the distribution of narwhal than to any social differentiation.

Lashing provision is very rare on closed socket harpoon heads, and so this attribute will not likely be a factor here. In the mainland western region, two of the eight Type IV harpoon heads (Morrison 1983: Pl,. 2a,b) have lashing holes and grooves to aid

in the attachment of the harpoon head to the foreshaft, but this is the only region of the study area where Type IV harpoon heads have lashing provision. Both of the specimens for which this applies are from the site of Clachan, and belong to the Clachan Closed Socket variety of Type IV. Lateral waists are also very rare on Type IV harpoon heads, with only four examples occurring across the entire study region. This attribute is not common enough to be a significant geographical marker, and so it will not be considered in this analysis.

The final attribute to be discussed for Type IV harpoon heads will be incised decoration. Only three specimens from the western region of the study area are decorated, all from Clachan. Two of these are of the Clachan Closed Socket type, and are decorated with the same incised triangle that is found on many of the open socketed harpoon heads from this site (Morrison 1983: Pl. 2a,b). The third decorated specimen belong to type AIIc1, and has an incised ladder pattern on either side of the line hole (Ibid.: Pl. 2h). Even fewer decorated Type IV harpoon heads are found in the central region of the study area, with only two examples. The first of these is from Learmonth, in the Boothia Peninsula/Somerset Island area, and consists of a simple groove running from the blade to the line hole on both faces (Taylor & McGhee 1979: Pl. 1g). The second decorated specimen comes from site M1 in the high arctic, and exhibits parallel lines running from the line hole to the tip (Ibid.: Pl. X6).

The eastern region of the study area boasts the most decorated Type IV harpoon heads, at seven specimens. Four of these are found in the area of northwestern Hudson Bay, and half of these, from Naujan and Kuk, include a Y-line motif in combination with parallel lines. A single specimen from Silumiut has a simple longitudinal line running down one side (McCartney 1977: Pl. 3A), and a specimen from the Naujan graves has

two deep grooves on either side of the line hole, with a raised portion between them (Mathiassen 1927a: Pl. 37(14)). Only one specimen from the area of the Melville Peninsula is decorated, (Ibid.: 127) and this is similar to the specimen described from the Naujan graves. The two final decorated Type IV specimens are both from northern Baffin Island. One of these exhibits four dots below the line hole (Mathiassen 1927a: Pl. 40(3)), which may or may not have been intended as decoration, and the other has a simple groove on one side (Mary-Rousselière 1979: Pl. 7c). In general, then, Thule Type IV harpoon heads seem to be very rarely decorated, but examples are found from all regions except for King William Island and southern Baffin Island. In general, the decorative motifs seem to correlate with the motifs found on the other harpoon heads from each area, in that incised triangles dominate in the west, and Y-lines in the east.

VI
Discussion and Conclusions

With four hundred seventy-seven specimens in the sample being studied, harpoon heads can be expected to show much variation, a prediction which can be seen to be true from the preceding two chapter. The question that remains to be asked is whether this variation is regular and patterned across space, or whether it is random and idiosyncratic. The patterns of distribution have been discussed in terms of four of Mathiassen's major types, but these major categories will be put aside for the time being, and the data will be discussed as one large group in an attempt to find patterning across space.

Distribution of Types

Mathiassen's typology (1927b: 12-13) is useful in breaking down his five major types into smaller groups characterised by specific attributes. Much can be learned by tracing the distribution of these types across space, though factors of function and chronology must also be considered. We have seen that Type I harpoon heads are very rare across the arctic, but the few specimens that exist are remarkably uniform in style. All belong to sub-type AIa, being barbless and self-bladed, and the only two regions where this type is found in substantial numbers is the Boothia Peninsula/Somerset Island region, and northern Baffin Island. These two regions are separated only by the Gulf of Boothia, and in historic times were occupied by two different groups: the Netsilik Inuit, and the Iglulik Inuit.

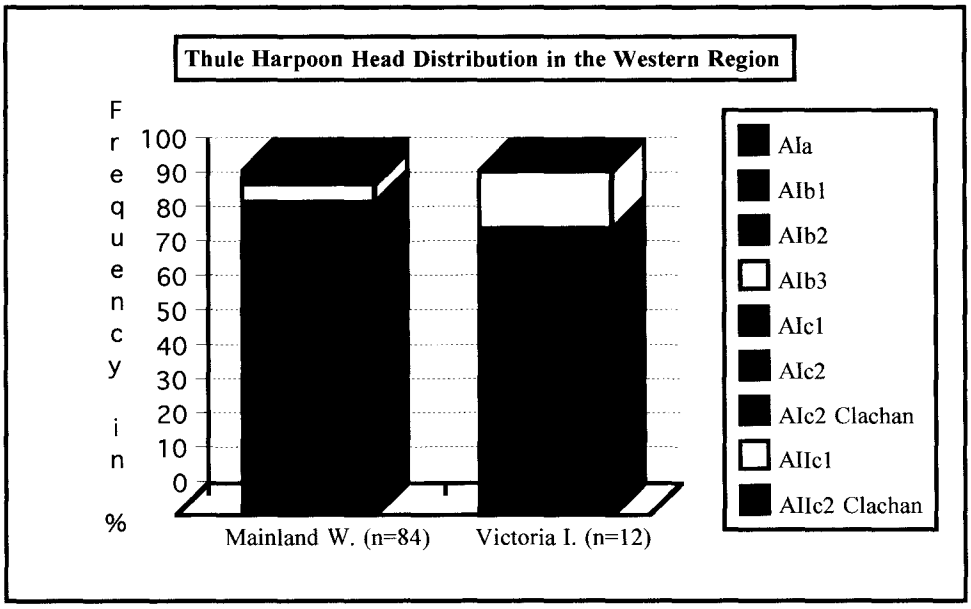


Figure 6-1: Distribution of Harpoon Head Types in the Western Central Arctic.

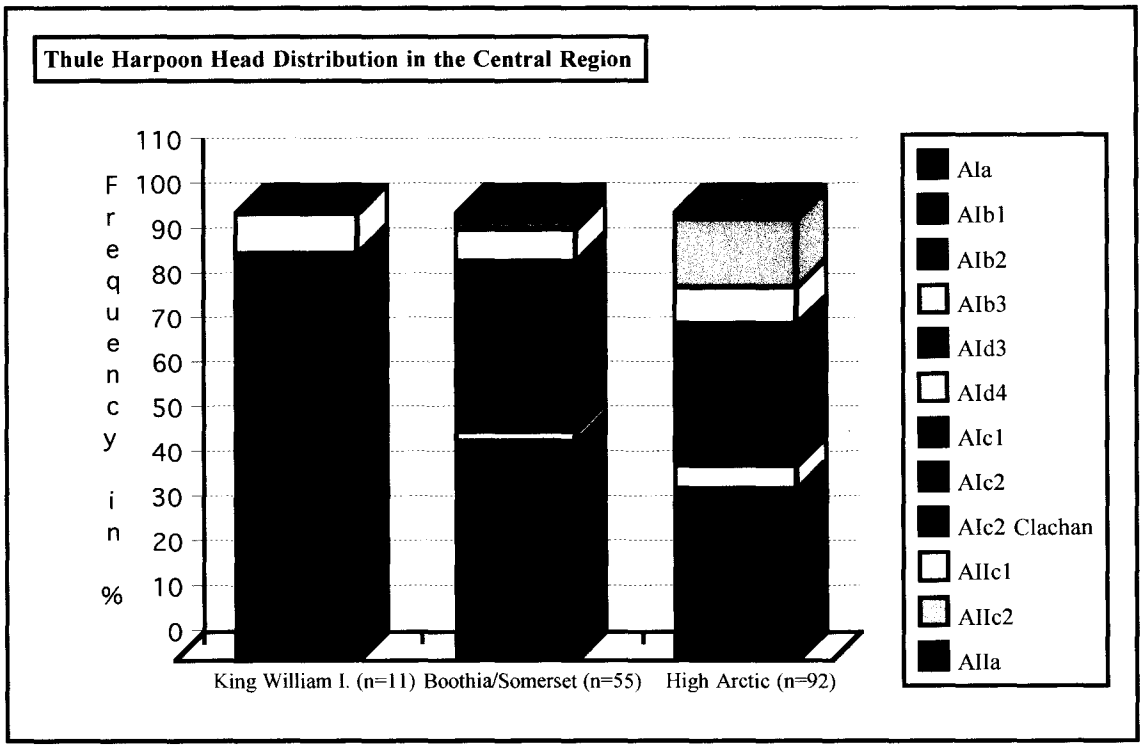


Figure 6-2: Distribution of Harpoon Head Types in the Central Study Region.

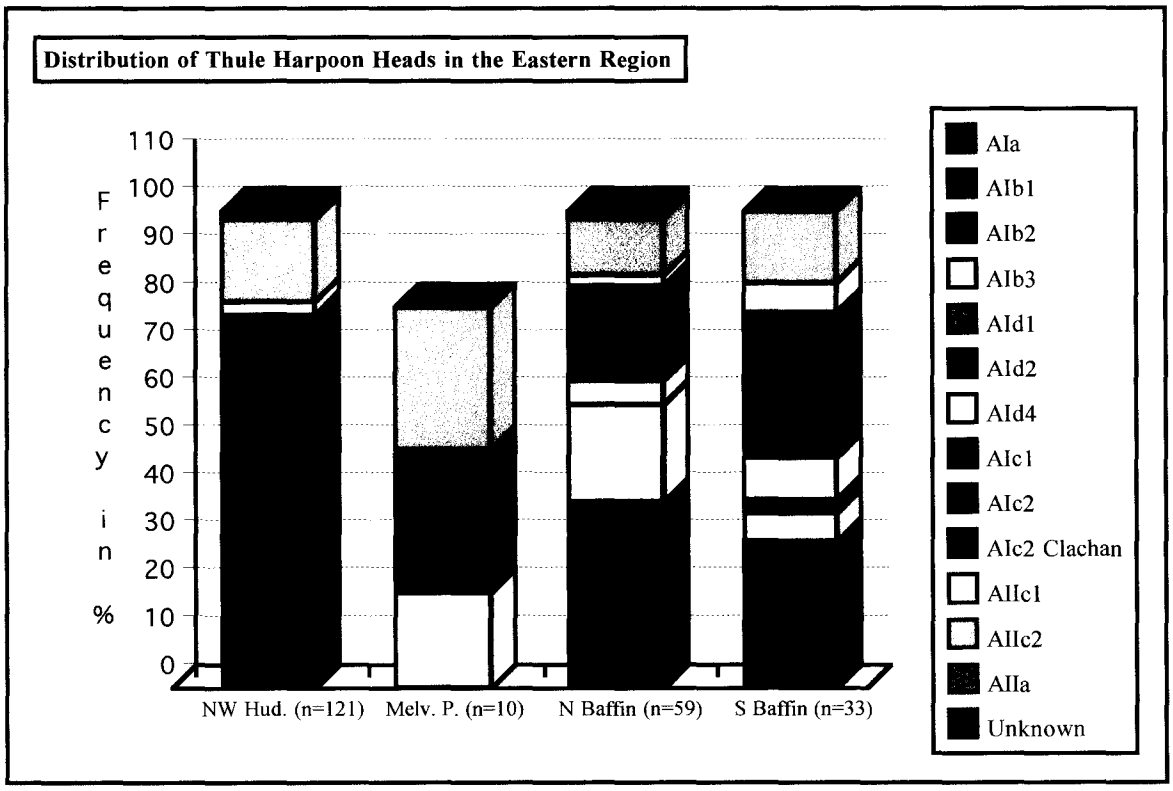


Figure 6-3: Distribution of Harpoon Head Types in the Eastern Central Arctic.

Type AIa is said by Mathiassen to be "...an old, generally known harpoon head, but one which was rarely used to any great extent..." (1927b: 15), yet this type accounts for 46% of the specimens at Spence Bay, on the Boothia Peninsula - a site designated as being historic in origin (VanStone 1962: 31). Qilalukan, where 26% of the harpoon head assemblage was type AIa, is generally considered to be a Classic Thule site (Morrison 1983: 15-16). If Mathiassen's hypothesis that this type was used for salmon fishing were correct, then perhaps this restricted distribution is related to function rather than chronology. However, were this the case, we would expect to find specimens throughout the arctic, yet only two specimens are known from the entire western study region. Another possibility is that type AIa is a local variety centred around the Gulf of Boothia, but it remains to be seen whether other patterns conform with this.

Type AIb1, with two barbs and no separately inserted blade, is the most common variety of harpoon head throughout the Canadian arctic. Mathiassen has suggested, on the basis of its wide distribution of this type, and its form, that this type of harpoon head was used for hunting seal (1927b: 17). It seems equally frequent in all regions but one - Melville Peninsula. As stated earlier, almost all of the sites in this region are graves, and thus might be expected to provide different sorts of artifacts than one would find in dwellings. Type AIb2, with only one barb, is much rarer, but still occurs in all regions but the Melville Peninsula, and southern Baffin Island. It is most common on Victoria Island, where it makes up 17% of the regional sample. Once again, we see a situation where the western part of the central study area resembles the sites immediately to the west, rather than those to the east.

