Dene Involvement in the Fort Churchill Fur Trade Market Economy – A World Systems Theory Application

by

Lisa Corinne Bobbie

A Thesis submitted to the Faculty of Graduate
Studies of
The University of Manitoba
In partial fulfillment of the requirements of the degree of

MASTER OF ARTS

Department of Anthropology
University of Manitoba
Winnipeg

Abstract

A significant change has occurred over the last forty years in the way archaeological and historical studies have perceived the way Aboriginal groups participated in the Western fur trade, from outdated portrayal of subordinate to a more accurate role as equal partner. A diachronic examination of Fort Churchill Trade Shop (IeKn-61) in northern Manitoba will provide a case study through which the Dene contributed to the market economy of the fur trade while maintaining their traditional modes of subsistence based around the migratory caribou herds of the subarctic.

Employing world-systems theory, which attempts to relive the old patterns of thinking, would indicate that the Dene would abandon their central socio-economic on the caribou in favour of the new market economy focused on fur-bearers and European trade goods. However, aspects of this theory show the interconnectedness of the system from which follows that a partnership and control could be held by peripheral groups.

A comprehensive analysis using historical, ethnographical and archaeological data sets are employed to determine the presence and degree of participation of the Dene at Fort Churchill through the 19th century. This examination using multiple lines of evidence provides an opportunity for a deeper understanding of Dene decision-making processes.

Acknowledgements

There are many people who have given their assistance and support throughout the production of this thesis and throughout my academic career. First and foremost is my advisor Dr. Gregory Monks, who has displayed considerable patience throughout this process. Recognition of the valued guidance and expertise goes to him as well as my committee members, consisting of Drs. Kent Fowler and Robin Jarvis Brownlie.

Several people were integral to my research and writing. Thanks to Dr. Virginia Petch who provided the archaeological source material and offered regular discussion and support throughout this process. Dr. Theo Koulis for guidance in the mystical world of statistical analysis, Kevin Brownlee of the Manitoba Museum for his intimate knowledge of comparative sites and artifacts from northern Manitoba in the early fur trade period, and to Ed Fread for his support and example on how to balance life, work and study.

A major part of this research relied extensively on the account books of the Hudson's Bay Company (HBC). Much thanks goes to the staff of the Hudson's Bay Company Archives (HBCA) in the Archives of Manitoba (AM) for their help. The University of Manitoba's faunal collection provided the basis for the identification of the Fort Churchill faunal materials. The Department of Anthropology is also gratefully acknowledged for the financial support in my receipt of the Thesis Write-up Award.

Last but not least, I wish to thank my family and friends who were of immeasurable support and gave me the strength to meet this challenge. To my parents who never doubted my ability even when I doubted myself, and gave me the special gift

of knowing from an early age that I could pursue my dreams. Special thanks and love to my husband, Derek who put up with me when frustration and tiredness was at its peak. To those countless friends, family and coworkers without whose support this study would not have seen the light of day.

Table of Contents

List of Tables

List of Figures

Chapter I: Introduction - Aims and Rationale

In 1682, the Hudson Bay Company (HBC) began its economic expansion on the shores of Hudson Bay along the Nelson and Hayes Rivers. The HBC influenced social and economic structures in many cultures, notably the Aboriginal cultures of Canada. Much of the early academic work regarding the Canadian fur trade has implied that the fur trade and wider colonial regimes led to the abrupt termination of traditional Aboriginal material culture in favour of "superior" European commodities (Rich 1958, Peterson and Afinson 1985; Bedard 1990:4). Recent academic works have successfully examined resistance and social negotiation in the fur trade (Burley 1993, Hamilton 1990, 2000, Hill 1994). However the rate and selection of European goods within indigenous groups are poorly understood, as are the motivations for doing so. In this thesis, I will argue that certain Aboriginal groups living along Hudson Bay's subarctic coastal regions, notably the Dene, did not abandon their cultural practices and traditional modes of survival. Rather, they became active, yet selective, participants in the fur trade economy in the 19th century.

This focus on Aboriginal participation in a fur trade economy redresses what Klimko (1983:1) calls "cultural reconstruction" and promotes study of the roles of individuals and groups outside of the European corporate structure. Using multiple lines of evidence provided through archaeology, history, and ethnohistory, a deeper understanding of the role Dene culture had in the fur trade economy. Rather than following the prescribed abandonment of cultural practices, the Dene did not relinquish control of their mode of subsistence but balanced a dual socio-economic system. For over two hundred years, the eastern band of Dene, the Ethen-eldeli Dene, selectively choose

how they would engage in the fur trade economy, managed – and some may argue, controlled – aspects of the fur trade economy at Fort Churchill, an HBC trade post established on Hudson Bay on the Churchill West Peninsula. Fort Churchill operated during the middle to late fur trade period from 1783 A.D. to the 1930s and was specifically established to elicit trade with the Dene (Kenny 1932; Esau 1984:6, 1986).

The Dene of northern Manitoba, traditional modes of subsistence and seasonal rounds were firmly tied two main barren-ground caribou herds of the region, the Qaminurjuak and Beverly. Despite numerous attempts throughout the 18th and 19th centuries to entice the Dene to trap fur-bearing animals and become regular patrons at Fort Churchill, the Dene remained unconventional consumers to the trade. This feature of Dene culture did not change until well into the 20th century (Alcock 1916, Sharp 1977). The Dene Pre-European Contact subsistence-oriented socio-economic system may have enabled them to direct their positions in trade relations and maintain traditional modes of subsistence and material culture for a significantly longer period than previously thought. All participants in the fur trade, including Aboriginal cultures, should be viewed as having various goals and strategies resulting in a multitude of outcomes in different periods and regions (Esau 1986:v). A world-system theory incorporates this dynamic interplay between these two cultures within a socio-economic framework.

1.1 Hypothesis and Objectives

The central hypothesis of this thesis proposes that subsistence and mobility patterns of the Dene, influenced by their sub-arctic environment, allowed them to control the quantity and types of trade goods brought in to Fort Churchill by the HBC. Ethnographically, Sharp (1977) noted that the reliance on caribou as their primary food

source meant that the Dene expended little effort exploiting secondary food sources unless caribou were unavailable. As early as the 18th century, this same feature of Dene socio-economics was noted by Samuel Hearne at Fort Churchill. Therefore, this basic strategy remained constant from the time of contact well into the 20th century.

Social and economic factors may have influenced the incorporation of European goods in Aboriginal cultures. These include differential access to European items, the extent to which obligatory kinship redistribution is conducted, and a population's desire to maintain traditional practices (Evans 1999:126). Examining the influence of Dene economic strategies on the selection of European material culture provides an opportunity to illustrate the impact that traditional modes of economic and social systems had on the introduction of Western economic systems in the 19th century, and it also provides the opportunity to better understand the mechanisms and extent of Aboriginal groups' incorporation into a world market economy. An economic approach to archaeological material culture will be employed to track influences and changes over time.

1.2 Statement of Research Questions

The aim of this thesis is to develop a set of expectations of the archaeological record based on historical, ethnographic and ethnohistorical data in order to provide an understanding of culture-based incorporation processes for trade goods in historic fur trade posts in the Canadian northwest. A model will be developed framed in a world-system theory which seeks to explain the dynamics of the "capitalist world economy" as a "total social system" where interdependent groups continually remodel production and exchange to their advantage (Vela 2001; Chase-Dunn and Grimes 1995:389). Economics of the fur trade is one way of assessing the structure and practices of a culture through

which the basic requirements of survival are mitigated. If successful, this model could be applied to other contemporaneous fur trade sites to deduce the degree economic incorporation of Aboriginal participation in the fur trade. A broader application of this model may be used to examine English colonialism and how various indigenous groups negotiated their relationships into a Western market economy.

To meet this primary objective, the goals of this thesis are to determine if there is a quantifiable archaeological artifact assemblage from Fort Churchill IeKn-61 that can verify historic accounts for trade at Fort Churchill. Secondly, investigate whether a model developed from a compilation of archaeological and historical data can expose differential selection patterns and incorporation of European trade goods by the Dene and elicit an understanding the decision-making process and degree of participation in a fur trade. Lastly, are there indicators on the abandonment of traditional subsistence practices based on caribou to a Western economy based on fur-bearing animals?

Answers to these questions will be gained using statistical analysis and interpretation of the archaeological material excavated from the trade shop at Fort Churchill and comparison to historic data of goods being provisioned to the fort. The archival source material will develop a historical model that will be compared to the archaeological artifact assemblage from the trade shop of Fort Churchill (IeKn-61) collected over four seasons of excavations (1992 through 1995). The archaeological collection will then be used to develop a more holistic model of selection patterns and to what degree incorporation of trade goods pervades the Dene culture. The various behavioral, environmental, and economic systems of the Dene, in the face of enticements

by the HBC, may have resulted in differential types or values of material goods to be present in the archaeological record at Fort Churchill.

Ultimately, analysis of material culture through economic practices may provide a selection process based upon perceived value of material items by an indigenous group vis-a-vis a European market economy. If the historic record is similar to the archaeological record and if there are limited types of goods over an extended period then it can be inferred that the Dene were able to remain limited partners in the fur trade economy.

After determining to what extent the archaeological record reflects historic primary documentation, an explanation for the cause of the discrepancy or similarity is another important objective. What caused the Dene to incorporate the fur trade economy to the degree seen in the analysis results? Ethnographic studies discussing the socio-economic framework of the Dene may shed light on consumer choice motivations.

Whatever the results of this thesis may be, the study will provide increased knowledge of this 'forgotten' fort and of a unique cultural group who negotiated their own way in the fur trade. The material record can compared to that from other contemporaneous forts to determine diversity in the fur trade economy. The focus on the Dene within the zone of influence of the fort will also expand the knowledge of the socio-economics of a subsistence-based Aboriginal group and their role and influence in an 18th and 19th century world capitalist market.

1.3 General Overview of Culture Contact Studies

One of the first models for examination of culture contact studies has been the cultural paradigm of acculturation which has been used to interpret contact in European

colonial contexts (Friesen 1995; Stein 2002). Bradley (1987:167) defines acculturation as "the process of reciprocal interaction that occurs when two autonomous cultures come into contact". This definition allows for the conception of dynamic cultures as adapting and changing through time, thus playing a primary role in the outcome of choices, ergo equity by both groups to advance cultural change and/or continuity is maintained (Evans 1999:11). Acculturation studies have examined the presence of European goods and the greater quantity represented in archaeological populations indicate increasing degree of acculturation (e.g. Farnsworth 1989, 1992; Lightfoot et al. 1998; Rubertone 2000). However this simplified approach has been criticized for being unidirectional and ignoring dynamic interchange of material culture. Increasingly refined methods have been developed.

