

IN ORDER TO LIVE UNTRoubLED
Inuit Management of Environments, Economies, and Societies,
1550-1940

by Renée Fossett

A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

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RENÉE FOSSETT

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ABSTRACT

Between AD 1000 and 1940, North American arctic communities made almost continuous modifications of their economies, demographic behaviour, and social relations in response to changes in their physical and social environments. Some communities, unable to make appropriate changes, became extinct; others were able to use the opportunities of specific physical and social environments to create and maintain flourishing societies.

Responses to particular events within the two kinds of environments included migration, expansion of population and territory, and occupational diversification. In their external relations with each other and with other aboriginal communities, Paleo-Eskimo, Neo-Eskimo, and Inuit societies used war, alliance, and trade as means of ensuring access to adequate supplies of necessary resources. Between 1700 and 1950, depending on place, Asians, Europeans and Americans entered the arctic and, again depending on place, created new social environments. Initially, and in nearly all cases, they opened up new opportunities for solving problems of economic uncertainty and unpredictability. Historic Inuit responded with a wide range of strategies, balancing traditional approaches with innovations.

Inuit worldviews not only provided descriptions of the arctic world, they also offered prescriptions for behaviours appropriate to that world. Social organization both reflected worldview and supported it. In spite of failures of the ideological and social systems which resulted in extinctions of some communities, Inuit society as a whole survived extreme pressures from both physical and social environments until the early twentieth century. The successes reinforced worldviews and contributed to the maintenance of an essentially Eskimoan way of life.

Until the imposition of government and government-backed agencies, Historic Inuit societies continued to direct their own affairs. The "Government Era," or more accurately, the "Government Eras," began at different times in different places, and resulted in the destruction of Inuit corporate autonomy. On the Atlantic coast of Labrador, Historic Inuit experienced an almost continuous European presence from as

early as the beginning of the eighteenth century, and had effectively lost control of their collective self-direction by the 1770s, as was also the case in Greenland. In other parts of the arctic the timetable varied, as did the responses with which Inuit societies attempted to deal with the presence of non-Eskimo societies and individuals.

Until the first decade of the twentieth century, Inuit made many superficial changes to their economic and social systems, but few transformations in the Braudelian sense. Events in both physical and social environments after 1915 made it clear that the successful strategies of the past were no longer capable of sustaining an old way of life in the face of new realities.

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Therefore it is that our fathers have inherited from their fathers all the old rules of life which are based on the experience and wisdom of generations. We do not know how, we cannot say why, but we keep those rules in order that we may live untroubled.

-- Aua, at Lyon Inlet (Rasmussen 1929:56)

INTRODUCTION

In 1266 or 1267, on the west coast of a great, ice-capped island, two parties of hunters -- one from the north and one from the south -- met. The northerners were Thule Eskimo and in later centuries they called the island Kalaallit Nunaat, Land of the People. The southerners were Norsemen, and they called the island Greenland. Both groups were newcomers to the island. The Thule were the descendants of whale hunters who began to move across the North American arctic around AD 900 in a major migration that took them from Alaska to Greenland in the course of two centuries. By AD 1200 they had reached as far south as Disco Bay on the west coast of Greenland. The Norse Greenlanders were the descendants of Icelandic immigrants who had established farms along the fjords of southwest Greenland during the preceding two and a half centuries. To supplement the poor harvests of their farms, they hunted as far north as Disco Bay (G. Jones 1964b:8; G. Jones 1968:294, 308; McGhee 1981:45). Two sentences in *The Annals of Greenland* recorded all that the Norsemen could say about the arctic people.

Toward the North, hunters have found some little people whom they call Skrellings; their situation is that when they are hurt by weapons their sores become white without bleeding, but when they are mortally wounded their blood will hardly stop running. They have no iron at all; they use missiles made of walrus tusks and sharp stones for knives (In Oswalt 1979:17).

Nothing of note was added to European knowledge about the arctic inhabitants of Greenland and North America until the second half of the sixteenth century. As the number of trans-oceanic voyages for exploration and harvesting of the resources of the western Atlantic increased, western European states and corporations, motivated by desire for information which would be commercially or strategically useful, showed intense interest in the indigenous peoples of North America (Chesire et al 1987:25). The physical and cultural characteristics of arctic inhabitants were of particular concern: proof that they were Asian would support the still current belief that America and Asia were one continent. Their knowledge was equally important:

after all, who but the inhabitants could be reliable sources of information on the geography of the country and the location of a possible northern sea route to the Orient? and who else might serve as potential allies in the exploitation of their country's mineral wealth? The only thing lacking was a mutually intelligible means of communication. Captains and crews heading for the arctic were therefore instructed by their sovereigns and masters to make careful verbal and pictorial descriptions of indigenous people, and to bring representatives to Europe when possible.

In 1566, the crew of a French vessel visiting the coast of Labrador seized a woman and child, who were displayed at fairs in Augsburg, Nuremberg and Frankfurt the following year. The handbill advertising the exhibition summarized current popular beliefs about America's most northerly inhabitants.

This woman with her husband and little child were met by the French ... and the husband was shot through his body with an arrow.... Finally he was struck and wounded in his throat so severely that he fell to the ground and died from this wound. This man was 12 feet tall and had in twelve days killed [twelve] people with his own hand, Frenchmen and Portuguese, in order to eat them,... They took the woman with her child and brought her away; and none of the Frenchmen could understand a single word of hers or speak with her at all (In Sturtevant 1980:48-50).

Other men, women and children from Greenland, Labrador and Baffin Island were carried across the Atlantic by whalers, fishermen, and explorers in the two and a half centuries which followed. Kidnapping was the usual means by which they were taken, but some were willing, even eager, visitors and were treated well by their hosts. The European scientific community studied their clothing, customs, and language, and autopsied their bodies when they died, as many did (Sturtevant & Quinn 1987); impresarios exhibited them at widely advertised fairs for the entertainment and education of the general populace (Malcolmson 1973:21); and a few sympathetic ship's captains taught them to read and write, presented them at court, showered them with gifts, and gave them safe passage back to their homes (McDonald 1841).

In spite of the numbers who arrived, one way or another, in Europe and the southern half of North America during the eighteenth and nineteenth centuries, and the intense observations they were subjected to, little was added to the few facts and many misconceptions recorded in the Nuremberg handbill beyond descriptions of their physical appearance and their styles of clothing, weapons and housing. They were understood to be hunters of marine mammals, and were judged to be highly skilled at paddling, harpooning, and sewing. It was widely believed that they practised cannibalism, infanticide, senilicide, and polygamy, and loaned their wives to visitors. Until the second half of the twentieth century, almost nothing was known of their political and social organizations, their territorial and ethnic divisions, their trading systems, and their external affairs. Least of all was there any understanding of their origins or history.

Official interest in arctic regions rose and fell with the perceived importance of the north to governments and commercial interests. The transfer of arctic regions to the Canadian government after 1867 was one such occasion. An expanded Geological Survey of Canada set about taking inventory of the newly acquired possessions. Government geologists were instructed to gather ethnographic material but the people of the region were of much less interest than its mineral and other riches. Fears that Canada might lose control of its arctic territories and their wealth potential increased as large numbers of American whalers and traders entered the Beaufort Sea, Davis Strait, and Hudson Bay in the 1870s, and foreign, that is, non-British, traders and explorers planted their stations and their flags on the surrounding lands. The Canadian government established police posts, and created offices for the administration of northern territories. The official responses were symbolic; none amounted to effective occupation or supervision of either territory or inhabitants (S.D. Grant 1989; D. Jenness 1964, 1968; MacKinnon 1989; W. Morrison 1987).

While government made gestures toward confirming its territorial rights in the north, the people of the Canadian arctic had become a matter of official indifference. Nineteenth century British and American explorers produced a substantial body of ethnographic literature for popular consumption, but no systematic attempts were

made to understand Eskimo social or political institutions until the 1880s when the German Polar Expedition began gathering geographical and environmental information on Baffin Island. Franz Boas, a recent doctoral graduate specializing in physics, mathematics and geography, was a member of the expedition from June 1883 to August 1884. His publications, *The Central Eskimo* (1888) and *The Eskimos of Baffin Island* (1901), were based primarily on observations made during that year. In 1883-85, the ethnologist Gustav Holm was a member of the Danish Polar Expedition to east Greenland. His observations were published in 1888, with an English edition being released under the title *Ethnological Sketch of the Angmagsalik Eskimo* in 1914. Although the studies were ground-breaking in their attempt to understand Eskimo social organization, they reported observed conditions, with no time depth and no attempt to trace or to explain historical events.

The next serious effort to study the people of the Canadian arctic was made by the ethnologist Vilhjalmur Stefansson, who though Canadian-born held American citizenship, and the zoologist Rudolph M. Anderson, also an American. The Stefansson-Anderson Expedition of 1908-12 was a joint venture sponsored by the American Museum of Natural History and the Canadian Geological Survey. Canadian government participation had nothing to do with concern for or interest in the indigenous people; it was a sovereigntist reaction to the presence of Americans on poorly secured territory. In 1913, Stefansson found backers for a new and larger expedition to the Alaskan north slope and the western arctic coast of Canada: the National Geographic Society, the American Museum of Natural History, and the Harvard Travellers' Club, all American agencies. Concerned that an American-sponsored expedition might compromise Canadian sovereignty in the arctic, Prime Minister Robert Borden arranged for his government to underwrite an official Canadian Arctic Expedition on condition that any previously unknown lands or islands must be claimed for Canada, rather than the United States (S. Jenness 1991:xxx).

In 1921, the Danish-Greenlandic explorer, adventurer, and ethnographer, Knud Rasmussen, undertook a three year expedition funded by private subscription to survey the entire arctic from Greenland to Alaska. The investigations of the Fifth

Thule Expedition of 1921-24 resulted in major collections of artifacts and folklore, and more than a dozen volumes of botanical, geographical, zoological, meteorological, and ethnographic observations. It did not frighten Ottawa's politicians or the Canadian public the way earlier forays into the arctic had done partly because by 1921 some of the symbols of Canadian sovereignty in the arctic were in place, and partly because Rasmussen and his party were not American.

The influx of American military personnel and money, the discovery of uranium deposits, the decision to build the Alaska Highway and pipeline, the presence of the United States Strategic Air Command, and the building of the Distant Early Warning and Mid-Canada Lines during the Second World War and the Cold War years raised the old spectre of threats to Canadian sovereignty. During the same period, aboriginal peoples in the United States and southern Canada began to make claims to lands and resources which governments had regarded as publicly owned. For the first time, Canadian intellectuals in large numbers began to take an interest in arctic peoples.

New research fields opened up in several academic disciplines, primarily in physical, or biological, anthropology, cultural anthropology, and archaeology. Physical anthropologists tackled problems of the distant past related to the origin of arctic racial groups. Their studies established the Asian origins of Eskimoan peoples prior to the third millennium BC, and used biological and genetic evidence to create 'family trees' showing their ancestry and affinities. Linguistic studies have tended to support the genealogies.

Archaeological studies by the dozen were sponsored by the Geological Survey of Canada and the Archaeological Survey of Canada, and by other public and private institutions in Canada, the United States, Britain, and Denmark.¹ As descriptive

¹For authors of some of the many studies done, see Bibliography under Bird, Clark, Collins, Dumond, Fitzhugh, Gordon, Harp, Hickey, Linnamae, Maxwell, McCartney, McCullough, McGhee, Meldgaard, Morrison, Nash, Savelle, Schledermann, Speiss, W.E. Taylor, J.V. Wright, Yorga. A few of the institutions
(continued...)

reports of sites in Alaska, Canada and Greenland accumulated, the time sequences and relationships between arctic sociocultural complexes between 3000 BC and AD 1700 were developed and refined. After considerable debate, most archaeologists agreed that the Eskimoan peoples of North America and Greenland were descended from Asian immigrants who expanded into North America and occupied the lands north of the treeline following the retreat of the last icesheets in the third millennium BC. Their conclusions fit with those of physical anthropologists and historical linguists.

Archaeology's main interpretive model for arctic societies has attributed both change and continuity in human history over the long term to environmental influence. Change has been seen as the result of necessary adaptations to altered environmental conditions in a cause and effect relationship, while continuity has been explained as the result of limited choices imposed by environmental constraints. The materialist base of the archaeological model derives from the nature of archaeological evidence, which is artifactual, accidental, and selected. Material culture, subsistence activities, chronology and demography can be described on the basis of the evidence, and change can be identified, but little can be concluded about the motives, meanings and state of mind of human beings either as individuals or as communities.

Robert McGhee's paleo-histories (1972a, 1974b, 1978) provide thorough syntheses of archaeological studies and conclusions for the pre-1700 period. Ernest S. Burch's studies of the seventeenth century origins of the Caribou Eskimo (1978, 1979, 1986) are detailed and comprehensive. Burch's use of artifactual, documentary, linguistic, oral, and environmental evidence serves as a model for future in-depth studies. Paleohistories based on archaeological investigations of limited geographical regions include examination of west Hudson Bay (McCartney 1977) and the western arctic coast (D. Morrison 1983a, 1988, 1990), and a series of

¹(...continued)

that supported archaeological research were The Arctic Institute of North America, the National Museums of Canada, the Royal Ontario Museum, the Smithsonian Institution, the American Museum of Natural History, Meddelelser om Gronland, and various universities.

studies of pre-nineteenth century Labrador peoples (Fitzhugh 1972, 1977; Kaplan 1984, 1985; J.G. Taylor 1974b, 1976, 1980, 1984).

Most of the hundreds of published studies of arctic peoples from social and cultural anthropologists have been descriptive of contemporary societies. Based on the frequently narrow focus of participant observers and collected emic data which is coloured by the ethnocentric opinions of both informants and observers, the conclusions of such studies are necessarily subjective. In an attempt to reduce the bias inherent in its evidence, anthropology as a discipline developed a methodology which tested field data against preconceived explanations. One of the results was a widespread assumption that chronology was unimportant because non-Western peoples were controlled by 'tradition,' that is, habits of thought which persisted unmodified over long periods of time, and ensured the stability of economic and social organization. Denial of internally motivated change necessarily stresses continuity, and limits explanations of change to contact situations, mainly those which involved a non-aboriginal presence.

Anthropological activity in the Canadian arctic since the 1960s has produced a vast body of literature characterized by 'thick description' and broadly general conclusions about the nature of Inuit society. The Arctic volume of the *Handbook of North American Indians* (ed. Damas 1984) summarized anthropological research and conclusions of work prior to 1984 in chapters by Eugene Arima, Asen Balikci, David Damas, William B. Kemp, Guy Mary-Rousselière, and Bernard Saladin d'Anglure, among others.

More narrowly focused work includes the studies of Guy Mary-Rousselière (1959, 1976, 1979, 1991) which combined oral sources and archaeology to sketch in some of the migrations of Baffin Island people in the nineteenth century; and histories of commercial whaling and its effects on specific arctic communities by Samuel Robinson (1973) and W. Gillies Ross (1975, 1977, 1979).

Between the temporal focus of the paleostudies, (that is, from genesis in the third millennium BC to AD 1700), and the contemporary period which anthropological fieldwork seeks to illuminate lies a 250-year interval which remains

largely undescribed and unexplained. This gap can be at least partially filled by researches based on the 'historical' approach. History, as the study of the human past, differs from both archaeology and anthropology in the kinds of evidence it uses, and in its philosophical approach. Archaeology must, of necessity, depend entirely on material evidence and etic interpretation. Anthropology tends to place a high value on emic evidence, and struggles to reconcile the contradictory subjectivities of informants and researchers. Ideally, the historical approach uses evidence from archaeology, material culture, oral sources, eyewitness reports, linguistics, and folklore to produce a chronological narrative of known events, suggests particularist interpretations which encompass both emic and etic explanation, and attempts to place them in specific temporal, geographical, and sociocultural contexts.

Almost no attempts have been made to produce narrative and explanation using historical research methods or theories. The primary reason is that historians assumed an absence of sufficient documentation. In spite of Raymond Fogelson's comment, made to a gathering of ethnohistorians, that "an understanding of non-Western histories requires ... an expanded conception of what constitutes documentation" (Fogelson 1989:134), and examples of aboriginal histories based on a wide range of evidence taken from many disciplines (e.g. Russell 1991; Trigger 1969), many historians continued to believe that where written records did not exist (or were thought not to exist), there could be no evidence.

Until the mid-1960s, there was good reason to doubt the existence of adequate documentation. Since then, however, many more documents have been available. The journals, letters and logs of British traders in the arctic since 1700 were made fully accessible through the opening of the Hudson's Bay Company Archives to researchers. The diaries and memoirs of most arctic explorers between 1700 and 1900 have been published or reprinted in the last twenty years, including translations of works originally written in German, French and Danish. Researches into specific topics, such as the arctic whaling histories of W. Gillies Ross, have resulted in bibliographies which are nothing short of finding aids to the great mass of documents held in dozens of small whaling museums in New England and Scotland. Along with

the reports of the Geological Survey of Canada, the Stefansson Expedition, the Canadian Arctic Expedition, and the Fifth Thule Expedition, the newly accessible documents constitute an abundance of primary materials.

It is important to recognize that the primary material is overwhelmingly etic, witnessed and recorded by outsiders. Except for a very few snippets of oral history recorded by observers, and the evidence of language and folktales, Eskimo individuals and communities have had almost no opportunity for participation in the recording and interpretation of their history. The major ethnographic expeditions between 1905 and 1924 recorded a huge mass of Inuit oral literature, but the vast bulk of it remains untranslated, unedited, and unanalyzed. Work on Yup'ik and Inupiaq oral literature and histories has begun at the Alaska Native Language Center, University of Alaska, but much transcription and editing remains to be done. Leah Minc's (1986) examination and analysis of orally transmitted information and mythology is the first study which allows Eskimo-Inuit voices from the past to be heard, and stands as a methodological model for further research. While Minc's studies have been based on Alaskan folktales, all of them have counterparts in Canadian and Greenlandic oral literatures.

Many theories suggesting why societies change have been advanced. Catalysts for change have been identified as: environmental pressures (Bryson & Murray 1977; Claiborne 1970; Lamb 1972, 1982, 1988; McGhee 1972b); the discovery of new resources and the creation of new technologies (Bernard & Pelto 1972; Burke 1985; Crosby 1972, 1986); contact between societies, both peaceful and violent, and the subsequent introduction of new ideas (Helm 1968); the internal emergence of new religions and ideas through the influence of charismatic leaders (Mary-Rousselière 1991); and the natural human urge to satisfy particular needs within specific environments (Fischer 1981; Maslow 1973; W.E. Taylor 1963, 1966). Theories which explain how societies change also abound, including hypotheses about optimal foraging (Nudds 1988; Winterhalder 1981), time-stability (Hardesty 1980), evolutionary ecology (E.A. Smith 1991), and cultural ecology (Binford 1978; Hodder 1986; Steward 1955).

Comparative studies which both generate and test theories of change and continuity have appeared in collected works dealing with the meanings of war (ed. R.B. Ferguson 1984), the range of economic strategies (eds Halstead & O'Shea 1989; eds Halstead et al 1984), the causes and implementation of migration and abandonment of territory (eds Cameron & Tomka 1993), the social uses of information (eds Miracle et al 1991), and social strategies for ensuring survival (eds Laughlin & Brady 1978).

All of the above theories have been used in studies of social and cultural change around the world. A Canadian archaeologist has suggested why the application and testing of social theories against the human history of the arctic might be useful.

Many of us feel that because of the nature of [the arctic's] environmental constraints and the necessarily limited scope of human biocultural adaptive response, much can be learned here about general cultural processes and systems, at least among hunters, from data not available in more temperate regions (Maxwell 1976:1).

The comment suggests that arctic human history has been played out on a stage which narrows the number of options open to the players, and in harsh physical conditions among small human populations there are fewer variables which complicate both narrative and explanation in the histories of peoples with greater numbers of individuals and a wider range of choices. There is some truth to the remark. Historical study of one part of the circumpolar world may cast light on how small societies respond to particular stimuli, and on the forces that impel change over both the *longue durée* and the short term. The comment is, however, somewhat naive in its denial of human free will, its assumption that variables of both physical and human environments can be identified and controlled, and in its assumption that human actions are governed by external forces to the extent that they can be predicted, provided the laws of human behaviour are discovered.

Another view suggests that the North American arctic offers unusual opportunities for the study of long-term social and demographic change because it is one of the few places in the world where

prehistoric and historic populations can be linked with a high degree of reliability. This linkage makes it possible to trace developments within a specific region or cultural tradition over comparatively long periods of time. This is true in particular of the Eskimo area east of Bering Strait, where the Thule people of a thousand years ago are known to have been the direct cultural and biological ancestors of all historic Eskimo populations (Burch 1979:190).

The suggestion implies that social change is to some degree mechanistic, but recognizes that primary forcing factors are not always or necessarily introduced through contact with other societies. In other words, historical change can and does take place through individual and collective self-direction in so-called cold societies.

Societies in the central Canadian arctic in the period from 1700 to 1940 are well suited to investigations of social change. In the absence of a pervasive and permanent European presence and attempts by outsiders to create neo-Europes in the arctic, Inuit social, demographic, and economic change was self-directed. At the same time, during brief periods of observation in the central Canadian arctic, eyewitnesses produced a body of documents large enough to serve as a base for a straightforward narrative of events and to identify broad patterns of change.

Some discussion of collective naming practices and the assignment of social units to ethnic categories is necessary. Considerable debate has taken place among scholars and in the popular media in the past twenty years on the origin and meaning of the word 'Eskimo.' European visitors to the lower St Lawrence and the Labrador coast learned the word from the St Lawrence Montagnais, and it first appeared in English print in Richard Hakluyt's treatise of 1584 which described the aboriginal people of 'graunde bay' as 'Esquimauwes.' A case can be made for its origin in the Montagnais *ayaskime*, or the proto-Algonquian *ayacimew*, both of which mean 'snow-shoe netter' (Goddard 1984:6; Mailhot 1978:65). In spite of popular misconception, the linguistic evidence does not support the notion that 'Eskimo' is derived from any word or combination of root words meaning *raw*, *meat*, or *eater* (Goddard 1984:6).

Prior to the emergence of a Pan-Eskimo movement in the 1970s, indigenous arctic people of Eskimo ancestry and language did not use any designation which included all of them. Many societies did not use ethnic designators at all, and when

they did it was to identify local groups of co-residents, usually in terms of territory and resources, for example, *Aivilingmiut*, People of the Walrus Place, and *Napartormiut*, People of the Tree Place. The self-designations were highly flexible, and seldom implied self-conscious ethnic or sociopolitical identity.

All Eskimoan languages and dialects contain a word, such as yup'ik, yuit, inuit, or inupiaq, which means "authentic people", (that is, real persons), and which served to differentiate them from their non-Eskimoan neighbours, who, in Eskimo cosmology, were not fully human. While they might look like human beings, Eskimo worldview assigned all people (that is, persons) except Eskimos to subhuman categories (Burch 1988b:13). While the generic terms translate into English as person (singular) and people (plural), they refer to *persons* as individuals, not to *peoples* as nations or ethnic communities.

In West Greenland, people of Eskimo ancestry have for centuries called themselves *Kalaallit*, a word apparently deriving from the Old Norse *skraelingar* (Thalbitzer 1904:36). With the emergence of Greenlandic nationalism, the word has come to be applied all Greenlanders of Eskimoan ancestry.

In western Alaska, the self-designation of Eskimoan people "has always been, and remains to this day, Yup'ik, from the base *yuk*, person, plus *-pik*, genuine or real, hence 'a real or genuine person'" (Fienup-Riordan 1990:5). Within the group of Yup'ik-speaking societies are subgroups who accept Yup'ik as a general designation but also retain ethnic identifiers for local groups, such as Yupigit on St Lawrence Island and Yupiit in southwest Alaska (Armstrong & Brody 1978:178).

In the 1970s, in response to the demands of various Canadian Eskimo political groups, the name 'Inuit' began to be more commonly used in Canada. In 1977, at the suggestion of Canadian Inuit delegates, the Inuit Circumpolar Conference "officially adopted Inuit as a designation for all Eskimos, regardless of their local usages" (Goddard 1984:7). However, the use of the term to include peoples outside of the Canadian central arctic, and of some people within it, is inappropriate and incorrect. It is also ahistorical when used to refer to most Canadian arctic peoples prior to the

second half of the twentieth century. 'Inuit' has until recently been used only by Eskimoan-speakers of West Greenland and eastern Canada, and was never a proper noun. As a proper noun, it "is properly applied only to the Canadian Eskimos.., (but excluding the Mackenzie Delta Inuvialuit)" (E.A. Smith 1991:xix). The Committee for Original Peoples' Entitlement has explicitly rejected the appellation 'Inuit' to designate the Inuvialuit of western Canada (Armstrong & Brody 1978:178). Other Canadian western arctic people, for instance, the Holman Islanders, have also rejected the term 'Inuit,' and continue to identify themselves as 'Eskimo.' Western Alaskans reject the use of 'Inuit' as an ethnic category on the grounds that they belong to the Yup'ik-speaking, not the Inuit/Inupiaq-speaking, branch of the Eskimoan linguistic family.

In northern Alaska, 'Inupiaq' is the preferred term, both for the people and their language. Since 1977, in a spirit of Pan-Eskimo cooperation following the Inuit Circumpolar Conference, the Inupiaq have increasingly used a hyphenated construction, 'Inuit-Inupiaq,' in verbal and written communications intended for international audiences. Locally they continue to identify themselves as Inupiaq.

Siberian Eskimo groups identify themselves locally as Chaplinski and Sirenikski, and collectively as Yuit, Yugyt, or Eskimosy (Armstrong & Brody 1978:178).

'Eskimo' continues to be used by Greenlanders, Yuit, Yup'ik and Inupiaq, as an overall designation for all Eskimoan peoples. In scholarly studies, the word identifies an ethno-linguistic category which includes Inupiaq-Inuktitut and Yupik speakers (E. Smith 1991:xix), as well as societies which "cannot specifically be affiliated with either language group" and which antedate the Historic Inuit period (D. Morrison 1992:7). It is the only word which identifies precisely who is included and who is excluded. It includes all the peoples of the circumpolar arctic who share certain genetic, linguistic, and cultural characteristics, their ancestors and their descendants, and it specifically excludes everybody else (Heinrich 1980:205; D. Morrison 1983a:2).

Physical anthropologists have identified a complex of genetically connected social groups among circumpolar peoples. The Dendrogram of Genetic Affinities at the end of the chapter presents the genetic connections of Eskimoan peoples in simple visual form. The table uses selected genetic characteristics of circumpolar peoples to illustrate the degree of relationship between groups. By comparing the relative number of biological traits held in common by different groups of people, it shows genetic distance from a common ancestor. Genetic comparisons indicate that Siberian Eskimos, St Lawrence Islanders and Reindeer Chukchi are all descended from the same biological ancestors. However, the branch of the family tree which led to the Reindeer Chukchi shows more genetic differences than the branch which gave rise to the other two groups (Szathmary 1984:71).

Linguistic studies have identified a now extinct language, Proto-Eskimo-Aleut, whose descendants are the Eskimo and Aleut language families. The Aleut branch consists of a single language, spoken in the Aleutian Islands. The Eskimo branch has divided into two major branches, Yup'ik (also called Yuit or Asiatic Eskimo) and Inuit-Inupiaq. Yup'ik today consists of three separate languages, one in Siberia (Chaplinski), and two in Alaska (Central Alaskan Yup'ik and Alutiiq). The Alaskan Yup'ik languages each have several dialects.

Inuit-Inupiaq is the language of the north coast of Alaska, the Canadian arctic, and Greenland. Alaskans call it Inupiaq, Canadian speakers call it Inuktitut, and in Greenland it is known as Kalaallit. Each has major dialects and many subdialects. The dialects of Inuit-Inupiaq are, at least in theory, mutually intelligible (Dumond 1977; McGhee 1978; Woodbury 1984. And see Genealogy of Eskimoan Languages at the end of the chapter).

Aside from denying the self-designations of the Inuvialuit and of all non-Canadian Eskimos, the term Inuit is inadequate to describe the genetically and culturally related social groups who hold different nationalities. Its use also denies history. The first Eskimoan people, that is, people who had an Eskimoan way of life, emerged from an Asiatic Mongoloid ancestry in Siberia. They brought their arctic-adapted lifestyle to North America at least 4000, and possibly 5000, years ago. From

them developed a number of cultural complexes that succeeded one another, and that were, to greater and lesser degrees, either culturally or biologically similar. In 1977, the Joint Project of the National Museums of Canada and the School of American Research adopted the term 'paleoeskimo' to refer to all arctic occupations between 3000 BC and AD 1000. In the context of the Canadian arctic, all the cultural complexes subsumed under the term, including the Arctic Small Tool tradition and the Dorset, were culturally Eskimoan (Maxwell 1976:4). Shortly before AD 1000, the Dorset disappeared during the advance across North America of an invading people from Alaska, the Thule, also biological and cultural descendants of the Asiatic Mongoloid. They have been identified as the first of the Neo-Eskimo peoples. The Eskimoan peoples of Siberia, the Aleutian Islands, Bering Strait, and Alaska experienced similar histories. The only words that adequately subsume all the arctic peoples of the past, as well as all the related contemporary societies in Siberia, Alaska, Canada, and Greenland are Eskimo and Eskimoan (McGhee 1978:14).

While it is inappropriate to use the term Inuit to describe early Thule peoples and the social groups noted in the preceding paragraph, there appears to be no sensible reason not to use it in discussions of the inhabitants of Greenland and the Canadian eastern and central arctic since the seventeenth century. The problem of naming is, however, complicated by the increasing use in both scholarly and popular works since 1970 of the designations 'Historic,' 'Recent' and 'Modern' Inuit to identify post-Thule peoples.

The differences between Thule and Inuit societies are clear. The Thule people of arctic Canada and Greenland were coast dwelling whaling people who occupied relatively large, permanent winter villages. During the fifteenth, sixteenth and seventeenth centuries, the Thule peoples of what are now Greenland and the central and eastern Canadian arctic made enormous changes in their subsistence economies, territories, and sociocultural institutions. Their descendants of the eighteenth, nineteenth and twentieth centuries were, and are, so different from their ancestors, that they must be recognized as a new people. These people are appropriately called Inuit.

While most work on arctic peoples hints at a distinction between Historic and Recent-Modern Inuit, the differences have never been clearly stated, and the designations have not been defined. General meanings are, however, implicit in the way the terms have been used. 'Historic Inuit' most often refers to societies in which economic, demographic, social and cultural change was self-directed. 'Recent Inuit' and 'Modern Inuit' are most often applied to people who experienced change through the coercive efforts of a permanent foreign presence, and who have, since the early 1970s, been searching for ways to reclaim autonomy. A few studies have used the term 'Government Era' to refer to the period of imposed change.

The purpose of this dissertation is to create a synthesis of the evidence of archaeological, ethnographic, linguistic, and climatic research, with accounts of non-aboriginal observers and the oral histories of arctic people to construct a narrative history of the Canadian Inuit from 1700 to 1940, and to attempt to explain the patterns of that history. The explanations are historical, that is specific to particular situations, rather than aspects of an overarching model with broad applicability to other situations.

With respect to sources, emic, that is, insider descriptions and explanations of events have been included whenever they are known. The evidence of Inuit historians and oral sources, however, have frequently fallen victim to cross-cultural misunderstanding which has seriously distorted information even in good-faith exchanges between givers and receivers. Some degree of misunderstanding and distortion is inevitable because of bias on the part of both observer and informant. As a recent discussion of historical methodology pointed out,

Human beings are born into a group which provides answers to the first and most basic questions they pose about life. Few outlive the impress of that first organization of consciousness. Hence, ethnocentrism is common to all folk (Appleby et al 1994:307).

Some non-Inuit observers and eyewitnesses, because of their pre-existing views of the world, simply could not grasp the logic of what they were told or comprehend the practicality of what they saw. Informants also occasionally failed to see that their

explanations did not match reality. Ideology, after all, is created expressly in order to make reality more palatable. The emics of mental life, that is, what insiders say they believe, is sometimes different from what they actually do (M. Harris 1990).

A second source of misunderstanding was the lack of a mutually intelligible system of communication. Inuktitut is an extremely complex and sophisticated language, and it differs in all fundamentals of grammar and conceptual ordering from European languages. Vilhjalmur Stefansson, who became fluent enough to understand ordinary conversation only after five years of living where nothing but Inuktitut was spoken, claimed that a European could more easily learn Russian, Swedish, French and Greek than Inuktitut. Most non-Inuit explorers and ethnographers who left accounts of Inuit life were linguistically incompetent, in spite of the claims some of them made to the contrary. Hudson's Bay Company traders who spent years in the arctic gained a surer knowledge of the language, but few reached levels of understanding at which they could discuss ideological or philosophical ideas. Inuit interpreters had an equally inadequate understanding of English, and some of them had trouble with unfamiliar Inuit dialects as well.

A third reason for misunderstanding is that among Eskimos and Inuit, as among many other peoples, asking direct questions is, under certain conditions, considered an invasion of privacy. Many ethnographers have innocently recorded false information, deliberately given by informants. What the informants were doing was 'telling a whopper' in order to teach the questioner, through shaming, that nosiness is disrespectful and rude. When the ethnographer does not understand this, she or he may accept as true those explanations which the informants think are so obviously ridiculous that no one could possibly believe them. In short, many ethnographers, including amateurs like the arctic explorers and professional anthropologists, may not have understood that their informants were delivering reprimands or attempting to 'teach' the culture. As a result of such misunderstandings, fieldworkers have on occasion concluded that their informants either did not know what they were talking about, or were liars. Ann Fienup-Riordan described the process as she saw it happening during field work with the Yup'ik.

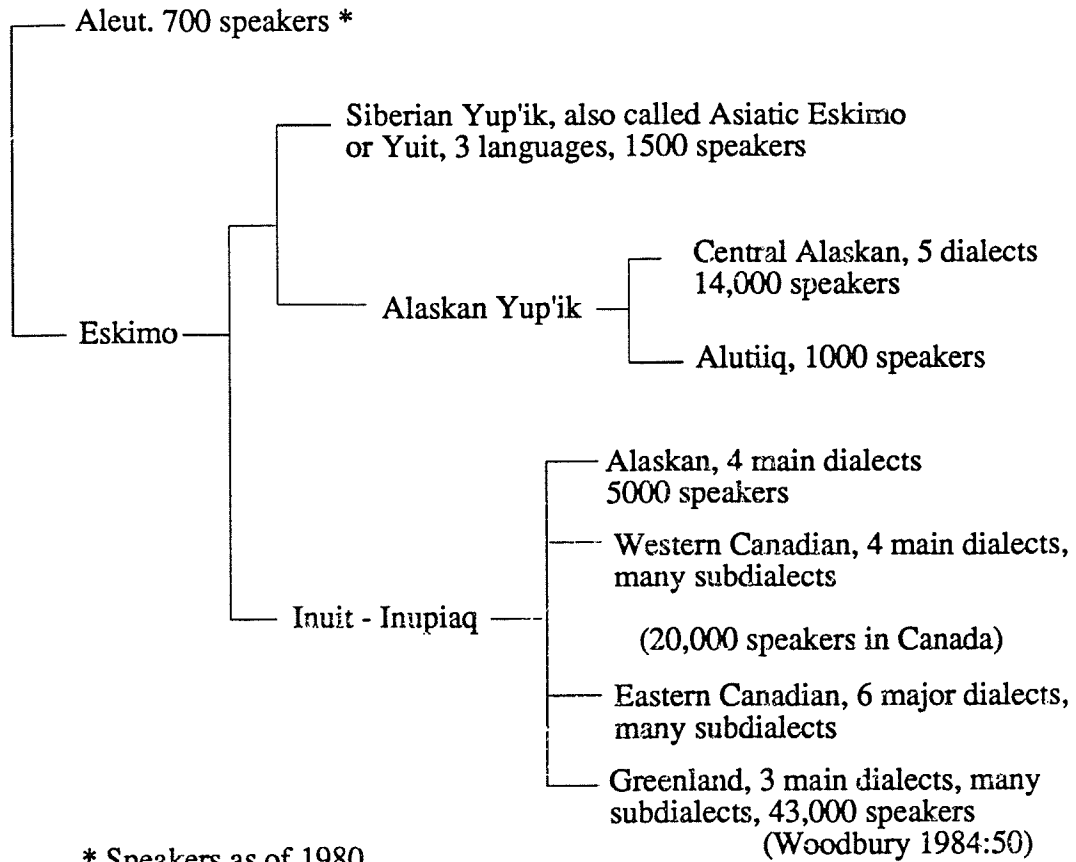
I had asked about naming procedures, just as I had asked about pregnancy taboos, but with little solid response. I was made to feel acutely nose-y. And, in fact, part of the message of this story is how little progress one can make in understanding the coastal Yup'ik people if one confines oneself to information acquired through a questionnaire approach. It certainly never worked for me, and in fact my best friends used to lie to me, in a good-natured way, to show me how foolish and misguided my occasional bouts of verbal curiosity were. Watching and listening, however, were different matters (Fienup-Riordan 1990:44).

My own experience was similar. During the ten years in which I lived in Inuit communities, some of my acquaintances were willing to attempt my education by the methods I was accustomed to, that is, they simply answered my questions and corrected me when I got things wrong. Many, however, preferred to teach by putting me in situations where, they thought, I could see for myself. The assumption that observers were always capable of understanding, made by many Eskimo and Inuit teachers and informants over the centuries, was charitable and flattering, but perhaps not always realistic or wise.

The difficulties of understanding and teaching were summed up by Ikinilik, a man from the Great Fish River (Rasmussen 1931a:501). Having done his best to explain his views on how the physical and metaphysical realms worked, he concluded by recognizing that self-knowledge, like other kinds of knowledge, is clouded by subjectivity, and that all transmitted knowledge is inherently imperfect.

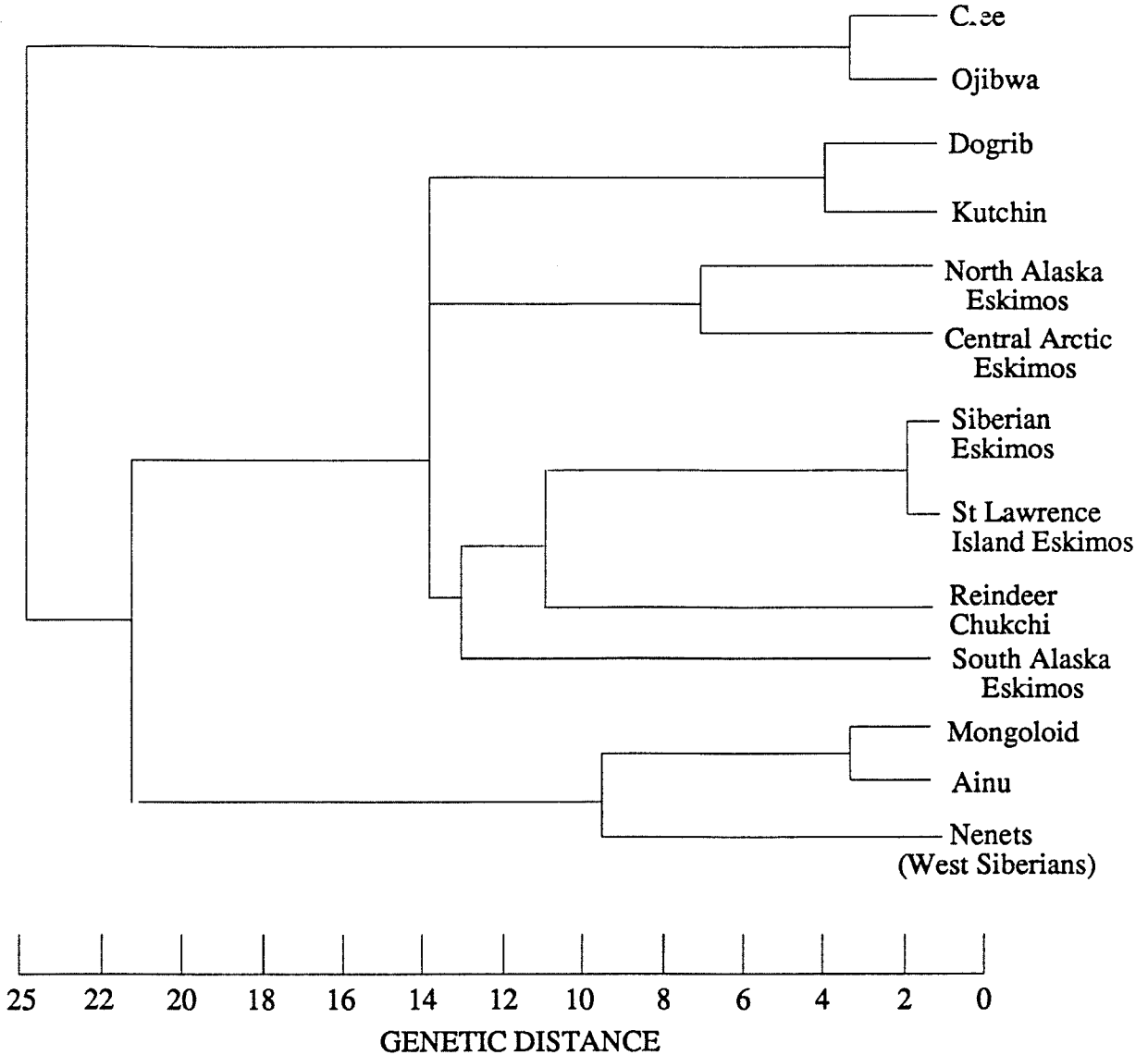
Of course it may be that all I have been telling you is wrong. For you cannot be certain about a thing you cannot see. And people say so much.

GENEALOGY OF ESKIMOAN LANGUAGES



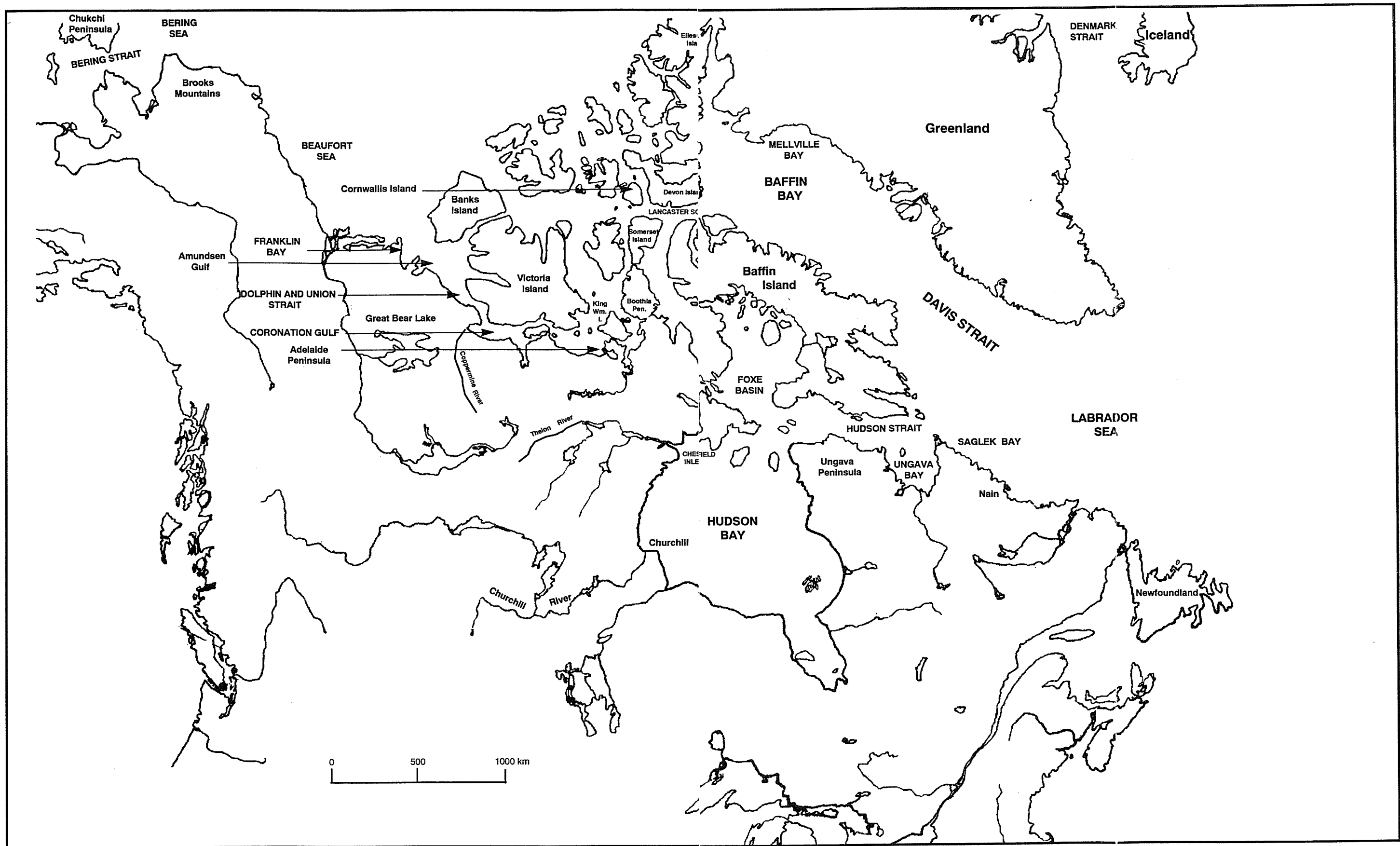
* Speakers as of 1980

DENDROGRAM OF GENETIC AFFINITIES



(After Szathmary 1981:66; 1984:70; 1985:98)

The dendrogram is a visual representation which uses an arbitrary linear scale to express the relative degrees of genetic affinity between groups, that is, the extent to which populations share genes. The 'distances' used in the dendrogram cannot be expressed in number of years or number of generations. They are simply a way of showing the extent to which groups share genetic traits. "The smaller the 'distance' the greater the genetic similarity" of the groups in question (Szathmary 1985:96). North Alaskan and Central Arctic Eskimos, for example, have more biological characteristics in common than either has with Siberian or St Lawrence Eskimos. There are, however, more genetic affinities among Eskimo groups than there are between the Eskimo groups and the Algonquians (Cree and Ojibwa). "Amerindians and Eskimos share genes that are indicative of an Asiatic origin. These genes occur presumably by virtue of common descent from the Asiatic populations that gave rise to the Americans" (Szathmary 1985:91-92).



CHAPTER 1

HUMAN HABITATION OF ARCTIC NORTH AMERICA TO 1550

Hard times, dearth times plague us every one. Stomachs are shrunken, dishes are empty.... Now is abundance with us once more. Days of feasting to hold us together.

-- Tuglik, at Lyon Inlet, 1922 (Rasmussen 1929:41-42)

The icesheets which covered most of the North American arctic throughout the last great ice age melted, shrank, and except for a few remnants, disappeared between 7000 and 6000 BC (Dumond 1977). Some time during the next millennium, human beings began to use and occupy the ice-free barren lands east of Great Bear Lake (McGhee 1990:667). They were a Paleo-Indian, caribou-hunting people whose material remains are similar to those of contemporary inhabitants of the Central Plains. On the basis of their scant remains, arctic archaeologists have speculated that they used the tundra barren lands on a seasonal basis, following the caribou herds north in the summer, and retreating to the forest for the winter. The available evidence does not allow precise dating of the occupation, but Paleo-Indian use of the area probably lasted between two and three thousand years, ending some time after 3000 BC (Noble 1971; Irving 1968a; McGhee 1972b, 1990; Harp 1961).

The disappearance or withdrawal of Paleo-Indian people from the arctic can be linked in time to climatic changes associated with the onset of a new climatic regime around 3000 BC. By 2500 BC, when the last icesheets had disappeared from the tundra (Dumond 1977), so had the Paleo-Indians. The two millennia which followed, identified as the Sub-Boreal Climatic Episode, were characterized by warming periods and alternating intervals of increased cold and precipitation, glacial advance, expansion of tundra areas, and significant declines in animal populations (Dekin 1972:15; Lamb 1982:121-22; Lamb 1988:87).

Arctic Small Tool Tradition

By 2000 BC a new people who were neither biologically nor culturally descended from Paleo-Indians had replaced them. The newcomers were the first people to occupy the barren grounds year-round, and the first who were fully adapted to arctic conditions and dependent on tundra resources (D. Anderson 1968; McGhee 1974a:172; McGhee 1990). The name assigned to them, Arctic Small Tool tradition (ASTt), is descriptive of their exquisitely crafted microblade technology, which distinguishes them from earlier and later peoples.

Analysis of their human remains has shown that they were Arctic Mongoloid, a group which includes all Eskimoan and Aleutian peoples (McGhee 1978:23-24) and some Siberian groups. Discoveries of ASTt sites on the east coast of the Chukchi Peninsula and in Alaska suggest that they migrated from Asia between 3000 and 2200 BC (Dumond 1977; Irving 1970). Sites dating from around 2000 BC have been located on Banks and Victoria Islands, and at the mouth of the Coppermine River. ASTt people were living on Melville Peninsula, Ellesmere Island, northern Greenland, and south Baffin Island by 1900 BC, and by 1600 BC, they had established themselves as far east and south as Nain in Labrador.

From the time of their first venture into the arctic, human beings have depended for their survival there on certain minimum requirements: tailored clothing; shelter and transportation produced from available natural resources; techniques and tools for hunting, fishing, and gathering; and food storage technology suited to available food resources. Achieving the "necessary technological threshold" for successful adaptation to arctic conditions almost certainly took place in Siberia (Fagan 1987:120-121). Among the earliest ASTt remains are traces of two Asiatic inventions previously unknown to North America -- the bow and arrow, and tailored skin clothing (McGhee 1990:667).

All the groups designated as ASTt were characterized by their use of distinctive microblades, but like all arctic occupations, ASTt social groups were widely dispersed and showed distinct variations, as well as being linked by many common traits. Each new variant, or apparent variant, has been given a unique name

by its discoverer: Independence I, Sarqaq, Independence II, Canadian Tundra (Noble 1971), Pre-Dorset, Dorset, Carlsberg, Buchanan Complex (W.E. Taylor 1967), Aurora River Complex (Noble 1971), among others. The classifications obscure the biological and cultural affinities of some groups, and imply genetic and social relationships where none existed. The 1977 Joint Project of the National Museums of Canada and the School of American Research suggested that the general term 'Paleo-Eskimo' should be used to describe all Canadian arctic occupations which followed the disappearance of Paleo-Indians from the tundra after 3000 BC, and antedated the Thule expansion of AD 1000 (Maxwell 1976:4).

Like the disappearance of Paleo-Indians from the barren grounds, the emergence, florescence and disappearance of Paleo-Eskimo groups during the 3000 years in which they occupied the North American arctic were temporally linked to climatic change. After about 2200 BC, environmental conditions were favourable to a movement of people across the arctic: the climate was warming, and Hudson Bay and Hudson Strait were ice free for part of the year (Blake 1966). One of the earliest ASTt variants was Independence I on Ellesmere, Devon and Cornwallis Islands, and in northern Greenland. It appeared about 1900 BC during a period of general climatic warming. The major animal resources of Independence I were the ringed seal and the muskox, animals which thrive in relatively warm conditions (McGhee 1974a:172-173; McGhee 1976a; Anderson 1968). Longer ice-free periods in Lancaster Sound resulted in an increase in driftwood reaching Ellesmere Island and northern Greenland, and a subsequent relative abundance of wood for fuel, house construction, tool and weapon handles, and sled runners. Stone lamps were apparently unknown. Some characteristics of Independence I do not appear among other Paleo-Eskimo groups: a dispersed settlement pattern; complete absence of communal camps; distinctive arrow and harpoon heads (McGhee 1974a:173; 1976a; 1978); and, with one exception, the house with a central hearth and passage. All Independence I sites are single family camps which were occupied for very short periods of a few days or weeks. The camps were widely dispersed, and old ones

were never reoccupied; nor were their materials used for new structures. Populations were apparently very small, and highly mobile (McGhee 1978:32-35).

Independence I remains suggest a society which enjoyed few luxuries, and lived under constant threat of disaster.

The small local groups of Independence I people must have been very vulnerable to starvation when the hunting was poor, or even when one or two hunters were lost through accidents. Extinction of local groups may have occurred frequently, and more-widespread extinctions may have taken place about 1700 BC, after which time we have little evidence of Independence I occupation in the High Arctic (McGhee 1978:36).

Few other Paleo-Eskimo variants were as austere limited in material goods and comforts as Independence I appears to have been.

Farther south, in Melville Peninsula, Foxe Basin, and Hudson Strait, larger populations flourished in areas where there were more food, and other, resources. The bow and arrow was in use, and people had learned to domesticate large dogs. A Paleo-Eskimo engineer had, at some time during the preceding centuries, understood the principles of the domed structure, and designed the first snowhouses, making it possible to live on the sea ice and hunt ringed seals during the winter months. Houses were warmed and lit by soapstone lamps burning marine mammal blubber, instead of by open fires in rectangular stone hearths which gave little heat (McGhee 1978:40-43).

Other Paleo-Eskimo sites, at Igloolik and south Baffin Island, also appeared around 1900 BC and in the two centuries that followed. There is no evidence of communication between Independence I and the Paleo-Eskimo variants which emerged during the relatively warm period from 2000 to 1600 BC, but all shared traits to the extent that a common cultural ancestry has to be assumed. Unlike Independence I, most were based on the hunting of caribou as well as sea mammals. One variation, which existed on Devon Island in the 1700-1500 BC period, resembled the Igloolik variant in its use of clustered settlement patterns and typical eastern arctic round houses and tents (McGhee 1976a; 1978).

A period of rapid climatic cooling occurred after 1600 BC, and the Independence I variants on Ellesmere Island and northern Greenland disappeared (Vibe 1967:153). Within a hundred years, a new variant had appeared at Sarqaq in southwest Greenland. The link between climate and the appearance of Sarqaq is recognized in the name assigned to the society; 'Sarqaq' is an Eskimoan word meaning 'sunny.' During the colder centuries, the south Baffin Island Paleo-Eskimo variant was apparently carried across Hudson Strait to the Ungava Peninsula and the north Labrador coast. At the same time, Paleo-Eskimo societies around Foxe Basin expanded southward. Their success may have been related to changes in topography and demography which were taking place in the barren lands west of Hudson Bay.

Near the beginning of the cooling period, somewhere around 1600 BC, a massive forest-tundra fire destroyed the transitional forest between Great Bear Lake and Hudson Bay, and shifted the treeline about 280 kilometres to the south (Wein & McLean 1983; Bryson et al 1965). Forest-tundra fires are not unusual during periods of climatic cooling. The loss of humidity associated with cooler air inevitably results in the dying off of most trees, while boreal forest shrubs and lichens, which need very little water and have a low water content, continue to thrive. Shrubs and lichens, as arctic dwellers over the centuries have known, make excellent fuels; both have a high ether content and a high fat calorie content. As a result they have a low ignition point and burn at extremely high temperatures. The combination of dry, dead conifers and highly flammable ground level vegetation creates ideal conditions for lightning fires (Wein & McLean 1983).

The effects of the fire, smoke, and altered soil temperatures on barren lands wildlife, permafrost, and vegetation have not been the subject of detailed study. However, some of their consequences are known. The fire and the rapidly cooling climate combined to prevent the boreal forest from re-establishing itself. Caribou herds that had previously migrated to the tundra north of the treeline found new summer feeding grounds farther south. Human groups accustomed to using the barren grounds were forced to make accommodations to the changed conditions of the physical environment. Subarctic Indian groups which had used the barren grounds

seasonally during the warmer period of about 2000 to 1600 BC, adjusted their annual movements to those of the herds, leaving the tundra temporarily unused by human beings.

The way was open for Paleo-Eskimo peoples from Melville Peninsula to move into empty territory. Over the next 500 years, Igloolik people expanded south along the coast of Hudson Bay to northern Manitoba, where their traces have been identified at Sea Horse Gully near Churchill and dated to about 900 BC (Nash 1969, 1972, 1976). Near the end of the period, yet another variant, adapted to a riverine-inland economy, emerged in the Keewatin barren grounds along the upper Thelon River, lasting from about 1100 to 800 BC (McGhee 1972b).

By 1000 BC, a new warming trend which made the area more attractive to the Eskimoan people of the arctic coasts also made it more attractive to the caribou hunting Athapaskan people of the transitional forest zone. Milder climate, the re-establishment of the boreal forest at higher latitudes, and the increasingly northern range of the caribou herds encouraged them to reoccupy lands as far north as the mouth of the Coppermine River and the south shore of Aberdeen Lake. Paleo-Eskimo peoples withdrew to the north.

A late ASTt variant, to which the name Independence II has been given, appeared in northern Greenland about 1000 BC, and in Northern Ellesmere, Devon, and Cornwallis Islands within the next century. It used the same box hearths, mid-passage tents, and dispersed settlement pattern as its namesake, suggesting that the original Independence people may not have become extinct when their camps on Ellesmere Island and northern Greenland were abandoned around 1600 BC. If they survived in some refugia through the colder centuries after 1600 BC to become the ancestors of later Independence people, archaeological research has not uncovered any clues as to where they might have lived.

Independence II differed from Igloolik in some details, for example, the absence of semi-subterranean houses. Both groups, however, shared a number of traits, such as the use of soapstone vessels, and styles of needles, blades, and harpoon

heads. Parallel developments in technology, such as the modification of harpoon heads, suggest communication between the two (McGhee 1978).

The Dorset People

In spite of the many regional variants, Paleo-Eskimo occupations were remarkably stable and homogeneous over vast areas for more than a thousand years. However, between 1000 and 800 BC, during the general warming of the last millennium BC, major cultural changes occurred. New styles appeared among the people of Foxe Basin and Hudson Strait between 1000 and 500 BC. In 1925, Diamond Jenness, analyzing the material remains of Baffin Island peoples, recognized a distinctive new style in artifacts sent to the National Museum of Canada from Cape Dorset on southwest Baffin Island. The items were different enough from those of both earlier and later cultural complexes to warrant the assignment of a new cultural category. The people who had produced and used the artifacts, whom Jenness called Dorset, characteristically occupied semi-subterranean houses, often with rectangular floor plans, and lived in small settlements, but the presence of snow knives indicated that they also built snow houses, possibly only when travelling. They did not use the bow and arrow, or any form of drill, and they did not have dogs (Meldgaard 1960:75; Maxwell 1976), although they had small sleds for which they made bone sled shoes (Maxwell 1984:363). Their tools, weapons and utensils tended to be made of antler or ivory, many of them exquisitely decorated with distinctive designs and motifs, as well as delicately carved items of personal adornment.

From the time of Jenness's discovery, the question of Dorset origins was a major problem in arctic archaeology. Canadian and American archaeologists took the position that Dorset material culture was an ASTt variant which had developed *in situ*. Scandinavian archaeologists, on the other hand, began by suggesting that Dorset material artifacts were so different from those of other Paleo-Eskimo groups that they could only have been introduced by immigration from elsewhere. The discovery on Baffin Island and Melville Peninsula of sites that had been continuously occupied for over 3000 years confirmed the *in situ* theory. Arctic Small Tool tradition and the

Dorset culture complex both belong to the Paleo-Eskimo category, and exhibit "a parent to offspring relationship" (Maxwell 1976:3) which confirms cultural continuity.

A second problem in Dorset studies was the means and pattern of expansion. The occurrence, length of occupation, and distribution of Dorset sites indicate that the Foxe Basin-Hudson Strait area was the heartland, or core area, in which the Dorset adaptation appeared and was sustained for two thousand years. The generally accepted expansion model prior to the Joint Project of the National Museums of Canada and the School of American Research postulated a core area in which Dorset culture originated, from which immigrants moved in successive waves during 'good' ecological times, and to which people withdrew during 'bad' times. The pulsation model was eventually rejected on the grounds that no evidence existed for the introduction of technology and techniques from the periphery to the heartland. The Joint Project suggested a new explanatory model which postulated successive waves of immigration out of the core area under favourable environmental circumstances, but rejected the notion that outlying social units returned to the heartland during periods of environmental stress.

Periods of occupation in peripheral regions appear to cease abruptly. Within their time span they have developed regional trait specialties. These, however, appear not to have been transmitted back to the core area. Combining these points they can best be interpreted as reflecting expansion followed by catastrophic decline in ecologically marginal regions, rather than the ebb and flow of people from centers of high food resource reliability (Maxwell 1976:5).

The regions around Foxe Basin, Hudson Strait, and Bylot Island have been identified as the Dorset core area within which Dorset traits were maintained for two thousand years. Persistent cultural homogeneity has been explained as a result of continuous communication among people who shared similar ecological zones and made similar adaptive changes. "In the face of such apparent traditionalism the process of culture change can only be set in motion by very critical factors" (Maxwell 1976:5). The literature of arctic archaeology has so far identified the "very critical factors" in cultural change as environmental. One widely accepted model suggests that climatic fluctuations which affect the size, availability, and density of animal

populations necessarily affect the human economies which depend on them, and force adaptations of human subsistence activities, social organization, and demography.

Outside the core area, Dorset people occupied parts of the arctic islands, a few mainland sites at Dolphin and Union Strait (Noble 1971; McGhee 1970a; 1974a:175), the west coast of Hudson Bay as far south as Churchill (Nash 1972), and the Labrador-Newfoundland coasts. The demographic continuity which is characteristic of the core area is not found on the peripheries, where Dorset occupation seems to have appeared and disappeared over time. McGhee's description of intermittent occupations in the arctic islands fits all of the Dorset colonies.

The picture ... begins to appear as one of sporadic migration by peoples from the south, followed by florescence and population expansion for a period of a few decades or a very few centuries, and then by extinction or abandonment of the area (McGhee 1976a:29).

Each of the short-lived outlier societies was characterized, as noted above, by "regional trait specialties" (Maxwell 1976:5). If Dorset "traditionalism" accounts for cultural continuity in the core area, it does not explain the "regional trait specialties" that appeared in the peripheries. Dorset colonists apparently valued flexibility and innovation as survival strategies, no matter how "traditionalist" the more ecologically secure heartland society was.

After five centuries of relatively mild and stable climatic conditions, Dorset social units began to experience environmental stress with the onset of a new cooling trend, the Sub-Atlantic Climatic Episode, which began about 550 BC and lasted till AD 400 (Bryson & Wendland 1967). During the cooling period Dorset outlier communities disappeared one after the other. All Independence II, Ellesmere Island, and northern Greenland sites were abandoned, and there is no evidence that populations moved in large numbers to other areas, or joined other communities.

Farther south, people continued to occupy the coasts of Banks and Victoria islands, Boothia Peninsula, the arctic islands of Lancaster Sound, northwest Hudson Bay, Foxe Basin, Baffin Island, Hudson Strait, the Labrador coast, northern Newfoundland, and the northwest coast of Greenland. The surviving communities here experienced diminished populations, although extinction seems to have occurred

only in the most northerly regions at first. There was also increasing cultural diversity as groups adapted to local conditions, and possibly because colder weather and more difficult travel conditions made continuous contact between them less frequent. By the final years of the Sub-Atlantic most of the peripheral areas had been abandoned. No evidence exists to suggest that their inhabitants withdrew to the Foxe Basin core area; the most likely explanation is that populations diminished beyond the point from which they could recover, and one by one the communities died out.

In the Keewatin, a major result of the cooling was a new southward retreat of the boreal forest-tundra transitional zone (Nichols 1968). During the years that the Paleo-Eskimo variants known as ASTt and Pre-Dorset occupied the arctic tundra, about 1500 to 800 BC, there was apparently little or no occupation of tundra regions by non-Eskimoan peoples. However, environmental changes after 800 BC seem to have encouraged the proto-Athapaskan inhabitants of more southerly regions to move back into the barren grounds. During periods when the tree-line receded south, the Athapaskan strategy of following the caribou herds north would have been maladaptive because of increased distances between caribou summer and winter habitats. A shift of the boreal forest-tundra transitional zone to the north, however, was an encouragement for caribou-dependent Athapaskan peoples to increased harvesting of tundra regions. They left traces of their seasonal occupations at the mouth of the Coppermine River and at Aberdeen Lake in the central Keewatin at the beginning of the last millennium BC (J.V. Wright 1972; 1976).

The moderately cool Sub-Atlantic Episode gave way to a new warming trend which began around AD 400 and continued for the next 600 years with significant, lasting effects on arctic occupations. For six centuries, Dorset peoples enjoyed a predictable environment and economic security. Life was apparently affluent and comfortable. They undertook new colonizations to the west, north and south, reoccupying Boothia Peninsula, King William Island, Victoria Island, and some parts of the mainland coast around Coronation Gulf. They developed new art forms, becoming masters in the creation of small carvings. The evidence of their art work

and finely decorated tools suggests that they experienced a rich spiritual life as well as economic security. In the words of Robert McGhee:

There was a great explosion of artistic production [which coincided] with a major expansion of Dorset occupation to many parts of the Arctic Archipelago which appear to have been abandoned, or very sparsely populated, during the preceding centuries. For a few generations, Dorset people lived from Labrador to northwestern Greenland, and across the Arctic Islands to the shores of Amundsen Gulf. It is these people who produced most of the carvings that make up our collections of Dorset art. It was an artistic tradition rooted in the Paleo-Eskimo past, but which flourished for only a few generations, and was remarkably standardized across the Arctic, apparently through widespread communication networks, and perhaps even through trade in carvings themselves (McGhee 1990:671-671).

It was the final florescence of Dorset societies. The same beneficent climatic conditions which provided ample resources as a necessary condition for the economic, artistic, and spiritual flowering of Dorset peoples also created opportunities for the emergence of the people who would ultimately destroy them.

The Thule Expansion

The period from AD 400 to 900 is known to climatologists as the Scandic Climatic Episode. It was a time of slow, steady warming. On the west coast of Alaska, far from the Dorset-inhabited lands, other Eskimoan peoples had already perfected techniques and technology for the efficient harvesting of coastal areas where seal and walrus were abundant, and were beginning to develop the skills necessary for whale hunting (Arnold & McCullough 1990:678). They took advantage of the warming trend to move into the coastal tundra areas north of the Brooks Mountains, where they initiated a subsistence pattern of hunting seal and walrus along the coast and the edges of the fast ice, and capturing whale in the open water of ice-leads. By the end of the Scandic Climatic Episode, one group, based at Birnirk on the north Alaska coast, had developed a marine technology which allowed them to hunt and capture whales in the open sea.

The Scandic Climatic Episode was only the beginning of a global warming trend. More pronounced and rapid warming continued into the climatic period known as the Neo-Atlantic, AD 900-1200. The North American arctic and Greenland experienced temperatures from two to four Celsius degrees higher than today's and Europe's mean summer temperature rose about 2^o Celsius (Claiborne 1970:356).

In the Scandinavian peninsulas, an increase in agriculturally viable land provided the Norse inhabitants with abundant cereal crops such as barley and rye, while warmer ocean temperatures resulted in greater yields of marine resources. Surplus food, a growing population, and a new measure of affluence encouraged the Norse to search for new territory and new trading contacts. In a burst of expansion, they sailed and rowed their longships up the Russian rivers to the edges of the Byzantine Empire, and their ocean-going *hafskip*¹ along the northern and western shores of Europe to the Mediterranean, and across the Atlantic to Iceland, Greenland and Labrador. By the 880s they had established a viable colony in Iceland, and by 995 settlers in two colonies on the west coast of Greenland were finding ways to adapt Norse farming and fishing techniques to the arctic environment (Mowat 1965:16; Roesdahl 1987).

In Bering Strait and along the northern coast of Alaska, a northward shift of the polar ice pack and thinner ice cover destroyed ringed seal denning areas, which resulted in smaller ringed seal populations, and a decrease in the populations of walrus who fed on them. The disappearance of major food resources was not, however, the threat to Birnirk people that it might have been. The same climatic circumstances which removed one source of subsistence created conditions which encouraged an increase in another food resource. Longer periods of open water

¹The longships associated in both popular and academic imaginations with Viking raids on British and European coasts were not used in Norse trans-Atlantic voyages. In the open-ocean, 40-50 ton *hafskip*, clinker-built vessels shorter and broader-beamed than longships, were used. They were equipped with one square-sail, and were rowed only when close inshore. "It is commonly, but erroneously, assumed that the craft which made the long transatlantic voyage to Greenland were longships.... Almost every English writer has fallen into this error" (Marcus 1955:73).

resulted in changes to the migration habits of Pacific Ocean baleen whales. Instead of returning to the Pacific Ocean via Bering Strait in late summer, the whales began to winter in the Bering Sea, and then the Beaufort Sea, and as the southern edge of the icepack moved farther and farther north, they moved east into the arctic. Birnirk people were well prepared to take advantage of the opportunity.

Decade by decade, migrating whales moved eastward into the arctic, followed by Birnirk people, perfecting their whaling technology and adapting to local conditions as they went. By about 1200, descendants of Birnirk people had crossed the arctic, and reached Greenland. They developed new economic and social organizations and technology as they adapted to changed climatic conditions. They had a highly efficient transportation technology that included sleds, umiaks, and dog harnesses. Their hunting equipment included sea-going kayaks, whale harpoons, seal scratchers, and seal-breath indicators. They had perfected a complex, and highly efficient, system of caches for food storage and preservation. They used toggles of wood, ivory, bone or stone on clothing, tent covers, and harnesses. They were expert at the tanning and working of leathers, and their wardrobes consisted of finely tailored parkas, pants, leggings, stockings, boots, and double-thumbed mitts, as well as snow goggles for eye protection. They built warm, comfortable dwellings with cold trap entrances, and they lived in permanent villages of up to thirty houses. The socioeconomic and technological changes were profound enough to warrant identifying this Birnirk-descended people as a new culture complex. Their own name for themselves is unknown; Therkel Mathiassen, the senior archaeologist of the Fifth Thule Expedition, called them Thule, after the site in northern Greenland where he first uncovered their remains.

While all arctic archaeologists agree on the broad outlines of the Thule migration, debate has continued concerning the details of precise date and route (McGhee 1984:370; W.E. Taylor 1963; Vibe 1976; Dumond 1977). Questions have also been raised about the motivations of Birnirk people in moving east. The usual explanation is as summarized earlier: Alaskan people in the process of perfecting the skills necessary for open-ocean hunting adapted to climate-induced changes in seal,

walrus and whale habitats; they followed the most abundant and accessible food resource, whales, from Alaska to Greenland; and during the migration they adjusted their social, cultural, and economic institutions to suit local conditions. An alternative suggestion has been offered by Robert McGhee: the migration may have been a planned move, undertaken when a window of opportunity made it possible.

There is a possibility ... that the impetus behind the invasion of Arctic Canada was the presence of metal in the eastern Arctic: meteoritic iron from the Cape York meteorite fall in northwestern Greenland. It is interesting that what appear to be the earliest Thule sites known in the eastern Arctic occur in northwestern Greenland and on adjacent Ellesmere Island, and contain quantities of not only meteoritic iron but of smelted metal obtained from the Greenlandic Norse (McGhee 1990:672).

The migration of Birnirk-Thule people from the Beaufort to the Greenland Sea in the tenth and eleventh centuries was not a simple relocation of people from one place to another along a passage through intervening territory. The move involved expansion, invasion, and occupation of the territories between the two ends of the journey.

The Neo-Atlantic Climatic Episode of AD 900-1200, also known as the Little Climatic Optimum, which created conditions favourable to the Birnirk eastward migration, did not offer a similar opportunity for economic expansion to the Dorset. On the contrary, Dorset people were faced with serious subsistence problems by the warming. Their societies were based on the harvesting of multiple resources at different times of the year. Late winter and early spring were spent sealing on the ice; late spring, summer and fall were the seasons for caribou hunting and fishing. Water fowl, muskoxen, walrus, and small land animals such as hare and fox were taken when available. Resources and the rhythm of harvesting varied with location and short-term climatic conditions.

The warmer Neo-Atlantic period posed a serious threat for hunter-gatherers practicing a Dorset type subsistence pattern.² Shorter, milder winters, and the attendant general decrease in sea ice, reduced accessibility of seal herds. Simultaneously, caribou herds were more widely dispersed, and their migration routes were longer. The seasons when food resources were available changed. A people who had enjoyed a stable and predictable economy for two thousand years, and developed a certain conservatism, may have been unprepared for the suddenness of the changes. As has already been noted, Dorset societies outside the Foxe Basin core-area had disappeared, apparently through extinction, countless times during the preceding two thousand years. Only in the core-area of north Baffin Island and Melville Peninsula, where resources remained steady and sufficient, was there continuous occupation.

For people already hard pressed by environmental and ecological changes, the appearance of Thule immigrants was a catastrophe. The Thule invasion resulted, as Robert McGhee has so precisely phrased it, in "the archaeological disappearance of the Dorset people" (McGhee 1990:672). To date, archaeological research has not been able to explain what happened to them during and after the Thule expansion into their territory, except that their remains became extremely rare in the archaeological record datable to post-thirteenth century. Guesses can and have been made: they may have been destroyed during violent encounters with the newcomers; they may have been absorbed and assimilated into Thule society, forcibly or willingly, quickly or gradually; or survivors may have withdrawn out of range of the invaders, and maintained their sociocultural distinctiveness in isolation for various periods of time.

Central and Eastern Inuit histories describe hostilities between Thule and Dorset, and the expulsion of the Dorset from their lands. Most tales of violence between the ancestors of modern Inuit and the indigenous Tunit come from the

²In anthropological studies, hunter-gatherer communities which use a variety of resources in different locations at different times of the year are often called 'Netsilik-type subsistence societies' because the pattern was first described by observers of the Netsilik people of Boothia Peninsula at the beginning of the twentieth century.

Igloolik area (Rasmussen 1929:256-257), the heartland of the Dorset people where occupation had been continuous over 2000 years and where Dorset populations were greatest. Stories from south Baffin Island, collected by Franz Boas (1888:634-636), also tell of feuds and violence between two peoples which resulted in the Tunit fleeing the country. In the Boothia Peninsula region, Netsilik histories are less likely to contain details of violent encounters, but they agree that "when their forefathers came to their present hunting grounds the lands were already populated with Tunrit" who were chased away by the newcomers (Rasmussen 1931a:113, 425-426).

A few Dorset groups may have survived the Thule invasion in isolated pockets. As late as the nineteenth century, a few societies which did not fit the typical Thule description are known to have existed: the Sallirmiut at Southampton Island in northwestern Hudson Bay; the Maniktunik on the Belcher Islands in southeastern Hudson Bay, and the Ammassalik on the east coast of Greenland. They may have been Thule-accultured Dorset remnants (Collins 1956c; Mathiassen 1927b; Quimby 1940:148; Schledermann 1975:11-12; W.E. Taylor 1963, 1968b).

Whatever the relations of the last Paleo-Eskimo societies (Dorset/Tunit) and the first Neo-Eskimo societies (Thule/Inuit) may have been in different places across the arctic, there is at least a possibility that they exchanged ideas and technologies. The oral histories of the Boothia Peninsula people recall that for some time after the arrival of the first Thule, they and the Tunit "hunted in company and were good friends" (Rasmussen 1931a:116). The use and construction of snowhouses and soapstone lamps, which have not shown up in the Birnirk record, may have been learned by Thule during periods of co-existence with the Dorset (W.E. Taylor 1963).

The general pattern of Paleo- and Neo-Eskimo history up to AD 1200, as revealed by archaeological investigations, is one of small societies emerging during periods of climatic warming, and disappearing during periods of increased cold. There is evidence that in some periods, separated communities stayed in touch and exchanged ideas and trade goods over great distances, and in other periods experienced loss of communication and increasing cultural diversity. Changes in

subsistence economies occurred in response to changes in local conditions as often as they did in reaction to widespread modifications of the environment.

On the basis of selected material remains, Dorset society can be described as one in which a core area was continuously occupied over two thousand years and for which there is little or no evidence of demographic or cultural change. Repeated attempts at expansion were apparently successful only in the short term during periods of climatic amelioration. Conservatism was more characteristic of the heartland than it was of the colonies, where adaptability and change were more frequent, or perhaps left more obvious traces in the archaeological record. One might hypothesize that conservatism was a survival strategy which worked in the resource-rich, predictable ecozone of the core area, and was therefore highly valued. In the more marginal ecological areas, where 'traditional' solutions were inadequate, greater flexibility was practiced. The waxing and waning of social groups in the expansion zones suggests that neither conservatism nor adaptability were successful in the long run.

The pattern of Thule history was similar. During periods of environmental stability, and in areas where resources and access to resources were reliable and predictable over long periods, Thule subsistence strategies and technologies remained relatively constant. After the relatively warm centuries of the Little Climatic Optimum (900-1200), communities more frequently made changes designed to improve their chances of survival in increasingly marginal and uncertain environments. The disappearance of communities, through extinction or dispersion, became more common during the Pacific Climatic Episode of 1250-1550.

As the vanguard of Birnirk people moved across the arctic, they left settlements behind them on the coasts of the arctic islands, and on the mainland coasts from Birnirk to Boothia Peninsula. Thule society in AD 1200 was remarkably homogeneous from the Alaskan north coast across the Canadian arctic coasts and islands to Greenland, but by the eighteenth and nineteenth centuries, there were conspicuous differences among communities. Some time during the intervening centuries, Thule economy, society and culture had undergone major changes. A new people, or peoples, the Historic Inuit, emerged from Thule roots.

The Thule-Historic Inuit Transition

The process which transformed classic Thule societies to Historic Inuit began as early as the twelfth century in the Coronation Gulf area. The first Thule immigrants quickly discovered that the whales and walrus which had been the basis of their economy in Alaska did not thrive in the shallow straits and channels of the central arctic coast. To wrest a living in the new environment, the newcomers created techniques and technologies for the efficient hunting of the caribou, fish, and ringed seal which became the bases of their livelihood.

As they moved east, they found that local clays were not well suited to the manufacture of pottery such as they had known in Alaska. They learned to use soapstone from local quarries to carve lamps and pots. Most were for their own use, but some were traded to their compatriots in northern Alaska (McGhee 1978:113-115), from whom they were able to get clay vessels in exchange (W.E. Taylor 1962). Their discovery of surficial copper deposits led to the manufacture of copper-tipped and sheathed tools which also became items of trade with groups farther west. Because of their use of copper, twentieth century observers have referred to them as 'proto-Copper' Eskimo (pre-nineteenth century), and 'Copper' Eskimo or Inuit (late nineteenth and twentieth centuries).

Also in the twelfth and thirteenth century, when the first Thule immigrants were moving into the Coronation Gulf area, other groups were establishing themselves just to the east, on King William Island, Adelaide and Boothia peninsulas, and Somerset Island. In the waters around King William Island and Adelaide Peninsula, as in Coronation Gulf, bowhead whale were infrequent visitors. The newcomers had to make immediate and sometimes drastic changes in residential patterns, hunting techniques and technologies, and diet. They switched successfully to winter sealing, and summer fishing and caribou hunting. They became highly mobile in order to make efficient use of widely-scattered summer food resources. Permanent summer villages of the classic Thule type, consisting of between fifteen and twenty-five stone-sod-whalebone structures, were replaced by communities of one or two nuclear families living in widely-separated locations. Portable skin tents were

constructed for summer occupation, and snowhouses began to be used for winter sealing on the sea ice (Savelle & McCartney 1988:67). Winter communities in the nineteenth century consisted of about twenty snowhouses and a maximum of one hundred people (Holland & Savelle 1987; McClintock 1859a; John Ross 1835a:243).

Maintaining communities on Boothia Peninsula was even more problematic than in other central arctic areas; whale seldom entered the shallow, enclosed waterways of the peninsula and its islands (Schledermann 1976:41), and caribou were scarce (Savelle & McCartney 1988:62, 66-67). Caribou moving from the Adelaide Peninsula to King William Island followed either of two major routes year after year, and people knew exactly where to find the herds at the proper season. In Boothia Peninsula, however, there were a dozen and a half possible crossings (Savelle & McCartney 1988:35), making it difficult to predict where the greatest number of animals would be during seasonal migrations, and adding more uncertainty to an already uncertain situation. Communities on Boothia Peninsula had, out of necessity, become highly diversified from the time the first Thule immigrants arrived (Savelle & McCartney 1988:62-67).

On the north coast of Somerset Island, the newcomers were initially able to continue an almost classic Thule way of life, based on the hunting and use of bowhead whale, which were easily accessible as they moved through Parry Channel (Savelle & McCartney 1988:46). Around 1350, however, ocean temperatures fell, the season of heavy sea ice became longer, and whales became scarcer. The response of the local residents was diversification, as it had been of the people of King William Island and the two peninsulas several generations earlier. They began to use alternative food resources, adding fish, seal, and caribou to their diet (Savelle & McCartney 1988:66). The strategy was only moderately successful, largely because of an inadequate and highly unpredictable caribou presence. By the mid-1400s populations were decreasing, and around 1500 Somerset Island was abandoned (McGhee 1970b).

Thule descendants who had established themselves around Amundsen Gulf did not begin to experience severe shortages of food resources until the fifteenth century.

But the new century was colder than any period during the preceding millennium had been (Lamb 1981:323), and by the mid-1400s, many animal habitats had become unviable. The human response was abandonment of the area just east of Franklin Bay (D. Morrison 1990:116), as it had been in Somerset Island. Precise dating of the abandonment has proved difficult, and different studies have suggested dates ranging from the early 1400s (McGhee 1972a) to the mid-1500s (Nichols 1975b).

Abandonment of territory was also the choice of at least some of the Thule peoples of south Baffin Island. Because of the island's alpine topography and proximity to a large body of open water to the east, it is particularly vulnerable to climate change (L.D. Williams 1979). Shortfalls in subsistence resources occurred as early as about 1300, when there was a minor, but sudden, shift to colder weather. At least some of the inhabitants of southern Baffin Island opted for the remedy of immediate migration. In the years between 1300 and 1330, they began moving across Hudson Strait to the Ungava and Labrador peninsulas via Resolution Island and the Button Islands (Fitzhugh 1977:3). Climatic cooling in the early decades of the century and consequent decreases in both marine and terrestrial food animals was the most likely 'push' factor behind the southward move. The reappearance of Greenland right whales on the north Labrador coast (Vibe 1967:96-97) at precisely that time and place may have served as a 'pull' factor in determining the destination.

It is not clear what happened when the indigenous Dorset of north Labrador realized that their control of resources was being challenged by invaders. Labrador Inuit histories recall wars, exterminations, and dispersions of Tunit (Dorset) communities (Mathiassen 1927). Some Dorset may have fled to the interior of Ungava Peninsula, while others may have attempted to move south, to be met and stopped by other aboriginal groups determined to hold their territory.

On the east coast of Ungava Bay, a number of fourteenth and fifteenth century sites contain both Dorset and Thule ruins and artifacts, suggesting some kind of coexistence, and ultimate assimilation of Dorset people into Thule society. A few sites are identifiably Dorset, showing no signs of a Thule presence. The west coast of Ungava Bay was almost entirely unoccupied at the time of the Thule arrival, and

subsequent Thule communities show no signs of Dorset co-occupation or cultural influence (Plumet 1979:111). Nowhere in Ungava Bay did Thule and their Historic Inuit descendants build on the ruins of older Dorset sites, suggesting that the two groups had different ideas of what constituted a good residential site (Plumet 1979:111).

Along Hudson Strait west of Ungava Bay, a handful of sites were occupied simultaneously by both Dorset and Thule, as happened on the east coast of Ungava Bay, and again indicative of coexistence in mixed Dorset-Thule communities. Some Thule villages here were built on the ruins of old Dorset ones, suggesting that both groups valued the same sites (Plumet 1979:112). It is not clear if Thule newcomers took over sites from which they had driven the former occupants, or whether they built their homes on sites which had already been abandoned.

Still farther to the west along Hudson Strait and south along the east coast of Hudson Bay, Dorset communities existed as late as 1600, physically separated from, but contemporaneous with, Thule winter villages (Plumet 1979:110).

While some communities became extinct, and others managed to survive through diversification or migration, there was also a general movement southward to areas where the seasonal balance between frozen and open oceans offered a more equitable distribution of food resources. The efforts of communities to adjust to local conditions, and their increasing separation and isolation from each other, fostered the emergence of territorial distinctiveness (McGhee 1978:105).

As the already cold Pacific Climatic Episode of 1200-1550 gave way to the even colder Neo-Boreal Episode of 1550 to 1850, popularly known as the Little Ice Age, sea temperatures dropped by as much as 3^o Celsius, and there were years when the polar pack ice around the islands north of Lancaster Sound did not break up. Communities transformed their social organizations, as well as their subsistence economies, to meet their changing situations, replacing social institutions that were no longer appropriate with systems that increased their chances of survival. The more or less permanent coastal winter settlements characteristic of the Thule began to disappear as people became more mobile, harvesting larger territories in smaller

groups. House ruins suggest that snowhouses were increasingly used, possibly by large groups spending the winters seal hunting on the ice. Increasing cultural variation is highly evident in the archaeological records of the Little Ice Age, indicating that communications between groups were becoming more difficult.

Increasing diversity, however, did not mean that ancient trade and communications routes and networks were abandoned. In every village, anomalous items have been unearthed, indicating the movement of both raw materials and manufactured goods over long distances. An item in the indigenous trade which predates Thule occupation was Ramah chert from the Saglek Bay region in extreme northwestern Labrador. It was traded at least as early as 2500 BC, at which time it was "spread throughout the Maritime Archaic zone from Saglek Bay to the U.S. state of Maine" (Dumond 1979:8; Fitzhugh 1985c:25-26). It continued to be a trade item well into the nineteenth century.

Because metal is site-specific, it has been possible to trace copper and iron items found in archaeological sites in the Canadian arctic back to their points of origin (McCartney & Mack 1973:336). Native copper from the Coppermine River-Coronation Gulf region was traded east to Boothia Peninsula and Hudson Bay (Mathiassen 1927b:25, 82-83), west to the Mackenzie River delta, northeast to Cornwallis Island (Collins 1951a:51), Somerset and Ellesmere Islands, and north across the gulf to Victoria Island (R.C. Harris 1987:Plate 14) from Dorset times to the twentieth century. Some iron artifacts found in arctic sites are made of meteoritic iron which can only have come from the Melville Bay-Cape York region of northern Greenland, where an ancient meteor shower had deposited some fifty-eight tons of iron over an area of about sixty square miles (McCartney & Mack 1973:329). Cape York iron discovered near Chesterfield Inlet may have been moved through an ancient trade route which connected northern Greenland with the west coast of Hudson Bay, via Ellesmere Island, north Baffin Island, and Melville Peninsula (R.C. Harris 1987:Plate 14).

Many arctic artifacts were manufactured from European and Siberian metals. Norse copper, in the form of a pendant, found in a Dorset site on the east coast of

Hudson Bay (Harp 1974), may have arrived there through the agency of Norse visitors to the area, but it is more likely that the amulet was moved between its points of origin and destination through an ancient trade route leading from the Norse landfalls on the Labrador coast across or around the Ungava Peninsula (R.C. Harris 1987:plate 14).

Items made of European iron entered arctic trade routes in several ways. The most obvious source after 1200 was Greenland, where Thule people obtained the metal through trade with the Norse colonies, or took it from abandoned Norse sites. After 1500, Greenlanders began to acquire metal articles from the more frequent visits of Danish, Dutch, Basque, French, Spanish, and Portuguese whalers (Gad 1970:161, 183-216). The whalers operated more and more frequently in Davis Strait, Baffin Bay, and the Labrador Sea, and some of them, particularly the Portuguese explored Hudson Strait during the second half of the sixteenth century, and may actually have entered Hudson Bay (Asher 1860:xcvi, clxxi).

Both meteoritic and European iron from Greenland were traded from Ellesmere Island to Somerset Island-Boothia Peninsula, and from there east to Hudson Bay, and west to the Coppermine River. Iron was also moved from Ellesmere Island to north Baffin Island and the Melville Peninsula, and from there southward along the west coast of Hudson Bay (R.C. Harris 1987:Plate 14; McCartney & Mack 1973:331, 336; Mathiassen 1927b:82-83; Maxwell 1960a:87; J.V. Wright 1977:81).

Other iron items were of Siberian origin, carried across Bering Strait to North America at least a thousand years before the Thule replaced their Dorset predecessors. Siberian iron has been traced from the Amur River-Okhotsk Sea region to the west and north coasts of Alaska, and from there to the western edge of the Mackenzie River mouth, and to Banks and Victoria islands (McCartney & Mack 1973:329; Oswalt 1979:279-280). Iron goods manufactured in Siberia, along with raw materials, continued to be important trade items until the Soviet government put a stop to trans-Bering travel in the 1930s.

Iron bars and dart heads, metal needles, and copper brow ornaments were in use by the people of south Baffin Island in the late sixteenth century. According to one observer,

They trade with some other people for such things as their miserable country does not provide they also told us that they had seen gold and bright metal plates which were used as ornaments among some people with whom they trade (Best 1578a:116).