The multibarbed form AIb3 is said to be a later derived form of type AIb1 (Mathiassen 1927b: 17), and though it is very rare in the Canadian arctic, it occurs in large numbers on northern Baffin Island, where it accounts for 20% of the specimens reported. A few isolated specimens occur in the mainland western region, the Boothia Peninsula/Somerset Island region, and northwestern Hudson Bay, but type AIb3 is generally restricted to Baffin Island, and could be considered a local variety.

The Type II forms with separately inserted blades seem to have a central and eastern distribution in the Canadian arctic. Type AId1, with one barb and a blade slot parallel to the plane of the line hole, is restricted to the region of northwestern Hudson Bay, and is represented by one specimen, from graves in the vicinity of Naujan. Type AId2, on the other hand, is only found on southern Baffin Island. Two forms of bilaterally barbed, bladed specimens also have a restricted distribution. Type AId3 is only found in the high arctic and the Boothia Peninsula/Somerset Island region, and type

AId4 is found in all four local regions of the eastern central arctic, as well as the high arctic in the central study region. King William Island, once again, is more similar to the western study region in that no barbed and bladed forms are found there.

Moving to the Type III specimens, type AIc1 is consistently the most common form, and is found throughout the study area. Type AIc2, however, is much rarer, though little sense can be made of its distribution. It seems to have a north-central distribution, being most common on Victoria Island, where it makes up 25% of the harpoon head sample, and occurs in small numbers in the contiguous regions of the high arctic and the Boothia Peninsula/Somerset Island region. Type AIc2 is completely absent in the eastern study region, with the exception of the Melville Peninsula, where one specimen is found. The related Clachan form of AIc2 has an even more restricted distribution, being found in large numbers only on the western mainland. Individual specimens of this type are also known from the high arctic and northwestern Hudson Bay. The closed socket version of the Clachan form, belonging to type AIIc2, is even more restricted, not being found outside of the mainland western region.

Type AIIc1, with parallel blade slot, is generally the most common form of Type IV harpoon head, and is found everywhere with the exception of the Melville Peninsula. Type AIIc2, however, which is the form to which the classic 'whaling harpoon heads' described by Mathiassen belong, is not found in the western study region, nor in the region of King William Island. They are found in small numbers on the Boothia Peninsula, then become more common in the high arctic and throughout the eastern study region.

In general, the region of King William Island seems to resemble the western region much more than the central region of the study area. The western regions (King William

Island included) are characterised by less variation in harpoon head styles, and two local varieties of harpoon heads that are only found as isolated specimens outside of the western region: the Open Socket Clachan type, and the Closed Socket Clachan type. The tendency in the eastern regions is towards more diversity in harpoon head styles, including multibarbed specimens and specimens having both a blade and barbs. If one were to propose prehistoric social groupings based on these data, two regions would stand out. The mainland western region would be one social grouping based on the almost exclusive appearance of the Clachan types there. The second region grouping would be northern Baffin Island, where types AIa and the multibarbed AIb3 occur in great numbers.

Distribution of Raw Material

Raw material distribution across the arctic is much more striking than the distribution of the types themselves. Antler is an important raw material throughout the arctic, but its use is much more dominant in the western study area, and King William Island has a very similar pattern of raw material use to the two western regions, with 100% of the specimens for which raw material is indicated being made of antler. Bone only becomes important as a raw material as one moves further into the central region of the arctic, and becomes less common further east on Baffin Island. Ivory specimens are found in large numbers in the high arctic, northwestern Hudson Bay, Melville Peninsula, and southern Baffin Island, but they are absent from the region of Boothia Peninsula/Somerset Island, and are only represented by two specimens on northern Baffin Island. Perhaps this distribution could be found to correspond with the prehistoric distribution of walrus, or, failing that, it could indicate the boundaries of an eastern social

interaction sphere. Narwhal tusk as a raw material is only found in one region: northern Baffin Island. As this raw material is only represented by two specimens across the entire Canadian arctic, its restriction to the region of northern Baffin Island is much more likely due to the distribution of narwhal than to any social boundaries.

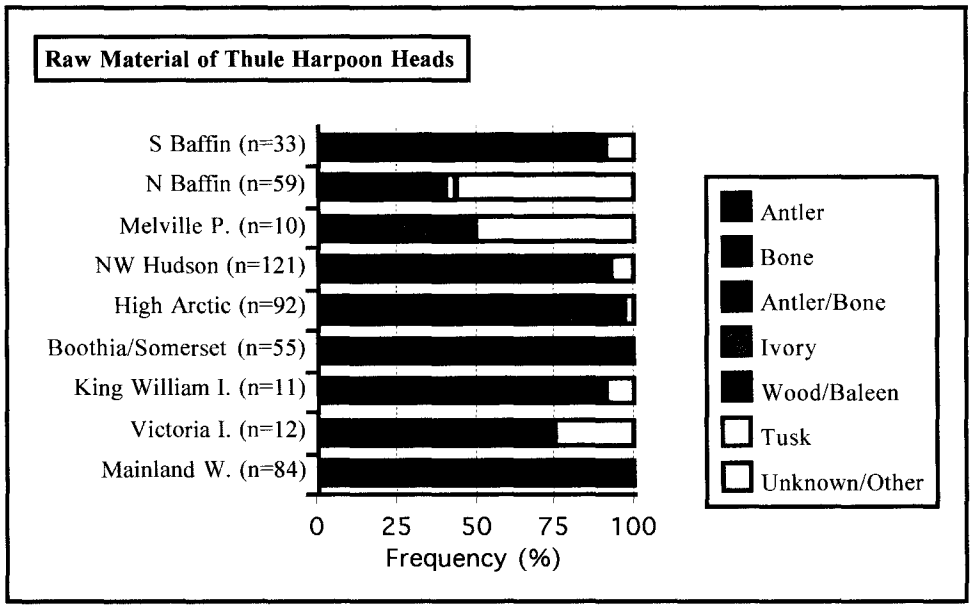


Figure 6-4: Relative Frequency of Raw Material Use, By Region.

Rather than seeing sharp boundaries formed by the distribution of raw material use, the pattern that emerges appears to be one of a continuum, with antler dominating in the west, bone in the central region, and ivory in the eastern region. These divisions are not discrete, with considerable overlap between them. One general trend that corresponds with a trend observed in the previous section, though, is the tendency for more variety in raw materials being used as one moves east.

Distribution of Lashing Provision Types

All open socketed harpoon heads have some sort of lashing provision for attachment to the foreshaft of the harpoon. This lashing provision most frequently takes

the form of elongated lashing slots, or round, drilled lashing holes on either side of the socket. This attribute seems to vary in regular ways across space. Lashing slots dominate in three of the study regions: the mainland western region, Victoria Island, and the high arctic, where they are found on 50% to 75% of the specimens for which lashing provision is indicated. Lashing holes dominate in the entire eastern study region, as well as the Boothia Peninsula/Somerset Island and King William Island regions of the central study area. Sunken lashing beds and simple lashing grooves do not seem to hold an important place anywhere, though they become slightly more common as one moves east.

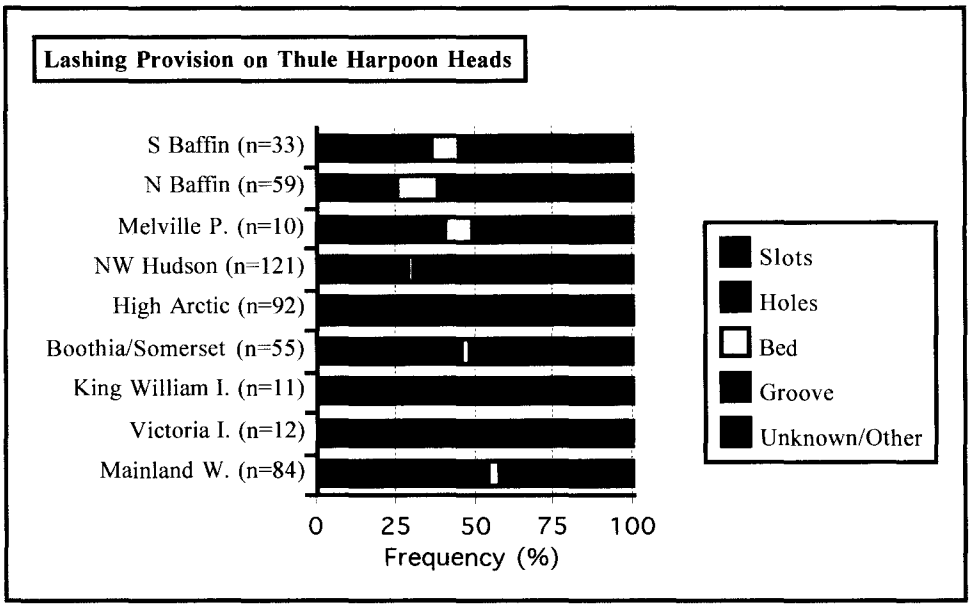


Figure 6-5: The Distribution of Lashing Provision Forms, By Region.

Once again, the distribution of the different lashing provisions does not suggest a situation of discrete social boundaries, but rather a gradual continuum of change across space from the dominance of lashing slots to the dominance of lashing holes. As each of these two lashing provisions requires different manufacturing techniques, we must be cautious in coming to any conclusions regarding the meaning of their differential distribution until the patterns are cross-referenced with the patterns of raw material

distribution. Lashing slots seem to occur in those very same areas where antler dominates as a raw material. Perhaps the raw material is a determining factor in the choice of manufacturing technique, and therefore lashing provision. In the western mainland region, of the forty-eight antler specimens for which lashing provision is present and indicated, thirty-six specimens, or 75%, exhibit lashing slots, while only nine specimens, or 19% have drilled lashing holes. In the region of Victoria Island, though 25% of the harpoon heads have lashing slots, the raw material for almost all of these specimens is stated as antler/bone (Taylor 1972: Pl. VIa,b), and so cannot be included in these statistics. Of the four antler specimens from this region for which lashing type is known, 50% have drilled lashing holes, 25% have a lashing groove, and 25% have lashing slots.

Moving into the central region, of the eight specimens known to be made of antler and with known lashing provision from King William Island, 62.5% have lashing holes, and only 37.5% have lashing slots. In the region of the Boothia Peninsula and Somerset Island, twelve specimens are known to be made of antler, but only six of these have known lashing provision. Of these, 33% have drilled lashing holes, and 67% have lashing grooves. In the high arctic, there are twenty-five specimens made of antler with known lashing provision, and of these, twenty-one specimens, or 84%, exhibit lashing slots. Only 12% of these specimens have a lashing groove, and the remaining 4% have a lashing groove.

In northwestern Hudson Bay, twelve specimens are made of antler and have a known lashing provision. Of these, seven specimens, or 58%, have lashing holes, five or 25% have lashing slots, 8% have a sunken lashing bed, and 8% have a lashing groove. On the Melville Peninsula, only one antler specimen is known, and this exhibits lashing holes (Mathiassen 1927a: 125). On northern Baffin Island, a total of eleven antler specimens

have known lashing provision. None of these has lashing slots, but 18% have lashing grooves, 36% have a sunken lashing bed, and 45% have drilled lashing holes. Finally, of the six antler specimens from southern Baffin Island with known lashing provision, 33% have drilled lashing holes, 33% have lashing slots, 17% have lashing grooves, and the remaining 17% have a sunken lashing bed.

From the above information, it would seem that while the general distribution of lashing slots appears to correlate with the distribution of the use of antler as a raw material, this correlation is shown not to hold at the level of individual specimens. Lashing slots are only the dominant lashing provision type on antler harpoon heads in the mainland western region and the high arctic, drilled lashing holes being the dominant form almost everywhere else, regardless of raw material.

If lashing provision type is not dependent on raw material, then we must ask whether it could be dependent on chronology. Lashing slots on harpoon heads have long been thought to indicate an Early Thule presence (e.g. McCullough 1989: 248; Morrison 1983: 86-87; Schledermann 1975: 240-244; Taylor & McGhee 1981: 51), and if this were to be the case, we would expect them to outnumber lashing holes at those sites considered to belong to this early period of Thule culture. Some sites generally believed to belong to the period of initial Thule occupation are: M1, Brooman Point, Crystal II, Malerualik, and the lower levels of Naujan (Morrison 1983: 11-14). At M1, on Cornwallis Island, 75% of the four harpoon heads with known lashing provision exhibit lashing slots, while at Brooman Point this number rises to 79%. At Malerualik, on King William Island, only 33% of the harpoon heads with known lashing provision have lashing slots, and at Crystal II on southern Baffin Island 57% carry this attribute. Naujan is more complicated because it represents such a long occupation, so although lashing slots are only found on

27% of the harpoon heads with known lashing provision from this site, they might be found to be much more frequent were we able to isolate those harpoon heads from the early part of the occupation sequence. While it appears to be the case that lashing slots dominate in most of those sites designated as Early Thule, one must keep in mind that many of these sites were defined as Early Thule *because* of the dominance of lashing slots. Also, we have seen that lashing slots dominate at Clachan in the western region, yet this site is not considered to be Early Thule. Regardless of the chronological implications, the fact remains that in general, lashing slots are less frequent in the east than in the western central arctic and the high arctic.