More recent contact-period studies using archaeological assemblages have incorporated notions of bi-directional impacts of contacting cultures on the material culture of both groups (e.g. Farnsworth 1992; Hoover 1992; Rogers 1990). World systems theory and frontier models are in many ways related to and derivative of earlier, and simpler, acculturation models (Orchard 2007:15). This is reflected, for example in Hoover's statement that "frontiers were zones of extraction that formed part of the periphery of the world economic system" (1992:39).

An economic theoretical framework may best suit the present research examining archaeological record patterning in relation to those cultural systems that produced them. Early studies focused on economic models developed specifically for the North American fur trade (Innis 1930, Carlos 1981, 1982; Carlos and Hoffman 1986). However, these models focused on the Euro-Canadian competition between trade companies and did not

address interpersonal relationships and how Aboriginal groups contributed to the market system (Ray 1999). Gradually, theories have begun to emphasize the economic role of Aboriginal groups as central players rather than passive agents and how these institutional arrangements had affected natural resource use (Ray 1974; Carlos & Lewis 1999:706). Considerable recent work has focused on cultural persistence among groups "contacted" by Europeans (e.g. Mann 1999) and on the bi- or multi-directional interactions between contacting groups in "pluralistic" settings (e.g. Lightfoot 1995). The assumption that Aboriginal groups were static and autonomous prior to contact belies the fact that trade and exchange was occurring in Pre-European Contact times for thousands of years. Adoption of goods and the exchange of ideas is not a new concept in Aboriginal culture and therefore the goods introduced by the HBC may have been seen as just another type of exchange network, albeit an accelerated one.

1.3.1 Culture Contact and the Western Fur Trade

Culture contact studies provide useful contexts for framing and understanding the interactions that occur between Aboriginal groups and Europeans (Orchard 2007:8). These studies have applied key approaches to the study of European and Aboriginal interaction. This section aims to provide a general overview of the theoretical and methodological issues in fur trade studies.

Throughout the 18th and 19th centuries, the fur trade represented a capitalist, European venture to procure furs for the European market. However, the trade fostered social and economic forces which played an important role in the development of western Canada (Klimko 1994:29).

The HBC and Aboriginal cultural groups interacted within a corporate and colonial regime. This played out in many of the HBC trade posts situated along the shores of Hudson Bay which were part of a larger economic system, that being the Western European capitalist market. From the viewpoint of the HBC, the success of Aboriginal trade meant their company's overall profitability, economic well-being and the continued trade in North America. For Aboriginal cultures, "any decision to incorporate a new item into an existing repertoire of material culture is socially mediated and no matter how unequal the relative power of two contacting groups, each will select and reject items according to their own logic" (Marshall and Maas 1997:275; cf. Bamforth 1993; Friesen 1995; Hoover 1989; Miller and Hamell 1986, Morantz 1980; Orchard 2007; Rogers 1990). Trade goods would be brought in an attempt to entice the Aboriginal populations, however these items were only continued to be imported if there was a need or a desire on behalf of the Aboriginal population. Therefore it is important to understand the adoption of goods by Aboriginal groups over the course of time.

Understanding the incorporation of European trade materials in Aboriginal culture is a key question in culture-contact studies. The differential adaptation of certain introduced goods or why participation varied by groups or individuals has been unclear. For the Dene, the fur trade may have represented a unique market to explore. However, historically they remained impartial and peripheral to the market due to underlying subsistence-based structures (see Chapter 2). Examining the selection process at Fort Churchill over time will hopefully quantify these economic decision-making processes and how they are influenced by underlying social structures.

The partnership aspect between the European traders and Aboriginal populations is characterized by the Hudson's Bay Company slogan "To please the Indians" which became ingrained in company policy in the 18th century. The types of commodities brought to trade at the shores of Hudson Bay and the quality of these materials was due to the instrumental role played by Aboriginal traders. Without the supply of furs, provisions, and traditional knowledge of environmental survival techniques, the HBC would have quickly succumbed to the foreign and harsh sub-arctic climate. Some have argued that the Aboriginal populations held the upper-hand in trade relations, with reference to Aboriginal populations as economic agents (Ray 1977). The selection of trade goods at Fort Churchill may have followed culturally derived socio-economics, therefore use of economic theory will elicit underlying structures. According to Kardulias (1990:52)

> "Prehistoric native societies had developed knowledge of their environment, both natural and social, that permitted them to accommodate rapidly to the demands of a capitalist market economy. This action involved economic specialization in both production and distribution, by way of a series of conscious choices made by the natives after balancing what they viewed as the appropriate available options".

The degree of incorporation of goods into Dene culture is the question of study. Using historic accounts and the archaeological record, significant changes in variety and quantity of goods over time may reveal increasing participation by the Dene in the fur trade. While various academic sources have implicated that European goods were instantly taken up by Aboriginals along Hudson Bay and traditional goods instantly discarded, this has been debated by some historians, archaeologists and economists

(Carlos and Lewis 1993, 2001; Orchard 2007, Kardulias 1990). Studies such as those conducted by Miller and Hamell (1986:314) have shown that "both the historical and archaeological records indicate that the [initial] impact of early European utilitarian trade goods was negligible (cf. Fitting 1976, Kaplan 1985). Other studies have put forth that early incorporation of seemingly utilitarian trade items by Aboriginal groups was for use in unpredictable ways such as ritual or symbolic significance or were reworked into Aboriginal culture as traditional utilitarian forms (e.g. Jordan 1978). Morantz (1980:46) posited that the term "'Supplement' rather than 'supplant' would more appropriately describe the impact of the new technology".

It may be argued that the Dene were introduced to the fur trade later than other contemporary Aboriginal groups therefore their resistance and minimal incorporation of trade goods in the 19th century reflects this delay. However, the Dene were only 30-40 years behind the Cree along Hudson Bay in attempts by the HBC to instill trade relations. This study reflects analysis of trade materials in the 19th century, well after the initial contact by Europeans and the Dene.

Economic historians Carlos and Lewis (1993, 2001) state that material goods were selected for and directed by the Aboriginal populations who were both the suppliers and consumers in the fur trade. That the Dene were able to have power and influence in trade can be seen in other research being done on the social relations of the Hudson's Bay Company (Burley 1993).

1.4 Theoretical Framework

Economics of the fur trade has been shown as one way of assessing structure and practice of a culture through which the basis requirements of survival are mitigated.

World-system theory goes a step further and applies a macro-sociological perspective that seeks to explain the dynamics of the "capitalist world economy" as a "total social system" (Vela 2001). Immanuel Wallerstein is associated with laying the foundation for the theory however aspects of this approach were previously presented by others (e.g. Wike 1958). Wallerstein's approach is one of praxis, in which theory and practice are closely interrelated, and the objective of intellectual activity is to create knowledge that uncovers hidden structures and allows oneself to act upon the world and change it (Vela 2001).

A world-system is a social system, one that has boundaries, structures, member groups, rules of legitimization, and coherence. Its life is made up of the conflicting forces which hold it together and tear it apart as each group seeks eternally to remold it to its advantage (Wallerstein 1974:347). Wallerstein (1974, as cited in Chase-Dunn and Grimmes 1995:389) further states that a world-system is a "multicultural territorial division of labour in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its inhabitants." This leads to the existence of two interdependent regions: core and periphery. These are geographically and culturally different, one focusing on labour-intensive, and the other on capital-intensive production (Goldfrank 2000). The model is based on a hierarchy of core, largely colonial powers such as Great Britain and France, who were linked to peripheral regions, such as colonial America. Semi-peripheral states held an important intermediate position between the core and periphery and shared traits of both thereby preventing polarization within the system (Hoover 1992:40). While the term hierarchy is used, this reflects economic power relations and does not negate the fact that both the core and periphery were active

participants. Wolf (1982:x) demonstrated that “human societies and cultures would not be properly understood until we learned to visualize them in their mutual interrelationships and interdependencies in space and time”.

Wallerstein adopts Marxist economic theory and allows for an agency perspective of adaptability and change to the structure; “Man’s ability to participate intelligently in the evolution of his own system is dependent on his ability to perceive the whole” (1974:10). Wallerstein (1974:301-302) points out that even small-scale economies in remote parts of the world are often tied to international exchange networks. This can be related to the study of the North American fur trade. While the HBC acted as the ‘core-state’ in the fur trade economic structure, there were times when ‘peripheral’ Aboriginal groups, such as the Dene and Cree, had control over structures and functions. The control that these ‘periphery’ groups showed in the selection of material goods indicates a significant degree of control over the overall social system. Through the quantitative study of material culture hidden structures may begin to appear.

For archaeological context, World Systems theory provides a framework for modeling the relationships that occurred between contacting cultures, and for interpreting the presence of trade goods and colonial features in archaeological assemblages (Orchard 2007:16). World-systems theory has been applied to examine Aboriginal participation in the fur trade and in culture contact studies. Friesen (1995) examined archaeological correlates among the Qikiqtarukmuit during contact period changes. Friesen’s studies indicated that “the increasing availability of preciosities and changing distribution of subsistence resources during the contact period caused the indigenous world-system to

increase in depth and breadth, and to begin to change in pattern of internal differentiation" (Friesen 1995:ii).

The use of world system theory has been successfully incorporated in history and archaeology by Kardulias (1990:27) who argues that the fur trade can be understood as one segment of a world system and that the role Aboriginal groups had in the fur trade was critical to its incorporation into European world economy. He argues that Aboriginal American societies exhibited remarkable flexibility in adopting, absorbing, and manipulating European goods and practices within an Aboriginal context. Social practices, kinship structure, and other elements felt the impact of the fur trade, but the agenda for change was an Aboriginal one (Kardulias 1990:29). In the case of culture contact scenarios, both societies make decisions as to the economic avenues to be pursued (Kardulias 1990:31). Examining the Aboriginal role in fur trade economics allows recognition of the Aboriginal populations in the fur trade as players in the world market economy.

This hypothesis was formulated for 19th century cases in North America, it does not address the initial adoption of utilitarian goods by the Dene in the early contact period, but "it does provide a more applicable model for explaining the sometime difficult preferences of different contact situations" (Orchard 2007:13).

1.4.1 Critiques of World-Systems Theory

Lightfoot and Martinez (1998:472) highlight three major problems with frontier studies and world systems approaches:

1) Insular models of change that treat frontiers as passive recipients of core innovations;
2) Studies that are conducted primarily at a single scale of analysis – that of macroscale; and
3) An archaeological expectation that frontier boundaries will be visible as discrete clusters of breaks in the spatial distribution of diagnostic material objects, often in a temporally static framework.

Stein (2002:904) further argues that world systems approaches neglect the role of human agency in contact situations, as the assumptions of world systems theory "eliminate or minimize the roles of polities or groups in the 'periphery,' local production and local exchange, local agency and internal economics of developmental change".