Travel and exchange of goods within each of the two major trade networks, (Siberia-Alaska-central arctic, and Greenland-central arctic), continued into the seventeenth century, when goods were being exchanged where their boundaries intersected along the shores of Coronation Gulf. As the seal hunting communities of the gulf became extinct or migrated to more favourable areas during the depths of the Little Ice Age, the connections between Alaskan villages and the people of the central arctic collapsed (McGhee 1978:116). However, within each of the two trading spheres which together encompassed roughly half of the circumpolar world, many smaller trade networks continued to operate at regional and local levels. While social and cultural change was always present within the Thule region, the persistence of trading relations between regions helped to maintain the similarities and continuities that are evident within indigenous arctic societies over long periods.

All interpretations of Paleo- and Neo-Eskimo history, to a greater or lesser degree, identify the physical environment as a major forcing factor in demographic, economic, social, and cultural change. The conclusion is reasonable enough, given the obvious temporal link between the two arenas of change (See Climatic Episodes and Arctic Human History at the end of the chapter), and the limited nature of evidence from paleostudies.

Other explanations of sociocultural change have only infrequently been used in arctic historiography, largely because of the nature of the available evidence, but archaeologists have been quick to assume and acknowledge that factors other than environmental ones have always played a part in social change. Individual choices are known to have been catalysts for cultural and demographic change, and have been

based on such things as food preference, involvement in blood feuds, curiosity about distant places, and desire for adventure (McGhee 1978:38; Mary-Rousselière 1976:55).

Sociocultural change has also resulted from contact with other groups, and the introduction of new technology and ideas (Schledermann 1975:vii; Spiess 1979:15-16). Thule adoption of Dorset techniques and technology is an obvious example. The sudden acquisition of additional resources led to territorial expansion on at least one occasion (Savelle 1985; and see Chapter 6). Opportunities offered by the presence of commercial whalers and trading posts also acted as catalysts for changes in location and subsistence systems on other occasions (See Chapter 7).

Yet another explanation for sociocultural change is the "idealist paradigm (i.e., that human behavior is a function of ideas, values, beliefs, wills, etc....)" (B. Price 1980:156-157). Changes in population size and density played a part in social change, encouraging the formation of flourishing new bands, the merger of failing old ones (Spiess 1979:8), and in the twentieth century the near extinction of several. Other societal changes, ranging from large-scale demographic adjustments to minute revisions in myth-literature, resulted when groups attempted to take advantage of newly available economic opportunities.

CLIMATIC EPISODES and ARCTIC HUMAN HISTORY TO 1550

The description and chronology of Climatic Episodes is based on reconstructions of past climatic events for northern Europe. The data is applicable to arctic regions in the western hemisphere, however. The marked and consistent congruence between the climatic trends of northern Canada-Iceland-Greenland and those of northwestern and central Europe over the last 7000 years has been amply demonstrated by Harvey Nichols (1967a; 1967b; 1967c), with the following caveat. The onset of cooling and warming trends in Greenland have sometimes been between 100 and 200 years earlier or later than in Europe (Lamb 1977:400). The Mill Creek, Iowa, study of Reid Bryson and David Baerreis (Bryson & Murray 1977) demonstrated that studies based on the parallelism of North American and European climatic episodes show a high degree of reliability over periods of more than a century.

c. 7000 - 6000 BC

Boreal Climatic Episode: global warming; North American icesheets disappear (Lamb 1977:372)

Human History: North American arctic regions unoccupied

c. 6000 - c. 3000 BC

Atlantic Climatic Episode: warmest postglacial period, also known as the Postglacial Climatic Optimum or Hypsithermal, most of the world about 2° Celsius warmer than present; a brief colder period between about 3500 and 3000 BC (Lamb 1977:372-373; 1982:121)

Human History: possible Paleo-Indian occupation of the central Canadian barren lands at the end of the period (Dekin 1972:14) or slightly later

c. 3000 - c. 700 BC

Sub-Boreal Climatic Episode: extremely variable climate, but with colder periods of a few centuries duration (Lamb 1982:121-122; 1988:87); southward movement of treeline, increase in precipitation, local glacial advance, decline in land animal populations, sea ice thicker and longer-lasting (Dekin 1972:15)

Human History:

2500-2000 BC: emergence of Arctic Small Tool tradition, first Paleo-Eskimo occupation

2000-1000 BC: emergence of a series of Paleo-Eskimo variants.

1900-1600 BC: emergence of Independence I, Igloodik; reoccupation of central barren lands by Paleo-Indians

c. 1600 BC: appearance of Sarqaq

1600-1500 BC: forest-tundra fire in central barren lands and withdrawal of Paleo-Indians

1500-1000 BC: expansion of Igloolik Paleo-Eskimo to Churchill and to Upper Thelon River (Nash 1969); emergence of pre-Dorset communities on western arctic coast (McGhee 1970a) and Canadian tundra tradition (Noble 1971)

1000 BC: reoccupation of barren lands by Paleo-Indians, and withdrawal of Paleo-Eskimos to the north, emergence of Independence II

1000- 500 BC: emergence of Independence II and Dorset, appearance and disappearance of Dorset outliers; rapid culture change across arctic (W.E. Taylor 1968b)

550 BC - AD 400

Sub-Atlantic Climatic Episode: significant global cooling, some glacier advance, probably mild winters and cooler summers; increased precipitation (Bryson & Wendland 1967; Lamb 1977:373-374).

Human History: disappearance of Independence II, withdrawal of Dorset to eastern arctic core area, reoccupation of barren lands by Paleo-Indians; significant population decrease in arctic; Dorset migrations from Baffin Island to Labrador and Newfoundland (Fitzhugh 1972)

AD 400 - 900

Scandic Climatic Episode: mild cooling to about 800, then mild warming,

Human History: expansions and florescence of Dorset at end of period (Dekin 1972); Birnirk (north Alaska) people adapting to whale-hunting, combined ice-lead whaling, sealing, and walrus hunting (McGhee 1970b)

AD 900 - 1200

Neo-Atlantic Climatic Episode: pronounced warming throughout northern hemisphere; mean summer temperatures in northern Europe up by about 2^o C; North American boreal forest about 100 km farther north, reduction of drift ice in North Atlantic, pack ice farther north, fewer seals and walrus near mainland coasts, Pacific whales entering Beaufort Sea & Amundsen Gulf (Nichols 1970; Lamb 1977:438)

Human History: Birnirk people move east into arctic as far as Greenland; Dorset people experience environmental stress; Greenland Dorset migrate southward; Norse arrive in North America, establish Greenland colonies.

AD 1200 - 1550

Pacific Climatic Episode: cooling, increased pack ice (Lamb 1977:451; 1981:323)

Human History: increased diversity of Thule bands in Amundsen Gulf, Foxe Basin, Hudson Bay, Baffin Bay, & Labrador; disappearance of Norse colonies from Greenland; expansion of Eskimoan people from northwest coast of Hudson Bay to Churchill River and retreat to Chesterfield Inlet; expansion of Eskimoan people from northeast coast of Hudson Bay to Eastmain River and retreat to northern Ungava Peninsula; abandonment of Somerset Island; migration from south Baffin Island to the Labrador coast.

CHAPTER 2

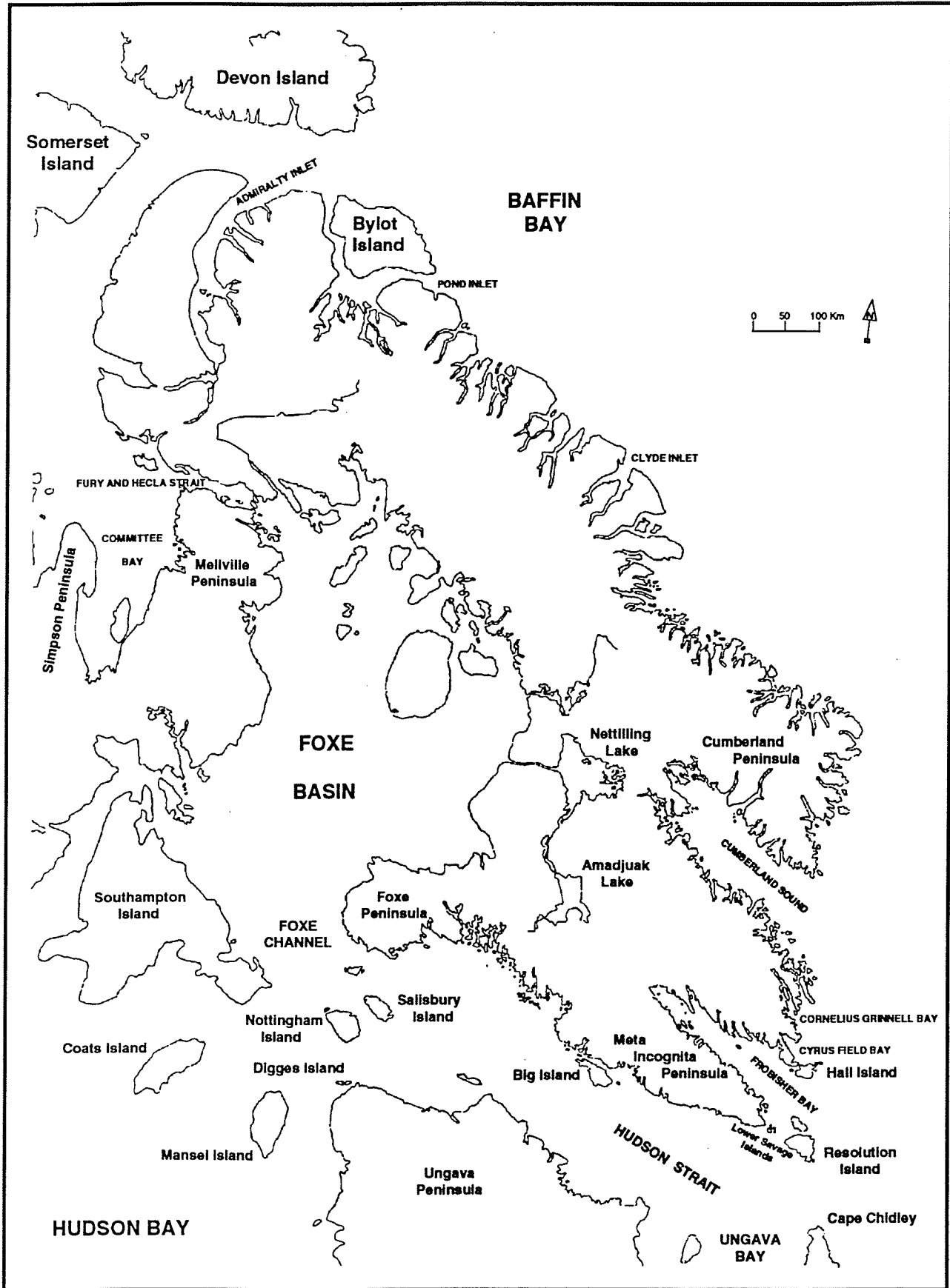
WAR AND THE PROTECTION OF RESOURCES, 1550-1670

Nothing is more ingrained in the real Eskimo and nothing pervades more thoroughly his traditions and folklore than the idea that strangers are necessarily hostile and treacherous.

-- Vilhjalmur Stefansson (1921:426)

At the beginning of the sixteenth century, most of the coastal areas of arctic Canada were occupied by peoples descended from the Thule. Centuries of adaptation to local conditions had resulted in peoples socially and culturally different from their biological ancestors and, in varying degrees, from each other. Because whale were less abundant, and available only in some seasons, Thule people in Coronation Gulf, Boothia and Melville Peninsulas, and northern Baffin Island made major changes in their subsistence economies soon after their first arrival in the areas (McGhee 1972a:19; 1978:109). They adapted Dorset technology or invented new techniques and equipment appropriate to fishing and terrestrial hunting. Communities which no longer depended on deep-water whaling ceased to build sea-going kayaks and umiaks, and replaced them with smaller coast and river kayaks, and hunting tools appropriate to seal and caribou hunting. In places where hunters needed to be highly mobile in order to find food resources, people less often built permanent winter houses of sod, stone and baleen, replacing them with snowhouses (McGhee 1978:109).

In a few places, communities carried on much as their Thule ancestors had done, depending mainly on whale for subsistence, and occupying relatively permanent villages. Southeastern Baffin Island, which had been wholly or partly abandoned during the sudden cooling of the 1300s (Fitzhugh 1977:3), was well-populated again by the beginning of the sixteenth century. The inhabitants may have been descended from groups which had opted not to take part in the migration to Labrador and had remained in the area, or they may have been descendants of other groups which had moved into abandoned or partially empty lands after the exodus across Hudson Strait. Whichever was the case, they continued to hunt whales and to duplicate many of the



BAFFIN ISLAND AND FOXE BASIN

technological and social features of their Thule ancestors (McGhee 1978:108). They maintained permanent year round villages, moving to other sites only briefly in order to harvest resources needed for clothing and tool manufacture, or to find food resources to add variety to their diet. By the early sixteenth century, the people of southeastern Baffin Island were competent caribou hunters as well as skilled whalers. Because of their efficient use of two major food resources, they were able to maintain some of the largest populations in the eastern arctic (J.G. Taylor 1975).

Sites of villages were rationally chosen, selection being based on the presence or absence of particular conditions. Archaeological examinations on Cumberland Peninsula have found that nearly all late Thule villages were located on beaches sheltered from sea winds by islands or opposite shores. Most were nestled under the sheltered side of a hill where heat loss is significantly less than on the windward side. Over 80% faced either south or west (Jacobs & Sabo 1978:608, 612).

An English observer understood the rationality of Inuit preference for south-facing villages five hundred years before it was noted in the literature of scientific archaeology. In 1578, George Best, describing Frobisher Bay, wrote:

The north side of the strait is less mountainous and snow-covered than the south and is more richly clothed with grass. This may be caused by the fact that the south side receives all the snow that the cold winds and piercing airs bring out of the north, while the northern shore receives warm blasts of milder air from the south. This may also be the reason that the natives are more plentiful along the north shore than along the south, as was suggested by our experience (Best 1578a:113).

The same conditions dictated the route sailing ships took through Hudson Strait from the first decade of the 1600s to the 1900s; the "warm blasts of milder air from the south" hastened the melting of winter ice on the north side of the strait, opening a passage through which ships could more quickly and safely reach Hudson Bay. The London headquarters of the Hudson's Bay Company cautioned its sailing captains, year after year for at least two centuries, to cling to the north side of the strait out of the way of the fast ice and floes which choked the southern side.

Ice conditions were another critical factor in the selection of Thule and Inuit village sites because of their role in resource availability. Expanses of smooth, thick ice that form along more or less straight coastlines provide easy winter travel conditions, but their very thickness and the absence of patches of open water make them unsuitable as living and denning areas for seal and walrus. Preferred village sites were along the deeply indented coasts where there were more food animals.

Thule communities of the Cumberland Peninsula on the east coast of Baffin Island were "clustered" within three or four regions, each region centering on a bay, fjord or inlet, and separated from other regions by mountains, headlands, and straight coasts (Jacobs & Sabo 1978:605). Each cluster consisted of two or three villages at any one time. With increasing latitude villages were fewer, farther apart, and had smaller populations (Jacobs & Sabo 1978:606).

George Best noted the preference of Baffin Islanders for the more southerly regions, and related it to the presence of more abundant food resources in the south.

This whole stretch of coast seemed to be more fruitful and populous than any area we had yet explored, with better pasture and more deer, and more wild fowl,.... There also they saw some of the larger boats of the country with twenty people in each (Best 1578a:89).

Excavated middens indicate that until the second half of the sixteenth century, food supplies were adequate for the numbers of people (McGhee 1978:86). Archaeologically speaking, food supplies are considered to have been adequate when middens contain animal parts which could have been used as food if there had been a shortage. In addition the Baffin Island middens for the period contained game animal parts and bones which had been eaten by dogs, rather than humans, suggesting that people were not suffering shortages, and there were no signs that the dogs were underfed or being used as food for people.

Midcentury, however, saw rapid and steady climatic deterioration. Glacial advance on Baffin Island was significant (J. Andrews 1967:39). The island's alpine topography and the large body of polar water to the east combined to produce greater precipitation, lower temperatures and higher winds than were experienced in other

parts of the arctic (L.D. Williams 1979). Permanent ice spread over major portions of the island, destroying lichens and grasses, and as grazing lands disappeared, the size of caribou herds declined.

Ocean temperatures after 1550 fell by as much as 3° Celsius from their previous levels (Lamb 1966:65). The resulting changes in the extent and thickness of pack ice had major effects on wild life resources necessary for human subsistence. Seal and walrus habitats shifted away from the coasts, whale migration routes were drastically changed, and in many places whales disappeared altogether (Holtved 1944:177-180; G. Jones 1964a:59; Lamb 1977:461-473), leaving whale hunting peoples with greatly reduced access to food, and technologies which were suddenly obsolete. Over the next hundred years whale refuse decreased steadily (Schledermann 1975:255-256), and many coastal winter villages disappeared during the period, suggesting lower human populations and possible extinctions of small societies in marginal areas (Dekin 1972).

All natural environments to some extent constrain the behaviour of the human groups within them, creating individual and social concern with problems of uncertainty and scarcity. Arctic communities, because of their dependence on the seasonal movements of caribou, fish, and seal, have always experienced periods of short-term scarcity, and coped with it in various ways: by moving seasonally between resource areas; by division of communities during certain periods of the year; by storing food supplies in different parts of their territory for use during times of game scarcity; and by controlling population numbers. The Little Ice Age, however, was a time when resources were scarce over the long term. Environmental conditions seriously jeopardized the continued existence of many communities, and "the main cultural focus in many areas became sheer survival" (Burch 1988b:10). Societies faced with long-term shortages of resources such that members cannot maintain acceptable standards of living, or such that life itself is threatened, must take action to increase their access to needed supplies, or die.

Perhaps the most immediate response to scarcity is to increase production within the home territory through intensification of effort (Boserup 1965; R.B.

Ferguson 1984a:55; B.J. Price 1977, 1984:211). However, there are limits both to the amount of effort that an individual or group can make, and to the extent of the available resources. When either of those limits is reached, other alternatives have to be considered. Intensification of effort is essentially a short-term strategy which will not solve problems posed by long-term disappearance of resources.

A community which finds that its home territory no longer yields sufficient resources to maintain its members at acceptable levels over the long term can attempt to solve its subsistence problems by laying claim to the resources of other areas. Trade, expansion, migration, and war are all potentially effective strategies toward that end, and each has costs and limitations. Trade is a successful solution to scarcity of some resources only when each party to the trade has sufficient surplus resources of the type needed or desired by the other party. When both parties have the same resources and neither party has a surplus, trade ceases to be an effective solution.

Another possibility is to extend the home territory in order to have access to greater quantities of needed resources. Assuming that neighbouring territory is unoccupied and has resources worth harvesting, intensification of effort is only the first of the costs which must be considered in expanding into new territory. The investment of additional time, energy, and equipment necessary for the travel and transportation required to harvest larger territories and distribute its products may prove prohibitive. When scarcity is long-term, separation and dispersion of a fragment group from the parent group may become permanent (B. Price 1984). In such an event, the costs in terms of cultural loss may be high. Even more expensive complications appear when the new territory is already occupied, particularly if the inhabitants are also facing environmentally-imposed pressures.

Abandonment of a resource-poor territory and relocation to one that offers increased ability to satisfy subsistence needs is yet another option. But like the expansion alternative, migration is an effective solution only if the new territory has adequate supplies of the needed resources and is unoccupied, or relatively empty.

War, whether of the one-time raid or long-term sustained variety, is yet another way of gaining needed resources or access to them. It is an expensive

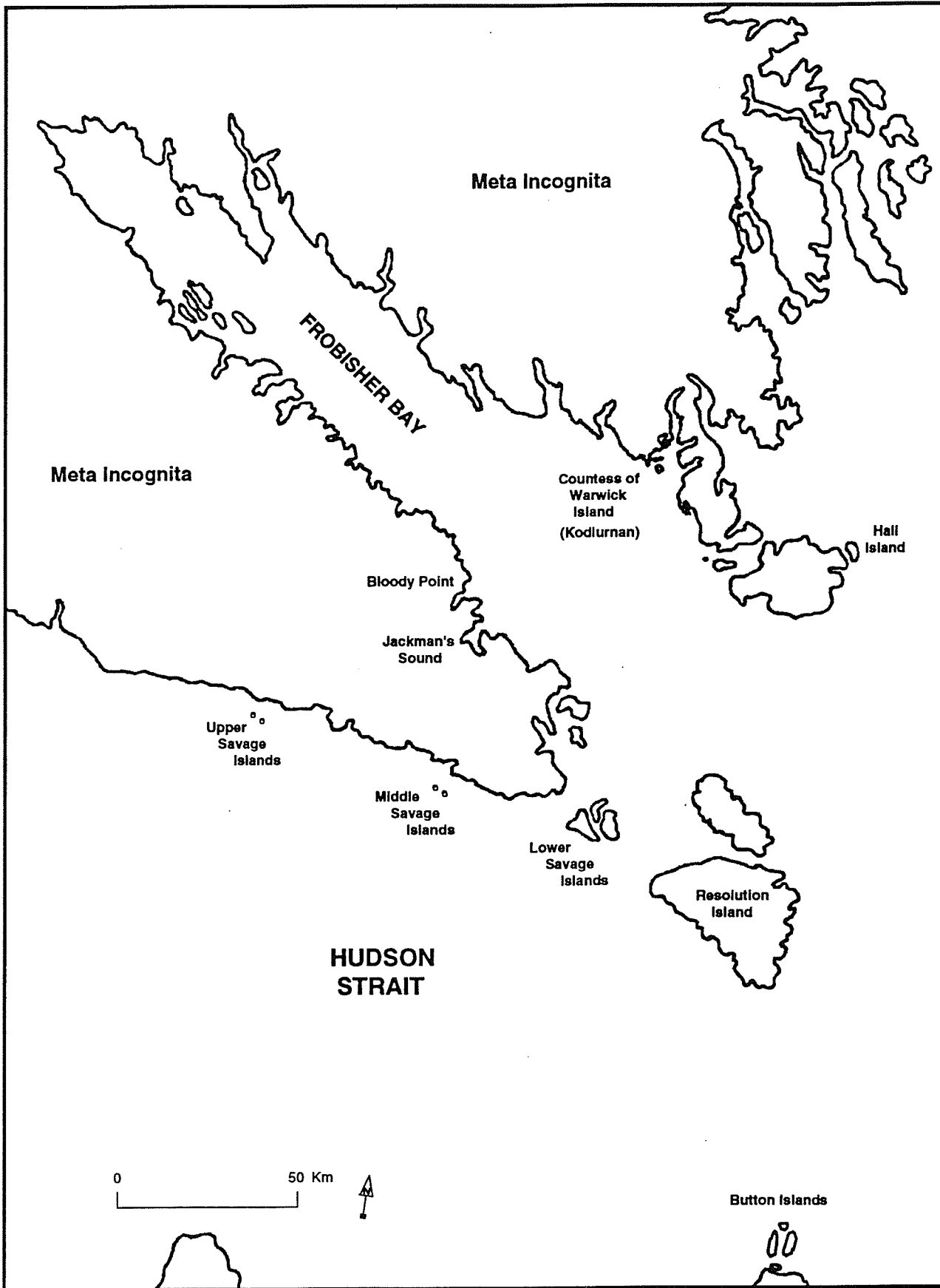
alternative: it requires capital investment in materiel; it involves major expenditures of time and energy taken away from hunting and production; it jeopardizes future trade alliances and transit agreements; it can lead to blood feuds and revenge situations which put future generations at risk; and it carries heavy emotional costs, particularly when small neighbouring societies are involved, because it requires the killing of kin and other known individuals. The costs of war also include the loss or potential loss of warriors who are hunters, of the elderly on whose wisdom and experience the group's success depends, and of craftswomen who process the raw products of animals into usable items. Finally, war may imperil the very existence of the group if losses are great enough to reduce the fertile adult population below the levels needed for effective reproduction, as can easily happen in societies of fewer than twenty adults.

All of these strategies -- intensification of labour, long-distance harvesting, trade, extension of territory, relocation, and pre-emption of lands and resources through war -- may be the means by which communities can gain access to new resources. War is also a means of protecting scarce resources from outsiders.

Southeast Baffin Island

Around 1550, the communities of Frobisher Bay made fundamental changes to their subsistence economies, architecture, diet, and demography, probably in response to difficult environmental conditions, as weather continued to deteriorate and game resources became increasingly scarce. Archaeological studies of the area indicate that like Thule whale-hunting peoples across the arctic, they had until about mid-century been mainly sedentary (McGhee 1978:99). With the disappearance of whales from the bay and nearby coastal areas, they became more mobile, harvesting a variety of resources at different places. They abandoned the villages of permanent stone/sod/whalebone construction associated with Thule whale-hunters in favour of portable skin houses.

In the 1570s, there were several communities living on the shores of Frobisher Bay. One, at Hall Island, had a population of about fifty people in 1576 (Best



FROBISHER BAY AND HUDSON STRAIT

1578a:40). Another village, in which there were at least eighteen adult males (Best 1578a:59) and possibly a total population of fifty souls, was on the south side of the bay. For at least a generation, the people of southeast Baffin Island had been pressed by climatic deterioration and disappearing food resources.

During the third week of July, 1576, members of the Hall Island community encountered Europeans, probably for the first time. The strangers were the English crew of the *Gabriel*, commanded by Martin Frobisher seeking a northwest passage from the Atlantic Ocean to Asia. The local people watched as nine of the strangers rowed ashore and climbed to the highest point on the island, then some of them, in seven boats, followed the strangers up the beach.

Their cautious approach was interpreted by Lieutenant George Best, Frobisher's second in command, as an attempt at ambush. The villagers, he wrote, "sneaked through the rocks ... [and] ... almost cut him [Frobisher] off from his boat" (Best 1578a:40). Communicating with gestures, the local people and the visitors arranged to meet on the beach, where Frobisher ceremoniously presented each person with a metal needle. Again through gestures, the two groups agreed that one of the Inuit would board the *Gabriel*, provided two sailors were left on shore as guarantees of his safe return. When the man was escorted safely back to the beach after his visit to the ship, his compatriots apparently became more trusting and nineteen individuals went on board (Foxe 1635a:42). They "exchanged coats of seal skins and bear skins and similar objects, for bells, looking-glasses and other toys [i.e., items]" (Best 1578a:40).

The next day, probably July 20, a Hall Islander was again a guest on the *Gabriel*, where Frobisher gave him gifts of a bell and a knife (Foxe 1635a:42). Five crewmen volunteered to carry the guest back to shore in the ship's boat. Still somewhat wary, Frobisher ordered his men to avoid the village, where they would be greatly outnumbered, and to deliver their passenger to the empty beach. The excited sailors ignored the order, rowed around a point of land in the direction of the village, and disappeared from the ship's view. They did not return, that day, during the light hours of night, or the next morning.

On July 21, Frobisher began to search for them, and in the following days tried to negotiate for their return. The local people avoided the searchers, refusing all communication. By offering a variety of gifts, Frobisher enticed one man in his kayak within reach and was able to "pluck him out of the sea by main force, boat and all, and into the ship" (Best 1578a:41). An attempt to get the missing sailors back through an exchange of hostages failed; the Inuit refused to respond to all further overtures. With his crew reduced by five, the expedition's only boat gone, ice closing in around them, and the weather daily becoming colder and windier, Frobisher decided to return to England without having learned the fate of the missing men.

Nearly three hundred years after George Best wrote his account, the Inuit of Cornelius Grinnell Bay told a story which may have been the sequel to Best's account:

Five white men were captured by Inuit people at the time of the appearance of the ships a great many years ago; ... [they] wintered on shore ... they lived among the Inuits; ... they afterward built an oomien (large boat) ... they succeeded in getting into open water, and away they went, which was the last seen or heard of them (C.F. Hall 1862:247).

Frobisher's captive, a "strange infidel, whose like was never seen, read, nor heard of before, and whose language was neither known nor understood of any" (Best 1578b:50), survived the journey to England, but fell ill soon after arriving in London. Frobisher's backers, the Cathay Company, spent £1/10/6 for his food, lodgings, and medical care. In spite of the ministrations of the "apothecary ... and folk hired to tend him," the man died. A further £5 was paid to the surgeon who performed an autopsy and embalmed the corpse, and 11s. 4d. was spent on a coffin and a grave in St Olave's churchyard in London's Hart Street (Sturtevant & Quinn 1987:72).

A year later, on July 19, 1577, the Hall Island community witnessed the arrival of the second Frobisher expedition, this time consisting of three sailing ships -- the 200-ton *Aid*, and two thirty-ton barks, the *Gabriel* and the *Michael*. The three ships together carried close to 150 men of all ranks, including mariners, miners, and

soldiers. The watchers made no attempt to come upon the strangers unawares, as they had done the year before. Instead, after watching the newcomers erect a cairn on the highest point of the island (Mt Warwick) and kneel briefly around a flag before marching to their boats drawn up on the beach, the islanders hurried to the top of the hill, and with loud cries and waving of flags attracted the attention of the marchers (Best 1578a:51). Communicating with gestures, the parties arranged for two unarmed emissaries from each group to meet and exchange gifts. The two Inuit brought a bow case for each English ambassador, along with some other "lesser things," and the Englishmen brought pins and needles and other small items (Best 1578:51). All efforts on the part of Frobisher and his men to get information about the five lost sailors of the previous year failed. Each side invited the other to join the larger group, but as George Best, Frobisher's lieutenant, put it, "Neither party trusted the other enough to visit them in their own territory" (Best 1578:51).

However, one of the Inuit, whose name has been recorded sometimes as Kalicho and other times as Calicough, was soon to be an unwilling visitor in the others' 'territory.' Kalicho and one companion, using gestures, requested a meeting with two of the Englishmen. Frobisher and Christopher Hall, master of the *Aid*, responded, and during the meeting tried to seize the other two, who fought back "with great fury and desperation" (Best 1578a:52). In response to Frobisher's cries for assistance, one of the English mariners managed to seize Kalicho and took him on board the *Aid*.

Kalicho gave every appearance of cooperation. During explorations of nearby islands, he demonstrated the methods by which his people harnessed and trained dogs, and explained the use of "some sleds, bridles, fish-skin kettles, bone knives, and other things belonging to the people of the country" (Best 1578a:56). When shown a drawing of the Inuit hostage taken the year before, he apparently tried to give information about the five sailors who had been captured by the natives, but the expedition members could not understand his efforts.

While Kalicho was becoming acquainted with the crew of the *Aid*, residents of a village at Jackman's Sound on the other side of the bay were alarmed by the

appearance of the *Michael* and the *Gabriel* on their shore. They hastily abandoned their tents to withdraw a short distance inland. In one of the tents they left "a doublet of canvas that was made in the English fashion, a shirt, a girdle, and three shoes for contrary feet and of different sizes" (Best 1578a:58). The doublet was "full of holes that had been made with their arrows or darts" (Best 1578a:62). Sailors from the two ships, exploring the beaches, found the items and identified them as the property of the five sailors captured a year earlier. Thirty or forty officers and soldiers of the *Aid* and the *Michael* formed a plan to approach the village in two parties, one from the land and one from the sea, and to "entrap or entice the people" into giving information on the fates of the missing Englishmen (Best 1578a:59).

While the Englishmen were regrouping, the owners of the tents returned and moved them inland. The English land party came upon them unexpectedly, and the entire population of between sixteen and eighteen villagers headed for the coast where they put to sea in two skin boats. If it had been their intention to escape from the English explorers in this way, their plan failed. The seaward end of the channel was blocked by the English sea party, and the Jackman Sound people were forced back to the point of land. Pulling their boats up onto the beach, they turned to their pursuers, and tried to hold them off with a rain of arrows. "That point has since been named Bloody Point because of the slaughter that occurred there that day," wrote George Best (Best 1578a:59).

The residents of the country fought to the death, shooting their own arrows and those that were fired at them. Some of the wounded ended their own lives by leaping into the sea. Altogether five or six of them died, the rest escaped, except for a woman who could not outrun her pursuers because of the child she carried on her back. The woman was taken with her baby, a year old boy, across the bay to Kodlurnan Island (Countess of Warwick's Island), the site of Frobisher's mining operation. Expedition members thought the mother's name was 'Ignorth,' also spelled 'Egnock' in some contemporary documents. Either could be a phonetic rendering of the Inuktitut word *arna*, which means simply 'woman.' Similarly, the two versions of the child's name which appear in contemporary documents, 'Nutaag'

and 'Nutioc,' could be renderings of *nutaraq*, the Inuit word for baby. On the other hand, both Arna and Nutaraq are common Inuit personal names.

When Ignorth was presented to Kalicho, the two behaved in a manner which the English thought indicated that they had not previously known one another, suggesting that they were members of different communities which did not meet at social gatherings during the year. They did, however, live amicably and chastely together on the ship, comforting and caring for each other.

Their people did not let them go easily. On August 6, a number of Inuit, identified by the mariners as those who had been involved in the recent battle on the south coast of the bay, appeared at the mining site on Countess of Warwick's Island (Kodlurnan). Their gestures were interpreted as requests for the return of Ignorth and Nutaaq. Kalicho was the interpreter in the parlay that followed. The English asked for the return of their five missing sailors, or at least for some information concerning their fate, and offered in return the freedom of Kalicho, Ignorth, and Nutaaq along with handsome gifts and treaties of friendship for all their people (Best 1578:63-64). No memoirs exist to tell what Kalicho and Ignorth might have made of the proceedings, or what information Kalicho intended to convey to Frobisher. George Best believed that the people promised to return in three days, either with the captured sailors or with news of them.

Over the next few days, Kalicho's signs and gestures convinced Frobisher that a great chieftain named "Catchoe" (or perhaps, Kajjuk, a name still common among Inuit, which means 'projectile'), would soon arrive prepared for war (Best 1578:66). Frobisher believed "these strange people to be of countenance and conversation proceeding of a nature given to fierceness and rapine" (Stefansson 1938:1:161). He took the precautions he thought necessary to protect his men and property, ordering the construction of fortifications around the camp, and setting additional watchmen (Best 1578a:63-64, 66).

Between August 11 and 14, increasing numbers of Inuit gathered around the English camp, for the most part hiding among the rocks. Occasionally they showed themselves. On August 11, twenty "lined up in plain sight on the top of a hill,

holding their hands over their heads and dancing and singing with great gusto," and on August 14, they appeared and "made a great noise and waved a white flag made of bladders sewn together" (Best 1578a:67, 68). Catchoe finally arrived and with him a "great multitude of them creeping among the rocks" (Best 1578a:67).

George Best described the events that followed. For a week, or perhaps longer, Frobisher's men had not hunted or fished for fear of the watching natives. Nor had their watchers been willing to trade food in exchange for the knives, nails, and other items that they had previously been anxious to obtain. Catchoe's first tactic was to invite the tired and hungry Englishmen to come to his camp for food and sleep. When they refused, he called one of his men out from a hiding place among the rocks. The man, who appeared to be lame, limped across the beach for some distance, and was then lifted up by Catchoe and carried to the water's edge. It was only with difficulty that Frobisher prevented his men from going ashore, but he did give permission for one of his archers to shoot at the 'lame' individual, who immediately leaped to his feet and with no trace of his former limp "darted behind a rock" (Best 1578a:68-69).

Then his companions, who had been hidden among the rocks, suddenly came forward to continue the skirmish with their slings, bows, and arrows, dashing fiercely to the very edge of the water. They followed us along the coast in complete desperation, and totally without fear of our arrows or anything else.... These natives had been lying in wait for us all along the coast and, being spread out like that, were not easy to count, but we could see over 100 of them, and had reason to suspect that a greater number were present (Best 1578a:68-69).

For another week, the Englishmen remained on the island, completing their mining operations and loading their ships. All the while they maintained careful watch, remaining close to their fortifications, and within reach of armed soldiers. On August 21, the miners finished their work, and two days later the ships sailed for home.

Kalicho and Ignorth, having made several attempts to escape while the expedition's ships were near the coasts of their own country, were carefully guarded, and they, along with the child Nutaaq, were carried to Bristol aboard the *Aid*. Both

adults died during the first week of November, 1578, and were buried at St Stephen's Church, Bristol (Cheshire et al. 1987:36). The baby Nutaaq, in the care of a nurse, was sent to London where he was to be taken under the queen's protection. However, he fell ill along the way and died before reaching the court. He was buried at St Olave's Church in Hart Street, (Cheshire et al. 1987:37-38) in the same graveyard that held the body of his countryman captured and taken to England the previous year.

In the summer of 1578, the people of Frobisher Bay for the third year in succession saw the arrival of foreign sailing ships, fifteen of them this time. They kept their distance, watched the activities of the strangers, but avoided contact. George Best noted that from time to time "a company of seven or eight boats ... [was seen] acting as though it intended to attack" but the people never came near, nor did they call to the strangers or ask for a meeting as they had done in the previous two years (Best 1578a:106). The visitors, still interested in a meeting, had few opportunities to suggest one. On August 15, Captain Edward Fenton, captain of the *Gabriel* in 1577 and of the *Judith* in 1578, spotted two men in kayaks. Hoping to open negotiations with them, he ordered his men "not to make any shouts or cries at them" for fear of scaring them away, and, with Captain York of the *Thomas Allen*, went a mile up the beach where they showed themselves and "offered them trafique and shoue of all the courtesie we could devise." The natives responded by "rowinge verie swiftlie" away (Fenton 1578:194-195).

On August 23, four or five umiaks appeared in Beare Sound, where the *Salmon* and the *Thomas of Ipswich* had been loading ore. When Captain Randel of the *Salmon* went to report the sighting, Frobisher censured him for having left the *Thomas* unguarded (Fenton 1578:198). The two men in kayaks seen earlier by Captains Fenton and Yorke had not frightened the Englishmen, but the presence of four or five umiaks with a possible sixty or more people on board created considerable anxiety.

Two themes stand out in the stories of meetings between the late Thule-Inuit peoples of Baffin Island and intruders in the 1570s: mistrust of strangers and willingness to fight. The responses of the Hall Island people to the appearance of strangers in 1576 were, first, cautious observation, then careful approach, which may or may not have been a failed attempt at ambush as the English observers believed, then an exchange of hostages, willingness to meet, accept gifts, and trade, followed by the taking of five prisoners and a boat in what the visitors regarded as an unprovoked act of ill will.

During the 1577 encounter, the sequence of events was initially the same: Inuit first watched from behind a shield of rocks and hills, then opened negotiations by hailing the visitors, and finally, suggested a meeting of emissaries during which gifts were exchanged. Whatever they had planned as their next move was pre-empted by the capture of Kalicho. After the discovery of clothing which apparently had belonged to the sailors captured the year before, the Inuit seized the offensive. Five or six of them died, and two more of their number, Ignorth and Nutaaq, were taken prisoner. Their response was to muster their ranks for war under the leader Catchoe, refusing all overtures to trade and denying the visitors opportunities to go ashore for food and water. When more than one hundred Inuit had assembled, they opened fire with a rain of arrows.

In the third and final encounter, residents and strangers alike showed extreme wariness. Although they watched from a distance, the Inuit avoided face-to-face meetings. George Best thought that a fighting force was gathering, but violence did not erupt.

A decade later, members of several communities in Cumberland Sound and the northernmost point of the Labrador coast exhibited varying degrees of xenophobia and violence when faced with the appearance of strangers, along with a great desire for metal and wooden items. On July 29, 1585, the inhabitants of a village in Cumberland Sound watched two ships, the barks *Sunshine* and *Moonshine* under the command of John Davis, drop anchor in their harbour. The residents hurried to greet them. Davis ordered his musicians to play, "wherein they tooke great delight, and

fals a dauncing" (J.Janes 1589:35). The next morning, July 30, thirty men in kayaks paddled out to the ships for some brisk trading. After a week of amicable relations during which the English party explored the nearby shores and islands, they left to continue explorations to the north.

Between August 11 and August 26, the *Sunshine* and the *Moonshine* were back in Cumberland Sound, but the people of the sound were occupied elsewhere. Davis and his party examined a number of villages and camps but saw no people. In the villages they found the heads of three recently killed "beasts," a number of tame dogs with collars, and some sleds, one made of "furre, spruce, and oaken boards," the other of baleen (J.Janes 1589:36). The boards could have come from one of the Basque, Portuguese or Dutch vessels which were beginning to frequent Davis Strait (Schledermann 1975:20), or they could have been of English origin, having been left in Frobisher Bay by the expeditions of 1576-1578.

When Davis, with two ships, *Moonshine* and *Mermaid*, returned for a second visit to Cumberland Sound in 1586, eighteen people greeted the visitors, "with great joy ... dauncing and leaping; and [making] signes [that] they knew all those that had beene there the year before" (J.Janes 1589:37). Davis presented each with a knife, refusing their offer of skins in exchange. On the second day of the reunion, trade between the two groups was lively, and fifty people joined a party from the ships in games of jumping and wrestling on the beach.

Some of the local inhabitants acted as guides while Davis examined their tent villages, discovering both black and red copper, evidence that they conducted trade with other communities. It was during this period of close companionship that Davis noticed and commented on the number and nature of the wounds and scars visible on some of the local men, and suggested that they must be at "warre with some other Nation or Inland people for many of them are wounded" (J.Janes 1589:38).

Relations between the natives and the explorers soon soured as the people began to take iron and wooden objects from the ships, including oars, a spear, and a sword, even cutting pieces from the ships' cables, and liberating a boat from the stern of one of the ships (J.Janes 1589:38). In spite of Davis's protests, and what he

thought were their promises to reform, they seized an anchor and began pitching stones into the ship with slings. After another round of protests, presents, and promises, they attacked the ships again with stones, striking the *Moonshine's* bosun and knocking him to the deck. At the next truce talk, Davis took a hostage to ensure their good behaviour. When the wind rose and the ships had to move quickly into deeper waters, the hostage became a prisoner (J.Janes 1589:39).

After leaving Cumberland Sound, Davis took the *Moonshine* south, and made a landfall somewhere near Cape Chidley on the mainland promontory at the entrance to Hudson Strait and Ungava Bay on August 20 (R.C. Harris 1987:Plate 19). The local people offered a decidedly unfriendly greeting. A party of five sailors going ashore to dry fish were unaware that "the Countrey people lay lurking in the wood, and on a sudden assaulted them. They slew 2, and greatly wounded other 2; one escaped by swimming, with an arrow shot through his arme" (J.Janes 1589:41).

In 1587, when Davis arrived for the third time in Cumberland Sound, the local people destroyed a little prefabricated pinnace which the sailors were putting together for use as an inshore exploration boat. Davis was convinced that the attack on the little vessel was motivated by desire for the iron in its construction, rather than any desire to harm the visitors (Foxe 1635b:43). The people who came to trade had firm ideas about what they wanted. One man refused all items of trade "until he saw a knife, and then he truckt [bartered]." Others were willing to trade anything they had for "a Knife, a Naile or a Bracelet" (Foxe 1635b:44)¹, in other words, for metal.

¹An account of the first Davis voyage was written by John Janes, who accompanied Davis on the 1585 voyage of the *Sunshine*. It was published by Richard Hakluyt in 1589. In 1635, when Luke Foxe published the narrative of his 1631 voyage to Hudson Bay, he included as many documents relating to earlier arctic explorations as he could find. Among them were George Best's accounts of the three Frobisher voyages of 1576-78, Janes' account of the first Davis voyage, Oliver Brownel's account, affidavit and deposition concerning John Knight's voyage of 1606, the depositions relating to Henry Hudson's expedition of 1610-11, and the 1631 narrative of Thomas James.

Neither Frobisher nor Davis took any kind of census during their visits to Baffin Island, and like other visitors they did not distinguish carefully between kayaks with their one male occupant, and umiaks, which could hold as many as twenty individuals and were usually rowed by women. In 1585, on Davis's second day at anchor, thirty 'canoes' surrounded his ships (Fuxe 1635b:35); in 1586, there were fifty 'canoes' (Fuxe 1635b:38). If by canoes, Davis and Janes meant kayaks only, then the total population of the area in either year could have been anywhere from one hundred to two hundred. Davis's canoe-counts, on their own, are not very useful for estimating populations. They do, however, fit well with other observations. Archaeological investigations in Baffin Island, and particularly in the Cumberland Peninsula region, have suggested two things about the size and placement of Thule villages: one, that each was probably occupied by about fifty people, and two, that they occurred in clusters of three or four villages, separated from other clusters of villages by topographical barriers. Davis's observation of populations of between one and two hundred souls suggests that in his 1585 and 1586 visits he met with people from two, three, or four villages within one region.

Labrador and Hudson Strait

During the two decades after Davis's visits, increasing numbers of French, Portuguese, Dutch, and Danish vessels fished and hunted in the waters east of Baffin Island and in Hudson Strait. Their interest was in harvesting the resources of the ocean, and if they went ashore at all, their visits were infrequent and brief. The climatic conditions of the period which pushed the large whales out of reach of Inuit hunters also forced European whalers to hunt in the open sea (Schlederman 1975:257). It is unlikely that they introduced European goods into Inuit societies. Archaeological investigations in the Cumberland Sound region have not found evidence of pre-nineteenth century contact between local inhabitants and whaling ships.

In 1606, Captain John Knight, searching for the elusive northwest passage, missed the entrance to Hudson Strait and made landfall at Cape Grimington on the

Labrador coast between Cape Chidley and Saglek Bay (John Knight 1606:291). The Inuit response to Knight's incursion into their territory was immediate and violent. At midmorning on June 26, 1606, Knight and five others went ashore on an island, and, like Frobisher's five sailors, disappeared. After keeping watch through the day and night, Knight's next in command, Oliver Brownel, sent out a series of search parties, until "they were assaulted by the salvages" but found no traces of Knight and the others (John Knight 1606:293). On his return to England, Brownel described the final encounter.

On Saturday, the 28th, while the crew were pumping out and repairing the ship, a crowd of natives came over the hill and seized the boat. They [the Englishmen] were but eight men and a great dog; but when the natives saw them resolutely against them, the dog being foremost, they ran away. They numbered about fifty men (Knight 1606:293).

Five years later, an incident in northeastern Hudson Bay had several of the elements that characterized earlier encounters between arctic people and European visitors. On July 28, 1611, the inhabitants of Digges Island made friendly overtures to a ship which sailed into their harbour. It was Henry Hudson's *Discovery*, in the hands of mutineers who had set their captain adrift in the bay which bears his name. The Digges Island people, after arranging for each party to leave hostages with the other, accompanied the strangers on a bird hunting expedition. When the parties came together again, the inhabitants "made great joy, with dancing, leaping, and striking of their breasts, they offered divers things" (Foxe 1635b:110). There followed some mild trade, and the parties separated.

The next day, they met again on the beach. "The people were on the hills dancing and leaping [they] came and every one had something in his hand to barter" (Foxe 1635b:111). Five of the sailors went ashore, unarmed and unwary, carrying looking-glasses, harps, bells, and bottles to trade. The sixth sailor, Abacuck Prickett, having a lame leg stayed in the boat, where he was suddenly attacked. Writing of himself in the third person, Prickett described the assault and its outcomes as follows:

Suddenly hee [that is, Prickett] sawe the leggs and feete of a man by him ... with his knife in his hand, who stroke at his Brest over his head; hee casting up his arme to save his brest, the Savage wounded his arme, and stroke him into the body under his right Pape; the Salvage stroke a second blow ... and then stroke him into the right thigh, and had like to have cut off his little finger of his left hand.... Whilst he was thus assaulted in the Boat, their men were set upon on the shore. John Thomas and William Wilson had their bowells cut; and Michael Pierce and Henry Greene, being mortally wounded, came tumbling in to the Boat together. When Andrew Moter saw this medley, hee came running down the Rock and leaped into the Sea, and so swam to the Boat, and hung at her sterne.... The Salvages betake them to their Bowes and Arrowes, which they sent so amongst them that Henry Greene was slain outright, and Michael Pierce received many wounds, and so did the rest.... Pricket received a cruel wound on his back with an Arrow.... That day dyed Wilson.... Michael Pierce lived two dayes and then dyed (Foxe 1635:111-113).

A year later, in 1612, the people of Digges Island reacted in almost identical fashion when two ships commanded by Thomas Button appeared, and a party of sailors rowed ashore to hunt birds. One of the ships was the *Discovery* and two of its crew members, Abacuck Prickett and Robert Bylot, had been aboard during its first visit to the island a year earlier (Christy 1894:162, 164). The new encounter was as sudden and as bloody as the attack of the previous year. Between seventy and eighty of the local people attacked the bird hunters from hiding places on the rocky beach. The shore party escaped to the boat and safety. Some failure of observation and understanding led them to make an ill-advised second sortie to the island in search of fresh water. The Inuit, again watching from the shelter of rocks, attacked and killed five of the strangers before they were able to reach the security of their vessels (Foxe 1635b:119).

The people of the Lower Savage Islands adopted a different strategy for dealing with strangers in 1615 and 1619. In 1615, the forty or so inhabitants of one village withdrew to some place of safety when they saw the *Discovery*, now commanded by Robert Bylot, anchor in their harbour. They left behind and unprotected five tents, several canoes, and about three dozen dogs, probably representing the greater part of their total wealth. Fourteen of the men took up a

station in a large boat a short distance from shore and out of sight of the foreign ship, but allowed themselves to be seen by Bylot and his shore party of seven. They responded with "signes of friendship" when Bylot called out to them using a few words in the Greenlandic dialect, but did not come any closer (Foxe 1635b:139-140). Bylot's use of some Greenlandic words may have been significant in the brief encounter.

In 1619, inhabitants of the Lower Savage Islands, possibly but not necessarily the same ones who had seen Bylot's ship four years earlier, responded in similar fashion to the appearance of two sailing ships. Their village was empty when the Danish explorer, Jens Munk, examined it, but the people were not far away. Some of them let themselves be seen on the opposite side of the harbour, and watched as Munk and his oarsmen drew near. In full view of the approaching strangers, the Inuit laid down their weapons, and stood back from them. Munk inspected the weapons, left them lying on the ground, and laid out knives "and all sorts of other iron goods," which the Inuit took, leaving fowl and seal meat in their place (Munk 1624:9-10).

Patterns of behaviour are discernible in the encounters between Inuit and strangers described above. Local inhabitants watched from the cover of rocks and hills for varying periods of time. About half of the groups opened negotiations by letting themselves be seen or by hailing the newcomers, always from a safe distance. The first meeting was between emissaries of each group, and usually included formal greetings, and exchanges of gifts, followed by trading, and, to use Captain John Davis's word, 'merrymaking.' Initial encounters at Hall Island in 1575 and at Digges Island in 1611 involved an exchange of hostages between the parties.

At every meeting the Inuit took possession of desirable goods, in trade, as gifts, or through pilferage. Of the ten violent encounters, at least six -- the taking of five captives from Frobisher's party in 1576, the attack on Davis's ship in Cumberland Sound in 1586, the sudden assault on Davis's shore party near Ungava Bay in 1586, the kidnapping and probable killing of John Knight and his men at Cape Grimington, and the two assaults at Digges Island in 1611 and 1612 -- were apparently unprovoked assaults of local people against strangers. In each case the

attackers gained metal or wooden items. The attack against the crews of the *Michael* and the *Gabriel* at Jackman Sound in 1577 after the discovery of the cast-off clothing of their kidnapped countrymen may have been launched in anticipation of a retaliatory strike. The final meeting in 1577, at Countess of Warwick's Island, ended with the local people in large numbers in fighting formation, but without harm to participants on either side. In 1578 there were no meetings and no violence, although large numbers of people were gathering along the coast during the period when the English ships were nearby. The destruction of Davis's tiny coastal boat was probably, as Davis himself explained, motivated by "love of the Iron" rather than any desire to harm the visitors (Fuxe 1635b:43). In each of the encounters in which violence occurred, the Inuit outnumbered the visitors.

Only three encounters were without violence or threats of violence: the first meeting with Davis in 1585 in Cumberland Sound, and the two encounters at the Lower Savage Islands, with Bylot in 1615, and with Munk in 1619. In each of these incidents, the Inuit were outnumbered.

Alaska

The immediate use of violence and warlike activities against outsiders which is apparent in events in Baffin Island and the north Labrador coast between 1576 and 1612 was a feature of Eskimo life in Alaska and the Bering Straits during the same period. During the seventeenth century western arctic societies met more frequently in war than in trade (Burch 1988a:229). Almost continuous warfare existed between Eskimo nations and the neighbouring Athapaskans. Another long series of bitter hostilities accompanied the Tlingit expansion to the north and west, during which the Eskimo were displaced from their former territories (de Laguna 1972:257; R.B. Ferguson 1984a:274). According to Eskimo accounts "material gain and territorial expansion were motives in addition to prestige and plain hatred" (Graburn & Strong 1973:121; also Fienup-Riordan 1990:157).

Not all of the enmity was directed towards non-Eskimoan nations. Long-standing hostile relations existed among Yup'ik groups in the sixteenth century,² prior to the arrival of the Russians (Fienup-Riordan 1990:160). Fighting between North Alaskan Inupiat bands was also common (Burch & Correll 1972:33). "There was at least as much fighting going on between nations *within* the North Alaskan Inupiat realm, for example, as there was between North Alaskan Inupiat nations and, say Koyukon or Kutchin nations" (Burch 1988a:229).

Descriptions of Alaskan Eskimo warfare contain all of the elements noted by George Best, Oliver Brownel, Abacuck Prickett, and other eyewitnesses in the eastern arctic: the surprise raid as a first strategy; the firefight, or 'rain of arrows' in open battle; and the use of bludgeoning and cutting weapons in one-on-one combat to the death (Burch 1974:8-10; Burch 1988a:231; Nelson 1899:327-330). Battle tactics were similar among different Eskimo nations. On both sides of Bering Strait, attackers relied on the element of surprise to destroy their enemies, entering a village or camp when everyone was asleep or gathered together in the community house, sealing the doors, and then shooting arrows through the smoke holes until all were dead (Nelson 1897:327; Turney-High 1949:124). Descriptions of the 1576-1612 eastern arctic encounters do not include any incidents of precisely this kind, but, according to George Best, the Baffin Islanders several times attempted to approach the strangers from behind and in secret.

The 'rain of arrows' was a widespread military tactic among Eskimo, although it was seldom seen among other North American indigenous peoples (Burch 1974; Turney-High 1949:91). The people of Frobisher Bay used the strategy against Frobisher's men twice in 1577, once at Jackman Sound in the Bloody Point battle,

²The eleven seventeenth century Yup'ik bands known by name were split into two factions. The members of each faction maintained military alliances in order to mount offensives against members of the other faction, and to provide each other with mutual defense when attacked (Fienup-Riordan 1990:160).

and again at Countess of Warwick's Island when a large force under Catchoe appeared on the beach. Because they understood the principle of firing by volleys, the winners tended to be those who had the most archers and the most arrows.

When the 'rain of arrows' did not destroy the opposing force, attackers resorted to teasing the enemy, calling out insults, laughing at them, and offering some of their force as easy targets, in the hope that the enemy would waste its arrows. The tactic was known among the Alaskans as *qarzuigutsaq* (Burch 1974:10). The incident of the pretended cripple during the final confrontation of Baffin Islanders under the leadership of Catchoe and Frobisher's people in 1577 is a variation of *qarzuigutsaq*.

The immediate objective of Alaskan Eskimo warfare was complete destruction of the enemy, including all men, women and children (Burch 1974:11; Fienup-Riordan 1990:158-159). Sometimes one person might be left alive to inform other groups of the attack and its outcome, thereby spreading terror among other potential enemies (Burch 1974:8), but Alaskan Eskimo seldom took prisoners. On the few occasions on which captives were taken, they were kept alive in order to carry booty, or, in the case of female prisoners, to cook and sew on the journey home, and put to death when their usefulness was over. It was not uncommon for captured women to be tortured before being killed (Burch 1974:11; Fienup-Riordan 1990:159-160). Asian Eskimo tended to take more prisoners, nearly always women who were later sold as slaves (Burch 1988a:231).

Among the Yup'ik, mutilation of enemy bodies was common, although not inevitable.

[Severing] the heads and genitals of the corpses ... might have been related to the Yup'ik belief that to finally kill an opponent, especially one believed to have supernatural powers, the victor must sever the body of the vanquished at the joints (Fienup-Riordan 1990:158).

The Yup'ik publicized their victories by tattooing their bodies; a man with many tattooed lines across his forehead was easily identifiable as a great warrior who had killed many enemies (Fienup-Riordan 1990:159-160)³.

For the vanquished, surrender was not an option because of the practice of not taking prisoners (Burch 1974:9). The apparent determination of the Baffin Islanders at Bloody Point in 1577 to fight to the death, and their suicidal leaps into the sea when the battle turned against them may have been the result of their belief that capture would inevitably lead to an even more painful death.

In the eastern arctic incidents, as already noted, Inuit did not attack the four parties of strangers which had superior numbers. Alaskan Eskimo are also known to have attacked only when they held the numerical advantage. When they were outnumbered, their usual response was to flee (Burch 1988a:234). Withdrawal of forces in the face of superior numbers, however, did not mean that a planned attack was permanently aborted. In such situations, the usual practice was to send out a call for more men so as to outnumber the enemy (Burch 1974:4; Turney-High 1949:101). Alliances with other groups, often arranged well in advance of a planned attack, gave a community intent on war the ability to recruit the necessary manpower from allies (Burch 1974:4; D.J. Ray 1967:374; Weyer 1962:157). A parallel from the eastern arctic is the apparent mustering of forces in Frobisher Bay in 1577 and 1578.

The Conditions of War

While violence in interpersonal relations within discrete Eskimo societies has long been recognized (Balikci 1970:173-182; Mead 1964:270), the common and widespread perception among both aboriginal and non-aboriginal peoples has been that

³In Hudson Strait communities in the late nineteenth and early twentieth centuries, Inuit men known to have committed murders kept track of the number of their victims by tattooing lines on their foreheads (HBCA:B373/a/3:93d; Payne 1889:11).

Eskimo are a peaceable people among whom war is unknown.⁴ Part of the problem is semantic. War has been defined in ways which stipulate the existence of sovereign states, professional armies, training and mobilization of forces, and long-term planning of strategies and logistics, in varying degrees (R.B. Ferguson 1984a:3-5). The assumption that some, if not all, of the above conditions are necessary elements of true warfare implies that small societies which are perceived as more or less consensual and without government and political leadership engage in blood feuds and seek revenge, but do not and cannot engage in war. Such definitions fail, in part because they depend on assumptions about leadership, government, access to resources, and national boundaries, and in part because they overlook the question of societal sanction.

Blood feuds and revenge killings undertaken by individuals or groups of individuals for personal, family, or clan reasons, both within a community or against another community, may be accepted to some degree by the rest of the society. Inuit communities sometimes ignored feuds at the personal level until they threatened to endanger the social group as a whole. At that point, the community took steps to end disharmony by separating the participants from each other, or from the social unit, or, in cases of extreme disruption in community life, by executing the perpetrators. As long as blood feuds and revenge killings are perceived as sub-cultural, that is as private and personal acts which do not have whole-community sanction, they cannot be considered 'war.'

On the other hand, violent acts against outsiders with the explicit or implicit approval of the social unit are war. A definition of war suggested by R. Brian

⁴See for example, E. Adamson Hoebel, *The Law of Primitive Man: A Study in Comparative Legal Dynamics* (Harvard University Press, 1961); Margaret Mead, Alternatives to war. In *War: The Anthropology of Armed Conflict and Aggression* (Eds. M. Fried, M. Harris, & R. Murphy. Natural History Press, 1968); and Margaret Mead, Warfare is only an invention, and William Graham Sumner, War. In *War: Studies from Psychology, Sociology, Anthropology* (Eds. Leon Bramson & George W. Goethals. Basic Books, 1964).

Ferguson is broad enough to allow for the occurrence of warring conditions in small societies.

[War is] organized, purposeful group action, directed against another group that may or may not be organized for similar action, involving the actual or potential application of lethal force (R.B. Ferguson 1984a:5).

"Purposeful group action" implies that acts of war are sanctioned by the group as a whole, even if the group is small by Asian and European standards, and even if there is a dissenting minority. When blood feuds and revenge killings against outsiders are part of hostile relations which have the approval of the social group in general, they are 'war.'

As arctic studies in the last twenty years have shown (Burch 1974; Burch 1988a; Fienup-Riordan 1990; Francis & Morantz 1983; M. Harris 1991; Lytwyn 1993), there are no grounds for denying the existence of Eskimo warfare. Five hundred years before the events of 1576-1612, war was an element, along with assimilation and expulsion, in the Thule takeover of the arctic coasts and islands from Alaska to Greenland. The outcome of that invasion was the virtual disappearance of the Dorset (Tunit) people. In western and northern Alaska, Eskimo wars declined only gradually in the century that followed the first Russian and Siberian arrivals in the 1750s. A long list of Alaskan Eskimo material and linguistic artifacts testifies to planned, persistent, violent confrontation: battle armour made of bone and ivory plates (Burch 1988a:227, 230); a battlefield littered with hundreds of skeletons (Rasmussen 1927); war artifacts such as body armour, and battle arrowheads deliberately fractured during production in order to cause more damage to the enemy's body than ordinary hunting arrowheads (Fienup-Riordan 1990:156); the custom of referring to people from neighbouring villages as 'attackers,' which antedates the arrival of Russian traders in the 1750s and continues to the present (Fienup-Riordan 1990:153); and the existence of a special vocabulary for weapons intended for use against human beings, not animals (Fienup-Riordan 1990:156).

A carved ivory bow drill found in northern Baffin Island depicts a battle scene in which confronting groups of men are exchanging arrow fire (McGhee 1978:87), and suggests that Inuit archers in battle formation were not unknown among Baffin Islanders. Finally, Inuit histories and European observers have identified many specific occasions of war.

Theories about the nature, causes and conditions of war are even more numerous and various than definitions of war. General theories of causation have been summarized by Marvin Harris (1991) and R. Brian Ferguson (1985a): war diverts humanity's innate killer instincts away from the social unit onto foreigners; war creates group identity; war preserves the group's biological integrity by eliminating reproductive rivals; war affirms personal and group superiority and satisfies the human desire for prestige and admiration; war is a means of expanding territory and expropriating resources; war is a means of regulating population size; war satisfies personal and group honour by revenging past wrongs. At some time or another, social theorists have advanced almost every imaginable psychological, sexual, biological, social, political, and ideological reason to explain why war exists.⁵

⁵See, for example, Morris Swadesh, Motivations in Nootka warfare. *Southwestern Journal of Anthropology* 1948:4:76-93; H.H. Turney-High, *Primitive War: Its Practice and Concepts*. University of South Carolina Press, 1949; Raymond Dart, The predatory transition from ape to man. *International Anthropological and Linguistic Review* 1956:1:201-219; Leon Bramson & George W. Goethals, eds., *War: Studies from Psychology, Sociology, Anthropology*, Basic Books, 1964, with individual chapters by Sigmund Freud, Bronislaw Malinowski, Margaret Mead, Robert Park, Joseph Schneider, and William G. Sumner; Robert Ardrey, *The Territorial Imperative*, New York: Atheneum, 1966; Konrad Lorenz, *On Aggression*, New York: Harcourt, Brace and World, 1966; Napoleon Chagnon, Yanomamo social organization and warfare. In *War: The Anthropology of Armed Conflict and Aggression*, M. Fried et al., eds., Natural History Press, 1967; William Divale & Marvin Harris, Population, warfare, and the male supremacist complex. *American Anthropologist* 1976:78:521-538; George E.B. Morren, Warfare on the highland fringe of New Guinea: the case of the Mountain Ok; and Thomas Biolsi, Ecological and cultural factors in Plains Indian warfare, both in *Warfare, Culture, and Environment*. R. Brian Ferguson, ed. Academic Press, 1984; Arther Ferrill, *The Origins of War From the Stone Age to Alexander The Great*. London: Thames and
(continued...)

Most of the above have been suggested as reasons for particular arctic wars in the few recent studies which have recognized the existence of Eskimo warfare, as has the Eskimo fear of strangers. Just as the myth of the peaceable Eskimo has become solidly entrenched in the popular imaginations of both Inuit and non-Inuit today, so has the myth of the ever friendly Eskimo welcoming all and sundry to his house. The evidence suggests otherwise. All Eskimo societies have shown intense fear of strangers, who were always assumed to be enemies (Burch 1974:8; Burch & Correll 1972:24; Riches 1982:71; Saladin d'Anglure 1967:148; Sumner 1964:210). In the words of Vilhjalmur Stefansson:

Nothing is more ingrained in the real Eskimo and nothing pervades more thoroughly his traditions and folklore than the idea that strangers are necessarily hostile and treacherous. Every Eskimo group always believes that wicked Eskimos are to be found on the other side of the mountains or down the coast at a distance (Stefansson 1921:426).

An analysis of Franz Boas's collection of folktales "shows that over 70% of encounters with strangers involve murder, evil spirits, monstrous people or some other fearful event" (S. Rowley 1985a:16-17). In Inuit folklore from all parts of the arctic, strangers nearly always have evil intentions. An attitude of deep and fearful suspicion towards strangers was deliberately inculcated in all individuals through education, and reinforced by experience.

Inuit may have been hostile toward Europeans in the late sixteenth and early seventeenth centuries because of their assumption that all strangers had evil intentions, or from experiences with murderers and kidnappers. Other actions and attributes may have been misinterpreted: the relatively large numbers, for example, may have been seen as menacing. In other situations, local people may have interpreted innocent

⁵(...continued)

Hudson, 1985; Marvin Harris, *Cannibals and Kings: The Origins of Cultures*, New York: Vintage, 1991; R. Brian Ferguson & Neil L. Whitehead, eds, *War in the Tribal Zone: Expanding States and Indigenous Warfare*, Santa Fe: School of American Research Press, 1992.

actions and attributes as threats. Or they may have interpreted the absence of women among the Europeans as a sign that the newcomers were not on a peaceful mission. While Netsilik and Keewatin coast women acted as first contacts, decoys, information gatherers, and sometimes as fighters (Balicki 1970:183; HBCA:B42/a/41:14; Schwatka 1880b:66), there is no evidence that they were active participants in eastern arctic wars. Among Alaskan Eskimo, women were, at least in theory, never belligerents (Burch 1988:234), although considering their fate as slaves and sacrificial victims if captured, they surely had a stake in helping their communities to resist attackers.

In other instances, the actions of strangers were obviously provocative. The crews of many European whalers and fishing vessels behaved toward aboriginal peoples in ways that could only arouse fear, hatred, and desire for revenge on the part of their victims, and that were judged criminal and immoral by their contemporaries. Greenlandic oral histories recorded in the 1740s and 1750s included the stories of attacks by ships, probably Basque, against Norse and Eskimo communities in the fifteenth and sixteenth centuries (Gad 1973:158-162). Details surrounding the kidnapping of three women in 1654 have been preserved in the oral traditions of the Greenlanders and in the legislative records of the Netherlands Staats-General (Gad 1973:88). The extent of the problem, and the disfavour with which western European rulers regarded it, led to a decree of the Staats-General, issued in the 1760s, prohibiting attacks on, and ill treatment of, Greenlanders (Gad 1973:12). Other attempts at controlling the behaviour of mariners in distant seas included the Danish royal decree of 1720 which banned the kidnapping and transporting of Greenlanders to Europe (Whitaker 1977:43). For Greenlanders and other North American aboriginal peoples, however, the unenforceable prohibitions of European states were no protection and no comfort when individual captains and crews flouted the instructions of distant governments.

The explanation that war affirms personal and group superiority and satisfies the human desire for prestige and admiration is unsatisfactory in an Inuit context. In the small, relatively egalitarian societies of the eastern arctic in the sixteenth and

seventeenth centuries, the war hero could not have expected to satisfy his material or psychological needs any better than other members of the society, although the best procurer of resources could. Among Eskimo and Inuit, male prestige depended on how effectively a man brought home needed resources, not on how many enemies he destroyed. Most of the time procurement could be achieved more easily, safely and cheaply through successful hunting, stealing, or scavenging, than by war. In cases where resources could be obtained only through war, the successful warrior would still be acclaimed for his ability to gain access to necessary resources, rather than his prowess at killing the enemy per se. In situations where the goal was to protect resources from direct threats by outsiders, the individual who killed the most enemies or planned a successful strategy would be highly valued by his community, but adulation would last only as long as he continued to defend communal resources successfully. A war leader could not expect to benefit materially by getting better access to, or a greater share of, communal stores. His value to the community, and therefore the prestige accorded him, would still depend on his skills of procurement. Given that the goal of Eskimo warfare was complete annihilation of the enemy, war as a means of affirming group superiority is as specious because after a successful war, nobody would be left to recognize the preeminence of the victorious group. It is difficult to see how violence against non-aboriginal strangers in 1576-77 could have enhanced either individual or group longings for prestige.

War as a means of regulating population size also fails upon examination of its consequences. If women were the main casualties in war, the argument would make sense, because it is women's reproductive limits which determine population size, not men's. The loss of male warriors will not affect population growth as long as one male is left alive, potent, and fertile. On the contrary, among Eskimo-Inuit, it is in the group's interest to prevent the best warriors from going to war whenever possible because their loss as hunters would seriously undermine the group's chances of survival. In the context of the 1576-78 hostilities in Frobisher Bay, any problems of overpopulation would not have had to await an unpredictable chance meeting with Europeans to find a solution.

The Eskimo-Indian Frontier

Confrontations between Athapaskans and Inuit were common all along their shared frontier, the Central Canadian transitional forest which separates the barren grounds from the wooded lands to the south. It is impossible to guess at the time-depth of the hostilities. At the western edge of the barren grounds, the Coppermine River Inuit were involved in uneasy trading and warring relations with Chipewyan peoples living to the south of them at least as early as the seventeenth century.

While the Chipewyan insisted that they waged war because Inuit witchcraft caused disease and death in their communities, Inuit motives were more clearly rooted in economics. Hostilities were common at resource sites such as the lower Coppermine River where outcroppings of surficial copper attracted both peoples (Abel 1993:31-32; Bell 1901:26-29), and the stone quarry near Peel River where battles were fought as both Inuit and Athapaskan tried to secure their own rights of access and to prevent its use by other groups (Abel 1993:96-97; Stefansson 1922:12-13). Trading relations between Inuit and Gwich'in were another frequent locus for conflict (Abel 1993:96-97). In all situations, Inuit stood to gain access to resources if they were victorious.

Almost nothing is known about the relations of Inuit communities with one another in the eastern arctic in the sixteenth and seventeenth centuries. Only one contemporary observer, John Davis, suggested that they were warring among themselves, when he remarked that they were at "warre with some other Nation or Inland people for many of them are wounded" (Fuxe 1635b:38). While Davis's comment and the known actions of natives in southeast Baffin Island and Hudson Bay suggest that they may have been involved in warfare in defense of existing resources and in attempts to gain access to new resources, there is no other evidence to support or negate an assumption of war between Eskimo nations in that area. Intramural warfare in protection of resources did, however, take place elsewhere, most notably in Alaska, where Tlingit, Yup'ik and other Eskimo nations were at war for over a century in protection of their territories and resources (de Laguna 1972:257).

The hostility of eastern arctic Inuit communities to the arrival of strangers in the late sixteenth and early seventeenth centuries may have been based on any of the reasons for warfare set forth earlier. However, the one which best fits the conditions of the period and the descriptions of the observers is that people with serious concerns about diminishing food supplies were prepared to use force against newcomers for two reasons: the newcomers might turn out to be competitors for already scarce resources and any intended takeover on their part had to be discouraged; and, the newcomers apparently had an abundance of the precious materials that would increase hunting efficiency, such as knives, other metals, and wood. Some of the known incidents of Inuit attacks between 1576 and 1670 were against Europeans who were hunting or fishing in Inuit lands, and may be construed as pre-emptive strikes against competitors for resources.

All of the incidents took place in circumstances in which the Inuit, if victorious, could reasonably have expected material gains, either directly through expropriation, as in the cases of Frobisher's lifeboat and Davis's pinnace, or indirectly by eliminating potential competition for scarce resources during a period of increasing shortages. Compared to the costs and rewards of migration or of raiding neighbouring communities, raids on unknown visitors were an inexpensive means of accomplishing economic goals, at least initially. They involved no significant investments of time and energy, and carried none of the emotional costs related to killing known individuals, or even distant compatriots.

There were also few social costs. From the local point of view, the foreigners were one-time visitors; attacking them would not lead to feuds and revenge wars lasting for generations. Europeans, as far as the Inuit could see, were not in a position to deny them passage across territory to resource sites, or rights of access to shared resource sites, as a neighbouring community could do. Attacks on them did not involve breaking alliances, and the subsequent destruction of partnerships, alienation of trade, and reduced access to spouses and adopted children. Not only were the costs of raiding Europeans considerably lower than the costs of attacking

neighbouring communities, the rewards -- metal and wood -- were significantly higher.

Inuit engaged in aggressive raids and defensive military actions in order to gain and defend important scarce resources. However, war was not always the most attractive or efficient means of ensuring survival during times of environmental degradation and consequent long-term shortages, and it was not the only, or even the principal, strategy used by eastern and central arctic peoples to ensure access to the means of survival during the climatic pessimum of 1550 to 1850.

CHAPTER 3

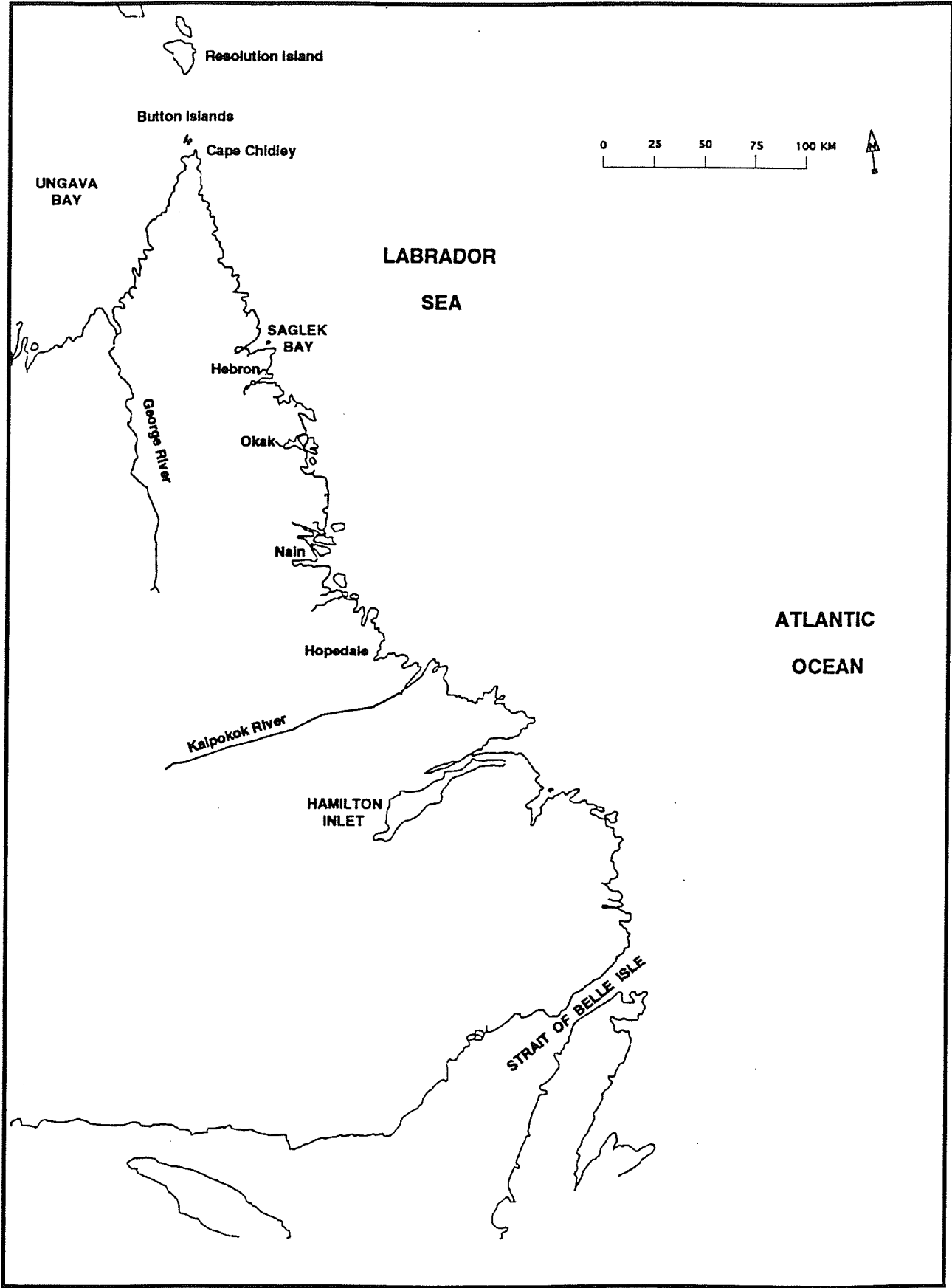
MIGRATION AND THE SEARCH FOR RESOURCES, 1670-1700

There is fear when winter comes to the great world, And the great moon -- now full moon, now new moon -- follows its footprints in the winter night. -- Ulipshialuk's wife (Rasmussen 1932:168)

Labrador

While people in Frobisher Bay and Cumberland Sound were reacting to the visits of foreign ships with armed attacks, possibly in attempts to protect their resources, their compatriots on the other side of Hudson Strait were expanding southward along the coast of Labrador, actively seeking out European vessels and camps in order to acquire new resources. They were descendants of Thule immigrants who had left Baffin Island in the decades just before 1350. By 1550, they had established villages as far south as Hebron and Okak on Labrador's Atlantic coast (Jordan & Kaplan 1980:38; Kaplan 1985:50).

Increasing numbers of Basque, Portuguese, and French fishing vessels and whaleships in Hudson Strait, Davis Strait and Baffin Bay, and along the Labrador coast in the fifteenth and sixteenth centuries (Asher 1860:xcvi, clxxi; Gad 1970:183-216; Sturtevant & Quinn 1987:64) brought new opportunities for Inuit-European contact and for aboriginal people to obtain scarce resources. In the same years that Frobisher and Davis were leading the first British probes into the arctic, about 350 European vessels were fishing the coasts of Newfoundland and Labrador every year (Cooke & Holland 1978:23). Initially, the Thule people of the northern Labrador coast responded to the appearance of strangers with tactics similar to those being used by Baffin Islanders and Digges Islanders at about the same time. The attacks on the shore parties of John Davis at Cape Chidley in 1586 and of John Knight at Cape Grimington in 1606 are examples, as is the 1657 raid at Kaipokok River, when Inuit ambushed and killed the Huron members of a French expedition heading for Hudson Bay under the command of Jean Bourdon (Cooke & Holland 1978:30-31; DCB 1:111-113).



LABRADOR AND STRAIT OF BELLE ISLE

The attacks, like those in Frobisher Bay and Cumberland Sound, were *ad hoc* responses to the unexpected appearance of strangers. Whether the attacks were motivated in order to protect resources or to get wood and metal items which the strangers appeared to have in huge quantities, resources acquired from chance encounters were unpredictable, unrepeatable windfalls which did not provide long-term solutions to long-term problems. Raids on European shore stations and depots were a more reliable means of obtaining scarce goods. Orderly and friendly trade was more reliable, and less dangerous.

It was probably no coincidence that small groups of northern Labrador people began to appear on the coast as far south as Hamilton Inlet shortly after 1550, immediately after the establishment of Basque whale fisheries there. By moving southward, Inuit traders and raiders put themselves into positions from which they could obtain much-desired European goods (Barkham 1980:54-56; Clermont 1980), the most popular items being wooden boats and all kinds of metals. Preferred objectives were the deserted shore stations of seasonal European fishing and whaling concerns, and the preferred tactics were looting and destruction. Occupied stages and on-shore camps, as well as travelling parties, were sometimes attacked, but only when Inuit held the numerical advantage.

Southward movement continued during the next half century or more (Sturtevant & Quinn 1987:64; J.G. Taylor 1984:509). At first it was intrusive rather than expansive. Contemporary observers noted that Inuit were seen in larger numbers on the northern coast than in the south. John Knight's shore party at Cape Grimington in 1606, for instance, was attacked by an estimated fifty men, suggesting that a summer village of about 200 people was nearby. In more southerly locations only small groups of travellers were seen, like the party of three -- man, woman, and infant -- who were killed or captured by a French crew in 1566 (Sturtevant 1980; Sturtevant & Quinn 1987). None of the known accounts of meetings between

Europeans and indigenous people report the existence of permanent villages or of large numbers of people south of Okak.¹

By about 1600, Inuit had established a permanent village at Eskimo Island in Hamilton Inlet (Fitzhugh 1977:38; Jordan 1977:43; Sturtevant & Quinn 1987:64), and between 1600 and 1630, they were making forays as far south as the Strait of Belle Isle, where French trading posts and settlements had begun to appear (Auger 1987; Jordan 1977; Martijn 1980a). Samuel Champlain described them as "impossible to make peace with.... as they go prowling about and making war." Their hostility toward French fishermen is not surprising in the light of Champlain's next comment.

They have killed a number of St. Malo men, who had previously often paid them back in double measure. The origin of this war was the killing -- accidentally or otherwise -- of the wife of a chief of that nation by one of the St. Malo sailors (Champlain 1632:5:168-169).

Other Inuit at Belle Isle were peaceful family groups. A few may have been year-round residents, although there can never have been more than a few hundred individuals living permanently in the extreme south (Clermont 1980:151-152; Jordan & Kaplan 1980:39; Martijn 1980b:196; J.G. Taylor 1979b:49). Most were itinerant families, travelling north or south along the coast. One such group was described by the priest, Antoine Silvy, who met travellers on the Belle isle north coast in 1684, and recognized some whom he had met a year earlier at Nain.

We saw some Eskimos in canoes and with blunderbusses Among them were some of those whom we had seen the other year, one hundred and fifty leagues from there, on the coast of Labrador. This makes me think there are only a handful of people who extend along these fearful coasts (Silvy 1684:79).

¹As Ernest S. Burch has pointed out (1978), absence of evidence is not necessarily evidence of absence. Until a systematic search for Portuguese and French logs, diaries, and other accounts of the period has been made in European archives, it is impossible to say with certainty that no villages existed. The discovery of previously unknown documents and sites could alter the current understanding of Inuit activities on the Labrador coast.

Summer trading with European crews and winter raiding of their empty shore stations were profitable activities for Labrador Inuit. By 1650, the people of Hamilton Inlet had European goods in such quantities and duplication that it is almost impossible to avoid the conclusion that some of them were middlemen who maintained depots of surplus goods for trading farther north (Kaplan 1985:59). Inuit far distant from Hamilton Inlet were acquiring astonishing quantities of European goods. In 1683, near Nain, Chouart Groseillers and Pierre Radisson engaged in amicable trade with local people, a meeting profoundly different from the hostile one at Cape Grimington in 1606 which resulted in the disappearance of John Knight and his men. Communities such as the one near Nain apparently recognized that they stood to benefit more from peaceful relations and friendly trade with most Europeans than they did from violence and looting. In 1694, Louis Jolliet, exploring the coast as far north as Nain, noted that in all the villages along the way there were

many articles of European manufacture, including wooden boats with sails and grapnels, barrels, sea chests, screws and nails, knives, cloth and various items of European clothing Some of it of Spanish origin (In J.G. Taylor 1984:510).

By 1700, the Labrador Inuit population had increased to six times what it had been two centuries earlier (Kaplan 1985:60). Other demographic changes had also taken place during the previous two hundred years. Outer island villages typical of the early period of Thule occupation had been largely abandoned in favour of settlements on the inner islands. The refuse dumps of the inner islands settlements show that caribou and freshwater fish were added to the usual diet of seal and whale meat (Kaplan 1985:60). Increased harvesting of inland food resources opened the way to a wide range of material and intellectual changes: new hunting and fishing technology and techniques; new forms of transport appropriate to new terrains; increased access to and therefore increased use of other inland resources, such as wood; the acquisition of new geographical, ethnological and botanical information; the invention or adoption of vocabulary to identify previously unknown materials and landforms; changes in social organization appropriate to the occupation and use of

larger more diversified territories; and the incorporation of new spirits and deities into the existing worldview.

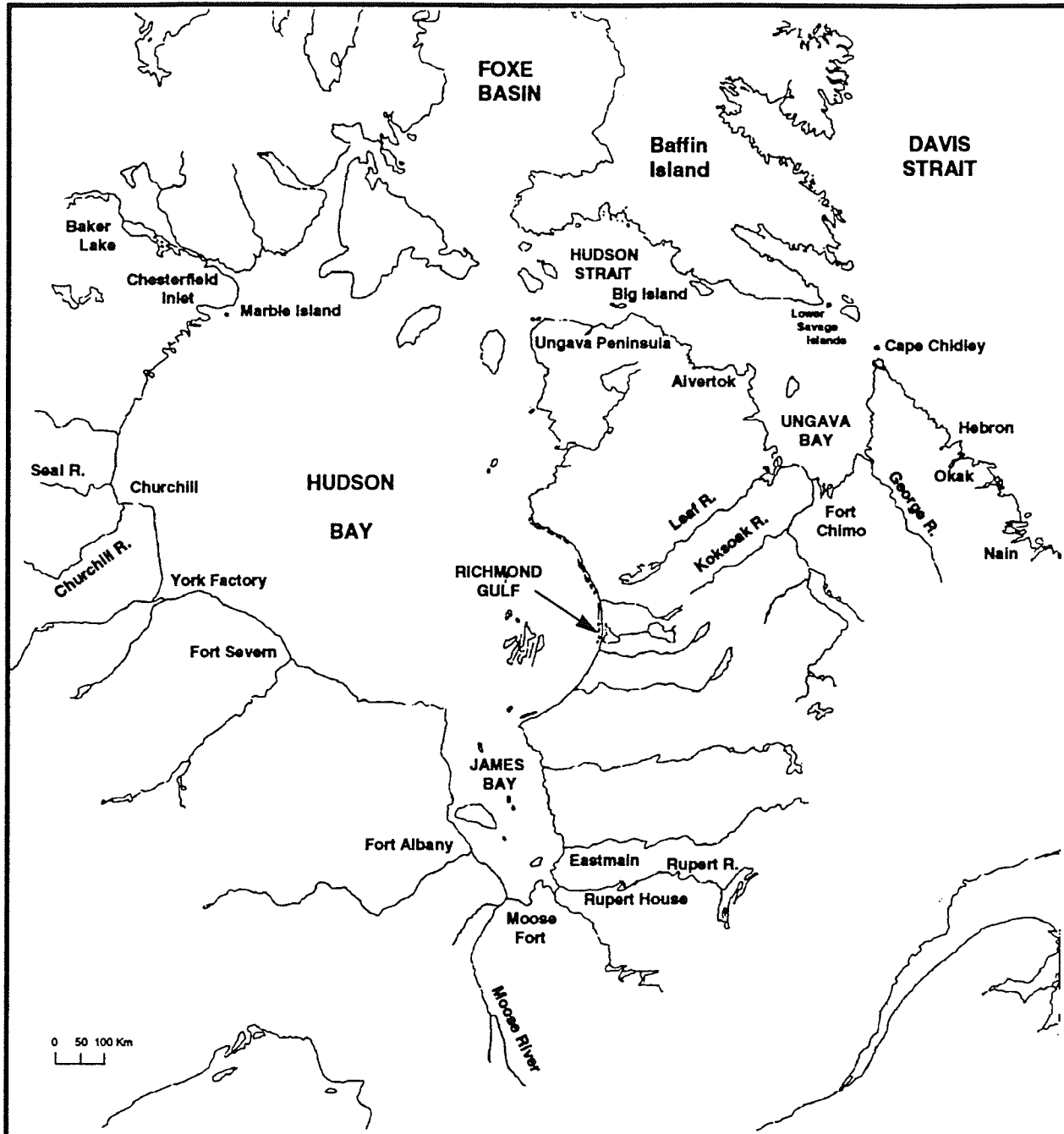
Movement inland and use of inland resources also increased the possibilities for confrontation with long-established inland groups. Unlike the communities of Baffin Island, the people of the Labrador coast and Ungava Peninsula shared frontiers with non-Eskimoan peoples, apparently not always peacefully. In the 1620s, Samuel de Champlain noted that "There is an Indian tribe inhabiting this territory, who call themselves Eskimos, and against whom the Tadoussac Indians go to war" (Champlain 1632:5:177). Jesuit accounts throughout the seventeenth century and Montagnais oral histories also describe unfriendly relations between Indian and Inuit. On the basis of observations and oral sources, Lucien Turner concluded that:

The prime cause of hostility was trespassing upon the hunting-grounds of each other, the Inuit asserting priority of right and endeavoring to repress the encroachment of the Naskopies. The usual mode of attack was from ambush, and by the attempted annihilation of the other party (Turner 1887:109).