Distribution of Decorative Motifs

Incised decoration on harpoon heads occurs rarely, but seems conform to a finite number of motifs. In general, decoration is most common in the mainland region of the western central arctic, where it is found on at least forty-nine specimens, or 58% of the total sample of harpoon heads reported from this area. This incised decoration seems most frequently to take the form of an inverted triangular hatched field, this motif being found on thirty-seven specimens, or 76% of the decorated sample. It must be noted that almost all of the decorated harpoon heads from the western mainland study region are from the site of Clachan, and all of the specimens exhibiting an inverted triangle were found at this site. Such a concentration of the same decorative motif seems to imply a sense of social cohesion at this site. Only four decorated specimens are found on Victoria Island, 33% of the total, and three of these carry the same triangular motif so common at Clachan - not surprising considering the geographical proximity of these sites to Clachan.

Only one decorated specimen is found in the region of King William Island, or 9%

of the harpoon heads from the area, and this seems to be unique in having a longitudinal incised line above the line hole, and knobs on the sides of the harpoon head at the level of the line hole (Mathiassen 1927a: 322). Three decorated specimens are known from the area of the Boothia Peninsula and Somerset Island, or 5% of the sample, and each of these has a different motif - one has an incised 'V' anterior to the line hole (Taylor & McGhee 1979: Pl. 1f), one has a simple groove running from the blade slot to the line hole (Ibid.: Pl. 1g), and the third has an incised Y-line (VanStone 1962: 15). Decoration becomes much more frequent as one moves into the high arctic, where at least twenty-two of the ninety known harpoon heads (24%) carry some form of decoration. Seven specimens, or 32%, have some form of a Y-line motif, and five specimens, 23%, have incised triangles similar to Clachan. The remaining decorated harpoon heads from the high arctic have lateral buttresses (23%), vestigial side slots (18%), or simple parallel lines. Once again, we have a situation where most of the decorated specimens are concentrated at one site, with 73% of the decorated harpoon heads from the high arctic being found at Brooman Point. This site differs from Clachan, however, in lacking the uniformity of decorative motifs displayed at the latter site, with four specimens exhibiting Y-lines, three exhibiting incised triangles, five with the ventral ends of the lashing slots extended by lines into lateral buttresses, and three with vestigial side slots.

In the area of northwestern Hudson Bay, at least thirty-nine of the one hundred twenty-one known harpoon heads (32%) are decorated. Here there is more uniformity than in the high arctic, though, with 59% of the decorated specimens exhibiting some form of the Y-line motif. Many specimens carry more than one motif, and when each decorative element is considered separately, 10% exhibit a triangular hatched field, 18% have a vestigial side slot, and individual specimens exhibit simple grooves or longitudinal

lines. Naujan is the core area of decorated harpoon heads in the region, with twenty-two of them, or 56%, occurring here. Of these, 45% exhibit some form of Y-line motif, and 32% have a vestigial side slot. All of the six decorated specimens from nearby Kuk have Y-lines, and 83% of the time the Y-line has the additional decoration of two longitudinal lines on the sides of the harpoon heads - perhaps a local motif.

Only three decorated specimens are known from the area of the Melville Peninsula, 33% of the total sample of ten harpoon heads. Two of these exhibit the Y-line motif so common at nearby Naujan, and one demonstrates a vestigial side slot. On northern Baffin Island, only five of the fifty-nine known harpoon heads (8%) are decorated, and each carries a different motif. One has an incised triangle like the Clachan specimens, one has a simple groove, one has four dots below the line hole, and two have vestigial side slots. On southern Baffin Island only four decorated harpoon heads are known, 12% of the total sample. Three of these decorated specimens are from the site of Crystal II, two with a Y-line motif, one with a longitudinal line above the line hole. The fourth specimen is from B-1, and has a raised median ridge, which may or may not have been intended to be decorative.

Decorated harpoon heads are widespread across the central Canadian arctic, but there seem to be at least three, or perhaps four, areas of concentration for these decorated specimens. Clachan is one such centre, and the motif of incised, inverted triangles seems to be characteristic of this site. Another centre is Naujan, where the Y-line motif dominates. The third centre for decorated harpoon heads, Brooman Point, seems to have more diversity in the motifs being used, with an almost equal number of Y-lines and incised triangles, as well as motifs not present in the other two sites. This suggests a continuum with incised triangles decreasing in popularity, and Y-lines increasing in

popularity as one moves east. The final centre for decorated harpoon heads is Crystal II. Although only three decorated specimens are found here, this site has a much higher frequency of decorated specimens than any other site on Baffin Island, and so it could also be considered a centre, though of less importance. It is interesting that the Y-line motif continues to dominate here, though the site is so isolated from northwestern Hudson Bay.

Incised decoration has also commonly been evoked as a chronological marker, and so this factor must be considered before the observed patterns of distribution are interpreted. It is interesting that of the proposed centres for decorated harpoon heads, three of the sites are generally considered to belong to the Early Thule period: Crystal II, Naujan, and Brooman Point (Morrison 1983: 11-14). However, the location of the fourth centre causes problems for this chronological interpretation, as Clachan has been interpreted as having been occupied during a period of a few centuries from A.D. 1150 to 1450 (Ibid.: 201-204), and thus spans the late Classic Thule period and the Modified Thule period. Of the other two Thule sites believed to belong to the Early period, Malerualik provided not one decorated harpoon head, though M1 on Cornwallis Island provided four specimens, or 33% of the assemblage. Incised decoration could be an indication of an early Thule occupation for some parts of the arctic, but this does not appear to be the case for the western central region. Regardless of chronology, the fact remains that the most commonly used motif changes as one moves from west to east, and this could be an indication of a Thule cultural continuum across the Canadian arctic.

Regional 'Tribes'?

Robert McGhee has perhaps been the strongest advocate of the existence of

regional Thule 'tribes', and he provided us with many predictions regarding the distribution of these social groups. McGhee referred to his social units as "cultural phases", by which was meant a group which inhabited a localised area of roughly one hundred thousand square kilometres, that was characterised by a relatively uniform environment and equal access to resources (McGhee 1984: 89-90). According to McGhee, a cultural phase could be identified through material culture, when "...the degree of stylistic similarity between structures and artifact assemblages is on the order of similarity which might be expected between the houses occupied contemporaneously on the same site" (Ibid.: 90).

McGhee's definition of a cultural phase is difficult to apply in a practical sense. First of all, Thule chronology is too loosely defined to permit the archaeologist to isolate contemporary components from separate sites. For example, it would be virtually impossible to conduct research on the scale of the study at hand that could isolate only those artifacts which originated from the period of A.D. 1100 to 1200, in order to define a cultural phase. This study has considered all of the material evidence as one group without attempting a chronological breakdown, and so McGhee's definition of a 'cultural phase' cannot be applied without modification. Another problem is the vagueness with which McGhee discusses the degree of stylistic similarity one would expect to find within a cultural phase. This issue has already been addressed in chapter three above, but as style is virtually impossible to quantify for the purpose of comparison, subjectivity is necessary in determining how different two artifacts have to be in order to be considered to belong to different cultural phases.

McGhee predicted at least five cultural phases, based on his definition of the term. The first of these, the 'Ruin Island Phase', is outside the study area, and so will not be

discussed here. The second phase defined by McGhee is the 'Resolute Phase', named for the sites excavated by Henry B. Collins on Cornwallis Island. This phase is said to include the following sites: M1, Lake, Brooman Point, site RaJu-7 on Devon Island, and Nunguvik on northern Baffin Island, and is suggested to have existed around A.D. 1200, and is characterised by Sicco-like Thule Type III harpoon heads[15] , Thule Type II harpoon heads with lashing slots, and Thule Type IV harpoon heads with dorsal and ventral ridges, among many other attributes for artifact classes not discussed here (McGhee 1984: 91). This phase, were it to exist, would span two of the study regions discussed here: the high arctic, and northern Baffin Island.

Another cultural phase suggested by McGhee is named the 'Learmonth Phase', and includes many sites in the region of Creswell Bay on Somerset Island, such as Learmonth and Quoak. This phase is said to date to a different period than the above phase - the thirteenth century A.D., and thus overlaps that territory to include Deblicquy on Bathurst Island, and Qilalukan and Mitimatalik on northern Baffin Island. This phase is said to be characterised by the use of heavy stone implements and harpoon heads with drilled lashing holes, and has many similarities to sites from the western coast of Hudson Bay (McGhee 1984: 91).

The 'Silumiut Phase', named for the site at Chesterfield Inlet, includes such sites as Naujan, Silumiut, Kamarvik. This phase, like the Learmonth Phase, is characterised by the use of heavy stone implements and a wide variety of sealing harpoon heads on which lashing holes dominate and double basal spurs occasionally occur (McGhee 1984: 91). Finally, the 'Clachan Phase', first suggested by David Morrison (1983), is defined by its similarities to the Western Thule culture of Alaska, including the Clachan variety of

[15] Some traits considered to mark a harpoon head as being 'Sicco-like' are facial facets, ornamental side blade slots, and a lateral waist (Morrison 1983: 184)

harpoon head. This phase, like the above two, has been given a date of the thirteenth century A.D. for the occupation (McGhee 1984: 91).

McGhee's breakdown of Thule cultural phases was considered by him to be tentative, and subject to change as new Thule sites are discovered. While McGhee considered a wide variety of artifact classes in his hypothesis, this study has focused only on harpoon heads and the many different combinations of attributes this artifact class can display. I have spent much time dissecting the harpoon head data in an attempt to find patterns in the distribution of individual attributes, and now it is time to ask whether the patterns I have identified conform with the cultural phases suggested by McGhee.

First of all, regarding the 'Resolute Phase', it is apparent that harpoon head assemblages from the high arctic resemble most closely those from the western study region rather than those from northern Baffin Island. This pattern is seen in the frequency of lashing slots on harpoon heads, with 44% of the harpoon heads from the mainland western region and 35% of the harpoon heads from the high arctic exhibiting this attribute. On northern Baffin Island, a mere 5% of reported harpoon heads have lashing slots, with lashing holes being the dominant form of lashing provision. McGhee's definition of this phase was very specific in which sites were to be included, and so the data should also be considered according to these terms. As he specifically spoke of Nunguvik as belonging to this cultural phase, and excluded Qilalukan and Mitimatalik, we should isolate these attribute patterns. At Nunguvik, only two specimens are known to exhibit lashing slots, but if the specimens with unknown lashing provision and those on which lashing provision is absent are excluded, these two specimens account for 100% of the reduced sample. At Brooman Point, lashing slots account for 79% of the specimens

for which lashing provision is indicated. At M1, also mentioned by McGhee as belonging to this phase, 75% of the four specimens with known lashing provision have lashing slots, and at Lake this number rises to 100%. Nunguvik does appear to have a similar frequency of lashing slots to the high arctic sites said to belong to the 'Resolute Phase', though two specimens can hardly be seen as a large enough sample size to come to any firm conclusions regarding this frequency. Additionally, these numbers are very similar to frequencies of lashing slots on harpoon heads from many western sites: 67% at Memorana, 79% at Clachan, 100% at Beulah, and 100% at Lady Franklin Point. Although it will be accepted that harpoon heads from the western central arctic carry many attributes not found in large numbers elsewhere, the fact remains that this particular attribute - lashing slots - does not differentiate McGhee's Resolute Phase from other Thule sites.

Another attribute linked to the definition of the Resolute Phase are lateral waists, one of the Sicco-like characteristics mentioned. Lateral waists are relatively common in the high arctic, being found on 32% of the Type III specimens for which this attribute is known. At M1, lateral waists are found on 75% of the four Type III specimens, at Lake site, the one Type III specimen has a lateral waist, and at Brooman Point, 44% of the Type III harpoon heads carry this attribute. At Nunguvik, there are only two Type III harpoon heads, and only one of these has a lateral waist. In fact, this is the only waisted specimen in the entire region of northern Baffin Island. In the mainland western region, though, the frequency of lateral waists on Type III harpoon heads is much more similar to the frequency of this attribute in the high arctic, being found on 37% of the specimens. However, this number is artificially low due to the large number of Clachan type harpoon heads here, none of which is waisted. On Victoria Island, only 20% have lateral waists,

and in the region of King William Island, 25% have this attribute. Once again, we have a situation where the high arctic, rather than resembling the region of northern Baffin Island as would be predicted by McGhee's scheme, is most similar to the mainland of the western study region.

Similar patterns can be observed when comparing raw material of harpoon heads, where antler is dominant in the entire western region, bone takes over as the dominant material in the Boothia Peninsula/Somerset Island region, then antler once again becomes dominant in the high arctic. In fact, this distribution is so similar to the distribution of lateral waists, one must ask whether these two variables are correlated. In the mainland western region, there are thirty-six antler Type III harpoon heads, of which twenty-four belong to the Clachan type. Of the remaining twelve specimens, nine, or 75%, are waisted. On Victoria Island, there are only three specimens known to be made of antler, and of these, 33% have a lateral waist. On King William Island, all four of the Type III specimens are made of antler, but only one specimen has a lateral waist (Mathiassen 1927a: Pl. 82(2)). In the region of the Boothia Peninsula and Somerset Island, there are only two harpoon heads designated as being made of antler, but neither of these appears to have a lateral waist. In the high arctic, fifteen antler Type III harpoon heads are reported, and at least ten of these (67%) are waisted.

In northwestern Hudson Bay, of the thirteen antler specimens, only one (8%) have lateral waists. There is only one other waisted specimen from this region, and this is made of ivory. No waisted specimens are known from the Melville Peninsula, and of the two antler specimens found in northern Baffin Island, only one is waisted - this is the one from Nunguvik mentioned above. Only one antler Type III specimen is known from southern Baffin Island, and it is not waisted.