According to Orchard (2007:19), the most problematic aspect of typical applications of world systems theory involves the tendency to approach contact situations as peripheries unidirectionally influenced by the dominant one, while neglecting or undervaluing the reciprocal influence that groups in the periphery can have on the core or on core representatives. However some authors have argued that Aboriginal populations, not Europeans, held the upper-hand in trade relations and were astute and effective economic agents (Ray 1977, 1980; Stein 2002).

By examining the complex relationship of all polities in the exchange network, involving both European and non-European societies and at all scales of inter-societal interaction, a more inclusive model can be developed. However, generalizations on how North American indigenous groups responded to trade must be examined through a given group's unique historical context (Orchard 2007:25).

Ray speaking generally of the land-based fur trade in Eastern Canada, states that "there is no question that over time Aboriginal people increasingly relied on imported subsistence technologies" (Ray 1974:xx). These eventually displaced most of the traditional ones. Aboriginal people increasingly depended on the traders to help them avoid starvation due to cyclical food shortages and chronic ones that resulted from resource depletion (Ray 1974:xx). However the Dene at Fort Churchill had an anomalous relationship with the HBC, facilitate by a strong reliance on the traditional modes of subsistence centred on caribou.

In summary, Chapter One is the introduction to the purpose of the research and need for the study. The objectives and goals of the research are outlined how this thesis will hope to answer these questions. A discussion has been presented on the theoretical concepts used to interpret variability of motivations and interactions between the Aboriginal groups and the HBC. The primary theoretical basis is World-systems theory as proposed by Immanuel Wallerstein (1974) for the concepts and ideas presented in this thesis. Specific focus on studies that have applied an economic approach to elicit incorporation of colonial or corporate regimes in the fur trade will be examined. This chapter examines how material culture can communicate economic positioning of core versus periphery groups in the fur trade, with overarching applications of the theory in a macro-sociological perspective. The following chapters in this thesis will define the various phases of the study.

1.5 Thesis Structure

Chapter 2 situates the study in a spatial, temporal and cultural setting as factors which influenced the human interactions and socio-economic patterning of both the HBC

and the Dene residing in the Fort Churchill trade zone. The chapter includes a review of the history and social structure fur trade in western Canada, with specific focus on the founding of Fort Churchill, its reestablishment after Prince of Wales Fort was destroyed, and throughout its lifecycle until its closure in the 1930s. A literature review of ethnohistoric studies of the Dene culture will assist in resolving some documentary biases of the historic record and provide reflection into the recent history of the Dene/Dene culture. The archaeological literature detailing the results of the excavation will provide context to the artifact assemblage.

In Chapter 3, the data sets and methods used to construct this thesis will be presented. A summary of the archaeological excavations describes the process through which the materials were collected. A discussion on the range and types of historical records used to provide quantitative data and how these records were selected for use in the developing of comparative models. Using historical literature, ethnography and ethnohistory it is hoped to demonstrate the Dene limited their incorporation in the fur trade and maintained traditional modes of subsistence.

Chapter 4 presents an analysis of the types and quantities of trade goods that were exchanged with the Dene at Fort Churchill. The analysis begins with historic records that provide a baseline for this study. The archaeological data from the Fort Churchill trade shop are then presented, analyzed and the outcomes of the two analyses are then compared. If little diversity is seen in material goods over time along with a uniformity of faunal remains, primarily caribou, then resistance and limited participation in the fur trade by the Dene can be assumed. The nature and frequency of the various artifact types over a significant period of time showing a consistency throughout the assemblage may

validate the ethnohistoric and historic records that state that the Dene were resistant to the trade for longer than was seen elsewhere in North America. The results will inform the interpretation and discussion in the following chapter.

The final chapter of the thesis is Chapter 5, and it summarizes how, by using economic models, inferences can be made about the degree of participation in the fur trade market economy and how that economy contributes to the formation of the archaeological assemblage. Discussion of how economics formed the archaeological record in relation to world-systems theory (WST) will demonstrate the validity of using WST in fur trade studies as well as an examination of the benefits or problems in applying this approach. Determination of the extent to which the archaeological data supports the theoretical framework and the historical record will be discussed. By examining this relationship and aligning social, historical and ethnographic studies, one can understand the unique set of circumstances that is represented at Fort Churchill in the 19th century. Critiques of the method employed, as well as future considerations of the applicability of the model will be discussed.

Chapter II: Historical Background

2.1 Introduction

The purpose of this chapter is to contextualize, through documentary evidence, the dynamic interplay between the Dene and the Hudson Bay Company. An examination of environmental, cultural and oral histories will provide underlying motivations for economic interactions in the Fort Churchill district in the late 18th through 20th century.

2.2 Environmental Characterization

The Churchill River is the fifth longest river in Canada draining some 300,000 square kilometers with headwaters situated near the Alberta/Saskatchewan border. The river terminates at Hudson Bay. The Churchill River, named after a Governor of the Hudson's Bay Company, became a super highway for the fur trade into the fur-rich interior and Athabasca watershed. The river was first officially recorded in 1619 when Jens Munk, a Danish explorer in search of the Northwest Passage was forced to overwinter in a natural harbour on its west bank, now known as the Churchill West Peninsula. The Danes experienced devastating losses with only Munk and two other crew members able to return alive to Denmark the following year (Alcock 1916: 433-435, Kenney 1932:10).

The archaeological remains of Fort Churchill are also situated on the west bank of the Churchill River, five kilometers (3 miles) from Hudson Bay and across from the present-day town of Churchill, Manitoba (Figure 2.1). The fort was founded on a shallow clay and sand beach ridge backed by quartzite hills (McInnes 1913: 33, 89). The west

coast of Hudson Bay has experienced extensive isostatic rebound causing exposure of land at a rate of 1 metre per century. Currently the location of Fort Churchill is quite a distance from the Churchill River.

Figure 2.1. Location of Fort Churchill.

The study area is located within the Hudson Bay Lowland ecoregion, a transitional zone between arctic tundra and boreal forest. Fauna in the ecoregion includes a variety of species. Summer provides the largest diversity and variety of wildlife. Millions of Snow geese migrate through the ecoregion, as well as other migratory bird species such as Canada goose, Black duck, King Eider, Pintail and Whistling swan. While fewer in number, upland bird species such as Willow ptarmigan, Spruce grouse, Snowy owl and Raven are year-round residents. Small mammals include Muskrat, Ermine, Weasel, Marten, and Wolverine. Large mammals have traditionally been more abundant in the interior Shield country to the south. Both woodland and barren-ground caribou are found in the Churchill Region, including other large mammals such as Moose, Black Bear, and Grey Wolves. Other species include the Canada Lynx, Snowshoe Hare, and Striped Skunk. Closer to the coast are such species as Polar Bear, which venture onto the sea ice in winter, and Arctic Fox. Marine mammals include Walrus, Bearded, Ringed and Harbour seals, along with Beluga Whale and the more uncommonly seen Bowhead whales, which are only beginning to return to the area after 100 years. Common fish found in inland streams and lakes are Brook Trout, Northern Pike and Walleye. Some, including Brook Trout, are migratory, wintering in the interior lakes and summering in the river mouths and estuaries of Hudson Bay (Government of Canada 2005; Churchill Northern Studies Centre 2005).

The main caribou herds are the Beverly and Qamanirjuaq barren-ground caribou herds. These animals range through the southern Arctic tundra and subarctic taiga of the western NWT, Nunavut, northern Manitoba, Saskatchewan and Alberta (Figure 2.2). These caribou herds have a regular migration patterns and life-cycle. In the spring, they

are in their calving grounds in the barrenlands of Nunavut, and in the fall they move south toward the boreal forests of northern Saskatchewan and Manitoba where they would spend the winter. According to the Beverly and Qamanirjuaq Caribou Management Board, communities on or near the range of these two herds still traditionally utilized the caribou for much of their food and maintaining the culture and traditional lifestyles (The Beverly and Qamanirjuaq Caribou Management Board 1999:3).

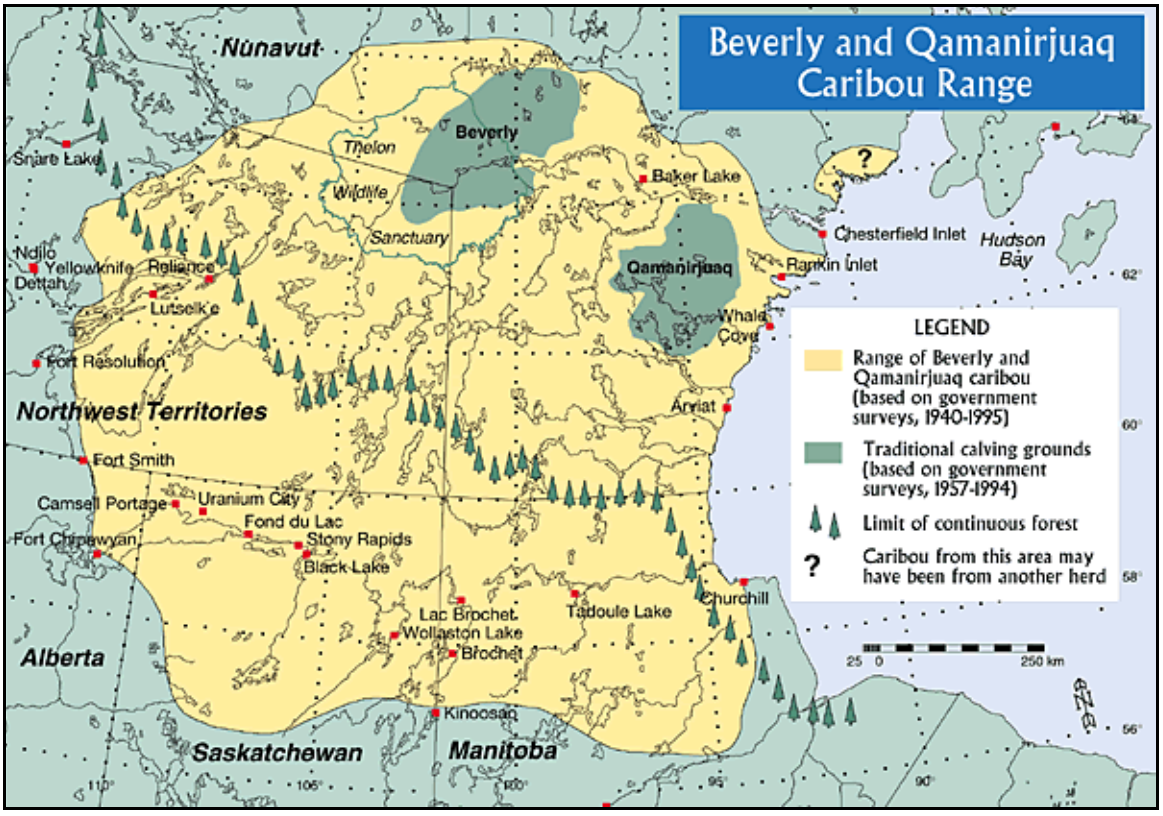

Figure 2.2. Range of the Beverly and Qamanirjuaq Caribou. © 2000 BQCMB

2.3 History of Fort Churchill

The Hudson Bay Company was formed on May 2nd, 1670 by right of a royal charter proclaiming them "*true and absolute Lordes and Proprietors*" of all lands that

drain into Hudson Bay (Oliver 1914). The first forts or 'factories' were establishments along the west coast of Hudson and James Bays where furs were brought by Aboriginal groups for packaging and transport to Europe. Built in 1682, York Factory at the mouth of the Nelson and Hayes River was the most northern fort and acted as the main entrepôt of the HBC. Despite the nucleus of trade at York Factory, the central headquarters of the HBC where all executive orders and plans for the fur trade were made was maintained in London.