While this may be true for the nineteenth century when Turner was in northern Labrador, it is impossible to say with certainty that it was true of the seventeenth century. It is reasonable to assume that competition for game resources in the barren grounds could have brought Inuit into conflict with their non-Eskimoan neighbours in the northern interior of Labrador-Quebec, but no firm conclusions can yet be drawn.

East Hudson Bay

Competition for resources may have been the underlying reason for the violent encounters and lingering hostility between the Inuit of east Hudson Bay and their Lowland Cree neighbours in the seventeenth and eighteenth centuries. Oral histories of the east coast Cree, recorded between 1670 and 1750, related that in earlier times Inuit had occupied territories as far south as the Eastmain River at the bottom of James Bay, and had been driven north in a series of territorial wars with the Cree (Dobbs 1744:49; Robson 1752:63). The accounts suggest that Inuit and Cree met more frequently in hostile confrontations than in peaceful encounters (Graburn &



HUDSON BAY BASIN

Strong 1973:119). No evidence indicates the time-depth of the Inuit occupation, or the period and length of the Inuit-Indian wars over the territory, but the process was completed by 1670. The first European eyewitnesses reported that the Inuit had been pushed north of Richmond Gulf, "so that a tract of land of more than three hundred miles extent from north to south, lies almost waste, without trade and without inhabitants" (Robson 1752:63-64).

Inuit excursions against the Cree usurpers continued for a short time after the establishment of the first trading posts. An observer in the 1670s noted that the Inuit who lived

on the Borders of Hudson's Streights ... sometimes in slight Parties make Incursion on the other Indians, and, having knock'd 8 or 10 on the Head, return in Triumph (Oldmixon 1708:381-382).

During the winter of 1673-74, they attacked the "Onanchanoes [near Moose River], most of that Nation being destroyed," and threatened a springtime attack against the "Cuscididah" Indians and the Hudson's Bay Company trading post at Rupert River. The traders "prepar'd every thing necessary in the Fort for [their] Defence." The expected party of Inuit arrived in June and camped about a quarter of a mile from Charles Fort, but withdrew without attacking (Oldmixon 1708:305-389), possibly because they were badly outnumbered by the combined forces of the well-fortified English and Indians.

By the end of the seventeenth century, Inuit had ceased to attack their Cree neighbours along the eastern Hudson Bay coast, and their threats against the European traders and military personnel in Hudson Bay after 1670 were ineffective. They had by that time, however, gained a reputation as a "people [who] are so utterly savage and cruel that it is impossible to trade with them" (Bacqueville 1722:279). Their reputation for violence and fierce fighting also lived on in the memories of the Lowland Cree, whose raids against them continued for another hundred years. At Charles Fort in 1686, for instance, the Chevalier de Troyes met four James Bay Indians who were travelling north to make war on the Inuit (Francis & Morantz

1983:75). Hudson's Bay Company journals for more than a century after 1670 contain frequent references to Indian war parties going north to attack Eskimos.

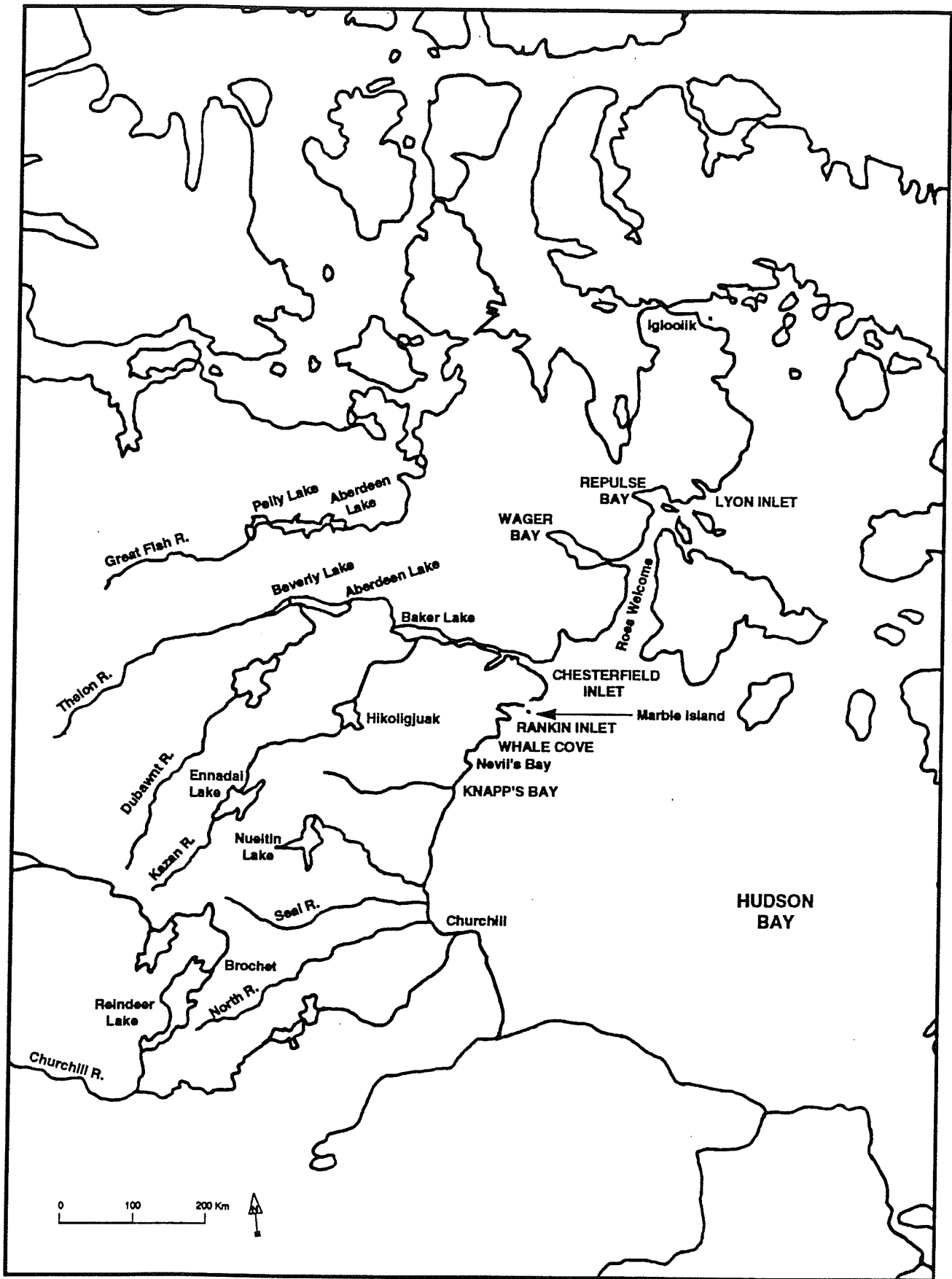
West Hudson Bay

On the west coast of the bay, Cree and Chipewyan informants told the first French and British traders similar histories of ancient enmity and war between their own peoples and the Inuit living north of them. The Indian histories recalled a time when Inuit had occupied the west coast of the bay as far south as Churchill, or even farther, and had been forced north by Cree and Chipewyan in a series of bitter wars (Ellis 1748; Graham 1791:213; Hearne 1795; James Knight 1717; Isham 1743:181; Robson 1752). Like the Lowland Cree histories from the east coast of the bay, the narratives did not suggest dates for the occupation, the wars, or the retreat, or elaborate on the causes of the conflict. Nevertheless, eighteenth century observers came to certain conclusions about the human history of Churchill River.

James Knight of the Hudson's Bay Company reported to his superiors in London in 1717 that Eskimos in large numbers frequented the Churchill River at that date (James Knight 1717:116). His claim was based solely on the existence of a large and possibly old tent village site which is still visible, and which is more likely to have been Cree or Chipewyan than Thule or Historic Inuit. James Isham, writing his *Observations* in 1743 after nine year's residence in Hudson Bay, believed that:

The Ehuskemay's, who before the English settled here used frequently to come to Churchill River or Ehuskemay point so Called, from their graves and marks of their dwellings, some of which are still remaining (Isham 1743:181).

Like James Knight, Isham cited the presence of old village sites at the Churchill River as the basis for his belief in a former Inuit occupation. Unlike Knight, he did not speculate as to the date of the occupation or the reasons for the withdrawal to the north, matters for which he had no evidence.



WEST HUDSON BAY

Joseph Robson, who worked at York Fort and Churchill River in 1733-1736 and 1744-47, wrote a history which included dates and an interpretation of events.

Churchill-river was much frequented by the Eskimaux before we settled there, the point on which the fort is built being called Eskimaux-point they were at length forced to go farther northward, to Cape-Eskimaux and Whale-cove; and are now totally dispossessed of this retreat, by our making a settlement here, and drawing down the northern upland Indians to trade, whom also we have supplied with arms (Robson 1752:63-64).

Andrew Graham, a resident of Rupert's Land between 1749 and 1775, echoed Robson.

Many of them [Eskimos] formerly resided upon Churchill River, but on the Company's building a Fort there, in the beginning of this present century, and the Indians resorting thither to trade, the Esquimaux retired farther to the north (Graham 1791:213-214).

Isham, Robson, and Graham did not state the sources of their information, who could have been Cree or Chipewyan, or Hudson's Bay Company personnel who in their turn had been told of the former Inuit occupation by Indian informants. While the fact of an earlier occupation is certainly accurate, the phrases "before the English Settled here," "before we settled there," and "formerly resided upon Churchill River," offer no clues as to the date of the earlier Inuit occupation. The belief of Europeans in Hudson Bay after 1670 that Inuit had lived in the vicinity of Churchill River within a generation is not supported by Indian or Inuit oral histories, by archaeological evidence, or by any eyewitness testimony from the seventeenth century.

In giving a recent date to the former Inuit occupation, Knight, Robson, and Graham all ignored the admittedly negative evidence of a dozen European exploration parties which had visited the west coast of the bay between 1612 and 1718.² If Inuit

²Thomas Button in 1612 and 1613, Jens Munk in 1619-20, Luke Foxe and Thomas James in 1631-32, Henry Kelsey in 1686, William Stuart and Henry Kelsey in 1689, Nicolas Jérémie between 1694 and 1714, Bacqueville de la Potherie between
(continued...)

had been permanent residents at Churchill or on the coast between Churchill and Chesterfield Inlet in the seventeenth century, it is difficult to explain why none of the observers between 1612 and 1718 actually saw Inuit or signs of recent Inuit occupation. It is particularly difficult to explain why Henry Kelsey's native companion in 1686 had no fears of encountering the enemies of his people until the two travellers were more than 200 kilometres north of Churchill.

Archaeological evidence supports Indian memory with evidence of a Thule occupation as far south as the Churchill River, and puts the date between 1200 and 1450, with the Inuit withdrawal occurring between 1450 and 1500 (Burch 1979:192, 194; Clark 1977; Clark:1979:93-97; Harp 1961, 1962, 1963; McCartney 1977). The timing of the southern occupation, roughly 1200-1450, coincides with the last years of the climatic optimum during which Birnirk peoples expanded from Alaska to Greenland. The northward withdrawal, 1450-1500, took place during the long period of climatic deterioration which culminated in the Little Ice Age.

In the two centuries or so which followed their retreat, that is between about 1450 and 1700, Inuit were effectively absent from the coast south of Chesterfield Inlet. Their settlements were restricted to Chesterfield Inlet and the lower Thelon River (Burch 1979:192, 194; Clark 1979:93-97; Harp 1961; McCartney 1977). Estimates of their numbers before about 1700 are highly speculative. Most living sites contain between one and three house ruins or tent rings, so it is probably correct to say that most communities consisted of no more than three or four nuclear families. It is impossible to know how many communities might have existed at any one time, how they were distributed, how often any one site was occupied, and whether seasonally or for longer periods. Given the steady drop in temperature, changes in wind patterns, and increased ice cover which affected the entire northern hemisphere (Lamb 1972:464; 1977:461-73), the inherent instability of the Keewatin climate

²(...continued)

1697 and 1703, William Stuart in 1715, James Knight in 1717, and their crews and companions.

(Dekin 1975:111; Gordon 1975:50; Nichols 1967a:187), and the widespread famines described by early observers (HBCA:B42/a/37; Oldmixon 1708:392), there is a strong possibility that late Thule populations on the west bay coast were seriously reduced by starvation. The total population in the mid- to late 1600s probably did not exceed one hundred individuals (Burch 1978:26).

Yet, after 1718, Inuit were present on the coast as far south as Knapp's Bay every summer. During most of the present century, their origins were one of the major problems of Inuit historiography, and a matter of considerable debate among arctic ethnologists and archaeologists. In two important studies, Ernest S. Burch (1978; 1979) suggested that the sudden re peopling of the bay coast was connected to another problem of arctic historiography -- the abrupt disappearance of a community or communities from Coronation Gulf. Burch's reconstruction of events, which links the abandonment of the Coronation Gulf south shore with the re peopling of west Hudson Bay, is speculative in some of its details, but overall it accounts for, and fits with, the known evidence from archaeological, documentary, linguistic, and environmental studies.³

The Little Ice Age

Discussion of the events must begin with a description of the geographical stage on which the historical drama took place. The Neo-Boreal Climatic Episode, also known as the Little Ice Age, began around 1550. It was a general cooling on a global scale. Environment-related famine and epidemic, and their demographic

³The archaeological evidence has been presented by Clark (1977); B. Gordon (1972, 1974); Harp (1959, 1961, 1962, 1963); Irving (1968); McCartney (1977); Noble (1971); W.E. Taylor (1972); and J.V. Wright (1972, 1976, 1977). Documentary evidence includes journals and letters of the Hudson's Bay Company, and the accounts of Foxe (1635a), James and Button (In Christy 1894), Jérémie (1720), Kelsey (1689), Knight (1717), and Munk (1624). Linguistic evidence has been summarized by Correll (1972) and Damas (1968b). Supporting environmental evidence can be found in Lamb (1972, 1988), and Nichols (1967a, 1967b, 1968, 1972, 1975b).

consequences, were facts of life and death in sixteenth and seventeenth century Europe as well as in North America. By 1550, the direction of the North Atlantic Drift had shifted from northeasterly to almost due easterly, and the extending polar ice pack had forced it out of its former track to a position farther south than it had occupied since the time of the Norse exploration and occupation of Greenland (Lamb 1977:512). The storms that Martin Frobisher's expeditions encountered in southern Baffin Island and Hudson Strait in the 1570s were characteristic of the deteriorating weather conditions of the Little Ice Age. Decade by decade the ice pack extended southward, until by the 1580s, when John Davis visited Baffin Island and Labrador, Denmark Strait was filled with pack ice which cleared only occasionally (Ogilvie 1984, 1992). In 1592, Pope Alexander VI noted that "at the ends of the Earth in Greenland ... extensive freezing of the water" made attempts to reach Greenland impossible (Lamb 1982:179).⁴

During the same half century, changes in atmospheric circulation carried polar air masses to the south, replacing the prevailing westerlies with north winds. The effects were felt throughout the northern hemisphere, on both sides of the Atlantic, with disastrous results for a number of populations. During the winter of 1603-1604 close to 9000 people died in Iceland from climate-related causes (Ogilvie 1992:108). In eastern North America during the hard winter of 1607-08, many deaths of both native Americans and Europeans were reported in the St Lawrence Valley and parts of New England and the Maritimes (Lamb 1972, 1988).

Throughout the eastern arctic, severe cold and slightly warmer periods alternated for most of the seventeenth century. In mountainous Cumberland

⁴The effects of climate and unstable environments were as significant for Europeans in Europe, as they were for North American arctic peoples. The cod fisheries of the Faroe Islands, which had supplied a substantial proportion of the fish consumed in Europe, collapsed by 1600 as schools of cod migrated away from the edge of the advancing ice and the increasingly cold polar waters. The fish did not reappear in sufficient quantities to make commercial fishing viable until the 1820s. Whaling was greatly improved in the area, especially in the period from 1717 to 1739 (Lamb 1977:511).

Peninsula, extreme glaciation occurred after 1610, more severe than at any other time in the previous millennium (Grove 1988:255). Jens Munk's passage through Hudson Strait and Hudson Bay to the Churchill River in 1619-20 took place during one of the brief, slightly milder summers, and would probably have been impossible a decade earlier or later.

The slow and steady global cooling after the thirteenth century intensified between 1645 and 1716, during a period of reduced solar radiation known as the First Maunder Minimum (Eddy 1976).⁵ Even colder episodes occurred within the Maunder Minimum because of a further reduction in solar radiation due to increased atmospheric dust following major volcanic eruptions in 1673 and 1693 (Fritts & Shao 1992:281). At New Severn River in 1674, John Oldmixon of the Hudson's Bay Company described the effects of the extreme cold on one local community.

[There was] great Mortality among them, and several were starv'd to Death for want of food; this country being such a miserable Wilderness, that it affords not Sufficient Sustenance for the wretched Inhabitants (Oldmixon 1708:392).

In the 1680s and 90s, Iceland was almost continuously surrounded by heavy ice (Lamb 1982:207; Ogilvie 1992:110). By 1695, the influx of polar water had lowered the temperatures of the Norwegian and Iceland Seas by as much as 5^o Celsius (Lamb 1979:15; 1982:208).⁶ The diary of Magnus Magnusson, an Icelandic farmer,

⁵The reduction in solar radiation is believed to be related to a relative absence of sun spots.

⁶Again, it is worth noting that the climatic pessimum was global. In Europe, the summers of the 1680s and early 1690s were wet and cold, the 1690s being one of the coldest decades ever reported for Europe (Grove 1988:417-418). European statistics for the terrible winter of 1695 appeared in a German newspaper in 1702, with reports of severe famines in Scotland and Norway after massive crop failures; figures for Estonia indicated that 20% of the population had died during that one winter of starvation and famine-related disease; in Finland human losses amounted to over 30% of the population (Grove 1988:417-418). In the first decade of the next century, the cold destroyed the entire poultry population of northern France, and by 1709 the French people were suffering massive mortality from starvation and exposure (LeRoy Ladurie 1972:91).

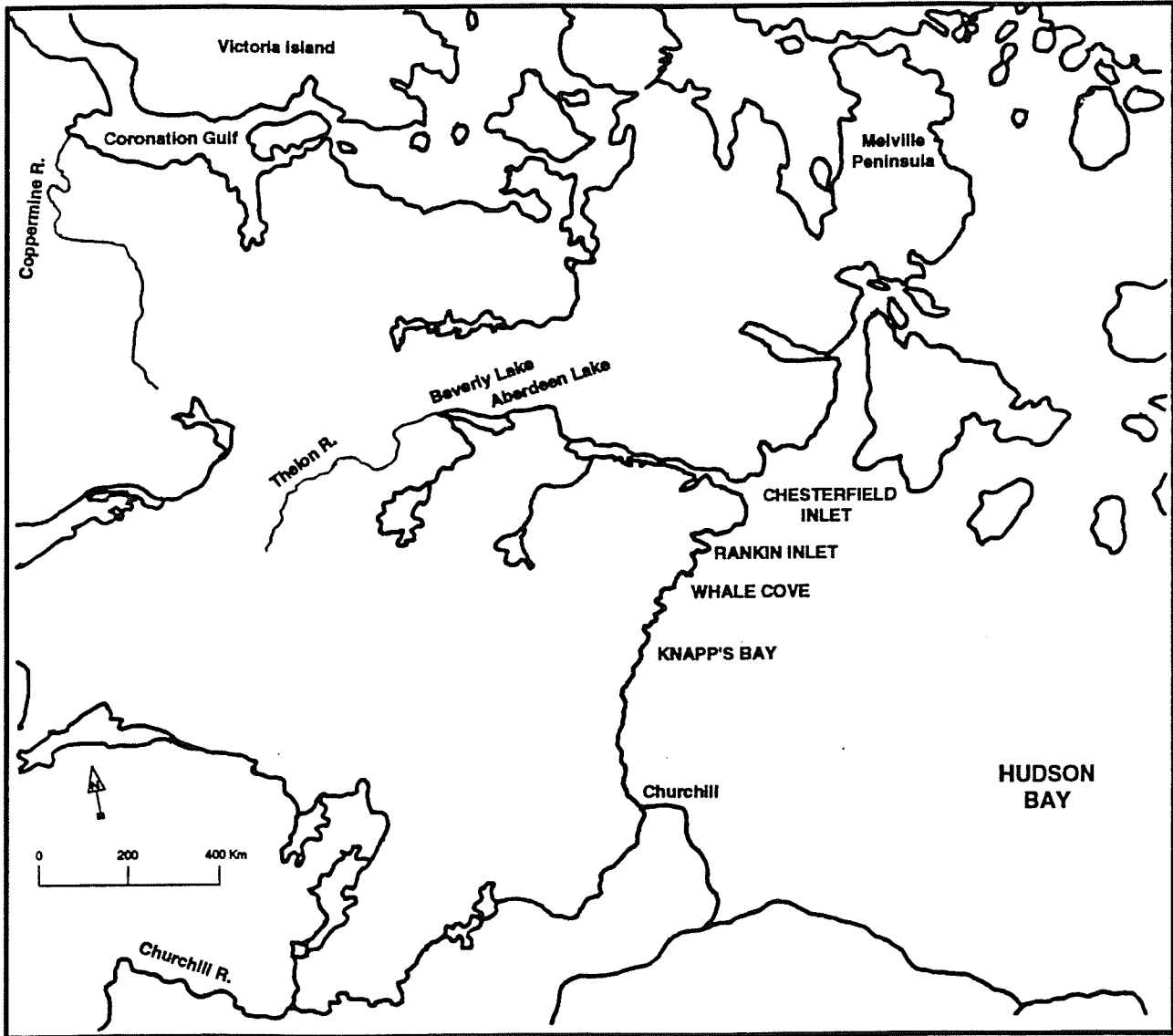
confirms modern reconstructions of ice conditions in the North Atlantic between 1673 and 1703. He noted that in 1695 ice along the west coast of Iceland lasted months longer than usual.

No one could remember such ice cover, nor had anyone heard of such ice from older people ... they also told of such a girth of ice in the sea round this country that ships could hardly reach the shore except in a small area in the south (In Grove 1988:21).

Temperatures in the 1690s were even lower in North America. The Hudson Bay region experienced the coldest weather and greatest extent of sea ice of the entire century (Ogilvie 1984:145; 1992:109-110). By 1700, Baffin Island was 70% covered with snow and ice which did not melt during the summers, compared to permanent coverage of between two and three percent in the twentieth century (Ives 1962; Lamb 1982:230).

Increased precipitation, lower temperatures, thicker ice, greater snow cover, and the disappearance of some food resources are not necessarily threats to human existence in themselves. Human communities have always found ways to survive even in apparently inhospitable environments. Even changed or changing conditions are not necessarily life threatening, when people can foresee them and prepare for them. Unpredicted and unpredictable situations, on the other hand, pose major threats to human life.

Unstable environments carry high risks for most wildlife. In the North American arctic, caribou herds, migratory birds, and marine mammals are highly vulnerable to climatic fluctuations, even short-lived, apparently minor ones. One particularly cold or wet summer can cause high mortality among caribou calves, seriously depleting a herd; ice which is a few inches thicker than usual in one winter can depopulate a seal denning area for years; birds fighting unfavourable winds may not reach their preferred nesting sites. Food resources become highly erratic in unstable environments, and the unpredictability of fluctuating environmental conditions increases the difficulties human beings face in planning for their subsistence needs.



-CORONATION GULF TO HUDSON BAY

Coronation Gulf

Like societies almost everywhere in the northern hemisphere during the First Maunder Minimum, a community or communities in Coronation Gulf on the arctic coast faced a potentially life-threatening environmental crisis as the caribou herds and seal populations which were their major food resources became increasingly inaccessible. Paleo-Eskimo occupations here had been intermittent, and Neo-Eskimo ones continued the pattern of alternating occupation and abandonment.

Coronation Gulf was one of the least hospitable of the new environments into which the first Thule moved during their eastward expansion out of Alaska in the twelfth and thirteenth centuries (Burch 1978:22). They found local conditions very different from those on the Alaskan shore of the Beaufort Sea. Whale and walrus did not flourish in the shallow, enclosed ocean surfaces of the central arctic. The first Thule immigrants had to develop new technologies and techniques suited to hunting and using the alternative food resources of the area -- seal, caribou and fish (McGhee 1972a:122-123; 1978:113-115). They became a storage-dependent people. Limited resources harvested during the short summer season had to be stored in sufficient quantities to carry the communities through the long winter, and required the development of highly efficient storage technologies (D. Morrison 1983a:278).

Around the middle of the seventeenth century, the already precarious existence of Coronation Gulf communities was severely threatened by the climatic changes of the First Maunder Minimum. Shorter cooler summers, longer colder winters, and increasingly thicker and longer lasting ice (McGhee 1972a:122) further reduced the already scarce resources. The rare beluga whales disappeared (Schledermann 1976:41), the caribou herds of Victoria and Banks islands and the mainland coast dwindled (Savelle & McCartney 1988:36), and the ringed seals extended their winter range (McGhee 1976a), making them more difficult to find and kill.

Environmental constraints of the magnitude posed by the onset of the Neo-Boreal climatic episode in 1550 and the First Maunder Minimum in 1645 are forcing factors for social change, setting limits to what human beings can do, although not compelling particular human responses. As discussed in earlier chapters, people

faced with the disappearance of major subsistence resources can choose from a number of possible responses: they may attempt to increase food-gathering efficiency through greater effort, through increased mobility, through development of new technologies, or through use of alternative food resources; they may attempt to exploit larger territories through expansion or by import strategies such as trade and long-distance harvesting; they may attempt to claim the resources of other groups through war, trade, alliance, or changes in group membership; they may migrate to richer resource areas; they may accept a reduction of the population to the minimum level at which the social unit can be maintained, or to a level at which the social unit is extinguished and the survivors seek refuge with more affluent neighbouring groups; or any combination of the above, or other, strategies (Amsden 1979:404-405; J.L. Anderson 1981:339).⁷

Most of the options were not available to the people of Coronation Gulf in 1650. Increased hunting efficiency through intensification of effort or new technologies may have been tried, but it could have had only short-term and limited success in a situation where the fundamental problem was long-term disappearance of resources. Increased use of alternative food resources was not a possibility because all food resources were threatened or increasingly inaccessible. Importation of resources by trade requires surpluses in the hands of both trading partners, which was not the case on the arctic coast. Importation by long-distance harvesting is a highly expensive alternative, costly in terms of travel time and of time taken away from subsistence hunting. It also carries with it the possibility of conflict with neighbouring groups who are themselves experiencing long-term shortages. For a community of one or two hundred individuals the time and energy costs of long-distance harvesting or procurement of necessary resources through raiding can prove prohibitive.

⁷The possible human reactions to resource shortages resulting from environmental degradation suggested by Anderson and Amsden, in spite of claims to the contrary, do not adequately encompass the 'infinite variety' of human behaviour, nor are the responses noted in the present discussion by any means comprehensive.

Nothing indicates that Coronation Gulf communities experienced widespread extinctions, or annihilative warfare, or that they dispersed and joined neighbouring communities. Archaeological evidence suggests instead that a period of severe food shortages, lowered populations, and high mobility was followed by the disappearance of all, or nearly all, of the population of Coronation Gulf some time in the seventeenth century (Burch 1978; McGhee 1972a:57-58; McGhee 1978; D. Morrison 1990; Nichols 1975b). Because of an almost complete absence of tool artifacts and food remains, and the evidence of declining populations during the period, archaeologists have called it the "Intermediate Interval" (McGhee 1972a:57-58).

The material evidence of the Intermediate Interval is consistent with a theory of a planned mass migration from the area. Two peculiar features of Coronation Gulf sites from the interval -- the absence of tools and utensils, and the absence of interior construction in the semi-subterranean houses of the period (McGhee 1972a:57) -- are understandable within a mass migration hypothesis. People planning a permanent or long-term move would tend to take serviceable tools, utensils, furniture, and scarce materials such as wooden or whalebone house supports to their new homes rather than leave them in abandoned structures to which they did not intend to return.

If, as the archaeology of the Intermediate Interval suggests, the people of Coronation Gulf chose to solve problems of serious long-term shortages by migrating to territory where resources were more abundant, where did they go? They could not have expected to find adequate resources to the north, where environmental pressures were also increasing, and the presence of well-established communities effectively barred the way to the west and south. The only direction in which they might have hoped to find uninhabited territory richer in resources than their own was to the southeast.

The forested area around the middle and upper Thelon was already known to them as a source of wood. It had also recently been abandoned by Athapaskans, who had responded to deteriorating climatic conditions by withdrawing to more southerly, forested regions. From the middle Thelon, the way was open for migrants from the

west to move into the sparsely populated Chesterfield Inlet area, and south along the coast.

If Coronation Gulf people moved across the barren grounds and along the Thelon-Chesterfield Inlet to the bay coast, a new question needs to be asked: Is there evidence from the bay coast that tends to support a migration-from-the-west theory? A number of apparently inexplicable changes in the material and intellectual cultures of the people of west Hudson Bay in the late seventeenth century make sense within the migration hypothesis as postulated by Ernest S. Burch (1978; 1979). One is the problem of a sudden change in the style of winter houses on the Keewatin coast in the mid- to late 1600s. Before 1684, the usual bay coast winter house was the classic Thule semi-subterranean stone and sod construction. By the mid-1740s, surface dwellings were the norm (Ellis 1748:147-148, 232). Why did the Keewatin coast people switch from the warm, comfortable semi-subterranean dwelling to one that apparently had nothing to recommend it? Burch (1978) has suggested that it is extremely unlikely that people would make such a change on their own, and that the style was introduced by newcomers who already had a long tradition of building surface houses. As it happens, exactly similar surface dwellings had been used since about 1500 in the Coppermine River area of Coronation Gulf (Burch 1979:196; Linnamae & Clark 1976:57; McGhee 1972a:40, 53, 66-67; Mathiassen 1927b:133).

A second problem long known to arctic researchers was the dialect anomaly. Communities speaking variants of the same language tend to develop dialects which retain similarities with the dialects of their near neighbours, and diverge from those of more distant co-linguists. For example, the dialects spoken by the Iglulik people of Melville Peninsula are closely related to those of their neighbours in Baffin Island, which in turn are closely related to the Labrador and Quebec dialects. Logically enough, the Iglulik variants are less like the Labrador-Quebec dialects than Baffin Island speech is to either of them. If the Keewatin Historic Inuit had developed *in situ*, their dialects should be more similar to those of their nearest neighbours, the Iglulik, than to more distant groups, which is not the case; they are phonologically more similar to the dialects of the Netsilik (Damas 1968b:155). Copper (on

Coronation Gulf), Netsilik (on Boothia Peninsula), and Keewatin dialects are similar enough to be considered a dialect group, and the greatest similarities are between the Copper and southern Keewatin people. The language anomaly cannot be accounted for outside of the migration theory (Burch 1979:197).

Other similarities of intellectual and material culture, for example, trading practices, mythology, and clothing styles, suggest a closer link between the Keewatin coast societies and the Coronation Gulf, than between the Keewatin coast and the Iglulik people of Melville Peninsula and north Baffin Island.

Inuit oral histories, an often overlooked source of evidence for past events, support the migration hypothesis. On the question of a possible migration from Coronation Gulf, the oral sources are sparse, limited to bare statements of an ancestral home to the northwest, and a journey across the great land (Burch 1979:201-202). They do not offer a reason for the move, or suggest when it took place. However, the oral sources, as far as they go, support the conclusion that a migration from Coronation Gulf to Chesterfield Inlet took place at some period before, possibly just before, the establishment of the first trading post at Churchill.

The available evidence suggests that around 1680, Coronation Gulf people made a decision to move *en masse* in a southeasterly direction, to the upper Thelon River and on to Chesterfield Inlet (Burch 1978; J.G.E. Smith 1981b). There they discovered inhabitants whose total population was less than their own.

[They] were able to overwhelm them in their scattered small camps. Some of the local people were killed, while others fled to the north. The remainder were simply assimilated by the immigrants. Confronted by more heavily populated territory toward the north, and presented with a virtually uninhabited area toward the south, the newcomers quickly established themselves around Rankin Inlet (Burch 1978:26).

Within a generation, the augmented population had established small outlier communities on the offshore islands and isolated peninsulas of the coast between Rankin Inlet and Whale Cove, and occasionally as far south as Knapp's Bay (Hearne 1795:217n; Jérémie 1926; Kelsey 1689:25; Warkentin & Ruggles 1970:87). Here they met Europeans for the first time in 1718.

Mobility, Migration, and Relocation

In the generally unstable and often unpredictable environments of the arctic, mobility has always been a necessary, common, and effective solution to problems of resource scarcity. It is the basis of the seasonal round which enables people to harvest the resources of more than one region within their territory, it is implicit in occasional long-distance harvesting of resources, and it is an inevitable component of trade. Societies practicing routine mobility recognize the fact of temporary and recurring periods of short-term scarcity, plan for them, and survive them without disrupting their accustomed demographic and social organization.

Mobility as a solution to immediate or impending life-threatening situations requires a level of response beyond the routine of seasonal round, possibly to the point of abandoning territory and relocating elsewhere. Warfare, climatic degradation, social upheaval (Tomka & Stevenson 1993:192), epidemic disease and geologic disaster are among the forcing factors. Abandonment may be an unplanned and unorganized response to catastrophic events or it may be a planned movement when impending disaster is identified in advance (Burch 1978; Tomka & Stevenson 1993:191-195). In either case, eventual return may or may not be anticipated.

The unplanned flight from immediate danger such as geologic disaster or epidemic disease, identified by migration theorists as the 'fragmentation model,' is characterized by the sudden abandonment of homes and workplaces as unprepared refugees flee in all directions in search of safety (Burch 1978:23; Burch & Correll 1972:31-32). Planned moves of entire social units or mass migration of significant portions of a population are responses which occur when societies have clear warning of impending catastrophe. In the arctic, planned mass migrations have occurred only when neighbouring regions were either completely unoccupied or occupied very thinly by populations significantly smaller than the migrating group.

Traces of permanent abandonment of territory, particularly fragmentation type moves, are difficult to recognize in the archaeological record because abandoned regions tend to be reoccupied when local conditions change (Tomka & Stevenson 1993:192). In the arctic, the scarcity of many building materials guarantees that later

residents will use materials from previous occupations whenever possible, resulting in the destruction of older sites. However, some migrations have been on a scale large enough to leave visible traces. Examples are the Thule expansion of 900-1100, the southward movement along the west coast of Hudson Bay to Churchill between 1100 and 1300, the intrusion of south Baffin Islanders into Ungava and Labrador around 1300-1330, the abandonments of Somerset Island and Amundsen Gulf in the 1450-1500 period, and the forced retreat from Churchill to Chesterfield Inlet some time between 1450-1500.

The movement of Thule out of Alaska, across arctic North America, to Greenland in AD 900 to AD 1100 is perhaps the best known example of an arctic mass movement of people. However, it differs from other movements of Eskimoan people in a number of ways. It was not so much a migration as it was an expansion; the Thule did not leave abandoned territory behind them. The impetus for the move was not a catastrophic event or life-threatening circumstance. It occurred during a climatic optimum when all resources were adequate and at least some were abundant. It was provoked by the appearance of new opportunities rather than forced by catastrophe. While not necessarily a planned movement, it was not a panic reaction leading to a fragmentation kind of dispersal.

The movement of people from southern Baffin Island to the Labrador and Ungava peninsulas between 1300 and 1330, while it was a mass migration in terms of arctic populations, may not have been a total abandonment of territory. A small population may have remained (Fitzhugh 1977:3), and may have been ancestral to the people who met the Frobisher and Davis expeditions in the 1570s and 1580s. The movement was probably motivated by the 'push' factor of extreme climatic cooling and serious shortfalls in both marine and terrestrial food animals, and the destination was probably chosen because of the presence across Hudson Strait of increasing numbers of Greenland whales. It appears to have been a planned move.

The disappearance of an entire population from Somerset Island between c.1450 and 1500 may have involved mass migration, albeit of a much reduced population following a period of resource loss and famine. It is also possible that the

abandonment was not due to migration at all: the communities may have become extinct. If there were survivors, they may have joined other communities as refugees or immigrants in numbers so small that their assimilation left no archaeological or linguistic evidence. Because of historiographical problems -- the absence of linguistic and artifactual evidence -- exactly what took place in Somerset Island in the late fifteenth century may never be clearly understood.

The disappearance of the peoples of Amundsen Gulf, also in the years between 1450 and 1500, seems to be another case of abandonment of territory. However, like the example from Somerset Island and unlike that of south Baffin Island, the ultimate destination or destinations of the inhabitants and their subsequent history are unknown.

The southward expansion of Eskimoan people along the west coast of Hudson Bay in the twelfth and thirteenth centuries was part of the general movement of Thule peoples across the arctic. Their subsequent abandonment of territory was forced on them by neighbouring people, the Cree and Chipewyan, whose coercive power was strong enough to compel their withdrawal from the Churchill River to Chesterfield Inlet some time in the late sixteenth or early seventeenth centuries.

Abandonment of territory and subsequent relocation of whole social units are powerful catalysts for social and economic change. When a migrating population enters unoccupied territory, it may have to adjust its subsistence economy and social organization in order to make the best use of the resources of the new environment, but it can safely maintain old traits which do not jeopardize the social unit. This was the experience of the original Thule people who arrived in Coronation Gulf in the twelfth and thirteenth centuries, and of the Baffin Island Thule who moved across Hudson Strait in the early fourteenth century. The people adjusted their subsistence economies and social structures enough to ensure survival in the new territory while at the same time remaining identifiably Thule.

When immigrants intrude into already populated territories, the maintenance of former identities is less certain. Their numbers relative to the numbers of indigenous people will influence the kinds of adjustments they make. In theory, if the incoming

group is smaller than the already-established society, and socially passive, its members will be assimilated into the majority society; if the incoming group is big enough, and socially aggressive, it may drive out the local population or absorb it (Rouse 1986:9). The withdrawal of some Tunit (Dorset) groups from their territories in the face of Thule expansions, as told in Inuit histories, is an example of local populations being driven away by relatively massive influxes of newcomers. In most places colonized by Thule, Dorset people were unable to survive as separate and identifiable social units.

The adoption by Thule of Dorset snowhouse technology is an example of majority society maintenance of minority society traits which prove particularly useful under local conditions. The social, cultural, and economic changes made by Coronation Gulf immigrants to the west coast of Hudson Bay shortly before or after 1700 also followed this pattern. The new inhabitants adopted some of the traits of the indigenous population which they replaced or absorbed, retained some of the characteristics of their earlier way of life, and made changes appropriate to their new environment.

In fragmentation dispersals, refugees joining already established communities may bring their own kinship networks and alliances with them (Burch & Correll 1972:32), with varying degrees of benefit to the enlarged community. The ideas they import may result in technological innovations, and the creation of new, syncretic worldviews. At the same time, they may bring a legacy of bad blood and ill will, and involve their new community in old feuds.

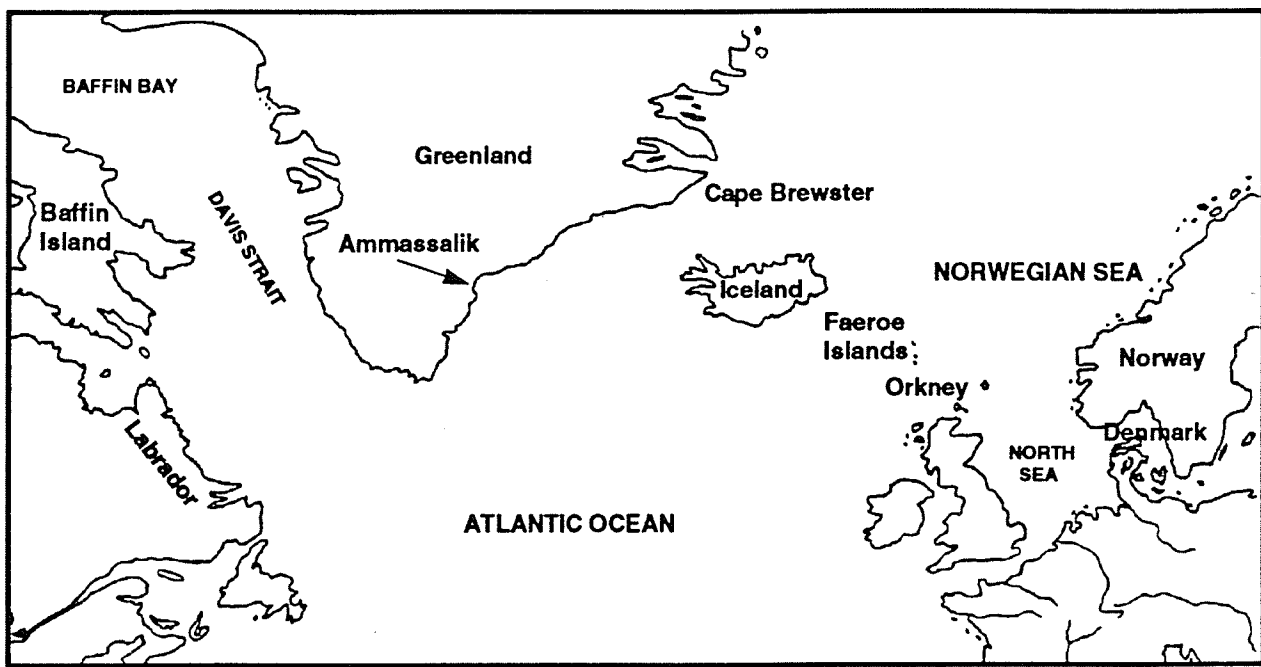
The exodus from Coronation Gulf in the late 1600s was apparently the movement of an entire society of at least one hundred individuals (Burch 1978:26). The migration was a response to increasingly severe environmental pressures and a potentially life-threatening environmental crisis. The keywords are 'increasingly' and 'potentially.' The basic problem was not climatic instability and sudden disastrous depletion of resources; it was gradually increasing cold (Burch 1978:23) and the subsequent slow but steady reduction of seal, whale, fish, and caribou. The declines may have been almost imperceptible from year to year, but would certainly have been

obvious over the lifetime of a generation. People had prior notice of impending hard times, and time in which to make plans. The existence in their former territory of house ruins which lacked all interior constructions (McGhee 1972a:57) suggests that they had removed the rare and valuable house supports and other fittings for use in their new homes. The curious absence of artifacts for the Intermediate Interval is also suggestive of a planned, permanent relocation; a community which has decided to abandon its homes and homeland, in order to establish itself in a distant and little known place might be expected to take as many of its usable tools and utensils as possible. All of the evidence points to a planned move, not a panic-driven flight of refugees fleeing in all directions from an unanticipated threat to existence (Burch 1978:22, 26). They moved into territory which was not entirely unknown to them; they knew it offered the possibility of adequate resources, and were probably aware that it was too thinly populated for there to be an effective resistance to their intrusion.

Greenland

During the same period in which people of Coronation Gulf and the Labrador coast were seeking new resources in a rapidly deteriorating environment by mass migration, expansion, raiding, and trading, unusual events in the North Atlantic suggest that other arctic people were also searching for ways to deal with the problems of diminishing resources. Between 1682 and 1701, several local historians in the Orkneys and northern Scotland commented on the appearance of mysterious strangers in skin boats along the coasts. An early incident was recorded by the Reverend James Wallace of Kirkwall, Orkney.

Sometimes about this Country are seen these Men which are called *Finn-men*. In the year 1682 one was seen sometime sailing, sometime Rowing up and down in his little Boat at the south end of the Isle of *Eda*, most of the people of the Ile flock'd to see him, and when they adventur'd to put out a Boat with Men to see if they could apprehend him, he presently fled away most swiftly (Wallace 1693:28).



NORTH ATLANTIC

Two years later, in 1684, another was seen off the coast of the Isle of Westray. The Reverend Wallace was firm in his identification of the strangers.

And in the year 1684, another was seen from *Westra*, and for a while after they got few or no Fishes for they have this Remark here, that the *Finnmen* drive away the fishes from the place to which they come. These *Finnmen* seem to be some of those people that dwell about the *Fretum Davis* (Wallace 1693:28).

In 1700, Reverend Wallace's son, Dr James Wallace, made some comments of his own in a second edition of his father's popular book.

Be the Seas never so boisterous their Boat being made of Fish Skins, are so contrived that he can never sink, but is like a Sea-gull swimming on the top of the Water. His shirt he has is so fastned to the Boat, that no Water can come into his Boat to do him damage, except when he pleases to unty it, which he never does but to ease nature, or when he comes ashore (Wallace 1700:60-61).

In 1701, the Reverend John Brand noted frequent appearances of strangers in skin boats off the coasts of the Isles of Orkney, in particular a sighting near Stronsay in 1699, and one near Westray in 1700. Brand's description of the unknown visitors agreed in most particulars with that of Wallace.

There are frequently *Fin-men* seen here upon the Coasts, as one about a year ago [1699] on *Stronsa*, and another within these few Months on *Westra*, a Gentleman with many others in the Isle looking on him nigh to the shore, but when any endeavour to apprehend them, they flee away most swiftly.... His boat is made up of Seal skins, or some kind of leather, he also hath a Coat of Leather upon him, and he sitteth in the middle of his Boat, with a little Oar in his hand, Fishing with his Lines (Brand 1701:50-51).

Yet another clergyman, the Reverend Francis Gastrell, described a kayak he saw in the museum of King's College Chapel, Aberdeen, in 1760. The canoe, he wrote, "was driven into the Don with a man in it who was all over hairy, and spoke a language which no person there could interpret. He lived but three days." Gastrell placed the incident "about thirty-two years since," that is, around 1728 (Idiens 1987:164).

Uncertainty as to the identity and origin of the leather-clad, skin-boated strangers continued long after Wallace and Brand presented their different opinions.

A popular explanation was that the mysterious visitors were Selkies. In the folklore and folksong of Orkney, Shetland, and Northern Scotland, Selkies are seal-people, creatures who have seal bodies while in the sea, and become human when they remove their seal skins. Their homeland was thought to be an island far to the west. Many of the stories tell of lonely maids and unsatisfied wives who took Selkie lovers and gave birth to dark-skinned, dark-eyed infants. Others relate how Scottish fishermen captured and married Selkie women. Human husbands and wives kept their Selkie spouses on land by hiding their shape-shifting outer skins. Much Selkie folklore centred around the quest of homesick seal-people for their skins, which they needed in order to return to the sea (Black & Thomas 1901; Marwick 1975).

Selkies were never confused with common seals, which were considered to be fish, and were treated with no more fear or respect than a North Sea herring. There was, however, a suspicion among the local inhabitants that the large and relatively rare Greenland and gray seals were Selkies, and their appearance on Scottish coasts caused concern and extra caution among the fishing villages. Seal-people were associated with strong tides, heavy seas, and fierce storms. Whether they appeared as a result of unusually strong westerly winds and currents, or were the cause of extreme weather conditions is not clear in the folklore, but the tales caution against wounding or killing a Selkie because of the bad luck and hazardous weather conditions associated with them (Black & Thomas 1901:172, 180-81; Marwick 1975:28-29).

In the context of seventeenth century European cosmography, an observer who failed to recognize the true nature of a seal-skin clad Inuit in a body hugging seal skin boat cannot be charged with being particularly naive. Inuit hunters were extraordinarily good at imitating the creatures of the sea, as Lieutenant George Best noted after observing the activities of the Frobisher Bay people in the 1570s.

They are good fishermen, and in their small boats, and disguised with their sealskin coats, they deceive the fish, who take them for fellow seals rather than deceiving men (Best 1578a:115).

Some commentators, like Wallace, Brand, and historians of the next two centuries put forward more mundane explanations. The strangers were either of

Scandinavian origin, as Brand believed, or inhabitants of North America, as Wallace claimed. All attempts to show a northern European provenance for the strangers have been unsuccessful. Scandinavian peoples had, in fact, experienced visits from the seal people at least as early as the thirteenth century. In the 1420s the Danish cartographer Clavus Swart noted that he had seen "the little pygmies ... after they had been caught at sea in a skin boat which now hangs in [the] Cathedral [at Trondheim]. In the cathedral there is also a long boat of skin which was taken with the same kind of pygmies in it" (Gad 1970:173). He invented a country for them and placed it half way between Norway and Greenland on his maps. The Trondheim cathedral records indicate that a Greenland kayak and umiak were indeed among its museum pieces in the fifteenth century (Gad 1970:174).

An increasing body of convincing evidence that the kayaks and their inhabitants were North American has been produced during the twentieth century (Birket-Smith 1924:266; Idiens 1987:162-163; Whitaker 1954, 1977). The major objection to a North American origin for the mysterious strangers has been the apparent impossibility of a kayak staying afloat in open water for nearly 1200 nautical miles, or nearly 2000 kilometres, that being the distance from Cape Farewell at the southern tip of Greenland to Scotland. An explanation which accepted a North American origin and at the same time did away with the long sea voyage was put forward early in the twentieth century. The mysterious strangers could have been captives carried across the Atlantic by whalers, fishermen, or explorers. When the sailing ships came in sight of land, the captives could have attempted to escape in their kayaks and ended up along the Scottish coasts (MacRitchie 1912b:502).

The escaping-captive theory gained considerable support and is still being championed (Souter 1935:17; Mikkelsen 1954; Nooter 1971:10; Idiens 1987:163-164). There is no question that while some Eskimos were willing passengers to Europe, considerable numbers were taken forcibly from their homes in the sixteenth and seventeenth centuries. Besides the Labrador Eskimo woman and child kidnapped in 1566 by French fishermen for exhibition in several German cities in 1567, and the four people taken from southeast Baffin Island by Martin Frobisher's 1576 and 1577

expeditions, at least thirty Greenlanders were kidnapped by Danish, Norwegian and Dutch ships and taken to Europe between 1605 and 1660 (Gad 1970:238).

At first glance, one documented incident lends support to the escaping-captive theory. In 1605, a Danish expedition took five Greenlanders to Europe (Idiens 1987:163). The next year, three of them tried to get away in their kayaks, and were caught making their way along the coast of Denmark (Whitaker 1977:43; Oswalt 1979:43). The most serious flaw in the escaping-captive theory is that the majority of captives were taken, not to British waters where all the known sightings occurred, but to Denmark and The Netherlands. As Ian Whitaker has pointed out:

It is possible that one, or even two, of these escapees may have reached Scotland, [but] it can scarcely be maintained that six or more arrived in the course of fifty years. One is thus forced to the conclusion that the 'Finn-men' were in fact Greenlanders ... making the journey from their homeland (Whitaker 1977:102).

If they were not 'escaping,' how are the appearances to be explained? Whitaker concluded that "deliberate design" lay behind them, because "It is unlikely that storm would send six or more Greenlanders to Iceland, and then on to the Faeroes, and then further still" (Whitaker 1977:103). The possibility that Greenlanders were deliberately trying to cross the Atlantic should not be rejected out of hand. The people of seventeenth century Greenland had motive, means, and opportunity to seek out new resources, and information about where such resources might be found.

Environmental phenomena provided necessary motive. Lichenometric dating of moraines indicates continuous and rapid glacial advance in Greenland between 1600 and 1775 (Grove 1988:260). Eyewitnesses also recorded the almost visible progress of ice rivers into Greenland fjords. The Moravian missionary, Otho Fabricus, wrote:

The ice spreads out more and more every year ... the experiment has been tried of erecting a post on the bare ground a good distance from the ice, and the next year it was found to be overtaken by it. So swift is this growth that present day Greenlanders speak of places where their parents hunted reindeer among naked hills which are now all ice. I

myself have seen [caribou] paths running up towards the interior of the country and worn in bygone days but now broken off at the ice (In Grove 1988:260).

In the conditions of the First Maunder Minimum, Greenlanders, like Baffin Islanders and the people of Labrador, were hard pressed and highly motivated to seek relief from conditions of scarce resources and recurring periods of starvation similar to those reported for the west coast of Hudson Bay during the period. They may have undertaken voyages to the east, hoping to find more abundant resources in other lands, or assistance from the owners of the sailing ships which had already appeared frequently in arctic waters.

Along with strong motives, Greenlanders had the means to make the trans-Atlantic journey. The escaping-captive theory was originally proposed because Europeans could not imagine a kayak surviving across nearly 2000 kilometres (1200 miles) of open ocean. The feat is, however, not impossible, or even improbable. The small craft most commonly used by Icelandic colonists for fishing and sea-hunting in the tenth and eleventh centuries was the leather-covered coracle, or curragh. It was "adequate for the 260-nautical-mile [418 kilometre] crossing of the narrowest part of the Denmark Strait [from Iceland] to Greenland" (Mowat 1965:17). A carefully oiled skin kayak can remain seaworthy for at least two weeks immersed in fresh water, as experiments have shown (Nooter 1971:9), and a kayak in salt water will remain sea-worthy much longer (Stefansson 1942:24).

Like the curraghs in which Irish voyagers journeyed to Iceland in the ninth and tenth centuries, a Greenland kayak in the hands of an experienced seaman such as a Greenland hunter would be capable of crossing Denmark Strait and the southern stretches of the Norwegian Sea. The nearly 2000 kilometres [1200-miles] from Cape Farewell to Scotland are irrelevant to the argument. The most direct route from Greenland to Europe is just over 1200 kilometres (700 miles): from Cape Brewster to northwest Iceland is 260 kilometres (180 miles), from southeast Iceland to the Faroe Islands is 442 kilometres (275 miles), from the Faroes to Shetland is 200 kilometres (185 miles), and from the Faroes direct to Orkney is 322 kilometres (200 miles)

(Whitaker 1954:103). A journey from Cape Brewster to Orkney could have been made in three or four stages, and involved at most 1230 kilometres (700 miles) at sea.

Opportunity was also at hand. The southward extension of the pack ice, and ocean currents altered by the presence of nearby polar ice, would have been assets in the search. For people setting out from Greenland, the 1200 kilometres to Scotland need not have been entirely by water. As Ogilvie's (1984, 1992) reconstructions of ice conditions in Denmark Strait indicate, the first leg of the journey, to Iceland, could certainly have been on ice, as might the second stage, from Iceland to the Faeroes. The water portion of the trip could have been less than 500 kilometres. Provisions need not have presented a problem; people walking along the edge of the ice pack would have been able to harvest the resources of the sea. The shift in the direction of the Gulf Stream-North Atlantic Drift from northeasterly to due easterly which had accompanied the southward expansion of the polar pack between 1577 and 1800 (Lamb 1977:512), while it may have been an obstacle to ships sailing west, was an asset to vessels heading in an easterly direction.

Finally, along with motive, means, and opportunity, several different groups of Eskimo had information, limited though it was, of inhabited lands to the east. As late as the nineteenth century, Greenlandic oral traditions contained memories of a thirteenth century Norse presence, and Baffin Islanders had not forgotten Martin Frobisher's expeditions of the 1570s, or meetings with Irish, Icelandic, Basque or Portuguese in the fifteenth and sixteenth centuries. By 1650, Greenlanders, Baffin Islanders and Labrador coast people were certainly aware of a well-populated and apparently affluent country on the other side of the Atlantic. A number of their people had been taken there; some had returned and others had not. It is by no means impossible that they should have undertaken deliberate voyages in that direction, to hunt the large arctic seals that live at the edge of the ice pack, to seek new resource areas in a new country, to find their lost compatriots, or to open up trade relations with the people of the sailing ships.

The environmental circumstances which forced southerly migrations of Greenland and grey seals to the latitude of Scotland and emptied the North Sea of

several varieties of fish were favourable to southeasterly moves by Greenlanders. The increasing appearances on Scottish coasts of strangers who were clearly Greenlanders were arguably also related to events in the climatic regime of the late seventeenth century.

While physical environments, and particularly changes within them, may act as forcing factors in human history, requiring human responses, they do not dictate the nature of the responses. Human beings have created an almost endless variety of subsistence technologies and techniques, and economic and social systems in order to find and use the resources necessary to survive within particular physical environments. Rational adaptations or alterations of resource base, subsistence activities, and attitudes are strategies intended to increase both individual and societal chances of survival, and perhaps to make desirable changes in quality of life. Other strategies designed to protect or obtain necessary resources include restricting access to resources by other groups or seizing resources held by other groups. The violent hostilities undertaken by Baffin Islanders against strangers in the 1570s and 1580s can be interpreted as an example of a resident group protecting its resources against perceived competitors. Expansion to new territories while continuing to occupy and use old territories was a strategy which Labrador coast peoples used between 1550 and 1650 in search of new resources. Abandonment of territory, and migration to new areas was apparently the choice of Coronation Gulf people in the late 1600s. The strange appearances of 'seal-people' near Scottish islands between 1680 and 1728 may have been attempts by eastern Greenlanders to find new resource areas across the Atlantic Ocean.

Before 1700, Thule-Historic Inuit history, to the extent that it can be reconstructed on the basis of limited archaeological, linguistic and material culture studies, and some documentary evidence, was marked by major demographic changes, the emergence and disappearance of many discrete societies, and periods of intense hostility or outright war. On the basis of available evidence, environmental change was a major forcing factor in social change for paleo- and neo-Eskimo societies.

During environmental, and therefore economic, 'good' times, communities maintained themselves in accustomed ways, expanding when population increase made it necessary, raising their standard of living when surpluses and favourable conditions of trade made it possible. In economic 'bad times,' which were frequently the result of environmental hard times, they withdrew from peripheral areas, often suffering population crashes and extinctions. When they were able to predict impending environmental-economic crises, they avoided social destruction by abandoning territory, migrating, expanding or intruding into other regions, and resorted to varying degrees of violence, creative innovation, annihilative warfare, and the exchange of goods and ideas.

Harsh and unpredictable environments were, however, not the only conditions which required human responses. The proximity of other social groups was often a source of stress when there was competition for resources, but neighbouring societies also presented opportunities in some circumstances. The increasing presence of European people and institutions in Inuit homelands after 1700 was a new and serious forcing factor in Inuit life, requiring new responses. It also offered new and additional options for dealing with hard times.

CHAPTER 4

STRATEGIES FOR SOCIAL ENVIRONMENTS, 1700-1790

The lands around my dwelling are more beautiful from the day when it is given me to see faces I have never seen before. All is more beautiful, and life is thankfulness. These guests of mine make my house grand. -- Inuit poem (Mary-Rousselière 1961:23)

After the cold and volatile climatic regime of the seventeenth century, a slow, steady warming began (Kelly et al. 1984:31). During most of the new century, few arctic communities were faced with environmental conditions which threatened their continued existence, or which required a human response significant enough to have left traces in the archaeological or documentary records. Most communities experienced a greater degree of affluence than had been possible during the climatically constraining 1600s. Inuit territorial and occupational changes during the temperate and predictable 1700s were more often responses to the widening of social environments than to the constraints of physical ones.

The major change in North American arctic social environments was the increasing, and increasingly permanent, presence of Europeans in Inuit territory. Old World governments and commercial interests recognized opportunities for trade, settlement, resource extraction, and the expansion of empire in the arctic and subarctic regions of North America. Rulers, merchants, and churches established themselves in eastern arctic regions on a more or less permanent basis: British traders, organized by royal charter as the Hudson's Bay Company, opened trading posts in James Bay and Hudson Bay between 1670 and 1720; French commercial concerns established sedentary seal and cod fisheries on the Labrador coast in ever increasing numbers after 1700; Dutch whalers and traders visited the coasts of Davis Strait and Baffin Bay irregularly during the second half of the seventeenth century,

and annually after 1713; and Danish¹ church and state combined forces to establish permanent settlements and supervise resource extraction in western Greenland in 1721.

Some Eskimo and Inuit individuals and communities saw the broader social environments created by the European presence in or near their territories as new opportunities for solving old subsistence problems and for satisfying needs and desires beyond survival. In Greenland by 1715, local people were trading regularly with Dutch whalers at prearranged rendezvous, where pelts and whale oil were exchanged for metal objects (Gad 1984:557). Between 1721 and 1770, trading posts and missions had been established along the entire west coast of Greenland, and local people had begun to occupy permanent villages nearby (Gad 1984).

Greenland

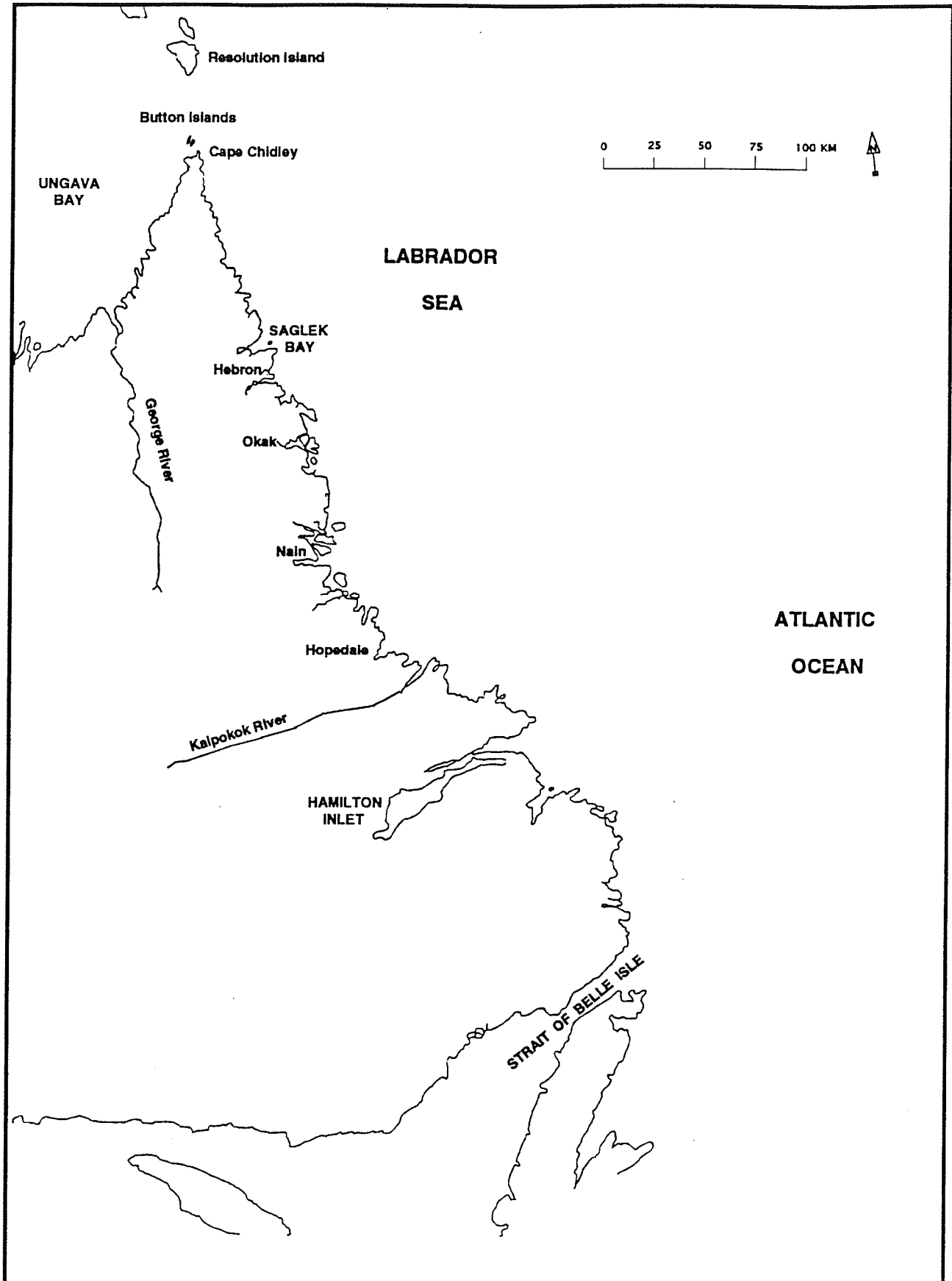
Two imperatives were the foundation of Denmark's official policy for Greenland: first, Greenlanders were to continue their ancient subsistence activities without interference or assistance from the (nominal) Danish government; and second, Greenland and Greenlanders were, for their own protection, to be isolated from the influences of outsiders (Gad 1973:370). Only two exceptions to the directives were tolerated. Individuals who could not achieve self-sufficiency in 'traditional' ways because of physical disability or because their communities had rejected them were permitted to live near the mission-trading posts and to take up 'non-traditional' occupations. And, missionaries were allowed to preach and to baptize willing converts provided that such converts were not encouraged to leave their original communities or to engage in 'European' activities.

¹Denmark, Norway and Sweden operated within a number of political and economic unions from Norse times to 1905. Scandinavian authors tend to use historically accurate, and unfortunately confusing, designations for each of the various unions. However, the Crown of Denmark was sovereign in all periods, so the terms Denmark and Danish, while not strictly correct, will be used to refer to the Scandinavian government in all periods.

In theory, the 'hands off' policy prevented missionaries and traders from interfering in any aspect of Greenlandic life, but local communities were quick to understand that appeal to the Christian precepts of the newcomers nearly always resulted in economic assistance. The indigent, the elderly, and the handicapped took up residence next to the missionary traders, and were provided by them with housing, food, clothing, medical care, and other necessities (Gad 1984:563). By shifting the burden of social security from their own communities to the newcomers, Inuit reduced the costs to themselves of providing for 'non-productive' members of the group, and relieved themselves of the need to make the life and death decisions implicit in the practices of infanticide, senilicide, and assisted suicide.

The first converts, catechists, and interpreters were the 'non-productive' orphans, aged, and disabled, as well as outcasts (Gad 1973:369-370). Outcasts included individuals identified by their communities as criminals and troublemakers. The outcast category also included many people who were of mixed descent, or who, through close association with the missions, were considered by their own people to have lost their Eskimo identity. Greenlandic widows, both grave and grass, of Danish spouses were frequently assigned to the outcast category, and sought refuge at the missions from the violence and abuse which they experienced in their own families and communities.

By no means all such women and their mixed-blood children were driven away because of economic dependency on the community. Danish law ensured that Greenlandic wives, ex-wives, widows, and children of Danish men had full rights to the estates and pensions of their spouses and fathers. Many of them inherited fortunes, or were provided for by annuities (Gad 1973:360). Rejection was usually on the grounds that they had become 'strangers.' Some chose to become strangers, preferring the easier, safer, more sedentary life of the mission settlement to life with their own people (Gad 1973:369-370). The managers, bureaucrats, and professionals who dominated Greenland's commercial, political, and social life in the nineteenth and twentieth centuries were for the most part descended from the Greenlandic mixed-blood 'Home Guard' of the first two generations of Danish rule (Gad 1973:358).



LABRADOR AND STRAIT OF BELLE ISLE

Labrador

In eighteenth century Labrador, communities and individuals continued to take advantage of the opportunities provided by the presence of Europeans, as they had done in the previous century. The territorial and occupational choices they made in the decades after the 1690s were not responses to insupportable environmental conditions as the migration from Baffin Island to Labrador's Atlantic coast in 1300-1330 had been. The whale populations which were their primary subsistence resource were not at risk (McGhee 1978:108), and there are no indications that basic foods were in short supply, that extinctions had taken place, or that group survival was threatened.

The five- or six-fold increase in the numbers of people between the early 1500s and 1700 (Kaplan 1985:60) stands in sharp contrast to the disappearance of whole societies from Somerset Island, Amundsen Gulf, and Coronation Gulf in the same period. The abundance of European goods in homes from Hamilton Inlet to Cape Chidley and in storage depots waiting to be moved through indigenous trade networks (Clermont 1980:153) suggest that, far from being stressed by inclement climatic conditions and resource shortages, Labrador Inuit enjoyed relative affluence in the seventeenth century (Jordan 1978; J.G. Taylor 1976).

While climatic change cannot be considered the major, or even a significant, forcing factor in Inuit population shifts, territorial expansion, and altered subsistence economies, it was an important factor in the movements of European populations. The steady expansion of heavy polar ice in the North Atlantic during the late seventeenth century forced large summering whale populations into feeding grounds in the Norwegian and Greenland Seas (Lamb 1977:511). Dutch and Basque whalers responded by moving their fleets to new, and richer, whaling grounds (Vaughan 1984), and the Labrador coast was open to expansion from both France and New France.

French occupation and use of the coast were vastly different from those of the Basque. The French crown allocated land in a quasi-seigneurial way, and many properties were operated throughout the year. For the Inuit, year-round access to

more and better-stocked installations provided greater opportunities for trading and pilfering than the unpredictable, seasonal Basque stations had done. Every year from 1716 to 1720, Inuit ransacked unoccupied shore stations. French title holders, with capital investments at stake, defended their properties, and often used pre-emptive strikes against potential looters (Kaplan 1985:58; F. Trudel 1981). And they did so year round.

Inuit attacks became less frequent but more aggressive after 1720. Strikes against occupied stations and travelling parties in 1720, 1721, 1728, and 1742 resulted in the deaths of a number of French fishermen, as did an attack in 1757 in which the Inuit used firearms (Martijn 1980a:198; F. Trudel 1978a). In 1743, Jean-Louis Fornel, a Canadian seigneur with concessions on the Strait of Belle Isle and Hamilton Inlet, reported hostilities on a much larger scale. A man identified only as "Laraguy from Bayonne, France," had been hunting whales near Hudson Strait in 1737, wrote Fornel, and saw "more than 400 corpses on the ice, whom he recognized as Dutch and Eskimos who were without doubt at war with one another" (Fornel 1743:74).

Inuit did not always distinguish between Europeans who kidnapped their people and sent posses after their raiding parties, and traders and missionaries with more peaceful intentions. When a small Moravian mission was built at Aivertok (Hopedale) in 1752, the local people attacked it, and killed seven members of the party (Hiller 1971:840).

Some contemporary observers attributed Inuit hostility to a nature "so utterly savage and cruel that it is impossible to trade with them" (Bacqueville 1722:279). Others, like Jean-Louis Fornel, believed the raiding and looting were motivated by desire for European goods and willingness to acquire them by any means (Fornel 1743:73).

There is no reason to doubt that Inuit were interested in obtaining European goods, especially wooden boats and metals. However, not all raids resulted in the acquisition of items, or were directed solely to that end. For instance, in the series of winter attacks in 1718-19, the raiders took as many wooden boats as they could, and

set fire to those that remained (Martijn 1980a). While destructive raids may have been motivated by anger at the deaths and capture of countrymen, or in order to obtain precious items, they may also have been undertaken in the reasonable hope of discouraging the activities of people who appeared to be competing with them for resources.

French activities during the period were also provocative. Kidnappings of local people can hardly have been interpreted as friendly overtures. The desire to study native bodies and languages, which had prompted Frobisher to take hostages, continued to be a factor in European-Eskimo relations two centuries later. Between 1717 and 1743, about a dozen Labrador Inuit, several of them children, spent periods of captivity in Quebec City (M. Trudel 1960). Some of them were kidnapped outright, some were sold by their families, and still others were bought or ransomed from other aboriginal groups who had captured them earlier for service as slaves.

Most of the captives died from diseases in the towns of New France, especially from small pox. A few lived and returned to their people, like the little boy who learned French and was sent back to "his people in Labrador" where, the authorities of New France hoped, he would interpret the two cultures to one another. His story had an unhappy ending; he was killed by his own people "for being half French and half stranger" (M. Trudel 1960:81). Rejection of the stranger and the half-stranger, implicit in the incident, echoes the Greenland experience of assigning partially acculturated wives and mixed blood children to the category of outcast.

Violent relations with the French did not prevent Inuit from making journeys of several hundred kilometres from the north Labrador coast to the Strait of Belle Isle (J.G. Taylor 1984:510-511) in order to trade at the French fisheries. By the 1730s, meetings for trade at some stations had become annual affairs, and peaceful trading encounters probably outnumbered hostile raids (J.G. Taylor 1979b:51). Large quantities of European goods were being carried to more distant communities by Inuit entrepreneurs, and an Inuit-French trade jargon had developed (J.G. Taylor 1984:510-511), suggesting that trading contacts were both regular and extensive.

In 1763, as a result of a war and a peace far from Inuit country, the Labrador coast passed from French to British control. The new government faced two immediate problems: French competition for use of the fisheries, and hostile Inuit raids on its establishments (J.G. Taylor 1974b:7). The British Governor of Newfoundland, Commodore Hugh Palliser, tried to solve both problems by forbidding year-round occupation of the north coast by Europeans (Kaplan 1985:64). The ban was mildly successful in eliminating French competition, but less so in stopping Inuit harassment. The indigenous inhabitants remained hostile to the point that the continued existence of British fisheries was threatened (F. Trudel 1981:383).

By 1771, desperate to end Inuit depredations, the governor agreed to a plan put forward by Moravian missionaries (F. Trudel 1981:383) who had been active in Greenland since 1721, and who had attempted to establish a Labrador mission in 1752. With Palliser's permission, a senior missionary, Jens Haven, visited the Inuit communities of the Labrador coast. His knowledge of the Greenland dialect enabled him to negotiate peace terms directly with the (male) inhabitants. They agreed to stop raiding, provided their access to European trade goods was guaranteed (F. Trudel 1981:384). Inuit and missionaries concluded an agreement, each of the Inuit being given a payment for land when he signed (or put his mark) on the compact (Hiller 1971:842).

Haven and the Moravian Mission Society got the prize they wanted -- a Greenland-style monopoly on religion, the trade which would support it, and a land grant of 100,000 acres (Hiller 1971:841). Palliser attained his goal -- a guarantee that the Inuit would be kept away from English fisheries, trading posts, and settlements. The Inuit secured their access to European trade items, and, as had happened in Greenland, the social security which went with membership in a Christian congregation. In the end it cost them their collective autonomy. Between 1780 and 1800 a few Inuit continued to come south to trade, but there were no hostilities, and no raiding parties (F. Trudel 1981:392).

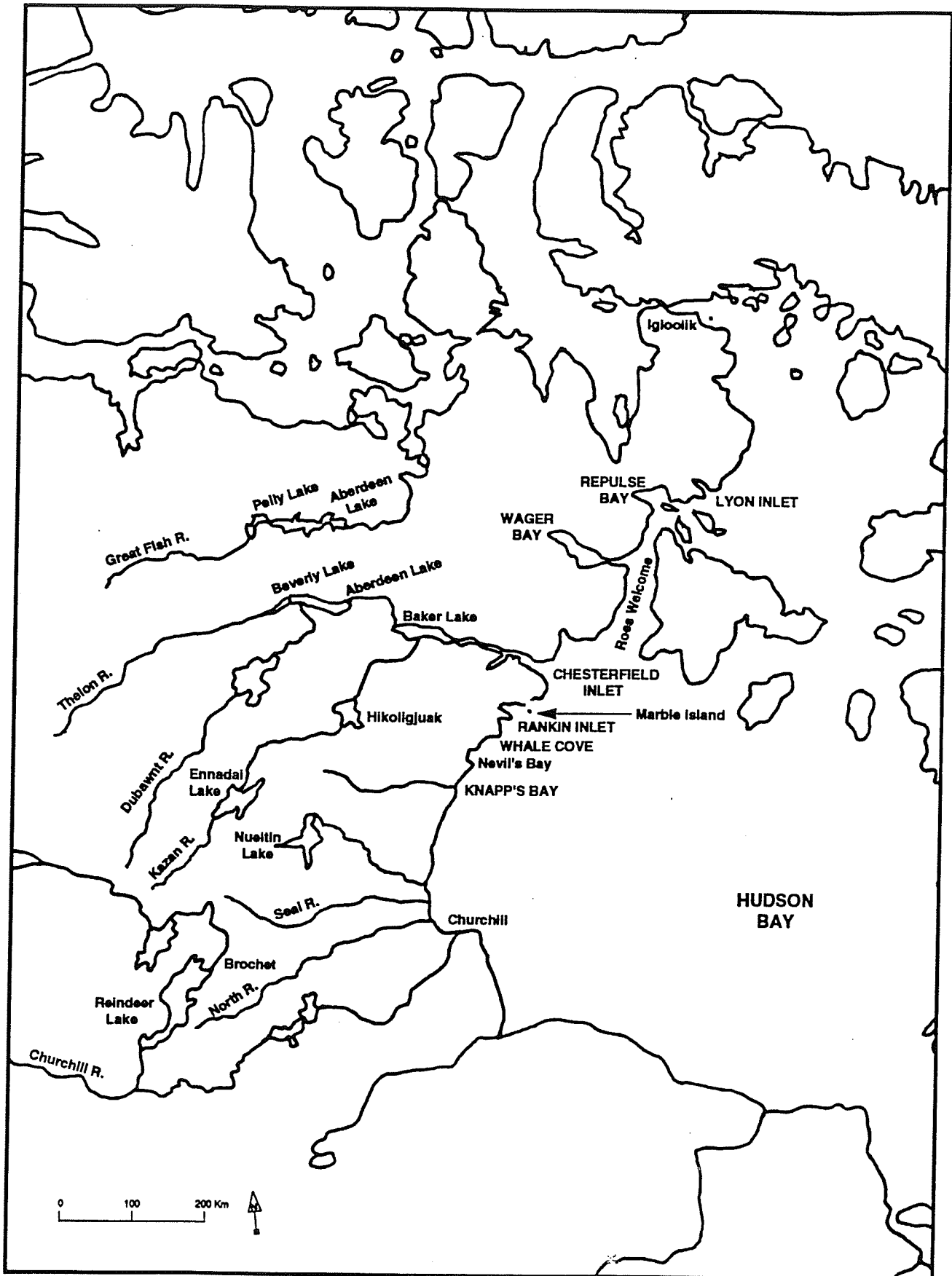
Missionary-trader government in northern Labrador, under British supervision, differed sharply from that of Greenland. The British government's policy of 'hands-

off' was in fact a policy of 'out of sight, out of mind,' which gave the missionary-traders total control of the social and economic activities of Inuit converts. Members of the congregation were encouraged to settle near the missions, and isolated from the unconverted, in so far as this was possible given that another missionary imperative was to keep the people in 'traditional occupations' where they could be self-supporting (Hiller 1971:844-45, 848). At the same time, as had happened in Greenland, non-Christian Inuit had access to trade and relief on the same footing as their converted countrymen. By the 1790s, neither Christian nor unconverted went south to trade. The result of missionary government was, very quickly, a rapid erosion of aboriginal self-direction and autonomous decision-making.

From the time of their fourteenth century migration from Baffin Island to the 1720s, Labrador Inuit had tempered the effects of deteriorating climate and changes in the availability of resources by relocating communities, expanding their harvesting range, and by raiding and trading. After 1730, in a period when fairly stable environmental conditions relieved them of serious threats to survival, they had made decisions and used strategies which enabled them to deal with broad changes in their social environment with notable success. Their population continued to rise (Kaplan 1985:60; J.G. Taylor 1974b:15), their homes were filled with large quantities of luxury, as well as utilitarian, goods of European origin (Kaplan 1985), and Inuit entrepreneurs were operating a trade network capable of distributing goods as far west as Hudson Bay (Davies 1963a; J.G. Taylor 1975:276), and north to Baffin Island (Graham 1791:213; Swaine 1749a:33). With the imposition of British-supported missionary government, they entered a period of nearly two centuries during which they lost control of their social, political, and economic lives.

West Hudson Bay

Early in the eighteenth century, the people of the west coast of Hudson Bay also found themselves in new social environments, but their experience differed significantly from the new circumstances of Inuit in Greenland and Labrador. In the two latter places, people long established in homelands experienced European



WEST HUDSON BAY

intrusions which proved to be permanent. On the west coast of the bay, it was the Inuit who were the newcomers, and the British presence was aloof and non-intrusive.

The migration from Coronation Gulf between 1650 and 1715 brought between one and two hundred people into Chesterfield Inlet and the near coasts. The greatly augmented population required immediate access to adequate food resources, and they began moving south along the coast to harvest seal, walrus, fish, and wood. The southward expansion brought them into territories which, since the 1500s, had been used or occupied by Athapaskan people. Athapaskans, specifically Chipewyan, spent the winters in the boreal forest and moved north of the tree line during the summer migrations of the caribou herds, which were their major subsistence resource. According to their own histories, they had, at some earlier but unspecified period, harvested the resources of the barren grounds as far north as the arctic coast, but had ceased to do so (Back 1836:85-86), probably because deteriorating weather forced the caribou herds to shift to a more southerly summer range.

The newly-arrived Inuit moved south cautiously, keeping well out of the way of Chipewyan caribou hunting parties by using only the most isolated parts of the coast in summer. When the Chipewyan withdrew to the south in winter, Inuit were able to move a few miles inland to harvest the fish resources of nearby lakes and take advantage of straggler caribou who wintered on the barren grounds. Some early British observers believed the choice of residential sites was made as much out of fear of the Chipewyan as from any preference for a maritime subsistence economy.

According to Andrew Graham:

They are fond of an insular situation [in order] to be more secure from the attacks of the Indians, who are inveterate enemies to them, and glory in their destruction (Graham 1791:213).

Samuel Hearne agreed with Graham's interpretation of Inuit-Chipewyan relations and the reasons for Inuit choices of territory.

Farther North [of Churchill] hostilities continue, and most barbarous murders are perpetrated; and the only protection the Esquimaux have from the fury of their enemies is their remote situation in the Winter, and their residing chiefly on islands and peninsulas in Summer, which

renders them less liable to be surprised during that Season. But even this secluded life does not prevent the Northern Indians from harassing them greatly, and at times they are so closely pursued as to be obliged to leave most of their tools and utensils to be destroyed by their enemy (Hearne 1795:217).

The tentative Inuit expansion into Chipewyan territory was under way precisely at the time that the Hudson's Bay Company established a trading post at the mouth of the Churchill River in 1717. In 1718 and 1719, the company sent boats north on voyages from which it hoped to gain geographical information relevant to the on-going search for a north west passage, and to the discovery of valuable mineral deposits. It also wanted to learn more about the inhabitants of the area, and to persuade them to come to Churchill to trade (HBCA:B239/b/1:17, 25). The Inuit, in the course of their southward expansion to the islands and peninsulas between Chesterfield Inlet and Knapp's Bay, met HBC traders for the first time (HBCA:B239/b/1; B239/b/3:9).

Their numbers are not known. The log of the 1718 voyage noted people on the coast in "large numbers," and the 1719 log reported "many" people at Whale Cove (HBCA:B239/b/1:2, 17). The company's potential customers and clients showed none of the hostility which had characterized the Baffin Island encounters one hundred and twenty-five years earlier, and little enthusiasm for trade. They accepted gifts of metal knives and other cutting tools, and offered "some Whalebone Oyle and some Sea Horse teeth [walrus tusk]" in exchange (HBCA:B239/b/1:2, 17, 25).

On the second of the voyages, the Knapp's Bay people agreed to Chief Trader Henry Kelsey's suggestion that two of their young boys go with him to Churchill, to be returned the following year. Kelsey, familiar with the Chipewyan and Cree custom of exchanging children and young people, offered to leave two 'Indian' boys, Andrew and Daniel, as hostages. It is not clear whether Andrew and Daniel were Chipewyan or Cree, and although they were referred to as 'slaves,' their status with the Hudson's Bay Company is as mysterious as their ethnicity. Kelsey named the two Inuit boys Jerry and Sharper (HBCA:B239/b/1).

Kelsey's intention was for the boys to learn English and some of the intricacies of European trading customs, before being returned to the community where they would in future act as language and culture interpreters. Inuit motives in agreeing to the exchange of boys may have been precisely the same; Kelsey's offer was an opportunity to gain useful information about the strangers' language, customs, and technology, a means of establishing good relations with the newcomers, and a way of expanding the network of allies on whom they could depend for assistance in times of need.

Whatever the reason for the willingness of Jerry and Sharper's people to let them spend a year at the trading post, their trust was not misplaced. Both "ladds ... proved very agreeable" and learned English quickly. In 1720, Captain Hancock returned them safely to their families (HBCA:B239/b/1:25). Andrew and Daniel, the 'Indian slave' boys, did not return to Churchill; unlike the two "ladds," they had not survived the winter in strange surroundings (HBCA:B239/a/5).

Henry Kelsey's 1721 trip north was intended to be a trading voyage, but in the fourth year of contact, the local people continued to show a marked lack of interest in trade (HBCA:B239/b/2:3). In 1722, Captain Scroggs was sent north with instructions to spread the word that a trading post had been established at Churchill River, and to invite the Inuit to come there to trade. The voyage did not have the desired effect. Inuit did not come to Churchill.

After a fifteen year hiatus, the company decided on a new attempt at drawing Inuit to the post (HBCA:A6/6:4-5). Its field officers questioned the policy, pointing to the dangers inherent in having two warring groups simultaneously at the post. Their letter of August 1, 1738 read, in part:

With submission to your honours we think there may be danger of drawing them to Ascomay Point [at the Churchill River], if we could, while so mortal an enmity is subsisting between them and the Northern Indians (Davies 1965:245).

Head office took their point. In 1739 it ordered annual voyages as far north as ice conditions would allow, to carry the trade to the people in their own communities (HBCA:A6/6:44-50).

In contrast to the preceding century, all European vessels travelling the coast between Knapp's Bay and Roes Welcome saw Inuit or signs of recent Inuit occupation. James Isham reported "numerous" people on the coast near Whale Cove in 1740 (Isham 1743:181). Captain Francis Smith was more precise with a count of two hundred people seen on the coast between Knapp's Bay and Whale Cove in 1744 (HBCA:B42/a/26).

The 1744 voyage was the last of a series of six trading visits between 1737 and 1744, and was fairly typical of the trips which had preceded it. On July 1, 1744, Francis Smith in the *Churchill* sailed from the Churchill River, arriving at Knapp's Bay on July 8. A day later, after trading with the forty or so people there, the *Churchill* moved on to a second location about thirty or so kilometres to the north where between thirty and thirty-five men, women and children were living. On July 10, about twenty kilometres to the north, Smith found a single family. Five days later, he waited at anchor in Whale Cove for twenty-four hours until thirty-seven kayaks appeared with whale oil and baleen to trade (HBCA:B42/a/26). The number of kayaks suggests that a very large settlement, perhaps as many as 150 people, was somewhere in the vicinity, although Smith and his crew did not see it.

No Inuit were on the coast at the moment of Smith's arrival at any of the usual anchorages, but they always responded to the sound of the sloop's guns, arriving a day after the alert. The timing suggests that they were occupied at a distance from the coast, but not out of earshot of the guns. They kept the trading sessions brief, and did not remain near the sloop or the anchorage after they had run out of things to trade. Unlike the Cumberland Sound people who danced and played football with John Davis's crews and the Hudson Strait groups encountered by Bylot and Munk, the Keewatin people did not stay to feast, socialize, pilfer, or beg for gifts after trading had been concluded (HBCA:B42/a/26:32-33).

Thirty years and a dozen encounters with British traders had apparently had no effect on the habits of west coast Inuit. They occupied the same summer villages in the same numbers during the same weeks as they had in 1718. The items they traded in the early 1750s were the same as those they had traded in 1719: whale oil, blubber, baleen, the occasional narwhal or walrus tusk, and once in a while a wolf, wolverine, or marten pelt. The items they took in trade were the same as those they had taken at every trading occasion since 1719: bayonets, hatchets, scissors, ice chisels, knives, awls, and needles, all of them useful in hunting and preparing skins.

The behaviour of the west coast Inuit toward the Hudson's Bay Company's personnel was in sharp contrast to that exhibited by other arctic groups. There were no displays of hostility or overt xenophobia similar to those shown by the Baffin Islanders and Labrador coast people, and none of the long-distance raiding and trading characteristic of Labrador Inuit behaviour. The west coasters showed no interest in settling near the traders as the Greenlanders did during the same period, or even in visiting them. Nor did they create entrepreneurial roles for themselves and distribute large quantities of European goods through their own trade networks as the Labrador people did.

The trading rituals associated with other groups, such as initiatory silent trade, diplomatic greetings, formal exchange of gifts between leaders, feasting, and the exchange of temporary hostages, were absent, except when instigated by outsiders. Trading activity did not lead to socializing. For the west coast Inuit, trade was a business to be carried out quickly, followed by immediate return to other occupations.

The differences in the responses of Keewatin coast communities to Europeans between 1718 and 1750 and those of more easterly Inuit groups in the same period and in the preceding centuries can be explained by reference to the geographical, historical, and psychological factors that pertained in different contact situations. Between 1576 and 1616, Baffin Island, Labrador, and Digges Island people had reacted to appearances of strangers into their country with extreme violence. Meetings north of Churchill were, on the other hand, mildly cordial. One reason may have been the relatively short period of Inuit occupancy. They were newcomers,

tentatively intruding into territory to which the Chipewyan clearly had a prior claim. As newcomers themselves they were in no position to protest the presence of other people who, as far as they knew, may also have been long-time inhabitants. Second, unlike the people of Baffin Island and the Labrador coast, they had not experienced repeated kidnappings and the theft of women by Europeans, and had no revenge debts to collect.