Although it is tempting to argue that the presence of lateral waists on harpoon heads and the use of antler as a raw material, this is not consistently the case. Although almost all antler Type III specimens not belonging to the Clachan type in the western mainland region have lateral waists, the frequency becomes around 50% in the central region, and gets even lower in the eastern study region. The high frequency of this attribute in the western mainland region and the high arctic, then, could be indicative of a social grouping encompassing those two areas.

The 'Clachan Phase' was first defined by David Morrison (1983), based on his observations regarding the unique nature of assemblages from the mainland western region. While there is no denying that the Clachan harpoon head types are unique to this area, and likely indicate a social grouping of some sort, we have seen that other attributes on harpoon heads from this site resemble those from the high arctic, such as lateral waists and lashing slots. Other attributes link this region with contiguous lands to the north and east. Antler harpoon heads dominate in the western study region, being the chosen raw material for at least 94% of the specimens from the mainland western region, at least 42% of those from the area of Victoria Island, and 91% of the specimens from the region of King William Island, immediately to the east. This distribution is just as likely to be the result of differing economic patterns as to social group cohesion, but the fact remains that antler becomes less frequent as one moves east within the Canadian arctic.

The site of Clachan is unique in the western region for its wealth of incised decoration on harpoon heads, and for the Clachan type of harpoon head. Sample sizes in the surrounding sites are often too small to produce meaningful patterns, but the distribution seems to suggest an area of concentration at Clachan, with decreasing frequency of this type as one moves out in all directions. Perhaps if more sites are

discovered in the western study region, it will be found that the Clachan type sees a gradual decrease in frequency in all direction from Clachan, until it is entirely replaced by other forms. Isolated specimens found in the high arctic and northwestern Hudson Bay could be the result of trade or migration. Once again, the situation is not one of abrupt social boundaries, but of gradual alteration in material culture norms, and thus possibly a social continuum, from west to east.

McGhee's 'Silumiut Phase' corresponds with the northwestern Hudson Bay region of the study area. One of the attributes said to characterise this area is the high frequency of lashing holes, and this is certainly the case as 67% of the specimens with known lashing provision from this area have this attribute. Lashing slots are the second most common form, being found on 20% of the analysable sample. This pattern holds for the most part at the site level, with lashing holes being found on 77% of the harpoon heads with known lashing provision at Silumiut, 67% at Kamarvik, and 80% at Kuk. Naujan is the only site that is not dominated by lashing holes, with this attribute being found on only 47% of specimens with known lashing provision. The remaining harpoon heads from this site exhibit lashing slots (21%), a lashing bed (11%), or a lashing groove (11%). If it can be shown that the frequency of lashing holes continues to decrease to the northeast and the northwest, then we have another example of a continuum. The sample size on the Melville Peninsula is very small, but of the five harpoon heads with known lashing provision, four (80%) have lashing holes. On northern Baffin Island, 46% of harpoon heads have lashing holes. The frequency of this attribute is very similar in southern Baffin Island, where it is found on 44% of the harpoon heads with known lashing provision.

To the northwest is the region of Somerset Island and the Boothia Peninsula.

Here, lashing holes are found on 41% of the harpoon heads for which this attribute is known. We have seen that lashing slots dominate in the high arctic region to the north, and lashing holes are only found on 17% of the specimens here. To the west of the Boothia Peninsula/Somerset Island region is the region of King William Island. Here, lashing holes are found on 56% of specimens. In the western mainland region, this number decreases to 16%, and on Victoria Island, lashing holes appear 34% of specimens with known lashing provision.

Finally, McGhee's 'Learmonth' Phase is said to be centred in the Boothia Peninsula/Somerset Island region, with some overlap into the high arctic region and northern Baffin Island. This phase is said to be very similar to the Silumiut Phase, with sites being dominated by lashing holes on harpoon heads. The sites belonging to this phase are Learmonth, where 50% of harpoon heads with known lashing provision have lashing holes and Deblicquy, where both of the harpoon heads with known lashing provision have lashing holes. Mitimatalik and Qilalukan on northern Baffin Island are also said to belong to this phase, lashing holes being found on 47% of the harpoon heads at the latter site, and on the only harpoon head for which this attribute is known from the former site. Nothing from the above figures seems to contradict the hypothesis that is being made here: lashing holes are most common at Silumiut, and seem to decrease in frequency to the northwest and northeast. Although the frequency of lashing holes at Deblicquy is very high when compared to the other high arctic sites, this anomaly could be explained by the extremely small sample size at this site.

Conclusions

While it would be tempting to argue for discrete culture units in the Thule culture

period of the Canadian arctic, this hypothesis does not appear to be borne out by the data presented in this paper. The general picture that emerges is one of culture continuum, or gradual change across the arctic, with individual attributes being very popular in a specific local region, then slowly decreasing in frequency as one moves out of that region. The patterns for certain attributes, however, seem to suggest the presence of cultural centres in some regions of the arctic. This is seen in the restricted distribution of the Clachan types of harpoon heads, in the restricted distribution of the multibarbed form AIb3, and in the wealth and uniformity of decorated harpoon heads in a few specific sites. It is probably not a coincidence, though, that these 'centres' are also among the few sites in the Canadian arctic from which we have substantial sample sizes: Clachan, Naujan, Brooman Point, and Qilalukan. The data are likely strongly biased in favour of these sites based on the huge discrepancy between the size of their harpoon head assemblages, and the size of the sample from most other sites, often under ten specimens.

The idea of a continuum of material culture is less difficult to demonstrate, with all attributes investigated showing gradual change from west to east. First of all, for raw material, we have seen that antler dominates in the western study region, as well as the contiguous region of King William Island, and the high arctic. Bone becomes the dominant raw material in the southern portion of the central study region, and eventually makes way for ivory in the eastern study region. The pattern of distribution is almost identical for the different forms of lashing provision, with lashing slots dominating in the western region, King William Island, and the high arctic, with drilled lashing holes becoming gradually more common as one moves east.

This research must be considered preliminary in nature. Harpoon heads are just one class of artifact among hundreds, and no firm conclusions can be made until these

other artifact classes are also considered. Additionally, at this time it is impossible to accurately control for chronology in a study of Thule material culture. The findings from this research may have been clouded by the fact that sites from the entire range of Thule occupation were considered as one study unit. As more Thule sites are completely excavated, and our understanding of Thule chronology improves, arctic archaeologists will be able to say much more on the topic of Thule material culture variation. For the time being, it will suffice to say that the patterns of distribution of individual attributes of Thule harpoon heads do not support the contention that discrete social units existed in this period of arctic prehistory. More substantial conclusions must be left for future research.

Appendix

Region	Site	Raw Material	Waist	Lashing	Type	Decoration	Notes	Reference
Mainland W	Clachan	antler	absent	slots	AIa	absent		Morrison 1983: Pl. 5a
"	"	antler	present	slots or bed	AIa	side slot	facetted	Ibid.: Pl. 5b
Boothia/ Somerset	Spence Bay	bone	absent	6 holes	AIa	unknown		VanStone 1962: Pl.X1
"	"	bone	absent	4 holes	AIa	unknown		Ibid.: Pl.X2
"	"	bone	present	groove	AIa	unknown		Ibid.: Pl. X6
"	"	bone	unknown	unknown	AIa	unknown		Ibid.: 28
"	"	bone	unknown	unknown	AIa	unknown		Ibid.: 28
"	"	bone	unknown	unknown	AIa	unknown		Ibid.: 28
"	Levesque Harbour	bone	absent	bed	AIa	absent		Taylor & McGhee 1979: Pl. 115
High Arctic	Brooman Pt.	wood	unknown	unknown	AIa	unknown	'toy'	McGhee 1984: 49
NW Hudson	Kuk	bone	absent	6 holes	AIa	absent	'toy'?	Mathiassen 1927a: Pl.69(1)
NW Hudson	Naujan	antler	absent	bed	AIa	absent		Ibid.: Pl. 1(1)
"	"	antler	unknown	4 holes	AIa	groove		Ibid.: 24
"	"	unknown	unknown	4 holes	AIa	absent		Ibid.: 24
N Baffin	Qilalukan	unknown	unknown	unknown	AIa	unknown	no description	Mary-Rousselière 1979: 57
"	"	unknown	unknown	unknown	AIa	unknown	no description	Ibid.: 57
"	"	antler	absent	2 holes	AIa	absent	off-centre line hole	Ibid.: Pl.40(5)
"	"	antler	unknown	4 holes	AIa	unknown	off-centre line hole	Ibid.: 146
"	"	antler	unknown	4 holes	AIa	unknown	off-centre line hole	Ibid.: 146
"	"	antler	unknown	bed	AIa	side slot		Ibid.: 146
"	"	antler	present	bed	AIa	unknown	flat base - no spur	Ibid: Pl. 40(7)
"	"	antler	absent	bed	AIa	absent	off-centre line hole, no spur	Ibid.: Pl. 40(8)
"	"	unknown	absent	unknown	AIa	absent	off-centre line hole, no spur	Ibid.: 148
"	"	unknown	unknown	unknown	AIa	unknown	off-centre line hole, no spur	Ibid.: 148
N Baffin	Button Point	unknown	absent	groove	AIa	absent	flat base - no spur	Ibid.: Pl.61(18)
"	"	unknown	unknown	unknown	AIa	unknown	no description	Ibid.: 208-209

Table 1: Thule Type I Harpoon Heads Being Used in this Study (n=26).

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
Mainland W.	Memorana	antler	slot + bed	Y-line	AIb1		McGhee 1972: Pl. Ie
"	"	antler	slots	converging lines	AIb1		Ibid.: Pl. If
"	"	antler	bed	absent	AIb1		Ibid.: 24-27
"	"	antler	slots	absent	AIb1		Ibid.: 24-27
"	"	antler	slots	absent	AIb1		Ibid.: 24-27
"	"	antler	slots	absent	AIb1		Ibid.: 24-27
"	"	antler	unknown	absent	AIb1		Ibid.: 24-27
"	"	antler	unknown	absent	AIb1		Ibid.: 24-27
"	"	antler	bed	converging lines	AIb1	asymmetrical barbs	Ibid.: Pl. Ic
"	"	antler	bed	Y-line	AIb1	asymmetrical barbs	Ibid.: Pl. Id
"	"	antler	unknown	absent	AIb1	asymmetrical barbs	Ibid.: 24-27
"	"	antler	slots	proximal Y-line	AIb2		Ibid.: Pl. Ib
"	"	antler	slots	absent	AIb2		Ibid.: 24-27
"	"	antler	bed	converging lines	AIb3	5 unilateral barbs	Ibid.: Pl. Ia
Mainland W.	Clachan	antler	slots	Y-line	AIb1	asymmetrical barbs	Morrison 1983: Pl. 3a
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3b
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3c
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3d
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3e
"	"	antler	slots	incised triangle	AIb1	asymmetrical barbs	Ibid.: Pl. 3f
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3g
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3h
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3i
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3j
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3k
"	"	antler	slots	incised triangle	AIb1		Ibid.: Pl. 3l
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 82-83
Mainland W.	Clachan	antler	unknown	absent	AIb1		Ibid.: 82-83
Victoria	Lady	antler/bone	slots	incised triangle	AIb1		Taylor 1972: Pl. VIa
Victoria Island	Pembroke	antler	groove	incised triangle	AIb2	Natchuk Open Socket Type	Taylor 1972: Pl. VIIIu
Victoria	Bell	unknown	unknown	absent	AIb1	middle fragment	Taylor 1972: Pl. Xy
"	"	antler	unknown	absent	AIb2		Taylor 1967: Fig. 7r

Table 2: Thule Type II Harpoon Heads From the Western Study Region (n=37).