In 1689, the London Committee undertook to expand trade northward to the Churchill River to include the Dene and Inuit. Other agendas included implementing a white whale fishery and copper exploration (Esau 1986:16). Fort Churchill from its inception was designed specifically for engaging the Dene also known as "Northern Indians" or "Chipewyan" into the fur trade economy. The Churchill River is situated in neutral ground between lands the Dene inhabited north of the Cree and south of the Inuit. The location of the fort was intended to keep the traditional enemies separated. This proved impossible, since the Churchill River was the most convenient route to a trading centre for the Cree of that region. For example, in June 1721, forty canoes of Churchill River Cree who came were told they should go to York, but they refused on grounds of convenience and that they had made peace (HBCA B.42/a/2 fo.133). French commander Jeremie (1926:20-21) observed that the Dene were located to the north of the Seal River and that the south was occupied by the Cree and that warfare and hostilities between the two groups was unpreventable.

The HBC anticipated that the establishment of a new trading centre at Churchill would settle old animosities between the Cree and Dene, and Inuit and Dene, and

facilitate all groups to trade. A new post at the Churchill River would allow the Dene to safely bring furs to the post and expand trade connections into the Athabasca territory. The first attempt to place a trade post at Churchill was made in 1689 by a small party which included future explorer Henry Kelsey. However this early attempt was cut short as the post was accidentally destroyed by fire and abandoned (Kenney 1932:20-21).

It was not until 1717 that a second and more permanent attempt was made to establish a post on the Churchill River. The Hudson Bay Company appointed Captain James Knight, Governor-in-Chief on the bay, to build a northern bayside post approximately 224 km north of York Factory. The resulting wooden fort, named Fort Prince of Wales, was constructed five miles inland from the mouth of the river in a small harbour on the west bank. Knight noted in his journal that this was the only favourable location along the river. This was the same location that Jens Munk occupied one hundred years earlier (Kenney 1932:113). The remains of the Danes were found when digging foundations for the post. Knight further noted that never had he seen such a miserable place in all his life (Kenny 1932:119). Contending with hoards of mosquitoes, long distances to obtain potable water, and harvestable timber three miles away, made the location of HBC's new post difficult for its inhabitants.

In the winter of 1723-24, the HBC sent a young employee named Richard Norton to winter among the 'Lowland Indians'. Norton's purpose was to "divert 'em [Lowland Cree] from going to warr and to desire 'em to go to trade at York Fort and not come here for they should not have any Encouragement" (HBCA B.42/a/4, fo.23).

The post became relatively productive in the fur trade but was short-lived, as plans began for a defensive fortress at the mouth of the Churchill River on Eskimo Point

would defend the company interests against French attack. Construction of a stone fortress, also called Fort Prince of Wales, was begun in 1731 under the direction of the newly appointed Chief Factor Richard Norton and was finally completed forty years later 1771 (Kenney 1932:93-98). The new fortress also had a limited lifespan, when in 1782 it was burned down by the French commander Comte de La Pérouse. After the destruction of the Stone Fort, Samuel Hearne re-established a wooden fort in 1783 back at the original site of the first Prince of Wales fort, and named it Fort Churchill (aka Churchill Factory). This fort served as the centre of the trade and of the settlement at Churchill until 1936 and is the focus of this thesis.

The early years of the trade were decidedly unprofitable and disappointing for the English company due to the clash of cultures, the Dene's focus on caribou and their distain and unwillingness to trap small fur-bearing animals. District Reports of 1825 by Colin Robertson (HBCA B 42/e/4) state the "Ammunition and tobacco that draws those Distant tribes of Chepoweyans [sic] from their Lands to this place, and forms one of the principal articles of our Trade" and without these items they would likely go back to their old ways of snaring caribou. (HBCA B 42/e/4).

Market competition for furs arose with the increasing influence of the French who throughout the 17th and 18th centuries led inland trade cutting off supply routes to the bay. Increasing threat came from independent traders who began expansion into the Athabasca District, forcing the HBC to build their first inland post – Cumberland House in 1774 on the Saskatchewan River (Klimko 1994). Trade was expanded inland in the 1790s from Fort Churchill when competition from the North West Company was in full force, a number of posts were established west of Churchill at Reindeer and Indian Lake. This

introduced a new trade relationship, the middleman, and provided the Dene with a secondary means of negotiation with the HBC (Ray 1974).

Bitter rivalries and violence ensued between the HBC and the NWC with decreasing profits for both companies. By 1821, the HBC and NWC amalgamated into a single corporation under the HBC and strict measures of streamlining recreated the fur trade into a profitable corporation once again (Rich 1958).

While the HBC was focused on restructuring their business, the Dene continued to manage their involvement in fur trade, using it for their purposes of minimal or specialized goods while maintaining their traditional seasonal rounds focusing on the caribou.

2.4 Dene Cultural-History

A complete account and historical examination of Dene culture is outside the scope of this thesis. Only a generalized summary of the culture-history of the coastal Hudson Bay Dene participating in the fur trade economy of Fort Churchill will be presented.

The Dene are the largest sub-group of the Athapaskan-speaking family (Birket-Smith 1930, Krech 1980) and they were the main cultural group historically documented to have traded at Fort Churchill during the period 1783 to 1936 A.D. The Dene were known historical by the name “Chipewyan” which was derived from the Cree word meaning "pointed skins", likely reference to the cut and style of Dene parka and the clothing once worn by these people (Abel 1993:xvi; Campbell 1997:395). Today the term is considered pejorative and therefore the contemporary self-identified name “Dene” which means “the people” will be used throughout this thesis.

The historic and present day inhabitants of Manitoba's subarctic region are also distinguished by the term Caribou-eater Dene, (Ethen-eldeli Dene) so-called by 19th century travelers because of their reliance on caribou for all their food and shelter needs (Abel 1993:xvi). Historically they made use of resources in both the boreal forest and the barrens, relying on migrating caribou in particular but also fishing in the lakes and streams. Like the caribou, the people who lived in the forest-tundra transition zone moved out onto the tundra in the summer and back into the woodlands for winter (Abel 1993:7).

The Dene territory falls within the barrenlands and sub-arctic boreal forest and ranges across northern Manitoba, Saskatchewan and Alberta; north along the Mackenzie Valley; and east to the Barren Grounds (Abel 1993:xvi). Today there are two remnants of the Ethen-eldeli-Dene in northern Manitoba, the Sayisi Dene (Tadoule Lake) and Hoteladi (Northlands Band at Lac Brochet). The Athapaskans of the Canadian subarctic declared themselves the Dene Nation in 1975; however, the Saskatchewan and Manitoba Dene were excluded from the original nation and not accepted until much later (V. Petch personal communication March 31, 2012).

2.4.1 Ancient Roots

Human occupation of the Churchill West Peninsula dates back four thousand years (Hodgetts 2006, Meyer 1977, 1979). The Dene can trace their ancestral roots to the Taltheilei tradition (2600 B.P. to 1715 A.D.) (Elias 2003:v, Gordon 1996, Nash 1975, Petch 1998). Pre-European contact life in the Athabasca Region, corroborated in the archaeological record, was dependent on the barren-ground caribou.

The importance of caribou to the Dene cannot be overstated. Caribou provided all the necessities for survival including food, clothing, tools and utensils. Noble (1971) stated that historically enduring material adaptations of the Taltheilei complexes is a reflection of a long term dependency upon the Bluenose, Bathurst, Qamanirjuaq and Beverly barren-ground caribou herds of the area. The concept of discrete band/discrete herd developed by Gordon (1975, 1976, 1996) illustrates the role of social structure and kinship in the interaction with local caribou herds and is supported by the archaeological record. The Migod site at Grant Lake exhibited a continuous development of Taltheilei tool complexes from 655 B.C. to A.D. 1700, and Gordon (1976, 1996) believed this represented the arrival of the early Athapaskan ancestors who eventually became the historical eastern division of Dene (Ethen-eldeli-Dene or Caribou Eaters) described by Samuel Hearne (1971) in the late 18th century. The enduring nature of the subsistence-oriented economy of the Chipewyan through the historic period is well documented.

2.4.2 Dene and the Fur Trade 1717 A.D. to 1930 A.D.

The Dene, were called the 'Northern Indians' by the HBC and early explorers. The historical record indicates that there was interest in conducting trade, but inter-tribal conflict and warfare between the Cree and Dene limited access to Fort York later known as York Factory. The Dene were viewed as a mysterious entity in the fur trade economy. The earliest written account of the Dene comes from Henry Kelsey who in 1689 traveled inland in an attempt to entice the Dene to trade.

Fort Churchill was to be established as a separate trading post for the Athabaskan-speaking cultures, long-standing enemies of the Algonquian-speaking Cree trading at York Factory (Carlos & Lewis 2001:3). However, to establish the post, a small group of

Cree were employed initially as the main traders and suppliers to the post. By the early 1800s, successful peace negotiations by the HBC led to the Dene becoming the main traders at Fort Churchill who became known as 'Homeguard Dene' (Esau 1984:6).

Throughout the 19th and 20th centuries, the Dene's presence as the main trading group remained strong. Historian Frederick Alcock states that "in a general way the Churchill River forms a natural boundary between their [Cree and Dene] territories…All those that come to trade at Split Lake are Crees and all those that come to Fort Churchill are Chipewyans" (1916:446). The HBC may have chosen wisely when selecting the post to elicit trade with the Dene as it may have been just within the eastern edge of Dene's traditional territories.

Despite HBC persistence and the close proximity of Fort Churchill near traditional lands, the Dene have been historically documented to be resistant to the involvement of the fur trade economy and specifically the use of European goods. Early accounts appear to indicate that the Dene choose in favour of maintaining their traditional mode of subsistence on the caribou herds of the barren lands.