At the same time, they were probably aware that open acts of violence would almost certainly carry a high price. They knew, after the first four voyages, that an alliance of some sort existed between the British traders and the Chipewyan. They also knew from their encounters with James Knight's shipwrecked crews in 1719-21 what firearms could do. They may even have known or guessed the effects of firearms on human bodies from encounters with their Chipewyan neighbours. They had every reason to conclude that retaliation by armed Indians and the Indians' white allies, who greatly outnumbered them, would almost certainly follow acts of violence against the floating trading posts. Knowledge that they stood to gain little or nothing, and to lose much by violent actions against the itinerant traders, was a sufficient encouragement to peaceful relations.

Differences in geography may account for the absence of Labrador-style raiding, and for long-distance trading and settlement as they occurred in Greenland and Labrador. Churchill post, the only possible raiding target, was safe from Inuit attack by virtue of being so far from their country, continuously occupied, and well-manned. The presence at the post of Chipewyan and possibly Cree enemies, combined with the high costs of travel and lost hunting opportunities, were also sufficient deterrents to attempts at long-distance trade. Distance between the trading post and possible client communities north and east of Chesterfield Inlet, as well as the small numbers of potential customers on the barren grounds and the low arctic islands were other factors which militated against Keewatin Inuit adopting entrepreneurial and middleman roles. In sum, the costs of a redistributive trade network would have outweighed any profits.

Settlement near the trading post was not an option. The Churchill traders did not establish posts in Inuit country comparable to the fishing and whaling stations, and the missions, of Greenland and Labrador. West coast bay people were also less pressed for resources in the 1718-1750 period than the eastern arctic communities had been between the 1570s and 1700. The presence of competitors for the limited resources of Frobisher Bay and Digges Island was an immediate and potentially serious threat. West coast bay people, on the other hand, were apparently not facing life-threatening resource shortages. Censuses taken by the sloop captains showed no population losses which could have been the result of periods of starvation. They had no particular reason to treat the crews of *Prosperous*, *Success*, *Musquash*, and *Churchill* as competitors for scarce resources.

While west coast Inuit were apparently not hard-pressed for subsistence resources in the first half of the 1700s, they did not have unlimited supplies either. A precondition of trade is that each party must have a surplus of at least one item desired by the other. The key word is 'surplus.' It does not make sense to trade necessities for non-essentials if the lack of necessities will result in fatal scarcity at a later date. And it does not make sense to take time away from acquiring necessities in order to obtain unusable goods which in turn can only be traded for other non-essentials.

The key questions are: What constitutes surplus? and how is it acquired? The simple answer to the first question is: surplus is what remains after use or need is satisfied. Few individuals or social units will have difficulty predicting use or need over the short term of a season. The difficulty is in predicting the availability and accessibility of resources adequate to answer needs. The problem is compounded where resources are seasonal, subject to extreme fluctuation, and limited to one or two seasonally-mobile species, which is typically the case in high latitude regions (Freeman 1984:36).

One means to minimizing risks inherent in unpredictability is to amass resources in times of abundance and store them for use in times of scarcity. Because fluctuations in availability and accessibility of resources cannot be confidently

predicted, the quantities of resources sufficient to satisfy needs cannot be foreseen with certainty either. Communities must, therefore, amass resources for storage in sufficient quantities to satisfy needs for any eventuality, including the worst case, consistent with their technological capabilities (Laughlin & Brady 1978:27-28; Rowley-Conwy & Zvelebil 1989:45).

The necessity in some hunter-gatherer societies to store resources sufficient to see the community through an entire season if the worst happens means that resources must be seized and stored at the first, and every subsequent, opportunity. If the worst does not happen, (and for most arctic communities in most years, it does not), resources which are taken and stored as future subsistence eventually become unneeded surplus. In other words, the creation of surplus is inherent in storage-dependency.

The Keewatin coast people visited by the sloops every year did not have much in the way of surplus, partly because of the timing of the voyages. Even in years when the spring and early summer seal and whale hunts were enormously successful, people would not yet have amassed enough oil for food, light, and fuel to see them through an entire winter. Lacking surpluses, they were in no position to engage in brisk trade with the sloops. The best they could do was exchange small amounts of current or potential subsistence supplies in order to acquire implements which would increase their hunting and food processing efficiency. It was probably also the wisest thing they could do.

Company personnel were mildly puzzled by the absence of excitement, social ritual, and bargaining at west coast trading locations. Andrew Graham suggested that Inuit lacked interest because they did not perceive themselves to be in need of anything.

[Wood] seems to be the only article the Esquimaux are short of, and it is but seldom they feel a scarcity of it... The sea is to them the treasures of the universe, affording them food, raiment and all the necessaries of life; and the surplus of their labour is sufficient to barter with Europeans for superfluities and ornaments (Graham 1775:229).

Graham assumed, reasonably enough, that Inuit, like Europeans, were prepared to exchange goods in order to acquire items of a nature or quality which they could not harvest or produce for themselves. He was not correct, however, in claiming that the Inuit were indifferent to trade, or that they bartered only for "superfluities and ornaments." From the time of the first sloop voyage, they were keenly interested in acquiring metal cutting tools, whether as gifts, or through trade, and in every trading year they added considerably to their store of useful items. They did not trade for goods of a 'luxury' nature for at least the first hundred years of trading contacts.

In 1744, eighteen men at Knapp's Bay received ten awls, eleven hatchets, twenty-five knives, eight ice chisels, and six bayonets. A pound and a half of glass beads, twenty quilting needles, twenty metal buttons, seventeen looking glasses, a brass collar, seven rings, six bells, and two ivory combs also changed hands. A day later at a camp consisting of exactly one tent, the householder exchanged one bag of seal oil for four awls, thirteen knives, and two ice chisels, along with one double-edged metal scraper, fourteen finger rings, and 3/4 of a pound of glass beads (HBCA:B42/a/26). The nineteen men who engaged in trade acquired, on average, more than three knives each, and each of the households represented received at least one hatchet, chisel or bayonet. The man who acquired thirteen knives sounds like an agent for an entire community or possibly a middleman.

The examples, typical ones, do not suggest that Keewatin Inuit were indifferent to trade and the acquisition of useful items. When the company presented its newest customers with opportunities to acquire useful items which would make survival more certain and perhaps even more comfortable, they were ready to take advantage of the offer. Slowly and steadily they had acquired useful metal tools at very little cost. The individual who received four awls, thirteen knives, two ice chisels, and an array of other items in exchange for one bag of seal oil was not unusual. Andrew Graham may have been right that trade was poor, but only from the company's point of view. The company's failure to realize a profit was not due to lack of interest on the part of its customers. Some of it can be attributed to Inuit lack

of tradeable surpluses, but most of it was the logical outcome of the sloop captains' habits of giving gifts and accepting worthless country products in exchange for goods of much greater value. As an attempt to create consumer demand and draw customers to Churchill, the loss-leaders did not work. People were not diverted from their primary goal of ensuring their own survival through harvesting the resources of their own territory.

That primary goal may, in fact, have been the source of the aloofness toward traders and trading which Andrew Graham sensed in the actions and attitudes of the west coast Inuit. Their recent history explains why this may have been so. Like the Hudson's Bay Company, the west coast Inuit were new to the area. They had been there three generations at the most, assuming that the migration from Coronation Gulf took place in the mid-1650s, the earliest possible date. The people who met the first sloops in 1718 and succeeding years could have been the children of the original immigrants. If the migration took place in the 1680s, the most likely possibility, or later, which is also possible, then many of the immigrants could still have been alive. Even as late as 1750, there may have been individuals alive who had actually made the trek across the barren grounds.

As immigrants, their first priority was to create appropriate ways to deal with their new physical environment, learning where the country's resources were, and devising efficient systems for harvesting them. Assuming that physical survival is the first goal of individuals and groups, people choose resource acquisition strategies which they believe will enhance their chances of survival. Identification of possible strategies, assessment of each in terms of costs and benefits, and choice of the most appropriate ones depend on having adequate information.

In hunter-gatherer societies generally, the most important kind of information is environmental; ability to deal with "environmental variability" depends on "ability to collect, process, and store information" about it (Keene 1981:192). The body of knowledge which had to be collected and processed by the immigrants from Coronation Gulf was enormous. They needed to know the general lie of the land, and the details of its topography to determine how and when travel was efficient as

opposed to merely possible; they needed to know its particular flora and fauna, in order to discover what resources were available, in what quantities, when and where, and the degree to which each was readily accessible; and they had to become familiar with the unique habits of particular caribou herds and seal populations.

They also had to adjust all the elements within their cognitive systems. The clues by which they understood, predicted, and controlled the physical world were different in their new location. They needed to know when the salmon would spawn, the caribou would rut, the seal would den, the warble fly would hatch, and the swans would nest, not in terms of a days-and-dates calendar, but in terms of a mental almanac consisting of clues from the physical environment itself. Wind direction, temperature, topography, precipitation, insolation, daylight, and dark, were all variables which affected freeze-up, break-up, flood, and the movements of animals. Each variable on its own affected weather forecasting, navigation, cartography, snowhouse construction, and every other aspect of physical existence. The almost limitless combinations and permutations of the variables made their interpretation a complex undertaking indeed.

Because the animal and other resources on which they depended for survival were different, the newly-arrived west coasters had to make appropriate adjustments to their technology. New techniques for floe edge sealing had to be developed to replace the breathing hole sealing which had been the main food harvesting method in Coronation Gulf. The almost complete absence of whale bone required the development of a new architecture. Because caribou pelts were more abundant and more readily accessible than seal skins, clothing styles and fabrication techniques had to be adapted to make better use of the available material. Cache construction and other storage technology had to be adapted to suit differences in building materials and in food supplies.

The adaptations noted above are all related to the natural world. Simply learning how to survive in the new physical environment represented a huge investment of manual and intellectual skills. The immigrants, however, also had to collect and process information about the new social environment into which they had

moved. They needed to know if other groups of people were nearby, who they were, and how they were responding to the sudden increase in the numbers of people resident around Chesterfield Inlet. Inuit groups to the north, with their more or less similar, and therefore comprehensible and predictable, social regulations had to be surveyed and assessed in order to make sensible decisions about how they should be dealt with. The establishment of diplomatic relations with the less known and unpredictable Cree and Chipewyan societies to the south, who were potentially hostile rivals for territory and resources, demanded careful collection of information and cautious overtures.

Hostility existed between Chipewyan and Inuit in the immediate post-migration period. In 1689, the possibility of Inuit attack was certainly on the mind of Henry Kelsey's native companion when he refused to go beyond Knapp's Bay for fear of meeting the enemy (Kelsey 1689:27-28). Immediately before and after the establishment of Churchill post, Chipewyan began reporting Inuit raids against their travelling trading parties. In 1716, a party of nine Chipewyan returning north from York factory were attacked "in meeting of the Iskemays at Churchill River," and six of them were killed (Glover 1965:63; Knight 1717:59). Another incident was reported in 1719, and again several Chipewyan had lost their lives (HBCA:B42/a/1). In 1725, a party of 105 Chipewyan arrived at Churchill to complain that somewhere near Marble Island "the Uskuomays had been to warr with them & had Murdered Severall of them" (HBCA:B42/a/5:25).

The incidents suggest that the Inuit expansion into Chipewyan territory was not entirely peaceful. Means had not yet been worked out by which the two nations could share the territory and its resources on a peaceful basis. There were, however, occasions when Inuit and Chipewyan met in peaceful encounters, such as the 1720 incident when a group of Chipewyan made peace with some "Esquimaux," probably in the vicinity of the Coppermine River, at least long enough to trade some knives and awls for copper lances and arrowheads (HBCA:B42/a/1:81, 127d).

The Chipewyan were not the only people who had less than cordial relations with the Inuit. Like the Chipewyan, the Cree remembered ancient enmity, probably

dating from the forced ejection of Eskimo from the area around Churchill River two centuries earlier. In 1724, a party of lowland Cree from York Factory was prevented by HBC personnel at Churchill from "going to warrs with ye Eskimoes" (HBCA:B42/a/4:33). As late as 1747, James Isham had to talk an "Albany Indian" out of his plan to "go to war against the Esquimaus to the Northward of here" (HBCA:B239/a/29). Cree and Inuit had occupied widely separated territories for several centuries, and could have had no quarrel over resources. However, the York and Albany Cree owned Eskimo "slaves" (HBCA:B239/a/5), and the aborted raids of 1724 and 1747 could have been attempts to take more captives.

Occupied as they were with problems of physical survival and major adjustments to their social and economic lives, the Keewatin Inuit may well have seen the sloop visits as occasional, and mildly profitable, interruptions to the critical business of survival. The single-mindedness with which west coast Inuit pursued their own interests in their own ways points to a recognition that conservatism has value as a strategy to ensure survival. Archaeological studies of the Coronation Gulf societies, whose descendants occupied the Keewatin coast some time after 1650, support the interpretation.

Thule sea mammal hunting strategies on Coronation Gulf ... seem to have been rather conservative, preserving and reflecting with only a few necessary modifications an economic pattern and way of life which had first developed over 1500 kilometres to the west [in Alaska] (D. Morrison 1983a:277).

In situations of sudden change and extreme unpredictability, conservatism can be an adaptive strategy, on the two principles that if something is working, changing it increases risk, and that in circumstances where survival is already problematic, additional risk is unacceptable. Innovation can be safely undertaken only in conditions of security sufficient to cushion the community in the event of failure. The circumstances of the Keewatin people in the first few generations of their occupation of the west coast of Hudson Bay were precarious. At the time the first traders from Churchill post arrived at their summer villages, they were already dealing with an

unfamiliar physical and social setting. Serious involvement with yet one more unknown may well have seemed too great a risk.

By 1750, the Keewatin Inuit had experienced a generation of sporadic contact with European trading and exploring parties, during which they had acquired trade goods, and perhaps more importantly, information about the Churchill traders from which they could draw some conclusions about the implications of the sloop trade for their own communities. Following the resumption of trade in 1750, and the assurances given by Captain James Walker that vessels would in future visit the coast communities annually (HBCA:B42/a/35), they experimented with new ways of acquiring European goods.

In 1753, for the first time in the company's experience on the bay's west coast, its Inuit customers were hostile and actively threatening. At Knapp's Bay between July 8 and 11, few local people were willing to trade, and those who did had little to offer. They insisted that Captain Walker lend them a boat and four sailors to help them fetch their oil from a cache along the coast. After an absence of sixteen hours, the sailors and the boat returned to an anxious captain with a mere two hogsheds of oil (HBCA:B42/a/41:13).

The almost continuous arrivals of strange Inuit from inland and the north, their repeated refusals to trade, and their demands that half the crew accompany them out of view of the sloop, worried Walker. He moved the sloop to Nevil's Bay (now Dawson Inlet), where the same scenes repeated themselves. By July 16, Walker was seriously alarmed by "the natives behaving so very rude to us and offering to stab one of our men." Noting growing hostility the following day, he ordered the sloop to sail (HBCA:B42/a/41:13).

At Whale Cove on July 18, over 100 people were alongside, more than triple the usual number, and for twenty-four hours there was constant coming and going. Again Walker noted that people were "behaving themselves in so insulting a manner we were obliged to be under arms to keep them out of the sloop and not without great difficulty we could do so with them being so many in number" (HBCA:B42/a/41:14). One man managed to get on board, and helped himself to a chisel. When Walker

tried to stop him, he cut an inch long gash in the captain's leg. When Walker took up a cutlass and chased him off the sloop, he picked up a lance and dared the captain to fight him. The incident ended only when Walker produced a pistol. Tension continued to mount.

[On July 20th], several of the natives came alongside and would be on board whether we would let them or no -- in two hours after that they went on shore and made a raft of their canoes and brought all their women off and put them in our boats astern of the sloop then the men left them and went on the rocks where they stayed near an hour (HBCA:B42/a/41:14).

When Walker's gestures of cutting the boats loose resulted in loud screams and other signs of agitation from the women, the men ferried them back to the beach.

A day later, nine men attempted to board the sloop. Walker's order to sink their kayaks if necessary to prevent boarding so "enraged" them that they went ashore, where they stood on the rocks, each one sharpening three or four lances, and holding them up in a "daring manner" (HBCA:B42/a/41:15). When a second and larger party consisting of twenty-two men tried to force its way on board the *Churchill*, Walker hauled in the anchor and moved farther off shore, while about 150 people made threatening gestures on the rocky beach. Within hours, about 300 people were on the beach, greatly outnumbering the eight crewmen, "which might," Walker suggested, "be the reason they behaved so rudely to us" (HBCA:B42/a/41:15).

Several elements of the incident -- the gathering of people, the ruse to separate crew members, the display of weapons, the taunting and posturing (*qarzuigutsaq*), and the fact that the sloop's crew of eight was greatly outnumbered -- are reminiscent of the experiences of Frobisher and Davis nearly two hundred years earlier, and fully consistent with other descriptions of Inuit war or pre-war activities. The motive is harder to discern. In contrast to the Baffin Island and Labrador coast people a century or so earlier, the communities of west Hudson Bay had no grounds for seeing the strangers as possible competitors for resources.

Of the nineteen British vessels which visited parts of the west coast between 1718 and 1752, fifteen were trading sloops from the Churchill post.² They came only in the summer, stayed only a few days, and had crews of less than ten men. Local people knew from their visits on board the sloops that the visitors brought provisions adequate for their own needs, plus surpluses of ship's biscuit and oatmeal which they shared generously. They may also have known from the reports of Jerry and Sharper, the two Knapp's Bay boys who spent the winter of 1719-20 at the post, that the traders had stocks of food from their own country, replenished yearly, as well as access to the food resources of the Churchill area.

In the years between 1750 and 1752, however, one or two Chipewyan crew members attempted to provide the sloop with some fresh meat and fish. They hunted only along the coast, the least likely place to find either caribou or fish in the summer, leaving the more fruitful inland areas to the local people, and their hunts met with limited success. They cannot have placed any noticeable strain on resources. Nevertheless, the Inuit may have objected, not to the presence of Europeans in what had effectively become Inuit territory, but to the presence of Chipewyan hunters. While the sloop captains had shown themselves to be generous in sharing food and other resources, Inuit had little reason to expect hospitality from the Chipewyan.

²The Hudson's Bay Company trading voyages were: 1718, David Vaughan (HBCA:B239/b/1); 1719, Henry Kelsey in *Prosperous* and John Hancock in *Good Success* (B239/b/1); 1720, John Hancock in *Prosperous* and James Napper in *Good Success* (B239/a/5); 1721, Henry Kelsey and Richard Norton in *Prosperous* (B239/b/2); 1722, John Scroggs in *Whalebone* (Rich 1949:xlili-xlv); 1737, James Napper in *Churchill* and Robert Crow in *Musquash* (B42/a/17); 1738, 1739, 1740, 1742, 1743, 1744, Francis Smith in *Churchill* (B42/a/19, 20, 26); 1750, 1751, 1752, James Walker in *Churchill* (B42/a/35, 37, 41). The other four voyages were: James Knight's disastrous passage and shipwreck ordeal of 1719-21 with George Berley in *Albany* and David Vaughan in *Discovery* (Kenney 1932:75-89); the 1742 summer voyage of Christopher Middleton in *Furnace* and William Moor in *Discovery* (Williams 1962:53-56); and the brief summer visits of William Moor in *Dobbs* and Francis Smith in *California* in 1746 and 1747 (Swaine 1748; Ellis 1748).

If the threats and ruses of 1753 had been intended to deliver new resources to the communities, the strategy did not work. The local people succeeded only in driving the visitors away, at the cost of losing whatever chances they had of acquiring the intruders' desirable resources, at least for that year. As far as they knew, the departure of the *Churchill* for the south in 1753 might have been their last opportunity to obtain valuable goods in any year.

When the sloop returned in 1754, the populations of the summer villages had returned to their more usual numbers. Walker recorded a total of 150 people on the entire coast: fewer than twenty at Knapp's Bay, about thirty at Nevil's Bay, and less than forty at Whale Cove (HBCA:B42/a/43). Whatever they had hoped to accomplish by their threatening behaviour in 1753, they did not repeat the strategy.

Instead, they had new tactics in 1754. They met the sloop with one hundred pounds (forty-five kilos) of deer flesh and twelve tongues, which they offered for trade (HBCA:B42/a/43). The meat may have represented no more than the edible parts of two caribou; nevertheless, it was a new product in their trade, indicating, first, that they had surplus food, and second, that they were thinking of subsistence resources as commodities.

The second change, a demand for more control over trade goods, also indicated new ways of thinking about commodities. A few men, invited to the *Churchill's* galley for a quick meal, spotted twenty-four tin cooking pots among the cook's utensils, and insisted on buying thirteen of them (HBCA:B42/a/43). The company responded to its customers' demands. On the next voyage, the sloop carried sixteen large and sixteen small tin pots, and a dozen saucepans in the trade goods inventory. All thirty-two pots and eight of the saucepans were sold (HBCA:B42/a/45). Pots, saucepans, and kettles became staple, and very popular, trade items in succeeding years.

In 1755, at Knapp's Bay, "very kind and courteous" people met the *Churchill* with "a deal of joy" and "parted very lovingly" from the crews when the sloop departed. Even so, John Bean, making his first trip as captain, wondered if their "civility was from innocence or from lack of opportunity to insult," and worried that

a hundred hostile fighters might at any moment appear and threaten his ship and crew. When he visited his customers in their tents to show them samples of the kinds of items the company was interested in buying, he took five "well armed" men with him. The people responded to his visits by bringing forth five wolf and two fox skins, which they traded, along with blubber and baleen, for awls, quilting needles, files, hatchets, tin pots, and ice chisels (HBCA:B42/a/45).

In the atmosphere of good will and developing commercial relations, John Bean's fears that the unusual hostility exhibited by the Inuit in 1753 might surface once more seem to have been unjustified. However, violence was loosed at Knapp's Bay in 1755, in which Inuit were the victims, a half dozen Chipewyan were the instigators, and the company was a contributing, although unwitting, cause. Within hours of the *Churchill's* departure, a party of travelling Chipewyan took murderous revenge on their ancient enemies.

Interpreting the Hudson's Bay Company's new policy of taking the trade to the Inuit as favouritism, Chipewyan had complained on several occasions at having to travel overland for distances of up to 150 kilometres in order to trade at Churchill, while the Inuit had only to wait in their camps for the floating posts to come to them (HBCA:B42/a/45; B42/a/47:2). In 1755, a party of Chipewyan men on their way to Churchill were on the coast a few hours' walk south of Knapp's Bay when they saw the sloop sailing north in search of Inuit. They sent up a smoke signal, their usual means of communicating at a distance. John Bean recognized it as a Chipewyan signal, and ignored it. He completed the usual round of trading at Knapp's Bay and Whale Cove, and sailed south.

In November, several young Chipewyan men reported to the Churchill traders what had taken place at Knapp's Bay on July 22, 1755. Having signalled the sloop on its way north without response, they shadowed it along the coast to Knapp's Bay. From hiding places among the boulders on the beach, they watched the trading activity and saw the sloop depart. When all the members of the little community were asleep in their tents, they struck, killing between sixteen and eighteen people. They kept one young woman alive, "which it seems some of them fancied." She

eventually escaped, naked and barefoot, but was easily tracked in the treeless land, and when she tried to hide in a shallow pool, they "found her and shot her instantly in the water" (HBCA:B42/a/47:2).

While relations between Inuit and Chipewyan along most of their shared border were inflammatory and unpredictable, and continued to be so as late as the mid-nineteenth century, no reports of hostility at the coastal villages were reported in the years between the 1717 founding of Churchill and 1755. The attack on Knapp's Bay, therefore, appears to be something of an anomaly. The reasons for the differences in Inuit-Chipewyan relations in the coastal villages and those between the two peoples in the transitional forest areas, as well as the underlying cause of the attack on Knapp's Bay, may have more to do with the Chipewyan than with the Inuit.

From the time of the establishment of the first trading posts in Hudson Bay, the traders had distinguished between 'Home Indians' and 'Away Indians.' The distinction had implications for the external relations of both groups, and for the Inuit. 'Home Indians' or 'the Home Guard' lived near the posts, and were employed as interpreters, hunters, and labourers. Samuel Hearne described them as "certain of the natives who are immediately employed under the protection of the Company's servants, reside on the plantation, and are employed in hunting for the Factory" (Hearne 1795:lxv). They learned English and were often familiar with several aboriginal languages and dialects; they were skilled hunters; they had insider knowledge of the geography of the country; and they were familiar with the manners and customs of neighbouring indigenous societies and of the British traders. Some had kinship ties with trading post personnel through female family members who had entered into country marriages with company officers and men. As a result, 'Home Indians' were effective culture brokers.

The particular skills and experience of the 'Home Indians' gave them attitudes somewhat different from those of their 'Away' compatriots. Because the Homeguard were able to maintain peaceful relations with their ancient arctic enemies does not mean that others of their countrymen were able or willing to do so. 'Away Indians' spent their lives in their own territories and were less familiar with European manners

and methods. A few visited the forts and factories occasionally in trading parties, but most never went to the posts. The Chipewyan attack on the community at Knapp's Bay in 1755, the bloodiest ever recorded for the bay coast, was the work of 'Away Indians.'

The Knapp's Bay massacre did not result in intensified Chipewyan-Inuit hostilities, or in the withdrawal of Inuit to more distant precincts. Quite the contrary. "Pacific and friendly terms [began] to dawn between those two tribes at Knapp's Bay, Navel's Bay, and Whale Cove" (Hearne 1795:217). A few Chipewyan families began spending the summers at Knapp's Bay, living amicably beside their Inuit neighbours. In 1762, they told Magnus Johnston that a truce existed between their two peoples (HBCA:B42/a/58), and by 1764 it was taken for granted by the company's men that the two nations were "now tolerably well reconciled with each other" (HBCA:B42/a/62). In 1767-68 at least two Inuit families spent the winter with a Chipewyan community on the barren grounds about 250 kilometres northwest of Churchill (Smith & Burch 1979:82). Again, it is worth noting that the Chipewyan were 'Home Guard' families, whose understanding of trade and social relations between nations differed from the perceptions of 'Away' groups.

For the next twenty-five years, Knapp's Bay was the site of bi-cultural summer communities in which the Chipewyan formed the larger group. In 1765 between thirty and forty Inuit in seven tents, and Chipewyan "to the number of 60 or 70" made up the summer community (HBCA:B42/a/63). A year later, the community consisted of three tents of Inuit, and twenty-seven of Chipewyan (HBCA:B42/a/65). Between 1770 and 1782, the Inuit population averaged about thirty, and the Chipewyan about one hundred (HBCA:B42/a/78). By 1770, so many Chipewyan were present that Captain Magnus Johnston complained about running out of trade goods before he had finished his tour of the coast (HBCA:B42/a/81).

While historic enmities may have been smoothed over and ideas exchanged between them, the people of the two northern nations remained distinctly different in the conduct of their economic lives. The Chipewyan brought "venison to Trade" as well as fox and marten pelts, and occasional robes of black bear fur

(HBCA:B42/a/63). In exchange they wanted powder and shot, woven cloth, clothing of European manufacture, brandy and medals. The Inuit continued to bring seal oil, baleen, caribou skins, and, from time to time, a wolf skin; in exchange they wanted kettles, tin pots, bayonets, awls, and chisels. Several Chipewyan men who were well known to the Churchill traders undertook to keep the peace at Knapp's Bay, and one of them, the trusted trading captain Hissty, promised to teach the Inuit how to trap furs for trade (HBCA:B42/a/62).

Inuit were also learning about white men and their style of trade from their own young people. Jerry and Sharper, who had accompanied Henry Kelsey to Churchill in 1719, were only the first of a number of teen-agers who learned the language and customs of the British traders at first hand. In 1756, the year after the massacre at Knapp's Bay, the people of that community sent two youngsters to the fort (Hearne 1795:218n). Most of the company's temporary wards were boys, but at least one woman, Doll, was an interpreter for the company, sailing with Magnus Johnston in 1765 and 1766 (HBCA:B42/a/63, 65, 77).

Between 1765 and 1771, two or three arctic apprentices from Knapp's Bay, Whale Cove, and Marble Island wintered at Churchill every year (HBCA:B42/a/63-82; Graham 1791:215, 241; Hearne 1795:218n). Young Petee Gunn was especially valued by Captain Magnus Johnston, as well he might be considering his linguistic achievements and apparent familiarity with the customs of the local people.

Old Hogg Shoke came along side and brought along with him Pette Gun a lad about 14 years of age who has been 2 winters at the factory before and understands Southern Indian as also Eskimaux Languages very well and the Same Gun is of material service to me along the coast amongst the different tribes of natives -- I then gave the old man his Gun and all other presents sent by me to him from The Governor (HBCA:B42/a/78), August 14).

The temporary adoption of the boy apprentices by the company was accompanied by the giving of gifts, nearly always including a gun. Petee Gunn's father was no exception.

The company's London office hoped the boys would become familiar with its methods of trade, learn enough English to be able to act as interpreters (HBCA:E2/12:611-612), and "acquaint their countrymen to be ready at the seaside with what commodities of trade they can procure ...; also for them to inform others whom they may meet with" (Graham 1791:239). Company officers in the field, with the exception of the sloop captains, expressed doubt that the strategy was working to the company's benefit (HBCA:A11/14). In the 1760s, Samuel Hearne counted off some of the pros and cons of the youth training programme.

Though during their stay at the Fort they made considerable progress both in the Southern Indian [Cree] and the English languages, yet those intercourses have not been any ways advantageous to the Company, by increasing the trade from that quarter. In fact, the only satisfaction they have found for the great expense they have from time to time incurred, by introducing those strangers, is, that through the good conduct of the upper servants at Churchill River, they have at length so far humanized the hearts of those two tribes, that at present they can meet each other in a friendly manner; whereas, a few years since, whenever they met, each party premeditated the destruction of the other (Hearne 1795:218n).

The Inuit seem to have benefitted more from sending their sons to Churchill than their hosts did. The boys learned English faster and more easily than the company's men learned the Inuit language because their linguistic priorities were Chipewyan and Cree, the languages of their principle customers and trading partners. The Inuit also learned far more about British attitudes and customs than their temporary foster parents learned about theirs. They picked up a good deal of technological knowledge, including the construction of traps, and the best ways to prepare skins.

Youths returning to their families after a year or two at the post were well supplied with clothing for themselves and their families, plus a store of household goods. They also brought their families preferred customer status with the company. The quasi-familial relationship of the fathers of the boys, and later of the young men themselves, entitled them to gifts at every meeting, and to the first chance to trade.

Another benefit of temporary adoption by the Hudson's Bay Company was skill in the care, repair, and use of firearms, which they had begun to acquire at the beginning of the 1760s. Andrew Graham commented:

When their young people began to winter at Churchill Settlement, they were initiated into the use of [guns], and a few of them are now annually bartered. When I commanded Churchill Factory Anno Domini 1773, 4 and 5 I trained up four young Esquimaux to use fire-arms, and left them fully a match for our best Indians, either at an object sitting or on the wing (Graham 1791:236).

Graham attributed the apparently more peaceful relations between Eskimo and Chipewyan to the Inuit possession of guns (Graham 1791:236), rather than to a fundamental change in the attitudes of either Inuit or 'Away' Chipewyan. One of the parents made the same point. When he put his two sons into the custody of Captain Johnston in 1765, he expressed his hope that they would return home knowing how to use guns (HBCA:B42/a/65, July 26). His continuing mistrust of the western 'Away' Chipewyan was prophetic.

In 1769, three Chipewyan on a visit to Churchill declared their intention of going to war with the Inuit whom they blamed for the witchcraft deaths of a number of their people during the preceding winter. HBC personnel believed they had talked the warriors out of their plan (HBCA:B42/a/74:29d), but during the winter four Inuit hunters from Knapp's Bay were attacked and robbed at gun point by "strange Northern Indians" (HBCA:B42/a/78). In July, 1771, 'Away' Chipewyan carried the attack to Bloody Falls on the Coppermine River where they destroyed an Inuit summer settlement while a horrified Samuel Hearne looked on (Hearne 1795:98-101).

In spite of attacks and hard feelings at distant places, in the bi-cultural community at Knapp's Bay, peaceful relations between Inuit and Home Chipewyan were the norm. Slight increases in the coast trade after 1760 were due to greater numbers of Chipewyan in the summer villages, not to increased interest and involvement on the part of the Inuit. They continued to spend their summers near the coast, avoiding areas where fur-bearing animals were found (HBCA:B42/a/65:13), and disappeared to inland residences for the winter. All the encouragement of the

sloop captains, and the efforts of Chipewyan trading captains like Hissty, who tried to convince them to spend more time hunting for saleable animals (HBCA:B42/a/101), were without effect.

Until 1770 west coast Inuit had successfully combined conservatism and adaptation to local conditions to shape their economic and social lives. After 1770, however, factors in both the physical and social environments introduced new uncertainties and forces for change. Ocean cooling resulted in the most severe summer ice conditions experienced in Hudson Bay since the beginning of the Little Ice Age (Catchpole & Faurer 1983:137). Caribou herds began to decline (HBCA:B42/a/101), and assistance of the kind which the Hudson's Bay Company was able to provide to the Chipewyan and Cree in bad economic times was not available to the Inuit.

Inuit did, however, see their trade with the company as an alternate source of necessary supplies in hard times. The Marble Island people did not wait for the sloop to come to them in 1776; they went to Whale Cove with their country products to make sure they did not miss the opportunity for trade (HBCA:B42/a/93:32d). In 1778 and 1779, the heaviest summer ice of the century (Catchpole 1992:33) damaged and delayed the *Charlotte* past the time when Inuit frequented the coast. No trade took place (HBCA:A6/12:126; B42/a/97), and no relief could be offered.

No more than thirty-five Inuit families occupied the entire coast in 1780, and while they had adequate caribou skins for their own use, they had none to spare for trade (HBCA:B42/a/101:23d). Captain George Holt paid handsomely for some oil, to give "encouragement," but he understood that people were reluctant to trade because "all the oils I am likely to trade is part of their winter stock" (HBCA:B42/a/101). The Whale Cove people had suffered a serious loss of community members earlier in the year, when many had drowned in a boating accident while moving south from Rankin Inlet (HBCA:B42/a/101), possibly as a result of heavy sea ice. In hunting communities with populations under thirty, the loss of even a few hunters can have catastrophic implications for the group's survival.

The social environment of the 1750-1780 decades in which Inuit had interacted with Chipewyan in their summer villages and with sloop traders every year also changed dramatically. In 1781-82, the Chipewyan suffered a devastating smallpox epidemic which, according to Samuel Hearne, nearly destroyed them. Hearne noted that only those Indians who were members of the sloops' crews travelled up the coast in subsequent years (HBCA:A11/15:118), and it was at least fifty years before they again frequented the barren grounds.

War between England and France had its effect on the west coast Inuit. The seizure and occupation of Churchill by the French between 1782 and 1784 prevented all trade, and when the annual sloop voyages resumed in 1785, only a few Inuit and no more than a handful of Chipewyan greeted them. Neither group had surplus goods to trade (HBCA:A11/15:118; B42/a/108).

The next year, a combination of factors -- the deteriorating weather, the disappearance of the Chipewyan, the succession of bad caribou years, and the failure of the sloop voyages in 1778 and 1779, and between 1782 and 1784 -- did what no amount of encouragement and persuasion in the previous seventy years had been able to accomplish: it brought Inuit to Churchill to trade. On May 28, 1787, six men, with their wives and families, arrived at the post. They had "goods which consisted of little more than a few hairy deer skins scarce worth the duty," wrote Hearne, and continued:

Traded with them and gave them some presents to carry back to their friends, but they inform me they intend to kill some seals off the river mouth, and build some canoes before they return to their own country. The principle reason for their undertaking this journey was to look for old iron works in the ruins of the Stone Fort.... Early in the morning [of May 30] all the Esquimaux went from the factory to pursue the seal fishery at the mouth of the river (HBCA:B42/a/108).

Two months later, Inuit were at their usual summer villages in the usual numbers, but there was still "very little trade" (HBCA:B42/a/109). In the summer of 1788, population shifts were evident: the people who usually summered at Knapp's Bay were all at Nevil's Bay, but like their countrymen all along the coast, they had

little to trade (HBCA:B42/a/111). The following year, people again appeared in unaccustomed places -- half the Marble Island people were at Whale Cove (HBCA:B42/a/113).

From the point of view of the Hudson's Bay Company, the attempt to develop trading relations with the Inuit was a failure. With the virtual disappearance of the Chipewyan from the coast, and no profit to be had from the Inuit trade, the company decided to end its annual visits to the coastal villages (HBCA:A6/14:105d). George Taylor took the *Churchill* on its last northern voyage in 1790 and informed the people that the sloop would not come again (HBCA:B42/a/115).

Estimates of Inuit numbers in Keewatin at the end of the eighteenth century are only slightly less speculative than those from the beginning. Archaeological investigations have suggested a population of slightly over 100 in the Chesterfield Inlet-lower Thelon River area before 1650, to which somewhere between one and two hundred Coronation Gulf immigrants were added sometime in the next fifty years (Burch 1978:26). The head counts of the sloop captains between 1718 and 1780 yield numbers no more reliable than the guesses based on the numbers of ruined house sites. Between 150 and 200 people were seen on the coast between Knapp's Bay and Rankin Inlet in July of most years, but they were only part of the total. In 1753 three hundred or more adults threatened the crew of the *Churchill* at Whale Cove, suggesting that at least 600 individuals occupied the coast and near inland between Knapp's Bay and Rankin Inlet. Andrew Graham's estimate of 500 individuals on the coast, at inland lakes, at Chesterfield Inlet and Baker Lake, and adjacent lakes and rivers was low (Graham 1791:213). By the end of the century there were probably between 800 and a thousand individuals in communities along the coast, and at Chesterfield Inlet, Baker Lake, and the lower Thelon River.

Identification of Inuit residential groups, or bands, on the coast and barren grounds north of Churchill in the eighteenth century is as problematic as estimates of population. Between 1750 and 1790, the sloop crews regularly saw, and traded with, people at Knapp's Bay, Nevil's Bay, Whale Cove, and Marble Island, which Andrew Graham identified as "summer resorts." On the basis of his experiences on board the

Churchill in 1750, '51, and '52, and conversations with the young men who spent winters at the fort over the next twenty years, he concluded that each coastal village was the summer headquarters of a separate "tribe." He identified the four groups as the *Achuiuck* at Knapp's Bay, the *Tahuiuck* at Nevil's Bay, the *Tekotheack* at Whale Cove, and the *Ockshotheack* at Marble Island (Graham 1791:238). The suffixes *-uck* and *-ack* would today be written with a final *q* or *k*, and designate place-names, not ethnonyms. While Graham made no comments on the possible locations of winter villages, he agreed with the sloop captains and other HBC personnel that the people spent the winters at points inland.

Taken together, archaeological and documentary evidence for the activities of the Keewatin coast Inuit between 1670 and 1790 indicates that they had made decisions and choices of both major and minor importance for their future. The first was their decision to abandon Coronation Gulf to seek new opportunities in the east some time between 1670 and 1717. By 1718, they had begun to extend their living and hunting range southward along the coast, risking competition and conflict with Chipewyan who used the same territory. Between 1750 and 1790, the period of regular sloop voyages, they sent young people to the trading post to learn new languages, customs, and technology; they established a working relationship with the traders, keeping their distance and refusing to accommodate them, but at the same time insisting that the company supply the kinds of trade goods they wanted; they began to replace utensils and implements of their own manufacture with metal ones of sturdier, lighter materials; they agreed to peaceful co-existence with the Chipewyan; and they not only maintained their population base in spite of losses such as the one at Whale Cove in 1780, they allowed it to expand. Changes in their social and cultural systems, while they are invisible in the archaeological and documentary records, surely accompanied the other changes.

At the same time, however, they chose not to transform their lives in other ways. Throughout most of the century they made no obvious changes in their subsistence occupations, their seasonal timetables, or the locations of their multiple residences. Except for the young people who accompanied the sloops to *Churchill* for

a winter's experience with the company, they did not visit the trading post before 1787. No Inuit Home Guard developed around the post, and Inuit-British relations did not produce a mixed-blood generation.

CHAPTER 5

SUBSISTENCE AND SURVIVAL, 1790-1830

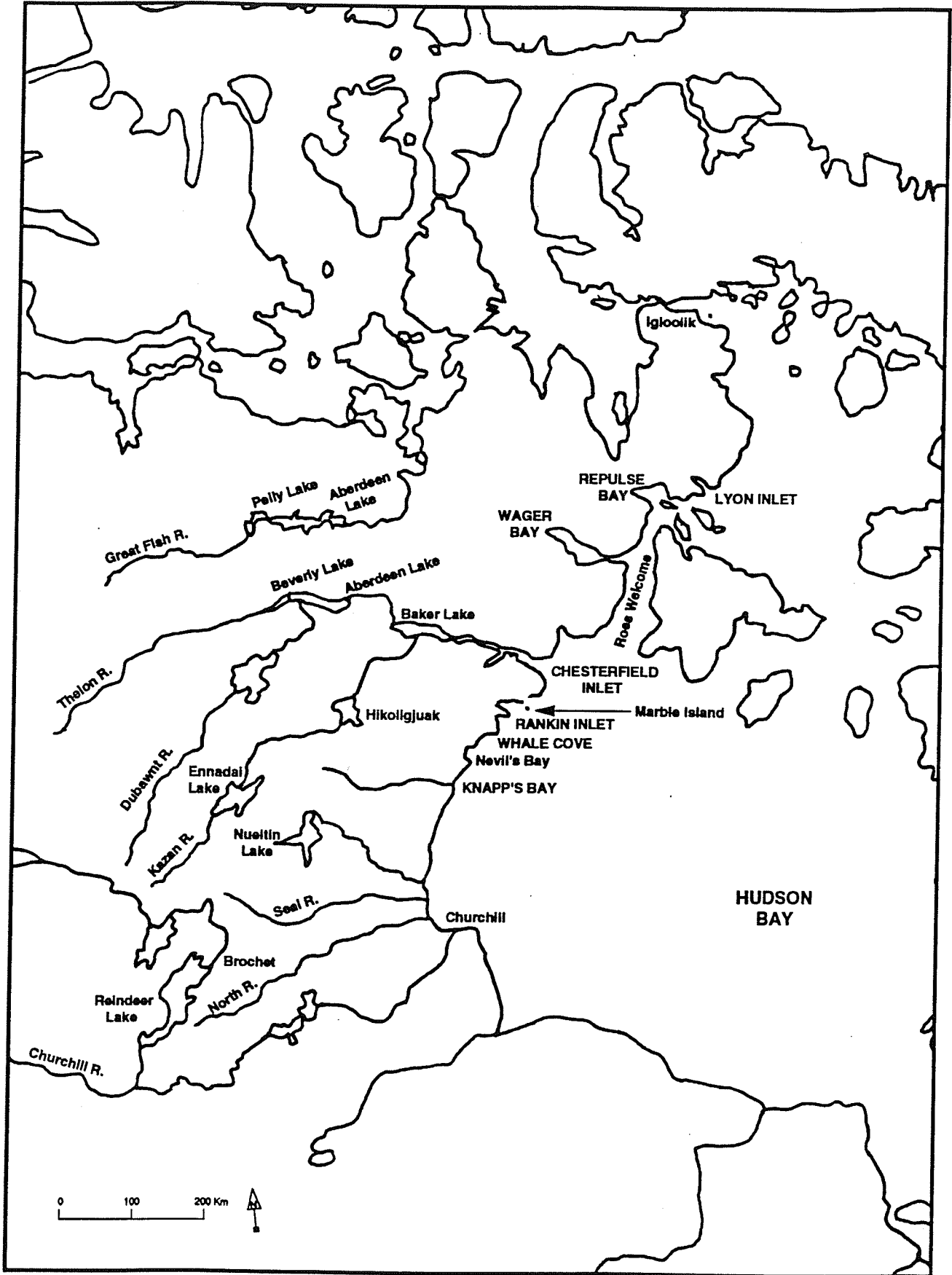
The degree of cold at one place furnishes no inference which can be relied upon as to the temperature of another place even moderately distant. -- George Back, at Great Fish River (1836:240)

After the long, slow, global warming of the eighteenth century, a period of sudden and intense cold, known as the Little Maunder Minimum, occurred between 1790 and 1830¹ (Eddy 1976, 1992; Siscoe 1980). Climatic deterioration was sudden, swift, and severe (Jacoby & D'Arrigo 1989). Temperatures at Churchill were unusually cold in every winter from 1801 to 1806 (Ball 1988:66), and ice conditions along the coast were particularly severe in 1802, 1808, and 1815 (Catchpole 1992:33). The eruption of Mt Tambora in 1815 added volcanic dust to the atmosphere, and further reduced levels of solar heat reaching the earth's surface (Lough & Fritts 1987:225), setting the stage for 'the year with no summer.' The eleven years from 1810 to 1821 proved to be the coldest of the entire period between 1602 and 1961 (Fritts & Lough 1985:221).

Keewatin

Severe environmental and atmospheric conditions disturbed normal animal-habitat relationships, which in turn created conditions of extreme unpredictability for human communities. The virtual disappearance of the caribou herds along western Hudson Bay resulted in varying degrees of famine and starvation among the three aboriginal groups which frequented Churchill post. Inuit from coastal villages formerly visited every year by the trading sloops began going to the post. Instead of

¹The colder climatic conditions of 1790-1830 are believed to be related to a reduction in sun spots. Reduced solar activity and colder temperatures were also features of the climatic episode of 1645-1716 known as the Maunder Minimum (Grove 1988:366).



WEST HUDSON BAY

the oil and blubber which had been their stock in trade during the sloop years, they began to take animal skins of various kinds. Trading was not the only, or perhaps even the primary, reason for their trips south, however. They went because seal and whale resources near the post represented an opportunity for long-distance harvesting of products which could be treated as subsistence goods as well as trading commodities. They traded some of the products of the hunts, and took what they needed for winter subsistence back to their homes, limited only by what they could carry.

In June 1791, a year after the last sloop voyage, twenty men accompanied by their families took "50 deer skins, 6 fox skins, and a wolf skin" to trade. The pelts would not have bought them a good used gun. The ninety-one seals they took during five weeks of hunting at the Churchill River were enough to buy them several (HBCA:B42/a/116).² They went again in June of 1795, in larger numbers -- more than sixty men, women, and children with about 390 Made Beaver in furs. Again they hunted seal at Churchill, and then moved about thirty kilometres north to the Seal River to hunt whale for a month. They brought in the blubber of four whales and more than sixty seals (HBCA:B42/a/121a:18-22d). To the disappointment of post master Thomas Stayner, they ended the hunt in mid-July and left in order to "return to their own country as by the time they can arrive there the deer will be plenty" (HBCA:B42/a/121a:22d).

Eight men visited the post in each of the years 1796 and 1797 without their families, arriving in August and September, later in the season than in previous years. Their deerskins and fox pelts were of little worth -- only 360 MB in 1796, and once again they were anxious to return to the north, and refused to joint the seal and whale hunts (HBCA:B42/a/122:15; B42/a/123:16; B42/a/124:1-1d). A pattern began to

²In the 1820s, seal and fox were each valued at 1/2 MB; used guns cost between 2 and 12 MB, new guns between 12 and 16 MB; 2 "good" dogs were worth one gun; 10 caribou tongues would bring 1 MB, and 30 would purchase a "checkered shirt" and some tobacco; 10 deerskins would buy a small knife, and 1 deerskin was worth "some tobacco" (HBCA:B42/d/111, 139).

emerge which would hold for most of the next half century. Men who went for the seal and whale hunts arrived in May or June, and nearly always brought their families. By early to mid-August, they were on their way again, anxious to get home before the fall caribou hunt. Years when only a few, or perhaps no, men went to the post were often either very good, or very bad, years. In very good years, when there was an abundance of caribou and enough seal in their own country to provide adequate oil for food and fuel, they avoided the company's seal hunt. In very bad years, when caribou and seal resources at home failed entirely, they could not go to the post because of illness caused by malnutrition.

About thirty men made the trip in June and July of 1798, some singly and some in small groups, and together they brought the largest harvest of furs to date -- deer skins and fox pelts amounting to almost 1,000 MB. Some hunted seal briefly, but on July 7, "in consequence of their numerous families [in the north, they] have been obliged to betake themselves to their own country" (HBCA:B42/a/124:20). The same year, "strangers" appeared at the post for the first time. When fourteen men arrived between July 22 and August 26 with more than 500 MB in furs, William Auld specifically identified eleven of them as men who had not been seen at any of the four regular ports of call during the sloop years, and who had not visited the post before (HBCA:B42/a/124:21-23d).

In the second decade of the forty year pessimism, the three aboriginal nations which frequented Churchill post suffered increasingly from scarcity of food supplies. No Inuit reached the post in 1802 (HBCA:B42/a/126), and in 1803, six arrived with "the dreadful intelligence of a great part of their tribe having perished by famine during the winter, which was remarkably cold" (HBCA:B42/a/128:4d). Churchill's Chipewyan Homeguard asked for assistance from the post master in the fall of 1804, "their families being starving" (HBCA:B42/a/130:2d). The Homeguard Cree also reported "that their families are starving having not seen any deer the whole winter"

(HBCA:B42/a/130:4d).³ As is usually the case, conditions varied widely from place to place. A party of 'Away' Chipewyan from the west reported that "they had been amongst plenty of deer but had not seen any within 12 days journey of the factory" (HBCA:B42/a/130:3d).

At Churchill, post master Auld continued to get appeals for help: in February, March, and April, 1805, Cree reported that their families were "starving and had not seen any deer during the whole winter" (HBCA:B42/a/130:5d, 6d, 7d). In April and May, Auld gave relief supplies to Chipewyan families whom he described as "almost dead for hunger. I never saw more wretched objects" (HBCA:B42/a/130:9).

Like the Chipewyan and Cree, Inuit suffered from the severity and unpredictability of the weather. Between 1802 and 1821, the numbers visiting the Churchill trading post every summer, and the quantities of the furs they brought, rose and fell with the temperature. Aside from the years 1802 and 1808, when no Inuit went to the post, and 1810 and 1818 when they went in larger than usual numbers, they arrived in small groups, were seldom accompanied by their families, and brought few furs, usually of inferior quality (HBCA:B42/a/126-148). In seven of the twenty years -- 1804, 1807, 1809, 1810, 1812, 1815, and 1816 -- they stayed to hunt seal, but only long enough to get essential supplies of oil, blubber, and skins for their own use, indicating that they were experiencing a subsistence crisis in their own countries

³British fur traders and the aboriginal peoples who learned English from them used the word *starve* to mean wither or die from lack of some essential, such as oxygen, food, warmth, or companionship. Using it only in its nutritional sense is a modern and mainly North American usage. In parts of Scotland today many people still speak of starving from cold or disease. In the fur trade journals and letters, the word is often used to indicate malnutrition and death from lack of food, but Cree and Chipewyan also used it when they meant they lacked their preferred food, or when they wanted to suggest that they had no spare time for trapping because they had to spend all their time acquiring food. *Starving* is used in this work in its modern meaning of hunger for lack of food, except when context and other evidence suggest that a different meaning was intended. In those cases, its use is qualified by a comment.

(HBCA:B42/a/129-140). Between 1813 and 1820, none remained to hunt whale (HBCA:B42/a/138-146).

As they had done in the 1750s, they looked for strategies which would ease their misery and ensure their survival. In the fall of 1804, when Churchill post was already crowded with Chipewyan in need of assistance (HBCA:B42/a/130:2d, 4d), at least four Inuit families sought relief and a winter refuge at the post (HBCA:B42/a/130:1), the first occasion on which Inuit other than the young apprentices of the previous century showed interest in spending a winter near the traders. In 1807, five men turned to the strategy of increased efficiency through technological up-grading. They convinced post master William Auld to sell them an old whale boat, and by pooling their labour they were able to bring in the twenty-five beluga they needed (HBCA:B42/a/132:20). Strangers appeared at the post again in 1807, this time twelve men from beyond Whale Cove with wolf, wolverine, and white fox furs (HBCA:B42/a/132:19).

Eighty men, women, and children went to the fort at the end of May, 1810, with almost nothing to trade. Their appearance in such numbers may have been the first step in a planned relocation to territory where they expected to find more abundant resources. Within a week of arriving at the post they declared their intention to go, *en masse*, to York Factory. Aware of the widespread suffering of Cree southwards along the bay, and the heavy burden of relief which had already been undertaken by the company, post master Thomas Topping "sent for their head men who promised they would not go" (HBCA:B42/a/135:7d). Instead they hunted seal and whale, frightened the Chipewyan, and worried Topping with their constant pilfering (HBCA:B42/a/135:7-8).

Inuit remained hard pressed in 1812, and seven families bringing only 27 MB in country products to the post "complained as well as the Northern Indians of the scarcity in the winter of provisions" (HBCA:B42/a/137:10). Long-distance harvesting of scarce resources was one of the strategies resorted to in 1814. Twenty-one men who brought in more than 500 fox pelts refused to hunt seal and whale, but took the time "to turn over the rubbish thrown out of the ruins for lead to convert into shot of

which however they could find none" (HBCA:B42/a/140:29d). Their search is reminiscent of the 1787 incident in which Inuit came to Churchill to "look for old iron works in the ruins of the Stone Fort" (HBCA:B42/a/108, May 29, 30). In both cases, new supplies of iron and lead would have increased the efficiency of their hunting implements.

Along with requests for assistance, attempts to increase hunting and transportation efficiency, long-distance harvesting of resources, and possible attempts at relocation, the west coast Inuit also became more heavily involved in the hunting and trapping of fur-bearing animals. The shift in occupation had already been noted by HBC personnel when Captain Edward Chappell, exploring Hudson Bay in HMS *Rosamond*, arrived at York Factory in September, 1814.

The land to the northward of Churchill Factory, in Hudson's Bay," he wrote, "is inhabited by Esquimaux, who, contrary to the general customs of this people, employ themselves in hunting. They carry their furs annually to Churchill Factory, for the purpose of traffic (Chappell 1817:80).

Yet another economic strategy was the exchange of country products between groups at trade meetings within Inuit territory. In 1815, the people of Knapp's Bay informed post master Adam Snodie that they planned to go "far off to trade furs with other tribes of Esquimaux whom they prevent from coming here as it enabled them to carry on an advantageous traffic at the expence of their more credilous neighbours" (HBCA:B42/a/142:13d). For the Churchill traders, the new Inuit strategy meant potentially more clients and customers, and with Inuit middlemen delivering both country products and trade items, none of the costs of transportation. Augustine,⁴

⁴In August, 1812, an Inuit trading party left a teen-aged boy at the fort in much the same way that boys were sent to the post on the trading sloops in the previous century. At the post his name was recorded at various times as Tatanaaq, Tataniak, and Tattannoecuck. He was renamed Augustine after the month in which he first came to Churchill, and occasionally referred to as Augustus. John Franklin (1823) recorded that his Eskimo name meant "belly." It is also possible that it was derived from *tatanniku*, meaning 'overflow,' 'surplus,' or 'the thing left behind for lack of

(continued...)

the company's Inuit clerk, convinced Snodie "that many of his nation are incapacitated from procuring furs" by their lack of steel traps which, Snodie thought, "would be an essential article and which they have hitherto never been favoured with" (HBCA:B42/a/142:13d-14). Steel traps of the type used by the Chipewyan thereafter became regular items in the Inuit trade. During the same period, firearms continued to be the most desired item on Inuit shopping lists.

Increased atmospheric pollution following the massive eruption of Mt Tambora in 1815 reduced both sunlight and solar warmth, resulting in a further sudden drop in world temperatures. In the worst year in a century, 1816, only three Inuit families made it to Churchill, bringing a mere fourteen white fox pelts. They explained that

their hunt was very nigh to this place all the winter and no deer about them, their only subsistence was fish which occupied their time angling and prevented them from killing foxes (HBCA:B42/a/142:19d).

Cree and Chipewyan also reported "great starvation" that winter (HBCA:B42/a/142:17). The company sent food and transport to bring survivors to the post, and on their arrival saw that "their account and indeed appearance of having been in starvation is beyond discussion. Many of their relations had died during winter." By late May of 1816, 106 Chipewyan were receiving relief at Churchill (HBCA:B42/a/142:18).

Tempers were short and intercultural tensions were high during the years of extreme cold and scarce resources. In 1807, the journal writer at Churchill had noted that:

⁴(...continued)
space.' In more than twenty years with the Hudson's Bay Company, Augustine worked at Churchill, York Factory, and Fort Chimo, acted as interpreter on both of John Franklin's western arctic land expeditions, was with Nicol Finlayson and Erland Erlandson on their overland journey to Ungava Bay in 1830 (HBCA:B38/a/1). He was the source of ethnographic information recorded by John Richardson (1822), George Back (1822, 1836), and John West (1824). He died in 1835 in an attempt to find George Back whom he believed to be lost on the barren grounds near the Great Fish River.

Much jealousy subsists between [the Inuit] and the other natives indeed the 3 distinct tribes are excessively jealous of the least favour being shown to any of the others so that it is with much difficulty we can please them (HBCA:B42/a/132:18).

People were on edge again in 1815, and there was trouble when a gun trading deal between an Inuit and a Chipewyan went sour. Post master Hugh Leslie defused a potentially dangerous confrontation by taking temporary custody of all Inuit firearms, and standing guard while the affronted Chipewyan left town (HBCA:B42/a/141:18ad-18b).

In 1818, seventy-four men, the largest number of Inuit men ever to come to the post at one time, arrived "with a quantity of white fox, wolves and deerskins etc to trade or barter into guns, ammunition, with such other articles of merchandise as they were able to procure" (HBCA:B42/a/144:2). They came without their families, caused no trouble, and within forty-eight hours they were gone.

The winter of 1819-20 was another desperate season, and in the summer that followed only sixteen men visited the post. They brought nothing to trade, "but came merely for the purpose of killing seals." They were given ammunition and powder on credit and went "off for said purpose" (HBCA:B42/a/145:5). The presence of large numbers of seals at the mouth of the Churchill River offered an opportunity for Inuit to survive 'bad' economic times in their own country by combining long-distance resource harvesting with short-term labour contracts. The costs of travel, transportation, and opportunity were manageable because the traders were prepared to outfit the potential seal hunters on credit, and undertook to feed and otherwise care for their families. Inuit recognized and used the opportunity.

The 1807 strategy by which a group of men turned accumulated savings into capital equipment was repeated in 1821. On May 11, Kootchuck and Au-we-ace-wack (HBCA:B42/a/146:6; B42/a/148:95), hunters well-known to the Churchill traders, arrived at the post, and were later joined by three other men and two or three boys. They intended to hunt seal and whale, and requested a boat to use in transporting the oil. While the post's carpenter repaired a boat for their use, they hunted caribou, bringing in 26 deerskins to be put on account (HBCA:B42/a/146:10d;

B42/a/148:97). Between May 22 and the end of July, they killed 258 seals and 26 whales. On July 31, they used their accumulated credit to purchase the old whale boat (HBCA:B42/a/146:9-10, 11d; B42/a/148:98).

Also in 1821, the Inuit took steps to maximize the profits and minimize the costs of the seal and whale hunt. They challenged an old policy of the company which had slept by the frozen sea,⁵ and warned Hugh Leslie that they would no longer accept the transportation costs or the physical risks of the Churchill seal and whale hunt. "They would only agree to it upon this condition," Leslie wrote to Governor George Simpson that fall, "namely that I would receive the blubber from them where it was killed" (HBCA:B42/a/147:1, 14).

The following year the expected traders from the north were late arriving at the post, leading Leslie to think they may have been short of provisions and unable to spare time for a trading trip (HBCA:B42/a/147:28). When nineteen hunters finally arrived, they immediately locked wills with Leslie, keeping to the position they had stated the previous year by refusing to hunt whale until they were assured that the company would accept responsibility for delivering the oil to the post. Leslie promised extra rewards and then tried to force their hand by refusing to trade with them, "the only plan I could adopt to ensure their stay," he wrote (HBCA:B42/a/147:31). But their seeming capitulation was short-lived. Three days and eleven whales later, they claimed to have run out of harpoon heads and prepared to depart. When accusations of breach of promise failed to move them, Leslie was forced to trade their 367 white and five blue fox furs, ten wolf skins, three wolverine pelts, one musk ox robe, 198 deerskins, eighteen pounds of walrus ivory, and one and a half tons of whale blubber, and they left for their homes (HBCA:B42/a/147:32).

⁵When Joseph Robson accused the Hudson's Bay Company in 1752 of being "asleep by the frozen sea" (Robson 1752:6) his intent was to mock it for lack of energy and ambition. Another way of interpreting HBC policy is as a clever ploy to force its customers, the aboriginal trappers and middlemen, to bear the costs of collection, transportation, delivery, local marketing, and local good will.

Two days after they left, a new party consisting of twenty-four or twenty-five men, four of whom "came from beyond Chesterfield Inlet" (HBCA:B42/a/147:32), arrived. Leslie traded with the four "far away" visitors and three others, receiving from them 150 fox, a few deerskin, wolf, wolverine, and musk ox skins, and thirty pounds of ivory (HBCA:B42/a/147:32). His refusal to trade with the other eighteen, along with the offer of necessary supplies "part gratis," were the levers he used to force them to spend two weeks reluctantly hunting whale. Before departing they traded 300 fox, 229 deerskin, sixteen muskox robes, nine wolf, four wolverine, and fourteen pounds of ivory (HBCA:B42/a/147:33).

Unpredictable climatic changes, and their effects on animal numbers and locations, brought disaster to several communities in the mid-1820s. In July of 1825, reports of "starvation during the winter" reached the post (HBCA:B42/a/154). A year later, Utuck, whose name was always linked in the post account books with those of Augustine's brothers and nephews, and whose country products suggest concentration on marine mammal hunting (HBCA:B42/d/111), reported to George Taylor on other catastrophes experienced by his people and their neighbours.

Before the commencement of the thaw he [Utuck] received a visit from one of the subjects of his neighbour whose domains was contiguous to his own who reported to him the mortality with which they had been visited with last summer and in the fall, likewise to communicate to us their intention of not coming to the House this season, should he or any of his tribe visit us. He [Utuck] himself has had the misfortune to lose part of his tribe - I could not distinctly make out the numbers of deaths in each respective tribe, but of the two the numbers amount to 34 of which 22 were men, 10 women and 2 children - Their deaths were not caused by starvation as they were at that time living in affluence (HBCA:B42/a/153:3).⁶

⁶A number of explanations of the mysterious deaths can be advanced. Contagious disease may have been the cause. In that case, however, Taylor's inquiries should have resulted in further comments in his journal. Another possibility is gastric distress caused by overeating after a period of enforced fasting, such as was noted among the people of Melville Peninsula by Mr Edwards, a surgeon on Captain Edward Parry's 1823 expedition (Parry 1824:543). A third possibility is trichinosis, a
(continued...)

Inuit responses to unpredictable weather and food supplies were rapid and, on occasion, appeared inconsistent. Regular visitors to the post continued to hunt whale at Seal River, but they did so unwillingly. Their reluctance was related to the company's inability to supply them with whaling boats. Trusting in the company's promise that boats suitable to the work would be supplied along with the men to handle them, thirty-eight hunters arrived in 1829 prepared to kill whale. Instead they were left on their own with only one "small boat" which was "driven on the rocks" and from which they "with some difficulty reached the shore in a half drowned state" (HBCA:B42/e/7:4; B42/a/157:4d, 5d, 6, 7). The post masters' repeated requests for more men and safer boats for the whale hunt were consistently ignored by their superiors.

Throughout the 1820s, country goods for trade were increasingly terrestrial, possibly inland, products. Walrus ivory and narwhal tusk were less and less often brought for trade, and only by the Whale Cove people, whom Leslie identified as "the farthest away Eskimaux" (HBCA:B42/a/149:45; B42/d/111). Also increasingly, people arrived at the post empty-handed, and hunted seal before they were able to trade (HBCA:B42/d/111).

Inuit shopping lists were also changing during the 1820s. The awls, chisels, bayonets, and files so eagerly desired during the sloop trade years were less

⁶(...continued)

disease caused by parasitic infestation contracted by eating infected meat. Inuit, of course, are aware of the danger, and under normal circumstances avoid the most likely sources of contamination. However, incidents have been reported in which people have added variety to an all-fish diet by eating polar bear, wolf, or dog meat, all possible sources of contamination. One such case occurred in 1958. After receiving reports that eighteen Garry Lake people had died of starvation, officials of the Department of Northern Affairs and the Hudson's Bay Company requested their arctic personnel to make inquiries. A post manager, in a chance meeting with a Garry Lake woman he had known for many years, obtained the following description and explanation of the incident. "She said they [the people of the community] were not really hungry having plenty of fish but wanted meat. The natives that died ate dog meat, their bodies got badly swollen and the skin started to peel off. The local nurse here says it was trichiniasis" (HBCA:RG7/1/1753).

frequently traded. Guns were the first priority, and by 1830, a man who did not own a gun was a rare exception. The next most frequently traded items were kettles, blankets, and yard goods, closely followed by luxury purchases of shirts, jackets, decorative gartering, and tin tobacco boxes (HBCA:B42/d/139).

The numbers and products suggest that the west coast people had made significant changes in the locations of their winter and summer residences, and, as Lieutenant Chappell noted in 1814, in their occupations between 1790 and 1830. During the period of coastal trade, sloop captains reported an average of about 300 people sealing and whaling on the coast during the summer and moving inland in late August or September for the caribou hunt (HBCA:B42/a/93:30; B42/a/107:13). Although no HBC personnel were ever on the coast in winter, they believed, on the basis of information provided by the people themselves, that the arctic communities wintered inland. Yet in 1821 Augustine said his people spent the summers at inland lakes and rivers fishing for salmon and hunting reindeer and musk ox (Back 1822:119; Richardson 1822:28), and the winters seal hunting on the coast, a reversal of the previous pattern of seasonal residence.

Exactly who Augustine meant by his "people" cannot be determined with certainty. He described his people as living "a little to the northward of Churchill [from which they] came to the Fort with sledges in the spring" (Back 1822:119). However, when he first came to Churchill as a "lad" in 1812, he was identified by Thomas Topping as one of the "farther natives" (HBCA:B42/a/138:2d), which suggests that his people were not part of the Knapp's Bay summer village. Shown a map of the west coast of Hudson Bay, he recognized Chesterfield Inlet. The farthest north he himself had been was Marble Island, which he knew as the site of the "disastrous termination" of James Knight's northward voyage of 1720 (Franklin 1823:264).

His home, therefore, seems to have been north of Knapp's Bay but south of Marble Island, at Nevil's Bay or Whale Cove. His summary censuses of his people -- eighty-four adult males and ninety married women (Franklin 1823:263), sixty-four girls and sixty-two boys between infancy and adulthood (West 1824:179-80), and an

unknown number of babies -- are in line with the estimates of 300 adults at the three villages visited regularly by the sloops prior to 1790, and with Andrew Graham's guess of a minimum of 500 people at the three more southerly villages and at Rankin and Chesterfield Inlets as well. Augustine's comments suggest that he considered all the inhabitants of the three southerly villages to be "his people," but that he and his immediate family belonged to a group which maintained a seasonal village at Nevil's Bay or Whale Cove.

After more than a century of commercial association, the men of the Hudson's Bay Company at Churchill were reasonably well-acquainted with the people of the bay's west coast as far north as Chesterfield Inlet. But during the 1820s when 'strangers' came to Churchill from Chesterfield Inlet, or "from beyond the Inlet" (HBCA:B42/a/147:32; B42/d/111; West 1824:181), the Churchill traders knew almost nothing about their communities, numbers, names, territories, occupations, and social organization. Unlike eighteenth-century clerks and post masters such as Samuel Hearne and Andrew Graham, few post masters in George Simpson's reorganized company concerned themselves with gathering or publishing ethnological information.

During the same years, however, the British government made the discovery of a northwest passage a high priority national goal. Its intensive search brought to the arctic explorers and other adventurers who produced a large body of ethnographic publications for the book-hungry British reading public. Major expeditions of the period were John Franklin's first overland journey from York Factory to the Coppermine River and eastern arctic coast in 1819-22, with John Richardson as surgeon and naturalist, and George Back as midshipman; Edward Parry's 1819-20 voyage to the east coast of Baffin Island in the *Hecla* and *Griper*; Parry's 1821-23 voyage to the northern coast of Hudson Bay and Melville Peninsula in the *Fury* and the *Hecla*, with George Lyon as second in command; Franklin's second overland journey, to the mouth of the Mackenzie River and the far western arctic coast in 1825-27, with John Richardson as surgeon; Parry's 1824-27 voyage in the *Fury* and *Hecla* to Melville Peninsula; John Ross's exploration of the west coast of Boothia

Peninsula in the *Victory* in 1829-33; the overland journey of George Back down the Great Fish River (now Back River) in 1833-35; and the explorations of Thomas Simpson and Peter Warren Dease of the Mackenzie River and arctic coasts in 1836-39. Another kind of exploration was conducted in 1820-23 by the Reverend John West in search of new fields for the propagation of the Christian gospel on the coast north of Churchill.

Augustine was a member of both Franklin land expeditions, borrowed from the Hudson's Bay Company at the request of the British Admiralty, as interpreter in the event the explorers succeeded in reaching Inuit territory on the arctic coast. He also acted as an interpreter and chief informant to John West at Churchill in 1823. When asked by Franklin, Richardson, Back, and West, he made it clear that some of the 'far away' Inuit, so little known to his questioners, were known to him, and that they had already begun to acquire European goods, as well as information about Europeans, through trade and the exchange of news with the Knapp's Bay and Whale Cove groups.

Augustine identified one of the 'far away' groups with which his people traded as the "*Ootkooseck-kalingmoeoot*" (Franklin 1823:264), that is, Utkusiksalingmiut, People of the Soapstone Place. Franklin identified them as a "tribe" occupying territory at Franklin Lake and along the lower Back River. There was, however, another soapstone quarry near Wager Bay, known to the Melville Peninsula people as *Ootkooseeksalik* (Parry 1828:153), and Augustine's reference could have been to people who lived near it.

Augustine's people also traded with "one tribe, who named themselves *Ahwhacknanhelett*, [who] he supposes may come from Repulse Bay," and with "the *Kangormoeoot*, or White Goose Esquimaux, [who] describe themselves as coming from a great distance" (Franklin 1823:264). The former, on linguistic grounds, may be identified as the Aivilingmiut, the People of Aivilik, the Whale Place. The latter seem to have been the Kanghirmiut, the White Goose People, whose territory was along the Perry River, a major nesting ground of the white, or snow, goose. Near

Perry River, during the 1819-22 Franklin overland expedition, Augustine found a paddle, which he "on examination declared to be made after the fashion of the White-goose Eskimaux a tribe with whom his countrymen had had some trading interviews" (Richardson 1822:108).

Foxe Basin

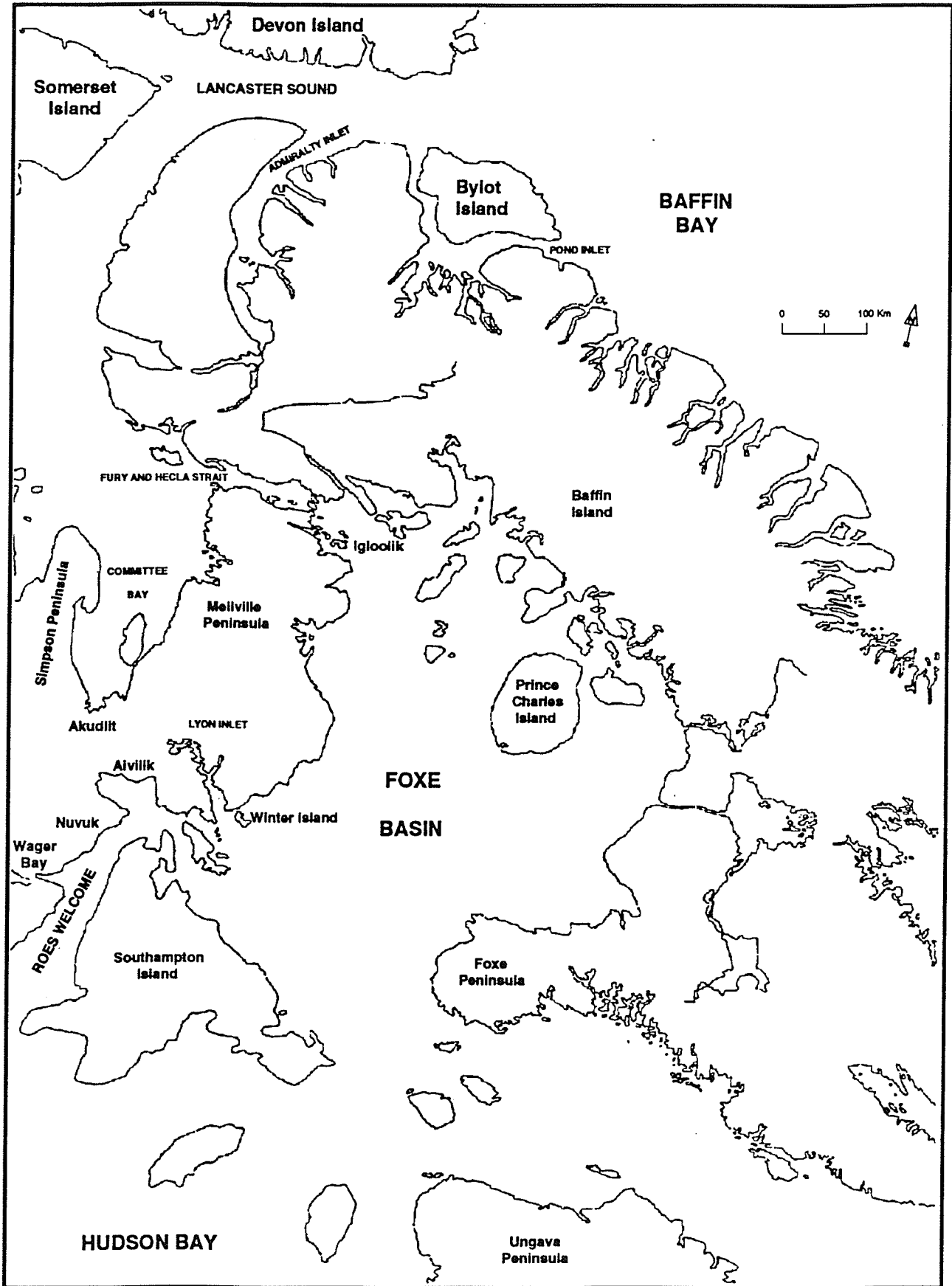
John West's ethnographic research at Churchill in 1823 added to the information gathered by Franklin and Richardson, and supported what William Auld had been told in 1815 about trade between Inuit communities.

They informed me that a great many of the Esquimaux meet in summer about Chesterfield Inlet.... The object of the Esquimaux in meeting from different tribes at Chesterfield Inlet every year, is to barter with those principally who trade at Churchill Factory, and also with some Northern Indians, who exchange what European articles they may have for fish-hooks made of bone, and sinew lines, and skins (West 1824:182-83).

The 'strangers' who traded at Churchill in 1823 had been at the Chesterfield Inlet gathering two years earlier, and had met people "from the great lake to the north" who told a curious story.

They had seen two very large canoes when there was no ice; and when one of these canoes stood in towards the shore where they were, they were so alarmed as to run off over the rocks, and ... they did not return till the big canoes were out of sight towards where the sun rises (West 1824:182-83).

West speculated that the two "very large canoes" had been the *Fury* and *Hecla* under the command of Captain Edward Parry searching for a northwest passage in 1821-23. Parry's account confirmed West's guess. In August of 1821, Parry and his second in command, George Lyon, had been in Repulse Bay, and found open water in a bay known for its summer ice. A village site there appeared to be deserted, but Lyon was convinced that people had been there within the past few days, and speculated that they may have left when they saw the ships (Lyon 1824:71). After a brief exploration of the area, Parry's little fleet headed east out of the bay in search of



a suitable wintering site (Parry 1824:56). In February, 1822, while his ships were iced-in at Winter Island near the mouth of Lyon Inlet, Appokiuk, one of the residents of a nearby community, confirmed that she and her companions had secretly observed the crews of the *Fury* and *Hecla* in Repulse Bay the previous year, as Lyon suspected (Parry 1824:175, 184).

The following month, another of Parry's informants, Iligliuk, who was also his most trusted cartographer and navigator, drew a map of the Melville Peninsula on which she included "a lake of considerable size ... [where] her countrymen are annually in the habit of resorting during the summer, and catch there large fish of the salmon kind, while on the banks are found abundance of rein-deer" (Parry 1824:198). The description and location of the lake suggest that it was the "great lake to the north," now known as Curtis Lake.

Little is known of the human history of the bay coast between Chesterfield Inlet and Repulse Bay before Parry's visits in the 1820s. Inuit histories relate that there was once a major centre on Roes Welcome between Chesterfield Inlet and Wager Bay. It was called Nuvuk, and was destroyed in a war of extermination by a neighbouring group under the leadership of a great chief named Oudlinuk. Another community, at Depot Island, planned to attack Oudlinuk's village to avenge the Nuvuk people, but dropped the idea when they saw the extent of the destruction that his forces were responsible for (Comer 1910:88). As is the case with other Inuit histories, nothing indicates when the hostilities took place. On the basis of information gathered by the whaling captain George Comer in 1897, Franz Boas dated the attack on Nuvuk and the subsequent abandonment of Depot Island to the years immediately before 1800 (Boas 1901:6).

The area between Chesterfield Inlet and Repulse Bay was an almost empty buffer zone between discrete groups of people when Edward Parry and George Lyon visited in 1821-1823. North of the empty area were the Melville Peninsula people. They were familiar with the whole of the peninsula, and regarded it as their particular territory (Parry 1824:185). Although there were "no regularly established settlements

along an immense extent of coast," there were "three or four which are considered as general mustering places" (Lyon 1824:341).

Nuvuk was still remembered in the oral histories of the Melville Peninsula people as one of their principal settlements. Although by the 1820s it was seldom occupied except for a few weeks in the summer, they regarded it as the southernmost limit of their territory (Lyon 1824:344; Parry 1824:341, 513). There they met and traded with the people of Chesterfield Inlet. A major item in the trade was wood, from which they made their paddles and tent poles. The wood, they told Parry, "had been traded north by more southerly people" (Parry 1824:501), as had some European items: the iron-bladed knives used by all the men, two large copper kettles, files, beads, the iron blades of the women's knives, and an axe (Lyon 1824:123; Parry 1824:503, 504).

In addition to deserted Nuvuk, the main villages were Aivilik, Igloolik, and Akudlit (Lyon 1824:160-161, 341; Parry 1824:279, 423, 492). Aivilik, at the bottom of Repulse Bay, had once been a larger and more important village than it apparently was in the 1820s. Lyon and Parry found the remains of an "immense Eskimaux settlement" there, with more than sixty tent rings, "several small fire-places covered with soot, [and] about a dozen perfect store-houses for flesh" (Lyon 1824:52), and nearly a hundred other kinds of structures including fireplaces, storehouses, caches, canoe stands, and route markers (Parry 1824:51). In the 1820s, although only about sixty people occupied Aivilik during the winters (Parry 1824:160), the people continued to regard it as a settlement of some importance (Lyon 1824:160-161).

Akudlit, at Committee Bay, was the western limit of occupation by Melville Peninsula people (Parry 1824:513). All of Parry's and Lyon's informants knew of it. Most had visited there once or twice, and thought that about fifty people usually lived there (Parry 1824:549). It was, however, more common for the people of Akudlit to visit Igloolik or Aivilik than it was for the inhabitants of the two latter settlements to cross the Rae Isthmus to their western border. The route to and from Akudlit was always overland across the Rae Isthmus. "Not one of them had been by water round

to Akkoolee, but several by land," wrote Parry (1828:170). Nor could people recall visits to or from lands farther west than Akudlit (Parry 1824:171, 198).

By far the largest permanent village was Igloodik. It was identified by most of the more than 200 people whom Parry and Lyon interviewed as their birthplace (Lyon 1824:160-161). Its inhabitants, the Iglulingmiut, People of the House Place, preferred it to any other residence, and wintered elsewhere only when the resources of Igloodik were not adequate for their numbers. The population in 1822 was 219, according to Parry's count, and included sixty-nine men, seventy-seven women, and seventy-three children, among whom there were eighteen deaths and nine births that winter (Parry 1824:492). During the dark period of the winter of 1822-23, about sixty individuals moved to Aivilik near Repulse Bay in order not to put too great a strain on the resources of the main village (Parry 1824:160).

The 220 or so people with whom Parry and Lyon spent two winters made up "nearly all the inhabitants of the north-east coast of America" between Nuvuk at Wager Inlet and Igloodik (Lyon 1824:347). Their language, family histories, and relations with other groups indicate that they identified themselves as a single social unit, occupying a particular territory, and having genetic relationships and a history distinct from those of neighbouring peoples (Lyon 1824:307). The people of Akudlit, on the west coast of the peninsula, were part of the larger Melville Peninsula community, in the sense that they were not outsiders, but they were less well-known, and were both geographically distant and emotionally removed from the heartland and the core settlements.

Trade among the Melville Peninsula communities and with other groups was reliable and capable of satisfying most resource needs. Although a soapstone quarry at Ootkooseeksalik near Wager Bay seemed to Captain Parry a likely source of the material for pots, the people "assured us [that] was not the case, the whole of them coming from Akkoolee." One woman explained that her parents "were much employed in making these pots, chiefly it seems as articles of barter." Asbestos, used by women to trim their lamps, was found in abundance near Aivilik at Repulse Bay (Parry 1828:153).

Nuvuk, while no longer a residential site, continued to be a major trading centre for the redistribution of both Inuit-made articles and European items. Augustine knew about trade meetings there (Franklin 1823:264), and most Iglulingmiut told Parry that they had been there to trade with people from other parts of the country (Parry 1828:170). Every family had a wooden tray manufactured by the people of Augustine's community from wood available in the Knapp's Bay hinterland, as well as copper kettles and iron knives stamped with the names of European makers (Lyon 1824:123; Parry 1828:154-155).

The east coast of Melville Peninsula and the other lands around northern Foxe Basin, which had sustained a Dorset occupation for more than 1500 years, continued to provide adequate, and frequently abundant, food and other resources in the nineteenth century. Scarcity arising from environmental conditions was less frequent than in many other parts of the arctic. In 1821-23, the Igloodik community was well enough off to feed and maintain more than a hundred dogs (Parry 1824:515). The community was, however, fully aware of exactly how many people could expect to spend the winter comfortably in a particular place. Lyon suspected that the number of people who left Igloodik to winter at Aivilik in 1822-23 would have been greater if it had not been for the presence of the *Fury* and *Hecla*. "In consequence of our known intention of visiting it, [Igloodik] proved the most attractive wintering quarter, and at least half the dwellers along the coast hurried to assemble there" (Lyon 1824:341-42).

One of them, Ooyara, confided to Lyon on New Year's Eve of 1822 that because of an unexpected decline in caribou numbers "they could not hope to support so great a number as by the recent arrivals were now assembled at Igloodik" (Lyon 1824:303). They made arrangements for the crews of *Fury* and *Hecla* to take turns acting as hosts and provisioners in supplying bread and oil for the women and children and such other people as were "most distressed" (Lyon 1824:303).

Just outside the Iglulingmiut core area, resources were not always adequate. Three hundred kilometres away, in the winter of 1820-21, the people of Akudlit suffered serious starvation. Two of its residents, Ooyarrakhioo and his wife Tabbi,

visiting Igloolik in the spring of 1823, brought news "that during a very grievous famine which had been experienced, one party of Eskimaux had attacked, killed, and eaten another party" (Lyon 1824:411-12; also Parry 1824:550).

The Iglulingmiut maintained connections with three communities on north Baffin Island, across Fury and Hecla Strait from Igloolik (Parry 1824:549). About ten days' journey away at Pond Inlet on the northeast shore of Baffin Island was the village of Tununeq. Toolemak, a widely travelled man of the Iglulingmiut, described Tununeq and its people in terms which suggest that the classic Thule way of life still survived there. The people depended on whaling for their subsistence and the surrounding bays and inlets provided cetacean harvests rich enough to support a year-round population in a permanent village (Lyon 1824:293-294). European whalers were attracted to the area because of its abundant resources, and by 1820 were regular visitors. The local people had not only observed them closely and passed information about them to the Iglulingmiut, but had communicated with them and accepted gifts. The Tununirmiut, People of Tununeq, had been the beneficiaries of European whaling in that carcasses from which the whalers had cut away the fat had "frequently" been left on the beach for their use (Lyon 1824:293-294).

Close to Tununeq was the village of "Toonoonee-roochiuch" (Parry 1824:549) in Admiralty Inlet. Toolemak had little to say about the community there, but Parry and Lyon gathered that its people, the Tununirisirmiut, did not differ perceptibly from the Tununeq people.

The third Baffin Island community associated with the Iglulingmiut was at "Peelig" (Parry 1824:549). Parry was unable to determine the location of the village, but in 1823, ten Peelig residents visited Igloolik. They had not known Europeans were there, but they were familiar with sailing ships like *Hecla* and *Fury* from meetings with whaleships on the northeast coast of Baffin Island (Parry 1824:430).

Iglulingmiut response to European explorers was decidedly unlike that of Baffin Islanders in Frobisher's day. The difference may be explained by the differences in the ecology of Melville Peninsula, and in the amount of information Iglulingmiut had about white men. In the Foxe Basin core area, the arrival of

strangers did not necessarily mean competition for limited resources. At Lyon Inlet in 1821, food was abundant, and the Iglulingmiut had no need to withhold hospitality or to take their guests resources without permission. They also had information about the newcomers from frequent meetings with the people of Tununeq and Toonooneeroochiuch, who had already had a number of encounters with whaleships, and knew from experience that much could be gained from establishing friendly relations with the strangers. Iglulingmiut had also heard descriptions of the Churchill traders from the southern groups they met at trade gatherings at Chesterfield Inlet, Curtis Lake, and Nuvuk. The Iglulingmiut in 1821 had no reason to see the white strangers as a threat to their resources as the east Baffin Islanders apparently had in the 1570s and 80s, or to fear for their lives and freedom as the Labrador people had in the sixteenth and seventeenth centuries.

In describing the people of the north Baffin Island communities, Toolemak made it clear that although they were different from his own Iglulingmiut, they were not strangers. Their speech was the same, although accented, and differences in clothing, hairstyles, and women's tattoos were minor. They were on friendly terms with each other, maintained social relations through visits, intermarriage, and exchanges of children, and families from each group were free to live temporarily or permanently within the other's communities (Lyon 1824:344).

In attempting a classification of arctic peoples according to cultural characteristics, the Fifth Thule Expedition grouped the people of Aivilik, Akudlit, Igloodik, and Tununeq together, and identified them as Iglulik. Although Toolemak and his people did not use the term 'Iglulik,' or any other term as an official descriptor of the category, they would probably not have denied the classification altogether because it included the people and groups they recognized as friends and relatives, and excluded all those they saw as strangers.

It is worth noting that during Parry's visits people who wintered at Aivilik were an integral part of the Igloodik subgroup. They did not see themselves as separate. The woman Appokiuk, for instance, was accustomed to divide her time between Aivilik and Igloodik (Parry 1824:175, 184), and could quite correctly have

claimed to be Iglulingmio (meaning resident of Igloodik) during the fall and winter, and Aivilingmio (meaning resident of Aivilik) in the summer. The transformation of part of the Iglulingmiut subgroup into a distinct Aivilingmiut band centred on Aivilik in Repulse Bay did not happen until some families were drawn into permanent residence there by the attractions of American whaling fleets in the 1860s (Robinson 1973).

As well as maintaining familial ties and trading relations with other groups, the Iglulingmiut were part of a wide communications network through which information on both past and current events was exchanged. "They have many traditionary stories of Kabloona and Indians," Lyon wrote. They knew about the white men at Churchill far to the south, who were said to "have plenty of wood and iron." And they had a substantial store of information about Indians, whom they called "It-kagh-lie," and of whom they spoke "with fear" (Lyon 1824:345-46; also Parry 1824:513). From the beginning of their relations with Parry, Lyon, and their crews, the Iglulingmiut eagerly sought to add to their store of information about other peoples and places. Iigliuk, Parry's best map-maker and pilot,

was always very much entertained also by pictures having any relation to the Esquimaux in other parts, and derived great entertainment from a description of any difference in their clothes, utensils, or weapons. Of these the sail in an Esquimaux boat seemed particularly to attract her notice (Parry 1824:210-211).