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
King William Island	Malerualik	antler	4 holes	absent	AIb1		Mathiassen 1927a: Pl.82(1)
"	"	antler	4 holes	unknown	AIb1		Ibid.: 311-312
"	"	antler	slots	unknown	AIb1		Ibid.: 311-312
"	"	antler	unknown	unknown	AIb1		Ibid.: 311-312
King William Island	Kangerarfi gssuaq	unknown	slots	longitudinal line	AIb2	knobs on sides	Mathiassen 1927a: 322
King William Island	Pelly Bay	antler	slots	unknown	AIb1		Mathiassen 1927a: 323
Boothia/ Somerset	Spence Bay	bone	4 holes	absent	AIb2	off-centre line hole	VanStone 1962: Pl. X7
"	"	bone	bed	absent	AIb2	weak barb	Ibid.: Pl. X3
Boothia/ Somerset	Nudlukta	bone	groove	unknown	AIb2		VanStone 1962: 18
"	"	bone	groove	unknown	AIb2		Ibid.: 18
"	"	bone	4 holes	absent	AId3		Ibid.: Pl. V17
Boothia/ Somerset	Levesque Harbour	antler/bone	slots	unknown	AIb1		VanStone 1962: Pl. I13
"	"	antler/bone	slots	unknown	AIb1		Ibid.: Pl. I14
"	"	antler/bone	slots	unknown	AIb1		Ibid.: 8
"	"	antler/bone	slots	unknown	AIb1		Ibid.: 8
"	"	antler/bone	slots	unknown	AIb1		Ibid.: 8
"	"	antler/bone	slots	unknown	AIb1		Ibid.: 8
"	"	antler/bone	slots	unknown	AIb1		Ibid.: 8
"	"	antler/bone	groove	unknown	AIb1	unfinished	Ibid.: 8
Boothia/ Somerset	Fort Ross	antler	unknown	unknown	AIb1		VanStone 1962: 23
Boothia/ Somerset	Quoak	antler	4 holes	unknown	AIb1		Taylor & McGhee 1979: Pl. 16a
Boothia/ Somerset	Learmonth	antler	unknown	unknown	AIb1		Taylor & McGhee 1979: Pl. 2e
	"	antler	groove	unknown	AIb1		Ibid.: Pl. 2g
"	"	antler	groove	incised V-line	AIb1		Ibid.: Pl. 1f
"	"	antler	groove	unknown	AIb1		Ibid.: Pl. 2d
"	"	ivory	unknown	unknown	AIb1		Ibid.: Pl. 2f
"	"	antler	4 holes	unknown	AId3		Ibid.: Pl. 2c
"	"	bone	4 holes	unknown	AId3		Ibid.: 63
"	"	antler	groove	unknown	AIb3	asymmetrical	Ibid.: Pl. 2a
"	"	antler	unknown	unknown	AIb1	blank	Ibid.: Pl. 2b
High Arctic	M1	antler	slots	unknown	AIb1		Collins 1951: Pl. XIV4
"	"	antler	groove	Y-line	AIb1		Collins 1952: Pl. X1

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
High Arctic	M1	antler	unknown	unknown	AIb1		Collins 1952: Pl. X2
"	"	antler	unknown	absent	AId4	open blade bed	Ibid.: Pl. X5
"	"	ivory	unknown	incised triangle	AIb2	side slot	Ibid. Pl. X4
High Arctic	Lake	bone	slots	modified Y-line	AIb1		Collins 1951: Pl. XIV5
High Arctic	Brooman Point *	bone	slots	Y-line	AIb1	*unsure about specific specimens	McGhee 1984: Pl. 1a
"	"	bone	slots	Y-line	AIb1		Ibid.: Pl. 1b
"	"	bone	slots	buttress becomes small barb	AIb1		Ibid.: Pl. 1c
"	"	ivory	slots	incised triangle	AIb1		Ibid.: Pl. 1d
"	"	ivory	slots	incised triangle	AIb1		Ibid.: Pl. 1e
"	"	ivory	slots	unknown	AId4	copper blade +	Ibid.: Pl. 1f
"	"	ivory	6 holes	unknown	AId4		Ibid.: Pl. 1g
"	"	wood	groove	absent	AIb1	'toy'	Ibid.: Pl. 1h
"	"	wood	groove	absent	AIb1	'toy'	Ibid.: Pl. 1i
"	"	wood	groove	absent	AIb1	'toy'	Ibid.: 44-45
"	"	bone	bed	unknown	AIb1		Ibid.: 44-45
High Arctic	Brooman Point *	antler	slots	Y-line	AIb1		Ibid.: 44-45
"	"	antler	slots	Y-line	AIb1		Ibid.: 44-45
"	"	antler	slots	longitudinal line on side	AIb1		Ibid.: 44-45
"	"	antler	unknown	buttresses	AIb1		Ibid.: 44-45
"	"	antler	unknown	buttresses	AIb1		Ibid.: 44-45
"	"	ivory	unknown	buttresses	AIb1		Ibid.: 44-45
"	"	ivory	unknown	buttresses	AIb1		Ibid.: 44-45
"	"	ivory	unknown	buttresses	AIb1		Ibid.: 44-45
High Arctic	Deblicquy	bone	unknown	absent	AIb1	tip fragment	Taylor & McGhee 1981: 28
"	"	bone	unknown	absent	AIb1		Ibid.: 28
"	"	bone	4 holes	absent	AId3		Ibid.: Pl. 1d
High Arctic	Port Refuge	bone	unknown	unknown	AIb1	blank	Park 1983: Pl. 23j
"	"	antler	unknown	unknown	AId4	unfinished	Ibid.: Pl. 23e
"	"	antler	4 holes	absent	AId4		Ibid.: Pl. 23i
High Arctic	Porden	bone	slots	absent	AIb2		Park 1983: Pl. 1b
"	"	antler	slots	absent	AId3	side blade slot	Ibid.: Pl. 1a
"	"	antler	slots	absent	AIb1	asymmetrical	Ibid.: Pl. 1c
"	"	baleen	groove	absent	AIb1	'toy'	Ibid.: Pl. 12b
"	"	wood	groove	absent	AIb1	'toy'	Ibid.: Pl. 12c
High Arctic	RbJr-7	antler	slots	double Y-line	AIb1		Park 1983: Pl. 19b
"	"	antler	slots	absent	AIb1		Ibid.: Pl. 19c
"	"	antler	slots	absent	AIb1		Ibid.: Pl. 19d

Table 3: Thule Type II Harpoon Heads From the Central Study Region (n=69).

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
NW Hudson	Silumiut	antler	4 holes	absent	AIb1	flat base - no spur	McCartney 1977: Pl. 1A
"	"	bone	4 holes	absent	AIb1		Ibid.: Pl. 1B
"	"	ivory	slots	absent	AIb1	flat base - no spur	Ibid.: Pl. 1D
NW Hudson	Kamarvik	antler/bon	4 holes	Y-line	AId4		McCartney 1977: Pl. 94C
NW Hudson	Kuk	antler	4 holes	unknown	AIb1		Mathiassen 1927a: 234
"	"	antler	unknown	unknown	AIb1		Ibid.: 234
"	"	unknown	unknown	unknown	AIb1		Ibid.: 234
"	"	antler	unknown	absent	AIb1		Ibid.: Pl. 68(1)
"	"	unknown	unknown	unknown	AIb1	unfinished	Ibid.: 243
"	"	ivory	unknown	Y-line with 3 parallel lines + bifurcated line + rows of dots	AIb1		Ibid.: Pl. 72(1)
"	"	unknown	unknown	absent	AIb1		Ibid.: 249
"	"	antler	bed	absent	AIb2		Ibid.: 69(2)
"	"	antler	unknown	unknown	AIb2	unfinished	Ibid.: 234
NW Hudson	Naujan	antler	slots	Y-line	AIb1	slots converge on one side	Mathiassen 1927a: Pl. 1(2)
"	"	antler	unknown	Y-line	AIb1		Ibid.: Pl. 1(3)
"	"	ivory	bed	Y-line + incised triangle	AIb1		Ibid.: Pl. 1(4)
"	"	antler	4 holes	Y-line + lines on barbs	AIb1		Ibid.: Pl. 1(5)
"	"	antler	unknown	Y-line	AIb1		Ibid.: 24
"	"	antler	unknown	incised triangle	AIb1		Ibid.: 24
"	"	antler	unknown	Y-line	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	antler	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	incised triangle	AIb1		Mathiassen 1927a: 24
"	"	ivory	unknown	Y-line	AIb1		Ibid.: 24
"	"	ivory	unknown	incised triangle	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
NW Hudson	Naujan	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	ivory	unknown	unknown	AIb1		Ibid.: 24
"	"	wood	absent	absent	AIb1	'toy'	Ibid.: Pl. 2(6)
"	"	wood	unknown	unknown	AIb1	'toy'	Ibid.: 26
"	"	antler	groove	unknown	AIb1	'toy', unfinished	Ibid.: Pl. 2(4)
"	"	wood	unknown	unknown	AIb1	'toy'	Ibid: 26
"	"	wood	unknown	unknown	AIb2	'toy'	Ibid.: 26
"	"	ivory	absent	absent	AIb2	'toy', unfinished	Ibid.: Pl. 2(5)
NW Hudson	Naujan Graves	ivory	4 holes	Y-line	AIb1		Mathiassen 1927a: Pl. 37(2)
"	"	unknown	4 holes	Y-line	AIb1		Ibid.: Pl. 37(3)
"	"	ivory	4 holes	longitudinal line + lines on barbs	AIb3	4 bilaterally symmetrical barbs	Ibid.: Pl. 37(9)
"	"	antler	4 holes	Y-line	AId1	unique, 1 barb	Ibid.: Pl. 37(4)
Melville Peninsula	Vansittart Island	unknown	unknown	unknown	AId4	tent ring	Mathiassen 1927a: 124
Melville Peninsula	Lyon Inlet	ivory	unknown	Y-line	AIb1		Mathiassen 1927a: 124
"	"	ivory	4 holes	absent	AId4	asymmetrical	Ibid.: Fig. 36
Melville Peninsula	Igloolik	ivory	2 holes	unknown	AIb1	no provenience	Mathiassen 1927a: 125
N Baffin	Nunguvik	unknown	slots	absent	AIb1		Mary-Rousselière 1979: Pl. 1a
"	"	unknown	unknown	unknown	AIb1	unfinished	Ibid.: Pl. 1b
"	"	unknown	unknown	absent	AIb1	broken at base	Ibid.: Pl. 1c
N Baffin	Qilalukan *	unknown	4 holes	absent	AIb1		Mathiassen 1927b: Fig. 1(5)
"	"	unknown	unknown	absent	AIb1	asymmetrical	Mathiassen 1927a: 147
"	"	unknown	bed	absent	AIb1 (?)	2 unilateral barbs	Ibid: Pl. 39(2)
"	"	antler	unknown	unknown	AIb1	unfinished	Ibid.: Pl. 40(1)
"	"	unknown	unknown	unknown	AIb2		Ibid.: 147
"	"	antler	groove	absent	AIb3	4 asymmetrical barbs	Ibid.: Pl. 39(3)
"	"	antler	bed	absent	AIb3	6 asymmetrical barbs	Ibid.: Pl. 39(4)
"	"	unknown	unknown	absent	AIb3	3 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	3 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	3 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	3 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	3 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	4 barbs	Ibid.: 147
"	"	unknown	unknown	absent	AIb3	5 barbs	Ibid.: 147
"	"	bone	unknown	incised triangle	AId4	blade bed	Ibid.: Pl. 39(6)
"	"	unknown	unknown	absent	AId4		Ibid.: 147

Region	Site	Raw Material	Lashing	Decoration	Type	Notes	Reference
N Baffin	Mitimatalik	antler	4 holes?	absent	AIb1		Mathiassen 1927a: Pl.35(1)
"	"	ivory	unknown	absent	AIb1		Ibid.: Pl. 39(5)
N Baffin	Qilalukan Graves	antler + ivory	4 holes	absent	AIb3	composite harpoon head, 4 barbs	Mathiassen 1927a: Pl. 63(1)
"	"	unknown	unknown	unknown	AIb3	composite	Ibid.: 216
"	"	unknown	unknown	unknown	AId4		Ibid.: 214
N Baffin	Button Point	unknown	bed	absent	AIb1	flat base - no spur, off-centre line hole	Mathiassen 1927a: Pl. 61(19)
"	"	antler	groove	longitudinal	AIb2	2 lateral spurs	Ibid.: Pl. 61(17)
"	"	unknown	unknown	unknown	AIb3	3 barbs	Ibid.: 209
S Baffin	Anarnitung (A-1)	antler	unknown	absent	AIb1		Schledermann 1975: Pl. 1d
"	"	antler	4 holes	absent	AIb3	6 asymmetrical	Ibid.: Pl. 1a
S Baffin	B-1	ivory	6 holes	absent	AIb1		Schledermann 1975: Pl. 1f
"	"	ivory	unknown	absent	AIb1	asymmetrical	Ibid.: Pl. 1g
"	"	ivory	groove	absent	AIb1		Ibid.: Pl. 1i
"	"	bone	hole + groove	absent	AIb1		Ibid.: Pl. 1h
"	"	unknown	unknown	unknown	AIb3	6 asymmetrical	Ibid.: 106
"	"	antler	unknown	raised median ridge	AId4		Ibid.: Pl. 1b
"	"	antler	4 holes	absent	AId4	asymmetrical	Ibid.: Pl. 1c
"	"	antler	unknown	absent	AId4		Ibid.: Pl. 1k
"	"	bone	unknown	unknown	AId2	blade bed	Ibid.: Pl. 1e
S Baffin	Crystal II	antler	slots	Y-line	AIb1		Collins 1950: Pl. V9
"	"	antler	groove	Y-line	AIb1		Ibid.: Pl. V10
"	"	antler	slots	longitudinal line	AIb1		Ibid.: Pl. V14
"	"	unknown	4 holes	absent	AIb1		Ibid.: Pl. V15
"	"	unknown	unknown	unknown	AIb1		Ibid.: 22

Table 4: Thule Type II Harpoon Heads From the Eastern Study Region (n=95).

*Lashing provision is not discussed for individual specimens at Qilalukan and Mitimatalik, but Mathiassen states that four specimens from these sites have a sunken lashing bed, three have two pairs of lashing holes, and three have lashing grooves (1927a: 147).