Samuel Hearne provided some of the earliest written descriptions of the Dene, as he travelled and lived with them on extensive trips to Coppermine River from 1769 to 1772 (Elias 2003, Hearne 2001). Hearne (1971:50-52) noted that the Dene actually required little in terms of trade goods because the caribou provided almost all of their needs. He further states that the caribou hunt "is sometimes so successful that many families subsist by it without having to move their tents above once or twice over the course of the winter" (Hearne 1971:50-51). Two centuries later, Hudson Bay officers still reported that the Dene were more committed to caribou than to fur (Elias 2003:9).

The many historic references to the Dene reliance on caribou support the theory that the Dene were able to conduct a basic subsistence without becoming dependent on European material items. The early years of the trade at Churchill in the 18th century proved that the Dene were an unmotivated market and were only interested in a few basic trade goods such as axes, knives, ice chisels, muskets, files and kettles (Esau 1984:42). This feature continued well into the late 19th century, where HBC journals, reports and account books document the Dene as being 'indolent' at least as far as the HBC is concerned. The Dene differentiated themselves from other Aboriginal trading groups by their seasonality. Adam Snoodie, an HBC employee writing in 1819, stated that the Dene "remain in a state of inactivity" spending most of their time in killing caribou "until the last supply of European goods are expended" (HBCA B. 42/a/144 fo. 8). By 1885, the Fort Churchill post report states that despite increasing number of aboriginals trading at the post, they retain "their native customs owing to their only visiting the fort for the purpose of trading – say twice a year, and then their stay does not last more than two or three days" (HBCA B.42/e/10 fo.4b). This is corroborated as early as 1783, when Herne wrote "…the Greatest part of our Trade comes in, in the winter which is not the case at any other factory in the Bay" (B 42/a/103/fo.4d).

2.4.3 19th and 20th Century - Missionaries and Researchers

Written accounts of the Dene were made by fur traders and then missionaries who came to the region in the mid-19th century and visited Dene camps. These groups were followed by early 20th century anthropologists and ethnographers. Anthropologist James G. E. Smith, who wrote the "the definitive work on the Dene" (Holland 2001), suggests that the caribou was of extreme importance to the Dene, structuring their seasonal cycle,

seasonal distribution, socio-territorial organization and technology, and formed the focus of their religious beliefs and oral literature (Smith 1981:272). The caribou provided the Dene with everything they needed to survive, and the plentitude of the animal herds at various times of year could make the harvest last for months at a time. This abundance assisted the Dene in maintaining their traditional culture and practices for a longer period of time than seen with Dene contemporaries, the Cree.

Ethnohistoric research on the Dene has shown that their socio-economic structure remained stable for hundreds of years. Henry Sharp (1977) wrote that the social organization of the Dene based on certain strategies of the caribou hunt. These strategies and use of caribou in everyday life had not appreciably changed prior to World War I. Sharp argues that even changes in the material culture did not significantly affect their basic subsistence activities or social organization (Esau 1984:8). Elias (2003:9) corroborates the continuity of Dene culture stating, "Dene synchronization of movements and social organization on the caribou led to a remarkably durable pattern of culture". The Dene oral tradition (Petch 1998) indicated that a lack of western goods such as tea or candles during WWII led people to resort to traditional teas and animal fat. Because of traditional sustainability, Dene culture change was remarkably conservative, showing only modest variation and even less social change between first contact *ca.* 1717 and the early 20th century. Ethnologists attribute the social structure of Dene culture, bilateral kinship, as playing a role in their ability to adapt to outside stressors. In this kinship structure, people were linked by filial and marriage ties in which kinship was extended as widely as possible. Death or disruption of marriage did not break these links, and

remarriage further extended the individual's relations on which one could rely in times of trouble or famine (Esau 1984:36).

On the other hand, scholars have argued that the changes undertaken by the Dene were significant and did strike at their core social system and behaviours. Anthropologist J.G.E. Smith, for one, suggested that the fur traders continually worked to coax the Dene from their traditional form of subsistence. "[O]ne may view the history of the Dene from the early 18th century to the present as one of conflicting attractions to the caribou of the taiga-tundra ecotone on the one hand and to the fur trade and the fur bearers of the full boreal forest on the other (Smith 1976:14).

Despite the reliability of the caribou to provide basic subsistence, the pull of the fur trade may have had some influence on overall territory of the Dene in the Contact Period. Early anthropologists have concluded that the Dene moved from the Peace River region in the early 18th century following the establishment of HBC trading posts on Hudson Bay. The Dene moved beyond their traditional territorial ranges in order to participate in the fur trade at the Hudson Bay post in the area from the interior regions to the west and northwest (Hodgetts 2006). This idea was first presented by Roman Catholic missionary and early anthropologists Emile Petitot (1865:47) who transcribed Dene oral history telling of an ancestral home in the Rocky Mountains. Hence, he and other French Traders called them "Montagnais" experiencing a west to east population movement (Abel 1993:11). This thought was accepted by the authors of the original Handbook of North American Indians, and went unchallenged by numerous scholars (Smith 1981:134). However, Smith (1975:410-414) and Beryl Gillespie (1975:352-358) contested the migration, and their position is supported by some archaeological evidence. The remains

of Taltheilei and ancestral Dene are more archaeologically visible in the Prairie Provinces and northward into the Tundra beginning around 3,000 years ago (Tanner and Rigney 2003:14). The presence of side-notched and corner-notched styles which have been attributed to the Dene in northern Saskatchewan and Manitoba have been noted along caribou herd migration routes (e.g., Gordon 1975, 1976; Burch 1978; Minni 1976; Nash 1975; Noble 1971, 1975; and Wright 1975).

The beginning of change in Dene culture began to be evident in some early 20th century ethnohistoric works such as that by Kaj Birket-Smith (1930) who concluded that the Dene in and around Churchill were 'deculturated.'[1] These studies followed on a period of significant policy changes such as the Hudson's Bay Company relinquished its control over Rupert's Land to the Dominion of Canada, and signing of treaties between the Dene and the Canadian Government which may have led to the acceleration of cultural change (Petch 1998:39). Recent critiques of Birket-Smith's work have shown that his study was restricted to a small group of Dene living in Churchill and tied to the fur trade and did not include the many people living in their traditional lands to the west but still utilizing the post at Churchill. Koolage (1970:45-46) stated that early anthropologists failed to consider the many ways in which the Dene were creatively adapting to changing socio-economic conditions. Changes in culture were mitigated by the Dene as best as they could in spite of their forced relocation to the town of Churchill in 1956, which restricted their mobility and hunting privileges, and ability to return to their traditional lands (Petch 1998).

[1] Deculturation is a term used by early ethnographers beginning in the 1920s to indicate a 'disintegration' or 'disorganization' of a cultural group due to contact with European cultures.

By the middle of the 20th century, the Dene had experienced change both from external and internal influences; however they managed to retain some traditions. Petch's dissertation (1998) contains numerous personal communications showing that traditional Dene practices were still being implemented, albeit with modern materials. One source stated that he killed his first caribou in the 1940s with a spear point made of cut metal. Traditional materials were also still being used; bone fleshers and beamers manufactured of caribou bones were used prepare hides for clothing. The extent that the caribou was still a large part of Dene culture is seen in an example by P. G. Downs (1943) when he related an anecdote told to him by Father Egenolf. When the priest asked a young Dene girl what was the most beautiful thing that God created, she replied "Edthen, the caribou".

2.5 Summary

The historic record provides multiple sources which demonstrate persistent Dene socio-economic structure inextricably connected to the caribou herds. This cultural bond foiled the HBC's attempts to elicit Dene commitment to trapping and trade at Fort Churchill. Rather, the Dene continued their traditional seasonal cycle which had endured for thousands of years and used their resource – the caribou – as a means of negotiating trade on their terms.

Despite the influx of new and foreign cultures, a new market economy, and eventually governmental strategies aimed at assimilation of the Dene into Canadian society, many of the traditional practices, and subsistence pursuits based around the caribou, continued to be central to Dene culture. Archaeological and ethnohistoric studies

have shown the caribou defined who the Dene were over the last three millennia and who are still a large part of today's Dene culture.

Chapter III: Methods and Data

This chapter describes the material culture from archaeological excavations of Fort Churchill and reviews the primary and secondary documents pertaining to the social, environmental and historical background of the HBC and the Dene. Ethnohistoric information has been provided through research conducted in the 20th century with the Ethen-eldeli Dene. Previous chapters have outlined the goals and research questions of this thesis, the following sections will discuss the methodology employed, and how the collection was gathered, a description of the types of samples that will be used in the analysis. The following sections include only summary data directly related to the current research questions.

3.1 Methods - Overview

Using multiple lines of evidence has shown to be an effective method for the examination of past cultures. The archaeological record is the physical basis for this thesis to elicit an understanding to what degree the Dene selected European material goods through the 19th century. While limitations to understanding Dene trade relationships at Fort Churchill are constrained by the nature of employing either archaeological or historical data, together they may provide a fuller understanding. The use of material culture to examine Fort Churchill's Dene trading past is advocated by archaeologist K.G. Lightfoot (1995:211) who maintains that archaeology is the principal means of inquiry for investigating the interactions of poorly documented ethnic workers in pluralistic communities. However, criticisms of archaeological methods that attempt to answer questions on social structure using material culture alone have been seen as too

limiting (Pyszczyk 1987). In order to understand the collection of artifacts and features of Fort Churchill and attempting to relate them to the Dene, they will be contextualized within the historical, social, and environmental conditions of the 19th century that set the stage for the material deposits. This concept, also known as the holistic approach, first outlined by Trigger (1989a, 1989b, and 1991), examines multiple lines of evidence to provide insight into culture-contact interactions and economic practices (Orchard 2007:31). Trigger (1991:561-562) argued that, in order to provide culturally specific meaning to the archaeological record, archaeologists must turn to other sources such as historical documents, oral histories, and ethnographic accounts. The ethnohistoric method, as it has come to be known, involves developing histories informed by ethnography, linguistics, archaeology and ecology (American Society for Ethnohistory 2007). Simmons (1988:10) describes ethnohistory as being "an endeavour based on a holistic, diachronic approach that is most rewarding when it can be joined to the memories and voices of living people". Therefore this study will use these principles to form a tripartite study which employs archaeology, history and ethnohistory to reveal and help to mitigate inherent biases and trends which influence individual disciplines.

To begin, historic records document the presence of Dene at Fort Churchill in the 19th century. Account ledgers provide documentary evidence that include names of traders, the types of goods purchased, and the quantities of furs brought to the post. By quantifying these account records, they can be compared with the archaeological record. Historic records, such as account books provide insight into the types of goods which were being traded to the Dene. Petch (1998) states that over time these accounts indicate cultural change through preferences for certain items and replacement of traditional

modes of production. Account books in particular were effective measures of trade, seasonal movement and resource use. Historic journals show the Dene as marginal fur producers, but important suppliers of country produce, such as caribou (Petch 1998:39). Journals of early explorers and Hudson Bay Company employees such as Samuel Hearne (1971), James Isham (Rich 1949), Tyrrell (1897, 1911) provide information regarding changes in political boundaries, and changes in demography.