Hudson Strait

To satisfy Iigliuk's intense curiosity about the people of Hudson Strait, George Lyon showed her some seal skin clothing which he had purchased from them. She declared the items badly made, but continued to ask Lyon and Parry for details of their makers (Lyon 1824:136-137, 150). Their descriptions embodied the first and lasting impression of all British explorers and traders -- the Hudson Strait people were great traders "well accustomed to bargain-making" (Parry 1824:11). They began meeting the Hudson's Bay Company supply ships at the Middle Savage Islands, Nottingham and Salisbury Islands (Glover 1969:xiii), and Cape Digges in the 1730s,

MAP: HUDSON BAY BASIN

and by 1800 the regular visits were "a sort of annual fair" where people indulged in opportunistic pilfering and enthusiastic but minor trade (Chappell 1817:64).

People wanted, above all, items such as "iron nails [and] barrel hoops" which they could use as "heads for their arrows, spears, and harpoons" (Chappell 1817:58, 62). They were not, however, prepared to pay a high price for what they wanted, and "displayed no small cunning in making their bargains, taking care not to exhibit too many articles at first" (Franklin 1823:17). They refused to sell their country products "for anything of reasonable value," wrote Parry, who described an incident in which two men unable to find buyers for their high-priced oil started pushing sailors around "with a violence I have never seen the Esquimaux use on any other occasion" (Parry 1824:14).⁷

While Baffin Islanders had used violence to protect or acquire resources two and a half centuries earlier in their encounters with Frobisher and Davis, the people of the Strait were never seen to engage in violent hostilities. Their encounters with Robert Bylot in 1615 (Foxe 1635a:139-140) and Jens Munk in 1619 (Munk 1624:9-10) were entirely peaceful. Edward Chappell was the only observer to suggest that they may have engaged in open conflict with their neighbours in the nineteenth century, and his comment expressed no more than a slight suspicion. They used spears and lances when hunting birds and fishing, he wrote, but preferred bows and arrows "in their wars" (Chappell 1817:64).

Whatever their military stance, they were certainly anxious to trade with all comers, and just as certainly engaged in a particularly insubstantial trade. The poverty of their trade sprang from the absence of the more or less permanent and intensive contacts which might have equipped them with the tools and support systems necessary to maintaining subsistence and amassing surplus goods. The ships' visits, while regular and predictable, took place only once a year and were limited to a few

⁷Although the incidents described by Parry took place in 1821, he wrote of them in 1823, and his standards for comparison were the Iglulingmiut in whose country he had just spent two years.

hours duration, and the crews and passengers were interested only in mild souvenir bartering. Aside from small amounts of overpriced whale oil and ivory, most of the goods they offered in trade were souvenirs. The Reverend John West's opinion of their workmanship was the opposite of Iligliuk's.

The women presented image toys, made from the bones and teeth of animals, models of canoes, and various articles of dress made of seal skins..," he wrote, "all of which displayed considerable ingenuity and neatness (West 1824:7).

Neither party to the trade took it seriously. Ship-time was an occasion for small-scale recreational trading in the context of a social gathering. Although the gatherings were smaller, they are reminiscent of the Greenland meetings described by the missionary Henri Cristopher Glahn.

To this large gathering some travel in order to see their relations; some to look for a bride among so many beauties; some to settle their litigations before this solemn gathering; some to stand their trial in wrestling, slapping and being slapped on the back; some in order to be healed by a more noted physician, who is supposed to come here; some for the sake of buying and selling, some to be spectators (Birket-Smith 1924:238).

In the absence of constant and reliable markets, and of social security in hard times, the Hudson Strait Baffinlanders made few noticeable changes in their way of life and were fundamentally unaffected by the brief appearances of passersby. There is no evidence that they changed their territories or occupations between the seventeenth and twentieth centuries. The population of the south coast, estimated at around 300 people in the 1740s (Ellis 1748), remained stable for three hundred years (Boas 1888; Chappell 1817:98; Franklin 1819:18; Lyon 1825; Maxwell 1979; West 1824:7).

Ungava Bay and Peninsula

Many of the people of south Baffin Island wintered in Labrador and the Ungava Peninsula, crossing the strait in their umiaks, "loaded with furs and other necessaries." During the winter they gathered wood for making boat frames, tent poles, and harpoon handles (Chappell 1817:98; also Franklin 1823:19; Graham 1791:213; Swaine 1749a:33), and traded with the Labrador coast people (McDonald 1841:120).

The people of the Labrador-Ungava coast, for their part, were as eager to trade as their countrymen on the north side of the strait, but had even less opportunity. A few of their number acted as middlemen, taking fox pelts, bear-skins, pyrites, and other country products from Ungava bay and peninsula to the Moravian trading post-missions. When they returned to their own communities after a two year round trip, they sold newly acquired European goods, including firearms, "at a very advanced price" (Kohlmeister & Kmoch 1814:47, 67).

The reputation for violence and war of the Ungava Bay people, noted by Nicolas Jérémie (1720:16) and Bacqueville de la Potherie (1722:279) a century earlier, remained. Among the people of Okak, on the Labrador coast, Ungava Inuit were known for their "hostile disposition" (Kohlmeister & Kmoch 1814:39-40). In spite of their reputation, hostility was not evident in their responses to the arrival of two Moravian missionaries in 1811. Instead, they greeted Brothers Benjamin Kohlmeister and George Kmoch with friendly overtures, and in the case of those who had not seen white men before, with considerable timidity.

Their hostility was reserved for their Indian neighbours, and involved more fear than malice. They constantly used their telescopes to scan the woods to the south for the smoke of Indian fires, and spoke of "bloody encounters" with Indians from the interior and from Hudson Bay at the George and Koksoak Rivers (Kohlmeister & Kmoch 1814:67). At one village where the women were alone while their men chased caribou in the water, a false sighting of an Indian sent all the women into hiding places where they stayed until assured by the returning hunters that no strangers were near (Kohlmeister & Kmoch 1814:57).

Even people from the Hudson Strait coast were constantly on the alert for Indians. Among the fourteen families camped at the mouth of the Koksoak River when the Moravian party arrived were five families from Aivertok (Stupart Bay). They had set up their tents in a cluster some distance from the others, and although they had been told about the missionaries, they were nervous about having strangers in their midst. When Brother Kohlmeister walked in the direction of their tents, the Koksoak people feared "that the Eivertok people, seeing him alone, might mistake him for an Indian, and shoot at him, [and] dispatched two men to bring him back" (Kohlmeister & Kmoch 1814:71-72). An interesting aspect of the account is that, although neither the Koksoak nor the Aivertok people had previously been visited by Europeans, they had guns.

Fear of the Indians influenced choices of living sites and occupations. Fourteen families who planned to winter at Koksoak in 1811 because of an abundance of game there refused to make permanent residences "by their fear of the land-Indians" (Kohlmeister & Kmoch 1814:76). They pointed out many signs of Indian occupation: places where Indian fires had burned out some of the woods, and the remains of Indian encampments (Kohlmeister & Kmoch 1814:74). The missionaries attributed the hostility to "national jealousies" on the part of both peoples, suggesting that disputes over the resources of the untreed territory were a basic cause of conflict (Kohlmeister & Kmoch 1814:57).

The Lowland Cree on the east coast of Hudson Bay were just as nervous about contacts with Inuit. When William Hendry explored the interior of Ungava Peninsula and the shores of Ungava Bay in 1828 with a view to establishing a trading post in the area, he thought that "the apprehension of being butchered by the Esquimaux would be an insurmountable obstacle" (HBCA:B186/b/15:10-11). The reactions of the Eastmain Cree who accompanied him along the Seal Lakes-Koksoak River route did nothing to dispel his fears. As they began their descent of the river and found increasing signs of Inuit occupation, the guides became more and more reluctant to continue (G. Williams 1963:liv). The murders of a Moravian missionary and five sailors in Labrador in 1752 (G. Williams 1963:xxiv), and the killing of a Hudson's

Bay Company clerk at Richmond House in 1754 (HBCA:B182/a/6:33), remained vivid in the memories of Europeans and Cree even though they had occurred more than half a century earlier.

In spite of the concerns of its men on the spot, the company's London Committee ordered the establishment of a post near the mouth of the Koksoak River in Ungava Bay for the purpose of trading with the Inuit. The founding party, which left Moose Factory in June 1830, included two officers, Nicol Finlayson and Erland Erlandson, and a dozen men, three of whom, Augustine, Moses and Ouligbuck, had long been employed at the Churchill post (Davies 1963:100). Three others were James Bay Cree who proved to be reluctant founders, "evidently under fearful apprehension of the Esquimaux" (HBCA:B38/a/1. In Davies 1963:108). By mid-September they had constructed a dwelling house adequate to shelter the traders during their first winter (HBCA:B38/a/1. In Davies 1963:118). The following year the post was given the name Fort Chimo (G. Williams 1963:lviii).

The newcomers were soon visited by "six kyaks and two large skin boats full of people [who] expressed their joy" in song and dance when greeted in their own language by Moses (HBCA:B38/a/1. In Davies 1963:115). As it turned out, they were not local people, having recently come from the east coast of Hudson Bay, "which they were forced to leave on account of the Indians whom they often see in that quarter and who sometimes unprovoked make them deplore the loss of a friend and relative" (HBCA:B38/a/1. In Davies 1963:116-117).

Like some of their compatriots, they were eager to trade. They already owned some European items, including knives bought from Inuit middlemen who visited Okak, in exchange for their fox skins and seal oil. Nevertheless, their eagerness to trade did not guarantee that they would have articles for barter. In 1830, they had nothing to exchange except skin boots, which Finlayson bought for his men (HBCA:B38/a/1. In Davies 1963:116-117).

The Ungava people, like other communities of their distant countrymen, were badly affected by the severe climatic conditions of the Little Maunder Minimum. Famine and starvation were frequent, and led to infanticide and cannibalism as well as

to increased violence, murder, and feuding (Saladin d'Anglure 1984:480). Living off the land was no easier for the fur traders. Fish and game were scarce in the vicinity of the new post, but not necessarily because of a decline in their numbers. Only a few miles away, both caribou and fish were available in good supply. They were, however, inaccessible due to the difficulties of travel and transportation.

In October, 1830, Augustine and Ouligbuck set up their tent at a small lake upriver from the post, hoping to supply fish in sufficient quantities to feed the men (HBCA:B38/a/1. In Davies 1963:125). The plan failed, not because of a shortage of fish at the lake, but because the erratic freezing and thawing of the river made it uncrossable, and the products of the fishery could not be transported to the post. Between November 8, 1830, and January 15, 1831, communication between fishery and post was impossible. Finlayson, afraid that Augustine and Ouligbuck might have starved, sent a relief party which succeeded in reaching them, and bringing them home (HBCA:B38/1. In Davies 1963:130-131). They had been living comfortably on the products of their fishery and had built up stores adequate to supply the traders, but could not get the fish or themselves to the post. Unable to provide for their own table, the traders tried bringing food from James Bay. However, by the end of 1831, the journey from Fort Chimo to James Bay had become so difficult due to heavy snowfalls that one of the company's Cree couriers died from starvation and exposure while attempting to reach Eastmain (G. Williams 1963:lxiii).

The distinction between scarcity and inaccessibility of game has not often been noted either by fur traders or by twentieth century scholars. Nicol Finlayson was one of those who understood the difference.⁸ He recognized that in the particular environmental conditions of Ungava Peninsula and Bay, it was impossible to track

⁸As did Franz Boas, whose comment, while generally accurate, is somewhat extreme. "I do not know of any cases of famine arising from the absolute want of game, but only from the impossibility of reaching it" (Boas 1888:19). The explanation is not necessarily applicable to situations where people are dependent on caribou for winter food. Because caribou numbers and routes vary unpredictably, scarcity, famine, and starvation could and did result from the absolute absence of game.

deer in the soft snow of winter no matter how abundant the animals were. Only in the spring, "the snow being hard, [could hunters] follow the deer into the interior" (HBCA:B239/c/2. In Davies 1963:183). Finlayson put his understanding of snow conditions into practice during the first winter at Fort Chimo, when he set his men to making snow shoes at every opportunity.

Two Inuit families from Hudson Strait who were among the new posts' first customers in 1831 were experiencing similar difficulties. They complained that the mildness of the winter had prevented them from achieving a good hunt, presumably because of soft wet snow which made travel difficult. Their main purpose in making the six day journey from the north was to get a gun (HBCA:B38/a/1. In Davies 1963:143).

Caribou were scarce or inaccessible again during the winter of 1831-32. Desperate with hunger, parties of Inuit arrived at the post, and Finlayson used the whale oil he had bought from them during the summer as relief supplies (HBCA:B38/a/1. In Davies 1963:162-164). The company's men were suffering from scurvy, and Indians arriving from the interior in May, 1832, reported starvation among their people (HBCA:B38/a/1. In Davies 1963:165-166). In the fall, Finlayson sent Erland Erlandson and half the men inland, partly to make contact with the Indians and encourage them to trade at Fort Chimo, but also in order to relieve the pressure on the post's slender food supply. To Erlandson, he wrote, "We must *fight it out the best way we can*, providence assisting," and instructed him to "*leave no stone unturned* in endeavouring to procure provisions for the people that are with you" (HBCA:B38/b/1. In Davies 1963:190. Original emphasis).

Relations between Inuit and Cree were cool, but not violent, at least in the presence of the traders. The traders encouraged friendly relations, and according to Finlayson, the Inuit were more prepared to end the old enmities than their former antagonists were (HBCA:B38/a/1. In Davies 1963:157). In 1831 the post master was certain that "had this band [of Inuit] met with them [the Indians] at a distance from the fort there is no doubt that they would through mere levity have sacrificed them" (HBCA:B38/a/1. In Davies 1963:160-161). A year later, when more Inuit owned

guns, he saw signs that "the Indians ... will not be averse to a peace, as they must know that the Esquimeaux will have it now in their power to retaliate" (HBCA:B38/b/1. In Davies 1963:179). By 1834, the two nations were living peacefully in tents side by side at the post. The Inuit insisted the Indians' kind treatment of them was due to the influence of the traders (HBCA:B38/a/3. In Davies 1963:227).

During the somewhat better hunting and trapping summer of 1833, several Inuit left credits on their accounts, promising to return to buy guns after the supply ship had visited. Others kept their furs, but planned to trade them for guns in the fall. When the supply ship failed to get through the Ungava Bay ice, three umiaks of people who were expected failed to show up. Finlayson concluded that "They were informed no doubt by those I saw of my having no guns; but whether they have proceeded on to the eastward or not I have not been able to learn" (HBCA:B38/a/3. In Davies 1963:225).

The Inuit trade continued uneven during the 1830s; in some years people brought in a few fox pelts, and in other years they not only had nothing to trade, but were forced to rely on the post for emergency provisions (G. Williams 1963:1xx). Finlayson reported to his superiors that the principal Inuit food was oil, of which they seldom had a surplus (HBCA:B135/c/2. In Davies 1963:192-3). In fact, he wrote, it was not unusual for them to be starving when they arrived at the post (HBCA:B239/c/2. In Davies 1963:185). By 1842, the risks to its men and the facts of no profit led the company to close its three small outposts and Fort Chimo itself (Saladin d'Anglure 1984:500). The local people once again had to depend on their middlemen for European goods, or undertake the long journeys to posts on the Labrador and Hudson Bay coasts.

CHAPTER 6

WINDFALLS, SURPLUS, AND SCARCITY, 1830-1860

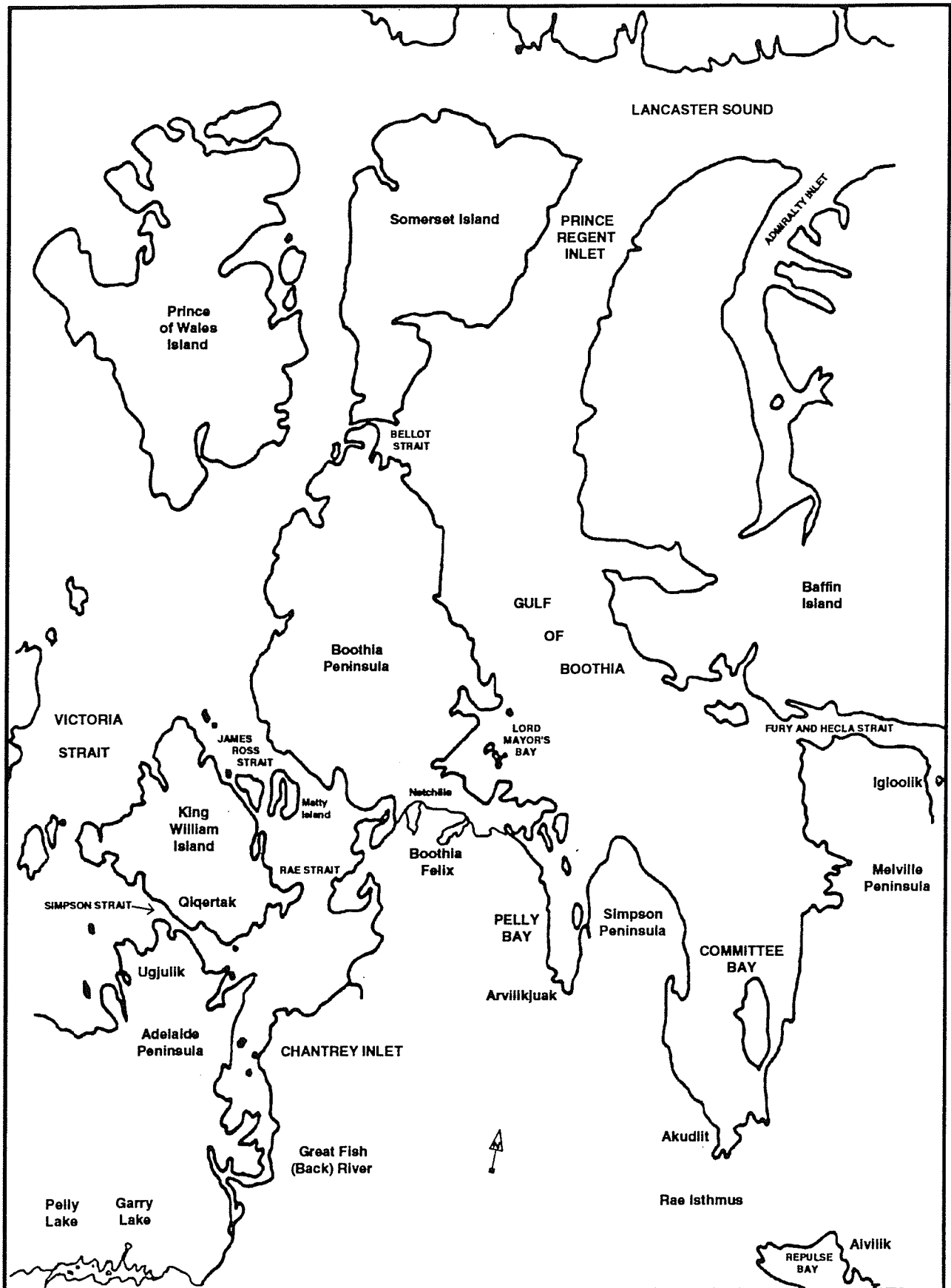
There are many memories of hunger in our land, memories new and memories of bygone days. Sometimes famine is due to hard winters with unceasing snowstorms, sometimes to mild winters when the ice will not lie. -- Samik, at Boothia Felix (Rasmussen 1931a:135)

Boothia and the Arctic Coast

Intent on finding a North West Passage, Edward Parry and George Lyon had sought information from the Iglulingmiut about the lands and peoples west of Melville Peninsula. Their relentless questioning did not elicit useful information (Parry 1824:513; 1828:153, 170-171). Communities did exist, however, at Pelly Bay and Boothia Peninsula in the 1820s. Pelly Bay communities were familiar with the villages and villagers at Igloodik, Lyon Inlet, Repulse Bay, and Akudlit (John Ross 1835a:252, 254). Farther west, the people of Boothia Peninsula had contacts with communities to the west and south of their home territory, and in spite of what Parry and Lyon understood to be Iglulingmiut denials, with eastern peoples as well. They had small quantities of iron, copper, and wood which originated with their western and southwestern neighbours, and iron and European knives traceable to Melville Peninsula and the Keewatin coast (Mathiassen 1927a:25, 82-83; Savelle 1985:205).

Boothia Peninsula has been described as "one of the most desolate environments on earth, particularly inappropriate for human occupation" (Balicki 1970:xviii). A century after the Parry-Lyon explorations, Knud Rasmussen, whose travels took him into nearly every part of Greenland and the Canadian arctic over a period of thirty years, made the definitive statement concerning Boothia Peninsula: "There is scarcely any country on earth that presents more severe and inclement conditions for man ... for it lies waste and bare of all that is considered necessary to life" (Rasmussen 1931a:131).

Except for the three centuries of stable, temperate climatic conditions from 900 to 1200 when Thule people expanding out of Alaska settled there, human



BOOTHIA, KING WILLIAM ISLAND, AND GREAT FISH RIVER

occupation of Boothia Peninsula and Somerset Island was always problematic. The Thule who occupied Somerset Island after 1300 were gone by 1500, and the island was deserted, either abandoned by hard-pressed communities or emptied through recurring extinctions of its people (McGhee 1970b). The absence of archaeological evidence for occupation suggests that Boothia Peninsula may also have been *terra desolata* for much of the period between 1500 and 1800.

The Second, or Little, Maunder Minimum, the last cohesive climate event of the Little Ice Age, was followed by a general and continued atmospheric warming on a global scale, beginning about 1830. The most significant feature of the 1830-60 period was the extreme variability of the climate. The receding ice pack and expanded open water areas released greater amounts of moisture to the atmosphere, resulting in more frequent summer rain and heavier winter snowfall. Winters were long and cold, and summers were short, cold, and cloudy. The last fifteen years of the period, 1845-60, were characterized by especially severe sea ice, low temperatures, and unusually heavy precipitation (Alt et al. 1985:69, 70, 73). Fluctuations in temperature and precipitation encouraged animal, fish, and bird populations to alter their schedules and habitats erratically. Indigenous pathogens, for whom humid conditions were ideal, multiplied and brought the misery of epidemic disease and parasites to human beings, and to the dogs, fish, and reindeer on which they depended.

Given the inhospitable nature of Boothia's physical environment, communities there might have been expected to find conditions insupportable during the years of unpredictable weather and scarce resources. Instead they survived in greater comfort and safety than many of their fellow countrymen.

Because of their connections with Melville Peninsula and the Keewatin coast, Boothians knew that there were white men in Hudson Bay. They first met them in their own country on January 9, 1830, at Lord Mayor's Bay where Captain John Ross and his northwest passage expedition were wintering in the *Victory*. It was not, however, their first view of the newcomers, and the meeting did not take them entirely by surprise. Two men saw the *Victory* as it was being carried south along the

Boothian east coast by ice in September, 1829, and took the news to their principal village at Netsilik (John Ross 1835a:309). In considering appropriate responses to the appearance of strangers in their territory, community members sought information about the visits of Parry and Lyon at Melville Peninsula from a woman whose sister, Kakikigiu, had met them both in 1823. Her description helped to convince them that they could safely make their presence known to the strangers (John Ross 1835a:309).

The meeting was peaceful, although the local people were cautious and ready to defend themselves and their families. Thirty-one men made their presence known to Ross and his party by appearing suddenly from behind blocks of ice, "forming in a body of ten in front and three deep, with one man detached, on the land side, who was apparently sitting in a sledge.... Each was armed with a spear and a knife" (John Ross 1835a:242).

Captain John Ross, Lieutenant James Clark Ross (whose experience included service on all three of Parry's expeditions), and the *Victory's* men all threw down their weapons and shouted greetings in Inuktitut. The Inuit responded by casting away their spears and knives of bone and antler, but they were taking no chances. The Rosses noted that each man also had, tucked at the back of his parka, "a much more effective knife pointed with iron, and some also edged with that metal" (John Ross 1835a:244). James Clark Ross presented his credentials by claiming acquaintance with the people of Aivilik, mentioning the names of all those he could remember. Tensions were eased. The warriors visited the *Victory* and were given gifts of iron, after which they invited the newcomers to their village.

The ability to muster a fighting force of thirty-one men suggests a community of at least a hundred individuals, but no village, of any size, existed in Lord Mayor's Bay in the fall and early winter of 1829 (John Ross 1835a). Who, then, were the inhabitants of the newly-built snowhouse settlement visited by Ross on January 10, 1830? Where had they come from, and why? Netsilingmiut and Arvilingjuarmiut

histories give slightly different versions of events.¹ The Netsilingmiut version, as told to and recorded by the Rosses, states that none of the new arrivals were normally resident in the area, that the people at Netsilik knew about the newcomers as early as the previous September, made a deliberate effort to gather information about them, and considered various ways of responding to their presence (John Ross 1835a:309). Arvilngjuarmiut histories record that it was one of their hunters who first saw the *Victory*, and that only one day later their people greeted the strangers for the first time (Rasmussen 1931a:27-28).

The two versions are not necessarily contradictory. January was the usual time for dispersed groups to come together in large communities for breathing-hole sealing on the ice, and Lord Mayor's Bay was used by people from both Netsilik and Arvilikjuaq. It is entirely possible that they came together at Lord Mayor's Bay for the large winter seal hunt at the usual time, that the people of Netsilik already knew about the wintering explorers, as James Clark Ross's informants said (John Ross 1835a:309), and that the people from Arvilikjuaq were surprised by the presence of white men, as their histories state (Rasmussen 1931a:27-28).

John Ross believed that Boothia people had three principal villages or territories: Netsilik on Boothia Isthmus; a second village somewhere on the east coast of Boothia; and a third at Owutta, an island on the Boothia coast "three days' journey to the westward of Nei-tyel-le" (John Ross 1835a:355, 423, 427). Ross thought that the place-name 'Nei-tyel-le,' sometimes written as 'Neitchillee' and 'Netchillik,' was used variously by the people to refer to "the land, the river, the lake, and the village, or settlements," individually or collectively (John Ross 1835a:389).

¹Netsilik, like Iglulik, is an umbrella term applied by the members of the Fifth Thule Expedition to the more or less culturally-related communities at Pelly Bay, Boothia Peninsula, the Great Fish River, and parts of King William Island and Adelaide Peninsula. Boothia people used the word as a place name, not as an ethnic identifier. Like the so-called Iglulik people, the Netsilik, if they bothered to identify themselves as ethnic units at all, used the names of the villages which they regarded as their principal residences: Netsilingmiut at Netsilik Lake, Arvilngjuarmiut at Arvilikjuaq (Pelly Bay), and so on.

The east coast village, which Ross did not name or identify on his charts, may have been an intermittently occupied settlement of the Arvilikjuaq people, who frequently spent the late winter months at Lord Mayor's Bay hunting seals, in communities which included Netsilingmiut from Boothia Felix. Pelly Bay families also spent occasional periods of one or two years on the east coast of Boothia (Rasmussen 1931a:23). The third village, Owutta, which, like the east coast village was not marked on John Ross's charts, was identified by James Clark Ross as a small island between Boothia and King William Land, "one of their steady places of resort" (John Ross 1835a:423).

John Ross counted ninety-nine souls in the winter village at Lord Mayor's Bay -- thirty-three men, twenty-five women, twelve elderly people, and twenty-nine children. During the two years that followed he met about sixty others (John Ross 1835b:60). Even assuming that the Rosses did not meet face-to-face with every resident of Boothia and Pelly Bay, the total number of people at the end of the 1820s was probably no more than 200 souls.²

Boothia Felix people, like other Inuit, dealt with regularly recurring periods of short-term scarcity by separating into small groups, sometimes no bigger than one nuclear family, and dispersing widely in order to harvest the resources of large territories. John Ross's journal is filled with references to camps, settlements, villages, resorts, stations, and centres, and to continuous shifting of groups of people,

²Franz Boas's estimate, based on the first volume of Ross's narrative, has been widely cited since publication in 1888. Boas assumed that the thirty-one men who made the first approach to Ross were all Arvilikjuaq people living at Lord Mayor's Bay, and extrapolated from this a total Arvilikjuaq population of 120. He also assumed that each of the twenty-one winter houses Ross saw at Netsilik was occupied by about eight people, and he arrived at a total figure for the Netsilingmiut of 170. To those figures he added his guess, (and it was no more than that), of sixty people at Owutta, and concluded that the total population was about 350 persons in the 1820s (Boas 1888:46). By assuming that none of the people in the winter village at Lord Mayor's Bay were Netsilingmiut, Boas effectively counted them twice, once as residents of the winter village and once as residents of Netsilik. The Appendix to Ross's *Narrative*, published separately, contains biographical information which allows for more close identification of individuals.

suggesting that Boothia communities were highly mobile, harvesting the resources of many different areas at different seasons, sometimes for very short periods of time. The picture is consistent with the survival strategies of societies under "continuous ecological pressure" (Balikci 1970:618).

The Netsilingmiut were well-travelled outside their own country, and tolerant of strangers in their territory and society. Within a week of meeting them, Ross had been introduced to at least nine competent map-makers who drew charts of neighbouring territories including Wager Bay, Repulse Bay, and Melville Peninsula (John Ross 1835a:259-262). Visitors to the ship included a party of Netsilingmiut returning from a trip to the east where they had seen people from Igloodik (John Ross 1835a:266). During the same period, three men who were clearly not Netsilingmiut visited the *Victory*. One "belonged to a different tribe;" one appeared to be "Indian rather than Esquimaux;" and one "was a stranger from another tribe, with his hair in a different fashion; but we could not make out the place of his residence" (John Ross 1835a:266, 273, 274). By the end of the second week, the crew had been host to a Netsilingmiut woman who was married to "a stranger, belonging to some southern tribe" (John Ross 1835a:274). A number of the women in Netsilingmiut society had been born in other communities.

Netsilik histories contain a substantial body of information on relations between the Netsilingmiut and the Arvilingjuarmiut. The histories are not clear on whether the place name, 'Arvilikjuaq,' referred to a major village or whether it was applied to the entire area of Pelly Bay. They are very clear, however, that in spite of, or perhaps because of, the many marriage ties between the two groups, violent confrontations were common. One series of hostile encounters, said to predate Ross's visit, began when an Pelly Bay man killed a Netsilik man with whom he shared a wife (Mary-Rousselière 1960a:22). The sons of the murdered man, along with most of their community, carried the attack to Arvilikjuaq, and both sides suffered heavy loss of life (Balikci 1970:182-183; Rasmussen 1931:440, 444-445; Steenhoven 1959:55-57). The history makes the point that the Netsilingmiut had special weapons for use in war, but the Arvilikjuaq people had only their caribou hunting implements.

The hostility which existed between Netsilik and Arvilikjuaq in spite of kinship ties and frequent communication has been attributed to quarrels over women (Balicki 1970:147; C.F. Hall 1879:258-259). Given the practice of female infanticide, and consequent inequities in the sex ratio of adults, it is not surprising that violence should erupt in order to get women from other groups, or to prevent other groups from marrying Netsilingmiut women, or to maintain a favourable balance in the exchange of women. It is also reasonable to suppose that such quarrels might result in revenge or blood feuds.

Other histories tell of Netsilik battles with Aivilik communities³ and with people living along the Great Fish River and at Garry Lake (Balicki 1970:184), although, like other Inuit histories, they are vague about dates. Planned hostilities followed certain conventions: a messenger, always an elderly person, was sent to inform the enemy that an attack was imminent; a short truce was arranged so that both sides could prepare themselves; and when the time arrived for confrontation, the combatants arranged themselves into facing rows (Steenhoven 1962a:12). The object was to annihilate the opponents and all their kin. Netsilingmiut war parties included women (Balicki 1970:183-184). It is not clear precisely what their roles in warfare were, although they were probably lightning rods. One observer wrote:

An old decrepit woman now came forward to meet us and ascertain our intentions and status. Apparently they intended her as a sacrifice for the good of the others should we be of a hostile nature (Schwatka 1880b:66).

Netsilingmiut relations with their western neighbours, the Ugjulingmiut of King William Island and Adelaide Peninsula, were less tense, perhaps because they were less frequent due to the greater distance between them. Two Netsilingmiut men, Ooblooria and Awack, who crossed Boothia Felix with James Clark Ross in April, 1830, told him about Ugjulik "across the salt water" where there were "great numbers

³*Aivilik* (Place of the Walrus) and *Aivilingmiut* (People of the Walrus Place) were at Repulse Bay, and are not to be confused with *Arvilikjuaq* (Place of the Big Whales) and *Arvilingjuarmiut* (People of the Big Whale Place) at Pelly Bay.

of Esquimaux" in the summer (John Ross 1835a:307, 308). As was the case with the place-names *Netsilik* and *Arvilikjuaq*, *Ugjulik* was sometimes used to refer to a specific village on the west coast of Adelaide Peninsula, and at other times to refer to the whole territory occupied by Ugjulingmiut, which included the eastern and southern coasts of King William Island. King William Island was frequently referred to as *Qikirtaq*, a generic word for any island.

Because non-native iron, copper and wood have been found on Boothia, some investigators have assumed the existence of trade between the Boothians and neighbouring groups (Balicki 1970; Boas 1888; Savelle 1985). The supposition overlooks the question of what the Boothians might have traded in return, as well as assuming that non-indigenous items could only have entered the economy through trade. Given the almost total absence of surplus-beyond-subsistence goods in the Netsilik economy, it is unlikely that they engaged in regular or frequent trade.

Without suggesting that women were commodities in the Netsilik economy -- although Ross hints at the possibility (John Ross 1835b:52) -- the evidence indicates that women were the major import of the Netsilingmiut, and that some men emigrated in order to find wives. One man, Kanayoke, "had communications with a tribe in [the west] where the females were most numerous." Over a period of some years, he had "married" six women from "the westward," and had, at different times, given (or sold?) the first five as brides to his unmarried co-residents (John Ross 1835b:43). Other women entered Boothian society from the east, including two sisters from Akudlit, one of whom, Kakikigiu, was married to two Netsilingmiut brothers (John Ross 1835b:39).

The exchange of people between territorial groups necessarily resulted in the creation of overlapping kinship networks. A description of the mobility and the almost impenetrable connections of just a few members of one family makes the point.

Seeuteetuar visited Ross at Felix Harbour and saw Rae at Pelly Bay, McClintock on Boothia, Hall at Keeuna, and Schwatka near Starvation Cove. In-nook-poo-zhe-jook (a Netsilingmiut) first met Rae when

travelling from Boothia to Pelly Bay, and often visited Repulse Bay. Pooyetta (Netsilingmiut) had an Arviligjuarmiut wife (Tooktoocheer). Too-shoo-art-thariu (Netsilingmiut) was a cousin of Ouela and his brothers at Repulse Bay, and his mother lived at Pelly Bay. Eek-choo-archoo ("Jerry"), a native of Pelly Bay, was a cousin of Teekeeta (Netsilingmiut), and met Hall while living at Igloodik! (Woodman 1991:295).

With family connections of this order spanning several territorial and ethnic groups, material goods and ideas can be exchanged without the vehicle of trade. Among 160 Netsilingmiut, John Ross saw only three knives of European manufacture (John Ross 1835a:244; 1835b:2). To assume that they were acquired through trade is to ignore the possibility that they could have been introduced by brides coming from other groups, by Netsilingmiut returning to the home village after a visit to relatives elsewhere, or by non-Netsilingmiut kin visiting Boothia.

By 1832, the *Victory* had been iced in for three winters, food stores were getting low, and Ross made a decision to abandon the vessel and make his way north to Lancaster Sound where he believed, correctly as it happened, that he and his crew might be rescued by a passing whaler. The abandonment of the well-equipped vessel provided the Netsilingmiut with an abundant supply of their scarcest resources: metals and wood. After 1833, they began making weapons and utensils from the newly accessible materials. Slate knives, lances, and harpoons were replaced by implements with cutting edges of iron, copper, tin, and brass. Copper and iron replaced bone rivets in the manufacture of soapstone and leather items (Savelle 1985:204). Most technological changes were in materials rather than form or function, but archaeological discoveries of aboriginally-made serrated-edge blades similar to surgeons' saws (Savelle 1985:204) indicate the incorporation of some European innovations into Netsilingmiut implement culture.

One change which the Netsilingmiut might have been expected to make was in sled construction. Their sleds before 1833 were made of fish, bone, antler, and animal skins. To create runners, frozen fish were wrapped in hides, which were molded to the appropriate shape and frozen solid. The runners were fastened together by cross-bars of bone or antler. The sleds were short, off balance, clumsy, fragile,

and slow. In warm weather they thawed, and while runners made of fish and hides served a second purpose as emergency rations, the absence of efficient transport added to the labours of travel and limited the range and speed of movement, as well as load size.

Access to long, straight wooden planks from which to make sled runners could have led to a revolution in Netsilingmiut transportation technology. Larger, faster sleds would have allowed them to increase their hunting range, harvest more food supplies, maintain more frequent communications between villages, expand their territories, and extend their trading contacts. Apparently they did not appreciate, or else they rejected, the possibilities. "Their sledges," wrote Leopold McClintock in 1858, "were wretched little affairs, consisting of two frozen rolls of sealskins coated with ice, and attached to each other by bones, which served as crossbars" (McClintock 1859a:235). Only one family owned a sled "made of two stout pieces of wood, which might have been a boat's keel" (McClintock 1859a:233). At Arvilikjuaq, on the other hand, people recognized the value of a new transportation technology. By 1846, they had pieces of mahogany, iron tipped weapons, and sleds with oak runners and cross braces (Rae 1850:124).

It might safely be assumed that the possession of adequate supplies of wood and metals not only cushioned the Netsilingmiut from the full force of the erratic and unpredictable climatic and other environmental conditions of the 1830-60 years, but also made daily life somewhat easier and more comfortable. Possession of the windfall resources seems also to have encouraged a more suspicious attitude towards outsiders than formerly. In 1846, the Aivilik people thought it necessary to caution John Rae that "the natives of this part of the coast [Boothia] bear a very bad character, and are much feared" (Rae 1850:121). Was the new attitude xenophobia born out of the perceived necessity to protect resources? Whatever it was, the sudden acquisition of surplus wealth did not result in expansion of territory, hunting range, or trade. When significant change occurred among the Boothia-King William Island-Chantrey Inlet peoples, it had nothing to do with the protection of resources.

The story begins with the Ugjulingmiut, the People of the Bearded Seal, who occupied the southern coast of King William Island and most of Adelaide Peninsula, and the Utkusiksalangmiut, the Soapstone People, who lived along the lower Great Fish River⁴ and Garry-Pelly Lakes. In 1834 near the mouth of the Great Fish River, about thirty-five Ugjulingmiut saw white men for the first time. The strangers were George Back of the British navy, and his exploration party (Back 1836:202, 198). The villagers reacted to the appearance of boat and crew by "brandishing their spears, uttering loud yells, and, with wild gesticulations, motioning to us not to land" (Back 1836:197). When Back threw aside his gun and spoke a few words in their language, they responded with gestures of friendship, and everyone, including the children, shook hands with the strangers.

A second, larger village of between sixty and seventy people stood at the eastern end of Garry Lake. Although Back was unable to understand most of what the villagers told him, he gathered that they had been hunting or trading along a river which flowed into Hudson Bay, and concluded that they had come from Chesterfield Inlet or Wager Bay (Back 1836:227). Communications between the Utkusiksalangmiut and the Netsilingmiut cannot have been frequent -- none of the people Back met had information about the Ross expedition, or about the cache at Lord Mayor's Bay, and no items from the abandoned *Victory* had made their way to the Great Fish River.

Although contacts between Netsilingmiut and the people of Ugjulik and Utkusiksalik were rare, the latter knew about the trading post at Churchill and had more frequent communications with people from the west coast of Hudson Bay. In one of the Utkusiksalangmiut communities, local people conveyed to Back, through gestures and a sketch map, that they traded at Akudlit (Back 1836:200-201), where they met with people from Arvilikjuaq, Igloodik, and Aivilik. They also met people from the southern Keewatin, as Augustine told Back, Richardson, and West in the

⁴The Great Fish River is known to the Chipewyan as Thlew-ee-choh, and to the Inuit as Irqalikjuak. The meaning of the name is the same in all three languages.

early 1820s, and supplied them with "short and rudely fashioned iron knives" and "rough iron" (Back 1836:200).

Like most other arctic people in the second half of the 1840s, Netsilingmiut, Ugjulingmiut and Utkusiksalingmiut were dealing with climatic stress of almost unmanageable proportions. The years from 1845 to 1859 were "one of the least favourable periods in the past 700 years" (Alt et al. 1985:69). Recalling the winters of 1846-1848 nearly twenty years later, four Netsilingmiut men who had lived through them declared that "The Innuits never knew such very cold weather -- there was no summer between two winters -- could catch no seals or kill any rein-deer at most of the usual places" (C.F. Hall 1789:589). Ugjulingmiut also remembered the virtual disappearance of both caribou and seal from their country and two years of starvation and death. Three generations after the fact, people at Great Fish River spoke of the blizzards, starvation, death from exposure, and cannibalism as "the year of horror" (Rasmussen 1931a:120).

In 1845, John Franklin's massive expedition sailed into Lancaster Sound in what was intended to be a final effort to realize the British dream of discovering the North West Passage. Given the climatic conditions, the timing could hardly have been worse. A year later, the *Erebus*, the *Terror*, and their complements of 135 men were beset by ice off the northwest coast of King William Island. On April 22, 1848, the surviving 105 men abandoned the frozen ships hoping to reach safety overland. Like the people of the Ugjulik and Great Fish River they knew death from starvation and exposure, and ate the flesh of their companions as they faced their own "year of horror." One by one, they died, leaving wooden boats, metal fittings, cutting tools, cloth, and containers strewn mile after mile along the west coast of King William Island and the shores of Simpson Strait.

A year or two later, with continued survival still threatened, the Ugjulingmiut were assaulted on a new front: Netsilingmiut moved into their territory to harvest the littered coasts. Using the windfall of wood and metal from the abandoned *Victory*, they had increased the efficiency of their hunting technology just enough to give themselves a slight edge during the ecological disaster. Their relatively better health

and higher levels of energy enabled them to take advantage of the second windfall of precious resources left by Franklin's retreating crews, and to destroy the few remaining Ugjulingmiut.

Hints of famine, war, and displacement of people surfaced from time to time over the next two decades, and were recorded by John Rae, James Anderson, and Leopold McClintock in the course of their searches for news of the lost Franklin expedition. The Ugjulingmiut account of events remained hidden from outsiders for thirty years until it was told to members of Frederick Schwatka's expedition in 1878. Taken together, and against the background provided in the accounts of earlier visits by George Back and John Rae, the scattered clues and the Ugjulingmiut history tell a coherent story of events.

In 1849, on a sledge journey along the Boothia Peninsula and Somerset Island west coasts in search of the lost Franklin ships, James Clark Ross saw no villages, encountered no Netsilingmiut, and noticed nothing different from what he had seen twenty years earlier (J.C. Ross 1850:58-64). By 1854, relations between Netsilingmiut and their neighbours were decidedly less friendly than they had been during the visit of the two Rosses in 1829-32. When John Rae crossed from Hudson Bay to Pelly Bay in search of information on the lost Franklin expedition, the Arvilikjuaq people, who only twenty years earlier had shared territory and winter sealing villages, and maintained trading and marriage ties with the Netsilingmiut, refused to accompany Rae westward, even for a day or two. They could not, or would not, give information on events taking place to the west, but they refused to act as guides in spite of generous rewards, and they frightened his interpreter William Ouligbuck by warning him that "the natives in that direction were acting particularly violent" (Woodman 1991:287; also Rae 1855a:273-274).

A year later, when James Anderson followed George Back's route down the Great Fish River, he recorded details which had no significance for him at the time, but which hindsight and comparison with Back's journey indicate were signs of major changes in demography and inter-group relations. People living along the river owned greater quantities of European articles than were noted by Back. Anderson, an

HBC Chief Trader, identified the goods as Fort Churchill trading stock. He also saw several stone kettles made from five slabs of sandstone cemented together, a style used only on the west coast of Hudson Bay (James Anderson 1855:55(2):25).⁵ The distribution of people and villages was also different. Less than a hundred people occupied several small villages, in contrast to the two larger villages of 1834.

Anderson was not certain exactly who the resident people were. The similarity of their clothing and implement styles to those of the Chesterfield Inlet people led him to conclude that they were from the bay (James Anderson 1855:54(12):135). In a critique of Anderson's journal written nearly a century later, the anthropologist Diamond Jenness disagreed, identifying them as a Back River inland band which had frequent contacts with the people of the Keewatin coast (D. Jenness 1940:135).

Other changes were noted in 1857-58, during the last expedition in search of Franklin survivors, led by Leopold McClintock. Nearly all of the Netsilingmiut were living in villages on the west coast of Boothia and the east coast of King William Island, and the villages were larger and more numerous than they had been in the 1830s. A winter settlement on Matty Island contained enough house sites for 200 or more people, and several on the east coast of King William Island were each occupied by between thirty and forty people (McClintock 1859:257, 260). At every meeting with local people, McClintock was shown relics from the wrecked ships. Forty-five people in a village near Cape Victoria had silver cutlery and medals, buttons, iron knives, a gold chain, and pieces of wood, which they offered for sale, as well as bows and arrows made from the ships' materials (McClintock 1859:232).

⁵The method was not restricted to the southern Keewatin coast, with which Anderson was familiar. George Lyon described kettles being made by the Iglulingmiut women in the same style. "[The women] also have an ingenious method of making lamps and cooking-pots of flat slabs of stone, which they cement together by a composition of seal's blood applied warm, the vessel being held at the same time over the flame of a lamp, which dries the plaster to the hardness of a stone." Lyon adds in a footnote that the blood is combined with a whitish clay and some dog's hair (Lyon 1824:320).

At Great Fish River in 1879, Ikinnelik-Puhtoorak, formerly the leader of an Ugjulingmiut community occupying most of the southern coast of King William Island and the western shores of Adelaide Peninsula, told his story to the members of Lieutenant Frederick Schwatka's exploration party. As a little boy he had seen ten white men in a boat near the mouth of the Great Fish River. He had shaken hands with all of them, and recalled that their leader's name was Tos-ard-e-roak. Schwatka's interpreter thought he was saying 'George Back.' The next time he saw a white man, he was an adult with a seven year old son, who was about thirty-five in 1879. The white man whom Ikinnelik-Puhtoorak saw was dead, lying in "a great ship which was frozen in the ice" and which had been carried by the ice to the village of Ugjulik on the west coast of Adelaide Peninsula. The ship, one of Franklin's, remained grounded there until the winter of 1857-58, the last date at which Inuit are known to have visited it. Soon after, Ikinnelik-Puhtoorak's "once powerful band" was "reduced ... to a handful" by the Netsilingmiut, who had taken possession of his country in order to gain access to the valuable remains of Franklin's ships and crews. The displaced Ugjulingmiut fled as refugees to join the Utkusiksalingmiut at the Great Fish River. In 1879 Ikinnelik-Puhtoorak was the headman of a community consisting of about thirty Ugjulingmiut and Utkusiksalingmiut (Gilder 1882:30-32; Klutschak 1881:65, 131; McClintock 1859:227, 236-237; Schwatka 1880b:61-62).⁶

⁶In 1881, two members of the Schwatka expedition published their accounts. One was in English, by William Gilder, a correspondent for the *New York Herald*; the other, in German, was by Heinrich Klutschak, an interpreter on transatlantic steamers and a free-lance journalist. Klutschak's report was a major source for Franz Boas's material on the Netsilik. It appeared in English in 1987 in a translation by William Barr. Frederick Schwatka did not publish his diary. It was edited by E.A. Stackpole and appeared for the first time in 1965. In their relation of Ikinnelik-Puhtoorak's story, the accounts by Gilder and Schwatka agree in nearly all details. Klutschak's contains two significant differences: he stated that Ikinnelik-Puhtoorak was not Ugjulingmiut, but Utkusiksalingmiut, and that it was the latter people who had been attacked and nearly destroyed by the combined efforts of Ugjulingmiut and Netsilingmiut. The accounts of Charles Francis Hall, when they are specific about details, support the Gilder and Schwatka versions of events, as does the rather slim evidence recorded by James Anderson.

Given Ikinnelik-Puhtoorak's account, arithmetic suggests that the Netsilingmiut began to harvest resources from the wrecked ship some time after 1851 but before it was completely broken up around 1858. By that time, the Ugjulingmiut had been reduced by famine and cold to a remnant of their former numbers, and when they were overwhelmed by Netsilingmiut invaders, the survivors took refuge with the Utkusiksalngmiut on the Great Fish River.

The only estimate of populations of Ugjulingmiut and Utkusiksalngmiut before the mid-1850s are those of George Back, who counted thirty-five of the former, and between sixty and seventy of the latter in 1834.⁷ Twenty years later, the population of the lower Great Fish River was still about one hundred, but the number included all the Utkusiksalngmiut, and all the remaining Ugjulingmiut as well.

If Anderson was right and the forty or so adults he saw at three villages in 1855 were from Keewatin, then the total number of Ugjulingmiut and Utkusiksalngmiut combined could not have been much over fifty.⁸ Climatic pressures and Netsilingmiut wars of expansion had been very costly in terms of human life. The particular events and specific results of those wars, although they are hidden from contemporary view by lack of evidence, were of shattering significance to the peoples involved. The merging of Ugjulingmiut and Utkusiksalngmiut, along with the borrowing or infiltration of technology and ideas from increased contact with the Keewatin, would explain Anderson's inability to place the people he saw in any of the 'ethnic' categories with which he was familiar.

⁷Most European observers, both explorers and HBC traders, were unclear about exactly who they were counting. Many counted male adults only, and sometimes said so, or implied that they had done so. George Back seems to have counted all adults, but none of his comments make it clear whether he included children in his counts or not.

⁸There is a real possibility that Anderson was right. In 1856, a group of people from near Whale Cove-Rankin Inlet told the Churchill traders that they had spent 1855-56 far to the west, and that their journey there had occupied 45 days (HBCA:B42/a/188: 26d, 27d).

Besides the blurring of group distinctiveness, another result of the events of 1848-1858 was the Netsilingmiut reputation for fierceness and warlike behaviour among their near neighbours and among people not so near. In the 1860s Aivilik and Arvilikjuaq people repeatedly warned the American explorer Charles Francis Hall not to enter Netsilingmiut country, and attempted to dissuade him with stories of murder and violence similar to those which had frightened William Ouligbuck during John Rae's second expedition. Like Rae, Hall had to abandon his attempt to reach King William Island in 1866 when no one would agree to accompany him (C.F. Hall 1879:258-259). On his second attempt, in 1869, he found some willing guides, but when the party met "about fifty Netchelli hunting seal" on the south coast of the island, there were some tense moments. According to Joe Eberbing, one of Hall's interpreters, the Netsilingmiut "showed fight when we first saw them, and had knives, and one of them the barrel of a rifle made sharp like a knife" (Eberbing 1880:279). On the journey back to Repulse Bay, Hall saw the military mind set of a group of Pelly Bay men whose reaction to seeing guns for the first time was that they would "be a good thing to kill Inuits with" (C.F. Hall 1879:274).

Other Pelly Bay people were distressed enough over the continuing conflicts in their land to consider permanent emigration. At least one family moved to Aivilik in the 1860s to escape continuing violent hostilities between their people and the Netsilingmiut (C.F. Hall 1879:259). The oral evidence of Aivilik people in the 1860s suggests that even Aivilik was not a safe refuge. They maintained that "the natives of Pelly bay ... are a hostile tribe, who occasionally come and make a raid on the Iwilli tribe of Repulse bay, and take everything away from them" (Barry 1880:278). Utkusiksalingmiut shared the fear and passionate dislike, making it clear to the members of Schwatka's 1978-79 searching party that they regarded the Netsilingmiut with extreme hostility (Gilder 1881:77).

The available evidence suggests that the Netsilingmiut were arguably neither more nor less warlike or inhospitable to strangers than other Inuit groups before 1832. In spite of periodically violent relations with the Arvilikjuaq people, they maintained communications and kinship ties with them, and shared territory,

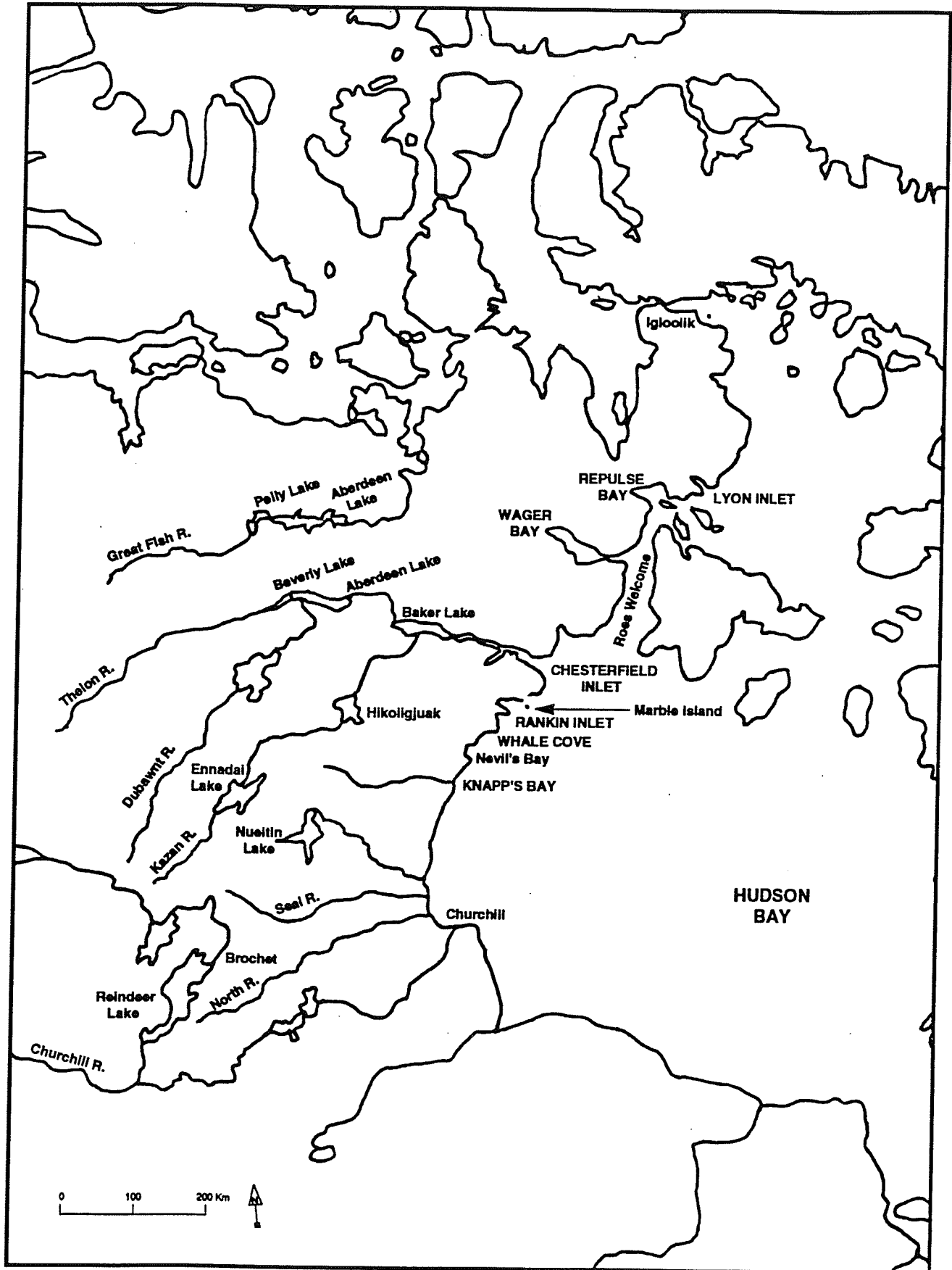
settlements, and resources at Lord Mayor's Bay. They had friends and relatives at Igloodik and Aivilik, and many of their women were Ugjulingmiut from King William Island. They included in their community a number of men and women who were not Netsilik born. They did not object to the presence of John Ross's party in their country. They were not territorially expansive, nor did they attempt to exploit the resources of other territories.

By 1846, however, as John Rae's experience showed, they had a growing reputation for belligerence apparently born out of their willingness to use violence in protection of resources they already possessed. And after the abandonment of the *Victory* in 1832, they had resources worth protecting. Their activities after 1850 suggest that they were also prepared to fight in search of resources. Their expansion to the west and southwest was motivated by desire to gain access to the abundant supplies of useful articles at Ugjulik and along the western and southern coasts of King William Island.

The abandonments of the *Victory*, *Erebus*, and *Terror* in 1832 and 1848 and the windfall of resources they contained were of major significance in the ability of the Boothia Peninsula people to survive environmental stress in the forty middle years of the nineteenth century. Efforts to gain access to valuable resources and the need to protect them led to changed relations among the groups of the larger Netsilik society, including expansion of territory and warfare in protection of resources.

Keewatin

On the west coast of Hudson Bay, the people of southern Keewatin were faced with similar environmental degradation, but without the windfalls to which the Boothians had fallen heir. Because of the distance between their places of residence and the post at Churchill, their long association with the traders was only marginally useful in helping them through the crisis. Instead they relied on their ancient strategies of increased mobility, community dispersion, long-distance harvesting, expansion of territory, relocation, intensification of labour, and a switch to new food



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resources. Their ability to choose appropriate strategies to deal with diverse problems ensured their survival, and supported a significant increase in population.

Fluctuations in the numbers and locations of caribou herds created special problems for the people of southern Keewatin because of their high degree of dependence on caribou for food, clothing, bedding, tenting, and kayak coverings. All caribou herds experience unpredictable cycles of population increase and decline, and shifts in migratory habits, for reasons which are not yet clear to wildlife scientists (Baker 1978:44-52, 170-171; Burch 1972:359; Clarke 1940:63; Kelsall 1968:205; G.R. Parker 1972:23; Stenton 1991). Even in stable environmental conditions, caribou are not a reliable resource over the long term. Caribou-dependent human communities can expect to face a major change in the migratory patterns and distribution of herds at least once in every fifteen to twenty years, and more frequent minor fluctuations in numbers and location (Fitzhugh 1972:185; Minc 1986:58; Spiess 1979:66).

In unstable environments, caribou numbers and locations become even more unpredictable. Numbers fall in periods of higher than usual humidity and when snow cover is icy or unusually deep (Vibe 1967:165), and tend to increase in drier conditions (Minc 1986:57). Migration routes are affected by the quality and depth of snow cover, and the condition of underlying vegetation. An early or late freeze or thaw, a sudden storm on an inland lake, a snowdrift in a valley between eskers, indeed, almost any change in topography or atmospheric conditions is enough to divert a moving herd, making its whereabouts uncertain at any given time.

Keewatin communities depended on two herds, the Kaminuriak herd whose summer range was (and is) south of Baker Lake between the Kazan River and the coast, and the Beverly herd which spent the summers along the Dubawnt River as far north as Beverly Lake. Both herds wintered south of the treeline, but in most winters a few stragglers remained on the tundra in groups of between ten and fifty (Hoffman 1976:71; Spiess 1979:44). Their numbers and movements were highly unpredictable. For the people of the southern Keewatin, who depended on the stragglers for winter food, access to caribou was a probability, but never a certainty.

As the numbers of caribou and fur-bearing animals declined in the early 1830s (HBCA:B42/a/159:1d; B42/a/160:28d; B42/e/7), Inuit communities along the southern Keewatin coast combined the opportunities for long-distance resource harvesting and for trade which were offered by the post at Churchill. Although the trade in country products in 1832 was the best since 1798 -- fifty-five men brought more than a thousand fox pelts and over seven hundred deer skins (HBCA:B42/a/160:8) -- in most years trade was decidedly sparse. The seal hunt at Churchill River was a more dependable means of acquiring surplus products than hunting for luxury furs was, and a more certain source of subsistence supplies (HBCA:B42/a/159:179). It was also cheaper in terms of time and transportation because subsistence hunting, acquisition of surplus, and conversion of surplus to goods were all available at the same time and place.

Although Inuit came to depend on the Churchill seal hunt in times of caribou shortages, they were reluctant to take part in the whale hunt (HBCA:B42/e/8:3d). It was often unprofitable and always dangerous, largely because of the company's inability to supply adequate whaleboats. Forty-five hunters in 1835 lost "a great deal of the oil by lying exposed to the sun" because they lacked efficient transport (HBCA:B42/a/165:7). The death by drowning of a woman during the 1838 hunt was also attributable to unsafe watercraft, and the accident "put a stop to their whaling" (HBCA:B42/a/172:6d-7). Except in years when a crisis of scarce resources at home gave them no alternative, they avoided the whale hunt (HBCA:B42/a/165-166).

Tough times were not limited to the nearby communities which regularly traded at Churchill. People began coming from much farther afield, and like their more southerly countrymen they did not come primarily to trade; they came to get subsistence supplies by hunting seals near the mouth of the Churchill River. Small groups came from "a considerable distance to the Northwards" in 1836 and 1837 (HBCA:B42/a/165:24d; B42/a/166:21), and in 1838 and 1840, there were visitors "from a great distance to the northward" (HBCA:B42/a/165:172; 167:23).

The presence or absence of caribou at specific locations was erratic. In 1836 and 1840, the people from "northwards" worried over shortages of deer, while more

southerly people had adequate supplies (HBCA:B42/a/165, 172). In the first half of 1841, the "northwards" people reported plenty of caribou in their country, and in the second half faced a serious shortage (HBCA:B42/a/172-173).

In 1841, unknown people arrived at unusual times of the years. In February, three visitors "from some distance to the northward" complained of the "late stormy weather" and difficult travel conditions. Between early fall when their community separated into small family groups for winter hunting, and their arrival at the post, they had seen only two other human beings (HBCA:B42/a/173:19d). In April, another six families reported that they too had "seen no other Esquemaux since last summer" (HBCA:B42/a/173:23b-23bd). In December, three travellers arriving "from some distance" reported continuing scarcity of fox and caribou (HBCA:B42/a/173:17d).

A sudden decrease in the number of dogs belonging to the northern people is another indication of increasingly bad economic times in the 1840s. A decade earlier, the company had regularly bought dogs from the northerners (HBCA:B42/a/157:3). After 1840, Inuit often did not have dogs. In 1841, three of the five small parties which went to the post were man-hauling. Post master Robert Harding almost routinely sent dogs north to assist starving and weakened families in reaching the post (HBCA:B42/a/173:23b-25; B42/a/175:16-16d). Travel to resource locations and hunting sites, delivery of stored foods from caches to homes, and of country products to the post were difficult to impossible because of reduced transportation efficiency. The few groups of two or three men who managed to reach the post in most years were limited in the amount of time they could spend hunting seal, as well as in the quantities of blubber, oil, and meat they could take away with them (HBCA:B42/a/175; 177).

The winter of 1843-44 took a heavy toll in health and life. All the Inuit who managed to reach the post were in serious trouble for lack of dogs and provisions. In January, 1844, one family reported a recent death (HBCA:B42/a/179:17). Another party trying to reach the trading post split into two groups while still "some distance away" at Egg River. One family moved on ahead, but at North River, all but two

were too weak to continue. On February 10, a father and son succeeded in reaching the post, where they requested "a little provisions for [their] family to enable them to reach here, they being much in want." Two days later when they arrived back at North River with emergency supplies, they found that

another of his sons who was fairly wore out ... [had died] which has caused great distress to the poor father who with his son that came with him are in a very low state from sheer starvation. His two surviving sons with the women and children yet remain near Egg River and most of them are unable to walk and tis not unlikely that more of them may perish ere we can assist them (HBCA:B42/a/179:18).

Assistance was delayed because of bad weather, but on February 15, the company's Inuit clerk Ouligbuck⁹ set out for Egg River with "5 dogs and 30 salt geese for the Esquimaux besides provisions for himself & dogs for 7 days." Ten days later he was back with "3 men, a boy, 3 women, and 3 children some of whom unable to walk and hauled by the dogs." Another man, along with his son, and two widows, were still north of Churchill, being "unable to walk and fairly knocked up by sheer hunger" (HBCA:B42/a/179:18d). On February 27, Ouligbuck brought the last of the travellers to the post (HBCA:B42/a/179:19).

The strain of a winter on short rations and the gruelling journey took its toll. On March 10, one of the babies died, "owing to the mother being unable to suckle it" (HBCA:B42/a/179:19). Post master Harding recorded his desperation at not having

⁹The Eskimo Trading Book of 1823 (HBCA:B42/d/111) contains the names of Ouligbuck the Elder and Ouligbuck the Younger, possibly father and son, although not necessarily. Ouligbuck the Younger, along with Augustine, was a member of John Franklin's second overland expedition to the mouth of the Mackenzie River. On his return in 1827, he worked at Churchill post as a casual labourer, and became an 'engaged servant' on equal terms with other salaried employees in 1829. He transferred to Fort Chimo in 1830, with Augustine and Moses, where he remained for nearly seven years. From 1838 to 1843, he was with Thomas Simpson and Peter Warren Dease on their exploration of the western arctic coast. For two years following his return, he was posted to York Factory, and in 1846 he became John Rae's interpreter and companion on the Keewatin coast expedition of 1846-47. He was known to the Churchill traders in the 1840s as Ouligbuck Senior. He spent the last five years of his life at Churchill, and died there in 1852 (Rich 1953:370-373).

dogs to perform the usual work of the post and to assist Inuit families in trouble. His only hope was that Chipewyan would come so that he could borrow a team (HBCA:B42/a/179:20).

In April, Hoomeneshak, who had been hunting seal at Churchill regularly since at least 1829, brought his family safely to the post, but within a day or two, his son died, having "been in a very low state since last autumn brought on by want of food, since which he has not been able to walk." By the end of April, four more were dead, and at least twenty-five people suffering from starvation, malnutrition, and exposure were being cared for at the post (HBCA:B42/a/179:22).

Three new arrivals in June reported that although they had spent the winter within seven days journey of the post, they had been "starving all winter" and unable to reach the post for assistance (HBCA:B42/a/181:1). In August, as the seal hunters prepared to start north for their homes, "two of them fell over, one dying immediately and the other not expected to live" (HBCA:B42/a/181:8).

Only one family reached the post during the spring of 1845. Five other families, with whom they had spent the winter, were unable to make the trip, being "pinched for provisions." They had not seen any other members of their band during the entire winter (HBCA:B42/a/181:25). At the same time, news from nearby Chipewyan indicated starvation among them, and post master Harding began to worry about the state of food supplies at Churchill. "Our means will not admit of rendering them assistance to the extent of their need," he wrote, "and with them can only hope for a change of weather to benefit us and themselves" (HBCA:B42/a/181:25d).

The activities of the Keewatin Inuit over the next ten years were a series of rapid responses, some successful, others not, to a high degree of environmental fluctuation in specific places, and extreme variability of conditions in different locations. A single community could experience extremes of starvation and of satiation within periods of a few months. At the same time, scarcity and abundance often existed in communities separated by only a few miles. As George Back noted in 1834,

the degree of cold at one place furnishes no inference which can be relied upon as to the temperature of another place even moderately distant (Back 1836:240).

His comment could equally well refer to the presence of game resources as to temperatures.

While Inuit and Chipewyan families living near Churchill were "pinched for provisions," the "more distant Esquimaux," who reached the post on August 1, 1845, after sixteen day's travel, were a healthier lot, "having been fortunate in meeting with deer all winter" (HBCA:B42/a/183:30d). Game was also more abundant, weather was less severe, and trade marginally better in 1846 and 1847 (HBCA:B42/a/183:42d). No cases of starvation were recorded in the post journals. The Inuit had dogs again, and were willing to sell some to the post, which by then had only six, two of which were "not sound" (HBCA:B42/a/183:44d).

The somewhat more abundant food resources were apparently not being found on the coast. When Dr John Rae, Ouligbuck the Younger, his son William Ouligbuck, and a dozen men sailed from Churchill to Repulse Bay in July, 1846, they found the coast almost deserted. There were no signs of villages at Knapp's Bay, Nevil's Bay, and Whale Cove (HBCA:B42/a/183:52-52d; Rae 1850:19-35), where the sloop captains had regularly seen around 300 people a year in the previous century. Their disappearance from the coast was consistent with Augustine's information that his people had been spending the summers inland since early in the century (Back 1822:119; Richardson 1822:28).

Rae's party did not find an occupied village until they reached Fullerton Bay. Ten families were in residence there, and were engaged in hunting inland along the northern shores of Chesterfield Inlet. Their summer hunt had been good, and one man already had a stock of wolf, fox and parchment deer skins, but he had been at Churchill the previous year and intended to wait one more year before making another visit (Rae 1850:27).

Four families, consisting of twenty-six individuals, who were actually making their living on the coast were spending the summer at Aivilik. None of them had

ever been south to Churchill, but all had connections with Igloolik and Akudlit, the same villages which, along with Aivilik, had been occupied by the Iglulingmiut twenty-five years earlier. Like the community at Fullerton Bay, the Aivilik people had had a good summer caribou hunt, and were well supplied with skins and venison. One late September day, a local hunter sold Rae sixty caribou tongues, and Rae himself brought down seventeen caribou. His men killed sixty-three deer a day later, along with five hares, 172 partridges, and 116 salmon and trout (Rae 1850:69, 73, 75).

The winter of 1846-47 was warmer than previous years had been,¹⁰ and there was a noticeable increase in the amount of snowfall. Anticipating a poor caribou hunt in conditions of deep, soft snow, several families left Aivilik to join Arvilngjuarmiut relatives at Simpson Peninsula (Rae 1850:89-90, 124). By the end of October, the wisdom of their decision was obvious; Rae's hunters, trying to follow a small herd of caribou, spent eight hours covering a mere eight miles, and ended the day exhausted and unsuccessful (Rae 1850:76, 78). At Aivilik, the exploration party and the remaining Inuit had adequate, though not abundant, provisions from the land throughout the year (Rae 1850:99).

Such was not always the case in communities south and north of them. At Wager Bay there was near starvation. Three men who reached Aivilik in the fall of 1846 were "so much reduced that they could not walk" (Rae 1850:169). At Igloolik food was so scarce that two members of the community saved themselves only by resorting to cannibalism (Rae 1850:178). A smaller community near Igloolik did not suffer shortage of provisions, but many people fell victim to a fatal disease which caused the deaths of twenty-one adults, although no children were affected. On hearing a description of the symptoms, Rae tentatively diagnosed some form of influenza (Rae 1850:173). Near Rankin Inlet, a disease which the Churchill post

¹⁰In marked contrast to conditions at King William Island where famine conditions prevailed and the crews of the Franklin expedition, their ships frozen solidly into pack ice, were experiencing lethal cold, and at Cumberland Sound where several communities suffered starvation.

master thought might be measles, proved fatal to "many" people (HBCA:B42/a/183:70).

Few travellers managed to reach Churchill in the summers of 1846 and 1847 (HBCA:B42/a/183), although one of Ouligbuck's sons¹¹ walked from Rankin Inlet to the post during the intervening winter (Rae 1850:182, 188-189), and four men made the trip at the end of December, 1847. The latter went because "they had not a single ball to shoot deer." When they met a small herd of musk oxen on their way south, they improvised, and "broke a stone kettle and made ball of it, with which they killed 3" (HBCA:B42/a/185:5d).

The first three visitors of 1848 reported another bad caribou year. They had survived their journey only by eating frozen deer skins which they had planned to trade. The post master was disappointed that they brought no meat, as the Churchill winter hunt had also failed and the provisions shed was nearly empty. He also expressed surprise that the visitors had "started so far with so very little," but the purpose of their trip was not to trade; they came to kill seal and whale for their own winter use and to ask for relief supplies, which they were given (HBCA:B42/a/185:8d-9). Four men who arrived on the first day of May likewise had "nothing eatable amongst them" and for two months hunted seals without success (HBCA:B42/a/185:14-15). Only at the end of June did they begin to kill seals in quantities large enough to supply their immediate needs. By mid-July they were whaling, and in a week they had taken ninety-two whales (HBCA:B42/a/185:20-22).

¹¹Ouligbuck Senior had at least three children: a son Donald, the only known child of his first marriage; and a daughter and son from his second marriage (Hargrave 1838-52:164). The younger son was William, also known as Marko, and referred to in the Churchill journals of the 1860s as Buck. Since William was with his father and Rae in Repulse Bay during the winter of 1846-47 (Rae 1844-55:239), the son who walked to Churchill from Rankin Inlet was probably Donald. Donald's presence at Rankin Inlet is an indication that Augustine and the Ouligbucks were not Knapp's Bay people, but from somewhere between Whale Cove and Chesterfield Inlet.

Rae's observations of 1846-47 and the post records for 1846-48 suggest that caribou were scarce around Churchill and the southern Keewatin, but rather more plentiful to the north (Rae 1850:89-90). Thirty or forty "Distant Esquimaux" who reached the post at the end of July had not only found adequate supplies of caribou during the winter, but brought "a quantity of white foxes and wolves" (HBCA:B42/a/185:22d-23).

The erratic distribution of game resources continued over the next few years. Fewer than thirty Inuit went to Churchill in 1849. The 'nearer' people brought almost nothing to trade, and the more 'distant' ones had skins, but no surplus meat (HBCA:B42/a/185). The early visitors of 1850 arrived with empty sleds, reporting that "foxes are scarce & have been so all winter" (HBCA:B198/a/97:6, 8-8d). Their complaints were echoed by the Chipewyan Homeguard who experienced "a miserable hunt, [and] complain of starvation" (HBCA:B198/a/97:9b). Ouligbuck's people north of Whale Cove had kept themselves alive by eating deer skins (HBCA:B198/a/97:17), and ten newly arrived "distant homeguard Esquimaux" were as badly off (HBCA:B198/a/97:26d).

Throughout the 1850s scarce game and hunger were frequently reported to the post. Dogs were in short supply again, and the heavy, soft snow of milder winters made hunting and travelling difficult. Only small quantities of fox, wolf, and wolverine pelts were traded, and they were of poor quality, as were the musk ox skins brought by northern hunters in increasing quantities. Deer continued to be scarce in most years, and when they were more abundant, the seal and whale hunts failed (HBCA:B42/a/186-188; B220/a/17).

In 1852, there was no scarcity of seal (HBCA:B42/a/186:48), but the animals were inaccessible. Fifteen hunters on their way to the sealing grounds were stopped short of their goal by early melting snow and ice which made travel impossible (HBCA:B42/a/186:39d). The only Inuit to reach the post that year were twenty-seven "Homeguards," probably from around Knapp's Bay, who managed to get to Seal River by sea for a short whale hunt, and nine "distant Esquimaux" who also went in kayaks (HBCA:B42/a/186:48). The latter took the precaution of borrowing one of

the company's whale boats to return home in (HBCA:B42/a/186:49-50), thus equipping themselves to make the next year's journey more easily and safely. Unfortunately, none of their preparations were of use in 1853. Although travel conditions on the land allowed the hunters to get to the sealing grounds, they found very few seal. The entire summer's hunt produced less than half the usual amount of blubber (HBCA:B42/a/187:11).

Again people reported "starving lately on account of the want of ammunition" (HBCA:B42/a/186:74). The post master increased the amount of ammunition he gave as presents, and instead of buying meat from the regular visitors, he gave what he could from the post's stores (HBCA:B42/a/186:25, 74; B189a:42d, 43). In addition to getting emergency rations and other supplies from the post, and hunting seal and whale for subsistence and trade (HBCA:B42/a/188:4), people tried other survival strategies, including dispersion of communities, expansion of harvesting range, the unilateral sharing which the post masters called pilfering, and relocation to new territory.

In 1851, for the first time in more than two decades, the traders complained of pilfering. Iron handles were removed from a soup kettle, the cook's fire tongs went missing, and lead was cut away from the roof of a shed (HBCA:B220/a/17:21d). Messengers from some of the communities in 1852 reported that they had been forced to separate into small groups, and, as happened throughout the 1840s, had lost touch with each other for the entire winter (HBCA:B42/a/186:46; B42/a/188:26d-27, 32).

More roofing lead disappeared in 1854, a year of extraordinary cold (HBCA:B42/a/187:35-36). William Ouligbuck's community at Whale Cove-Rankin Inlet lost all of their dogs "from want of meat." After "starving most of the winter, [because of] no deer in their quarter" (HBCA:B42/a/186:23d-24d), they opted for temporary relocation. Led by a man the Churchill traders called The Chief, all but three families moved "to the Northward & inland from there" in the spring of 1855 (HBCA:B42/a/188: 26d). Sickness among them during the winter took the lives of The Chief and at least eight others (HBCA:B42/a/188:27d, 31d). Their exact location remains unknown, but the messengers who carried the news to Churchill in February,

1856, were "2 1/2 moons coming to the post, which is 45 days" (HBCA:B42/a/188:27d).¹²

Wherever they were, they found caribou sufficient for their own food and clothing needs, and a surplus for trade. In March, 1856, William Ouligbuck, fifteen other men, and two women brought three sleds heavily loaded with 1603 pounds of venison, 11 whole reindeer, sixty-one reindeer hearts, twenty-one tongues, 336 parchment deer skins, and seven heads with antlers attached. They also brought 378 fox furs, twenty-two staged and prime wolves, seven wolverine and five arctic hare pelts. The post master noted with some surprise that although they were coastal people, they brought only inland products (HBCA:B42/a/188:32). A week after Ouligbuck's arrival, two more members of his community brought some coastal products, explaining that they had separated from the main party while on the way to make a side trip "to the coast for oil." With the exception of fifty pounds of seal, the products the later arrivals traded were also all inland items, including venison, parchment deer skins, caribou hearts and tongues, a few white fox, and caribou sinew (HBCA:B42/a/188:33).

William Ouligbuck and seven other hunters made a mid-winter visit in February, 1858, to deliver 135 fox furs, a few prime wolf and wolverine, venison, tongues, hearts, kidneys, whole heads and horns, and even two whole deer (HBCA:B42/a/188:76d). Not only were the products all inland items, but most were provisions for the post. Other communities were also concentrating on inland products. In 1855 the Churchill journalist noted that the trade of one group of "the more distant" people was all inland trade (HBCA:B42/a/188:6d).

By 1858 post personnel were aware that some people had become "inland Esquimaux that never visit the coast in summer" (HBCA:B42/a/189a:33). So many were at the post in 1861 that the post master was nervous:

¹²It is an interesting coincidence, and may be more than that, that 1855 was also the year in which Chief Factor James Anderson saw people whom he strongly suspected were from Hudson Bay living at Great Fish River.

34 men and 7 wives, with nine sledges heavy laden with parchments [but] very little meat.... This is all the inland Esquimaux, there is too many of them here at one time and have set 2 men to watch them all night for fear of them stealing the lead of the houses (HBCA:B42/a/189b:35).

Like the 'Inlanders,' the 'Homeguards' turned more and more to trading provisions (HBCA:B42/a/189a:31). They continued to hunt seal when caribou were scarce (HBCA:B42/a/189b:42), and fell back on the whale hunt in times of acute crisis. The increasing involvement of Keewatin Inuit in provisioning does not signal a change in occupation. They were trading surpluses of game resources they had already taken for subsistence storage, and using them as their main trading commodity, instead of discarding the unused quantities. Provisioning was an extension or intensification of the activities they were already involved in. They had by no means become dependent on the trading post for necessary supplies; on the contrary it was the Churchill traders who, by 1860, were heavily dependent on the food they bought from their northern suppliers.

In March, 1860, the post was short of provisions again. On the 12th, the post master wrote, "I do not know what we are to do for provisions & no appearance of any Esquimaux,.. there is now about 40 souls of us at this place & nothing to eat" (HBCA:B42/a/189b:32d). By far the greater part of the forty souls were Chipewyan families forced by the scarcity of game in their own lands to depend on the trading post for subsistence. On March 18, one of the traders killed a caribou, and on March 19, the emergency was over when eleven Inuit arrived with 2220 pounds of venison, thirty hearts, forty kidneys, twenty-five tongues, and seven livers taken during their caribou hunt (HBCA:B42/a/189b:33d-34).

Venison from the north did not, however, alleviate the suffering of the Chipewyan living near the post. In May, "half the Indians are starving, bad news" (HBCA:B42/a/189b:43d). The meat brought in during March was gone, and the weather was so bad that the post master feared for the Inuit who were hunting seal. The seal hunt was a failure on account of "so much water on the ice" and the whale

hunt yielded only nine animals (HBCA:B42/a/189b:47, 55). The post master handed out oatmeal and carefully rationed venison (HBCA:B42/a/189b:44d).

The recurring descriptions of starvations in the post journals, if taken at face value, indicate a people at the mercy of a cruel environment and on the edge of extinction. The descriptions are misleading. Not only were Inuit communities surviving, they were steadily increasing in numbers. The Keewatin population north of Churchill as far as, and including, Chesterfield Inlet at the turn of the eighteenth century has been tentatively estimated at about 200 (Burch 1978:26). On the basis of trading sloop censuses and the comments of Andrew Graham (1791:213), there were probably close to a thousand individuals living at Chesterfield Inlet and south of it by the beginning of the nineteenth century. Between 1828 and 1830, there were at least 160 hunters from the coast south of Rankin Inlet trading at Churchill (HBCA:B42/d/111, 139), suggesting a minimum population of 700 people. Fifty years later, the Churchill census for the southern Keewatin was 732 (HBCA:B49/e/9:4), suggesting that the population was holding steady. It may even have been rising.

The apparent contradiction between actual head counts and reports in the post journals of deaths from starvation, accident or disease in at least one year out of every four between 1791 and 1881, can be explained by two factors. The Churchill fur traders consistently underestimated the populations of their client communities, and overestimated the extent of famine and starvation. Their population estimates were based on the number of adult males who came to the post. Because the traders assumed that all productive adult males came to trade, they placed total populations too low. A second, and related, assumption led to the second mistake. They believed that the reports they heard of conditions in the northern communities were descriptive of all communities. The traders' own account books indicate that such was not the case.

The starvation periods resulting from scarcity of caribou, so carefully noted by HBC post masters, were usually local. In years when one or two communities experienced life-threatening shortages, people in other places were reporting adequate

or even plentiful supplies. The frequent reports of death by starvation in the post records for the most part describe the sufferings of individuals and families from communities who frequented the trading post, but do not indicate famine severe enough to cause a population crash, or even to prevent population increase.

Two facts of the physical environment in the 1830-60 period made it possible for the Keewatin people not only to survive but to increase in numbers even in the face of fluctuating and uncertain food supplies: unoccupied territory nearby, and an unused food resource.

As Keewatin coast populations increased and caribou herds declined or became less accessible in the first half of the nineteenth century, families began to hunt farther inland than they had previously done. The expansion of hunting territory brought them within reach of a second food resource, the muskox herds. Although there is no evidence that muskox was or was not a regular part of Inuit diets in the eighteenth century, it was important enough by 1821 for Augustine to mention it in the top three when he told George Back that his people "obtained abundance of musk oxen - reindeer - salmon - sufficient for their winter consumption" at inland rivers and lakes during the summer (Back 1822:119). By 1844, post master Robert Harding recognized musk ox as a staple food resource of the northern communities. "Their means of subsistence in all seasons are Deer, Musk ox, Fish of many kinds," he wrote to George Simpson. "Deer, Musk oxen and Fish are said to be in general plentiful and abundant enough to serve more people than themselves and families" (HBCA:D5/12:129).

Between 1820 and 1840 muskox wool and skins were a regular, if minor, item in the Inuit trade at Churchill, and the hunters who brought them also brought marine products. During the 1840s and 50s, the fur traders recorded increasing numbers of people who brought only inland products to the post (HBCA:B42/a/142-189a). In solving the problems of a growing population, and frequent failures of the seal and whale hunts, people who for more than a century had spent their summers on the coast harvesting marine resources expanded inland, spending less time sealing and whaling, and more time hunting caribou and musk ox.

The emergence of an inland community of people was only one of the significant changes in location and social organization made by the Keewatin people between 1830 and 1860. In 1821, the coastal people south of Rankin Inlet, according to Augustine, were a single community with villages at Knapp's Bay, Nevil's Bay, and Whale Cove. North of them at Chesterfield Inlet was a second community where the inhabitants were not "Augustine's people." The observations of Fort Churchill's traders agree with Augustine's description; like him they distinguished between only "two tribes.... The one from towards Chesterfield Inlet and the other from Knapp's Bay." By 1825, following a sharp drop in the price of white fox furs, the Chesterfield Inlet people had stopped going south except on rare occasions (HBCA:B42/e/4:5).

In the 1840s, the traders began referring to "Augustine's people" as the "near" and the "more distant Esquimaux" (HBCA:B42/a/173-181; D5/12:130), implying that they were no longer a single social unit, but had become geographically separated and in some sense identifiably distinct groups. The "near Esquimaux" had their principal residence at Knapp's Bay, and went to the post more frequently and in larger numbers than the northern group. The "more distant" people lived between Whale Cove and Rankin Inlet, and brought larger quantities of coast products to trade, including ivory. Augustine, Utuck, and the Ouligbucks were identified by the traders as members of the "more distant" community (HBCA:42/a/169:6). At the beginning of the 1850s, the traders adopted the terms "Homeguard" and "distant Homeguard" to refer to the two groups they now thought of as discrete bands (HBCA:B42/a/186-189a).

The separation of Augustine's single "people" into inland and coastal groups is not surprising. For centuries, their ancestors had survived short-term scarcity every year by fragmentation and dispersal of communities. Two instances are described in exploration literature. During the winter of 1822-23, while Parry was wintering at Igloodik, fifteen or so families left the larger community to spend the winter at Aivilik, and in 1846, several Aivilik families opted to spend the winter at Simpson Peninsula. In both cases the dispersion was a means of lessening the strain on local food resources. The constant reports of the Inuit themselves, recorded in the

Churchill journals, illustrate how frequently the strategy was used, and how successful it was in ensuring the survival of small family groups.

About the same time that the single society of southern Keewatin was splitting into three geographically separated groups, Churchill's traders began to note the existence of leaders or chiefs among them. During the 1850s there were frequent journal entries concerning the activities of The Chief or The Eskimaux Chief (HBCA:B198/a/97:17d, 26d). He was always mentioned in connection with a member of the Ouligbuck family (HBCA:B42/a/186-189a; B198/a/97; B220/a/17), and always in connection with hunters who took part in the seal hunt, the whale hunt, or both. He can, therefore, be identified with the Distant Homeguard whose territory was north of Whale Cove, and possibly extended to Rankin Inlet.

In 1851, a reference was made to two chiefs, one who was already at the post, and another, Uchuputack, who was expected at any time (HBCA:B220/a/17:21d). A few clues exist in the Eskimo Trading Books of 1823 and 1828-32 (HBCA:B42/d/111, 139) as to the identity of the second chief. Although the same names occurred over and over among people of different communities, and in different generations, two people in the same residential group seldom shared a name. It is, therefore, not unlikely that the references in the Trading Books to Uchuputack, Utchiputak, and Utchapetahk are all to the same person. If so, Chief Uchuputack had a reputation of long-standing as a good son, a good hunter, and a good provider. In 1823 he was identified as "a boy, Atahoona's son." Atahoona was a close companion of Utuck and Ouligbuck the Elder, indicating that he was a member of their community, possibly a relative. Of the thirty seals traded by Atahoona that year, six had been taken by "his boy." The son, however, also had his own account with the company. In addition to the six seals he handed over to his father, he traded twenty-four on his own behalf, in exchange for one white jacket, one copper kettle, a cloth capot, a bayonet, a knife, and a tobacco box. His name appeared again six years later in the second Eskimo Trading Book of 1829, when he bought a new gun.

The evidence suggests that the families of both chiefs were part of the community north of Whale Cove which came to be known as the Distant Homeguard.