Region	Site	Raw Material	Lashing	Decoration	Lateral Waist	Type	Notes	Reference
Mainland W.	Clachan	antler	2 holes	incised triangle	absent	AIc2 Clachan		Morrison 1983: Pl. 1a
"	"	antler	slots	absent	absent	AIc2 Clachan		Ibid.: Pl. 1b
"	"	antler	4 holes	incised triangle	absent	AIc2 Clachan	knobbed + double spur	Ibid.: Pl. 1c
"	"	antler	4 holes	incised triangle + oval	absent	AIc2 Clachan	double spur	Ibid.: Pl. 1d
"	"	antler	slots	incised triangle + oval	absent	AIc2 Clachan		Ibid.: Pl. 1e
"	"	antler	slots	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1f
"	"	antler	slots	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1g
"	"	antler	slots	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1h
"	"	antler	4 holes	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1i
"	"	antler	slots	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1j
"	"	antler	unknown	incised triangle	absent	AIc2 Clachan	fragment	Ibid.: Pl. 1k
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	unknown	unknown	absent	AIc2 Clachan	fragment	Ibid.: 76-78
"	"	antler	slots	incised triangle + vestigial side slot	present	AIc1	'Group 1'	Ibid.: Pl. 4a
"	"	antler	slots	double line + vestigial side slot	present	AIc1	'Group 1'	Ibid.: Pl. 4b
"	"	antler	slots	incised triangle	present	AIc1	'Group 1'	Ibid.: Pl. 4c
"	"	antler	slots	"	present	AIc1	'Group 1'	Morrison 1983: Pl. 4d
"	"	antler	slots	"	present	AIc1	'Group 1'	Ibid.: Pl. 4e
"	"	antler	slots	"	present	AIc1	'Group 1'	Ibid.: Pl. 4f
"	"	antler	slots	absent	absent	AIc1	'Group 2'	Ibid.: Pl. 4g
"	"	antler	slots	absent	absent	AIc1	'Group 2'	Ibid.: Pl. 4h
"	"	antler	4 holes	incised triangle	present	AIc1	'Group 3'	Ibid.: Pl. 4i
"	"	antler	4 holes	incised triangle	present	AIc1	'Group 3'	Ibid.: Pl. 4j
"	"	antler	4 holes	incised triangle	present	AIc1	'Group 3'	Ibid.: Pl. 4k
"	"	ivory	absent	absent	present	AIc2		Ibid.: Pl. 5c
Mainland W.	Bloody Falls	unknown	4 holes	absent	absent	AIc2 Clachan		McGhee 1972: Pl. VIa

Region	Site	Raw Material	Lashing	Decoration	Lateral Waist	Type	Notes	Reference
Mainland W.	Beulah	antler	slots	V-shaped groove	present	AIc2 Clachan		Morrison 1983: Pl. 31a
"	"	bone	slots	absent	present	AIc2 Clachan		Ibid.: Pl. 31b
"	"	bone	unknown	absent	present	AIc2 Clachan		Ibid.: 183
"	"	bone	unknown	absent	present	AIc2 Clachan		Ibid.: 183
"	"	antler	slots	vestigial side	present	AIc1	Sicco-like	Ibid.: Pl. 31c
Victoria Island	Memorana	antler	slots	vestigial 2nd spur	absent	AIc1	copper blade	McGhee 1972: Pl. 1h
Victoria Island	Lady Franklin Point	antler/ bone	slots	incised triangle	absent	AIc2 Clachan		Taylor 1972: Pl. VIb
"	"	antler/ bone	unknown	unknown	absent	AIc2?	No illustration - Clachan type?	Ibid.: 39
"	"	antler/ bone	unknown	unknown	absent	AIc2?	"	Ibid.: 39
Victoria Island	Bell	antler	4 holes	absent	absent	AIc1		Taylor 1967: Fig. 7q
"	"	antler	holes +	absent	present	AIc2	no line hole?	Ibid.: Fig. 7s

Table 5: Thule Type III Harpoon Heads From the Western Study Region (n=47).

Region	Site	Raw Material	Lashing	Decoration	Lateral Waist	Type	Notes	Reference
King William Island	Malerualik	antler	4 holes	absent	present	AIc1	2 side slots	Mathiassen 1927a: Pl. 82(2)
"	"	antler	4 holes	unknown	unknown	AIc1		Ibid.: 312
"	"	antler	slots	unknown	unknown	AIc1		Ibid.: 312
King William Island	Kangerarfi gssuaq	antler	4 holes	absent	absent	AIc1	bone blade	Ibid.: Fig. 109
Boothia/ Somerset	Spence Bay	bone	unknown	unknown	absent	AIc1	bone blade	VanStone 1962: Pl. X5
"	"	bone	4 holes	absent	absent	AIc1		Ibid.: Pl. X9
"	"	bone	4 holes	absent	absent	AIc2	blade bed	Ibid.: Pl. X10
"	"	bone	unknown	unknown	unknown	AIc2	blade bed	Ibid.: 28
Boothia/ Somerset	Nudlukta	bone	slots	absent	absent	AIc1		VanStone 1962: Pl. V18
"	"	bone	groove	absent	unknown	AIc1		Ibid.: 18
"	"	antler	holes + groove	absent	present	AIc2	no line hole?	Ibid.: Fig. 7s
Boothia/ Somerset	Levesque Harbour	antler/ bone	4 holes	absent	absent	AIc1		VanStone 1962: Pl. I21
"	"	antler/ bone	4 holes	unknown	unknown	AIc1		Ibid.: 8
"	"	antler/ bone	slots	unknown	unknown	AIc1		Ibid.: 8

Region	Site	Raw	Lashing	Decoration	Lateral	Type	Notes	Reference
Boothia/ Somerset	Levesque Harbour	antler/ bone	unknown	unknown	unknown	AIc1		Ibid.: 8
"	"	antler/ bone	unknown	unknown	unknown	AIc1		Ibid.: 8
Boothia/ Somerset	Creswell Bay Site A	bone	unknown	Y-line	unknown	AIc1		VanStone 1962: 15
Boothia/ Somerset	Learmonth	bone	4 holes	absent	unknown	AIc1		Taylor & McGhee 1979: 65
"	"	bone	groove	absent	absent	AIc1	broken slot?	Ibid.: Pl. 1e
"	"	bone	4 holes	absent	present	AIc1		Ibid.: Pl. 1a
"	"	antler	groove/slot	absent	absent	AIc1	ivory blade	Ibid.: Pl. 1c
"	"	bone	3 holes	absent	absent	AIc1		Ibid.: Pl. 1b
"	"	antler	2 holes	unknown	absent	AIc2		Ibid.: Pl. 1d
High Arctic	M1	antler	unknown	incised triangle	present	AIc1		Collins 1952: Pl. X9
"	"	antler	slots	absent	present	AIc1		Collins
"	"	antler	slots	absent	present	AIc1		Ibid.: Pl. XIV3
"	"	bone	unknown	absent	absent	AIc1		Collins 1952: Pl. X8
High Arctic	Lake	antler	slots	absent	present	AIc1		Collins 1951:
High Arctic	Brooman Point	antler	slots	parallel curved lines, side slot	present	AIc1	2 line holes	McGhee 1984: Pl. 2a
"	"	bone	4 holes	absent	present	AIc1		Ibid.: Pl. 2b
"	"	ivory	slots	absent	present	AIc1		Ibid.: Pl. 2c
"	"	ivory	4 holes	absent	absent	AIc1		Ibid.: Pl. 2d
"	"	antler	slots	absent	present	AIc1		Ibid.: Pl. 2e
"	"	antler	unknown	absent	present	AIc1		Ibid.: Pl. 2f
"	"	antler	slots	absent	present	AIc1		Ibid.: Pl. 2g
"	"	antler	slots	absent	present	AIc1		Ibid.: Pl. 2h
"	"	antler	slots	absent	present	AIc1		Ibid.: Pl. 2i
"	"	ivory	slots	incised	unknown	AIc1		Ibid.: 46-47
"	"	antler	slots	vestigial side slot	unknown	AIc1		Ibid.: 46-47
"	"	antler	slots	absent	unknown	AIc1		Ibid.: 46-47
"	"	antler	slots	absent	unknown	AIc1		Ibid.: 46-47
"	"	antler	slots	unknown	unknown	AIc1	blank	Ibid.: 46-47
"	"	antler	unknown	unknown	unknown	AIc1	blank	Ibid.: 46-47
"	"	bone	unknown	unknown	unknown	AIc1	blank	Ibid.: 46-47
"	"	bone	slots	unknown	unknown	AIc1	blank	Ibid.: 46-47
"	"	unknown	unknown	unknown	unknown	AIc2	"Type II"	Ibid.: 45
High Arctic	Deblicquy	ivory	2 holes	absent	absent	AIc2 Clachan	'toy'?	Taylor & McGhee 1981: Pl. 1e
High Arctic	Port Refuge	antler	4 holes	absent	absent	AIc1	baleen blade	Park 1983: Pl. 23a
"	"	ivory	4 holes	vestigial side	absent	AIc1		Ibid.: Pl. 23b
"	"	unknown	unknown	unknown	absent	AIc1	unfinished	Ibid.: Pl. 23c
"	"	wood	absent	absent	absent	AIc1	'toy'	Ibid.: Pl. 33a
High Arctic	Porden Pt.	wood	groove	absent	absent	AIc2	'toy'	Park 1983: Pl. 12a

Table 6: Thule Type III Harpoon Heads From the Central Study Region (n=51).

Region	Site	Raw Material	Lashing	Decoration	Lateral Waist	Type	Notes	Reference
NW Hudson	Silumiut	bone	4 holes	modified Y-line	absent	AIc1		McCartney 1977: Pl. 2A
"	"	ivory	slots	modified Y-line	absent	AIc1	partial open socket	Ibid.: Pl. 2B
"	"	bone	4 holes	absent	absent	AIc1		Ibid.: Pl. 2C
"	"	bone	4 holes	absent	absent	AIc1		Ibid.: Pl. 2D
"	"	bone	4 holes	absent	absent	AIc1		Ibid.: Pl. 2E
"	"	bone	4 holes	absent	absent	AIc1		Ibid.: Pl. 2F
"	"	ivory	unknown	unknown	unknown	AIc1	centre fragment	Ibid.: Pl. 2G
"	"	antler	4 holes	Y-line	absent	AIc1		Ibid.: Pl. 2H
"	"	antler	4 holes	Y-line	absent	AIc1		Ibid.: Pl. 2I
"	"	antler	unknown	unknown	unknown	AIc1	tip fragment	Ibid.: Pl. 2J
"	"	ivory	4 holes	unknown	unknown	AIc1	base fragment	Ibid.: Pl. 2K
"	"	ivory	unknown	unknown	unknown	AIc1	centre fragment	Ibid.: Pl. 2L
"	"	antler/bo	unknown	unknown	absent	AIc1	unfinished	Ibid.: Pl. 2M
"	"	antler	unknown	unknown	unknown	AIc1	blank	Ibid.: PL. 2N
"	"	ivory	unknown	unknown	unknown	AIc1	blank	Ibid.: Pl. 2O
"	"	bone	slots	absent	absent	AIc2 Clachan	reworked	Ibid.: Pl. 1C
NW Hudson	Chesterfield Inlet	ivory	4 holes	3 parallel lines on each side	absent	AIc1	Grave	Mathiassen 1927a: 113
"	"	unknown	4 holes	unknown	unknown	AIc1	Grave	Ibid.: 113
NW Hudson	Kamarvik	bone	holes	absent	present	AIc1		McCartney 1977: Pl. 87B
"	"	antler	slots	absent	unknown	AIc1		Ibid.: 318
NW Hudson	Kuk	ivory	4 holes	Y-line + 2 lines on each side	absent	AIc1		Mathiassen 1927a: Pl. 69(3)
"	"	ivory	unknown	"	absent	AIc1		Ibid.: 234
"	"	antler	4 holes	absent	absent	AIc1		Ibid.: 243
"	"	bone	unknown	unknown	absent	AIc1	unfinished	Ibid.: Pl. 68(2)
"	"	unknown	unknown	Y-line + 2 lines on each side	absent	AIc1		Ibid.: 249
NW Hudson	Naujan	ivory	slots	absent	absent	AIc1	meteroic iron blade	Mathiassen 1927a: Pl. 1(6)
"	"	antler	slots	absent	present	AIc1	copper blade	Ibid.: Pl. 1(7)
"	"	bone	4 holes	absent	absent	AIc1	bone blade	Ibid.: Pl. 1(8)
"	"	unknown	slots	3 Y-lines	present	AIc1		Ibid.: Pl. 1(9)
"	"	bone	4 holes	Y-line	present	AIc1		Ibid.: Pl. 1(11)
"	"	ivory	groove	incised triangle	absent	AIc1		Ibid.: Pl. 1(12)
"	"	antler	unknown	vesitigial side	absent	AIc1		Ibid.: Pl. 1(10)
"	"	antler	unknown	"	unknown	AIc1		Ibid.: 25
"	"	antler	unknown	"	unknown	AIc1		Ibid.: 25