The use of ethnohistoric studies to illustrate Dene lifeways will provide a valuable cultural voice to the written records and provide context for the resistance that is recorded in HBC documents. Bishop and Ray (1976) and Ray (1974) have demonstrated the utility of combining archival research with the ethnographic record in order to plot cultural change (Petch 1998:36). Ethnoarchaeological models such as those applied by Jarvenpa (1977) and Brumback and Jarvenpa (1989, 1997) have successfully shown the relationship between Dene social organization and hunting strategies. Various accounts by missionaries and early ethnographers in the 19th and 20th centuries identify the continuity of Dene traditional subsistence, while presenting evidence of limited incorporation into Western market systems. Therefore the use of ethnohistoric accounts will add a unique dimension and will add support to the holistic approach of this thesis.

In summary, applying a holistic approach will provide useful insights into the questions being asked in this thesis. Historic records and ethnohistoric accounts will assist in framing the archaeological data. Together these sources cover a broad range of time which must be considered in order to appropriately elicit understanding of how the Dene negotiated their involvement in the fur trade at Fort Churchill. The following

section will discuss the data sources in this thesis, provide context as to how the data was collected, and methods on how the data will be employed.

3.2 Archaeological Investigations - Fort Churchill, IeKn-61

Archaeological investigations on the Churchill West Peninsula began in the 1960s with research designs to understand the early inhabitants of the study area, specifically the ancestors of the Inuit of the Canadian arctic. Ronald J. Nash (1969) conducted research on the Arctic Small Tool Tradition (ASTt) at the Seahorse Gully Site, approximately 6 km from Fort Churchill; however Nash omits any mention of historic sites or features. Fort Churchill gained a passing mention in Meyer's 1978 publication during an archaeological survey of the Churchill West Peninsula (Meyer 1979). The study, commissioned by Parks Canada, was once again focused on locating archaeological sites that represented Inuit and Aboriginal origins. Meyer did note that the remains of Fort Churchill had "great potential for public education as the ruins of the post's buildings are quite obvious, particularly the impressive cellars whose walls are lined with dry laid limestone masonry" (Meyer 1979:81). The first type of study to bring Fort Churchill to public attention focused on historical land-use. Historian Martha McCarthy documented the history of construction at Fort Churchill and presented her research in a Parks Canada serial publication (McCarthy 1985).

Archaeological studies began in the late 1980s by the Historic Resources Branch, Manitoba Culture, Heritage and Tourism (HRB) implemented a four-year survey of the Churchill West Peninsula to inventory previously recorded sites and to conduct aerial survey to detect new sites and features (Riddle 1987, Petch 1989, 1990). During the 1989 survey, a site visit at Fort Churchill consisted of a ground-truthing excursion with no sub-

surface testing. A total of 30 features were noted during this brief survey (Petch 1990). After the 1989 survey, a site form for Fort Churchill registered in the Provincial Inventory. The site form provided a description as follows: “the site is situated at the base of Burton Rock, the southern insular outcrop of quartzite. The site is protected by a natural windbreak known locally as Burton Rock, which protected the post from northwesterly winds. Disturbance in the form of 3 metre high willow, ATV trails and modern cabin has caused some damage to the site”.

A second site visit by the HRB in 1990 identified and mapped 12 building foundations (Petch 1991) (Figure 3.1). This survey defined the site boundaries through surface reconnaissance. It was noted that the complete or partial repurposing of buildings over the life of the post caused some difficulty in reconstructing original plans of the fort and identifying building type. The survey provided evidence of the continual tearing down, rebuilding, adding onto, and burning of buildings at Fort Churchill. The results of the survey determined that the site consisted of a series of buildings and features related to the historic trade post. Feature 14 was identified as the Trading shop (Figure 3.2). The feature represented the original part of the Trading Shop constructed in 1800, and added onto in 1831. The addition was built with squared logs, weather-boarded, and roofed with lead taken from the roof of the Ice House (McCarthy 1985:100).

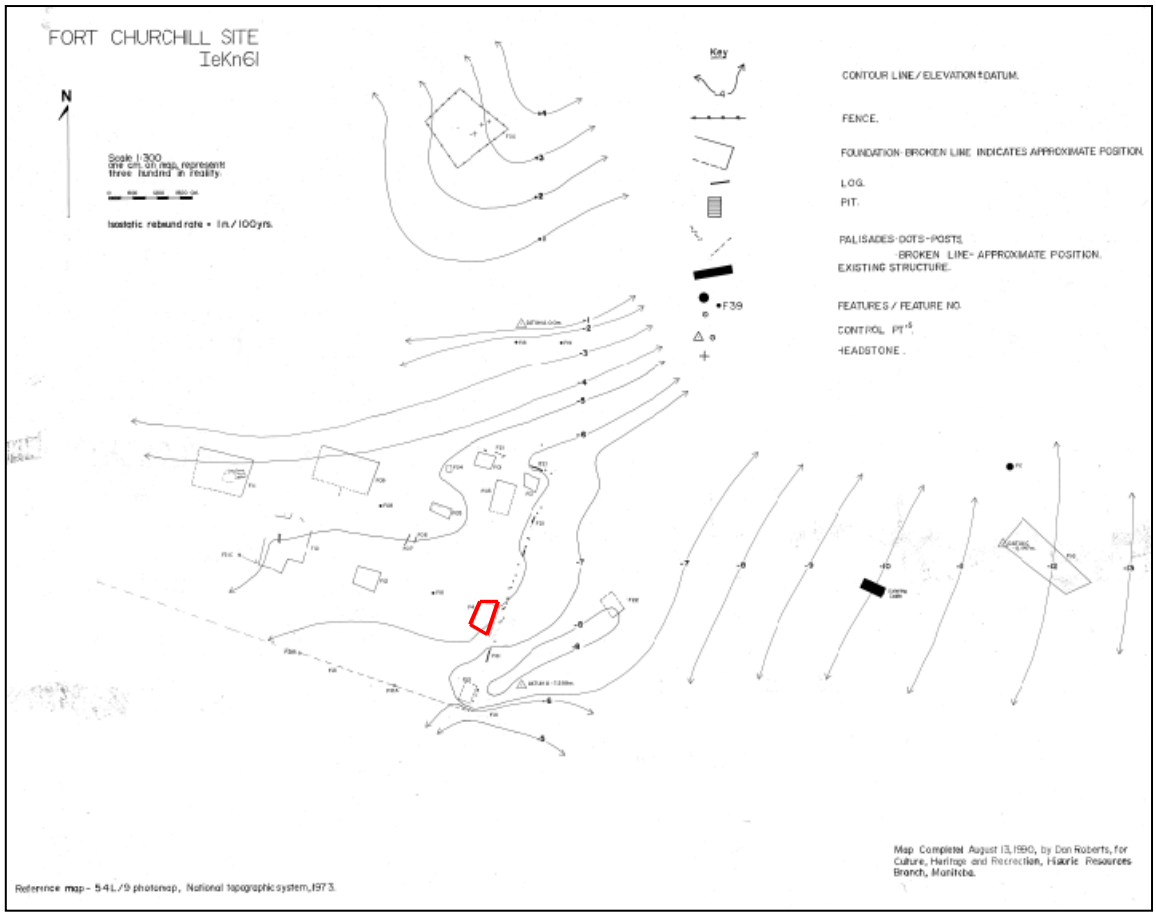

Figure 3.1. 1990 Survey Plan of Fort Churchill showing building features, note Trade Post is outlined in red.

The trade shop can be viewed as the nucleus of trade at Fort Churchill, as it was here that the furs from the Aboriginal traders would be exchanged for trade goods. Much of the Dene trade at Churchill consisted of bringing in caribou meat (provisions) for the post rather than trading furs. Only ammunition and a few necessaries were traded for provisions. The trade shop experienced a number of modifications over its life history. In 1825 the trade shop merged with the provisions store into a single room, this made it difficult to enforce the distinction between the two trades (McCarthy 1985:97). By 1831, the provision shed was moved to the Launch House at the water's edge. In 1868 a fur

room was built attached to the old Trading Shop, this was a frame building with clapboards measuring 4.6 m (15') by 4.6 m (15'). By 1894, plans were made to create a new Trading Store in front of the Men's house however, weather hampered construction, and it was finally completed in 1901. The old Trading Shop remains were still visible at the post through the 20th century trade. The trade shop chronology has been demonstrated by historic records which provide a date range from 1800 A.D. to 1901 A.D.

During the 1990s survey, it was noted that the foundation of the extension was badly damaged, likely during removal; however the 1800 foundations have remained in remarkable condition (Petch 1991). The historic measurements of the trade shop were 43' x 15' with a 15' addition at the south-west side (McCarthy 1985:159). However an HBC record stated that the trade shop was "36' x 17'; log; weather boarded and roofed with lead; very old" (HBCA B.42/e/11 fo. 5). Field measurements taken in 1990 for the original trade shop were 7.5 m x 4.8 m (about 23' x 14'). Approximately 7 m beyond the south wall, an irregular disturbed line of stone was suggestive of a former wall. The offices of 1786 were originally located in this area. The extended rock features may be part of the 1786 building or the trade shop addition. The east and south sides of the trade store were built up considerably because of the slope of the land. Dead grass was cleared off the surface of the feature to assist in plan views. Several historic artifacts were noted on the surface of the south wall.