CHAPTER 7 THE SEARCH FOR PREDICTABILITY, 1860-1940

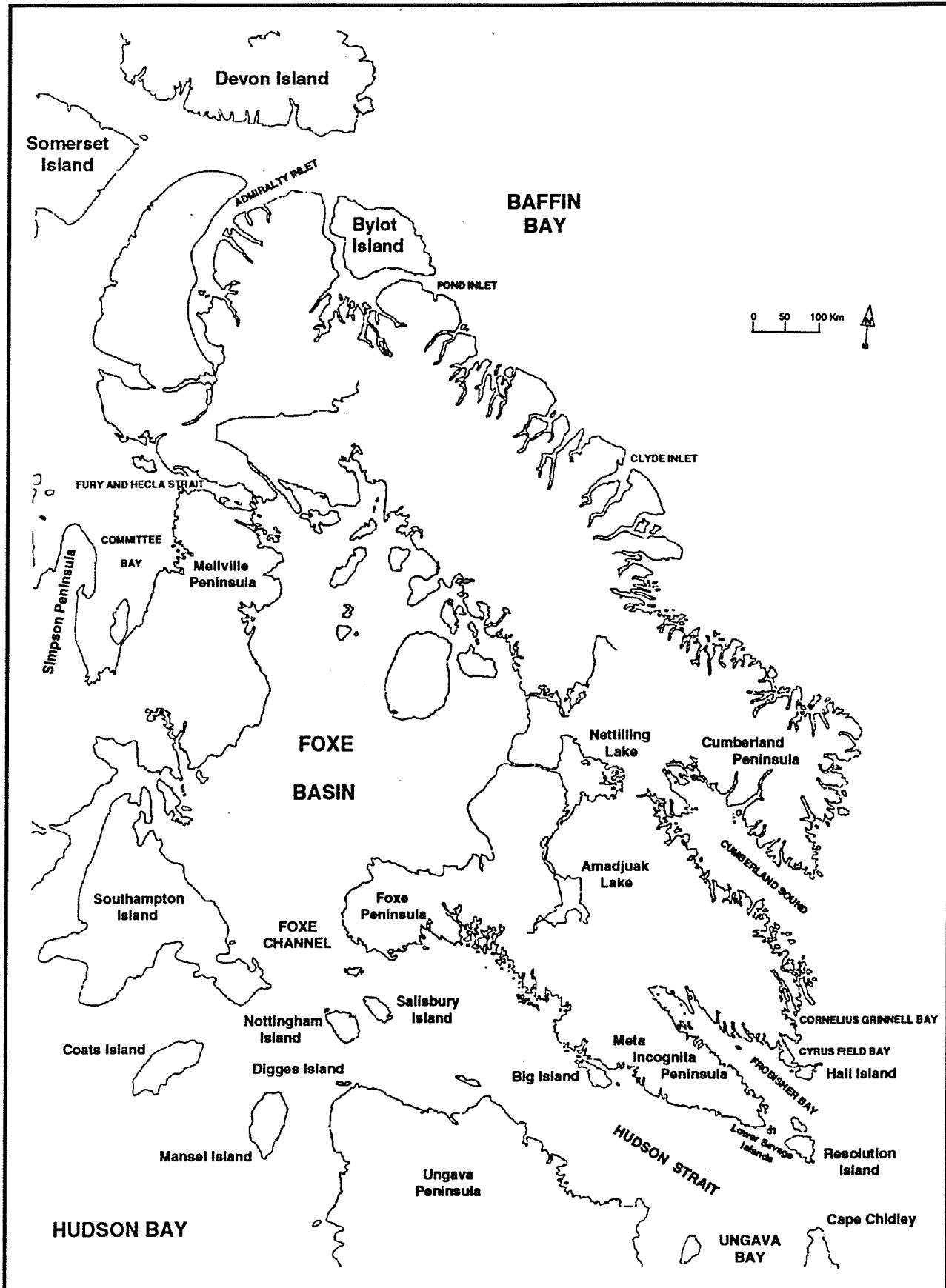
You, louse-like; you, long legs; you, long ears; you with the long neck hair. Do not run past below me. Skin for soles, moss for wicks, you shall look forward to. Come hither, come hither. Orpingalik's magic words to bring luck on a caribou hunt. At Netsilik, 1923 (Rasmussen 1931:279-280).

Through the last years of the Little Maunder Minimum and the fluctuating environmental conditions which followed, communities in southern Keewatin solved problems of long-term shortages by separating into new communities and expanding into new territories. Netsilingmiut found a temporary solution in the eagerly sought, and fought-over, resources left by the Franklin disaster. They were, of course, windfalls. Acquisition of even such abundant supplies did not offer long-term solutions to problems of scarcity, or permanent affluence to their finders. On the east coast of Baffin Island, communities at Cumberland Sound recognized commercial whaling activities in their waters as opportunities for longer term security, and seized them.

Cumberland Sound

Between 1587, when John Davis made his third and last visit to Cumberland Sound on the east coast of Baffin Island, and 1824, the people of Cumberland Peninsula either did not have any encounters with Europeans, or their meetings were not recorded. In July 1824, however, Inuit near Merchants Bay on northern Cumberland Peninsula encountered British whaleships. At the first meeting, the Inuit approach was cautiously threatening. During a second meeting the following year, local people tried to intimidate an officer of the Scottish whaler *Ellen* with bows and arrows (Goldring 1986a:158), but neither episode resulted in open violence.

The suspicions and tension which accompanied the meetings of 1824 and 1825 disappeared quickly, perhaps because local communities recognized the economic



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possibilities offered by the whaleships. First were the trading opportunities. Inuit were quick to initiate trade, offering baleen from their own whale hunts, and provisions from their seal hunt. In return, they received metal items, needles, and food supplies such as bread and molasses (Goldring 1986a:159). They also benefitted from whale carcasses left on the beach by the whaleships, as had the Tununeq communities of northern Baffin a few years earlier (Lyon 1824:293-294). With so much to be gained, the Inuit apparently decided that their best course of action was to make the newcomers welcome.

Cumberland Sound people began going to the northern coast of the Peninsula every fall when the whaleships were expected, and a few moved permanently to areas near the whaling stations. The economic opportunities were, however, still of a windfall nature, and local people took steps to make their relations with the whalers permanent and predictable, as a hedge against recurring hard times. Throughout the 1830s, they tried to bring the whaleships into Cumberland Sound by showing the captains what a rich whaling ground it was. In 1840, one man, Inuluapik, persuaded the British whaling captain William Penny to begin whaling in the Sound (McDonald 1841).

In spite of the climatic changes which had affected wildlife resources during the centuries between the arrival of Thule people on Baffin Island and the mid-nineteenth century, whaling was still an important subsistence occupation. Communities at the head of the Sound killed between eight and twelve whales every year in the 1830s (McDonald 1841:118), providing themselves with abundant food and fuel, as well as baleen for utensils and tools, and bone for sled and kayak frames, and for houses. At the same time, seal hunting had become their principal occupation, and seal meat was the dietary staple, along with considerable whale meat and blubber, supplemented by fish and caribou. In most years seal were plentiful, and even after the Inuit became provisioners to the whaling fleet, supplies remained abundant (Munn 1922:269).

In 1846 and 1847, the same years in which the Franklin expedition met disaster in Victoria Strait and the Ugjulingmiut of King William Island were reduced

to a tiny remnant of their former numbers, bad ice years on the east coast of Baffin Island resulted in failure of the seal hunt. Whalers returning to east Baffin stations in 1848 found communities with populations reduced by as much as 10% as a result of starvation in the preceding winters (Goldring 1986a:159). Desperate people from other parts of the coast made their way to Cumberland Sound hoping to find relief among the whalers. Most were disappointed when the whaleships were prevented by the same severe ice conditions (Goldring 1986a:159-160).

The Inuit solution was to continue their efforts to bring whalers permanently to the rich bowhead grounds of Cumberland Sound. They were finally successful in 1851. That year, the American whaling captain William Quayle of the *McClellan* left a volunteer crew to overwinter near Niantilik (Blake 1874:89). Inuit from a nearby community acted as teachers, guides, provisioners, and whale hunters (Blake 1874:89-90; Goldring 1986a:160), and ensured themselves of more or less reliable and steady access to necessary resources. Wintering was also profitable from the whalemens' point of view; the men at the Niantilik station had seventeen whales waiting when the *McClellan* returned in 1852 (Blake 1874:90).

The Scottish whaling captains William Penny and George Brown wintered the *Lady Franklin* and the *Sophia* at Niantilik in 1853-54, and employed fifty Inuit as whalers, hunters, and transportation labourers (Goldring 1986a:160). Other vessels also wintered in the Sound in the 1850s, and by 1857 every local man who wanted work with the whaleships -- and nearly all did -- was sure of employment. Many women also joined the workforce, as professional seamstresses, laundresses, provisioners, and tanners (Goldring 1986a:160-161; W.G. Ross 1985:155-156, 172). A *lingua franca* developed (W.G. Ross 1985:56, 172) which allowed for discourse at work and in trade.

As the economic environment changed, so did the social environment. Material culture was greatly expanded; every household had tools and utensils unimaginable a generation earlier. Inuit acquired many European items by trading the products of their seal and whale hunts; they received other goods as payment in kind for their labour as whalers, provisioners, and seamstresses. Yet other items were

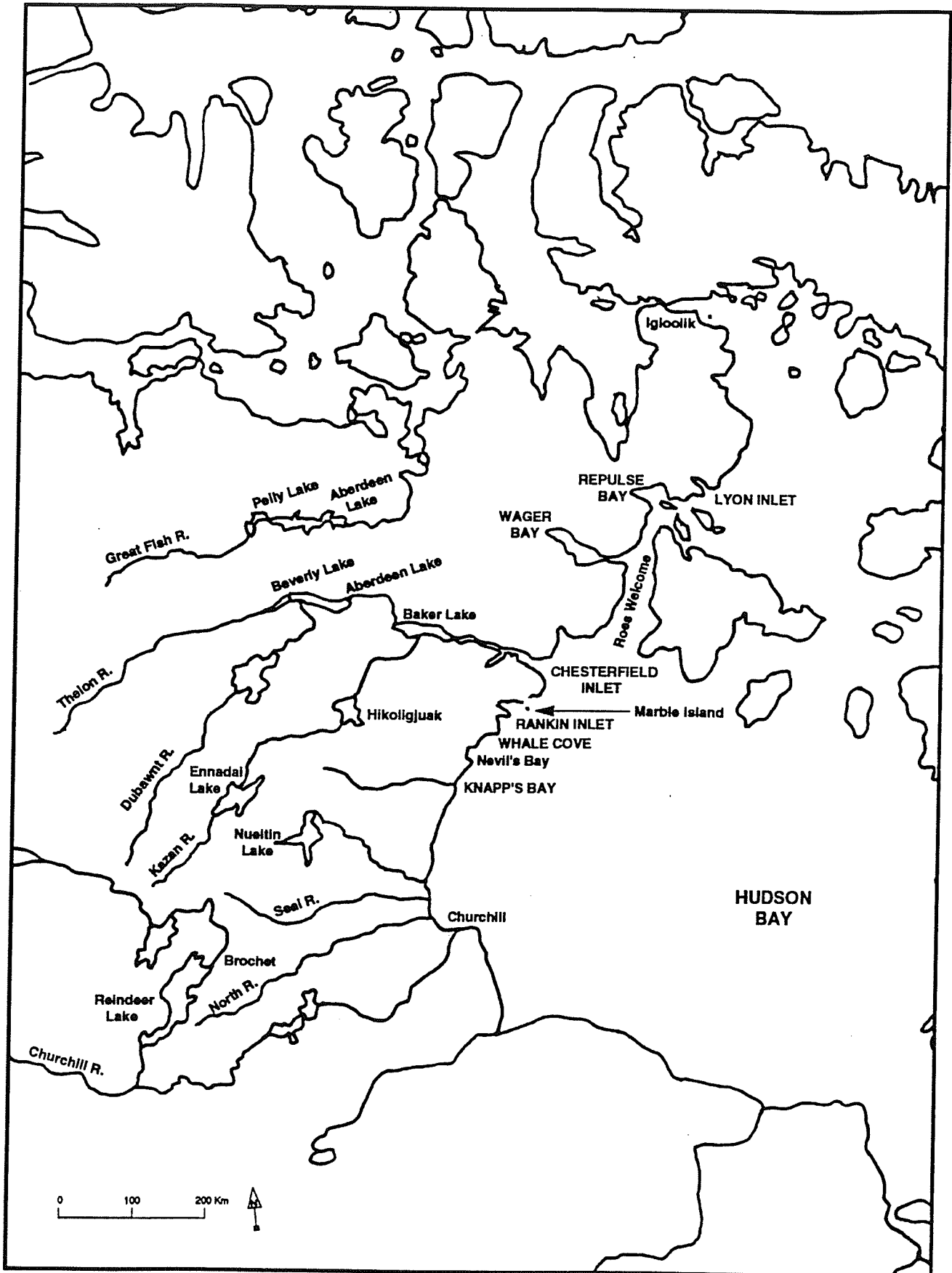
procured by transforming articles discarded by the whaling crews, such as tent poles made from broken oars (W.G.Ross 1985:143). New techniques and technologies eased the labour of some kinds of work, for example, hunting after the introduction of rifles and metal flensing tools. For women, skin preparation and sewing were less arduous after the introduction of shears and sewing machines. The British government and many whaling captains provided relief and other kinds of social security (W.G.Ross 1985:173), which also had their effects on Inuit family life and other social arrangements.

On the other hand, there were whaling captains who were unconcerned about the welfare of their local hosts and employees. They introduced alcohol into communities, and made no attempt to restrain their crews from conduct which was considered immoral by most people in both European and Inuit societies. The move to more or less year-round residences, and all the hygienic and sanitary problems of centralization gave rise to conditions in which disease was easily spread.

When whalers lived year round in Inuit communities, liaisons with local women became commonplace, and children were the inevitable result. The impact of such children on the societies of Cumberland Sound was probably negligible, however; their fathers seldom took an interest in them, and they were raised by their mother's communities and kin. Their European genetic inheritance was of little consequence in their lives.

West Hudson Bay

Although Keewatin Inuit had, like the people of Cumberland Sound, occasionally encouraged Europeans to establish stations closer to their homes (West 1824:180), they had not met with any success; the Hudson's Bay Company had no plans for entering Inuit country in the 1860s. A significant non-Inuit presence north of Whale Cove came from a different and unexpected direction. The climatic warming of the mid-1800s, which resulted in uncertainty in the lives of the Keewatin people, brought whales in large numbers into Hudson Bay and opened the way for commercial whaling in Roes Welcome. Two American whaleships wintered at



Winchester Inlet, just north of Chesterfield Inlet, in 1860-61. They were followed by other commercial whalers who brought new social and economic environments within which some of the "most distant Esquimaux" sought security against the vagaries of an unpredictable physical environment.

From the end of the eighteenth century, when the villages at Nuvuk and Pikiulaq (Depot Island) were destroyed or deserted in local wars, until 1860 when the first whalers wintered in Roes Welcome, the coast and inland areas from Chesterfield Inlet to Repulse Bay constituted an empty buffer zone between the Melville Peninsula people and the people of Chesterfield Inlet (Comer. In Boas 1907:377-78; HBCA:D5/12:130; Lyon 1824:341, 345; Rae 1850:27-34, 178-188; 1870). Almost immediately after the arrival of the first whalers, however, Inuit began moving into the uninhabited coast near the winter whaling stations, as Baffin Islanders had done.

The first event in the discourse with American whalers was an Inuit request for relief supplies. The log of the *Syren Queen*, one of the two ships at Winchester Inlet, recorded at least three incidents of needy Inuit families applying to the captain for assistance during March of 1861 (Robinson 1973:50). Less than a month later, "the old natives" built houses beside the ship, assuming that necessary help would be forthcoming, a move reminiscent of the Greenlanders' shifting of responsibility for unproductive members of society from the indigenous community to the newcomers. Inuit continued to ask for, and obtain, relief throughout the whaling period (Robinson 1973:49-50).

Inuit also took employment with the whalers in the first season of Roes Welcome commercial whaling. In the spring of 1861 they were transporting blubber from the flensing station to the ships (W.G. Ross 1975:49), and hunting to supply not only their own subsistence needs, but the needs of the whaling crews for fresh meat (Robinson 1973:33). In succeeding years, men continued to work as labourers around the ships in winter and in the boats during the whale hunting season. Women found employment tanning skins and sewing winter outfits for sale to the whalers (W.G. Ross 1975:64-65).

The southern Iglulingmiut whose principal village was at Aivilik were the first whaling homeguard. They began moving south into the formerly unoccupied coast between Wager Inlet and Fullerton Bay immediately after the arrival and overwintering of the first whaleships. One new summer settlement was at the exact mid-point of the whaleships' range, according to Captain George Comer, the most productive whaling ground of the entire coast (Low 1906:32). Other new villages, occupied in both summer and winter, were at Depot Island and Wager Bay (Boas 1888:449). The old site at Nuvuk, more or less abandoned after the hostilities at the beginning of the century, was reoccupied both summer and winter when Aivilik people moved south to maintain contact with the whaling fleet (C.F. Hall 1879; Mathiassen 1928:28).

The physical and occupational separation of the Roes Welcome Iglulingmiut from their parent community on Melville Peninsula encouraged their emergence as a separate band. By the end of the century, they perceived themselves as a new social entity, centred at Aivilik, and self-identified as Aivilingmiut.

Although nearly all the whaling fleet 'homeguard,' according to Captain George Comer, came "from the vicinity of Repulse Bay" that is Aivilik (Robinson 1973), others came in smaller numbers from the south and west. People from the coast between Rankin Inlet and Chesterfield Inlet began wintering near the whalers at Depot Island, and working as casual labourers and provisioners as early as 1864-65 (Robinson 1973:114). In 1866, several Pelly Bay families moved to Repulse Bay seeking to exchange the uncertainties of life on the land in an unpredictable physical environment for assured year-round work and social security (C.F. Hall 1879:275, 278).

As was the case with the south coast hunters who became provisioners to the trading post, the Roes Welcome people did not change their occupations; they adjusted them to fit new circumstances. In continuing to hunt caribou, seal, and walrus, they used the same skills and knowledge they used for subsistence. The work of transporting blubber and meat from kill sites to flensing, rendering, and storage areas also depended on old skills and the familiar equipment of dogs and sleds.

Although the activities themselves remained basically the same, their timing and duration did not. Roes Welcome Inuit, whether they worked as independents or as hired hunters, were not selling surpluses created as a by-product of storage for subsistence. Meat sold to the whaling captains ranged from the 3000 pounds of venison purchased by the *Isabella* in 1878-79 to 16,000 pounds of caribou, walrus, and seal meat, as well as fish purchased for the *Abbie Bradford*'s crew of fifteen over a fifteen month period in 1886-87 (Robinson 1973:47). The quantities indicate deliberate attempts to increase the harvest through intensification of effort or increased periods of time spent hunting.

As tanners and tailors, women also used accustomed skills to produce familiar articles in traditional ways. But their work -- preparing skins and sewing winter outfits -- was greatly increased when they began to market their products to the whalers. At Aivilik in 1864, Tookooliktoo, one of the interpreters to Charles Francis Hall, made winter clothing for herself, her husband, Hall, and Hall's servant. She "labored for thirty days, fifteen hours out of the twenty-four, during which time ... she had made up, besides bedding, seven complete fur suits" (C.F. Hall 1879:100). Tookooliktoo, an expert seamstress, spent a minimum of sixty hours on each suit, 120 on a complete winter outfit for one adult. The period within which sewing of new clothing was done was short; sewing could begin only after skins were taken in the fall hunt and had to be completed before the onset of winter. Women who became professional tailors in addition to their responsibilities as the producers of clothing for family needs had greatly increased work loads.

As the men of Aivilik became more involved in whaling activities during the summer, they had less time for caribou hunting. Whaling captains increasingly bought meat from Rankin Inlet and Chesterfield Inlet communities for their crews, and supplied local hunters and their families as well. There were even years when Aivilingmiut involvement in whaling prevented them from taking enough meat and skins for their own subsistence. Whaling captains bought skins from Qairnirmiut so that Aivilingmiut women could clothe their families. "We have now collected about 75 deer skins for winter clothing and spring use," wrote Captain George Comer of the

Era at the end of September, 1903. "If our natives are not successful we will let them have some of these skins we have got from outside natives **who have not been in boats looking for whale**" (Robinson 1973:111; emphasis added).

The Roes Welcome Inuit did not undervalue their products and services. Independent provisioners consistently charged a high price for meat (Robinson 1973:47-50). They were paid with immediate goods, or credit which could be turned into goods at a later date. Hired hunters were similarly compensated, but in addition many whaling captains recognized social obligations which local people invoked in times of resource shortage. Food, powder, and ammunition were nearly always provided when needed. Other perquisites of association with the whaling fleet, accessible to all community members, were medical services, repairs to guns and other implements, and access to carcasses left on the beach after baleen and oil had been removed. The abandoned carcasses were a major source of oil for lighting and heating, and of meat for human consumption as well as for dog feed. After 1870, winter villages on the coast of Roes Welcome were invariably located near flensing stations to facilitate access to the whale cache (Robinson 1973:111-112).

Work in the provisioning trades, while it resulted in greater economic security evenly spread throughout the year, did not guarantee affluence. The buying power of hunters varied from year to year depending on the number and needs of wintering vessels, and the availability of game. Farther south at Rankin Inlet, unreliable ice frequently prevented travel between the whaleships at Marble Island and the mainland, and many vessels found themselves dangerously undersupplied (W.G. Ross 1975:66). The provisioners suffered a loss of buying power at the same time.

The decision to tie their economic lives to commercial whaling had the immediate effect of limiting the seasons of Inuit mobility. Because the whaleships were in harbour for nine months of the year, so were the local families whose livelihood was linked to them. They adjusted their timetables in order to take advantage of the whaler presence. Instead of spending the late summers inland, they began going to the whaling stations in time to greet the ships when they arrived in August (W.G. Ross 1975:65).

Involvement in commercial whaling also guaranteed increased access to food throughout the year. It is an axiom of hunter-gatherer life in the arctic that all communities suffer periodic shortages in their own territories due to fluctuations in the availability of game. Aboriginally there was a general reluctance to take necessary resources from the territories of other groups, possibly because open hostilities might result, and be costly in terms of group survival. After more than a century of interaction with British traders and American whalers, most communities were confident that requests for food would be met with at least minimal generosity, and never with hostility. The worst that could happen was refusal. Starvation times occurred less often among the whaling fleet homeguard than in earlier times (Robinson 1973:33).

Some changes in social and cultural life, although they are largely invisible in the historical record, must be assumed. Settlement of families, increased economic security, and provisioning and labouring as male occupations, for example, imply changes in family and social life. Separation of communities into small groups during seasons of scarcity was no longer so necessary or so frequent. The separation of family members, however, became more common as men began to work apart from wives and children.

The professionalization of women's labour in skin preparation and clothing manufacture required adjustments in religious understanding and spiritual imperatives. Powerful religious tenets restricted the sewing of new clothing to the period between the fall caribou hunt and the beginning of winter sea mammal hunting. But there were occasions when new clothing had to be made at other times of the year for a variety of reasons -- because sufficient skins were not available in the early winter, or because more outfits were required than could be completed during the allotted time. Women's domain thus became an arena where Inuit religious principles, Inuit economic self-interest, and the physical needs of both Inuit and whalers were in conflict.

Other changes are better documented. Less than two decades after the beginning of commercial whaling, Aivilingmiut living between Wager Bay and

Chesterfield Inlet had "added to their language so-called pidgin-English, that is, a mixture between their own language and English" (Klutschak 1881:22). Inuktitut itself expanded to include new words for new things: *tii* (tea), *sigaliaq* (cigarette), and *siorauyak* (sugar). Square dancing and new forms of music became popular recreations, and a mid-winter festival of feasting and revelry was introduced and adopted (Freuchen 1935a:385; Hunter 1983:17) decades before the Christian meaning of Christmas was preached in their midst.

The presence of the whaling fleet gave local people opportunities for adding to and altering their material culture. Before the 1860s, few coast Inuit owned watercraft larger than kayaks, although the idea of multi-passenger boats was not new to them. Iglulingmiut, including Aivilingmiut, did not build umiaks or ship's boats before 1861, but they had seen them during the long visits of Parry, Lyon, and Rae, and they were certainly aware of their advantages. At least one whaleboat was left for the use of the community at Winchester Inlet when the *Syren Queen* and *Northern Light* sailed from Roes Welcome after the first year of whaling (Robinson 1973:69). By 1865, three men in a community of about a dozen families at Wager Bay owned wooden boats (C.F. Hall 1879:63, 173), and in 1878, Roes Welcome people began using wooden boats to make annual trips to Churchill (Schwatka 1880b:26).

Although employment encouraged a more settled residence among whaling fleet homeguard families and limited the seasons in which they could travel, possession of multi-passenger boats increased their ability to move entire households safely and quickly between widely separated resource sites in summer.

Marble Islanders were also acquiring whaleboats, some of them as wages in kind for their work as whalers, provisioners, labourers, and seamstresses. Ten Marble Islanders went to Churchill in 1874 in three whaleboats, and thirteen "faraway" Inuit in two boats made the trip the following year (HBCA:B42/a/192:128, 149d). William Ouligbuck settled at Marble Island in 1875 and within three years

owned a small schooner, which he used for freighting goods and transporting people along the coast (Schwatka 1880b:26).¹

Firearms were another technological commodity with which most central and eastern arctic communities were familiar before the beginning of the whaling period. Southern Keewatin Inuit were using guns a century before the first whalers entered Hudson Bay, and by 1830, every hunter from the communities south of Rankin Inlet probably owned one. After the beginning of commercial whaling in Roes Welcome, people at Repulse Bay, Chesterfield Inlet, and Rankin Inlet began to acquire firearms in greater numbers. Gun ownership not only increased hunters' ability to harvest some subsistence resources, it was a precondition of provisioning. Because the whalers, like the Churchill traders, were dependent on local people for fresh meat, it was in their interest to see to it that their hired hunters were well equipped. And see to it they did. The *Syren Queen* supplied guns, powder, and shot to local people during its first wintering, and by 1867, firepower materials were staples of the whaler-Inuit trade (Gilder 1881:41; C.F. Hall 1879:62, 302, 337; HBCA:A6/40) and remained so until the end of the whaling era (Robinson 1973:66-69).

The Iglulingmiut proper, still occupying Melville Peninsula north of Lyon Inlet as they had during the 1820s, were not drawn to Roes Welcome by the presence of whaleships. Three factors are implicated in their decision not to participate in commercial whaling. First, commercial whalers did not frequent Foxe Basin, and involvement would have meant relocation to territories already occupied by other groups. Second, while severe, long-term shortages certainly occurred in the lands

¹On the journey to Chantrey Inlet in search of the lost Franklin expedition with John Rae in 1852-54, William Ouligbuck was known to the Inuit of Pelly Bay as Mar-ko or Mokko (Woodman 1991:287), possibly *Makkok*, meaning 'two.' He worked for the Hudson's Bay Company in 1856-61, 1872-74, 1882-94 (Rich 1953:374), and lived in a number of places as hunter and whaler in the years when he was not under contract to the company. As William Ouligbuck he was known as a good interpreter and hunter, but dishonest and unreliable (Rae 1844-55:239). As Captain Marco, he was suspected by the whaling captains of having come by his schooner in devious ways (Log book of *Isabella*, W.G.Ross 1975:93; Schwatka 1880:26).

around Foxe Basin, they were less frequent than in most other arctic environments. Caribou, walrus, whale, and seal, which had maintained Dorset communities in their heartland for fifteen hundred years, continued to sustain Iglulingmiut communities in the late nineteenth century. And, finally, by 1867 they were getting guns, metal cutting tools and kettles, and wood through trade with Aivilik and with their countrymen at Tununeq (Pond Inlet) who, like the Aivilingmiut, saw whalers nearly every year (C.F. Hall 1879:302). They apparently did not perceive a need for greater access to European goods, and the presence of whalers to the south did not tempt them. In the relatively unthreatening physical environment of Melville Peninsula, opting for the status quo was a rational strategy.

The Hudson's Bay Company learned that American whalers were in the bay in 1862. The Churchill post report that year informed company headquarters that:

It appears there has been some ship or vessel visiting [the distant Esquimaux] last summer as they ... has got sailors clothing on some of them. I think it has been American ships as I got a gun from 1 of the Esquimaux made in Boston, most likely they seen whalers. (HBCA:B42/a/190:23).

Concerned that the whalers were buying furs, threatening its charter rights, and destroying the Churchill trade, the company sent the *Ocean Nymph* to Marble Island and Repulse Bay in 1866-67 to protect its interests (HBCA:A6/40:237). Its fears were, for the moment, unfounded: whalers were not yet conducting a commercial trade with local Inuit (W.G. Ross 1975:66), and fur and skin returns at Churchill were not down. Over 1200 fox were taken to the post in 1866, more than in either of the two record years, 1798 and 1832, and the post reported "we have now more parchment than we have room for" (HBCA:B42/a/191:54).

Throughout the 1860s, with the exception of firearms, powder and shot, whaler trade with local people was of the souvenir-trinket variety (Ferguson 1879:84). As long as whale remained abundant and prices in Europe justified the long, expensive voyages, whaling firms focused on taking baleen and oil. As the number of whales began to decline in the 1870s, however, owners instructed their captains to engage in commercial fur trading as well as whaling (W.G. Ross 1975:47). Inuit

used their buying power to get the kinds of goods they wanted. The 1892 log of the whaleship *A.R. Tucker* noted that men agreeing to work wanted assurances beforehand that they would be paid with lumber, axes, lances, guns, powder, boat masts, and wooden poles (Robinson 1973:55). In the 1890s, one astute captain, George Comer, was trading guns, 10-inch knives, fish hooks and lines, telescopes, buttons, scissors, roasting pans which could be hung over a cooking lamp, and planks and shoeing for sled runners (W.G. Ross 1975:69-70).

In the southern Keewatin, people were faced with problems of subsistence and survival similar to those of their northern neighbours, but their options for solution were different. For them there was no new social environment which offered economic opportunities. While Rankin Inlet and Repulse Bay people were becoming involved in commercial whaling, the southern people continued to respond to the pressures of physical environment in more familiar ways: hunting caribou and musk ox for subsistence and a trading surplus; occasionally relocating temporarily to better game areas; and participating in the Churchill seal and whale hunts.

Caribou and fox distributions continued to be erratic throughout the second half of the century. A dozen distant Inuit went to the post in 1859 and 1860, and described caribou in large numbers in the north. At the same time, some Homeguards reported "no deer to be seen," others could find "no foxes among them..., but deer is plentiful," and still others declared "foxes extremely scarce -- Deer only made their appearance a short time ago" (HBCA:B42/a/191:49, 52d, 93d; B42/b/61:57). Post masters continued to comment on the small number of Homeguard who went to the post, and their pitiful trade, described as "not worth them coming so far with" (HBCA:B42/a/189b:68d).

Seal, once a staple of the coast communities, were in seriously short supply during the 1860s, and so were the seal skin boots which the Company was in the habit of buying in large quantities. In 1862, the Homeguard seal hunters did not find or kill a single animal (HBCA:B42/b/61:65d), and in 1866 seals were so rare all along the coast that the Inuit "are so scarce themselves nowadays for boots that no bribery will scarcely induce them to part with any" (HBCA:B42/b/61:84).

In conditions of scarce game and consistently poor whale hunts, the Homeguard used what power they had as consumers to ask for better prices for their country produce. Post master William Simpson blamed William Ouligbuck for creating unrest in the early 1860s by "telling them lies" which caused them to abandon the whale hunt and prevented The Little Chief from coming to the post (HBCA:B42/b/61:60). "They say it is very hard work killing whales. William Ouligbuck I suspect has put that in their heads" (HBCA:B42/b/61:63).

Both Homeguard and Distant hunters were prepared to take advantage of competition between post and whaler almost from the moment the first whalers appeared. Thirty-five "distant Esquimaux" went to the post in the summer of 1862, with a "a good quantity of clothing which they traded from the Americans.... This was given them for assisting them in killing of whales, of course they gave them everything they had in the shape of furs and parchment" (HBCA:B42/b/61:65d). Sixty men visited Churchill the following winter and reported that no "Yankies" were wintering over (HBCA:B42/b/61:67), but the whaleships were back in the summer of 1863, and "none of the distant Esquimaux visited" Churchill (HBCA:B42/b/61:68). The distant people did not show up again until 1869, when thirty of them made the long trip to Churchill in three American whaleboats with nearly 400 white fox, sixty-four pounds of ivory, fifty-seven muskox skins, and over 500 parchment deerskins (HBCA:B42/b/62:11). Again the visitors reported "the entire absence of any American whalers in our northern waters" (HBCA:B42/b/62:11). By 1868, the "distant" people visited the trading post only when whaleships were not around to provide employment and trading opportunities.

The numbers of near Homeguard going to Churchill also continued to drop off. In January 1868, the post master wondered about "the entire desertion from this place of all my Esquimaux during the past year. 18 Esquimaux! were all that visited the post during the twelvemonth just ended" (HBCA:B42/b/62:3). William Ouligbuck, somewhat mysteriously, attributed "the desertion of all the hunters ... to bad news brought them by the distant Esquimaux" (HBCA:B42/b/62:9d-10).

In 1869, there was bad news for the post master.

My Chipewyans told me a long rigmarole story about a Priest and some "Indian Chief" having been amongst these Homeguards of mine last summer and endeavoring to induce them all to go to Deers Lake [Lac du Brochet]. They don't seem to have succeeded very well in their machinations, as regards my Chipewyans, but managed to induce five of my Inland Esquimaux to go at which I am exceedingly annoyed, evidently from all I hear too, [they] had no wish to go but in the simplicity of their hearts allowed themselves to be enveigled into going and have left their families a drag on the movements of my Chipewyans (HBCA:B42/b/62:9d).

To add to his problems, Simpson foresaw bad times ahead, and on the first day of January 1870, he wrote:

I am greatly afraid my poor Esquimaux will be put to their shifts this winter, for it seems the deer all left the coast very prematurely last fall, they passed here early in October and instead of their going, as in former years east and south of this, went south a short distance and then made a detour to the westward (HBCA:B42/b/62:14d-15).

His fears were well-founded. Homeguards began to arrive in January, and during March people sought refuge and relief at the post almost every day. At the end of the month, "no less than 46 Esquimaux [arrived] all in one band, they gave us no rest night or day." Between January and April 1, eighty-eight men, thirty-four women, and thirty-five children were at the post (HBCA:B42/b/62:16). The summer seal and whale hunts were poor, the fall fishery was "a mere apology for one," the goose hunt was "the most wretched affair I ever have seen," and deer were "unprecedentedly rare this winter everywhere" (HBCA:B42/b/62:20).

Eighteen-seventy-one was worse. Over thirty men, many with their families, went to the post for the spring seal hunt, and fell victims to diarrhoea and dysentery which "carried off nearly, if not quite, two thirds of this number of men, besides a great many women, and children." After two months of misery and death, the survivors, including the Little Chief, and Wot Wot, the leader of a party from Rankin Inlet (HBCA:B42/b/62:2), left early in August, using one of the post boats in an attempt to reach their homes before fall. "They were all then, with but two or three uncertain, either dangerously ill or so very reduced and prostrated by illness without

proper or sufficient nourishing food either, that really its marvellous how they got off as well as they did" (HBCA:B42/b/62:26).

Nothing more was heard of them until August 28, when William Ouligbuck arrived. He reported leaving his community north of Whale Cove with eight other men in a kayak brigade. The travellers, except for Ouligbuck, lashed their canoes together and set up a sail of parchment deer skin. When a sudden squall hit, they were unable to control the raft and all eight drowned. Ouligbuck, paddling alone close to shore, landed his kayak safely and survived (HBCA:B42/a/192:58).²

Continuing south, Ouligbuck met the Little Chief, who had left the post three weeks earlier, and "all that was then left of his party ... very ill and perfectly helpless, in fact, starving." The Little Chief's wife, oldest son, and brother Tatiak were dead. The others were

all lying there perfectly helpless on the beach, some too ill to do anything, those that were in any way or the least convalescent so weak and exhausted that they could neither hunt or fish nor yet scarcely able to assist the helpless (HBCA:B42/b/62:58).

A day or so after leaving the Little Chief, Ouligbuck saw Wot Wot and his people "in a dying state" (HBCA:B42/b/62:59). Throughout the fall reports of deaths continued to reach the post. In October, two travellers found Wot Wot's body,

starved to death, died in his very tracks in endeavoring apparently to reach here, the men say he was reduced to a ghastly skeleton, fearfully emaciated. Strange too, he had a fur nearly new, ammunition, firebag, etc, etc, but we fancy he was too weak and reduced by illness to attempt killing anything for himself. His wife must be there or thereabouts somewhere too, of course dead, or he never would have left her (HBCA:B42/a/191:70).

The last grim news of the year arrived on December 29.

²Chief Factor James MacTavish did not believe Ouligbuck's story. He added to the letter, in pencil, "The above is one of Buck's yarns and not true" (HBCA:B42/b/62:27).

All Inland Esquimaux arrived this morning early, no meat, no deer, starving, no ammunition, no nothing... These fellows report that all our Homeguards are dead but five! out of 30 odd!
(HBCA:B42/a/192:91).

Post master Charles Griffin summed up the year in his journal entry on New Year's Eve, 1871:

Last day! last entry for 1871! take it all together, one of the most disastrous, unfortunate, miserable years I ever passed in my life -- one thing with another, I never experienced its equal
(HBCA:B42/a/192:91).

Griffin also summed up Inuit activity in relation to the trading post in his 1871 New Year's letter. The "Distant Esquimaux" (at Chesterfield Inlet and Roes Welcome) were "entirely alienated" by the American whaleships which supplied all their trading and other needs in their own country. The "middle Esquimaux" (between Rankin and Chesterfield Inlets), suffering the aftermath of epidemic disease and high mortality, were uncertain customers with an undependable trade. The Homeguards or "Coast Esquimaux" (between Knapp's Bay and Whale Cove) were "truly the main support" of the post, supplying all the oil and blubber, but "fearfully reduced in numbers now." The Inlanders continued to go to the post in their usual numbers, but they brought and bought little. They traded only parchment deer skins, and their purchases did not go beyond ammunition, files, saws, and knives
(HBCA:B42/b/62:26-26d).

The new year, 1872, brought very little in the way of an easier life to Churchill's regular clients. To begin with there was unusually heavy snow, "perfectly startling to behold" (HBCA:B42/a/192:114). Twenty-two Inlanders went to the post "in a miserable plight" with no food and having seen no deer. The traders could not spare food for them, although they gave them "plenty of ammunition"
(HBCA:B42/a/192:93-94, 113).

Only five men, one woman, and one girl made the trip from the coast communities. Two of the men tried to hunt at Seal River, but whale were scarcer than anyone could remember, and the travellers went home empty-handed

(HBCA:B42/a/192:142). Whale were still absent in 1873, and the fall fishery was a failure on account of high water (HBCA:B42/b/62:34d, 35d).

In 1874, for the first time in thirty years no Inlanders went to Churchill (HBCA:B42/a/192). The "long rigmarole story" Simpson had heard in 1869 was true. The missionary priest Alphonse Gasté, spending the summer of 1868 with a band of Churchill Homeguard Chipewyan, had visited a community of inland Inuit on the Dubawnt River. He encouraged them, through a Chipewyan interpreter, to trade at Reindeer Lake³ (Gasté 1869:13; Mary-Rousselière 1960b:17).

The Hudson's Bay Company station at Reindeer Lake was originally intended "for procuring provisions for District use" (HBCA:B42/b/62:22). It was established in 1858, two years after Roman Catholic missionaries opened a small trading post. By 1871, the company's meat depot had begun trading furs, and, in order to compete with the mission post, offered lower prices, higher tariffs, and easier debt than were available at Churchill. The Inuit who accepted Father Gasté's invitation to go to the Brochet posts recognized an economic opportunity when they saw one, and began to trade at the inland depot in greater numbers. "Were the Company an opposing force," raged Charles Griffin at Churchill, "they could not more determinedly conspire to ruin the trade here than they have done by the establishment of Deers Lake" (HBCA:B42/b/62:22d).

Inuit loyalty, however, was not blind; it depended on customer satisfaction of one kind or another. In 1869, "many" Churchill hunters went to Brochet because "they had no furs by which to pay their debts [at Churchill]" (HBCA:B42/b/62:13). In 1873, twenty-two switched their accounts back to Churchill because they suspected the Deer Lake trading posts of "swindling" them (HBCA:B42/b/62:36). In 1881, nearly one-third of the hunters who had accounts with the company were trading at the company's inland post (HBCA:B42/z/2; B49/e/9:4), while an unknown number sold their produce to the missionaries.

³Also known as Deer Lake and Jackfish Lake.

In 1885, they were still trading at Lac du Brochet where, they said, they could "get so much more for their furs" (HBCA:B42/b/62:58d). Some responded to Churchill post's efforts to offer them a customer-sensitive inventory. A four-sled party took a good hunt of white fox, wolves, wolverines, muskox robes, and deerskin to Churchill in 1886 because they liked Churchill's merchandise better than what was available at Brochet. "If it was not for our larger tin kettles, hand dags,⁴ and carrot tobacco it is a question if they would ever come to Churchill," wrote the post master (HBCA:B42/b/62:58d).

After the severe winter of 1887, when many Inlanders suffered "considerable sickness and a great want of food," they began going to Churchill again in larger numbers (HBCA:B42/b/62:72a; B49/a/13:2). More Inlanders followed after the bad winter of 1889-90 when deer were scarce and both Chipewyan and Inuit were forced to go farther afield in search of food animals and furs (HBCA:B296/e/1:1).

The resumption of HBC trading voyages along the coast in 1882, an attempt to reclaim some customers from the whaling fleets, gave the coast Inuit an opportunity to take advantage of competing markets. The returns from the Marble Island boat in 1886 were good in spite of a hard winter and sixteen reported deaths from starvation (HBCA:B42/b/62:62-63). Like the more southerly groups, the Marble Islanders explained that customer satisfaction was the reason for their change of heart. They complained that "the Americans used to take their furs and pay them without consulting their requirements" (HBCA:B42/b/62:63d).

In addition to a preference for Churchill goods and dissatisfaction at whaler disregard for their autonomy, the Rankin Inlet people found their choice of traders limited after 1886. As whale became increasingly scarce near Marble Island, the fleet moved farther north into Roes Welcome (Burch 1977:144). Local communities had to decide whether to follow the whalers north, go to the post at Churchill, or trade with the Marble Island boat.

⁴Short, broad-bladed, double-edged hunting knives.

The first option cannot have been seriously considered. Roes Welcome communities were already providing adequate country products and labour for the whaling fleet, and straining the resources of the mainland for subsistence. In 1887 some people chose the second possibility, and went to the post partly for trade and partly for the seal hunt. But they made it clear that they would no longer use their own kayaks or boats for the journey. If they came to the post at all, they wanted to return north on the Marble Island trading vessel or spend the winter at Churchill. Their preference was for a coastal boat, and their gentle blackmail ensured that they got it (HBCA:B42/b/62:72ad).

Alarm at the thought of a hundred or so Inuit spending the winter at the post, the generally profitable nature of the Marble Island trade, and its popularity with local communities were all factors in the company's decision to continue to send trading boats north every year (HBCA:B42/b/62:72ad-72b). The company also established a number of "pick up places" where the boats stopped regularly to trade for furs (HBCA:A11/16:54-54d; B42/b/62:98d-99), reminiscent of the sloop trade of the previous century.

Throughout the nineteenth century Inuit took fox pelts to Churchill post in most years, but no Keewatin hunter was deeply involved in the fur trade as such. The principal country products were venison for trading post provisions and parchment deer skins for Europe's tanneries. After mid-century, Inuit hunters added a second staple skin to their trade goods, muskox.

The abundance of muskox in the interior was a major attraction for coastal people in the years of growing population and declining caribou and seal. Faced with shortages of their preferred food staples, they increased their use of muskox meat, going farther and farther inland in search of it. They seldom bothered to take the skins to the post, however, because they were heavy and cumbersome to transport over long distances, and they had little trading value. In the 1850s, the growing demand for muskox robes in Europe prompted the Hudson's Bay Company to request more skins of the huge animals (HBCA:B42/a/189a:34d). Within a few years Inuit began to oblige, bringing at least twenty-two in 1862. When the price went up in

1865, they brought more -- over fifty in 1866, and nearly 150 in 1869 (HBCA:B42/a/190-191). They also sold muskox skins to the whalers, probably in quantities at least as great as what the company purchased. Over one-third of the skins taken to Churchill in 1869 came from Marble Islanders who would have traded with the whalers had any showed up (HBCA:B42/b/62:11).

The increase in quantities of muskox skins being traded does not indicate an increase in the total number of muskox kills, nor does it mean that animals were being killed solely for their skins. Muskox were killed for food when caribou were in short supply, as happened in 1885-86, when a community of about a hundred people from near Rankin Inlet spent the winter inland hunting muskox, "deterred through fear of starvation" from coming to the coast (HBCA:B42/b/62:63). When caribou were available, few muskox skins were taken for trade. In 1862, for instance, hunters brought 2800 parchment deerskins, over 5400 pounds of venison, 1765 prime fox pelts, and twenty-two robes (HBCA:B42/a/190); in 1863, they brought more than 3000 parchment deerskins, 6400 pounds of venison, 3500 fox furs, and only two muskox skins (HBCA:B42/a/190).

The sale of robes was incidental to the killing of muskox for food. The presence of traders and whalers willing to buy muskox skins did not encourage the south Keewatin Inuit to kill more muskox; it simply gave them a means of turning the useless by-products of their hunt into trade goods in much the same way they turned unused subsistence stores into trading surpluses.

Unlike the southern Keewatin peoples, Aivilingmiut living at or near whaling stations and beaching sites were seldom hard pressed for basic food supplies. They became specialists in the muskox hunt because the robes were marketable. As the demand for whale products declined in the 1870s, demand for muskox robes continued to rise, and whaling firms, facing reduced profits from whale products, began to develop a trade in muskox skins. The Roes Welcome Aivilingmiut, the people most closely allied with the whalers, became the primary procurers. They ceased to hunt seal and walrus in the deep winter and spring months and became muskox hunters instead. By the beginning of the 1890s, they were hunting muskox

from December to May, whaling from May to September, and caribou hunting from September to December (Low 1906:270; Robinson 1973:117). With the decline of both caribou and whale after 1900, they spent even more time inland hunting muskox, sometimes from December right through to the autumn. From a beginning of four animals taken in 1860-62, the number of robes bought by whalers reached at least 150 every year between 1899 and 1912 (Robinson 1973:118).

Throughout the nineteenth century, all west coast Inuit south of Lyon Inlet responded to population increases and the constraints of the physical environment by changing locations, principal food resources and seasonal activities in order to take advantage of available opportunities. Their communities were in a state of continuous flux.

Early in the century, the Churchill traders perceived all the communities south of Chesterfield Inlet as a single social entity, "Augustine's people," and all others as "Distant Esquimaux." By 1860 they recognized that Augustine's people had become three more or less discrete societies occupying different territories. The "middle Esquimaux" or "Distant Homeguard" lived around Rankin Inlet and probably as far south as Whale Cove. Augustine and the Ouligbuck family were most often mentioned in connection with them. The "near Homeguards" occupied the coast between Whale Cove and Eskimo Point. The third group, the "Inlanders," expanded out of Augustine's people as their population grew. Over the course of two generations they became year-round residents of the upper Kazan River area, distinct from the parent community.

The Churchill traders, with their long experience of aboriginal peoples, recognized Keewatin residential groups as fluid and voluntary communities associated with particular locations and subsistence activities. Other nineteenth and twentieth century European observers made attempts to fit Inuit societies into categories based on European concepts of nation, state, and territory, which did not necessarily reflect Inuit reality. Franz Boas classified what he called the "tribes" of southeastern Baffin Island after a year of observation in 1882-83, and in succeeding years he arranged the peoples of west Hudson Bay and Boothia Peninsula into categories based on his

reading of Klutschak and John Ross, and on information from the whaling captain, George Comer. The members of the Fifth Thule Expedition of 1921-24 conceived of all Keewatin Inuit south of Repulse Bay as a single 'tribe,' which they called the 'Caribou Eskimo,' and constructed a neat taxonomy of 'bands' within it. They applied the model retroactively to Keewatin Inuit of earlier periods.

Scholars ever since have used the Boas and Fifth Thule classifications, artificial, oversimplified, and sometimes just plain inaccurate as they are, because they provide a concept and a vocabulary which allows for generalization. The conceptual framework is tempting, and sometimes useful because it facilitates discussion about social and historical processes, but it does not reveal how Inuit, individually and as communities, thought about their societies or their identity. What needs to be stressed is that Inuit who were assigned to particular categories, say Ahiarmiut, did not always consider themselves to be irrevocably Ahiarmiut; nor did they inevitably and necessarily behave the way Ahiarmiut in general have been described as behaving.

The Fifth Thule taxonomy identified five bands in the so-called Caribou Eskimo group. The "Distant Esquimaux" of the Hudson's Bay Company journals were called Kinepetu by the whalers, a mistaken and meaningless identification. Their own designation for themselves, identified by the Fifth Thule Expedition, is Qairnirmiut, People of the Bedrock Place. The communities around Rankin Inlet and probably as far south as Whale Cove, known to the Hudson's Bay Company as the "Distant Homeguard," were identified by the Fifth Thule as Hauniqtormiut, People of the Place of Bones. Between Whale Cove and Eskimo Point were the "near Homeguards," known to Fifth Thule observers as Padlirmiut, People of the Willow Thicket.

The assignment of the name 'Padlirmiut' is problematic. In 1922, Kaj Birket-Smith and Knud Rasmussen of the Fifth Thule Expedition agreed that the "near Homeguard" were self-identified as Padlirmiut (Willow People), but they recognized two subgroups among them, one with an inland orientation and the other more focused on the coast and marine activities (Birket-Smith 1929:1:67). Rasmussen

suggested that the self-designation of the coast dwellers, whose principal village was at Eskimo Point, was actually Paatlirmiut, similar in sound to Padlirmiut (at least to non-Inuit ears), but derived from a root word meaning 'river mouth' (Rasmussen 1930a:5). Rasmussen's position has received support from some recent linguistic studies which suggest that Paatlirmiut, People of the River Mouth, is a more likely designation for both coast and inland groups (Correll 1976:174). On the other hand, oral testimony from the 1960s and 70s favours Birket-Smith's conclusion that the Padlirmiut, People of the Willow, was the name used by the people themselves, as well as suggesting that a small community at the river mouth called themselves Avviamiut (Williamson 1974:17-18).

The third group recognized by the Churchill traders before 1860 were the "Inlanders," living along the upper Kazan River. They were later identified as the Ahiarmiut, People from Out of the Way.

Two other groups are known to have emerged towards the end of the nineteenth century. The Harvaqtormiut, People of the Rapids, occupied the lower Kazan River just south of Baker Lake by 1890 (Birket-Smith 1929:1:67-68; Burch 1986:109, 127). They probably represented an expansion of the Qairnirmiut, whom they closely resembled. The Tassiujormiut, People of the Place like a Lake, had emerged, or were in the process of emerging, from a Paatlirmiut parent society by 1915. Their winter residences were inland on the shores of Kaminak Lake just west of Whale Cove and they spent the summers hunting seal on the coast around Dawson Inlet (Leden 1927:145, 150, 152-53).

Throughout the nineteenth century, Inuit responded to changes in social environments such as the presence of whalers, relocation, expansion and emergence of communities, and to the increase in their own numbers by adjusting their trading and social relations. In pre-whaling times, Chesterfield Inlet had been the site of a market at which European goods were passed by Churchill's Homeguard to the southern Iglulingmiut of Aivilik in exchange for walrus hides and sinew (Franklin 1823:264; HBCA:B42/a/142; West 1824:182-83). The Homeguard also moved goods to Akiliniq at the western end of Beverly Lake where they met with people from

Chantrey Inlet and the arctic coast (Mary-Rousselière 1959:13; Rasmussen 1930a:28; T. Simpson 1843:70-71).

According to Augustine, by 1815 Homeguard middleman activities were important enough in their economies that they "prevented" more distant people from trading directly at Churchill. The means of prevention were not made clear in Adam Snodie's report of his conversations with Augustine, but he was certain that profit was its motive (HBCA:B42/a/142:13d). John Rae's experiences of 1846-47 and 1852-54 made him equally certain of both the prevention and the profit, although like Snodie he did not record details. He noted only that the people within "350 English miles" of Churchill preferred "to barter all their own half-worn weapons, tools, cooking utensils ... at a much higher price than would be paid for new articles at the trading post, and thus secure a double profit" (Rae 1866:139).

After 1870, Aivilingmiut and Qairnirmiut not only had direct access to European goods from whalers, and were no longer interested in the trade of second-hand articles from the south, they were also ideally placed to act as middlemen between the whalers and the communities of Melville Peninsula, Pelly Bay, Great Fish River, and the Keewatin interior. Wage labour and provisioning enabled them to amass surpluses of the European goods most desired by other groups, and whaling captains and firms were willing to buy the furs and muskox robes which made up the bulk of the resources offered by more distant bands.

The Churchill Homeguards found themselves shut out of the trade (Birket-Smith 1929:1:161). They not only lost the profits of their brokering activities, they no longer had access to walrus hides and skins of bearded seal in sufficient quantities to meet their own footwear needs. By the 1890s, the only trade taking place between groups north and south of Chesterfield Inlet was the transfer of furs at Baker Lake from the Keewatin Inlanders to Aivilik middlemen, and that trade was organized and supervised by Captain George Comer (Robinson 1973:120).

The Homeguards also lost what little trade they had with Ahiarmiut, who had begun to meet with Qairnirmiut and Aivilingmiut middlemen at Akiliniq and Baker Lake by the 1890s. Families in a dozen small camps along the Dubawnt River in

1893 owned tin kettles, old guns, and clothing of European manufacture acquired at Akiliniq from coast people who traded with the HBC at Fort Churchill and with whalers at Marble Island and Roes Welcome (J.W. Tyrrell 1898:107-108, 111).

Aivilingmiut and Qairnirmiut trading activity was in itself an encouragement to greater mobility and inter-band contact among more distant people who were unwilling to pay inflated prices to middlemen. The people of Great Fish River occasionally bypassed the intermediaries; instead of meeting them at Akiliniq as they had done before 1870, they followed the Quoich River to Chesterfield Inlet, and dealt with the whalers directly (Klutschak 1881:152). Copper Eskimos from Bathurst Inlet were part of the summer community at Rankin Inlet in various years during the 1890s, along with visitors from Repulse Bay, Cape Fullerton, and Baker Lake (Lofthouse 1922:107).

The Ahiarmiut also undertook to buy goods at the source at times, bypassing Aivilingmiut and Qairnirmiut at Akiliniq and Baker Lake. Inspector E.A. Pelletier of the 1908 Royal Northwest Mounted Police Thelon River patrol reported communities occupied solely by women and children, in the absence of the men, who had gone to Cape Fullerton to trade directly with the whalers (RCMP 1910:155).

Because of their location, the Keewatin Inlanders had maintained trading and social relations with Chipewyan as early as the 1820s. The 1868 meeting between Chipewyan and Inland Inuit near Dubawnt Lake, described by Father Gasté, was apparently a regular occurrence. The Chipewyan knew enough of the language of their northern neighbours to exchange news with them, transact business, interpret Gasté's sermons, and convince them to trade at Lac du Brochet instead of at Churchill (Gasté 1869:10-12). The decision to trade at Reindeer Lake after 1868 led to even closer association with Chipewyan and a slow expansion southwards into the forest fringe.

Farther north, Aivilingmiut and Qairnirmiut were also dealing with the problems of boundaries. Communities which in earlier times had been geographically separated by unoccupied land found themselves in a tense situation in 1879. Two visiting Qairnirmiut took part in a target-shooting contest in an Aivilingmiut village,

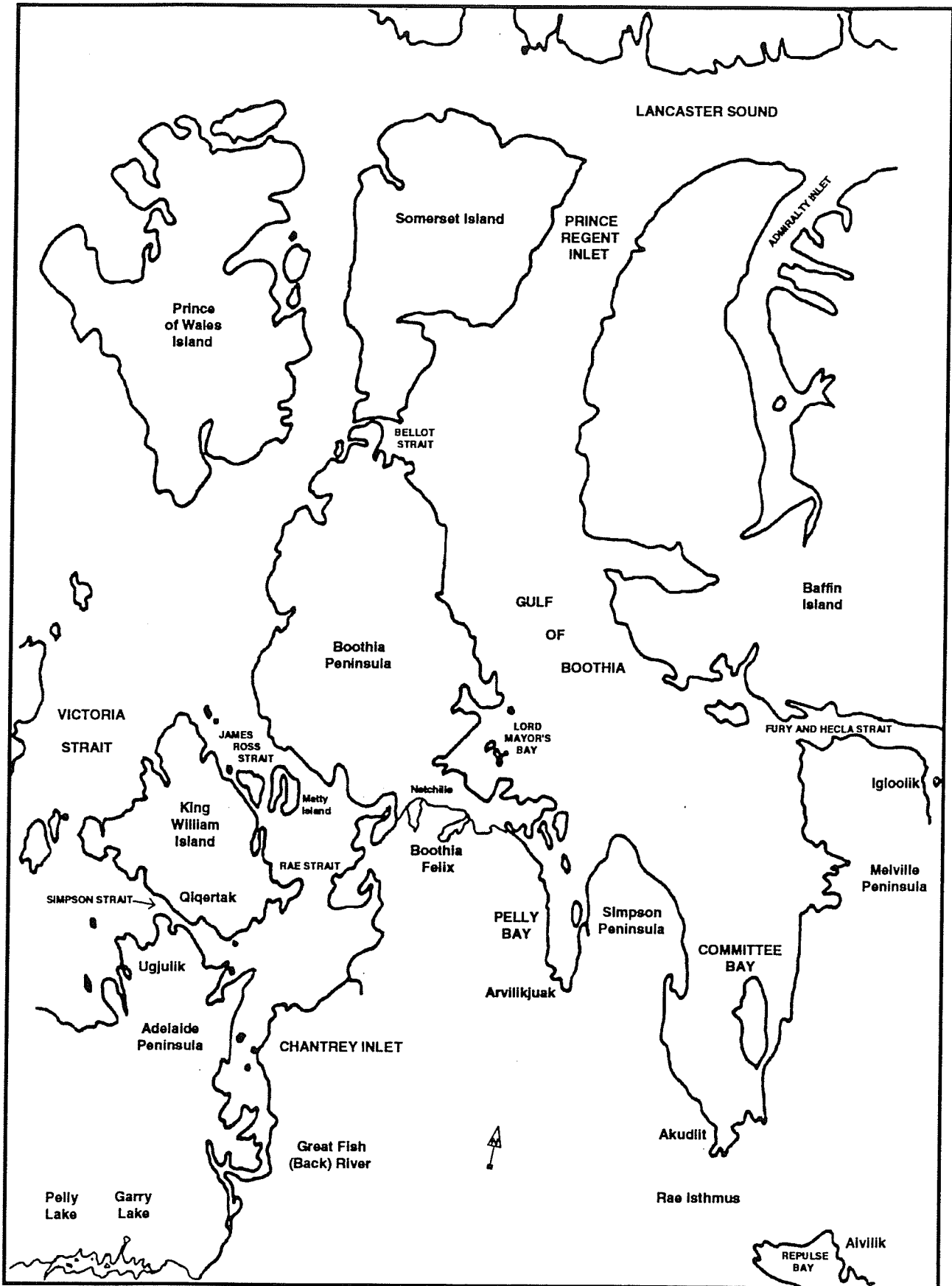
during which one of the host community accidentally wounded one of the guests. The Qairnirmiut demanded compensation and were refused. The two groups then each selected three men and charged them with continuing the vendetta, while the remaining members of each group maintained their usual wary but peaceful relations. As the observer who reported the incident noted, neighbouring communities had to identify new borders between their altered territories and work out ways of crossing boundaries "with the approval of their neighbours" (Klutschak 1881:200).

Relations between some communities remained unchanged. The fear and suspicion with which the Aivilik people had regarded Netsilingmiut in the 1840s was still there a generation later (C.F. Hall 1879:81-82). During the 1870s, members of an Aivilingmiut family did not hesitate to undertake a journey of 650 kilometres to Boothia Peninsula to take revenge on their Netsilingmiut opposite numbers in a blood feud (Klutschak 1881:201).

Boothia and the Arctic Coast

Although responses of Inuit communities to the long-term presence of Europeans and Americans in Hudson Bay resulted in permanent changes in social and economic organization by 1900, the short-term incursions of non-Inuit into Boothia and King William Island had few lasting effects. By the beginning of the twentieth century, the peoples of King William Island, Adelaide Peninsula, and Boothia Peninsula had, to a large extent, reverted to the territorial distribution which had prevailed prior to the abandonments of the *Victory*, *Erebus*, and *Terror*. The Netsilingmiut had withdrawn from Adelaide Peninsula and the south coast of King William Island. Ugjulingmiut, descendants of people who had fled to the Great Fish River during the famines and Netsilingmiut invasion of the 1850s, were again living in their former territories.

The east coast of King William Island was once again shared territory, Netsilingmiut and Ugjulingmiut villages being interspersed. In a few settlements, people from both groups lived together. There were other signs that the enmities which had sprung up in the 1840s and 50s had been laid aside. The Netsilingmiut of



BOOTHIA, KING WILLIAM ISLAND, AND GREAT FISH RIVER

Boothia Isthmus, the Utkusiksalingmiut of Great Fish River, the people of Lord Mayor's Bay on the east coast of Boothia Peninsula, and the Ugjulingmiut, while maintaining their separate communities, regarded themselves as a single social unit, in which they included the Kidlinirmiut of the lower Coppermine River. Their dress, customs, and habits were strongly similar, and they intermarried and exchanged children (Amundsen 1908:1:292-293).

Unlike the Hudson Bay whaling communities which were created to facilitate occupational activity, Netsilik villages were based on kinship. Fifteen families living at the principal Netsilingmiut village at Lake Willerstad in the summer and fall of 1904 were related by blood, marriage, or spouse-exchange. With them were one family from Ittuaqturvik (at Lord Mayor's Bay)⁵ and one from Ugjulik, both regarded as temporary residents. The total population of the village was about seventy-five (Amundsen 1908:1:297-319; 1908:2:3).

Contacts between Netsilik and Hudson Bay were greatly reduced, although three or four men occasionally went to Aivilik to trade skins. In the first decade of the twentieth century, only three of the women had ever seen white men or been outside of their own territory, and they were all elderly individuals who had been at Aivilik with their husbands in their youth (Amundsen 1908:1:293-294).

Like the Netsilingmiut, the Pelly Bay people had made few changes in the preceding century. They continued to spend the winters in villages on the sea ice, occupied in breathing hole sealing. In the 1920s, there were two villages, each with a population of about 100 people (Damas 1988a:115). In 1938-39, the same number of people were distributed among five winter villages (Poncins 1941).

⁵The place name *Ittuaqturvik*, at Lord Mayor's Bay where John Ross spent the years 1829-33, and the band designation *Ittuaqturvingmiut*, appeared for the first time in the expedition memoirs of Raoul Amundsen in 1908.

Roes Welcome and Melville Peninsula

As commercial whaling declined around the turn of the century, Aivilingmiut and eastern Netsilingmiut who made up the bulk of the whaling fleet homeguard were increasingly faced with economic uncertainty. In 1897, when Captain George Comer built a whaling station on Southampton Island, 125 Aivilingmiut agreed to live there and operate the station (Comer 1910:89). Although his accounts are vague on the exact dates of occupation, the station does not seem to have operated continuously. In 1899, a second attempt at settlement was made, with 100 Inuit from the mainland coast of Roes Welcome (Comer 1921:243). Again in 1903, Comer took "the greater number of my natives (Eskimos from Repulse Bay)" to the island "hoping that they might procure a quantity of fox-skins" (Comer 1910:86). In 1908, he left about seventy Aivilingmiut on Southampton (Comer 1910:90). Recognizing that commercial whaling was coming to an end, and faced with inadequate supplies of walrus, whale and caribou around Repulse Bay, between fifteen and twenty families chose to remain there more or less permanently.

The end of commercial whaling in Hudson Bay in 1915 coincided with the onset of highly variable climatic conditions. The receding icepack introduced more moisture into the atmosphere resulting in heavier winter snowfalls and wetter summers. The period from 1910 to 1920 was characterized by rapidly alternating short periods of cooling and warming through the year (Lamb 1982:250). Increased precipitation and rapidly fluctuating temperatures created conditions particularly inhospitable to caribou. The herds disappeared in search of more congenial climatic conditions, and it was a decade before they began to reappear.

The Iglulingmiut were able to compensate for climatic conditions more effectively than their southern countrymen. Their strategies included separation into smaller communities and relocation of about a quarter of the population to Steensby Inlet on the northwest coast of Baffin Island. As caribou resources declined, they became more dependent on sea mammals for subsistence. The potentially serious consequences of lost caribou resources were avoided, primarily because walrus and seal numbers remained adequate for the population. A second important factor in

their success was possession of whaleboats (Manning 1943:101-102; 1960:9). More efficient transportation technology allowed them to harvest larger territories, hunt more safely, and transport greater quantities of marine mammal resources over greater distances.

Iglulingmiut continued to occupy more or less permanent coast villages close to their cached food supplies. In 1922, there were three principal settlements: Igloolik with a population of seventy-three; Steensby Inlet with thirty-five souls; and a village at the northern end of Roes Welcome occupied by twenty-eight people (Mathiassen 1928b:17-19). The relatively large number of dogs they were able to support attests to their success at compensating for loss of caribou through more efficient sea mammal harvesting and dispersion of population. Most Igloolik families owned five or six sled dogs, and hunters were able to put together teams of ten or more animals (Mathiassen 1928b:81).

After 1915, when the last whaleship left Hudson Bay, coastal communities turned to more intensive sea mammal hunting. Subsistence hunting, storage, and increased seasonal mobility were the major survival strategies. Hunters searched for food resources over larger areas, and in periods when few game animals were available, they stayed close to their cached food supplies (Damas 1988a:113-114). They abandoned the large settlements at flensing and beaching stations and created more dispersed, smaller villages of between fifteen and twenty-five souls (Mathiassen 1928b:15-20).

The establishment of trading posts at Chesterfield Inlet and along Roes Welcome between 1911 and 1925⁶ made trapping a viable option for Qairnirmiut and

⁶Four Hudson's Bay Company posts proved to be permanent: Chesterfield Inlet, established 1911; Baker Lake, established 1914; Repulse Bay, established 1920, and Coral Harbour on Southampton Island, established 1924. Others were of shorter duration: Coats Island, 1918-28; Bury Cove at a now unknown site on Roes Welcome, 1919-20; and Wager Bay, 1926-47. Still others were operated by other companies: Monjo & Company at Fullerton Harbour, 1913-19; Henry Toke Munn at Coral Harbour, 1916-18; Lamson & Hubbard at Chesterfield Inlet and Baker Lake, 1920-22; and Revillon Freres at Baker Lake and Repulse Bay in 1924-36 (Usher 1971:139-145).

Aivilingmiut after 1915 when opportunities offered by commercial whaling were gone and caribou was no longer an adequate food source. They turned increasingly to fox trapping, and some found employment with the posts and missions, although in fewer numbers than had worked for the whalers. The high price of fox throughout most of the 1920s and 30s assured them of economic security and even a degree of prosperity.

Keewatin

Like the Melville Peninsula communities, Inuit of the southern Keewatin had always put a higher priority on hunting for subsistence than on trapping animals for resale or working for external agencies. They had always understood that subsistence hunting required their presence in their own territories, and was incompatible with long journeys to trading posts and trapping areas. The failure of the fur trade companies to establish posts near their customers effectively prevented them from taking the fur trade seriously as a full time occupation. Trapping was incidental to hunting for subsistence.

As James VanStone pointed out in connection with the Snowdrift Chipewyan, trappers have two options: to stay on the trapline for weeks at a time, depending on chance-met game for subsistence; or to go to the trading post frequently to drop off furs and pick up supplies (VanStone 1963:160-161). The first plan requires fairly abundant game accessible almost everywhere in the trapping area, a situation which rarely happens on the barren grounds, and certainly was not the case for Keewatin communities after 1900. The second strategy can only be used if the post is within easy reach of the trapping territory, which again was not so for any Keewatin community before 1911, or for the Ahiarmiut and Paatlirmiut before the mid-1920s. Both arrangements, of course, have another serious drawback. During the absence of hunters on the trapline or en route to the post families are left without support for long periods of time.

Southern Keewatin communities responded to the disappearance of food resources with the old and usually reliable storage strategy. It was not enough. The disappearance of game too often resulted in half-empty caches. According to oral

sources, they tried, sometimes running traplines of a hundred miles or more radiating out from the cache site (Freeman 1976), but with limited success.

The final disappearance of the caribou herds after 1915 pushed the two southern Keewatin bands into a decade of catastrophic famine. There was no rhetoric, exaggeration, or misunderstanding about this famine; starvation was real and mortality was high. From a probable total of around 1200 people on the coast south of Chesterfield Inlet and inland on the upper Kazan River at the turn of the century, the population had fallen to about 500 in 1922.

After 1920 the only means of survival left was trapping and the only certainty was the Hudson's Bay Company post. Survival was, however, more or less certain only in places where trading posts were within reasonable distance of trapping areas. The establishment of trading posts at Eskimo Point (formerly Knapp's Bay and now Arviat) in 1921, Maguse Lake in 1925, Padlei in 1926, Tavani in 1928, and Nunalla in 1929 gave Paatlirmiut a degree of certainty in their economic lives. They survived, continued to occupy their accustomed territories, and until the massive government interventions after the Second World War, maintained their collective autonomy.

For the inland communities, even the presence of trading posts nearer to their country did not ease uncertainty in their individual and collective lives. In the 1920s and 30s, at least a dozen small posts were operated for periods of one to five years in Chipewyan territory around Ennadai and Nueltin Lakes. Some belonged to the well-established fur trade companies, such as the Hudson's Bay Company, Lamson and Hubbard, and Revillon Freres; others were operated by independent trapper-traders (Keighley 1989:100-114; Usher 1971:140-145).

Although they often proved to be a lifeline for hard-pressed, isolated Kazan River communities, they could not be counted on. Most were manned by one person, and were opened, closed, and even moved, without the knowledge of their customers. In 1926, between fifteen and twenty Inuit died of starvation at the HBC's one-man outpost at Poor Fish Lake during the absence of the operator, who had gone to Brochet to pick up supplies (Keighley 1989:110). The tragedy was not a rare event.

Each of the few options available was inadequate. People could not survive as subsistence hunters because of game shortages and the impossibility of laying up stores sufficient for a season's needs. They could not enter fully into the fur trade, first, because the trading posts were too far from their caches and traplines, and second, because the posts were all too often temporary and their presence unpredictable. The same factors of distance and unpredictability made the few missions and police detachments unviable as sources of relief. By the end of the 1930s, the Ahiarmiut and inland Paatlirmiut were on the edge of extinction.

CHAPTER 8

CONCLUSIONS: SOCIAL ORGANIZATION, WORLDVIEW, AND SURVIVAL

But anyone who keeps his eyes and ears open and remembers what the old people relate, has a certain knowledge that can fill the emptiness of our thoughts. Therefore we are always ready to listen to those who get their knowledge from the experience of dead generations. And all the old myths we got from our forefathers are dead men's talk. In these speak those who long ago were wise. We, who think we know so little ourselves, listen eagerly to them.

-- Apakak, in Alaska. (Rasmussen 1952:180)

Eskimo and Inuit activities over several thousand years were closely linked to the physical and social environments in which the people found themselves. While few social theorists have difficulty recognizing cross-cultural contacts as events requiring individual and societal responses, and as catalysts for change, the identification of physical environment as a major influence in human history is an uncomfortable explanation for many twentieth century historians.

Fear of 'geographical determinism' as historical explanation springs from semantic confusion and is reinforced by examples of misuse of the concept, mainly by historians. The Latin verb *terminare* means 'to set limits.' English derivatives such as 'term' (a limited period of time), 'terminals' (end limits), and 'terminate' (reach the limit), retain the meaning of a range limited at its two extremes. 'To determine,' meaning to set limits, was common English usage until the middle of the nineteenth century, when theories which noted a cause and effect relationship between pairs of sequential events or actions were labelled 'determining,' and the idea of causation was attached to the word. Geographers and anthropologists, for the most part, have used the concept of geographical or ecological 'determinism' to refer to limits or sets of restraints on human activities, within which there is a range of possibilities, and outside of which some responses are not possible. Historians and other social and political theorists have used (or misused) the phrase and the concept to mean that certain circumstances or phenomena inevitably cause or result in specific other occurrences. In spite of historians' fears that geographers and anthropologists believe

the environment to be causative in human events, few, if any, have even come close to "rigorous environmental determinism" (J.K. Wright 1966:203).

Mechanistic explanations of cause and effect, by denying human free will and the possibility of both individual and group choice, fly in the face of empirical evidence that human beings do indeed have choices, and historically have reacted in different ways to similar stimuli. When 'determinism' is used to mean only that there are limits to the kinds of human responses that will be effective in particular physical and social environments, it is an explanation which can scarcely be avoided. Climate and weather most certainly do "affect food production, energy use, land use, water resources, and other factors vital to national security and human welfare," as Robert Claxton has pointed out (1985:104). Population size, contact with outsiders, the aspirations and attitudes of national neighbours, and other factors in the social environment are equally constraining. At the same time both physical and social environments may create opportunities.

Both physical and social environments set limits on what can happen, but neither ensures what will happen. The "possibilist approach" (Claiborne 1970) acknowledges that climate may determine that under present climatic and technological conditions wheat farming is not a viable choice in Greenland, or that the military mind set of a neighbouring nation may preclude peaceful coexistence, but only the impossible is ruled out. A vast array of options remains, and nothing is inevitable.

Environments can also be understood as "eventual," to use Lucien Febvre's (1932) word. Some events provoke human responses and events. A river, rising out of its bed and pouring across the floodplain, has implications for human societies in its vicinity, and may necessitate a response from them, but does not dictate, or even suggest, a particular response. People might attempt to escape the flood by deserting its village, either temporarily or permanently; they might try to control the rising water by technological means, such as dams, dikes, and spillways; they might seek protection and preservation from the supernatural world or attempt to appease transcendental forces; or they might remain in their homes and live or die as chance

allows. There are, of course, other possibilities, but no necessities. Even when the forcing factors for response appear to be the same, societies tend to make different choices which are not only appropriate to the physical circumstances, but are also suited to their ideological systems.

In his denunciation of geography (that is, environment) as causative, Lucien Febvre (1932) insisted that the idea of causality implied similar and predictable results consequent to similar conditions, an outcome not consistent with the unique and particular events of the human past. The problem with all determinisms as historical explanation, in Febvre's view, is that human activity is contingent on too many variables for the precise relationships among them to be understood. The variables can be identified as economic factors, social relations, technology, worldview, power relations, government activity, or individual action, as well as many others. Different historians and schools of thought tend to choose one or another of the factors as "the controlling variable of a societal system," as Joseph Petulla has pointed out. He suggested

that each geographic location of a societal/cultural system at a particular time is characterized by a unique mix of the above-mentioned historical factors, perhaps controlled by one or more of them for a short time, but no one of them operating independently from the rest (Petulla 1985:43).

The exact mix of relevant variables is always unknown. The causes of past human activities can never be known with certainty, nor can future human actions and reactions be predicted. Every determinant cause, if such a thing is even conceptually possible, is a combination of interdependent and mutually influential elements, and, as Petulla suggested, historical explanation is to be found in the "unique relationship among the variables" (Petulla 1985:43).

Human activities in harsh environments such as the arctic are generally assumed to be more constrained by the physical environment than in other societies. However, the limitations are not intractable; they can be compensated for by the development of technologies which mitigate the effects of environment. The higher the degree of technological insulation from environment, the less limiting an

environment is, or to put it another way, techniques and tools can broaden the range of possibilities of human action. Of course, the higher the degree of technological insulation from the physical environment, the greater will be a society's vulnerability to failures of the technological environment; electrical failure in a city of 1,000,000 people during a period of -30° temperatures will be devastatingly costly in terms of human life and the ability of the city to continue functioning.

Inability to control environment through technology does not necessarily make society unviable under conditions of extreme physical or social constraints. Where technological insulation is not possible, or has reached the limits of its effectiveness, societies can make cultural adaptations which enable them to satisfy their needs within specific environments. Population control through social proscription and prescription is an example of cultural adaptation which enables social groups to survive even in the face of seemingly unyielding constraints.

Because attempts have been made to use environmental explanations of human conduct as justification for racist behaviour, historians have tended to avoid them. However, the conflict between 'geographical determinism,' as perceived and feared by historians, and human free will can be disposed of in the light of the foregoing discussion, and summed up in David Hackett Fischer's comment:

Important linkages may appear in the relationship between climate and culture [i.e. society] -- not in the form of mindless, monistic determinism, but rather in the form of an intricate interaction of challenge and choice (Fischer 1981:248).

Social units, from the micro-society of a nuclear family to the macrosociety of a world community, create systems to understand and organize their physical and social environments, means to predict their events, and strategies to control their impacts. In the harsh physical environments of the arctic, explanation, prediction, and stratagem operated as mutually supportive systems for the purpose of reducing the uncertainty which is the ultimate threat to survival, however defined. For Eskimo and Inuit, animals and land in their physical and spiritual manifestations were central to human survival. As late as the 1960s, most Inuit, no matter what their occupations, continued to believe that "survival of the whole society depended upon

intense and unceasing concentration on [hunting]" (Williamson 1974:58). Worldview, social organization, and value system explained, prescribed and supported the strategies, techniques, and behaviour best calculated to reduce subsistence uncertainties and enhance survival.

Archaeology and anthropology as disciplines have recognized that the fundamental problem of Eskimo-Inuit life has always been how to ensure access to necessary resources. Sub-disciplines in eco-archaeology and ecological anthropology have developed in order to examine human responses to resource shortages and scarcity resulting from events in the physical environment. However, threats to resources are also present in social environments, as different social units compete for resources or seek ways to share them. Much of the following discussion focuses on physical and mental strategies which Eskimo-Inuit societies used to organize their relations with the physical environment in widely separated places at various times between 1550 and 1940. Most of what is suggested also has applications for Eskimo and Inuit interactions with elements in the social environment.

The first step in reducing uncertainty arising from the physical environment is to recognize threats to essential resources. Hunting-gathering societies, which are typically subject to both short- and long-term economic uncertainty (Bishop 1978; Colson 1979; Cove 1978; Halstead et al. 1984; J.G.E.Smith 1978) are able to predict periods of scarcity through close familiarity with their physical environments. On the basis of detailed information about the environment, arctic hunting societies developed a variety of responses (identified in the vocabulary of social theory as 'buffering' or 'coping mechanisms' or 'risk reducing strategies') which alleviate or guard against shortages. Mobility, diversification, storage, exchange, technical innovation (J.L. Anderson 1981:339; O'Shea & Halstead 1989:123), and alterations to the environment itself are basic responses to the problems of scarce or inaccessible resources.

Each of the broad categories of strategies covers a wide range of activities. Mobility strategies among arctic hunting-gathering societies, for example, have included routine seasonal movements between resource sites, long-distance harvesting, trading journeys, timely visits to relatively affluent kin and allies, temporary

relocation during short-term scarcity, extension of hunting-gathering areas, and in extreme cases, permanent abandonment of territory and relocation.

Diversification (sometimes called maximization) strategies range from the habitual use of different resources in season, to temporary or permanent substitution of one food staple for a former one, and in extreme cases, change of occupation.

Storage may involve caching of food supplies, techniques for preserving harvested food, taboos against killing certain animals in some seasons, and the reuse and recycling of scarce building materials. Exchange strategies include sharing and trade, among many others. Some theorists have included the unilateral and unequal changes of ownership which accompany war and theft as exchange: "Interactions that are characterised by 'negative reciprocity', such as raiding, theft and appropriation, can also be placed under the broad heading of exchange" (Halstead and O'Shea 1989:4).

The above four strategies for reducing uncertainty -- mobility, storage, diversification, exchange -- imply human adaptation to the environment, that is, individuals and societies learn the rules of the natural world and live within them. A precondition of successful use of any one of the strategies is, then, an investment of intellectual effort in order to understand natural law and shape social behaviour so that human beings might take the resources necessary for their survival without disturbing the rights of non-human beings who share the land.

Other strategies involve adapting the environment to suit human needs. Among arctic societies alterations to the physical world have included the temporary damming of rivers and construction of fish weirs, but their activities have usually tended to respect the earth as it is. Instead of changing the physical world, they have concentrated on changing the metaphysical world to meet their needs. Their worldview identifies animals as the ultimate source of human subsistence, and characterizes them as other-than-human persons with immortal souls, self-consciousness, omniscience, and the ability to reincarnate. The belief system also acknowledges the influence in human affairs of the spirits which animate weather and land. Eskimo-Inuit societies, have, therefore, invested considerable intellectual and

spiritual effort in understanding the natural order of things and manipulating the metaphysical world, as well as bringing themselves into harmony with it. Because of their "severe and demanding" physical environment, Keewatin people in particular recognized that "simple physical exertion for the sake of survival would be insufficient," and turned to "the primacy of thought" as a means of manipulating the environment, "something which requires considerable intellect and spiritual strength" (Williamson 1974:20).

The preferred strategies for reducing economic uncertainty and risk were, for the most part, complementary. Mobility supported routine activities like long-distance harvesting, diversification, trade, and visits to trading posts, whaling stations, and distant friends in order to seek relief or reinforce ties. It also enabled territorial expansion and relocation. Storage encouraged trade by producing tradeable surpluses in most years. Some strategies could not be invoked simultaneously: the fundamental and ultimately insoluble problem faced by Keewatin Inlanders after 1915 was the incompatibility of storage-dependence with the mobility requirements of trapping, long-distance harvesting, and trade.

Knowledge of the environment and information about current conditions were as important to choosing appropriate strategies as they were to identifying threats to survival. Seasonally recurring, short-term, predictable shortages of some resources were always assumed and planned for by arctic peoples. Decisions about storage and diversification in times of seasonal scarcity depended on current information, such as precisely where caribou were at the moment. Knowledge of similar situations in the past was critical to predicting the consequences of particular choices.

Relevant information and knowledgeable individuals were highly valued. People who spoke other dialects or languages, for instance, and could collect information from and about neighbouring communities were assets to the group. Often they attained "positions of power" because of their usefulness to the group and because they controlled the spread of information (Correll 1972:119). Well-travelled women and men were esteemed for their contributions to geographical knowledge, mapping skills, and the information they had about other societies. As George Lyon

noted, "The importance assumed by a great Eskimaux traveller is fully equal to that displayed by Europeans who have seen the world" (Lyon 1824:342).

Shamans were also highly valued by their communities, and often achieved status and power because of the special knowledge which enabled them to predict environmental conditions and to manipulate the metaphysical world. Given the Eskimo-Inuit belief that human success and survival depended on human beings occupying their proper places in an orderly cosmos, shamanistic ability to identify sources of disharmony with the spirit world and restore the balance was essential to effective subsistence activities. Although shamans dealt with taboo problems and healing, most shamanistic work focused on "the basic function of the Eskimo society, that upon which their whole survival depended -- hunting" (Williamson 1974:27).

As was the case with linguists, travellers, navigators, and shamans, elderly "uncertainty specialists" were appreciated as repositories of knowledge which had survival value and contributed to the security of the community. Contrary to the widespread and inaccurate notion that Inuit societies routinely practiced geronticide, mature and elderly individuals in many Inuit communities had "important roles as educators, experienced persons, and decision makers when [the community was] faced with uncertainty" (Binford 1991:132).

In the course of growing up, every Inuit lived through a dozen or more periods of short-term scarcity, and even as a child would have been able to predict recurring seasonal shortages and choose the correct course of moving from fish camp to caribou crossing, or from winter sealing village to spring bird nesting site. Environmental fluctuations, such as the once in five years average failure rate of the whale hunt and the fifteen to twenty-year distributional cycle of caribou (Minc 1986:71; Vibe 1967) also occurred frequently enough that most members of a community would have been able to predict the consequences in terms of food availability and accessibility, and decide on appropriate action. Other periods of scarcity were less frequent, sometimes occurring only once or twice in a single lifetime.

Whether the cycle of recurrence was as short as a season or as long as a generation, most communities had someone who remembered similar events. As repositories of essential information who knew from experience how to recognize threatening situations, how to predict their consequences, and how to choose suitable responses, they were lifesaving assets in communities faced with a threat to resources. Information within living memory could be transmitted verbally throughout the community, and appropriate decisions made with a fair degree of certainty that the chosen strategies would work. Recognizing a developing problem and knowing the options in cases of sudden catastrophic shortage or when a situation was so rare that it occurred only once in every three or more generations was another matter.

General studies in community extinction and survival have concluded that the ability to store and transmit information about potentially dangerous situations is critical to long-term survival (Cove 1978:243-244; Laughlin & Brady 1978:231). Societies which do not save information in written records must develop means by which infrequently needed but essential information can be stored, and retrieved by future generations when required. Transmitting knowledge through several generations is more problematic than the face-to-face transfer of data from experienced teacher to inexperienced learner, not least because intervening generations need to recognize the importance of passing on information even though they may not have to use it themselves. The Eskimo-Inuit solution apparently was the elegant one of encoding information in stories.

Leah Minc's analysis of fifty-four Inupiat stories identified recurring themes which reflected "strategies and social mechanisms for coping with environmental stress" (Minc 1986:80). The stories contained more than 450 references to storage, pooling of resources, and sharing within the community as solutions to the problems of seasonal shortages. Seventy-eight references were made to failures of a primary food source over an entire season, along with suggestions that expansion of hunting range, relocation to nearby territory, increased use of alternative resources, and application for relief from kinsmen in other communities were appropriate ways to deal with the problem. Seven themes relevant to problems of long-term shortages

which could be solved by migration to more distant territories were repeated fifty-nine times. The stories made it clear that even temporary use of the resources of unrelated communities depended on pre-existing diplomatic, trade, and feasting relationships (Minc 1986).

A fourth recurring theme encoded specific environmental information as well as solutions to the problem. For example, a creation myth linked declining numbers of inland animals to increasing cold, suggested that the rate of growth of spruce trees was a reliable indicator of deteriorating climate, pointed out that caribou herds were likely to disappear from a large area for a long time, and recommended relocation to the coast and reliance on marine mammals as appropriate action (Gubser 1965:33-34, 43-42; Minc 1986:90-91; Rasmussen 1952).

Oral tradition, that is, "oral testimony transmitted verbally from one generation to the next or more" (Vansina 1971:444), differs from ordinary verbal transfer of information in that it is institutionalized (Minc 1986:74). Storytelling rules among Inupiat, Yup'ik, and Greenlanders required that stories be prefaced by a statement of their factuality. Inupiat and Yup'ik distinguished clearly between true stories and fiction. All Greenlandic stories were said to be true or partly true.¹ Narrators were required to meet two other conditions in storytelling: they were expected to tell more than one story at a session, thus increasing the number of tales

¹Inupiat true stories, *oqaluktoq*, are placed in historical time as "very early days," "early days," or "personal memory" of the narrator. Fictional stories, *unipqaq*, never have a time reference and are clearly not intended to convey accurate information about the past (Gubser 1965:28-29; Hall 1975:39; Rainey 1947:269).

Yup'ik true stories, *qanemcit*, are historical narratives "grounded in the experience of a particular person, whether that person is living or dead." They are "based on the narrator's personal knowledge, either direct or transmitted by persons to whom living men and women can trace a relationship" (Fienup-Riordan 1990:128-129, 244). Yup'ik mythical stories, *qulirat*, are "part of the experience of ancient ancestors and never involve particular individuals definitely believed to have existed" (Fienup-Riordan 1990:128-129).

All Greenlandic stories are said to be grounded in historical fact. The ancient tales, *okalugtuat*, have no time reference, and are estimated to be anywhere from two hundred to a thousand years old. *Okalualarutit* are stories whose origins can be traced to actual historical events within six generations (Knuth 1963:209-210; Rasmussen 1930b:111; Rink 1875:83-86).

in circulation and providing multiple opportunities for them to be heard; and they were, at least in theory, expected to tell the stories exactly as they had heard them, thus reducing the chances of error (E.S. Hall 1975:39, 410; Minc 1986:76-77).

Examination of Alaskan stories suggests that time depth is an indicator of secular and sacred truth; stories identified as ancient are more likely to contain divinely sanctioned imperatives than stories about more recent times (Minc 1986:75, 78, 87). They embody broad truths about broad topics, even if the details are fictional, partly fictional, or a combination of elements from different factual histories.

To ensure that the economic options prescribed by the stories would be used, Eskimo-Inuit societies embedded imperatives in their belief systems. The need to store supplies in quantities large enough to carry a community through a period of scarcity was reinforced by a worldview which denied the possibility of overkill. Inuit cosmology explained death, not as an end to life, but as a recurring event in a continuous existence in which individual essences (souls) were constantly reborn (Williamson 1974:21-28). Like human persons, animals had souls capable of being constantly reincarnated. Animals were, therefore, an "infinitely renewable resource" (Fienup-Riordan 1990:172). Out of their spiritual goodness, and in return for respect and gratitude, animals offered themselves repeatedly as sustenance to humankind. Disrespect, mistreatment, or refusal of an animal spirit's gift were insults which inevitably caused it to withdraw its offer, and may have resulted in other animals withholding themselves from human beings as well. Only if their gift of life was respectfully accepted would animals continue to make themselves available for killing. In practice, the ideology required that all animals who came within the purview of the hunter had to be killed.