Region	Site	Raw Material	Lashing	Decoration	Lateral Waist	Type	Notes	Reference
NW Hudson	Naujan	antler	unknown	"	unknown	AIc1		Ibid.: 25
"	"	antler	unknown	"	unknown	AIc1		Ibid.: 25
"	"	antler	unknown	"	unknown	AIc1		Ibid.: 25
"	"	ivory	unknown	"	unknown	AIc1		Ibid.: 25
"	"	ivory	unknown	unknown	unknown	AIc1		Ibid.: 25
"	"	ivory	unknown	unknown	unknown	AIc1		Ibid.: 25
"	"	ivory	unknown	unknown	unknown	AIc1		Ibid.: 25
"	"	bone	unknown	unknown	unknown	AIc1		Ibid.: 25
"	"	bone	unknown	unknown	unknown	AIc1		Ibid.: 25
Melville Peninsula	Lyon Inlet	unknown	4 holes	Y-line	unknown	AIc1		Mathiassen 1927a: 126
"	"	unknown	bed	absent	unknown	AIc1		Ibid.: 124
Melville P.	Igloolik	antler	4 holes	unknown	unknown	AIc2		Ibid.: 125
N Baffin	Nunguvik	unknown	slots	vestigial side slots	absent	AIc1		Mary-Rousselière 1979: Pl. 1d
"	"	unknown	unknown	unknown	present	AIc1	unfinished	Ibid.: Pl. 1e
N Baffin	Qilalukan*	bone	4 holes	absent	absent	AIc1		Mathiassen 1927a: Pl. 39(7)
"	"	bone	bed	absent	absent	AIc1	off-centre	Ibid.: Pl. 39(8)
"	"	bone	4 holes	unknown	unknown	AIc1		Ibid.: 147-48
"	"	bone	4 holes	unknown	unknown	AIc1		Ibid.: 147-48
"	"	bone	4 holes	unknown	unknown	AIc1		Ibid.: 147-48
"	"	bone	bed	unknown	unknown	AIc1		Ibid.: 147-48
"	"	antler	4 holes	unknown	unknown	AIc1		Ibid.: 147-48
"	"	antler	unknown	unknown	unknown	AIc1		Ibid.: 147-48
"	"	narwhal	slots	unknown	unknown	AIc1		Ibid.: 147-48
N Baffin	Button Point	bone	4 holes	unknown	unknown	AIc1		Mathiassen 1927a: 208
S Baffin	Anarnitung (A-1)	bone	bed	absent	absent	AIc1		Schledermann 1975: Pl. 2c
"		antler	bed	absent	absent	AIc1		Ibid.: Pl. 2e
S Baffin	B-1	ivory	6 holes	absent	absent	AIc1		Schledermann 1975: Pl. 2a
"	"	ivory	6 holes	absent	absent	AIc1		Ibid.: Pl. 2b
"	"	ivory	bed	absent	absent	AIc1		Ibid.: Pl. 2d
"	"	bone	4 holes	absent	absent	AIc2	blade bed, "Type II"	Ibid.: Pl. 1j
S Baffin	Crystal II	ivory	slots	absent	present	AIc1		Collins 1950: Pl. V11
"	"	"	groove	absent	present	AIc1		Ibid.: Pl. V12
"	"	"	slots	absent	absent	AIc1		Ibid.: Pl. V13
"	"	"	unknown	absent	present	AIc1		Ibid.: Pl. V16

Table 7: Thule Type III Harpoon Heads From the Eastern Study Region (n=68).

Region	Site	Raw Material	Decoration	Lateral Waist	Type	Notes	Reference
Mainland W.	Clachan	antler	incised triangle	absent	AIIc2 Clachan	lashing holes	Morrison 1983: Pl. 2a
"	"	antler	"	absent	AIIc2 Clachan	lashing groove	Ibid.: Pl. 2b
"	"	antler	absent	absent	AIIc2 Clachan		Ibid.: Pl. 2c
"	"	antler	absent	absent	AIIc1		Ibid.: Pl. 2d
"	"	antler	absent	absent	AIIc1		Ibid.: Pl. 2e
"	"	antler	absent	absent	AIIc1		Ibid.: Pl. 2f
"	"	antler	absent	present	AIIc1		Ibid.: Pl. 2g
"	"	antler	ladder	absent	AIIc1		Ibid.: Pl. 2h
Victoria Island	Lady Franklin Pt.	unknown	absent	absent	AIIc1	Nuwuk Closed Socket	Taylor 1972: Pl. VIj
Victoria Island	Clare	unknown	unknown	unknown	AIIc1	blank	Taylor 1972: Pl. IXi

Table 8: Thule Type IV Harpoon Heads from the Western Study Region (n=10).

Region	Site	Raw	Decoration	Lateral Waist	Type	Notes	Reference
King William Island	Malerualik	antler	absent	absent	AIIc1	caribou bone blade	Mathiassen 1927a: Pl. 85(1)
Boothia/ Somerset	Spence Bay	bone	absent	absent	AIIc1	bifurcated spur	VanStone 1962: Pl.X4
Boothia/ Somerset	Levesque Harbour	antler/ bone	absent	absent	AIIc2		VanStone 1962: Pl. I16
"	"	antler/ bone	absent	absent	AIIc1		Ibid.: Pl. I18
Boothia/ Somerset	Fort Ross	antler	unknown	unknown	AIIc1		VanStone 1962: 23
Boothia/ Somerset	Learmonth	bone	longitudinal groove	absent	AIIc1		Taylor & McGhee 1979: Pl. 1g
"	Learmonth	bone	unknown	absent	AIIa		Ibid.: Pl. 1h
High Arctic	M1	bone	absent	absent	AIIc2	whaling type	Collins 1952: Pl. X3
"	"	bone	2 parallel lines	absent	AIIc2		Ibid.: Pl. X6
"	"	bone	absent	absent	AIIc2		Ibid.: Pl. X7
High Arctic	Lake	bone	absent	absent	AIIc2		Collins 1951: Pl. XIV6
High Arctic	Brooman Point*	bone	absent	absent	AIIc2	keeled	McGhee 1984: Pl. 3c
"	"	bone	absent	absent	AIIc2	keeled	Ibid.: Pl. 3d
"	"	bone	absent	absent	AIIc2		Ibid.: Pl. 3e
"	"	bone	absent	absent	AIIc2		Ibid.: Pl. 3f
"	"	ivory	absent	unknown	AIIc2	keeled	Ibid.: 47-48
"	"	unknown	absent	unknown	AIIc2		Ibid.: Pl. 47-48
"	"	bone	absent	absent	AIIc1		Ibid.: Pl. 3a

Region	Site	Raw Material	Decoration	Lateral Waist	Type	Notes	Reference
High Arctic	Brooman Point	bone	absent	present	AIIc1	'toy'?	Ibid.: Pl. 3b
"	"	bone	absent	absent	AIIc2	whaling type	Ibid.: Pl. 3g
"	"	bone	absent	absent	AIIa		Ibid.: Pl. 3h
High Arctic	Deblicquy	bone	absent	absent	AIIc1	bifurcated spur	Taylor & McGhee 1981: Pl. 1a
"	"	bone	absent	absent	AIIc1		Ibid.: Pl. 1b
"	"	bone	unknown	absent	AIIc1	blank	Ibid.: Pl. 1c
High Arctic	Port Refuge	ivory	absent	absent	AIIc2	keeled	Park 1983: Pl. 23d
"	"	bone	absent	absent	AIIc1		Ibid.: Pl. 23f
"	"	bone	absent	absent	AIIc1	bifurcated spur	Ibid.: Pl. 23g
"	"	bone	absent	absent	AIIc1	bifurcated spur	Ibid.: Pl. 23h
High Arctic	RbJr-7	bone	absent	absent	AIIc2		Park 1983: Pl. 19a
High Arctic	Porden	bone	absent	absent	AIIc2	whaling type,	Park 1983: Pl. 14a

Table 9: Thule Type IV Harpoon Heads from the Central Study Region (n=30).

** For Brooman Point, individual specimens are not discussed separately, so attribute combinations have been guessed.

Region	Site	Raw Material	Decoration	Lateral Waist	Type	Notes	Reference
NW Hudson	Silumiut	antler	absent	absent	AIIc2	lashing groove	McCartney 1977: Pl. 3A
"	"	ivory	longitudinal line on side	absent	AIIc2	V-cut spur	Ibid.: Pl. 3B
"	"	ivory	absent	absent	AIIc2		Ibid.: Pl. 3C
"	"	ivory	absent	absent	AIIc2		Ibid.: Pl. 3D
"	"	bone	absent	absent	AIIc2	base fragment	Ibid.: Pl. 3E
"	"	ivory	absent	present	AIIc2	centre fragment	Ibid.: Pl. 3F
"	"	bone	absent	absent	AIIc2		Ibid.: Pl. 3G
"	"	bone	absent	absent	AIIc2	V-cut spur	Ibid.: Pl. 3H
"	"	bone	absent	absent	AIIc2	V-cut spur	Ibid.: Pl. 3I
"	"	bone	absent	absent	AIIc2	V-cut spur	Ibid.: Pl. 3J
NW Hudson	Kamarvik	antler	absent	absent	AIIa	V-cut spur	McCartney 1977: Pl. 87A
NW Hudson	Kuk	ivory	absent	absent	AIIc2	V-cut spur	Mathiassen 1927a: Pl. 69(4)
"	"	ivory	Y-line + 2 lines on sides	absent	AIIc1		Ibid.: Pl. 69(5)
"	"	bone	absent	absent	AIIc1		Ibid.: 234-235
"	"	ivory	absent	absent	AIIc1		Ibid.: 234-235
"	"	unknown	unknown	unknown	AIIc?	unfinished	Ibid.: 249

Region	Site	Raw Material	Decoration	Lateral Waist	Type	Notes	Reference
NW Hudson	Naujan	bone	absent	absent	AIIc2		Mathiassen 1927a: Pl. 2(1)
"	"	bone	absent	absent	AIIc2		Ibid.: 25
"	"	bone	absent	absent	AIIc2		Ibid.: 25
"	"	bone	absent	absent	AIIc2		Ibid.: 25
"	"	bone	absent	absent	AIIc2		Ibid.: 25
"	"	bone	absent	absent	AIIc2		Ibid.: 25
"	"	ivory	absent	absent	AIIc2	bifurcated spur	Ibid.: Pl. 2(2)
"	"	bone	Y-line	absent	AIIc2	whaling type, bifurcated spur	Ibid.: Pl. 4(8)
"	"	ivory	absent	absent	AIIc2	"	Ibid.: 26
NW Hudson	Naujan Graves	ivory	raised median ridge	absent	AIIc2	bifurcated spur	Mathiassen 1927a: Pl. 37(14)
Melville Peninsula	Lyon Inlet	unknown	raised median ridge	absent	AIIc2		Mathiassen 1927a: 127
"	"	unknown	absent	absent	AIIc2		Ibid.: 127
Melville Peninsula	Pingerqalik	ivory	absent	absent	AIIc2	whaling type, bifurcated spur	Mathiassen 1927a: Fig. 34
N Baffin	Nunguvik	unknown	absent	absent	AIIc2		Mary-Rousselière 1979:
"	"	unknown	groove on	absent	AIIc2	whaling type	Ibid.: Pl. 7c
"	"	unknown	absent	absent	AIIc2	whaling blanks	Ibid.: Pl. 7b
"	"	unknown	absent	absent	AIIc2	whaling blanks	Ibid.: Pl. 7e
N Baffin	Qilalukan	narwhal	absent	absent	AIIc2		Mathiassen 1927a: 148
"	"	unknown	absent	absent	AIIc2		Ibid.: 148
"	"	ivory	4 dots	absent	AIIc1	knob on spur	Ibid.: Pl. 40(3)
N Baffin	Mitimatalik	bone	unknown	absent	AIIc2	whaling type	Mathiassen 1927a: Fig. 47
S Baffin	Anarnitung (A-1)	ivory	absent	absent	AIIc2	partially closed socket, V-cut spur	Schledermann 1975: Pl. 2i
"	"	bone	unknown	absent	AIIc2	"	Ibid.: Pl. 2j
"	"	ivory	unknown	absent	AIIc1	"	Ibid.: Pl. 2k
S Baffin	B-1	ivory	absent	absent	AIIc1	partially closed socket, V-cut spur	Schledermann 1975: Pl. 2g
S Baffin	B-1	ivory	absent	absent	AIIc2	"	Ibid.: Pl. 2f
S Baffin	B-1	ivory	absent	absent	AIIc2	"	Ibid.: Pl. 2h
S Baffin	Crystal II	bone	absent	absent	AIIc2		Collins 1950: Pl. V18

Table 10: Thule Type IV Harpoon Heads from the Eastern Study Region (n=44).

Bibliography

Arnold, Charles D.

1986 In Search of the Thule Pioneers. In Thule Pioneers, E. Bielawski, Carolynn Kobelka and Robert R. Janes, eds., pp. 1-89. Occasional Papers of the Prince of Wales Northern Heritage Centre, Yellowknife, N.W.T., No. 2.

Arundale, Wendy H.

1981 Radiocarbon Dating in Eastern Arctic Archaeology: A Flexible Approach. American Antiquity 46: 244-271.

Barger, W. K.

1979 Inuit-Cree Relations in the Eastern Hudson Bay Region. Arctic Anthropology 16(2): 59-75.

Barth, Frederik, ed.

1969 Ethnic Groups and Social Boundaries: The Social Organisation of Culture Difference. Boston: Little, Brown and Company.

Binford, L. R. and S. R. Binford

1966 A Preliminary Analysis of Functional Variability in the Mousterian of Levallois facies. American Anthropologist 68: 238-195.

Birket-Smith, Kaj

1929a The Caribou Eskimos: Material and Social Life and their Cultural Position. Report of the Fifth Thule Expedition 1921-1924,

Volume V, Part 1. New York: AMS Press (1976 Edition).

1929b The Caribou Eskimos: Material and Social Life and their Cultural Position. Report of the Fifth Thule Expedition 1921-1924, Volume V, Part 2. New York: AMS Press (1976 Edition).

Boas, Franz

1888 The Central Eskimo. Toronto: Coles Publishing Company Ltd (1974 Edition).

Bordes, François and Denise de Sonneville-Bordes

1970 The Significance of Variability in Paleolithic Assemblages. World Archaeology 2(1): 61-73.

Burch, Ernest S. Jr.