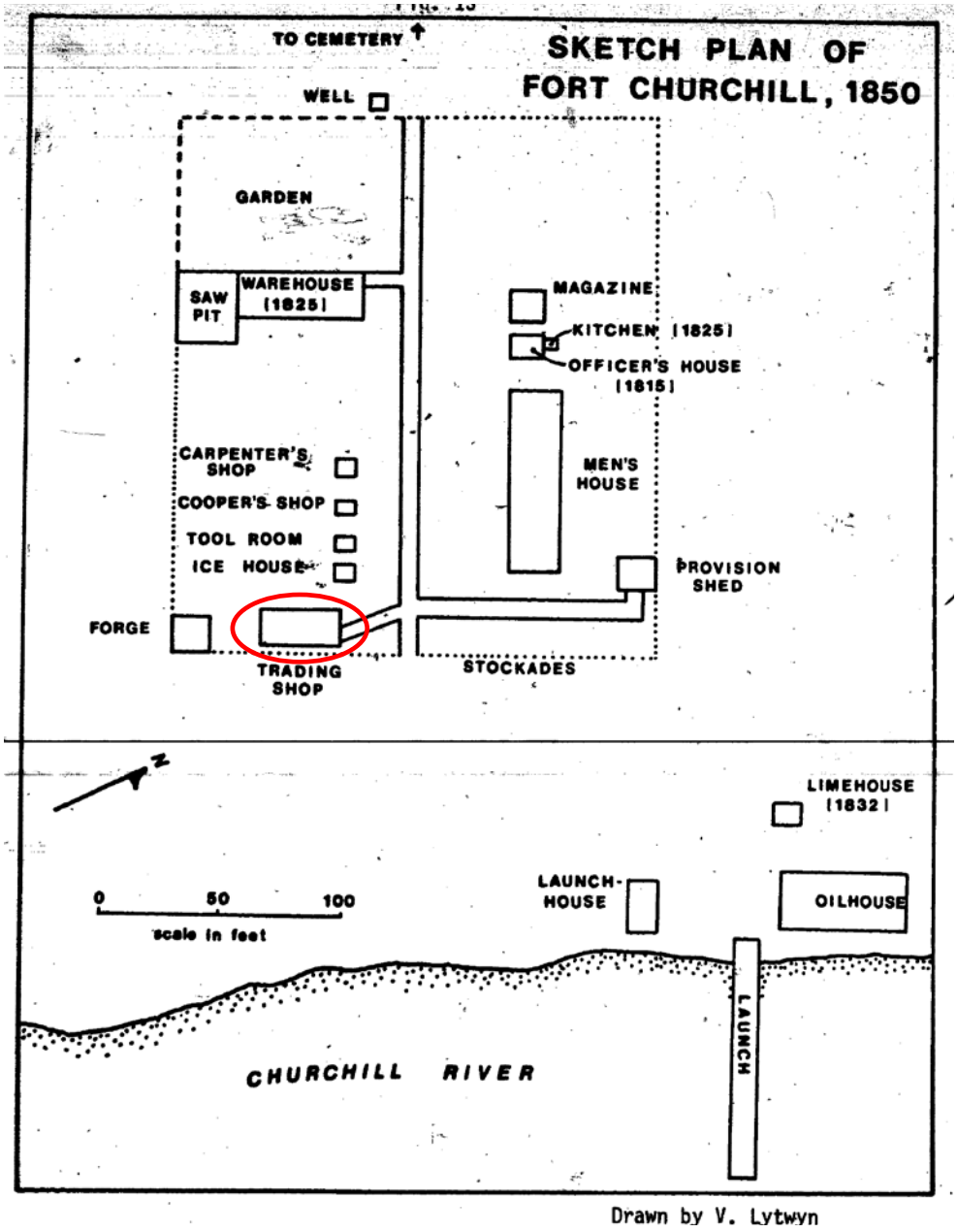

Figure 3.2. Sketch Plan of Fort Churchill, 1850 the trade shop has been circled; drawn by V. Lytwyn in McCarthy1985.

3.2.1 Fort Churchill Archaeological Project 1990-1996

The first sub-surface testing at Fort Churchill occurred in 1990 as part of the final year of the Historic Resources Branch's survey of the Churchill West Peninsula. Trench excavations focused on the south wall of the trade shop that had been historically built up

to bring the post level with the ground surface. The south wall was cleared to ground level, 10 cm at the south-west corner to 28 cm at the south-east corner. A variety of artifacts (n=201) were recovered during this initial exploratory trench excavation.

Beginning in 1992, a formal excavation project focussing on Fort Churchill was implemented (Petch 1992) funded in part by the Manitoba Heritage Federation and the Earthwatch program. The volunteer workforce provided by Earthwatch assisted in exploring the rich history of the Churchill West Peninsula as well as to extend knowledge of archaeology and history of Manitoba outside regional boundaries to a world stage. The Old Fort Churchill Archaeological Program was continued for another four years 1993, 1994, 1995 and 1996 and resulted in the artifact collection which will serve as the basis for analysis in this thesis.

The Fort Churchill trade shop, feature 14, was selected to be the focus of the formal excavation because the absence of thick willow overgrowth had caused minimal root disturbance to the sub-surface artifacts and features. A grid was set-up to encompass the entire building feature measuring 7 x 10 metres, forming 70- 1 metre square units based on grid north and not magnetic north. The declination of the grid off of magnetic north is unknown, but is somewhere between 5 and 25 degrees. All units were assigned a sequential number (Figure 3.3) based on coordinates of north and east of the southwest corner of the trade shop. Units were excavated by trowel in controlled 3 cm levels to a maximum depth of 30cm. While seemingly exceedingly precise, the accumulation of soil in the subarctic is slow therefore time depths for the 19th century would be within the first 25cm. Any slight change in the soil stratigraphy could indicate a change in chronology. All excavated material was screened through ¼ inch mesh screens.

In 1992, the first year of the excavation focused on the north end of the grid because this was the location of the door of the trade shop. A checkerboard excavation allowed for inexperienced people to easily move around outside of their unit. It also provided a sampling of the extent of the foundations and the artifact assemblage.

Through the 1992 excavation, 7 units were excavated although weather hampered the process. A total of 1,121 artifacts including a variety of faunal material, coal and chinking fragments were recovered with the majority of artifacts coming from Level II (3-6 cm) and Level IV (9-12 cm). At the site level, the majority of artifacts came from Unit 43. The unit contained many red fire bricks and mica which suggested the location of a stove or fireplace. The remaining artifacts were evenly distributed over the excavated units, although the majority of lead shot occurred in Unit 53 within a small wood feature which may have been a container. The doorway of the trade shop was also found on the north wall in unit 59.

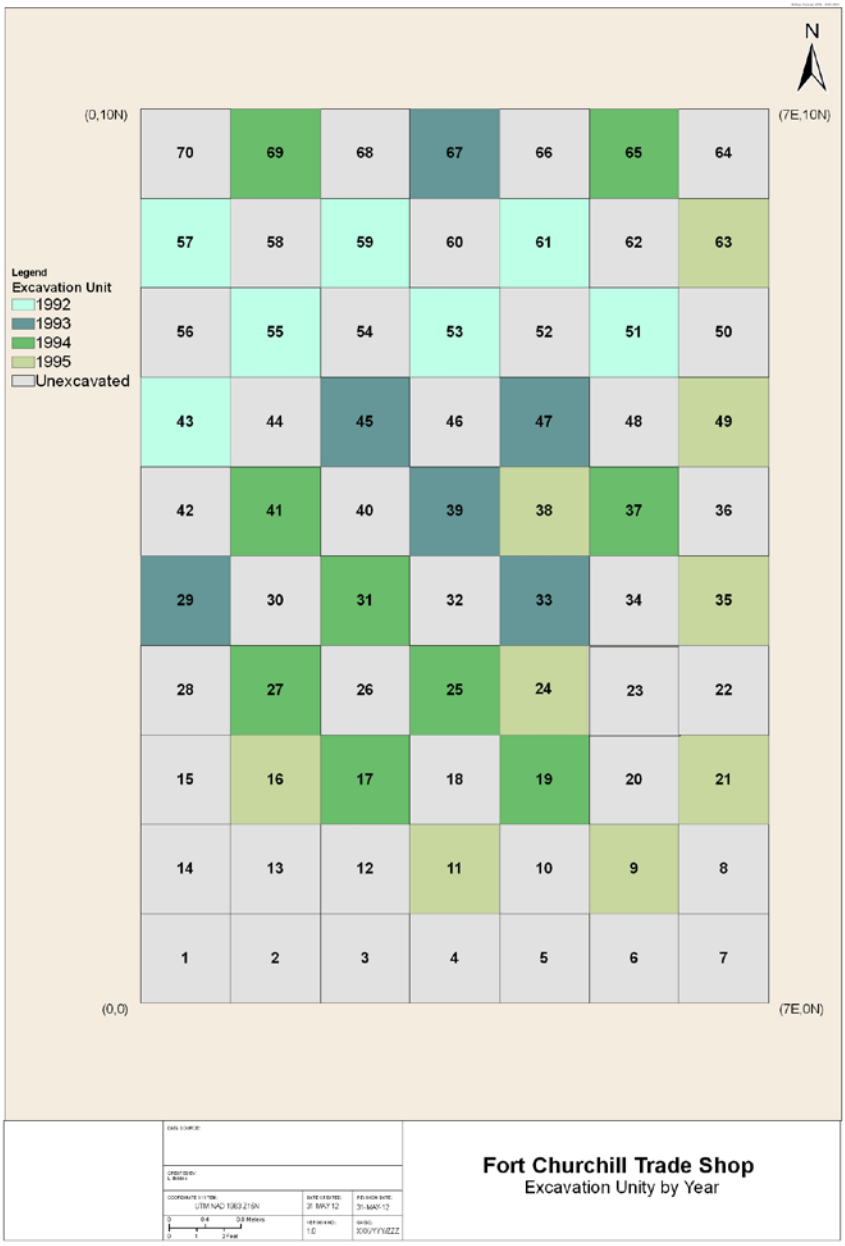

Figure 3.3. Excavation units opened during the 1992 to 1995 excavations.

The site reports summarizing the excavation project for the years 1993, and 1995, and 1996 could not be located, but extensive paper records, such as unit level summaries and daily journals, were available for every year. In 1993, six new units were opened along with the re-opening of six of the 1992 units that had only been excavated through a

few initial levels the previous year. A total of 3,733 artifact and faunal materials were recovered.

In 1994, nine new excavation units were opened, as were two earlier units which saw continued excavation. The walls of all four sides of the trade shop were recorded on a sketch map by Petch in the 1994 site report, which also recorded portions of both the 1850s and earlier 1717 stockades that surrounded the entire Fort (Figure 3.4). In 1995 the excavation included an additional nine new units, as well as reopening nine older units. Limited shovel testing across the site was conducted in both years. The combined total of the 1994 and 1995 excavation collected 8,735 artifacts and faunal materials. The 1996 excavation records were unable to be located and therefore will be omitted from this analysis. In order to maintain control over the archaeological data, the trench excavation from 1990 as well as a small number of test pits and surface collections conducted in 1992, 1994 and 1995 will also be omitted from the study because provenience and unstructured recording of depth does not provide the time correlation upon which this study relies. Using the five years of formalized excavation at Fort Churchill, the majority of the trade post was excavated totaling 31 m^2.