Belief in the infinite renewability of animal resources was, to some degree, part of Eskimo and Inuit worldviews from Siberia to Greenland (Stefansson 1943:163), and remains so among many groups in the late twentieth century. As Ann Fienup-Riordan pointed out in her discussion of Yup'ik hunting practices, the belief that animals could not be overhunted was correct throughout most of aboriginal times,

but only because human demands on herds were limited by relatively small numbers of people (Fienup-Riordan 1990:188-189). When material circumstances change and the worldview which supports economic imperatives does not, the practical intent of the ideology may be subverted to the point of contributing to disaster.

Precisely such a situation occurred among the communities of the west coast of Hudson Bay during the second half of the nineteenth century. The slow, steady increase of the human population which began with the arrival of immigrants from Coronation Gulf some time after 1680 had, by 1850, resulted in a population large enough to require separation into three discrete bands. After 1850 the increased needs of even larger numbers of southern Keewatin people as well as of Qairnirmiut, Aivilingmiut and immigrant Netsilingmiut in the north led to the routine use of muskox as a substitute for caribou. Motivated by severe deprivation and confident of the continuous renewability of the herd, the west coast bay people pushed the muskox herds to the edge of extinction. As a result, there was a real possibility after 1915 that the southern Keewatin Inlanders also might disappear as a community. The ideology which had prescribed hunting practice for thousands of years, and which was credited with the survival of numerous small societies over millennia, was counter-productive in the face of larger populations and extreme deprivation.

In addition to using subsistence strategies to reduce uncertainty, communities recognized some kinds of social behaviour as having greater survival value than others. Inuit informants assisting in anthropological fieldwork after the mid-twentieth century have reported that sharing and hospitality were among the most highly valued traits of Eskimo societies. The survival value of generosity and open-handedness in times of food shortage is obvious, provided that sharing serves to redistribute quantities of food sufficient to sustain life among all participants. As triage it is inadequate. When food supplies are insufficient to provide a minimum number of calories for all members of the community, unrestricted sharing is more likely to ensure death or permanent disability for most people than to guarantee the survival of either individuals or social units. Sharing as a universal and open-ended imperative becomes counterproductive under some circumstances.

Unlike ethnographers after the mid-twentieth century, nineteenth century eyewitnesses to Inuit activities noted sharing in the breach more often than in practice. When it occurred it was in the context of public obligation, rather than private morality. Edward Parry recognized the reciprocal nature of sharing among Iglulingmiut:

Anything like a free gift is very little, if at all, known among them. If A gives B a part of his seal today, the latter soon returns an equal quantity when he is the successful fisherman. Uncertain as their mode of living is, and dependent as they are upon each other's exertions, this custom is in the evident and unquestionable interest of all. The regulation does credit to their wisdom, but has nothing to do with their generosity (Parry 1824:190).

Parry's observations also suggest that there were well-defined limits to the sharing unit. Hospitality, he thought, would not be freely extended to strangers or destitute persons "unlikely soon to repay them" (Parry 1824:193). John Davis's experience in 1586 indicates that the people of Cumberland Sound did not expect gifts either; when Davis gave them knives at their first meeting, they tried to give him skins in exchange. When John Ross presented the men of Netsilik and Arvilikjuaq with iron hoops at their first meeting in 1829, they immediately reciprocated by inviting him and his crew to feast in their homes.

The idea that resources of all kinds are shared only within closely defined sharing units and that rules govern distribution is explicitly or implicitly expressed in the observations of all the eyewitnesses. At Cumberland Sound in the 1880s, Franz Boas was sceptical about sharing as a universal imperative. He saw it mainly in the context of hunting partnerships in which several men hunted together and shared the catch. Shares were, however, not necessarily equal; there were rules to decide which of the hunters actually owned the animal, and how much he was obliged to give away. Beyond the hunting partnerships, meat and blubber were shared within extended family groups, but only when food was scarce (Boas 1888:173-174). Rules for seal sharing at Pelly Bay in the present century were essentially the same (Van de Velde 1956).

Diamond Jenness came to similar conclusions during the investigations of the Canadian Arctic Expedition of 1913-1918 among the Copper Inuit, noting that "a thing would not be offered unless it was expressly asked for, and then the transaction would become ordinary barter" (D. Jenness 1923:90). Among northern Alaskans, sharing was "limited to the household ... rare between households" (Binford 1991:28). Investigations of sharing among hunter-gatherer societies in general indicate that "widespread day-to-day sharing" is neither practiced nor practical because it "may preclude the storage of food to counter seasonal shortages" (O'Shea & Halstead 1989:124).

What, then, is the source of the widespread belief among both Inuit and non-Inuit that arctic societies were open-handed and generous with possessions and resources? Another look at Leah Minc's analysis of myths and folktales with attention to their time frames suggests some possible answers. As noted earlier, the stories address problems of resource scarcity in three time periods: seasonal, inter-annual, and long-term. Seasonal refers to the predictable short periods every year when a particular resource was scarce, for instance the period of two months or so in early winter after the caribou had gone but before sealing could begin. Inter-annual refers to the more serious scarcity of an expected resource which either did not appear at all or was inaccessible. The complete failure of the seal hunts along the southern Keewatin coast in 1860 and 1862 are examples (HBCA:B42/b/61:65d; B42/a/189b:47). Long-term crisis refers to periods of longer than a year in which the total of all available resources was insufficient (Minc 1986:75, 79-82), that is, deprivation on the scale which prompted the migration of Coronation Gulf people to west Hudson Bay at the end of the seventeenth century, and the near fatal scarcity experienced by their descendants in the Keewatin interior after 1915.

Stories that advised sharing and generosity did so only in reference to the regularly-recurring (and therefore predictable) local scarcities of a season's duration. Sharing was never suggested as an appropriate response to inter-annual or long-term shortages, or to geographically widespread scarcity. As well as recommending storage and diversification as the most effective economic strategies for getting

through seasonal scarcities, the stories identified social attitudes appropriate to the situation. The prescribed behaviours taken together come close to the popular image of Eskimos: be cheerful, show respect for others, cooperate, work hard, maintain good relations with the spirit world, marry in order to have someone to help with the work, have children to comfort and care for you in old age, stay on friendly terms with all your relatives, be charitable when you can, be suspicious of strangers, and stay out of unknown territory.²

The list of recommended behaviours was the cultural ideal for conduct within the residential family group in times of mild deprivation over the short term; it did not necessarily apply in times of abundance or in times of serious deprivation over the long term; and it never applied to strangers. Of course, the cultural ideal in any society is always tempered by human emotion. People love, and they share because they love. In their families and face-to-face societies they know each other, care about each other, and out of love, they give. However, for Inuit, specifically the people of west Hudson Bay, love has implications beyond affective relations. It always implies commitment and acceptance of responsibility for the well-being of the loved. The reverse is also true: to be unable to take care of someone is expressed as being unable to love them (Williamson 1974:55-56). Love, because it cannot be separated from commitment, must necessarily involve sharing. Inability to share/care for, which is expressed as being unable to love, does not mean that affective emotion is missing. Being unable to love/care for is a source of intense grief and emotional pain to parents, children, spouses, and companions in times of extreme deprivation when there are simply not enough resources to go around. The imperative to share, and therefore to love and take responsibility for, cannot be extended without limits.

²Only myths and folktales known to have been collected in the field from Eskimo or Inuit informants have been used. Published collections which meet the criterion appear in: Reports of the Fifth Thule Expedition, Reports of the Canadian Arctic Expedition, and in Boas (1888a, 1901, 1907); Ellanna (1988); Gubser (1965); E.S. Hall (1975); Imgalrea (1984); Kappi (1977); Jenness (1926); Metayer & Nanogak (1972); Murdoch (1886); Nanogak (1986); Nololnigee (1972); Nungak (1988); Oquilluk (1973); Rink (1875). In addition to the analysis which appears in Minc (1986), see Rowley (1985b).

Some kinds of behaviour were threats to the security of the community. In spite of the statements of some observers that Inuit did not possess a coherent body of law or a system of enforcement -- consider, for example, Jenness's statement that Copper Inuit society was "without law-courts, judges or chiefs, without laws even," and "for minor offences, therefore, such as theft and abduction, there is no remedy" (D. Jenness 1923:94) and Boas's comment that "there is no way of enforcing these unwritten laws and no punishment for transgressors except the blood vengeance" (Boas 1888:174) -- Inuit law was a reality. Its purpose was not to ensure justice for individuals, but to maintain harmony within the community, and between the community and the spirit world. In light of the earlier discussion of worldviews and the relative positions of animals, land, and human beings in the natural order of things, the importance of maintaining correct relations with the spirit world is obvious. Behaviour which offended animals or weather spirits put the community at immediate and life-threatening risk of losing its food supply.

Continuing harmonious relations of individuals within the community were equally important. Given that most Inuit communities consisted of a dozen or so individuals living in constant close contact, often under conditions of uncertainty and stress, minor disagreements, grudges, or even the annoying personal habits of one person, could lead to open animosities and failures of cooperation which could be dangerous to the community. Liars, layabouts, braggarts, loud-mouths, know-it-alls, misers, debtors, and whiners were as likely to be classed as "social nuisances" as murderers were, because they made "life uncertain and their unpredictable attitude [worked] disruptively in the daily routine" (Steenhoven 1968:82).

Means of enforcing the peace included shaming, shunning, banishment, abandonment leading to death, and execution. Public ridicule and ostracism were the most frequently used methods of social control, and generally had the desired effect of keeping people cooperative (Balikci 1970:185, 192; Fienup-Riordan 1990:212; Steenhoven 1959:60; Steenhoven 1968:79-84; Williamson 1974:47-49). Harsher means such as banishment and execution were resorted to only in cases where anti-social behaviour was perceived as a continuing threat to the community.

Banishment was common enough among Netsilingmiut that an outcast community existed at Bellot Strait. Some of the (male) murderers and wife-abductors who lived there with their families had been exiled by their communities; others were fugitives hoping to escape the vengeance of their communities or their victims' relatives (Balikci 1970:129, 182; Rasmussen 1931a:88; Steenhoven 1962b:97). Murderers were cast out of the community or killed, not out of desire for retribution, but in order to prevent enmity and vengeance from escalating to the point where the community might suffer the loss of needed hunters (Balikci 1970:182), seamstresses and child-bearers.

Among the several dozens of cases of murder described in the ethnographic literature, social sanctions were never taken against a murderer if the community believed that she or he would not do it again. A case in point is that of Idjuadjuk, a Padlirmio, who killed an entire family which opposed his marriage. The community did not act against him, on the grounds that after he had found a wife he was satisfied and was unlikely ever to commit a similar offense (Steenhoven 1968:82). A second illustrative case is that of Krittark, an old Netsilingmio, who was killed because the community suspected her of sorcery which caused her son-in-law to have bad luck in the hunt (Rasmussen 1931a:143-144; Steenhoven 1959:51). While both of the above incidents took place at the beginning of the twentieth century, the attitudes they imply were noted in the eighteenth by Andrew Graham: "They punish no transgressors with death, [except for] murderers and such conjurers and witches as are reported to have bewitched others to death" (Graham 1791:223).

The Inuit attitude towards crime and punishment has been neatly summarized by Birket-Smith:

In essence it is not the mission of the community to execute law and justice, but exclusively to restore peace.... On this basis the settlement may, for instance, combine in killing a man or a woman suspected of witchcraft, for such persons are a menace to the peace of the community. The killing is not, however, a **punishment** for the practising of witchcraft, for the community may in the same manner get rid of a man with a wild and brutal temperament, or of old or sick people who are a burden upon the settlement (Birket-Smith 1936:156. Original emphasis).

Much of the scholarly literature describing Inuit social organization has remarked on the absence of institutionalized leadership. Inuit historians think otherwise. "There were bosses way before the white man ever came" (Kananginak Pootoogook. In Harley 1986:9), but they did not rule or enforce rules. They were chosen because they had skills which enhanced the community's chances of survival. "The best hunter in a camp would automatically be boss because he was the main support" (Kananginak Pootoogook. In Harley 1986:9). Usually their influence was restricted to their own residential kin-based communities, and lasted only as long as the physical community did (Pitseolak 1975:77). Leaders appeared when extended families moved away from band aggregations in seasons of scarcity, and set aside their limited authority when dispersed groups came together again. When chiefs were chosen to deal with special problems, their tenure was often of even shorter duration: Catchoe assumed authority as a leader, for instance, only after the events at Jackman Sound had confirmed that Martin Frobisher's 1577 mining expedition was well and truly a threat. George Best's description of the 1577 encounter clearly portrays the concerted action of men following the plan and the orders of their military leader, Catchoe, but suggests that Catchoe's authority was limited to conditions of war.

Close to two and a half centuries later on the west coast of Hudson Bay, Augustine described

two great chiefs, or *Ackhaiyoot*,... who directed the movements of the party ... [with the help of] the *Attoogawnoeuck*, or lesser Chiefs,... [who were] respected principally as senior men. The tribe seldom suffers from want of food, if the Chief moves to the different stations at the proper season (Franklin 1823:263).

Were the *ackhaiyoot* actually *angakot*, shamans? A shaman's ability to create harmonious relations between humans and the spirits on which their lives depended was a solid basis for the recognition of authority. If they were personally popular, they were respected and had considerable prestige. Whether they were liked or not, they were powerful within their communities.

Most eyewitnesses noted the existence of chiefs, headmen, and other leaders in Inuit communities in periods before outside influences were present. "The Eskimo

respect for power is not a post-Kabloona phenomenon," wrote one observer (Vallee 1964:411). Throughout the nineteenth century the Hudson's Bay Company traders at Churchill made frequent mention of chiefs among the southern Keewatin communities, and in the 1890s Captain George Comer noted leadership roles among the Aivilingmiut. One chief, Coonic Charley (Kunuksialuk?), was succeeded by his son Albert, and then by a grandson Tesiaq. The latter was recognized as a leader "on account of his ability," wrote Comer, but Tesiaq had also apparently been nominated as a future leader by his grandfather (Boas 1901:115).

Generally speaking, leaders were experienced adults who had proven themselves to be good providers and who managed their own families well. They were physically strong, skilled in hunting or in the spiritual manipulation of animals and the environment, knowledgeable in matters pertaining to subsistence, and able to maintain peaceful relations within the community (Burch 1988b:23-24; Hickey 1979b:424). In short, they were people who had made or were capable of making significant contributions to the security and prosperity of the community. They were usually, but not always, male. In south Baffin Island, a woman was the chief or leader of a band for many years in the 1920s and 30s (Fleming 1957; Maxwell 1979:84).

According to the ideal, they could suggest but not command, and enforcement of customary law was not their business. All decisions were ultimately made by the community, but leaders could be asked, or instructed, to carry out the community's judgments. For example, "people who have made themselves obnoxious are disposed of by common consent" (Boas 1901:117), but leaders were often "sought for in the settlement of disputes and sometimes [to] act as public executioners" (Payne 1890:359).

Leadership was always provisional, lasting only as long as the community required the special skills of an individual, and approved his actions. Public recognition of an individual's proven ability, wealth as an indicator of competence, reputation for honesty and wisdom, and non-abrasive leadership style were factors

which predisposed communities to choose a particular leader, but chieftainship lasted only as long as it reflected public opinion (Fienup-Riordan 1990:202).

Risk reducing behaviour such as the economic strategies of storage and diversification, and social conduct which included sharing, hard work, and an uncomplaining attitude, centred on enhancing the survival chances of the residential group over the short term. Law and leadership focused on achieving the same goal. Inuit, however, were frequently faced with crises of greater magnitude which could not be managed within the face-to-face community or even within the confines of its territory.

Inter-annual and long-term shortages could only be dealt with through the importation or use of resources from other areas. The prescriptive stories recommended the expansion of hunting range into nearby territories, preferably unoccupied ones, or relocation, either temporary or permanent, to nearby territories, again preferably unoccupied ones (Minc 1986:81). The stories assumed that intrusion or relocation to unoccupied zones were not likely to create serious problems, but contact with strangers would. The social mechanisms suggested by the encoded instructions for use of new territories were all concerned with the problems of strangers.

As has already been pointed out, the great majority of stories dealing with encounters between Inuit and strangers identify strangers as murderers or monsters intent on doing harm (Boas 1888; 1901; 1907; D. Jenness 1924; Minc 1986; Rowley 1985a:16-17; Stefansson 1921:426). Eyewitness accounts readily and consistently confirm that attitude. Inuit reactions to the appearance of Europeans in their homelands in the sixteenth and seventeenth centuries were immediate and violent, as were their responses to their Indian neighbours. As a Copper Indian warned Robert Hood in 1821, "the Esquimaux had never met a stranger who they did not find an enemy" (Hood 1822:132-33). The conviction that strangers were always a danger applied to other Inuit as well as to Indians and Europeans. Copper Eskimo communities described Netsilingmiut as "cruel, bloodthirsty people" (D. Jenness 1923:49), as did the Aivilingmiut, and in both cases the feeling was returned in full

measure (Gilder 1881:66). Fear of strangers was so strong that it was common practice for people to carry amulets as protection (Rasmussen 1927:184-185).

"One would think that in these waste and desolate regions," wrote Knud Rasmussen, "they would feel pleasure when they came across people who could be company for them; far from it" (Rasmussen 1931a:202). Like sharing, friendly social relations were restricted to the residential kin group. In situations where food supply was often limited, and always a source of concern, the mere presence of strangers could have been seen as competition for resources, both on the hoof and in the cache. The extension of sharing privileges beyond the small circle of procurers and their families could reduce supplies and endanger the community. While insiders, that is, members of the immediate community, could hunt anywhere within the bounds of the territory a collective considered its own, strangers could not (Klutschak 1881:200; Whittaker 1937:75).

The underlying reason for the worldview which proclaimed strangers to be dangerous was apparently economic. To keep strangers away was equivalent to safeguarding food and other important resources for one's own use. Inuit did not carry food with them when they travelled; they hunted as they went. If the people of Frobisher Bay in the 1570s assumed that their visitors planned to do the same, they had solid grounds for anxiety. Taking Frobisher's boat in 1576 may have been an attempt to protect resources by taking away the strangers' ability to hunt seal or whale. By preventing Frobisher's men from setting foot on the mainland, which they did with great success in 1578, they made sure that the strangers could not take food resources, or gather information about the nature and extent of local resources. The demolition of John Davis's boat at Cumberland Sound in 1587 was another case of people destroying the means by which strangers could harvest the resources of the country. Both responses were similar to the actions of Labrador people during the attacks of 1718-20, when their destruction of boats and other hunting equipment effectively prevented Europeans from pursuing whale and seal.

Recognition of strangers was easy; the myths identified a stranger as any person who was not a member of the face-to-face community. However, cultural

wisdom and pragmatism also insisted that in periods of long-term or critical food shortages the only means to survival might very well be through interactions with strangers. The problem then became how to make strangers into non-strangers. The solution, again according to the stories, was to accommodate the largest possible number of individuals in the category of family, and to recognize or create relationships other than kinship.

Most Eskimo kinship systems included members of father's family, mother's family, spouse's family, and adopted child's family, to the greatest extent that they were known (Damas 1963, 1972b:41; 1975b; Guemple 1972:67, 1979:35). Kinship was also recognized in name-sake practice, spouse-exchange, and life-giving practice: individuals who shared a name shared a soul and were therefore related (Guemple 1965:327; Riches 1982:85); individuals who exchanged spouses widened their kinship circle by accepting responsibility for each other and for children born or adopted by any of the participants (Guemple 1961; D. Jenness 1923:85-86); individuals who were delivered by the same midwife, "she who makes," were related at the in-law level, and also had special lifelong relationships with their "cultural mother" and her kin (Saladin d'Anglure 1984:494; also Guemple 1972:67). Every member of a network could, at least in theory, turn to every other member for assistance in time of need.

Besides the relationships which were recognized as familial, Inuit created economic alliances which bound individuals together in non-stranger relationships: among Netsilingmiut, unrelated men entered into seal sharing partnerships (Van de Velde 1956); Copper Inuit males created partnerships for hunting, seal sharing, and rifle sharing, and like other Inuit made socially recognized agreements of friendship endorsed by dancing, singing, or joking (D. Jenness 1923:86-87); among Mackenzie and Copper Inuit trading partnerships were of primary importance in creating safe ways to approach men from other groups (D. Smith 1984:354). The nature of relationships and partnerships varied from group to group across the arctic. Keewatin Inuit, for instance, emphasized biological, adoptive, and in-law kinship, and gave less importance to partnerships with non-kin than some other groups did (Arima 1984:455).

While recognition of different degrees of kinship and the creation of friendship agreements made it possible to function among known strangers by converting them into non-strangers, there remained the problem of unknown strangers. Means were needed for dealing with the unexpected appearance of strangers with whom there was no pre-existing rationale for laying aside suspicion. A greeting protocol for just such situations has been widely described by eyewitnesses. It required that the strangers show evidence of friendly intent by laying aside their weapons or otherwise offering proof that they were unarmed. Local people then tested the intentions of the strangers by sending one of their own as an emissary-*cum*-hostage, or as George Lyon put it, "a kind of herald" (Lyon 1825:55). It helped a great deal if the strangers showed some familiarity with the language.

The emissary was usually an old woman, sometimes an old man or a lame person, and occasionally a child (D. Jenness 1928:51-52, 121; Lyon 1825:55-56; Rasmussen 1927:116; John Ross 1835:27, 169-170). Observers believed they were chosen because they were relatively non-productive members of the community. "If our designs had been hostile, and we had killed the old woman," concluded William Gilder of the Schwatka expedition, "their fighting strength would not have been reduced, and it would only have been one less old woman to care for" (Gilder 1881:83-84).

The greeting protocol was called into play only when meetings took place between people who were genuinely uncertain about each other's intentions. People who were already known to each other, even by reputation, were not bound by the rules even when formal alliances or kinship did not exist between them. Inuit greeted John Rae at Repulse Bay in 1846 and Leopold McClintock at Admiralty Inlet and Boothia Peninsula in 1857-58 casually and without ceremony, because, as McClintock noted, "they evidently knew us to be friends" (McClintock 1859:260). In some communities, even those which had never before met Europeans, white men were accepted as non-strangers. William Gilder described the meeting of Schwatka's party with Utkusiksalingmiut in 1879:

They carried their bows in their hands, with arrows fixed to the strings; but when the old woman [emissary] shouted back that the strangers were white men, they laid aside their arms, and received [us] in a friendly fashion (Gilder 1882:32).

One of the members of the party, Equeesik, suggested that a gun be fired to signal their approach. Gilder concluded that it was the firing of the gun, and "the knowledge of the effect of the white men's fire-arms [which] protected [us] from attack" (Gilder 1882:32). It could also have been because white men had never been known to cause bodily harm to Inuit, and were generally accepted as friendly and peaceful, albeit marginally human, persons.

Correct greeting etiquette in all its prescribed detail was adhered to, in most cases by chance, in the peaceful encounters between Inuit and Munk in Hudson Strait, Bylot at the Savage Islands, Parry and Lyon at Melville Peninsula, Lyon at Southampton Island, the Rosses in Boothia Peninsula, Back and Anderson at Great Fish River, McClintock at King William Island, Schwatka at King William Island, and Hanbury at Adelaide Peninsula. In each case, although the Inuit were meeting white men for the first time, they had previous knowledge of them, and quickly exempted them from the category of strangers to be feared.

The parties of John Davis near Cape Chidley in 1586, John Knight at Cape Grimington in 1606, and Thomas Button at Digges Island in 1612, all of which were attacked by local people, did not follow correct greeting procedures. As well, the Inuit were meeting white men for the first time, and probably did not have prior information about them. In each case, the new arrivals were taking the food resources of the country -- the Davis and Knight parties had been fishing just offshore, and the Button crew had been collecting eggs and netting birds -- without the permission of the owners and without having established their credentials as

friends and allies.³ To the Inuit it would not have mattered that the strangers were unaware that the land was inhabited.

Some communities had mechanisms for converting their own people into strangers. The banishing of partly acculturated women and their mixed-blood children from Greenlandic societies is one example. The murder of the little Labrador boy by his people "for being half French and half stranger" (M. Trudel 1960:81) is another. Explanation of the rejections on economic grounds fails to convince: many of the outcast Greenlanders had rights in their husband's and father's estates guaranteed by the Danish government; no evidence is available to suggest that the little Labrador boy was unwelcome because he returned to his family in bad economic times. The practice does not seem to have been widespread -- either it did not occur elsewhere, or it was unobserved and unrecorded. The young apprentices who wintered at Churchill post in the eighteenth century and the men who were employed there in the nineteenth were certainly not repudiated by their communities. Nor were the dozens of people who willingly accompanied ships' captains to London, New York, Boston, Edinburgh, Copenhagen, and other European and American cities over several centuries. Two possibilities comes to mind, unsupported by evidence and purely speculative; the half-strangers may have been rejected because they were not educated in Inuit ways, and were therefore perceived as unproductive and likely to become burdens on the community, or because their ignorance of Inuit ways introduced disharmony which put the community at risk; or the incidents may have been the results of events or conditions specific to the people and communities involved.

Economic and social strategies for reducing uncertainty and ensuring community survival carried with them implications for both change and continuity. Prior to 1860, inter-group trade among the communities of Melville Peninsula, the

³An encounter which does not fit the pattern was between Abacuck Prickett's party and Digges Island people in 1611. When the *Discovery* arrived at the island, its crew apparently observed correct greeting procedures, and went bird hunting at the invitation of the local people. The attack on the English sailors the next day took place during trading.

southern Keewatin, and the Boothia and Adelaide Peninsulas served to enhance survival, as the cultural wisdom encoded in myths and stories intended, but had little influence for change in opinions or in practice.

Because of the widespread uniformity of worldview, trade between Inuit communities was an unlikely vehicle for the introduction of new ideas. Meetings between Indians and Inuit were also poor vehicles for changes in intellectual culture: they were either violent encounters in which material items might change hands at the same time that negative emotions were reinforced, or they were so fraught with suspicion and anxiety that little exchange of ideas was possible. The introduction of new ideas in the course of trade with Europeans was also extremely limited because of the brevity and infrequency of contact.

Because of similarities in environment and subsistence practices, the exchange of material goods did not encourage change in customary practices either. For example, from the beginning of the eighteenth century, the communities of Melville Peninsula exchanged walrus hide and sinew with the people of Chesterfield Inlet in return for wood. As a result the more northerly groups were able to make kayak frames, harpoon handles, and tent poles more easily and in greater quantities. Without trade, they would still have managed to make whatever implements they needed. The Chesterfield Inlet communities benefitted from the longer-wearing boots and tougher cord they received in trade from the north, but had there been no exchange, they could have provided for their needs by some other means. The goods traded from Churchill post were similarly insignificant as agents of change. The knife blades, metal awls, and kettles acquired through trade allowed for more efficient performance of work, but in no case did the introduction of new material goods lead to changes in subsistence practices or social organization.

Extensive use of storage as a survival strategy encouraged continuity rather than change. One of the consequences of storage-dependence was a high degree of sedentarization, which reduced opportunities for trade and travel, and supported relative isolation. There was always some travel undertaken by individuals and

families in order to trade, seek spouses and children, exchange information, and keep up friendship and kinship ties, but no large scale mingling of distinct communities.

Of all survival strategies employed by Inuit the practice of mobility arguably had the greatest potential for significant social change in the period between 1650 and 1940. The strategic objective of mobility, whether seasonal, or in connection with temporary or permanent relocation, was to bring people and resources together in one place. The permanent relocation of Coronation Gulf people to Chesterfield Inlet in the late seventeenth century and the subsequent peopling of the southern Keewatin, is one example.

Division of communities in times of shortage, implicit in seasonal mobility, encouraged permanent separation in times of increasing population and the search for additional resources. Residence at alternate locations sometimes became permanent, as happened to Augustine's people between 1820 and 1860. In the case of the Keewatin Inlanders, relocation meant new sources of subsistence and the loss of connections with the sea.

The temporary relocations of Netsilingmiut to areas close to abandoned ships in the 1840s and 50s, and of Ugjulingmiut to Great Fish River as a result of famine and Netsilingmiut incursion in the same period were facilitated by the Inuit recourse to mobility as a first response in cases of deprivation. Netsilingmiut efforts to protect the windfall represented by the abandonment of John Ross's *Victory* left their mark in attitudes of hostility and increased suspicion towards other arctic groups, opinions which other groups returned in full measure. In 1830, Netsilingmiut villages had included many women and men from other groups, as spouses, immigrants, and visitors. By 1870, the Boothia people were generally feared and disliked. In the 1920s, Takornaq, an Aivilingmio, told Therkel Mathiassen of the Fifth Thule Expedition that

if she were to have a new husband, it was all the same to her whether he was an Aivilingmio, an Iglulingmio or a Tununermio; if need be, a Qairnermio or an Akudnermio might do; but a Netsilingmio -- never! (Mathiassen 1928b:23).

As late as 1951, Cape Dorset families who had emigrated to Boothia Peninsula in the mid-1930s refused to let their children marry Netsilingmiut. Their stated reason was that:

While the Nechilik men have shown that they would like to marry Dorset girls, and have done so in a few cases to the girl's detriment, no Dorset father will willingly allow a daughter to marry into the tribe (HBCA:RG7/1/1752).

The movement of the surviving remnant of the Ugjulik community to Great Fish River in the 1850s was reversed by the 1870s after the withdrawal of Netsilingmiut from Adelaide Peninsula and the return of the Ugjulingmiut to their former territories. After a generation of sharing territory, communities, and subsistence activities with the Utkusiksalngmiut they (re)assumed their self-perceptions of difference and distinctiveness. Between 1832 and 1860, the practice of going where the resources were resulted in temporary demographic change for the Netsilingmiut and their neighbours, and in the creation of long-lasting suspicion, but not in fundamental changes in social organization and worldview.

After 1860, strategic mobility drew some Melville Peninsula people to Roes Welcome, and the rapid emergence of the Aivilingmiut as a distinct community. The Qairnirmiut did not have to move in order to increase their access to resources; the whaleships arrived on their doorstep. Both groups became sources of relief and hosts for immigrants from Boothia Peninsula and Great Fish River anxious to participate in the new affluent societies. People had to reconcile old attitudes about strangers and group distinctiveness with new realities of culturally mixed communities. Group identities which previously had been taken for granted, perhaps because they were not threatened, became more noticeable. Aivilingmiut, Netsilingmiut, and Qairnirmiut maintained their sense of difference. The Netsilingmiut practice of infant betrothal between kin, for example, made it unlikely that female members of the group would marry out. Ahiarmiut also maintained their sense of distinctiveness by refusing to marry outside their own dialect group, although it was common practice for families to spend periods of one or two years living in other communities (Csonka 1991:458).

Occupational specialization contributed to the maintenance of group distinctiveness and mental boundaries. The Aivilingmiut were more involved in summer whaling activities than other groups, and spent less time in the caribou hunt, with the result that whaling captains depended on the Qairnirmiut for summer meat supplies and on Aivilingmiut as a labour force (Robinson 1973:111).

Evidence of Inuit activities in the eighteenth and nineteenth centuries indicates that societies tended to be egalitarian within their own confines, and that each was convinced of its own superior position relative to all other groups defined as strangers, including other Inuit. As communities expanded into previously unoccupied territory, and the empty buffer zones between them disappeared, ideologies were created in order to maintain distinctions. By the beginning of the twentieth century, each of the whaling homeguard societies -- Aivilingmiut, Qairnirmiut, and eastern Netsilingmiut -- saw itself as an elite community, superior to all the others (Freuchen 1935a:382).

After 1940, when government initiatives created more communities and populated them with people from many different regions, a hierarchy of west Hudson Bay bands was widely recognized among Inuit. The Aivilingmiut were at the top. They were more deeply involved with white men, at an earlier date, than any other group. They formed the first Inuit homeguard in the sense of Hearne's definition, and were the first to become the employees of white men on a large scale, the first to live in wooden houses, the first to learn English, and the first to produce a mixed-blood generation. In other words, the Aivilingmiut had made the most changes in their way of life. They were the first group to be identified by their compatriots as Qablunamiut, People of the White People. The mockery intended by the use of the name did nothing, however, to prevent members of other groups from giving them first place in the hierarchy of Inuit peoples.

By the 1960s, at Chesterfield Inlet, Baker Lake, and Rankin Inlet, most Keewatin Inuit accepted social rankings in which the top place was still occupied by the Aivilingmiut, followed by Qairnirmiut, Utkusiksalingsmiut and other Great Fish River people (Williamson 1974:19). The Paatlirmiut, Padlirmiut, and Ahiarmiut,

whose biological and cultural ancestors were the first to meet and treat with Europeans, were in general the last to depend entirely on the land for subsistence, the last to move into government communities, and, in the opinion of their fellow countrymen, came to occupy the lowest rung on the Inuit social ladder.

The most obvious differences between the high ranking Aivilingmiut and the low ranking Ahiarmiut were their relative economic positions and the degree to which they had instituted or accepted change. By the end of the nineteenth century, the Aivilingmiut were wealthy in terms of material possessions, and because they owned whaling boats, rifles, long wooden sleds, and relatively large dog teams, they had achieved economic security. They had been in the right place at the right time when commercial whalers appeared on their doorsteps, and they had made changes in their ways of living and earning a living in order to take advantage of the opportunities implicit in the presence of Qabluna. As the whalers withdrew, traders, police, and missionaries took their place as employers, trading partners, and occasional providers of health care and relief. Aivilingmiut, and to a lesser extent Qairnirmiut, created relations with Qabluna which ensured them of individual and societal survival. They attained the Inuit cultural ideal of economic certainty by reinterpreting the sanctified rules for life embodied in their ancient oral literature. In short, apostasy led to relative prosperity.

The southern Keewatin people, the Ahiarmiut, Padlirmiut and Paatlirmiut, on the other hand, continued to respond to the pressures of the physical environment with behaviours which were validated and reinforced by past successes, and were sacralized in their ideology and embedded in their prescriptive culture lore. The responses proved to be inadequate survival strategies in post-1915 conditions when deteriorating climate and declining herds could no longer support the greatly augmented population. In other words, fidelity to cultural imperatives and ancient worldview was maintained at great cost in individual lives and brought their societies close to extinction.

For hundreds of years, the individual and social survival of Inuit depended on faithful adherence to old strategies made emotionally bearable by an ancient ideology.

The old behaviours were created in order to maintain small, face-to-face societies of fifteen to thirty people. They required acceptance of early and painful death, frequent cannibalism, and strict population control through infanticide and suicide. The relative prosperity experienced by most central Canadian Inuit in the nineteenth century relieved them of the dreadful necessities implicit in limiting their numbers. The increased population and environmental pressures were central facts in the disasters which befell the post-1915 generation.

On the surface, the greatest of the disasters (as seen by outsider observers) was the cost in human lives. Less obviously, the catastrophe led to the traumatic realization that the ancient ideology was out of step with new aspirations and a consequent crisis of religious faith, doubts about ancestral wisdom, and loss of confidence in sociopolitical institutions. People began to question their understanding of the natural order, and the correctness of their views on the relations of human beings with each other and with other-than-human persons. The emotional strain which accompanied the destruction of the belief system was expressed by Aua, a shaman of the Iglulingmiut in 1922.

We fear the weather spirit of the earth, that we must fight against to wrest our food from land and sea. We fear Sila. We fear dearth and hunger in the cold snow huts. We fear ... the great woman down at the bottom of the sea, that rules over the beasts of the sea. We fear the sickness that we meet with daily all around us; not death, but the suffering. We fear the evil spirits of life, those of the air, of the sea and the earth,... [We fear] all the creatures that we have to kill and eat, all those we have to strike down and destroy to make clothes for ourselves ... and which must therefore be propitiated lest they should revenge themselves on us for taking away their bodies (Rasmussen 1929:56).

Aua's summation, "We do not believe. We fear" (Rasmussen 1929:54), was as descriptive of southern Keewatin and arctic coast societies in the years after 1915 as it was of the Iglulingmiut.

The contradictions between new social goals and old beliefs and practices were obvious. Old sociopolitical institutions, created to meet the needs of face-to-face communities in which decision-making was a more or less consensual process, were

no longer efficient in residential groups four and five times the size of traditional ones. Measures to reduce numbers, such as the once common practices of infanticide and suicide, were no longer emotionally or socially acceptable. But the new aspirations and expectations were in conflict with the divinely sanctioned view of the cosmos which defined animals as an infinitely renewable resource. The ideology was incompatible with increased populations in a deteriorating physical environment. The cosmic order which Inuit intellectual and spiritual leaders had struggled for centuries to understand was called into question.

The transition from Thule to Historic Inuit in the centuries between about 1250 and 1600 involved permanent socioeconomic transformation. Historic Inuit subsistence occupations, architecture, residential patterns, and resource use were profoundly different from those of their biological ancestors. In contrast, between about 1550 and 1900, most self-directed change in Historic Inuit societies and economies were surface oscillations, not long-term transformations. In the greatly altered physical environment after 1915, old strategies failed, and physical survival was possible only through extraordinary measures taken by non-Inuit agents. Continued social and cultural survival into the twenty-first century depends less on maintaining Historic Inuit lifestyles than on the ability of Modern Inuit to transform their societies in ways which are ideologically, socially and economically compatible with their cultural past.

UNPUBLISHED SOURCES

ARCTIC AND POLAR ARCHIVES, Elmer Rasmuson Library, University of Alaska (Fairbanks).

Bernard Papers. Logs of the *Teddy Bear*, 1909-1918.

Bernard Papers. Memoirs of Captain Joseph Bernard, 1959.

HUDSON'S BAY COMPANY ARCHIVES, PROVINCIAL ARCHIVES OF MANITOBA

London Letter Books

A1/35 (1740-43); A6/1-45 (1679-1870); A11/13 (1761); A11/15 (1774-91); A12/Ft. Misc/207 (1913).

Albany

B3/a/59-62 Post Journals, (1766-1770)

Fort Chimo

B38/a/1-7 Post Journals, 1832-39

B38/b/2 Correspondence Books Outward, 1834-40

B38/e/1 Annual Report, 1833

Fort Churchill

B42/a/1-196 Post Journals, Logbooks, and Meteorological Journals, 1718-1895

B42/b/44-62 Correspondence Books, 1783-1891

B42/d/1-139 Account Books, 1717-1832

B42/e/5-8 District Reports, 1827-33

B42/z/2 Census Books, 1881

Cumberland House District

B49/e/9 District Report, 1885

Moose Fort

B135/b/16 Correspondence Book, 1785

Richmond Post

B182/b/1 Correspondence Book, 1754

Rupert House

B186/b/53-56 Correspondence Books, 1845-48

Severn

B198/a/97 Post Journal, 1850

Trout Lake

B220/a/17 Post Journal, 1850-51

York Factory

B239/a/2-5 Post Journals, 1716-20

B239/b/1-3 Council Books, 1719-22

Lac du Brochet

B296/d/1 Account Books, 1875-76

B296/e/1-4 District Reports, 1890-1902

Logbooks

C1/204-205 *Beaver*, 1791-1792

C1/617-618 *Ocean Nymph*, 1866-1867

C7/175 Letters to ships' captains, 1790

District Reports

D5/12 Churchill District, 1844

D25/1-3 Cumberland District, 1886

D25/17 Cumberland District, 1894

E3/4:16 Inuit map of coast from Churchill to Chesterfield Inlet, 1809

E18/2 Journal of *California* from London, Francis Smith

F3/2:109 Inuit map of coast, Churchill to Chesterfield Inlet, 1811

General Correspondence

RG7/1/1752

Proposed Transfer of Natives to Spence Bay (Boothia Peninsula) Area from Hudson Straits. Mimeographed memo. [Undated, probably 1951 or 1952].

Letter, C.K. LeCapelain, Acting Director, Department of Resources and Development, Northern Administration and Lands Branch, to R.H. Chesshire, General Manager, Fur Trade Department, September 5, 1951.

Native Welfare Files

RG7/1/1753

General Correspondence, 1958. Letter from H.W. Sutherland to B.G. Sivertz, May 30, 1958.

PUBLISHED SOURCES

Abel, Kerry M.

- 1993 **Drum Songs: Glimpses of Dene History**. Montreal; Kingston: McGill-Queen's University Press.

Alt, B.T., et al.

- 1985 Arctic climate during the Franklin era, as deduced from ice cores. In **The Franklin Era in Canadian Arctic History, 1845-1859**. Ed. Patricia D. Sutherland. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #131. Ottawa: National Museums of Canada.

Amsden, Charles Wynn

- 1979 Hard times: a case study from northern Alaska and implications for arctic prehistory. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. A. McCartney. 395-410. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

Amundsen, Roald

- 1908 **The North West Passage**. 2 vols. London: Archibald Constable.

Anderson, Douglas

- 1968 A stone age campsite at the gateway to America. **Scientific American** 218:6:24-33.

Anderson, J.L.

- 1981 History and climate: some economic models. In **Climate and History: Studies in Past Climates and Their Impact On Man**. Eds. T.M.L. Wigley, M.J. Ingram, & G. Farmer. 337-355. Cambridge University Press.

Anderson, James

- 1855 Chief Factor James Anderson's Back River Journal of 1855. **Canadian Field Naturalist** 54:5(May 1940; 55:3(March 1941).

Anderson, Rudolph M.

- 1915 Canadian Arctic Expedition, 1913-14. In **Summary Report of the Geological Survey, Department of Mines, in the Calendar Year 1914**. Ottawa.
- 1916 Canadian Arctic Expedition, 1913-14. In **Summary Report of the Geological Survey, Department of Mines, 1914 in the Calendar Year 1915**. Ottawa.

Andrews, John T.

- 1967 Radiocarbon dating obtained through geographical branch field observation. **Geographical Bulletin** 9:2.

Andrews, John T., & Gifford H. Miller

- 1979 Climatic change over the last 1000 years, Baffin Island, N.W.T. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. A. McCartney. 395-410. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

Andrews, M., & John T. Andrews

- 1979 Bibliography of Baffin Island Environment Over the Last 1000 Years. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. A.P. McCartney. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper 88:555-569. Ottawa: National Museums of Canada.

Appleby, Joyce, Lynn Hunt, & Margaret Jacoby

- 1994 **Telling the Truth About History**. New York: W.W. Norton & Company.

Arima, Eugene Y.

- 1975 **A Contextual Study of the Caribou Eskimo Kayak**. National Museum of Man Mercury Series. Ethnology Paper #5. Ottawa: National Museums of Canada.

- 1984 Caribou Eskimo. In **Handbook of North American Indians**. Volume 5. **Arctic**. Ed. David Damas. 447-462. Washington, DC: Smithsonian Institution.

Armstrong, Terence E.

- 1978 **The Circumpolar North: A Political and Economic Geography of Arctic and Sub-Arctic**. London: Methuen.

Armstrong, Terence E., & Hugh Brody

- 1978 The term 'Eskimo.' **Polar Record** 19:119:177-180.

Armstrong, Alexander

- 1857 **A Personal Narrative of the Discovery of the North-West Passage**. London: Hurst and Blackett.

Arnold, Charles D., & Karen McCullough

- 1990 Thule pioneers in the Canadian arctic. In **Canada's Missing Dimension: Science and History in the Canadian Arctic Islands**. Ed. C.R. Harington. Vol. 2:677-694. Proceedings of the conference on The Canadian Arctic

Islands: Canada's Missing Dimension, Ottawa, November 21-24, 1987.
Ottawa: Canadian Museum of Nature.

Asher, G.M.

1860 **Henry Hudson, the Navigator; from the Original Documents....** London: Hakluyt Society, 1860.

Auger, Réginald

1987 Probabilities for a late eighteenth century Inuit occupation of the Strait of Belle Isle. *Etudes/Inuit/Studies* 11(1):47-66.

Back, George

1822 **Arctic Artist: The Journal and Paintings of George Back, Midshipman with Franklin, 1819-1822.** Ed. C. Stuart Houston. Kingston: McGill-Queen's University Press, 1994.

1836 **Narrative of the Arctic Land Expedition to the Mouth of the Great Fish River, and Along the Shores of the Arctic Ocean, in the Years 1833, 1834, and 1835.** London: J. Murray.

Bacqueville de la Potherie, Claude C. LeRoy

1722 Letters of La Potherie. In **Documents Relating to the Early History of Hudson Bay.** Ed. J.B. Tyrrell. 145-370. Toronto: Champlain Society, 1931. [Originally published in **Histoire de l'Amerique septentrionale.** Vol. 1. Paris: Nyon Fils, 1722]

Baker, R.R.

1978 **The Evolutionary Ecology of Animal Migration.** New York: Holmes & Meier.

Balikci, Asen

1964 The Eskimos of the Québec-Labrador Peninsula: ethnographic contributions. In **Le Nouveau-Québec: Contributions à L'Etude de L'Occupation Humaine.** Ed. Jean Malaurie & Jacques Rousseau. 375-394. Paris: Mouton.

1968 The Netsilik Eskimos: adaptive processes. In **Man The Hunter.** Eds. R.B. Lee & I. DeVore. Chicago: Aldine.

1970 **The Netsilik Eskimo.** Garden City: Natural History Press.

1984 Netsilik. In **Handbook of North American Indians.** Vol. 5. Arctic. Ed. David Damas. 415-430. Washington, D.C.: Smithsonian Institution.

Ball, T.F.

- 1977 'As cold as ever I knew it': Manitoba climate for the last 200 years. **Historical and Scientific Society of Manitoba Transactions**. Series III, #33:61-66.
- 1988 Historical and instrumental evidence of extreme climatic conditions in central Canada, 1770-1820. **Annales Geophysicae**. Proceedings of the Annual Geophysical Society General Assembly, Bologna, March 1988. and In **Climate since A.D. 1500**. Eds. Raymond S. Bradley & Philip D. Jones. 40-73. London: Routledge.
- 1992 The year without a summer: its impact on the fur trade and history of western Canada. In **The Year Without a Summer? World Climate in 1816**. Ed. C.R. Harington. 196-202. Ottawa: Canadian Museum of Nature.

Ball, T.F., & R.A. Kingsley

- 1984 Instrumental temperature records at two sites in central Canada, 1768 to 1910. **Climatic Change** 6:39-56.

Barger, W.K.

- 1979 Inuit-Cree relations in the eastern Hudson Bay region. **Arctic Anthropology** 16(2):59-75.

Barkham, Selma de Lotbinière

- 1980 A note on the Strait of Belle Isle during the period of Basque contact with Indians and Inuit. **Etude/Inuit/Studies** 4(1-2):51-58.

Barry, R.G., et al.

- 1977 Environmental change and cultural change in the eastern Canadian arctic during the last 5000 years. **Arctic and Alpine Research** 9(2):193-210.

Barry, Thomas F.

- 1880 Appendix No. 1. Thomas F. Barry's statement. Arctic meeting at Chickering Hall October 28th, 1880. **Journal of the American Geographical Society of New York** XII:275-279.

Berger, Thomas R.

- 1985 **Village Journey: The Report of the Alaska Native Review Commission**. New York: Hill and Wang.

Bergthorssen, P.

- 1969 An estimate of drift ice and temperature in Iceland in 1000 years. **Jokull: Journal of the Icelandic Glaciological Society** 19:94-101.

Belcher, Edward

1855 **The Last of the Arctic Voyages, Being a Narrative of the Expedition in H.M.S. Assistance....** 2 vols. London: L. Reeve.

Bell, Robert

1901 Legends of the Slave Indians of the Mackenzie River. **Journal of American Folklore** 14:61:26-29.

Bellot, Joseph René

1855 **Memoirs of Lieutenant Joseph René Bellot ... With His Journal of A Voyage in the Polar Seas in Search of Sir John Franklin.** 2 vols. London: Hurst and Blackett.

Bernard, H. Russell, & Pertti Pelto, eds.

1972 **Technology and Social Change.** New York: Macmillan.

Bernier, Joseph E.

1909 **Report on the Dominion Government Expedition to the Arctic Islands and the Hudson Strait on Board the C.G.S. Arctic 1906-1907.** Ottawa: King's Printer.

1911 **Report on the Dominion Government Expedition to the Northern Waters and Arctic Archipelago of C.G.S. Arctic in 1910.** Ottawa: King's Printer.

Best, George

1578a **A True Discourse of the Late Voyages of Discoverie, for the Finding of a Passage to Cathaia.** London: Henry Bynnyman. [New edition Trans. & ed. by Walter A. Kenyon, **Tokens of Possession: The Voyages of Martin Frobisher.** Toronto: Royal Ontario Museum, 1975]

1578b **A True Discourse of the Late Voyages of Discoverie, for the Finding of a Passage to Cathaia, by the Northwest, Under the Conduct of Martin Frobisher, General, Divided into Three Bookes.** London: Henry Bynnyman. [Microfilm. Early English Books Before 1640, Reel 196]

Bettinger, Robert L.

1987 Archaeological approaches to hunter-gatherers. **Annual Review of Anthropology** 16:121-142.

1991 **Hunter-Gatherers: Archaeological and Evolutionary Theory.** New York: Plenum Press.

Binford, Lewis R.

1978 **Nunamiut Ethnoarchaeology.** New York: Academic Press.

- 1979 Organization and formation processes: looking at curated technologies. **Journal of Anthropological Research** 35:255-273.
- 1983 **In Pursuit of the Past: Decoding the Archaeological Record**. New York: Thames & Hudson.
- 1991 When the going gets tough, the tough get going: Nunamiut local groups, camping patterns and economic organization. In **Ethnoarchaeological Approaches to Mobile Campsites: Hunter-Gatherer and Pastoralist Case Studies**. Eds. C.S. Gamble & W.A. Boismier. 25-137. Ethnoarchaeological Series I. International Monographs in Prehistory.
- Bird, Junius B.
- 1945 **Archaeology of the Hopedale Area, Labrador**. Anthropological Papers of the American Museum of Natural History 39(2).
- Bird, J.B., & M.B. Bird
- 1961 **Bathurst Inlet, Northwest Territories**. Memoir 7. Ottawa: Geographical Branch, Mines and Technical Surveys.
- Birdsell, J.B.
- 1968 Population control factors: infanticide, disease, nutrition and food supply. In **Man The Hunter**. Eds. Richard B. Lee & Irven DeVore. Chicago: Aldine.
- Birket-Smith, Kaj
- 1924 **Ethnography of the Egedesminde District With Aspects of the General Culture of West Greenland**. Copenhagen: Bianco Lunos; Reprint New York: AMS Press, 1976.
- 1928a **Five Hundred Eskimo Words**. Copenhagen: Gyldendal.
- 1928b **Inuktitut Language -- Glossaries, Vocabularies, Etc**. Copenhagen: Gyldendal.
- 1929a **The Caribou Eskimos: Material and Social Life and Their Cultural Position. Report of the Fifth Thule Expedition, 1921-24**. Vol. 5:1. Descriptive Part. Copenhagen: Gyldendal.
- 1929b **The Caribou Eskimos: Material and Social Life and Their Cultural Position. Report of the Fifth Thule Expedition, 1921-24**. Vol. 5:2. Analytical Part. Copenhagen: Gyldendal.
- 1930a **Contributions to Chipewyan Ethnology. Report of the Fifth Thule Expedition, 1921-224**. Vol. 6:3. Copenhagen: Gyldendal.

- 1930b The question of the origin of Eskimo culture: a rejoinder. *American Anthropologist* 32:608-24.
- 1940 **Anthropological Observations on the Central Eskimos. Report of the Fifth Thule Expedition, 1921-24.** Vol. 3:2. Copenhagen: Gyldendalske Boghandel.
- 1945 **Ethnographical Collections from the Northwest Passage. Meddelelser om Grönland,** Bd 66. Copenhagen: Gyldendalske Boghandel.
- 1976 **Ethnography of the Egedesminde District: With Aspects of the General Culture of West Greenland.** New York: AMS Press.
- Bishop, Charles A.
- 1978 Cultural and biological adaptations to deprivation: the Northern Ojibwa case. In **Extinction and Survival in Human Populations.** Eds. Charles D. Laughlin & Ivan A. Brady. 209-230. New York: Columbia University Press.
- Black, G.F., & Northcote W. Thomas
- 1901 **Examples of Printed Folk-Lore Concerning the Orkney & Shetland Islands.** County Folk-Lore Series, Vol. III, #5. Kraus Reprints, 1967.
- Blake, E. Vale
- 1874 **Arctic Experiences: Containing Capt. George E. Tyson's Wonderful Drift on the Ice-Floe.** New York: Harper.
- Blake, Weston
- 1966 **End Moraines and Deglaciation Chronology in Northern Canada with Special Reference to Southern Baffin island.** Geological Survey of Canada Paper #66-26. Ottawa: Department of Mines and Technical Surveys.
- 1972 Climatic implications of radiocarbon-dated driftwood in the Queen Elizabeth Islands, Arctic Canada. In **Climatic Changes in Arctic Areas During the Last Ten-Thousand Years.** Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. 77-104. Eds. Y. Vasari, H. Hyvarinen, S. Hick. Oulu, Finland: University of Oulu.
- Blasing, T.J., & H.C. Fritts
- 1973 Past climate of Alaska and northwestern Canada as reconstructed from tree rings. In **Climates of the Arctic.** Gunter Weller and Sue A. Bowling, eds. 48-58. 24th Alaska Science Conference. Fairbanks: University of Alaska.

Boas, Franz

- 1884 A journey in Cumberland Sound and on the west shore of Davis Strait in 1883 and 1884. **American Geographical Society of New York Bulletin** 16:241-272.
- 1887 The Eskimo. **Transactions of the Royal Society of Canada** 2:35-39.
- 1888 **The Central Eskimo**. Ed. Henry Collins. University of Nebraska Press, 1964.
- 1888a **The Central Eskimo**. Sixth Annual Report of the Bureau of Ethnology. Washington, DC: Smithsonian Institution.
- 1888b On the geography and geology of Baffinland. **Proceedings and Transactions of the Royal Society of Canada** 5:iv:75-78.
- 1901 **The Eskimo of Baffin Land and Hudson Bay**. Bulletin of the American Museum of Natural History. XV(1).
- 1907 **The Eskimo of Baffin Land and Hudson Bay**. Bulletin of the American Museum of Natural History. XV(2).

Boserup, Ester

- 1965 **The Conditions of Agricultural Growth**. Chicago: Aldine.

Bowden, M.J., et al.

- 1981 The effect of climate fluctuations on human populations: two hypotheses. In **Climate and History: Studies in Past Climates and Their Impact on Man**. Eds. T.M.L. Wigley, M.J. Ingram, & G. Farmer. 479-513. Cambridge: Cambridge University Press.

Bradley, R.S.

- 1973 Seasonal climatic fluctuations on Baffin Island during the period of instrumental records. **Arctic** 26(3):230-243.

Bradley, R.S., & P.D. Jones

- 1992 Climate since A.D. 1500: Introduction. In **Climate since A.D. 1500**. Eds. Raymond S. Bradley & Philip D. Jones. 1-16. London: Routledge.

Brady, Ivan A., & Charles D. Laughlin

- 1978 Epilogue: adaptation and anthropological theory. In **Extinction and Survival in Human Populations**. Eds. Charles D. Laughlin & Ivan A. Brady. 282-290. New York: Columbia University Press.

Brand, John

- 1701 **A Brief Description of Orkney, Zetland, Pightland-Firth and Caithness.** Edinburgh.

Bray, Emile Frédéric de

- 1992 **A Frenchman in Search of Franklin: De Bray's Arctic Journal, 1852-1854.** Trans. and ed. William Barr. Toronto: University of Toronto Press.

Brice-Bennett, Carol, ed.

- 1977 **Our Footprints are Everywhere.** Ottawa: Labrador Inuit Association.

Briggs, Jean

- 1974 Eskimo women: makers of men. In **Many Sisters: Women in Cross-Cultural Perspective.** Ed. C.J. Matthiasson. 261-340. New York: Free Press.
- 1975 The origins of non-violence: aggression in two Canadian Eskimo groups. In **The Psychoanalytic Study of Society.** Ed. Warner Muensterberger & Aaron H. Esman. 6:134-203. New York: International Universities Press.
- 1978 The origins of non-violence: Inuit management of aggression. In **Learning Non-Aggression.** Ed. Ashley Montagu. 54-93. New York: Oxford University Press.

Brody, Hugh

- 1977 Permanence and change among the Inuit and Settlers of Labrador. In **Our Footprints Are Everywhere.** Ed. Carol Brice-Bennett. 311-347. Ottawa: Labrador Inuit Association.

Brown, Roger James Evan

- 1961 **Permafrost in Canada: Its Effect on Development in a Region of Marginal Human Activity.** Ph.D. thesis, Geography, Clark University.

Browne, I.M., & A.P. Crary

- 1958 The movement of ice in the Arctic Ocean. In **Arctic Sea Ice.** Proceedings of a Conference held February 1958. Washington, DC: National Academy of Science/National Research Council. Publication #598. 191-209.

Bryson, Reid A.

- 1966 Airmasses, streamlines, and the boreal forest. **Geographical Bulletin (Canada)** 8:228-269.

- Bryson, Reid A., & P.R. Julian, eds.
 1963 **Proceedings of the Conference on the Climate of the Eleventh and Sixteenth Centuries**. National Center for Atmospheric Research Scientific Report #1. Boulder.
- Bryson, Reid A., & W.M. Wendland
 1967 Tentative climatic patterns for some late glacial and post-glacial episodes in central North America. In **Life, Land and Water**. Ed. William Mayer-Oakes. 271-298. Winnipeg: University of Manitoba Press.
- Bryson, Reid A., W.M. Wendland, J.D. Ives, & J.T. Andrews
 1969 Radiocarbon isochrones on the disintegration of the Laurentide Ice Sheet. **Arctic and Alpine Research** 1(1):1-14.
- Bryson, Reid A., & Thomas J. Murray
 1977 **Climates of Hunger: Mankind and the World's Changing Weather**. Madison: University of Wisconsin Press.
- Bryson, Reid A., William N. Irving, & James A. Larsen
 1965 Radiocarbon and soils evidence of former forest in the southern Canadian tundra. **Science** 147:46-48.
- Burch, Ernest S.
 1970 The Eskimo trading partnership in North Alaska: a study in balanced reciprocity. **Anthropological papers of the University of Alaska** 15(1):48-80.
- 1972 The caribou/wild reindeer as a human resource. **American Antiquity** 37:339-368.
- 1974 Eskimo warfare in northwest Alaska. **Anthropological Papers of the University of Alaska** 16(2):1-14.
- 1975 Eskimo kinsmen: changing family relationships in northwest Alaska. **American Ethnological Society Monograph 59**. New York: West.
- 1976 The 'Nunamiut' concept and the standardization of error. In **Contributions to Anthropology: The Interior Peoples of Northern Alaska**. E.S. Hall, ed. 52-97. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #49. Ottawa: National Museums of Canada.
- 1977 Muskox and man in the central Canadian subarctic, 1689-1974. **Arctic** 30:3(Sept 1977):135-154.

- 1978 Caribou Eskimo origins: an old problem reconsidered. **Arctic Anthropology** XV(1):1-35.
- 1979 The Thule-Historic Eskimo transition on the west coast of Hudson Bay. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. Allen P. McCartney. 189-211. National Museum of Man Mercury Series. Archaeological Survey Paper #88. Ottawa: National Museums of Canada.
- 1981 **The Traditional Eskimo Hunters of Point Hope, Alaska: 1800-1875**. North Slope Borough.
- 1983 Peoples of the arctic. [Map Supplement]. **The National Geographic Magazine** (February).
- 1986 The Caribou Inuit. In **Native Peoples: The Canadian Experience**. Ed. Bruce Morrison & C. Roderick Wilson. 106-133. Toronto: McClelland and Stewart.
- 1988a War and trade. In **Crossroads of Continents: Cultures of Siberia and Alaska**. Eds. William W. Fitzhugh & Aron Crowell. 227-240. Washington, DC: Smithsonian Institution.
- 1988b **The Eskimos**. Norman: University of Oklahoma Press.
- 1988c Knud Rasmussen and the 'original' inland Eskimos of southern Keewatin. **Etudes/Inuit/Studies** 12(1-2):81-100.
- Burch, Ernest S., & Thomas C. Correll
 1972 Alliance and conflict: inter-regional alliance in north Alaska. In **Alliance in Eskimo Society**. Ed. Lee Guemple. 17-39. Proceedings of the American Ethnological Society Supplement. Seattle: University of Washington Press.
- Burke, James
 1985 **The Day The Universe Changed**. Boston: Little, Brown and Company.
- Burwash, Lachlan Taylor
 1927 **Report of Exploration & Investigation Along Canada's Arctic Coast Line From the Delta of the Mackenzie River to Hudson Bay, 1925-1926**. [Ottawa: Northwest Territories and Yukon Branch, Dept. of the Interior, 1927]
- Cameron, Catherine M., & Steva A. Tomka, eds.
 1993 **Abandonment of Settlements and Regions: Ethnoarchaeological and Archaeological Approaches**. Cambridge University Press.

Campbell, John M.

- 1978 Aboriginal human overkill of game populations: examples from interior North Alaska. In **Archaeological Essays in Honor of Irving B. Rouse**. Eds. Robert C. Dunnell & Edwin S. Hall. 179-209. The Hague: Mouton.

Canadian Permanent Committee on Geographical names

- 1971 **Gazeteer of Canada. Northwest Territories. Provisional Edition**. Ottawa: Surveys and Mapping Branch. Department of Energy, Mines and Resources.
- 1977 **Gazeteer of Canada. Northwest Territories. Cumulative Supplement**. Ottawa: Surveys and Mapping Branch. Department of Energy, Mines and Resources.

Catchpole, A.J.W.

- 1985 Evidence from Hudson Bay region of severe cold in the summer of 1816. In **Climatic Change in Canada 5: Critical Periods in the Quaternary Climatic History of Northern North America. Syllogeus 55**. Ed. C.R. Harington. 121-146. Ottawa: National Museums of Canada.
- 1992 Hudson's Bay Company ships' log-books as sources of sea ice data, 1751-1870. In **Climate Since A.D. 1500**. Eds. Raymond S. Bradley & Philip D. Jones. 137-140. London: Routledge.

Catchpole, A.J.W., & T.F. Ball

- 1981 Analysis of historical evidence of climatic change in western and northern Canada. In **Climatic Change in Canada 2: Syllogeus 66**. Ed. C.R. Harington. Vol. 33:78-96. Ottawa: National Museum of Natural Sciences.

Catchpole, A.J.W., & Marcia-Anne Faurer

- 1983 Summer sea ice severity in Hudson Strait, 1751-1870. **Climatic Change** 5:2:115-139.

Catchpole, A.J.W., & J. Halpin

- 1983 Measuring summer sea ice severity in eastern Hudson Bay, 1751-1870. **The Canadia Geographer** 31:233-244.

Catchpole, A.J.W., & Irene Hanuta

- 1989 Severe summer ice in Hudson Strait and Hudson Bay following major volcanic eruptions, 1751 to 1889 A.D. **Climatic Change** 14:61-79.

Champlain, Samuel de

- [1632] **The Works of Samuel de Champlain**. Vol. 5. Ed. H.P. Biggar. Toronto: The Champlain Society, 1933.

- Chapman, F. Spencer
1934 **Watkins' Last Expedition**. Harmondsworth: Penguin.
- Chappell, Edward
1817 **Narrative of a Voyage to Hudson's Bay in His Majesty's Ship Rosamond: Containing Some Account of the North-eastern Coast of America and of the Tribes Inhabiting that Remote Region**. London: Printed for J. Mawman.
- Cheshire, Neil, Tony Waldron, Alison Quinn, & David Quinn
1987 Frobisher's Eskimos in England. In **Indians and Europe: An Interdisciplinary Collection of Essays**. Ed. Christian Feest. 23-50. Aachen: Edition Herodot, Rader Verlag.
- Chipman, Kenneth G., & J.R. Cox
1924 **Geographical Notes on the Arctic Coast of Canada. Report of the Canadian Arctic Expedition, 1913-18**. Vol 11B. Ottawa.
- Christy, M., ed.
[1894] **The Voyages of Captain Luke Foxe of Hull and Captain Thomas James of Bristol in Search of Northwest Passage in 1631-32**. 2 vols. Ed. M. Christy. London: Hakluyt Society.
- Claiborne, Robert
1970 **Climate, Man and History**. New York: W.W. Norton.
- Clark, Brenda
1977 **The Development of Caribou Eskimo Culture**. National Museum of Man Mercury Series. 0316-1854. Archaeological Survey of Canada Paper #59. Ottawa: National Museums of Canada.
- 1979 Thule occupation of west Hudson Bay. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. Allen P. McCartney. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. 89-109. Ottawa: National Museums of Canada.
- Clarke, C.H.D.
1940 **A Biological Investigation of the Thelon Game Sanctuary**. National Museum of Canada Bulletin #96. Ottawa: Department of Mines and Resources.

Claxton, Robert H.

- 1985 Climate and history: the state of the field. In **Environmental History: Critical Issues in Comparative Perspective**. Ed. Kendall E. Bailes. 104-134. New York: University Press of America.

Clermont, N.

- 1980 Les Inuit de Labrador méridional avant Cartwright. **Etudes/Inuit/Studies** 4:1-2:147-164.

Coats, W.

- 1752 **The Geography of Hudson's Bay**. Ed. J. Barrow. London: Hakluyt Society, 1852.

Collins, Henry Bascom

- 1937 The archaeology of St. Lawrence Island, Alaska. **Smithsonian Miscellaneous Collections** 96(1).

- 1940 Outline of Eskimo prehistory. **Smithsonian Miscellaneous Collections** 100:533-592.

- 1950 Excavations at Frobisher Bay, Baffin Island, Northwest Territories. **Annual Report of the National Museum of Canada for 1948-49**. Bulletin #118:18-43.

- 1951a Excavations at Thule culture sites near Resolute Bay, Cornwallis Island, N.W.T. **Annual Report of the National Museum of Canada for 1949-50**. Bulletin #123:49-63.

- 1951b **The Origin and Antiquity of the Eskimo**. Washington.

- 1952 Archaeological Excavations at Resolute, Cornwallis Island, N.W.T. **Annual Report of the National Museum of Canada for 1950-51**. Bulletin #126:48-63.

- 1955 Excavations of Thule and Dorset culture sites at Resolute, Cornwallis Island, N.W.T. **National Museum of Canada Bulletin** 136:22-35.

- 1956a Archaeological investigations on Southampton and Coats Islands, N.W.T. **Annual Report of the National Museum of Canada for 1954-55**. Bulletin #142:82-113.

- 1956b The T-1 site at Native Point, Southampton Island, N.W.T. **Anthropological Papers of the University of Alaska** 4(2):63-89.

- 1956c Vanished mystery men of Hudson Bay. **National Geographic** 110:669-687.
- 1957 Archaeological investigations on Southampton and Walrus Islands, N.W.T. **Annual Report of the National Museum of Canada**. Bulletin 147:22-61.
- Colson, E.
- 1979 In good years and in bad: food strategies of self-reliant societies. **Journal of Anthropological Research** 35:18-29.
- Comer, George
- 1905 **An Arctic Whaling Diary: The Journal of Captain George Comer in Hudson Bay 1903-1905**. Ed. W. Gillies Ross. Toronto: University of Toronto Press, 1985.
- 1910 A geographical description of Southampton Island and notes upon the Eskimo. **Bulletin of the American Geographical Society** XLII:1:84-90.
- 1921 Notes by G. Comer on the natives of the northwestern shores of Hudson Bay. **American Anthropologist** n.s. 23:243-244.
- Cooke, Alan
- 1973 The Eskimos and the Hudson's Bay Company. In **Le Peuple Esquimau Aujourd'hui et Demain/The Eskimo People To-Day and To-Morrow**. Ed. Jean Malaurie. 209-223. Fourth International Congress of the Fondation Francaise d'Etudes Nordiques. Paris: Mouton.
- Cooke, Alan, & Clive Holland
- 1978 **The Exploration of Northern Canada, 500-1920: A Chronology**. Toronto: Arctic History Press.
- Correll, Thomas
- 1972 **Ungalaqlingmiut: A Study in Language and Society**. Ph.D. thesis, Anthropology, University of Minnesota. Facsimile edition. Ann Arbor: University Microfilms.
- 1976 Language and location in traditional Inuit societies. In **Report: Inuit Land Use and Occupancy Project** 2:173-178. Ed. Milton M.R. Freeman. Ottawa: Department of Indian and Northern Affairs.
- Cove, John J.
- 1978 Survival or extinction: reflections on the problem of famine in Tsimshian and Kaguru mythology. In **Extinction and Survival in Human Populations**. Eds. Charles D. Laughlin & Ivan A. Brady. 231-244. New York: Columbia University Press.

- Cropper, J.P.
 1982 Climate reconstructions (1801 to 1938) inferred from tree-ring width chronologies of the North American arctic. **Arctic and Alpine Research** 14:223-241.
- Cropper, J.P., & H.C. Fritts
 1981 Tree-ring width chronologies from the North American arctic. **Arctic and Alpine Research** 13:245-260.
- Crosby, Alfred
 1972 **The Columbian Exchange: Biological and Cultural Consequences of 1492.** Westport, CN: Greenwood Publishing Company.
- 1986 **Ecological Imperialism: The Biological Expansion of Europe, 900-1900.** Cambridge: Cambridge University Press.
- Crowe, Keith J.
 1969 **A Cultural Geography of Northern Foxe Basin, N.W.T.** Ottawa: Northern Science Research Group, Department of Indian Affairs and Northern Development.
- Cruikshank, Julie
 1991 **Reading Voices: Dan Dha Ts'edenintth'e: Oral and Written Interpretations of the Yukon's Past.** Vancouver: Douglas & McIntyre.
- Curtis, R.
 1774 Particulars of the country of Labrador. Extracted from the papers of Lieutenant Roger Curtis, of His Majesty's Ship "Otter." **Philosophical Transactions of the Royal Society of London** 64:2.
- Csonka, Yvon
 1991 **Les Ahiammiut (1920-1950) Dans La Perspective de l'Histoire des Inuit Caribous.** Ph.D. thesis. Département d'Anthropologie. Université Laval.
- Damas, David
 1963 Igluligmiut kinship and local groupings: a structural approach. **Anthropological Series** 64. Bulletin 196. Ottawa: National Museums of Canada.
- 1969 Environment, history, and Central Eskimo society. In **Cultural Ecology: Readings on the Canadian Indians and Eskimos.** Ed. Bruce Cox. 269-300. Toronto: McClelland and Stewart, 1973.

- 1972a The Copper Eskimo. In **Hunters and Gatherers Today**. Ed. M.G. Bicchieri. 3-49. New York: Holt, Rinehart and Winston.
- 1972b The structure of Central Eskimo associations. In **Alliance in Eskimo Society**. Proceedings of the American Ethnological Society, 1971, Supplement. 40-55. Ed. Lee Guemple. Seattle: University of Washington Press.
- 1975 Three kinship systems from the central arctic. **Arctic Anthropology** 12(1):10-30.
- 1984a Central Eskimo: introduction. In **Handbook of North American Indians Vol 5. Arctic**. Ed. David Damas. 391-396. Washington, DC: Smithsonian Institution.
- 1984b Copper Eskimo. In **Handbook of North American Indians. Volume 5 Arctic**. Ed. David Damas. 397-414. Washington, DC: Smithsonian Institution.
- 1988a The contact-traditional horizon of the central arctic: reassessment of a concept and reexamination of an era. **Arctic Anthropology** 25(2):101-138.
- 1988b Journey at the threshold: Knud Rasmussen's study of the Copper Eskimos, 1923-24. **Etudes/Inuit/Studies** 12(1-2):129-149.
- Damas, David, ed.
1984 **Handbook of North American Indians**. volume 5 **Arctic**. Washington, DC: Smithsonian Institution.
- Dauphiné, T.C.
1976 Biology of the Kaminuriak population of barren-ground caribou, Part 4. **Canadian Wildlife Service Report Series** 38.
- Davies, K.G.
1963 Appendix A: Post histories. In **Northern Quebec and Labrador Journals and Correspondence, 1819-1835**. Ed. K.G. Davies. 261-326. London: Hudson's Bay Record Society.
- 1963a Map: Northern Quebec and Labrador Exploration and Settlement by Hudson's Bay Company to 1835. Accompanies **Northern Quebec and Labrador Journals and Correspondence 1819-35**. London: Hudson's Bay Record Society.
- 1965 **Letters from Hudson Bay 1703-40**. London: Hudson's Bay Record Society.

de Laguna, Frederica

1972 **Under Mount Saint Elias: The History and Culture of the Yakutat Tlingit.** Contributions to Anthropology Volume 7. Washington DC: Smithsonian Institution.

1983 Aboriginal Tlingit sociopolitical organization. In **The Development of Political Organization in Native North America.** 1979 Proceedings of The American Ethnological Society. Ed. Elisabeth Tooker. 71-85. Washington, DC: AES.

Dekin, A.A.

1972 Climatic change and cultural change: a correlative study from eastern arctic prehistory. **Polar Notes** 12:11-31.

1975 **Models of Pre-Dorset Culture: Towards an Explicit Methodology.** Ph.D. thesis, Anthropology, Michigan State University. [Cited in Burch 1978]

Dictionary of Canadian Biography "Jean Bourdon." 1:111-113.

Dobbs, Arthur

1744 **An Account of the Countries Adjoining to Hudson's Bay in the North-West Part of America.** London: J. Robinson. [CIHM/ICMH #35075. Ottawa: Canadian Institute for Historical Microreproductions]

Dumond, Don E.

1969 Prehistorical culture contacts in southwestern Alaska. **Science** 166(3909):1108-1114.

1977a **The Eskimos and Aleuts.** London: Thames and Hudson.

1979b Eskimo-Indian relationships: a view from prehistory. **Arctic Anthropology** XVI:2:3-22.

Dunbar, Moira

1958 Curious open-water feature in the ice at the head of Cambridge Fiord. **Proceedings of I.U.G.G.** Extraits des Comptes Rendus et Rapports - Assemblée Generale de Toronto, 4:514-519.

1985 Sea ice and climatic change in the Canadian arctic since 1800. In **Climatic Change in Canada 5: Critical Periods in the Quaternary Climatic History of Northern North America.** **Syllogeus** 55. Ed. C.R. Harington. 107-120. Ottawa: National Museums of Canada.

Dunbar, M., & M.J. Dunbar

- 1972 The history of the North Water. **Proceedings of the Royal Society of Edinburgh.** (B)72:21.

Durham, William H.

- 1981 Overview: optimal foraging analysis in human ecology. In **Hunter-Gatherer Foraging Strategies: Ethnographic and Archeological Analyses.** Eds. Bruce Winterhalder & Eric Alden Smith. 218-232. Chicago: University of Chicago Press.

Eberbing, Joe

- 1880 Appendix No. 1. Joseph Eberling's statement. Arctic meeting at Chickering Hall October 28th, 1880. **Journal of the American Geographical Society of New York** XII:279-281.

Eddy, John A.

- 1976 The Maunder minimum. **Science** 193:1189-1202.

- 1992 Before Tambora: the sun and climate, 1790-1830. In **The Year Without a Summer? World Climate in 1816.** Ed. C.R. Harington. 11. Ottawa: Canadian Museum of Nature.

Ekblaw, Walter Elmer

- 1927 The material response of the Polar Eskimo to their far arctic environment. [Part 1]. **Annals of the Association of American Geographers** XVII:4(December):148-198.

- 1928 The material response of the Polar Eskimo to their far arctic environment. [Part 2]. **Annals of the Association of American Geographers** XVIII:1(March):1-24.

Ellanna, Frank, et al.

- 1988 **King Island Tales: Eskimo History and Legends from Bering Strait.** Fairbanks: Alaska Native Language Center and University of Alaska Press.

Ellis, Henry

- 1748 **A Voyage to Hudson's Bay by the Dobbs Galley and California in the Years 1746 and 1747 for Discovering a North West Passage; with An Accurate Survey of the Coast, and a Short Natural History of the Country** London: H. Whitridge. [Reprint. New York: Johnson Reprint Corporation, 1967]

- Eurola, S.
 1971 The driftwoods of the Arctic Ocean. **Report of Kevo Subarctic Statistics** 7:74-80.
- Fagan, Brian M.
 1987 **The Great Journey: The Peopling of Ancient America**. London: Thames and Hudson.
 1991 **Ancient North America: The Archaeology of a Continent**. London: Thames and Hudson.
- Fainberg, L.
 1967 On the question of the Eskimo kinship system. **Arctic Anthropology** 4:1:244-256.
- Faurer, M.A.
 1981 **Evidence of Sea Ice Conditions in Hudson Strait, 1751-1870, Using Ships' Logs**. M.A. Thesis, Department of Geography, University of Manitoba.
- Febvre, Lucien
 1932 **A Geographical Introduction to History**. London: Kegan Paul.
- Feilden, Henry Wemyss and C.E. De Rance
 1878 Geology of the coasts of the Arctic lands visited by the late British expedition. **Geological Society of London. Quarterly Journal** 34:556-557.
- Fenton, Edward
 1578 The Canadian arctic journal of Captain Edward Fenton, 1578. Ed. Walter A. Kenyon. **Archivaria** 11:171-203.
- Ferguson, R. Brian
 1979 Warfare and redistributive exchange on the northwest coast. In **The Development of Political Organization in Native North America**. Proceedings of the American Ethnological Society. Ed. E. Tooker. 133-147. Washington, DC: American Ethnological Society.
 1984a Introduction: studying war. In **Warfare, Culture, and Environment**. Ed. R. Brian Ferguson. 1-81. Academic Press.
 1984b A reexamination of the causes of northwest coast warfare. In **Warfare, Culture, and Environment**. Ed. R. Brian Ferguson. 267-328. Academic Press.

Ferguson, R. Brian, ed.

1984 **Warfare, Culture, and Environment.** Academic Press.

Ferguson, Robert

1879 **Arctic Harpooner: A Voyage on the Schooner Abbie Bradford, 1878-1879.** Philadelphia: University of Pennsylvania Press, 1938.

Fienup-Riordan, Ann

1984 Regional groups on the Yukon-Kuskokwim Delta. **The Central Yupik Eskimos.** Ed. Ernest S. Burch. Supplementary issue of *Etudes/Inuit/Studies* 8:63-93.

1988 **The Yup'ik Eskimos as Described in the Travel Journals and Ethnographic Accounts of John and Edith Kilbuck, 1885-1900.** Kingston: Limestone Press.

1990 **Eskimo Essays: Yup'ik Lives and How We See Them.** Rutgers University Press.

Fischer, David Hackett

1981 Climate and history: priorities for research. In **Climate and History: Studies in Interdisciplinary History.** Eds. Robert I Rotberg & Theodore K. Rabb. 241-250. Princeton, NJ: Princeton University Press.

Fisher, Alexander

1819 **Journal of a Voyage of Discovery, to the Arctic Regions Performed Between the 4th of April and the 18th of November, 1818, in His Majesty's Ship Alexander....** London: Richard Phillips.

1821 **Journal of a Voyage of Discovery to the Arctic Regions in His Majesty's Ships Hecla and Griper, in the Years 1819 & 1820.** London: Longman, Hurst, Rees, Orme, and Brown.

Fitzhugh, William W.

1972 **Environmental Archeology and Cultural Systems in Hamilton Inlet, Labrador: A Survey of the Central Labrador Coast from 3000 B.C. to the Present.** Smithsonian Contributions to Anthropology no. 16. Washington, DC: Smithsonian Institution Press.

1973 Environmental approaches to the prehistory of the north. **Journal of the Washington Academy of Sciences** 63(2):39-53.

- 1975 A comparative approach to northern maritime adaptations. In **Prehistoric Maritime Adaptations of the Circumpolar Zone**. Ed. William Fitzhugh. The Hague: Mouton.
- 1976 Environmental factors in the evolution of Dorset culture: a marginal proposal for Hudson Bay. In **Eastern Arctic Prehistory: Paleoeskimo Problems**. Memoirs of the Society for American Archaeology. Ed. M.S. Maxwell. 31:139-169.
- 1977 Indian and Eskimo/Inuit settlement history in Labrador: an archaeological view. In **Our Footprints Are Everywhere: Inuit Land Use and Occupancy in Labrador**. Ed. Carol Brice-Bennett. 1-42. Labrador Inuit Kattekatenginga.
- 1978 Winter Cove 4 and the Point Revenge occupation of the central Labrador coast. **Arctic Anthropology** 15(2):146-174.
- 1985a Introduction [and] Commentary on Part I. In **Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800**. Ed. William W. Fitzhugh. 21-19. Washington, DC: Smithsonian Institution.
- 1985c Early contacts north of Newfoundland before A.D. 1600: a review. In **Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800**. Ed. William W. Fitzhugh. 23-43. Washington, DC: Smithsonian Institution.
- Fitzhugh, William W., & Aron Crowell, eds.
 1988 **Crossroads of Continents: Cultures of Siberia and Alaska**. Washington, DC: Smithsonian Institution Press.
- Fleming, Archibald L.
 1957 **Archibald The Arctic**. London: Hodder & Stoughton.
- Fogelson, Raymond D.
 1989 The ethnohistory of events and nonevents. **Ethnohistory** 36:2(Spring):133-147.
- Fornel, Jean-Louis
 1743 Relation de la découverte qu'a faite le Sieur Fornel en 1743 de la Baye des Eskimaux nommée par les sauvages Kessessakiou. In **Rapport de l'Archiviste de la Province de Québec, 1920-21** 1921:63-75.

Foxe, Luke

1635a **North-West Fox, or Fox from the North-West Passage...** London: B. Alsop & Tho. Fawcet. In **The Voyages of Captain Luke Foxe of Hull, and Captain Thomas James of Bristol, in Search of Northwest Passage in 1631-32.** Ed. Miller Christy. 2 vols. London: Hakluyt Society, 1894.

1635b **North-West Fox, or Fox from the North-West Passage...** London: B. Alsop & Tho. Fawcet. [Facsimile edition. New York: S.R. Publishers Ltd and Johnson Reprint Corporation, 1965]

Francis, Daniel

1979 Les relations entre Indiens et Inuit dans l'est de la baie d'Hudson. **Etudes/Inuit/Studies** 3(2):73-83.

Francis, Daniel, & Toby Morantz

1983 **Partners in Furs: A History of the Fur Trade in Eastern James Bay, 1600-1870.** McGill-Queen's University Press.

Franklin, John

1823 **Narrative of a Journey to the Shores of the Polar Sea in the Years 1819-20-21-22.** London: John Murray.

1828 **Narrative of a Second Expedition to the Shores of the Polar Sea in the Years 1825, 1826, and 1827.** Reprint: Rutland, VT: Charles E. Tuttle & Co., 1971.

Freeman, Milton M.R.

1967 An ecological study of mobility and settlement patterns among Belcher Island Eskimos. **Arctic** 20(3):154-175.

1979 A critical view of Thule culture and ecological adaptation. In **Thule Eskimo Culture: An Anthropological Retrospective.** Ed. A.P. McCartney. 278-285. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

1984 Arctic ecosystems. In **Handbook of North American Indians.** Volume 5. **Arctic.** 5:36-48. Washington, DC: Smithsonian Institution Press.

Freeman, Milton M.R.

1976 **Inuit Land Use and Occupancy Project.** Department of Indian and Northern Affairs. 3 volumes.

French, Hugh M., & Olav Slaymaker, eds.

1993 **Canada's Cold Environments**. Canadian Association of Geographers Series in Canadian Geography. McGill-Queen's.

Freuchen, Peter

1935a **Arctic Adventure: My Life in the Frozen North**. Toronto: Farrar & Rinehart.

1935b **Mammals. Report of the Fifth Thule Expedition, 1921-24**. 2(4-5). Copenhagen: Gyldendal.

1958 **I Sailed with Rasmussen**. New York: Messner.

1961 **Book of the Eskimos**. Cleveland: World Publishing.

Fritts, H.C., & J.M. Lough

1985 An estimate of average annual temperature variations for North America, 1602 to 1961. **Climatic Change** 7:2:203-224.

Fritts, H.C., & X.M. Shao

1992 Mapping climate using tree-rings from western North America. In **Climate Since A.D. 1500**. Eds. Raymond S. Bradley & Philip D. Jones. 269-295. London: Routledge.

Gad, Finn

1970 **The History of Greenland**. Volume 1. **Earliest Times to 1700**. Trans. Ernest Dupont. London: C. Hurst & Company.

1973 **The History of Greenland**. Volume 2. **1700-1782**. Trans. Gordon Bowden. London: C. Hurst & Company.

1982 **The History of Greenland**. Volume 3. **1782-1808**. Trans. Charles Jones. Kingston: McGill-Queen's University Press.

1984 History of colonial Greenland. In **Handbook of North American Indians**. Volume 5. **Arctic**. Ed. David Damas. 556-576. Washington, DC: Smithsonian Institution.

Gaskin, D.E.

1982 **The Ecology of Whales and Dolphins**. London: Exeter.

Gasté, Alphonse

1869 Father Gasté meets the Inland Eskimos. **Eskimo** 57 (Dec 1960):3+

Gilberg, R.

- 1975 Changes in the life of the Polar Eskimo resulting from a Canadian immigration to the Thule District, North Greenland. **Folk** 16-17:159-170.

Gilder, William

- 1881 **Schwatka's Search: Sledging in the Arctic in Quest of the Franklin Records**. New York: C. Scribner's Sons.
- 1882 **The Search for Franklin: A Narrative of the American Expedition Under Lieutenant Schwatka, 1878 to 1880**. London: T. Nelson and Sons.
[Abridged version of Colonel Gilder's serialized account in the *New York Herald*, September and October 1880]

Glover, Richard

- 1965 Introduction. In **Letters From Hudson Bay, 1703-40**. Ed. K.G. Davies. xiii-lxviii. London: Hudson's Bay Record Society.
- 1969 Introduction. In **Andrew Graham's Observations on Hudson's Bay 1767-1791**. Ed. Glyndwr Williams. xiii-lxxii. London: Hudson's Bay Record Society.

Goddard, Ives

- 1984 Synonymy. In **Handbook of North American Indians**. Volume 5. **Arctic**. Ed. David Damas. 5-7. Washington, DC: Smithsonian Institution.

Goland, Carol

- 1991 The ecological context of hunter-gatherer storage: environmental predictability and environmental risk. In **Foragers in Context: Long-Term, Regional and Historical Perspectives in Hunter-Gatherer Studies. Michigan Discussions in Anthropology**. Volume 10. Eds. Preston T. Miracle, Lynn E. Fisher, & Jody Brown. 107-126. Ann Arbor: Department of Anthropology. University of Michigan.

Goldring, Philip

- 1986a Inuit economic responses to Euro-American contacts: southeast Baffin Island, 1824-1940. In **Historical Papers: A Selection from the Papers Presented at the Annual meeting Held at Winnipeg 1986**. 146-172.
- 1986b Last voyage of the *McClellan*. **The Beaver** 66:1(January)

Goldthwait, R.P.

- 1966 Evidence from Alaskan glaciers of major climatic changes. In **World Climate from 8000 to 0 B.C.** London: Royal Meteorological Society. 40-53.

Gordon, Bryan

1972 **Archaeological Investigations in the Thelon Game Sanctuary, Central Barrenlands**. Manuscript #726. On file with the Archaeological Survey of Canada. Ottawa: National Museums of Canada.

1974 Thule culture investigations at Baker Lake, N.W.T. **Canadian Archaeological Association Bulletin** 6:218-224.

1975 **Of Men and Herds in Barrenland Prehistory**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #28. Ottawa: National Museums of Canada.

1988 Nadlok and its unusual antler dwellings. **Arctic** 41(2):160-161.

Gordon, Kate

1981 **The Vikings and Their Predecessors**. Ottawa: National Museums of Canada.

Gosch, C.C.A.

1897 **Danish Arctic Expeditions, 1605 to 1620**. London: Hakluyt Society.

Graburn, Nelson H.H.

1969 **Eskimos Without Igloos: Social and Economic Development in Sugluk**. Boston: Little, Brown and Company.

Graburn, Nelson H.H., & Molly Lee

1990 The arctic culture area. In **Native North Americans: An Ethnohistorical Approach**. Ed. Daniel L. Boxberger. 23-64. Dubuque, IO: Kendall/Hunt Publishing.

Graburn, Nelson H.H., & R. Stephen Strong

1973 **Circumpolar Peoples: An Anthropological Perspective**. Pacific Palisades: Goodyear Publishing Company.

Graham, Andrew

1775 Indians. In **James Isham's Observations on Hudson's Bay, 1743, and Notes and Observations on a Book Entitled A Voyage to Hudsons Bay in the Dobbs Galley, 1759**. Ed. E.E. Rich. 309-312. London: The Hudson's Bay Record Society, 1949.

1791 **Observations on Hudson's Bay, 1767-91**. Ed. Glyndwr Williams. London: Hudson's Bay Record Society, 1969.

Grant, Shelagh D.

- 1989 Northern nationalist. In **For Purposes of Dominion: Essays in Honour of Morris Zaslow**. Eds. Kenneth S. Coates & William R. Morrison. North York, ON: Captus Press Inc.