1978 Caribou Eskimo Origins: An Old Problem Reconsidered. Arctic Anthropology XV(I): 1-28.

1979 The Thule-Historic Eskimo Transition on the West Coast of Hudson Bay. In Thule Eskimo Culture: An Anthropological Retrospective, Allen P. McCartney, ed., pp. 189-211. Archaeological Survey of Canada Paper No. 88. Ottawa: National Museums of Canada Mercury Series.

Clark, Brenda L.

1977 The Development of Caribou Eskimo Culture. Archaeological Survey of Canada, Paper No. 59. Ottawa: National Museum of Man Mercury Series.

1979 Thule Occupation of West Hudson Bay. In Thule Eskimo Culture: An Anthropological Retrospective, edited by Allen P. McCartney,

pp. 89-99. Archaeological Survey of Canada, Paper No. 88. Ottawa: National Museums of Canada Mercury Series.

Clegg, J. K.

1977 The Four Dimensions of Artifactual Variation. In Stone Tools as Cultural Markers: change, evolution and complexity, R.V.S. Wright, ed., pp. 60-66. New Jersey: Humanities Press, Inc.

Collins, Henry B.

1937 Archaeology of St. Lawrence Island, Alaska. Smithsonian Miscellaneous Collections, Vol. 96.

1950 Excavations at Frobisher Bay, Baffin Island, Northwest Territories (Preliminary Report). Annual Report of the National Museum of Canada, Bulletin No. 118: 18-43. Ottawa.

1951 Excavations at Thule Culture Sites Near Resolute Bay, Cornwallis Island, N.W.T. (Preliminary Report). Annual Report of the National Museum of Canada, Bulletin No. 123: 49-63. Ottawa.

1952 Archaeological Excavations at Resolute, Cornwallis Island, N.W.T. Annual Report of the National Museum of Canada, Bulletin No. 126: 48-63. Ottawa.

Dumond, Don E.

1977 The Eskimos and Aleuts. London: Thames and Hudson, Ltd.

Fitzhugh, William H.

1987 Archaeological Ethnicity and the Prehistory of Labrador. In Ethnicity and Culture: Proceedings of the Eighteenth Annual Conference of the Archaeological Association of the University of

Calgary, 1987, Reginald Auper, Margaret F. Glass, Scott MacEachern & Peter H. McCartney, eds., pp. 141-153.

Ford, J. A.

1959 Eskimo Prehistory in the Vicinity of Point Barrow, Alaska. Anthropology Papers of the American Museum of Natural History Vol. 47, Part 1. New York.

Freeman, Milton M. R.

1979 A Critical View of Thule Culture and Ecological Adaptation. In Thule Eskimo Culture: An Anthropological Retrospective, edited by Allen P. McCartney, pp. 278-285. Archaeological Survey of Canada, Paper No. 88. Ottawa: National Museums of Canada Mercury Series.

Fried, Morton H.

1968 On the Concepts of 'Tribe' and 'Tribal Society'. In Essays on the Problem of Tribe, June Helm, ed., pp. 3-20. Proceedings of the 1967 Annual Spring Meeting of the American Ethnological Society. Seattle and London: University of Washington Press.

Giddings, J. Louis

1964 The Archaeology of Cape Denbigh. Providence: Brown University Press.

Graburn, Nelson

1979 Indian-Eskimo Relations. Arctic Anthropology XVI(2): 184-195.

Greaves, Sheila

1982 Upon the Point: A Preliminary Investigation of Ethnicity as a

Source of Metric Variation in Lithic Projectile Points. Archaeological Survey of Canada. Paper No. 109. Ottawa: National Museum of Man Mercury Series.

Hearne, Samuel

1911 A Journey to the Northern Ocean. Edited by J. B. Tyrell. Toronto: The Champlain Society (Originally Published 1795).

Hoebel, E. Adamson

1958 Man in the Primitive World. New York: McGraw Hill.

Holtved, E.

1944 Archaeological Investigations in the Thule District (I and II). Meddelelser om Grønland. Bd. 141, Nr. 1. Copenhagen.

Irving, William

1962 A Provisional Comparison of some Alaskan and Asian Stone Industries. In Prehistoric Culture Relations between the Arctic and Temperate Zones of North America, J. Campbell, ed., pp. 58-68. Arctic Institute of North America, Technical Paper No. 11.

Isaac, Glynn

1977 Squeezing Blood from Stones. In Stone Tools as Cultural Markers: Change, Evolution and Complexity, R.V.S. Wright, ed., pp. 5-12. Prehistory and Material Culture Series No. 12, Australian Institute of Aboriginal Studies. New Jersey: Humanities Press Inc.

Jenness, Diamond

1922 The Life of the Copper Eskimos. New York & London: Johnson Reprint Corporation (1970 Edition).

1928 Comparative Vocabulary of the Western Eskimo Dialects. Report of the Canadian Arctic Expedition, 1913-1918, Vol. 15, Part A. Ottawa.

Mary-Rousselière, Guy

1979 The Thule Culture on North Baffin Island: Early Thule Characteristics and the Survival of the Thule Tradition. In Thule Eskimo Culture: An Anthropological Retrospective, edited by Allen P. McCartney. National Museum of Man, Archaeological Survey of Canada, Mercury Series No. 88, pp. 54-75, Ottawa.

Mathiassen, Therkel

1927a Archaeology of the Central Eskimos: Descriptive Part. Report of the Fifth Thule Expedition 1921-1924, Vol. 4, Part I, Copenhagen.

1927b Archaeology of the Central Eskimos: The Thule Culture and Its Position Within the Eskimo Culture. Report of the Fifth Thule Expedition 1921-1924, Vol. 4, Part II, Copenhagen.

Maxwell, Moreau S.

1979 The Lake Harbour Region: Ecological Equilibrium in Sea Coast Adaptation. In Thule Eskimo Culture: An Anthropological Retrospective, edited by Allen P. McCartney. National Museum of Man, Archaeological Survey of Canada, Mercury Series No. 88, pp. 76-88, Ottawa.

1985 Prehistory of the Eastern Arctic. Orlando: Academic Press.

McCartney, Allen P.

1977 Thule Eskimo Prehistory Along Northwestern Hudson Bay.

Archaeological Survey of Canada, Paper No. 70. Ottawa: National Museum of Man Mercury Series.

1980 The Nature of Thule Eskimo Whale Use. Arctic 33(3): 517-541.

McCullough, Karen

1989 The Ruin Islanders: Early Thule Culture Pioneers in the Eastern Arctic. Archaeological Survey of Canada, Paper No. 141. Ottawa: Canadian Museum of Civilization Mercury Series.

McGhee, Robert

1969/70 Speculations on Climatic Change and Thule Culture Development. Folk 11-12: 173-184.

1972 Copper Eskimo Prehistory. Publications in Archaeology, No. 2. Ottawa: National Museum of Man.

1977 Ivory for the Sea Woman: The Symbolic Attributes of a Prehistoric Technology. Canadian Journal of Archaeology, No. 1: 141-149.

1984 The Thule Village at Brooman Point, High Arctic Canada. Archaeological Survey of Canada, Paper No. 125. Ottawa: National Museum of Man Mercury Series.

1994 Disease and the Development of Inuit Culture. Current Anthropology 35(5): 565-594.

McGhee, Robert and James A. Tuck

1976 Un-Dating the Canadian Arctic. In Eastern Arctic Prehistory: Paleoeskimo Problems, edited by Moreau S. Maxwell. Society for American Archaeology Memoir No. 31, pp. 6-14.

Megginson, Mary Jo

1997 The Tyranny of the Ethnographer: Reassessing the Culture Boundaries of the Central Canadian Arctic. Unpublished Honours Thesis, McGill University, Montréal, Québec.

Mellars, Paul

1970 Some Comments on the Notion of 'Functional Variability' in Stone-Tool Assemblages. World Archaeology 2(1): 74-89.

Morrison, David A.

1983 Thule Culture in Western Coronation Gulf. Archaeological Survey of Canada, Paper No. 116. Ottawa: National Museum of Man Mercury Series.

1999 The Earliest Thule Migration. Canadian Journal of Archaeology 22(2): 139-156.

Naroll, Raoul

1964 On Ethnic Unit Classification. Current Anthropology 5(4): 283-674.

Park, Robert W.

1983 Porden Point and Port Refuge: Thule Eskimo Sites from the Grinnell Peninsula, Devon Island, N.W.T. Unpublished Masters Thesis, Department of Anthropology, McMaster University, Hamilton.

1994 Approaches to Dating the Thule Culture in the Eastern Arctic. Canadian Journal of Archaeology 18: 29-48.

Rasmussen, Knud

1929 Intellectual Culture of the Iglulik Eskimos. Report of the Fifth Thule Expedition 1921-24, Volume VII, Number 1. New York: AMS Press (1976 Edition).

1931 The Netsilik Eskimos: Social Life and Spiritual Culture. Report of the Fifth Thule Expedition 1921-24, Volume VIII, Numbers 1&2. New York: AMS Press (1976 Edition).

1932 Intellectual Culture of the Copper Eskimos. Report of the Fifth Thule Expedition 1921-24, Volume IX. New York: AMS Press (1976 Edition).

Sackett, James R.

1990 Style and Ethnicity in Archaeology. In The Uses of Style in Archaeology, Margaret W. Conkey & Christine A. Harstorf, eds., pp. 32-43. Cambridge: Cambridge University Press.

Sahlins, Marshall

1961 The Segmentary Lineage: An Organization of Predatory Expansion. American Anthropologist 63: 332-345.

Savelle, James M.

1987 Collectors and Foragers: Subsistence-Settlement System Change in the Central Canadian Arctic, A.D. 1000-1960. BAR International Series 358. Oxford: British Archaeological Reports.

Savelle, James M. and Allen P. McCartney

1994 Thule Inuit Bowhead Whaling: A Biometrical Analysis. In Threads of Arctic Prehistory: Papers in honour of William E. Taylor, Jr.,

David Morrison and Jean-Luc Pilon, eds., pp. 281-310. Mercury Series Paper No. 149. Canadian Museum of Civilization, Archaeological Survey of Canada, Ottawa.

Schledermann, Peter

1975 Thule Eskimo Prehistory of Cumberland Sound, Baffin Island, Canada. Archaeological Survey of Canada, Paper No. 38. Ottawa: National Museum of Man Mercury Series.

Schledermann, Peter, and Karen McCullough

1980 Western Elements in the Early Thule Culture of the Eastern High Arctic. Arctic 33(4): 833-842.

Service, E.R.

1962 Primitive Social Organization. New York: Random House.

Stuiver, Minze, and Gordon W. Pearson

1986 High-Precision Calibration of the Radiocarbon Time Scale, A.D. 1950-500 B.C. Radiocarbon 28: 805-838.

Taylor, William E. Jr.

1963 Hypotheses on the Origin of Canadian Thule Culture. American Antiquity 28(4): 456-464.

1965 The Fragments of Eskimo Prehistory. The Beaver 295: 4-17.

1966 An Archaeological Perspective on Eskimo Economy. Antiquity 40: 114-120.

1967 Summary of Archaeological Fieldwork on Banks and Victoria Islands, Arctic Canada, 1965. Arctic Anthropology 4(1): 221-243.

1968 An Archaeological Overview of Eskimo Economy. In Eskimo of

the Canadian Arctic, edited by Victor Valentine and Frank Vallee, pp. 1-17. Toronto: McClelland and Stewart.

1972 An Archaeological Survey Between Cape Parry and Cambridge Bay, N.W.T., Canada in 1963. Archaeological Survey of Canada, Paper No. 1. Ottawa: National Museum of Man Mercury Series.

Taylor, William E. Jr., and Robert McGhee

1979 Archaeological Material from Creswell Bay, N.W.T., Canada. Archaeological Survey of Canada, Paper No. 85. Ottawa: National Museum of Man Mercury Series.

1981 Deblicquy, A Thule Culture Site on Bathurst Island, N.W.T., Canada. Archaeological Survey of Canada, Paper No. 102. Ottawa: National Museum of Man Mercury Series.

Tuck, James A., and Robert McGhee

1983 Sea Mammal Dates: Science or Science Fiction? Quarterly Review of Archaeology 4(2): 9-10.

VanStone, James W.

1962 An Archaeological Collection from Somerset Island and Boothia Peninsula, N.W.T. Royal Ontario Museum, Occasional Paper 4. Toronto: University of Toronto Press.

Wissler, C.

1916 Harpoons and Darts in the Stefansson Collection. American Museum of Natural History, Anthropological Papers, 14(2).

Wobst, H. Martin

1977 Stylistic Behaviour and Information Exchange. In Papers for the

Director: Research Essays in Honour of James B. Griffen, C.E. Cleland, ed., pp. 317-342.

1978 The Archaeo-Ethnology of Hunter-Gatherers, or, the Tyranny of the Ethnographic Record in Archaeology. American Antiquity 43(2): 303-309.

Yorga, Brian W. D.

1979 Migration and Adaptation: A Thule Culture Perspective. In Thule Eskimo Culture: An Anthropological Perspective, edited by A.P. McCartney, pp. 286-291. Mercury Series Paper No. 88. Canadian Museum of Man, Archaeological Survey of Canada, Ottawa, Ontario.