Grove, Jean M.

- 1988 **The Little Ice Age**. London: Methuen.

Gubser, N.

- 1965 **The Nunamiut Eskimos: Hunters of Caribou**. New Haven: Yale University Press.

Guemple, D. Lee

- 1961 **Inuit Spouse-Exchange**. [Chicago]: Dept. of Anthropology, University of Chicago.

- 1965 Saunik: name sharing as a factor governing Eskimo kinship terms. **Ethnology** 4:323-35.

- 1972 Kinship and alliance in Belcher Island Eskimo Society. In **Proceedings of the American Ethnological Society for 1971**. Ed. L. Guemple. 56-78. Seattle: University of Washington Press.

- 1979 **Inuit Adoption**. National Museum of Man Mercury series. Canadian Ethnology Service Paper #47. Ottawa: National Museums of Canada.

- 1980 Growing old in Inuit society. In **Aging in Canada: Social Perspectives**. Ed. Victor W. Marshall. Toronto: Fitzhenry & Whiteside.

Gullov, Hans Christian

- 1985 Whales, whalers, and Eskimos: the impact of European whaling on the demography and economy of Eskimo society in West Greenland. In **Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800**. Ed. William W. Fitzhugh. 71-96. Washington, DC: Smithsonian Institution.

Hall, Charles Francis

- 1862 **Life with the Esquimaux: A Narrative of Arctic Experience in Search of Survivors of Sir John Franklin's Expedition**. Reprint: Edmonton: Hurtig, 1970. Originally published as **Arctic Researches and Life Among the Esquimaux: Being the Narrative of an Expedition in Search of Sir John Franklin, in the Years 1860, 1861, and 1862**. New York: Harper.
[Pagination changed]

1879 **Narrative of the Second Arctic Expedition Made By Charles F. Hall: His Voyage to Repulse Bay, Sledge Journeys to the Straits of Fury and Hecla and to King William's Land, and Residence Among the Eskimos During the Years 1864-69.** Ed. J.E. Nourse. Washington, D.C.: US Government Printing Office.

Hall, Edwin Spurr

1971 Kangiguksuk: a cultural reconstruction of a sixteenth century Eskimo site in northern Alaska. **Arctic Anthropology** 8(1):1-101.

1975 **The Eskimo Storyteller: Folktales from Noatak, Alaska.** Knoxville: University of Tennessee Press.

1978 Technological change in northern Alaska. In **Archaeological Essays in Honor of Irving B. Rouse.** Eds. Robert C. Dunnell & Edwin S. Hall. 209-229. The Hague: Mouton.

Halstead, Paul, & John O'Shea

1989 Introduction: cultural responses to risk and uncertainty. In **Bad Year Economics: Cultural Responses to Risk and Uncertainty.** Eds. Paul Halstead & John O'Shea. 1-7. Cambridge University Press.

Halstead, Paul, J. O'Shea, & T. Whitelaw

1984 **Symposium on Cultural Responses to Risk and Uncertainty.** Cambridge: Theoretical Archaeology Group.

Hanbury, David

1900 A journey from Chesterfield Inlet to Great Slave Lake, 1898-9. **Geographical Journal** 16:63-77.

1903 Through the barren ground of northwestern Canada to the arctic coast. **Geographical Journal** 22:178-191.

1904 **Sport and Travel in the Northland of Canada.** New York: Macmillan.

Hantzsch, Bernard A.

1911 **My Life Among the Eskimos: Baffinland Journeys in the Years 1909 to 1911.** Ed. L.H. Neatby. Institute for Northern Studies, Mawdsley Memoir Series 3. Saskatoon: University of Saskatchewan, 1977.

Hardesty, Donald L.

1980 Ecological explanation in archaeology. In **Advances in Archaeological Method and Theory,** Ed. M.B. Schiffer, Vol. 3.

Hargrave, Letitia

- 1852 **The Letters of Letitia Hargrave**. Ed. Margaret Arnett MacLeod. Toronto: The Champlain Society, 1947.

Harley, Dorothy Eber

- 1986 First impressions: Inuit oral accounts of early contact with Whites. Paper presented at the 1986 Canadian Historical Association.

Harp, Elmer

- 1958 Prehistory in the Dismal Lake Area, N.W.T., Canada. *Arctic* 11:4:219-249.
- 1959 The Moffatt archaeological collection from the Dubawnt country, Canada. *American Antiquity* 24:4:412-422.
- 1961 **The Archaeology of the Lower and Middle Thelon, Northwest Territories** Technical Paper #8. Montreal: Arctic Institute of North America.
- 1962 The culture history of the Central Barren Grounds. In **Prehistoric Cultural Relations Between the Arctic and Temperate Zones of North America**. Ed. John M. Campbell. Technical Paper #11. 69-75. Montreal: Arctic Institute of North America.
- 1963 Archaeological evidence bearing on the origin of the Caribou Eskimo. **Proceedings of the International Congress of Anthropological and Ethnological Science** 2:1:409-413.
- 1974 A late Dorset copper amulet from southeastern Hudson Bay. *Folk* 16:33-44.

Harper, Francis

- 1955 **The Barren Ground Caribou of Keewatin**. Museum of Natural History Miscellaneous Publication #6:1-63. University of Kansas.
- 1964 **Caribou Eskimos of the Upper Kazan River, Keewatin**. Lawrence, KS: University of Kansas Press.

Harris, Marvin

- 1984 A cultural materialist theory of band and village warfare: the Yanomamo test. In **Warfare, Culture, and Environment**. Ed. R. Brian Ferguson. 111-140. New York: Academic Press.
- 1990 Emics and etics revisited. In **Emics and Etics: The Insider/Outsider Debate**. Eds. Thomas N. Headland, Kenneth L. Pike, & Marvin Harris. 48-61. (Frontiers of Anthropology Vol 7). London: Sage Publications.

- 1991 **Cannibals and Kings: The Origins of Cultures**. New York: Vintage.
- Harris, R. Cole, ed.
 1987 **Historical Atlas of Canada: Volume I: From the Beginning to 1800**.
 University of Toronto Press.
- Haven, Jens
 1773 Extract of the voyage of the sloop George to reconnoitre the northern part of
 Labrador in the months of August and September 1773. Unpublished ms.
 London: Moravian Archives. [Cited in J.G. Taylor 1975]
- Hearne, Samuel
 1795 **A Journey from Prince of Wales's Fort in Hudson's Bay to the Northern
 Ocean: Undertaken by Order of the Hudson's Bay Company, for the
 Discovery of Copper Mines, a North West Passage, &c. in the Years
 1769, 1770, 1771 & 1772**. London: A. Strahan & T. Cadell. Ed. Richard
 Glover. Toronto: Macmillan Company of Canada, 1958.
- Hegmon, Michelle, & Lynn E. Fisher
 1991 Information strategies in hunter-gatherer societies. In **Foragers in Context:
 Long-Term, Regional and Historical Perspectives in Hunter-Gatherer
 Studies**. Michigan Discussions in Anthropology. Volume 10. Eds. Preston T.
 Miracle, Lynn E. Fisher, & Jody Brown. 127-145. Ann Arbor: Department
 of Anthropology. University of Michigan.
- Heinrich, Albert C.
 1980 Letter to the editor. *Arctic* 33:1(March):204-205.
- Helm, June, ed.
 1968 **Essays on the Problem of Tribe: Proceedings of the 1967 Annual Spring
 Meeting of the American Ethnological Society**. Seattle: AES.
- Helm, June, & Eleanor B. Leacock
 1971 The hunting tribes of subarctic Canada. In **North American Indians in
 Historical Perspective**. Ed. Eleanor B. Leacock & Nancy O. Lurie. 343-
 374. New York: Random House.
- Hickey, Clifford G.
 1979a Archaeological and ethnohistorical research on Banks Island.
Etude/Inuit/Studies 3(2):132-133.
- 1979b The historic Beringian trade network: its nature and origins. In **Thule
 Eskimo Culture: An Anthropological Retrospective**. Ed. A. McCartney.

411-434. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

1984 An examination of processes of cultural change among nineteenth century Copper Inuit. **Inuit Studies** 8:13-35.

Hill, J.H.

1978 Language contact systems and human adaptations. **Journal of Anthropological Research** 34(1):1-26).

Hiller, J.K.

1971 The Moravians in Labrador, 1771-1805. **The Polar Record** 15:99:839-854.

Hippler, Arthur E.

1973 Patterns of migration, urbanization and acculturation of Alaskan natives. In **Le Peuple Esquimau Aujourd'hui et Demain/The Eskimo People To-Day and To-Morrow**. Ed. Jean Malaurie. 171-177. Fourth International Congress of the Fondation Francaise d'Etudes Nordiques. Paris: Mouton.

Hodder, Ian

1986 **Reading the Past: Current Approaches to Interpretation in Archaeology**. Cambridge University Press.

Hoebel, E. Adamson

1961 **The Law of Primitive Man**. Cambridge, MA: Harvard University Press.

Hoffman, David

1976 Inuit land use on the barren grounds: supplementary notes and analysis. **Report: Inuit Land Use and Occupancy Project** 2:69-84. Ottawa: Department of Indian and Northern Affairs.

Holland, Clive A., & James M. Savelle

1987 My dear Beaufort: a personal letter from John Ross's Arctic Expedition of 1829-33. **Arctic** 40:66-77.

Holland, Paula Lee

1979 **Seven Eskimo Religious Movements: Description and Analysis**. M.A. thesis, Anthropology, University of Manitoba.

Holm, Gustav

1888 **Ethnological Sketch of the Angmagsalik Eskimo**. Part I. **Meddelelser om Grønland**. 39:1. Ed. William Thalbitzer. Copenhagen, 1914.

Holmer, Nils

- 1967 The native place names of arctic America: Part 1. Name: **Journal of the American Name Society**. XV:182-196.

Holtved, Erik

- 1944 **Archaeological Investigations in the Thule District, Parts I and II. Meddelelser om Grønland** 146(3).
- 1954 **Archaeological Investigations in the Thule District, Part III: Nugdlit and Comer's Midden. Meddelelser om Grønland** 146(3).
- 1967 **Contributions to the Polar Eskimo Ethnography. Meddelelser om Grønland** 182(2):1-180.

Hood, Robert

- 1821 **To the Arctic by Canoe, 1819-1821: The Journal and Paintings of Robert Hood, Midshipman with Franklin**. Ed. C. Stuart Houston. Montreal: Arctic Institute of North America, 1974.

Hornby, John

- 1934 Wild life in the Thelon River area, Northwest Territories, Canada. **The Canadian Field-Naturalist** 48:7:105-111.

Hulten, Eric

- 1962-71 **The Circumpolar Plants**. Svenska vetenskapsakademien, Stockholm. Handlingar, 4. ser., bd. 8, nr. 5. Stockholm: Almqvist & Wiksell.

Hummel, Monte

- 1984 **Arctic Wildlife**. Toronto: Key Porter Books.

Hunter, Archie

- 1983 **Northern Traders: Caribou Hair in the Stew**. Victoria: Sono Nis.

Hustich, Ilmari

- 1972 The influence of climate on the growth of trees. In **Climatic Changes in Arctic Areas During the Last Ten-Thousand Years**. Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. 273-276. Eds. Y. Vasari, H. Hyvarinen, S. Hick. Oulu, Finland: University of Oulu.

Idiens, Dale

- 1987 Eskimos in Scotland: c. 1682-1924. In **Indians and Europe: An Interdisciplinary Collection of Essays**. Ed. Christian Feest. 161-174. Aachen: Edition Herodot, Rader Verlag.

- Ingalrea, Tom, Leo Moses, & Anthony C. Woodbury
 1984 **Eskimo Narratives and Tales From Chevak**. Fairbanks: Alaska Native Language Center, University of Alaska.
- Ingold, Tim
 1988 Notes on the foraging mode of production. In **Hunters and Gatherers 1: History, Evolution and Social Change**. Eds. Tim Ingold, David Riches, & James Woodburn. 269-285. Oxford: Berg.
- Irving, W.N.
 1968 Prehistory of Hudson Bay: the barren grounds. In **Science, History and Hudson Bay**. Eds. C.S. Beals. Vol. I. 26-54. Ottawa: Department of Energy, Mines, and Resources.
 1970 The Arctic Small Tool tradition. **VIIIth International Congress of Anthropological and Ethnological Sciences** 3:340-342.
- Isham, James
 1743 **Observations on Hudsons Bay, 1743**. In **James Isham's Observations on Hudsons Bay, 1743**. Ed. E.E. Rich. 3-196. London: Hudson's Bay Record Society, 1949.
 1749 Notes and Observations on a book entitled **A Voyage to Hudsons Bay in the Dobbs Galley, 1749**. In **James Isham's Observations on Hudsons Bay, 1743**. Ed. E.E. Rich. 197-240. London: Hudson's Bay Record Society, 1949.
- Israel, Heinz
 1987 Johann Gottfried Schadow and his Inuit portraits. In **Indians and Europe: An Interdisciplinary Collection of Essays**. Ed. Christian Feest. 235-241. Aachen: Edition Herodot, Rader Verlag.
- Ives, J.D.
 1962 Indications of recent extensive glacierization in north-central Baffin Island, N.W.T. **Journal of Glaciology** 4:197-205.
- Jacobs, John D., & George Sabo
 1978 Environments and adaptations of the Thule culture on the Davis Strait coast of Baffin Island. **Arctic and Alpine Research** 10:3:595-615.
 1985 Environment, resources, and prehistoric settlement in upper Frobisher Bay, Baffin Island. **Arctic Anthropology** 22(2):59-76.

Jacobs, John D., Douglas Stenton, & W.N.Mode

- 1990 Environmental and cultural change in the large lakes region of Baffin Island: a progress report. In **Canada's Missing Dimension: Science and History in the Canadian Arctic Islands**. Proceedings of the conference on The Canadian Arctic Islands: Canada's Missing Dimension, Ottawa, November 21-24, 1987. Ed. C.R. Harington. II:724-742. Ottawa: Canadian Museum of Nature.

Jacoby, Gordon C., & Rosanne D'Arrigo

- 1989 Reconstructed northern hemisphere annual temperatures since 1671 based on high-latitude tree-ring data from North America. **Climatic Change** 14:1:39-59.

Janes, John

- 1589 The first voyage of Captain John Davis of Sandruge in Devonshire 1585 to the North-West. In **North-West Fox, or Fox from the North-West Passage....** Ed. Luke Foxe. 33-37. London: B. Alsop & Tho. Fawcet, 1635. [Facsimile edition. New York: S.R. Publishers Ltd and Johnson Reprint Corporation, 1965] [Originally published by Richard Hakluyt, 1589]

Janes, Robert R.

- 1973 Indian and Eskimo contact in southern Keewatin: an ethnohistorical approach. **Ethnohistory** 20:1(Winter):39-54.

Jenness, Diamond

- 1916 **Arctic Odyssey: The Diary of Diamond Jenness, Ethnologist with the Canadian Arctic Expedition in Northern Alaska and Canada, 1913-1916**. Ed. Stuart E. Jenness. Hull: Canadian Museum of Civilization.
- 1923 **The Life of the Copper Eskimos. Report of the Canadian Arctic Expedition, 1913-18**. Volume 12, Part A. Ottawa.
- 1924 **Myths and Traditions from Northern Alaska, the Mackenzie Delta, and Coronation Gulf. Report of the Canadian Arctic Expedition 1913-18**. Volume 13, Part A. Ottawa.
- 1925 A new Eskimo culture in Hudson Bay. **Geographical Review** 15:3:428-437.
- 1926 **Eskimo Folk-Lore**. Report of the Canadian Arctic Expedition, 1913-18 Volume 13. Ottawa: F.A. Acland.
- 1928a **Comparative Vocabulary of the Western Eskimo Dialects. Report of the Canadian Arctic Expedition, 1913-18**. Vol. 15A. Ottawa.

- 1928b **The People of the Twilight**. Chicago: University of Chicago Press.
- 1940 Comments on James Anderson's Back River Journal of 1855. **Canadian Field Naturalist** 54:5(May).
- 1941 Comments on James Anderson's Back River Journal of 1855. **Canadian Field Naturalist** 55:3(March).
- 1946 **Material Culture of the Copper Eskimo. Report of the Canadian Arctic Expedition, 1913-18**. Vol. 16. Ottawa.
- 1962 **Eskimo Administration: I. Alaska**. Technical paper #10. Montreal: Arctic Institute of North America
- 1964 **Eskimo Administration: II. Canada**. Technical Paper #14. Montreal: Arctic Institute of North America.
- 1965 **Eskimo Administration: III. Labrador**. Technical Paper #16. Montreal: Arctic Institute of North America.
- 1967 **Eskimo Administration. IV. Greenland**. Technical Paper #19. Montreal: Arctic Institute of North America.
- 1968 **Eskimo Administration: V. Analysis and Reflections**. Technical Paper #21. Montreal: Arctic Institute of North America.
- Jenness, Stuart E.
- 1991 Preface and prologue. In **Arctic Odyssey: The Diary of Diamond Jenness, Ethnologist with the Canadian Arctic Expedition in Northern Alaska and Canada, 1913-1916**. Ed. Stuart E. Jenness. xxvii-xliii. Hull: Canadian Museum of Civilization.
- Jérémie de la Montagne, Nicolas
- 1720 **Twenty Years of York Factory 1694-1714**. Trans. from the French edition of 1720. Eds. R. Douglas & J.N. Wallace. Ottawa: Thorburn & Abbott, 1926.
- Jones, Gwyn
- 1964a **The Norse Atlantic Saga: Being the Norse Voyages of Discovery and Settlement to Iceland, Greenland, America**. London: Oxford University Press.
- 1964b The first Europeans in America. **The Beaver** (Winter):4-17.

- 1968 **A History of the Vikings**. London: Oxford University Press.
- Jordan, Richard H.
- 1977 Inuit occupation of the central Labrador coast since 1600 AD. In **Our Footprints Are Everywhere: Inuit Land Use and Occupancy in Labrador**. Ed. Carol Brice-Bennett. 43-48. Labrador Inuit Kattekatenginga.
- 1978 Archaeological investigations of the Hamilton Inlet Labrador Eskimo: social and economic response to European contact. **Arctic Anthropology** 15(2):175-185.
- Jordan, Richard H., & Susan Kaplan
- 1980 An archaeological view of the Inuit/European contact period in Central Labrador. **Etudes/Inuit/Studies** 4(1-2):35-45.
- Kaplan, Susan A.
- 1984 Eskimo-European contact archaeology in Labrador. In **Comparative Studies in the Archaeology of colonialism**. Ed. S. Dyson. Oxford: British Archaeological Reports.
- 1985 European goods and socio-economic change in early Labrador Inuit society. In **Cultures in Contact: The Impact of European Contacts on Native American Cultural Institutions, A.D. 1000-1800**. Ed. William W. Fitzhugh. 45-69. Washington, DC: Smithsonian Institution.
- Kappi, Leoni, ed.
- 1977 **Inuit Legends**. Yellowknife: Dept. of Education.
- Keene, A.S.
- 1981 Optimal foraging in a nonmarginal environment: a model of prehistoric subsistence strategies in Michigan. In **Hunter-Gatherer Foraging Strategies**. Eds. B. Winterhalder & E.A. Smith. 171-193. Chicago: University of Chicago Press.
- Keighley, Sydney A.
- 1989 **Trader, Tripper, Trapper: The Life of a Bay Man**. Winnipeg: Watson & Dwyer.
- Kelly, P.M., J.H.W. Karas, & L.D. Williams
- 1984 Arctic climate: past, present and future. **Arctic Whaling**. Proceedings of the International Symposium Arctic Whaling, February 1983. 25-38. University of Groningen.

- Kelsall, D.R.
 1968 **The Migratory Barren-Ground Caribou of Canada**. Ottawa: Canadian Wildlife Service.
- Kelsey, Henry
 [1689] A Journal of a Voyage and Journey Undertaken by Henry Kelsey.... June the 17th, 1689. In **The Kelsey Papers**. Ed. A.G. Doughty & C. Martin. 25-32. Ottawa: Public Archives of Canada.
- Kemp, William B.
 1984 Baffinland Eskimo. In **Handbook of North American Indians Volume 5. Arctic**. Ed. David Damas. 463-475. Washington, DC: Smithsonian Institution.
- Kenney, J.F., ed.
 1932 **The Founding of Churchill....** Toronto, 1932.
- Kenyon, Walter Andrew
 1981 Introduction. The Canadian arctic journal of Captain Edward Fenton, 1578. **Archivaria** 11:171-203.
- Kindle, E.M.
 1917 The migration of the barren-land caribou. **The Ottawa Naturalist** 31:9:107-109.
 1921 Mackenzie River driftwood. **Geographical Review** 11:50-63.
- Kitto, F.H.
 1930 **The North West Territories 1930**. Ottawa: Department of the Interior.
- Klutschak, Heinrich
 1881 **Overland to Starvation Cove: With the Inuit in Search of Franklin, 1878-1880**. Trans. & ed William Barr. Toronto: University of Toronto Press, 1987.
- Knight, James
 1717 Journal kept at Churchill River, 14 July to 13 September, 1717. In **The Founding of Churchill....** Ed. J.F. Kenney. Toronto, 1932.
- Knight, John
 1606 **Journal of the Voyage of John Knight to Seek the North-West Passage 1606**. Ed. Clement R. Markham. Hakluyt Society #56. London: Hakluyt Society, 1877.

Knuth, Eigil

1963 Singajuk's family saga. *Folk* 5:209-218.

Kohlmeister, Benjamin, & George Kmoch

1814 **Journal of a Voyage from Okkak, on the Coast of Labrador, to Ungava Bay, Westward of Cape Chudleigh.** London: Brethren's Society for the Furtherance of the Gospel Among the Heathen. [CIHM/ICMH #21002. Ottawa: Canadian Institute for Historical Microreproductions]

Kroeber, Clifton B., & Bernard L. Fontana

1986 **Massacre on the Gila: An Account of the Last Major Battle Between American Indians, with Reflections on the Origin of War.** University of Arizona Press.

Kupp, Jan, & Simon Hart

1976 The Dutch in the Strait of Davis and Labrador during the 17th and 18th centuries. *Man in the Northeast* 11:3-20.

Lamb, H.H.

1966 **The Changing Climate.** London: Methuen.

1972 Atmospheric circulation and climate in the arctic since the last ice age. In **Climatic Changes in Arctic Areas During the Last Ten-Thousand Years.** Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. Eds. Y. Vasari, H. Hyvarinen, S. Hick. Oulu, Finland: University of Oulu.

1977 **Climate Present, Past and Future.** Volume 2. London: Methuen.

1979 Climatic variations and changes in the wind and ocean circulation: the Little Ice Age in the northeast Atlantic. *Quaternary Research* 11:1-20.

1981 Climate changes and food production: observations and outlook in the modern world. *Geo-Journal* [Weisbaden] 5:2:101-112.

1982 **Climate, History and The Modern World.** London: Methuen.

1988 **Weather, Climate & Human Affairs: A Book of Essays and Other Papers.** London: Routledge.

Laughlin, Charles D., & Ivan A. Brady

1978 Introduction: diaphasis and change in human populations. In **Extinction and Survival in Human Populations.** Eds. Charles D. Laughlin & Ivan A. Brady. 1-48. New York: Columbia University Press.

- Laughlin, Charles D., & Ivan A. Brady, eds.
 1978 **Extinction and Survival in Human Populations**. Eds. Charles D. Laughlin & Ivan A. Brady. New York: Columbia University Press.
- Leden, Christian
 1927 **Across the Keewatin Icefields: Three Years Among the Canadian Eskimos, 1913-1916**. Trans. from the German by Leslie Neatby. Ed. Shirlee Anne Smith. Winnipeg: Watson and Dwyer, 1990.
- Leroy Ladurie, E.L.
 1972 **Times of Feast, Times of Famine: A History of Climate since the Year 1000**. Trans by Barbara Bray. New York: Doubleday.
- Linnamae, Urve, & Brenda L. Clark
 1976 Archaeology of Rankin Inlet, N.W.T. **Musk Ox** 19:37-73.
- Literary Gazette.**
 1821 Esquimaux. 21 May 1821:501. London.
- Lofthouse, J.
 1899 A trip on the Tha-anne River, Hudson Bay. **Geographical Journal** 13:274-277.
- 1922 **A Thousand Miles From a Post Office, or, Twenty Years' Life and Travel in the Hudson's Bay Regions**. London: Society for Promoting Christian Knowledge.
- Lough, J.M., & H.C. Fritts
 1987 An assessment of the possible effects of volcanic eruptions on North American climate using tree-ring data, 1602 to 1900 A.D. **Climatic Change** 10:3:219-240.
- Low, Albert P.
 1903 Report on an exploration of the east coast of Hudson Bay from Cape Wolstenholme to the south end of James Bay. **Geological Survey of Canada Annual Report 1900 N.S. Vol. XIII**. Ottawa.
- 1906 **Report on the Dominion Government Expedition to Hudson Bay and the Arctic Islands on Board the D.G.S. Neptune 1903-04**. Ottawa: Government Printing Office.
- Lyon, George Francis
 1824 **The Private Journal of Captain G.F. Lyon of H.M.S. Hecla During the Recent Voyage of Discovery Under Captain Parry**. London: John Murray.

[CIHM/ICMH #36822. Ottawa: Canadian Institute for Historical Microreproductions]

- 1825 **A Brief Narrative of an Unsuccessful Attempt to Reach Repulse Bay, Through Sir Thomas Rowe's "Welcome," in His Majesty's Ship Griper in the Year MDCCCXXIV [1824].** London: John Murray.

Lytwyn, Victor P.

- 1993 **The Hudson Bay Lowland Cree in the Fur Trade to 1821: A Study in Historical Geography.** Ph.D. thesis, Geography, University of Manitoba.

McCartney, Allen P.

- 1977 **Thule Eskimo Prehistory Along Northwestern Hudson Bay.** National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #70. Ottawa: National Museums of Canada.

- 1978 **Study of Whale Bones for the Reconstruction of Canadian Arctic Bowhead Whale Stocks and Whale Use by Prehistoric Inuit.** Northern Environmental Branch, Final Report. Ottawa: Department of Indian and Northern Affairs.

- 1979 Whale bone assessment. In **Archaeological Whale bone: A Northern Resource.** Ed. Allen McCartney. Anthropological Papers of the University of Arkansas 1:21-70.

- 1980 The nature of Thule Eskimo whale use. *Arctic* 33:517-541.

- 1984 History of native whaling in the arctic and subarctic. **Arctic Whaling.** Proceedings of the International Symposium Arctic Whaling, February 1983. 79-111. University of Groningen.

McCartney, Allen P., & D.J. Mack

- 1973 Iron utilization by Thule Eskimos of central Canada. **American Antiquity** 38:3:328-338.

McCartney, Allen P., & James M. Savelle

- 1985 Thule Eskimo whaling in the central Canadian arctic. **Arctic Anthropology** 22:37-58.

McClintock, Francis Leopold

- 1859a **The Voyage of the "Fox" in the Arctic Seas: A Narrative of the Discovery of the Fate of Sir John Franklin and His Companions.** London: John Murray.

- 1859b **In the Arctic Seas: A Narrative of the Discovery of the Fate of Sir John Franklin and His Companions.** Author's ed. Philadelphia: Porter & Coates. Appendix IV. Geological account of the Arctic Archipelago by Samuel Haughton.
- 1857 Reminiscences of Arctic ice travel in search of Sir John Franklin and his companions. **Journal of the Royal Dublin Society** 1:183-238.
- McClure, Robert
- 1856 **The Discovery of the North-West Passage by H.M.S. *Investigator*, Capt. R. M'Clure, 1850, 1851, 1852, 1853, 1854.** Ed. Sherard Osborn. London: Longman, Brown, Green, Longmans, & Roberts.
- McCullough, Karen M.
- 1986 **The Ruin Islanders: Thule Culture Pioneers in the Eastern High Arctic.** Mercury Series. Archaeological Survey of Canada Paper #141. Ottawa: Canadian Museum of Civilization.
- McDonald, Alexander
- 1841 **A Narrative of Some Passages in the History of Eenoooloopik.** Edinburgh: Fraser & Co. [CIHM/ICMH #46887. Ottawa: Canadian Institute for Historical Microreproductions]
- McGhee, Robert
- 1970a Excavations at Bloody Falls, N.W.T., Canada. **Arctic Anthropology** 6:2:53-73.
- 1970b Speculations on climatic change and Thule culture development. **Folk** 11/12:173-84.
- 1972a **Copper Eskimo Prehistory.** Publications in Archaeology #2. [Ottawa: National Museums of Canada].
- 1972b Climatic change and the development of Canadian arctic cultural traditions. In **Climatic Changes in Arctic Areas During the Last Ten Thousand Years.** Proceedings of a symposium held at Oulanka and Kevo, 4-10 October 1971. Eds. Y. Vasari, H. Hyvarinen, & Sheila Hicks. 39-60. Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. Oulu, Finland: University of Oulu.
- 1974a A current interpretation of central Canadian arctic prehistory. **Inter-Nord** 13-14(December):171-180.

- 1974b **Beluga Hunters: An Archaeological Reconstruction of the History and Culture of the Mackenzie Delta Kittigaryumiut.** Newfoundland Social and Economic Studies 13. St John's: Memorial University of Newfoundland.
- 1975 An individual view of Canadian Eskimo prehistory. **Canadian Archaeological Association Bulletin** 7:55-75.
- 1976a Paleoeskimo occupations of central and high arctic Canada. In **Eastern Arctic Prehistory: Paleoeskimo Problems.** Ed. Maxwell S. Moreau. 15-39. The Joint Project of the National Museums of Canada and the School of American Research. *Memoirs of the Society for American Archaeology* #31. [Washington, DC: Society for American Archaeology.]
- 1976b West Alaskan influences in Mackenzie Eskimo culture. In **Contributions to Anthropology: The Interior Peoples of Northwest Alaska.** Ed. E.S. Hall. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #49. Ottawa: National Museums of Canada.
- 1978 **Canadian Arctic Prehistory.** Toronto: Van Nostrand Reinhold.
- 1981 The Norse in North America. In **The Vikings and Their Predecessors** by Kate Gordon. 39-48. Ottawa: National Museums of Canada.
- 1982 The past ten years in Canadian arctic prehistory. **Canadian Journal of Archaeology** 6:65-77.
- 1983 Eastern arctic prehistory: the reality of a myth? **Musk-Ox** 33:21-25.
- 1984a The timing of the Thule migration. **Polarforschung** 54(1):1-7.
- 1984b Thule prehistory in Canada. In **Handbook of North American Indians.** Volume 5. **Arctic.** Ed. David Damas. 369-376. Washington, DC: Smithsonian Institution.
- 1984c **The Thule Village at Brooman Point, High Arctic Canada.** National Museum of Man Mercury Series, Archaeological Survey of Canada Paper #125. Ottawa: National Museums of Canada.
- 1984d Contact between native North Americans and the medieval Norse: a review of the evidence. **American Antiquity** 49(1):4-26.
- 1987 Why did the Vikings leave? **Rotunda** 20:3(Winter):42-48.

- 1988 The prehistory and prehistoric art of the Canadian Inuit. In **Inuit Art: An Anthology**. Ed. Alma Houston. 12-20. Winnipeg: Watson & Dwyer.
- 1990 The peopling of the arctic islands. In **Canada's Missing Dimension: Science and History in the Canadian Arctic Islands**. Proceedings of the conference on The Canadian Arctic Islands: Canada's Missing Dimension, Ottawa, November 21-24, 1987. Ed. C.R. Harington. Vol. 2:666-676. Ottawa: Canadian Museum of Nature.
- McGovern, T.H.
- 1981 The economics of extinction in Norse Greenland. In **Climate and History: Studies in Past Climates and Their Impact on Man**. Eds. T.M.L. Wigley, M.J. Ingram, & G. Farmer. 404-433. Cambridge: Cambridge University Press.
- McKeevor, Thomas
- 1819 **A Voyage to Hudson's Bay During the Summer of 1812: Containing a Particular Account of the Icebergs and Other Phenomena Which Present Themselves in These Regions; Also, a Description of the Esquimeaux and North American Indians; Their Manners, Customs, Dress, Language, &c.** London: Phillips. [CIHM/ICMH #38001. Ottawa: Canadian Institute for Historical Microreproductions]
- McKinnon, C.S.
- 1989 The 1958 government policy reversal in Keewatin. In **For Purposes of Dominion: Essays in Honour of Morris Zaslow**. Eds. Kenneth S. Coates & William R. Morrison. North York, ON: Captus Press Inc.
- McLaren, Peter L., & R. A. Davis
- 1983 **Winter Distribution of Arctic Marine Mammals in Ice-covered Waters of Eastern North America**. OLABS Program report [For LGL Limited for Petro-Canada Exploration, Inc.]. [Calgary: Petro-Canada].
- McLean, John
- 1849 **Notes of a Twenty-five Year's Service in the Hudson's Bay Territory**. Ed. W.S. Wallace. Publications of the Champlain Society 19. Toronto: Champlain Society.
- MacRitchie, David
- 1912a Kayaks of the North Sea. **Scottish Geographical Magazine** XXVIII:126-133.
- 1912b The kayak in north-western Europe. **Journal of the Royal Anthropological Institute** XLII:493-510.

- Mailhot, José
 1978 L'étymologie de 'Esquimau': revue et corrigée. *Etudes/Inuit/Studies* 2:2:59-69.
- Malcolmson, Robert W.
 1973 **Popular Recreations in English Society, 1700-1850**. Cambridge: Cambridge University Press.
- Manning, Thomas H.
 1943 Notes on the coastal district of the eastern barren grounds and Melville from Igloodik to Cape Fullerton. *Canadian Geographical Journal* 26:84-105.
 1951 **A Mixed Cape Dorset-Thule Site on Smith Island, Eastern Hudson Bay**. Bulletin #123. Ottawa: National Museums of Canada
 1960 **The Relationship of the Peary and Barren-Ground Caribou**. Technical Paper #4. Montreal: Arctic Institute of North America.
- Manning, Thomas H., and E.W. Manning
 1944 The preparation of skins and clothing in the eastern Canadian arctic. *Polar Record* 4(18):156-169.
- Markham, Clements R., ed.
 1881 **The Voyages of William Baffin 1612-22**. London: Hakluyt Society.
- Martijn, C.A.
 1980a The 'Esquimaux' in the 17th and 18th century cartography of the Gulf of St. Lawrence: a preliminary discussion. *Etudes/Inuit/Studies* 4(1-2):77-104.
 1980b The Inuit of southern Quebec-Labrador: a rejoinder to J. Garth Taylor. *Etudes/Inuit/Studies* 4(1-2):194-198.
 1980c La présence inuit sur la Cote Nord du golfe St-Laurent à l'époque historique. *Etudes/Inuit/Studies* 4(1-2):105-126.
- Marwick, Ernest W.
 1975 **The Folklore of Orkney and Shetland**. Totowa, NJ: Rowman and Littlefield.
- Mary-Rousselière, Guy
 1954a The archaeological site of Pingerkalik. *Eskimo* 33(September):11-15.
 1954b Issingut, the starvation camp. *Eskimo* 33(Dec):9-13.

- 1959 Eskimo migrations. *Eskimo* 51(June):8-9, 12-15.
- 1960a The grave of Kukigak. *Eskimo* 57(December):18-22.
- 1960b Importance of Father Gasté's voyage. *Eskimo* 57(December):16-17.
- 1961 **Beyond the High Hills: A Book of Eskimo Poems.** Cleveland: The World Publishing Company.
- 1976 The Paleoeskimo in northern Baffinland. In **Eastern Arctic Prehistory: Paleoeskimo Problems.** Ed. Moreau S. Maxwell. 40-57. *Memoirs of the Society for American Archaeology* 31.
- 1979 The Thule culture of north Baffin island: early Thule characteristics and the survival of Thule tradition. In **Thule Eskimo Culture: An Anthropological Retrospective.** Ed. A. McCartney. 54-75. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.
- 1983a Gone leaving no forwarding address, the Tununirusirmiut. *Eskimo* N.S.24 (Fall-Winter):3-15.
- 1983b Merquasaq (ca. 1850-1916). *Arctic* 36:3(Sept):292-293.
- 1984 Iglulik. In **Handbook of North American Indians.** Volume 5. *Arctic.* Ed. David Damas. 431-446. Washington, DC: Smithsonian Institution.
- 1985 Factors affecting human occupation of the land in the Pond Inlet region from prehistoric to contemporary times. *Eskimo* N.S. 28(Fall-Winter):8-24.
- 1991 **Qitdlarssuaq: The Story of a Polar Migration.** Winnipeg: Wuerz.
- Maslow, Abraham
- 1973 **Dominance, Self-Esteem, Self-Actualization: Germinal Papers of A.H. Maslow.** Ed. Richard J. Lowry. Monterey, CA: Brooks/Cole Publishing Company.
- Mathiassen, Therkel
- 1927a **Archaeology of the Central Eskimos I: Descriptive Part. Report of the Fifth Thule Expedition, 1921-24** 4(1). Copenhagen: Gyldendal.
- 1927b **Archaeology of the Central Eskimos II: Analytical Part. Report of the Fifth Thule Expedition, 1921-24** 4(2). Copenhagen: Gyldendal.

- 1928a **Material Culture of the Central Eskimos. Report of the Fifth Thule Expedition, 1921-24.** Copenhagen: Gyldendal.
- 1928b **Material Culture of the Iglulik Eskimos. Report of the Fifth Thule Expedition, 1921-24.** 6(1). Copenhagen: Gyldendal.
- 1930 **Archaeological Collections from the Western Eskimos. Report of the Fifth Thule Expedition, 1921-24** 10(1). Copenhagen: Gyldendal.
- 1931a **Ancient Eskimo Settlements on the Kanagmiut Area.** Copenhagen: C.A. Reitzel.
- 1931b **Contributions to the Physiography of Southampton Island.** Report of the Fifth Thule Expedition, 1921-24. 1(2). Copenhagen: Gyldendal.
- 1933 **Contributions to the Geography of Baffin Land and Melville Peninsula.** Report of the Fifth Thule Expedition, 1921-24. Copenhagen: Gyldendal.
- 1935 **Archaeology in Greenland.** *Antiquity* IX:34(June):195-203.
- 1945 **Report on the Expedition.** Report of the Fifth Thule Expedition, 1921-24. Copenhagen: Gyldendal.
- Maxwell, Moreau S.
- 1960a **An Archaeological Analysis of Eastern Grant Land, Ellesmere Island, Northwest Territories.** National Museum of Man Bulletin #170. Ottawa: National Museums of Canada.
- 1960b **The movement of cultures in the Canadian High Arctic.** *Anthropologica* (n.s.) 2:2:177-189.
- 1976 **Introduction.** In **Eastern Arctic Prehistory: Paleoeskimo Problems: A Monograph Resulting from a Joint Project Sponsored by the National Museums of Canada and the School of American Research.** *Memoirs of the Society for American Archaeology*, #31. [Washington, DC: Society for American Archaeology].
- 1979 **The Lake Harbour region: ecological equilibrium in sea coast adaptation.** In **Thule Eskimo Culture: An Anthropological Retrospective.** Ed. A. McCartney. 76-88. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.
- 1984 **Pre-Dorset and Dorset Prehistory of Canada.** In **Handbook of American Indians.** Volume 5. **Arctic.** Ed. David Damas. 359-368. Washington, DC: Smithsonian Institution.

Maxwell, Moreau S., ed.

- 1976 **Eastern Arctic Prehistory: Paleoeskimo Problems: A Monograph Resulting from a Joint Project Sponsored by the National Museums of Canada and the School of American Research.** *Memoirs of the Society for American Archaeology*, #31. [Washington, DC: Society for American Archaeology].

Meldgaard, Jorgen

- 1960 Origin and evolution of Eskimo cultures in the eastern arctic. **Canadian Geographic Journal** 60(2):64-75.
- 1962 On the formative period of the Dorset culture. In **Prehistoric Cultural Relations Between the Arctic and Temperate Zones of North America.** Ed. J. Campbell. 92-95. Arctic Institute of North America Technical Paper #11. Montreal: Arctic Institute of North America.

Meltzer, David, & J.I. Mead, eds.

- 1985 **Environments and Extinctions: Man in Late Glacial North America.** Orono, ME: Centre for the Study of Early Man.

Metayer, Maurice, & Agnes Nanogak

- 1972 **Tales From the Igloo.** Edmonton: Hurtig Publishers.

Mikkelsen, E.

- 1954 Kajakmandan fra Aberdeen. **Grønland** 53-58.

Miller, Frank

- 1974 Biology of the Kaminuriak population of barren-ground caribou, Part 2. **Canadian Wildlife Service Report Series** 31.
- 1976 Biology of the Kaminuriak population of barren-ground caribou, Part 3. **Canadian Wildlife Service Report Series** 36.

Minc, Leah

- 1986 Scarcity and survival: the role of oral tradition in mediating subsistence crises. **Journal of Anthropological Archaeology** 5:39-113.

Minc, Leah, & K.P. Smith

- 1989 The spirit of survival: cultural responses to resource variability in North Alaska. In **Bad Year Economics: Cultural Responses to Risk and Uncertainty.** Eds. Paul Halstead & John O'Shea. 8-39. Cambridge University Press.

- Miracle, Preston T., Lynn E. Fisher, & Jody Brown, eds.
 1991 **Foragers in Context: Long-Term, Regional and Historical Perspectives in Hunter-Gatherer Studies.** *Michigan Discussions in Anthropology* Vol. 10. Ann Arbor: Department of Anthropology. University of Michigan.
- Mithen, S.J.
 1990 **Thoughtful Foragers: A Study of Prehistoric Decision Making.** Cambridge: Cambridge University Press.
- Moodie, D.W., & A.J.W. Catchpole
 1975 Environmental data from historical documents by content analysis: freeze-up of estuaries on Hudson Bay, 1714-1871. *Manitoba Geographical Studies* 5. Winnipeg: Department of Geography, University of Manitoba.
- Moore, James A.
 1981 The effects of information networks in hunter-gatherer societies. In **Hunter-Gatherer Foraging Strategies: Ethnographic and Archeological Analyses.** Eds. Bruce Winterhalder & Eric Alden Smith. 194-217. Chicago: University of Chicago Press.
 1983 The trouble with know-it-alls: information as a social and ecological resource. In **Archaeological Hammers and Theories.** Eds. J.A. Moore & A.S. Keene. 173-198. New York: Academic Press.
- Morrison, David
 1983a **Thule Culture in Western Coronation Gulf, N.W.T.** National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #116. Ottawa: National Museums of Canada.
 1983b Thule sea mammal hunting in the western central Arctic. *Arctic Anthropology* 20(2):61-78.
 1987 Thule and historic copper use in the Copper Inuit area. *American Antiquity* 52(1):3-12.
 1988 **The Kugaluk Site and the Nuvorugmiut.** National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #137. Ottawa: National Museums of Canada.
 1990 **Iglulualumiut Prehistory: The Lost Inuit of Franklin Bay.** National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #142. Ottawa: National Museums of Canada.

- 1992 **Arctic Hunters: The Inuit and Diamond Jenness.** Canadian Museum of Civilization.
- Morrison, William R.
 1987 Eagle over the arctic: Americans in the Canadian north, 1867-1985. **Canadian Review of American Studies** (Spring):61-75.
- Mowat, Farley
 1965 **Westviking: The Ancient Norse in Greenland and North America.** London: Secker & Warburg.
- Munk, Jens
 1624 **The Journal of Jens Munk, 1619-1620.** Ed. Walter A. Kenyon. Toronto: Royal Ontario Museum, 1980. [New edition of Munk's Journal, 1619-20 originally published in **Danish Arctic Expeditions, 1605 to 1620.** Ed. C.C.A. Gosch. London: Hakluyt Society, 1897]
- Munn, Henry Toke
 1922 The economic life of the Baffin Island Eskimo. **Geographical Journal** 59:4(June).
- Murdoch, John
 1886 A few legendary fragments from the point Barrow Eskimo. **American Naturalist** 20:593-599.
- Murdoch, John
 1885 **Report of the International Polar Expedition to Point Barrow, Alaska.** Washington, DC: U.S. Government Printing Office.
 1892 Ethnological results of the Point Barrow expedition. **Bureau of American Ethnology. Annual Report** 9:16-441.
- Nanogak, Agnes
 1986 **More Tales From the Igloo.** Edmonton: Hurtig.
- Nash, Ronald J.
 1969 **The Arctic Small Tool Tradition in Manitoba.** Winnipeg: Department of Anthropology Occasional Paper 2. Winnipeg: University of Manitoba.
 1972 Dorset culture in northeastern Manitoba, Canada. **Arctic Anthropology** 9(1):10-16.
 1976 Cultural systems and culture change in the central arctic. In **Eastern Arctic Prehistory: Paleoeskimo Problems.** Ed. Moreau S. Maxwell. 150-155.

Memoirs of the Society for American Archaeology 31. Salt Lake City: The Society for American Archaeology.

Nelson, Edward W.

- 1899 **The Eskimo about Bering Strait**. Bureau of American Ethnology Annual Report for 1896-97. Vol. 18, #1. Washington, DC: Smithsonian Institution. [Reprint: Smithsonian Institution, 1983]

Nichols, Harvey

- 1967a The post-glacial history of vegetation and climate at Ennadai Lake, Keewatin, and Lynn Lake, Manitoba (Canada). **Euszeitalter und Gegenwart** 18:176-197.
- 1967b Pollen diagrams from sub-arctic Central Canada. **Science** 155:1665-1668.
- 1967c Central Canadian palynology and its relevance to northwestern Europe in the Late Quaternary period. **Review of Paleobotany and Palynology** 3:231-243.
- 1968 Pollen analysis, paleotemperatures, and the summer position of the arctic front in the postglacial history of Keewatin, Canada. **Bulletin of the American Meteorological Society** 49(4):387-8.
- 1970 Late quaternary pollen diagrams from the Canadian arctic barren grounds at Pelly Lake, northern Keewatin, N.W.T. **Arctic and Alpine Research** 2(1):43-61.
- 1972 Summary of the palynological evidence for late-quaternary vegetational and climatic change in the central and eastern Canadian arctic. In **Climatic Changes in Arctic Areas During the Last Ten-Thousand Years**. Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. 309-339. Eds. Y. Vasari, H. Hyvarinen, S. Hick. Oulu, Finland: University of Oulu.
- 1975a Palynological and paleoclimatic study of Holocene displacement of the forest limit in MacKenzie and Keewatin, N.W.T., Canada. **Arctic and Alpine Research**. Occasional Paper 15.
- 1975b **Palynological and Paleoclimatic Study of the Late Quaternary Displacement of the Boreal Forest-Tundra Ecotone in Keewatin and Mackenzie, N.W.T., Canada**. Institute of Arctic and Alpine Research Occasional Paper 15.

- Nichols, Harvey, P.M. Kelley, & J.T. Andrews
 1978 Holocene palaeo-wind evidence from palynology in Baffin Island. **Nature** 273:140-142.
- Noble, William C.
 1971 Archaeological surveys and sequences in Central District Mackenzie, N.W.T. **Arctic Anthropology** VIII:1:102-135.
- Noholnigee, Henry Yugh
 1982 **The Stories That Chief Henry Told**. Ed. Eliza Jones. Fairbanks: Alaska Native Language Center, University of Alaska.
- Nooter, G.
 1971 **Old Kayaks in the Netherlands**. Mededlingen van het Rijksmuseum voor Volkenkunde, Leiden No. 17. Leiden. [Cited in Whitaker 1954,1977, qv]
- Nudds, Thomas D.
 1988 Effects of technology and economics on the foraging behaviour of modern hunter-gatherer societies. In **Knowing the North: Reflections on Tradition, Technology and Science**. Ed. William Wonders.
- Nungak, Zebedee, & Eugene Arima
 1988 **Inuit Stories: Povungnituk**. Canadian Museum of Civilization, National Museums of Canada.
- Oakes, Jill E.
 1985 **Factors Influencing Kamiik Production in Arctic Bay, Northwest Territories**. M. Sc. thesis, Clothing and Textiles, University of Manitoba.
- Ogilvie, Astrid E.J.
 1984 The past climate and sea-ice record from Iceland, part 1: data to A.D. 1780. **Climatic Change** 6:131-152.
- 1992 Documentary evidence for changes in the climate of Iceland, A.D. 1500 to 1800. In **Climate Since A.D. 1500**. Eds. Raymond S. Bradley & Philip D. Jones. 92-117. London: Routledge.
- Oldmixon, John
 1708 The history of Hudson's Bay. In **Documents Relating to the Early History of Hudson Bay**. Ed. J.B. Tyrrell. 371-410. Toronto: Champlain Society, 1931. [Originally published as a chapter in John Oldmixon, **The British Empire in America**. vol. 1. London, 1708]

- Oquilluk, William A.
 1973 **People of Kauwerak: Legends of the Northern Eskimo.** Anchorage: AMU Press.
- Orans, Martin
 1966 Surplus. **Human Organization** 25:24-32.
- O'Shea, John, & Paul Halstead
 1989 Conclusions: bad year economics. In **Bad Year Economics: Cultural Responses to Risk and Uncertainty.** Eds. Paul Halstead & John O'Shea. 123-126. Cambridge University Press.
- Oswalt, Wendell H.
 1979 **Eskimos and Explorers.** Novato, CA: Chandler and Sharp.
- Parker, G.R.
 1972 Biology of the Kaminuriak population of barren-ground caribou, Part 1. **Canadian Wildlife Service Report Series** 20.
- Parry, William Edward
 1821 **Journal of a Voyage for the Discovery of a North-West Passage from the Atlantic to the Pacific; Performed in the Years 1819-20 in His Majesty's Ships Hecla and Griper.** London: John Murray. [CIHM/ICMH #39497. Ottawa: Canadian Institute for Historical Microreproductions]
- 1824 **Journal of a Second Voyage for the Discovery of a North-West Passage From the Atlantic to the Pacific: Performed in the Years 1821-22-23 in His Majesty's Ships Fury and Hecla....** London: John Murray. [CIHM/ICMH #42230. Ottawa: Canadian Institute for Historical Microreproductions]
- 1828a Account of the Esquimaux of Melville Peninsula and the adjoining islands. In **Journal of a Third Voyage for the Discovery of a North-West Passage From the Atlantic to the Pacific: Performed in the Years 1824-27 in His Majesty's Ships Fury and Hecla....** London: John Murray.
- 1828b **Narrative of an Attempt to Reach the North Pole in Boats Fitted for the Purpose, and Attached to His Majesty's Ship Hecla in the Year MDCCCXXVII....** London: John Murray. [CIHM/ICMH #39498. Ottawa: Canadian Institute for Historical Microreproductions]
- Payne, F.F.
 1889a Eskimo of Hudson's Strait. Extract from **Proceedings of the Canadian Institute.** Series 3. 6:213-230.

- 1890 A few notes upon the Eskimo of Cape Prince of Wales, Hudson's Strait.
Proceedings of the American Association for the Advancement of Science.
38:358-360.
- Petersen, Robert
1962 The last Eskimo immigration to Greenland. **Folk** 4:94-110.
- 1974 Some considerations concerning the Greenland longhouse. **Folk** 16-17:171-188.
- Petitot, Emile
1887 **Among the Chiglit Eskimos.** Trans. E. Otto Höhn. Boreal Institute for Northern Studies. Occasional Publication No. 10, 1981. Orig. pub. as: **Les Grands Esquimaux.**
- [1976] **The Book of the Dene.** Yellowknife: Department of Education.
- Petulla, Joseph M.
1985 Environmental values: the problem of method in environmental history. In **Environmental History: Critical Issues in Comparative Perspective.** Ed. Kendall E. Bailes. 36-45. New York: University Press of America.
- Pitseolak, Peter, with Dorothy Eber Harley
1975 **People From Our Side.** Edmonton: Hurtig.
- Plumet, Patrick
1979 Thuléens et Dorsetiens dans l'Ungava (Nouveau-Quebec). In **Thule Eskimo Culture: An Anthropological Retrospective.** Ed. A. McCartney. 110-121. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.
- Poncins, Gontran de
1941 **Kabloona.** New York: Reynal & Hitchcock.
- Powell, David Arnold
1983 **Trappers and Traders in the Keewatin: The Fur Trade as an Agent of Acculturation.** M.A. thesis, Anthropology and Archaeology, University of Saskatchewan.
- Preble, Edward A.
1910 Across the barren grounds to Hudson's Bay. **Sports Afield.**

Price, Barbara J.

1977 Shifts of production and organization: a cluster-interaction model. **Current Anthropology** 18:209-233.

1980 The truth is not in accounts but in account books: on the epistemological status of history. In **Beyond the Myths of Culture: Essays in Cultural Materialism**. Ed. Eric B. Ross. 155-180. New York: Academic Press.

1984 Competition, productive intensification, and ranked society: speculations from evolutionary theory. In **Warfare, Culture, and Environment**. Ed. R. Brian Ferguson. 209-240. Academic Press.

Price, J.

1975 Sharing: the integration of intimate economies. **Anthropologica** 17:3-27.

Pruitt, W.

1960 Snow as a factor in the winter ecology of the barren-ground caribou (*Rangifer arcticus*). **Arctic** 12:159-179.

Pullum, Geoffrey K

1991 **The Great Eskimo Vocabulary Hoax and Other Irreverent Essays on the Study of Language**. Chicago: University of Chicago Press.

Quimby, G.I.

1940 The Maniituk culture of east Hudson Bay. **American Antiquity** 6(2):148-165.

Rae, John

1850 **Narrative of an Expedition to the Shores of the Arctic Sea in 1846 and 1847**. London: Boone.

1855a **Arctic Correspondence with the Hudson's Bay Company on Arctic Exploration, 1844-55**. Ed. E.E. Rich. London: Hudson's Bay Record Society, 1961.

1855b Arctic exploration with information respecting Sir John Franklin's missing party. **Royal Geographical Society Journal** 25:246-256.

1866 On the Eskimaux. **Transactions of the Ethnological Society of London N.S.** 4:138-153.

1878 Eskimo migrations. **The Journal of the Anthropological Institute of Great Britain and Ireland** VII:125-131.

1882 On the conditions and characteristics of some of the Indian tribes of the Hudson's Bay Company's Territories. Address to the Royal Society of Arts, London. [Reprint: Rae and the Eskimos. **The Beaver** 1954 (March):38-41]

Rasmussen, Knud

1921 **Greenland by the Polar Sea: The Story of the Thule Expedition from Melville Bay to Cape Morris Jesup.** London: W. Heinemann.

1927 **Across Arctic America.** New York; London: G.P. Putnam's Sons.

1929 **Intellectual Culture of the Iglulik Eskimos. Report of the Fifth Thule Expedition, 1921-24.** Vol. 7:1. Copenhagen: Gyldendal.

1930a **Iglulik and Caribou Eskimo Texts. Report of the Fifth Thule Expedition, 1921-24.** Vol. 7:3. Copenhagen: Gyldendal.

1930b **Observations on the Intellectual Culture of the Caribou Eskimos. Report of the Fifth Thule Expedition, 1921-24.** Vol. 7:2. Copenhagen: Gyldendal.

1931a **The Netsilik Eskimos, Social Life and Spiritual Culture. Report of the Fifth Thule Expedition, 1921-24.** Vol. 8:1-2. Copenhagen: Gyldendal.

1931b **Posthumous Notes on East Greenland Legends and Myths. Meddelelser om Grønland.** Vol. 109. Ed. H. Osterman.

1932 **Intellectual Culture of the Copper Eskimos. Report of the Fifth Thule Expedition, 1921-24.** Vol. 9. Copenhagen: Gyldendal.

1938 **Iglulik and Caribou Eskimo Texts. Report of the Fifth Thule Expedition, 1921-24.** Copenhagen: Gyldendal.

1941 **Alaskan Eskimo Words. Report of the Fifth Thule Expedition, 1921-24.** 3(4). Copenhagen: Gyldendal.

1942 **The Mackenzie Eskimos, After Knud Rasmussen's Post-humous Notes. Report of the Fifth Thule Expedition, 1921-24 .** 10(2). Copenhagen: Gyldendal.

1952 **The Alaskan Eskimos as Described in the Posthumous Notes of Knud Rasmussen. Report of the Fifth Thule Expedition, 1921-24.** 10(3). Copenhagen: Gyldendal.

1973a **Eskimo Poems from Canada and Greenland**. Translated by Tom Lowenstein from material originally collected by Knud Rasmussen. [Pittsburgh]: University of Pittsburgh Press.

1973b **Eskimo Songs and Stories**. Collected by Knud Rasmussen on the Fifth Thule Expedition, selected and translated by Edward Field. [New York]: Delacorte Press.

Rich, Edwin E.

1949 Introduction. In **James Isham's Observations on Hudsons Bay, 1743 and Notes and Observations on a Book Entitled A Voyage to Hudsons Bay in the Dobb Galley, 1749**. Ed. E.E. Rich. xiii-cv. London: The Hudson's Bay Record Society.

1953 Appendix B: biographical B¹ lists. In **John Rae's Correspondence with the Hudson's Bay Company on Arctic Exploration, 1844-1855**. Ed. E.E. Rich. 348-378. London: Hudson's Bay Record Society.

1960 **Hudson's Bay Company, 1670-1870. Vol I: 1670-1763**. Toronto: McClelland and Stewart.

Richardson, John

1822 **Arctic Ordeal: The Journal of John Richardson, Surgeon-Naturalist with Franklin, 1820-1822**. Ed. C. Stuart Houston. Kingston: McGill-Queen's University Press, 1984.

1851 **Arctic Searching Expedition: A Journal of a Boat-Voyage Through Rupert's Land and the Arctic Sea, In Search of the Discovery Ships Under Command of Sir John Franklin: With an Appendix on the Physical Geography of North America**. 2 vols. London: Longman, Brown, Green, and Longman.

Riches, David

1982 **Northern Nomadic Hunter-Gatherers: A Humanistic Approach**. London: Academic Press.

Rink, Hinrich

1875 **Tales and Traditions of the Eskimo**. Montreal, 1974.

Robinson, Samuel Isaac

1973 **The Influence of the American Whaling Industry on the Aivilingmiut, 1860-1919**. M.A. thesis, Anthropology, McMaster University.

Robson, Joseph

1752 **An Account of Six Years Residence in Hudson's Bay, from 1733 to 1736 and 1744 to 1747.** London. [CIHM/ICMH #20155. Ottawa: Canadian Institute for Historical Microreproductions]

Roesdahl, Else

1987 **The Vikings.** Trans. Susan M. Margeson and Kirsten Williams. London: Penguin Press.

Rogers, Edward S.

1964 The Eskimo and Indian in the Quebec-Labrador peninsula. In **Le Nouveau-Quebec: Contribution a l'Etude de l'Occupation Humaine.** Ed. Jean Malaurie & Jacques Rousseau. 211-249. Paris: Mouton.

Root, D.

1983 Information exchange and the spatial configurations of egalitarian societies. In **Archaeological Hammers and Theories.** Eds. J.A. Moore & A.S. Keene. 193-219. New York: Academic Press.

Ross, James Clark

1850 Narrative of the proceedings of Captain Sir James C. Ross in command of the expedition through Lancaster Sound and Barrow Strait. **Great Britain, Parliament, House of Commons, Sessional Papers, Accounts and Papers** 35:107:58-64.

Ross, John

1835a **Narrative of a Second Voyage in Search of a North-west Passage, and of a Residence in the Arctic Regions, During the Years 1829-30-31-32-33.** London: A.W. Webster.

1835b **Appendix to the Narrative of a Second Voyage in Search of a North-West Passage.** London: A.W. Webster.

1855 **Rear Admiral Sir John Franklin: A Narrative of the Circumstances and Causes which Led to the Failure of the Searching Expeditions Sent by Government and Others for the Rescue of Sir John Franklin.** 2nd ed., London: Longmans, Green, Brown, & Longmans.

Ross, W. Gillies

1975 **Whaling and Eskimos: Hudson Bay 1860-1915.** Publication in Ethnology 10. Ottawa: National Museum of Man.

- 1976 Inuit and the land in the nineteenth century. In **Report: Inuit Land Use and Occupancy Project**. Ed. Milton M.R. Freeman. 2:123-140. Ottawa: Department of Indian and Northern Affairs.
- 1977 Whaling and the decline of native populations. *Arctic Anthropology* 14:2:1-8.
- 1979 Commercial whaling and Eskimos in the eastern Canadian arctic 1819-1920. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. A.P. McCartney. 242-266. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.
- 1984 Introduction. In **An Arctic Whaling Diary: The Journal of Captain George Comer in Hudon Bay 1903-1905**. Ed. W. Gillies Ross. 3-39. University of Toronto Press.
- Ross, W. Gillies, ed.
 1985 **Arctic Whalers, Icy Seas: Narratives of the Davis Strait Whale Fishery**. Toronto: Irwin Publishing.
- Rouse, Irving
 1986 **Migrations in Prehistory: Inferring Population Movement From Cultural Remains**. Yale University Press.
- Rowley, Susan
 1985a Population movements in the Canadian arctic. *Etudes/Inuit/Studies* 9:1:3-22.
- 1985b **The Significance of Migration for the Understanding of Inuit Cultural Development in the Canadian Arctic**. Ph.D. thesis. Anthropology. University of Cambridge.
- 1986 Eenoooloopik (ca. 1820-1847). *Arctic* 39:2(June):182-183.
- Rowley-Conwy, Peter, & Marek Zvelebil
 1989 Saving it for later: storage by prehistoric hunter-gatherers in Europe. In **Bad Year Economics: Cultural Responses to Risk and Uncertainty**. Eds. Paul Halstead & John O'Shea. 40-56. Cambridge University Press.
- Royal Canadian Mounted Police
 1874-89 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.
- 1906 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.

- 1908 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.
- 1910 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.
- 1911 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.
- 1913 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.
- 1925-52 **Royal Canadian Mounted Police Annual Report**. Ottawa: King's Printer.

Russell, Dale

- 1991 **Eighteenth-Century Western Cree and Their Neighbours**. Archaeological Survey of Canada. Mercury Series Paper 143. Canadian Museum of Civilization.

Saladin d'Anglure, Bernard

- 1967 L'Organisation sociale traditionnelle des Esquimaux de Kangirsujuaak (Nouveau-Québec). **Centre d'Etudes Nordiques Travaux 17**. Quebec: Université Laval.
- 1984 Inuit of Quebec. In **Handbook of North American Indians**. Volume 5. **The Arctic**. Ed. David Damas. 476-507. Washington, DC: Smithsonian Institution.

Savelle, J.M.

- 1981 The nature of nineteenth century Inuit occupations of the High Arctic Islands of Canada. **Inuit Studies** 5:109-123.
- 1985 Effect of nineteenth century European exploration on the development of the Netsilik Inuit culture. In **The Franklin Era in Canadian Arctic History**. Ed. Patricia D. Sutherland. Archaeological Survey of Canada Paper 131. 192-214. Ottawa: National Museum of Man.

Savelle, James M., & Allen P. McCartney

- 1988 Geographical and temporal variation in Thule Eskimo subsistence and economies: a model. **Research in Economic Anthropology** 10:21-72.
- 1990 Prehistoric Thule Eskimo whaling in the Canadian arctic islands: current knowledge and future research directions. In **Canada's Missing Dimension: Science and History in the Canadian Arctic Islands**. Proceedings of the conference on The Canadian Arctic Islands: Canada's Missing Dimension, Ottawa, November 21-24, 1987. Ed. C.R. Harington. II:695-743. Ottawa: Canadian Museum of Nature.

Schledermann, Peter

1975 **Thule Eskimo Prehistory of Cumberland Sound, Baffin Island, Canada.** National Museum of Man Mercury Series. Archaeological Survey of Canada #38. Ottawa: National Museums of Canada.

1976 The effect of climatic/ecological changes on the style of Thule culture winter dwellings. **Arctic and Alpine Research** 8(1):37-47.

1979 The 'Baleen Period' of the arctic whaling hunting tradition. In **Thule Eskimo Culture: An Anthropological Retrospective.** Ed. A. McCartney. 134-148. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

Schwatka, Frederick

1880a Address. Arctic meeting at Chickering Hall, October 28th, 1880. **Journal of the American Geographical Society of New York** XII:246-258.

1880b **The Long Arctic Search: The Narrative of Lieutenant Frederick Schwatka, U.S.A., 1878-1880, Seeking the Records of the Lost Franklin Expedition.** Ed. E.A. Stackpole. Mystic, Connecticut: Marine Historical Association Inc., 1965.

Silvy, Antoine

1684 Journal of Father Silvy from Belle Isle to Port Nelson. In **Documents Relating to the Early History of Hudson Bay.** Ed. J.B. Tyrrell. 37-101. Toronto: The Champlain Society, 1931.

Simpson, Thomas

1843 **Narrative of the Discoveries on the North Coast of America; Effected by the Officers of The Hudson's Bay Company During the Years 1836-39.** 2nd ed. London: Richard Bentley. [CIHM/ICMH #40724. Ottawa: Canadian Institute for Historical Microreproductions]

Siscoe, G.L.

1980 Evidence in the auroral record for secular solar variability. **Review of Geophysics and Space Physics** 18:647-58.

Smith, Derek

1984 Mackenzie Delta Eskimo. In **Handbook of North American Indians.** Volume 5. Arctic. Ed. David Damas. 347-358. Washington, DC: Smithsonian Institution.

- Smith, Eric Alden
 1983 Anthropological application of optimal foraging strategy: a review. **Current Anthropology** 24:625-651.
- 1991 **Inujjamiut Foraging Strategies: Evolutionary Ecology of an Arctic Hunting Economy**. New York: Aldine De Gruyter.
- Smith, James G.E.
 1975 The ecological basis of Chipewyan socio-territorial organization. In **Proceedings: Northern Athapascan Conference, 1971**. Ed. Annette McFadyen Clark. National Museum of Man Mercury Series. Ethnology Paper 27. 389-461. Ottawa: National Museums of Canada.
- 1978 Economic uncertainty in an "original affluent society": caribou and caribou eater Chipewyan adaptive strategies. **Arctic Anthropology** 15:68-88.
- 1981a Chipewyan. In **Handbook of North American Indians. Volume 6: Subarctic**. Ed. June Helm. 271-284. Washington, DC: Smithsonian Institution.
- 1981b Chipewyan, Cree and Inuit relations west of Hudson Bay, 1714-1955. **Ethnohistory** 28:2(Spring):133-156.
- Smith, James G.E., & E.S. Burch
 1979 Chipewyan and Inuit in the central Canadian subarctic, 1613-1977. **Arctic Anthropology** XVI;2:76-101.
- Souter, William Clark
 1935 **The Story of Our Kayak and Some Others**. Presidential Address to the Aberdeen Medico-Chirurgical Society, 1933. Aberdeen.
- Speck, Frank G.
 1924 Eskimo collection from Baffin Land and Ellesmere Land. **Indian Notes** 1:3(July):143-149.
- 1931 Montagnais-Naskapi bands and early Eskimo distribution in the Labrador Peninsula. **American Anthropologist** 33(4):557-600.
- 1936 Inland Eskimo bands of Labrador. In **Essays in Anthropology in Honor of Alfred Louis Kroeber**. 313-330. Berkeley: University of California Press.
- Spiess, Arthur E.
 1979 **Reindeer and Caribou Hunters: An Archaeological Study**. New York: Academic Press.

Spink, John

- 1969 **Eskimo Maps from the Canadian Eastern Arctic.** M.A. thesis, Geography, University of Manitoba.

Staunton, Richard

- 1738 Letter 70. In **Letters From Hudson Bay.** Ed. K.G. Davies. 270-273. London: Hudson's Bay Record Society, 1965.

Steenhoven, Geert Van den

- 1956 Caribou Eskimo legal concepts. In **Eskimo of the Canadian Arctic.** Eds. Victor Valentine & Frank Vallee. 76-84. Toronto: McClelland & Stewart, 1968.

- 1959 **Legal Concepts Among the Netsilik Eskimos of Pelly Bay.** Ottawa: Department of Northern Affairs and National Resources.

- 1962a A 'Good Old Days' Eskimo story at the Netsilike. **Eskimo** 61(March-June):10-13.

- 1962b **Leadership and Law Among the Eskimos of the Keewatin District, Northwest Territories.** Rijswijk: Uitgeverij Excelsior.

Stefansson, Vilhjalmur

- 1913 **My Life with the Eskimo.** New York: The Macmillan Company.

- 1914a **Prehistoric and Present Commerce Among the Arctic Coast Eskimo.** Museum Bulletin No. 6, Anthropological Series No 3. Ottawa: Geological Survey, Department of Mines.

- 1914b **The Stefansson-Anderson Arctic Expedition: Preliminary Ethnological Results.** Anthropological Papers of the American Museum of Natural History 14(1).

- 1919 The Stefansson-Anderson Arctic Expedition of the American Museum: Preliminary Ethnological Report. **Anthropological Papers** 14(1). New York: American Museum of Natural History.

- 1922 **Hunters of the Great North.** New York: Harcourt, Brace.

- 1921 **The Friendly Arctic: The Story of Five Years in Polar Regions.** Reprint. New York: The Macmillan Co. 1943.

- 1928 **The Standardization of Error.** London: K. Paul, Trench, Trubner.

- 1936 **Adventures in Error**. New York: R.M. McBride.
- 1938 **The Three Voyages of Martin Frobisher in Search of a Passage to Cathay and India by the North-West, A.D. 1576-8. From the Original 1578 text of George Best, Together with Numerous Other Versions, Additions, etc.** Ed. Vilhjalmur Stefansson. London: Argonaut Press.
- 1943 **Greenland**. Garden City: Doubleday.
- Steffian, Amy F.
- 1991 Territorial stability as a factor in the occurrence and perpetuation of inter-group buffer zones. In **Foragers in Context: Long-Term, Regional and Historical Perspectives in Hunter-Gatherer Studies. Michigan Discussions in Anthropology**. Volume 10. Eds. Preston T. Miracle, Lynn E. Fisher, & Jody Brown. 89-106. Ann Arbor: Department of Anthropology. University of Michigan.
- Stenton, Douglas R.
- 1987 Recent archaeological investigations in Frobisher Bay, Baffin Island, N.W.T. **Canadian Journal of Archaeology** 11:13-48.
- 1991 Caribou population dynamics and Thule culture adaptations on southern Baffin Island, N.W.T. **Arctic Anthropology** 28:2:15-43.
- Steward, J.H.
- 1955 **Theory of Culture Change: the Methodology of Multilinear Evolution**. Urbana: University of Illinois Press.
- Stupart, R.F.
- 1886 The Eskimo of Stupart Bay. **Proceedings of the Canadian Institute**. Series 3, Vol. 4:95-114.
- Sturtevant, William C.
- 1980 The first Inuit depiction by Europeans. **Etude/Inuit/Studies** 4:1-2:47-49.
- Sturtevant, William C., & David Beers Quinn
- 1987 This new prey: Eskimos in Europe in 1567, 1576, and 1577. In **Indians and Europe: An Interdisciplinary Collection of Essays**. Ed. Christian Feest. 61-140. Aachen: Edition Herodot, Rader Verlag.
- Swaine, Theodore [Clerk of the California]
- 1749a **An Account of a Voyage for the Discovery of a North-West Passage by Hudson's Streights, to the Western and Southern Ocean of America: Performed in the Year 1746 and 1747, in the Ship California, Capt.**

Francis Smith, Commander. Vol. 1. London. (Canadian Institute for Historical Microreproductions, #51794)

1749b **An Account of a Voyage for the Discovery of a North-West Passage by Hudson's Streights, to the Western and Southern Ocean of America: Performed in the Year 1746 and 1747, in the Ship California, Capt. Francis Smith, Commander.** Vol. 2. London. (Canadian Institute for Historical Microreproductions, #51795)

Szathmary, Emöke J.E.

1979 Bloods groups of Siberians, Eskimos, and subarctic and northwest coast Indians: the problem of origins and genetic relations. In **The First Americans: Origins, Affinities and Adaptations.** Eds. William S. Laughlin & Albert B. Harper. New York: Gustav Fischer.

1981 Genetic markers in Siberian and northern North American populations. **Yearbook of Physical Anthropology** 24:37-73.

1984 Human biology of the arctic. In **Handbook of North American Indians.** Volume 5. **Arctic.** Ed. David Damas. 64-71. Washington, DC: Smithsonian Institution.

1985 Peopling of North America: clues from genetic studies. In **Out of Asia: Peopling the Americas and the Pacific.** Eds. Robert Kirk & Emöke Szathmary. 77-100. Canberra: The Journal of Pacific History.

Taylor, Bea

1985 1550-1620: a period of summer accumulation in the Queen Elizabeth Islands. In **Climatic Change in Canada 5: Critical Periods in the Quaternary Climatic History of Northern North America.** *Syllogeus* 55. Ed. C.R. Harington. 461-479. Ottawa: National Museums of Canada.

Taylor, E.G.R., ed.

1959 **The Troublesome Voyage of Captain Edward Fenton, 1582-83.** 2nd series, volume 113. London: Hakluyt Society.

Taylor, J. Garth

1958 Archaeological work in Ungava. **Arctic Circular** 10:2:25-27.

1969 "Introduction" and "Discussion." In William Turner's journeys to the caribou country with the Labrador Eskimos in 1780. Ed. J. Garth Taylor. **Ethnohistory** 16(2):141-143, 157-164.

- 1970 Structure of early contact Labrador Eskimo social units. **Proceedings of the 38th International Congress of Americanists, 1968** 2:251-254.
- 1972 Eskimo answers to an eighteenth century questionnaire. **Ethnohistory** 19:2(Spring):135-145.
- 1974a **Netsilik Eskimo Material Culture**. Oslo: Universitetsforlaget.
- 1974b **Labrador Eskimo Settlements of the Early Contact Period**. Publications in Ethnology 9. Canada: National Museum of Man.
- 1975 Demography and adaptations of eighteenth-century Eskimo groups in northern Labrador and Ungava. In **Prehistoric Maritime Adaptations of the Circumpolar Zone**. Ed. William Fitzhugh. 269-280. The Hague: Mouton Publishers.
- 1977 Traditional land use and occupancy by the Labrador Inuit. In **Our Footprints Are Everywhere: Inuit Land Use and Occupancy in Labrador**. Ed. Carol Brice-Bennett. 49-58. Labrador Inuit Kattekatengeninga.
- 1979a The case of the invisible Inuit: reconciling archaeology, history and oral tradition in the Gulf of St. Lawrence. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. A. McCartney. 267-277. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.
- 1979b Indian-Inuit relations in eastern Labrador, 1600-1675. **Arctic Anthropology** 16(1-2):49-58.
- 1980 The Inuit of southern Quebec-Labrador: reviewing the evidence. **Etudes/Inuit/Studies** 4(1-2):185-194.
- 1984 Historical ethnography of the Labrador coast. In **Handbook of North American Indians**. Volume 5. **Arctic**. Ed. David Damas. 508-521. Washington, DC: Smithsonian Institution.
- Taylor, J. Garth, & Helga R. Taylor
 1977 Inuit land use and occupancy in the Okak region, 1776-1830. In **Our Footprints Are Everywhere: Inuit Land Use and Occupancy in Labrador**. Ed. Carol Brice-Bennett. 59-82. Labrador Inuit Kattekatengeninga.
- Taylor, William Ewart
 1959 The mysterious Sadlermiut. **The Beaver** Outfit 290:Winter:26-33.

- 1960 A description of Sadlermiut houses excavated at Native Point, Southampton Island, N.W.T. **Annual Report of the National Museum of Canada** Bulletin #160:53-100. Ottawa.
- 1962 Pre-Dorset occupations at Ivugivik in northwestern Ungava. In **Prehistoric Cultural Relations Between the Arctic and Temperature Zones of North America**. Ed. John M. Campbell. 80-91. Arctic Institute of North America Technical Paper 11. Montreal.
- 1963 Hypotheses on the origin of Canadian Thule culture. **American Antiquity** 28:4:456-464.
- 1964a The prehistory of the Quebec-Labrador Peninsula. In **Le Nouveau-Qébec, Contribution a l'Etude de l'Occupation Humaine**. Ecole Pratique des Hautes Etudes. 181-210. Paris: Mouton & Co.
- 1964b Interim Report of an Archaeological Survey in the Central Arctic. *Anthropological Papers of the University of Alaska* 12:1:46-55.
- 1966 An archaeological perspective on Eskimo economy. **Antiquity** XL:114-120.
- 1967 Summary of archaeological field work on Banks and Victoria Islands, Arctic Canada, 1965. **Arctic Anthropology** 4:1:221-243.
- 1968a Eskimos of the north and east shores. In **Science, History and Hudson Bay**. Eds. C.S. Beals & A. Shenstone. I:1-25. Ottawa: Department of Energy, Mines and Resources.
- 1968b The Arnapiik and Tyara sites: an archaeological study of Dorset culture origins. **Memoirs of the Society for American Archaeology** #22.
- 1972 **An Archaeological Survey Between Cape Parry and Cambridge Bay, N.W.T., Canada in 1963**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #1. Ottawa: National Museums of Canada.
- Taylor, William E., & Robert McGhee
- 1979 **Archaeological Material from Creswell Bay, N.W.T., Canada**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #85. Ottawa: National Museums of Canada.
- 1981 **Deblicquy, A Thule Culture Site on Bathurst Island, N.W.T., Canada**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper # 102. Ottawa: National Museums of Canada.

Testart, A.

- 1982 The significance of food storage among hunter-gatherers: residence patterns, population densities, and social inequalities. **Current Anthropology** 23:523-530.

Thalbitzer, William

- 1904 A phonetical study of the Eskimo language based on observations made on a journey in North Greenland 1900-1901. **Meddelelser om Grønland** 31.

- 1912 **Ethnographical Collections from East Greenland (Angmagsalik and Nualik) Made by G. Holm, G. Amdrup, J. Peterson, and Described by W. Thalbitzer. Meddelelser om Grønland.** 39:7. Copenhagen.

Thibert, Arthur

- 1970 **English-Eskimo Dictionary.** Ottawa: Canadian Research Centre for Anthropology, Saint Paul University.

Tomka, Steve A., & Marc G. Stevenson

- 1993 Understanding abandonment processes: summary and remaining concerns. In **Abandonment of Settlements and Regions: Ethnoarchaeological and Archaeological Approaches.** Ed. Catherine M. Cameron & Steve A. Tomka. 191-195. Cambridge University Press.

Trigger, Bruce

- 1969 **The Huron: Farmers of the North.** New York: Holt, Rinehart & Winston.

Trudel, François

- 1978a The Inuit of southern Labrador and the development of French sedentary fisheries (1700-1760). In **Papers from the Fourth Annual Congress, Canadian Ethnology Society, 1977.** Ed. Richard J. Preston. 99-122. Canadian Ethnology Service Paper #40. Ottawa: National Museum of Man.
- 1978b Les inuit de Labrador méridional face à l'exploitation canadienne et française des pecheries (1700-1760). **Revue d'histoire de l'Amérique française** 31:481-500.
- 1978c Les inuit face à l'expansion commerciale européenne dans la région du Détroit de Belle-Isle au XVIe et XVIIe siècles. **Recherches amérindiennes au Québec** 9(1-2):141-150.
- 1980 Les relations entre les Français et les Inuit au Labrador méridional, 1660-1760. **Etudes/Inuit/Studies** 4:1-2:135-145.

- 1981 **Inuit, Amerindians and Europeans: A Study of Interethnic Economic Relations on the Canadian South-Eastern Seaboard (1500-1800)**. Ph.D. thesis, Anthropology, University of Connecticut. Facsimile edition. [Ann Arbor: University Microfilms International]
- Trudel, Marcel
 1960 **L'Esclavage au Canada francais**. Quebec: Les Presses de l'Université Laval.
- Turnbull, Colin M.
 1978 Rethinking the Ik: a functional non-social system. In **Extinction and Survival in Human Populations**. Eds. Charles D. Laughlin & Ivan A. Brady. 49-75. New York: Columbia University Press.
- Turner, Lucien M.
 1887 On the Indians and Eskimos of the Ungava District, Labrador. **Transactions of the Royal Society of Canada** 2:99-119.
- 1888 **Ethnology of the Ungava District, Hudson Bay Territory: Indians and Eskimos of the Quebec-Labrador Peninsula**. Quebec: Presses Comeditex 1979.
- 1894 **Ethnology of the Ungava District**. Eleventh Annual Report of the Bureau of American Ethnology. Ed. John Murdoch. 159-350. Washington, DC: Smithsonian Institution.
- Turner, William
 1780 Report of the first trip, February 8-February 27, 1780; Report of the second trip, August 8-August 25, 1780. In "William Turner's journeys to the caribou country with the Labrador Eskimos in 1780." Ed. J. Garth Taylor. 144-157. **Ethnohistory** 16(2):141-164.
- Turney-High, H.H.
 1949 **Primitive War: Its Practice and Concepts**. University of South Carolina Press.
- Tyrrell, James W.
 1898 **Across the Sub-Arctics of Canada: A Journey of 3,200 Miles by Canoe and Show-Shoe**. London.
- Tyrrell, Joseph B.
 1894 An expedition through the barren lands of northern Canada. **Geographical Journal** 437-450.

- 1895 A second expedition through the barren lands of northern Canada. **Geographical Journal** 438-448.
- 1896 **Report on the Doobaunt, Kazan and Ferguson Rivers and the North-West Coast of Hudson Bay.** Geological Survey of Canada Annual Report 1896, V. 9, Part F. Ottawa.
- 1910 Ice on Canadian lakes. **Transactions of the Canadian Institute IX.**
- 1931 **Documents Relating to the Early History of Hudson Bay.** Toronto: Champlain Society.
- Usher, Peter
- 1971 **Fur Trade Posts of the Northwest Territories, 1870-1970.** Northern Science Research Group 71-4.
- Vallee, Frank
- 1964 Kabloona and Eskimo in the Central Keewatin. In **Canadian Society: Sociological Perspectives.** Eds. Bernard R. Blishen et al. 409-419. Toronto: Macmillan of Canada.
- Van Campen, Samuel Richard
- 1878 **The Dutch in the Arctic Seas. Vol. 1 A Dutch Arctic Expedition and Route.** 3rd ed. London: Trubner & Co.
- Van de Velde, F.
- 1954 Infanticide among the Eskimo. **Eskimo** 34:6-8.
- 1956 Rules governing the sharing of seal after the 'aglus' hunt amongst the Arviligjuarmiut. **Eskimo** 41(September).
- Vansina, Jan
- 1971 Once upon a time: oral traditions as history in Africa. **Daedalus** 100:442-468.
- VanStone, James
- 1962 An archaeological collection from Somerset Island and Boothia Peninsula, N.W.T. In **Occasional Paper 4.** 1-63. Ontario: Art and Archaeology Division, Royal Ontario Museum.
- 1963 Changing patterns of Indian trapping in the Canadian subarctic. **Arctic** 16:159-174.

- Vasari, Y., Hannu Hyvarinen, & Sheila Hicks, eds
 1972 **Climatic Changes in Arctic Areas During the Last Ten-Thousand Years.** Proceedings of a symposium held at Oulanka and Kevo, 4-10 October, 1971. Acta Universitatis Ouluensis. Series A, Scientiae Rerum Naturalium, #3, Geologica #1. Oulu, Finland: University of Oulu.
- Vaughan, Richard
 1984 Historical survey of the European whaling industry. **Arctic Whaling.** Proceedings of the International Symposium Arctic Whaling, February 1983. 121-134. University of Groningen.
- Vibe, Christian
 1950 The marine mammals and the marine fauna in the Thule District (Northwest Greenland) with observations on ice conditions. **Meddelelser om Grønland** 150(6).
 1967 Arctic animals in relation to climatic fluctuations. **Meddelelser om Grønland** 170(5).
- Wallace, Reverend James
 1693 **Descriptions of the Isles of Orkney.** Edinburgh.
- Wallace, Doctor James
 1700 **An Account of the Islands of Orkney.** London.
- Warkentin, John, & Richard Ruggles
 1970 **Manitoba Historical Atlas: A Selection of Facsimile Maps, Plans, and Sketches from 1612 to 1959.** Winnipeg: Historical and Scientific Society of Manitoba.
- Wein, Ross, W. and David A. MacLean, eds
 1983 **The Role of Fire in Northern Circumpolar Ecosystems.** The Scientific Committee on Problems of the Environment of the International Council of Scientific Unions. New York: Wiley.
- Welland, Tony
 1976 Inuit land use in Keewatin District and Southampton Island. In **Inuit Land Use and Occupancy Project.** Ed. Milton M.R. Freeman. V:83-114. Ottawa: Department of Indian and Northern affairs.
- Weller, Gunter, and Sue Ann Bowling, eds
 1975 **Climates of the Arctic.** Twenty-fourth Alaska Science Conference, 1973. Fairbanks: Geophysical Unit, University of Alaska. SCI Q180 U5 A66

West, John

- 1824 **The Substance of a Journal During a Residence at the Red River Colony, British North American in the Years 1820-1823.** London: L.B. Seeley & Son. [CIHM/ICHMH #41912. Ottawa: Canadian Institute for Historical Microreproductions]

Whitaker, Ian

- 1954 The Scottish kayaks and the 'Finn-men.' *Antiquity* XXVIII:110(June):99-104.
- 1977 The Scottish kayaks reconsidered. *Antiquity* LI:201(March):41-45.

Whittaker, Charles E.

- 1937 **Arctic Eskimo.** London: Seeley, Service and Co.

Williams, Glyndwr

- 1963 Introduction. In **Northern Quebec and Labrador Journals and Correspondence, 1819-1835.** Ed. K.G. Davies. xv-lxxix. London: Hudson's Bay Record Society.
- 1975 Introduction. In **Hudson Bay Miscellany.** Ed. Glyndwr Williams. 3-9, 77-80, 97-105, 153-166. London: Hudson's Bay Record Society.

Williams, L.D.

- 1979 An energy balance model of potential glacierization of northern Canada. *Arctic and Alpine Research* 11:443-456.

Williamson, Robert G.

- 1973 Eskimo value persistence in contemporary acculturation. In **Le Peuple Esquimau Aujourd'hui et Demain/The Eskimo People To-Day and To-Morrow.** Ed. Jean Malaurie. 265-288. Fourth International Congress of the Fondation Francaise d'Etudes Nordiques. Paris: Mouton.
- 1974 **Eskimo Underground: Socio-Cultural Change in the Canadian Central Arctic.** Occasional Papers II. University of Uppsala.

Wilson, Cynthia

- 1985 The Little Ice Age on Eastern Hudson/James Bay: the Summer Weather and Climate at Great Whale, Fort George and Eastmain, 1814-1821, as derived from Hudson's Bay Company Records. In **Climatic Change in Canada 5: Critical Periods in the Quaternary Climatic History of Northern North America.** *Syllogeus* 55. Ed. C.R. Harington. 121-146. Ottawa: National Museums of Canada.

Winterhalder, Bruce, & Eric A. Smith, eds.

- 1981 **Hunter-Gatherer Foraging Strategies: Ethnographic and Archaeological Analyses.** Chicago: University of Chicago Press.

- 1992 **Evolutionary Ecology and Human Behavior**. New York: Aldine de Gruyter.
- Woodbury, Anthony C.
1984 Eskimo and Aleut languages. In **Handbook of North American Indians**. Volume 5. **Arctic**. Ed. David Damas. 49-63. Washington, DC: Smithsonian Institution.
- Woodman, David C.
1991 **Unravelling the Franklin Mystery: Inuit Testimony**. McGill-Queen's University Press.
- Wright, J. V.
1972 **The Aberdeen Site, Keewatin District, N.W.T.** National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #2. Ottawa: National Museums of Canada.

1976 **The Grant Lake Site, Keewatin District**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #47. Ottawa: National Museums of Man.

1977 **Thule Eskimo Prehistory Along Northwestern Hudson Bay**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #70. Ottawa: National Museums of Canada.
- Wright, John Kirtland
1966 **Human Nature in Geography: Fourteen Papers, 1925-1965**. Cambridge, Mass: Harvard University Press.
- Wright, Robin K.
1987 The travelling exhibition of Captain Samuel Hadlock, Jr.: Eskimos in Europe, 1822-1826. In **Indians and Europe: An Interdisciplinary Collection of Essays**. Ed. Christian F. Feest. 215-233. Aachen: Edition Herodot, Rader-Verlag.
- Yorga, Brian
1979 Migration and adaptation: a Thule culture perspective. In **Thule Eskimo Culture: An Anthropological Retrospective**. Ed. Allen P. McCartney. 286-291. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #88. Ottawa: National Museums of Canada.

1980 **Washout: A Western Thule Site on Herschel Island, Yukon Territory**. National Museum of Man Mercury Series. Archaeological Survey of Canada Paper #98. Ottawa: National Museums of Canada.