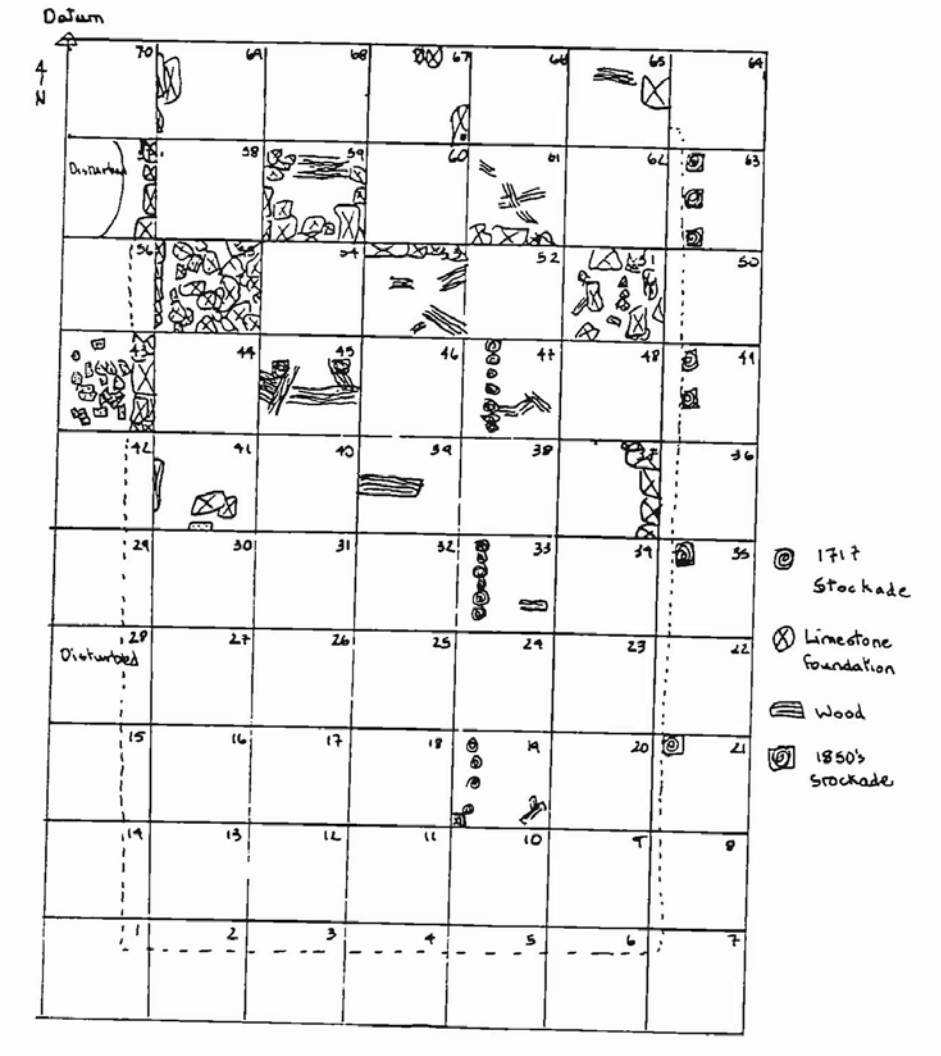

Figure 3.4. Sketch map of extent of trade shop and features from 1992 through 1994 excavations from Petch (1994).

3.3 Data

Following the holistic approach outlined above, the major problem with methodology is classification (Lunn 1985:9). The method employed in this thesis will make use of both the archaeological and historic data in order to elucidate matters concerning what is the relationship between artifacts and the archival inventories and the extent to which the excavated materials change over time from the beginning of the 19th

century to the 20th century. Ethnographic studies presented in Chapter Two, while corroborating the value of caribou to the Dene and persistence of traditional economies, do not provide a quantifiable measure of the types of goods being utilized by the Dene in the late 19th and early 20th century.

If Dene subsistence activities were altered due to their increasing participation in the fur trade, as predicted by World Systems Theory, such changes should be represented in the artifact and faunal assemblages. Following the historic record, archaeological correlates may be identified. 1) During the middle fur-trade period (1780-1930 A.D.) changes should be evident in both faunal and artifactual assemblages. 2) The coercion of the Dene by the HBC to change subsistence from hunting caribou to trapping fur-bearing animals should result in lesser number of caribou in relation to fur bearers in later stratigraphic layers at Fort Churchill and finally 3) Increasing overall quantity and variety of types of European goods and decreasing numbers of hunting artifacts in relation to trapping artifacts as the Dene became more involved in the European market economy.

3.3.1 Archival Inventories

The purpose of using the historical record is to provide historical documentation and qualitative assessment of the post's material culture. The historic records for Fort Churchill were examined for the types of goods that were being brought into the Fort specifically for aboriginal trade. These records consist of Indian Debt Books from 1822 to 1824 A.D. (HBCA B.42/d/109a) and 1861 to 1865 A.D. (B.42/d/221) which provide a list of Aboriginal traders at the fort, the types of goods they purchased each year, and the types of provisions that were brought in to gain credit. Additional details provided in these accounts include qualitative and/or quantitative descriptions. The selection of years

from which to pull records was based on those records available at the Hudson Bay Company Archives in Winnipeg, Manitoba and also the requirement to obtain information from two separate points in the century.

The accounts were quantified based on the type of trade good each Dene trader purchased and then the total percentage of the most purchased goods was ranked into a top twenty table for each period and divided by the number of years the account book covered (Table 3.1a and 3.1b). Furs brought into the post to trade for goods were also quantified (Table 3.2). A second analysis using overall quantities of each of the top ranked items was also undertaken. The average number of items in a good category bought per year over a span of three to five year period dependent on the number of years represented in the account book. The first analysis will show which items were consistently traded by the majority of traders, and the second one will show the actual quantities of the preferred goods that were traded The information from the historical invoices will be categorized according to function and use categories as outlined by Lunn (1985) and South (1977:93-96).

Table 3.1a. Fort Churchill "Indian Debt Account Book 1822-24 Top Twenty Trade Goods.

1820s Rank	Trade Good	Category	% of Traders Purchasing Trade Good	Quantity/year	Measure
1	Cloth	Clothing	87	98	Yards
2	Measure Power	Arms	83	244	Measure
3	Tobacco	Leisure Activity	67	110	Yards or plug
4	Blanket	Clothing	65	76	Each
5	Measure Shot	Arms	48	43	Measure
6	File	Activity	45	25	Each
7	Ball Shot	Arms	40	28	Ball
8	Hatchet	Activity	33	18	Each
9	Tin/Copper Kettle	Kitchen	33	21	Each
10	Gun	Arms	28	13	Each
11	Chisel	Activity	17	9.5	Each
12	Shirt	Clothing	13	7	Each
13	Capot	Clothing	8	5	Each
14	Flints	Arms	7	4	Each
15	Moose Skin	Clothing	7	4	Each
16	Powder Horn	Arms	6	4	Each
17	Trousers	Clothing	6	3	Each
18	Coloured Belt	Clothing	6	3	Each
19	Gartering	Clothing	4	15	Yard
20	Hooks & Needles	Clothing	3	2	Each
	TOTAL			727	
Number of traders = 87					

Table 3.1b. Fort Churchill "Indian Debt Account Book 1861-65 Top Twenty Trade Goods.

1860s Rank	Trade Good	Category	% of Traders Purchasing Trade Good	Quantity/year	Measure
1	Measure Powder	Arms	90	258	Measure
2	Cloth	Clothing	84	150	Yard
3	Capot	Clothing	80	37	Each
4	Handkerchief	Clothing	78	45	Each
5	Blanket	Clothing	75	36	Each
6	Shirt	Clothing	74	34	Each
7	Ball Shot	Arms	70	2587	Ball
8	Measure Shot	Arms	58	26	Measure
9	Gun	Arms	54	13	Each
10	Tobacco	Leisure Activity	53	371	Plug
11	Kettle	Kitchen	47	31	Each
12	Frying Pan	Kitchen	38	9	Each
13	Trousers	Clothing	29	8	Each
14	File	Activity	27	6	Each
15	Pocket Knife	Arms	27	7	Each
16	Flints	Arms	20	25	Each
17	Twine	Activities	20	9	Yard
18	Porringer (pot)	Kitchen	20	4	Each
19	Powder Horn	Arms	16	3	Each
20	Cloth Cap	Clothing	16	3	Each
	TOTAL			3643	
Number of traders = 89					

Table 3.2. Fort Churchill "Indian Debt Account Book 1822-24 and 1861-65 Furs Brought for Trade.

1820s	Fur	Quantity/yr	1860s	Fur	Quantity/year
	Beaver	439		Beaver	285
	Black Bear	1		Black Bear	3
	Polar Bear	0		Polar Bear	<1
	Caribou	<1		Caribou	83
	Fox	10		Fox	30
	Marten	1095		Marten	859
	Mink	6		Mink	19
	Muskrat	16		Muskrat	29
	Hare	1		Hare	<1
	Lynx	<1		Lynx	0
	Muskox	10		Muskox	<1
	Otter	66		Otter	49
	Swan	4		Swan	4
	Wolf	6		Wolf	<1
	Wolverine	5		Wolverine	2
Totals		**1515**			**1367**

3.3.2 Archaeological Data

The archaeological excavation of Fort Churchill from the initial testing through formal excavations occurring between 1990 and 1996 produced more than 13,000 artifacts including faunal materials. These artifacts provide a collection of materials that offer a glimpse into the material culture and lifeways of a forgotten Hudson's Bay Company post of the 19th century.

A basic artifact catalogue was produced during and immediately after the excavation by Master's students who acted as assistant archaeologists and then as lab staff. This catalogue has served as the initial starting point for the analysis; however

extensive re-cataloguing and re-analysis had to be undertaken especially in the realm of faunal material which was only generally categorized as “Faunal”.

Data Problems

The original catalogue record (1990 to 1995) was available; however because of a number of blank data cells in the Excel record sheet and lack of analysis of faunal materials, there was a need for a complete re-analysis of the artifacts. The original records contained a series of errors likely due to an inexperienced volunteer excavation force. A number of unit coordinates were recorded in error on the original excavation sheets, a lack of dates, excavator names, and incorrect depths were also noted. These errors were corrected during the initial cataloguing, however there were a few omissions that had to be revisited and corrected.

Classification Scheme

Artifactual remains were analysed with particular emphasis on temporally significant artifacts that provide datable timeframe of use and/or diagnostic categories of function. Parks Canada has produced manuals for use in the analysis of contact-period artifacts, and category types (Karklins 1985, Kidd and Kidd 1970, Sussman 1979, Jones and Sullivan 1985, and Lunn 1985). One of the greatest challenges in this study was to distinguish specific chronological histories for the majority of the artifacts. The nature of degradation of the materials limited the amount of diagnostic features or makers marks which would provide a limited timeframe. The majority of artifacts represented a wide time-depth of up to 100 years in duration. However, the finely controlled excavation depths assist in identifying those artifacts that are stratigraphically older than others.

One of the most common problems in classification is the various ways artifacts can be assigned in groups or categories (Lunn 1985:9). The decision as to which grouping system will allow for elucidating matters concerning a temporal pattering of activities and then extrapolate to what extent this reflects an economic relationship will have to strongly be developed. The process of determining an appropriate classification scheme for this study began with a review of various models of artifact classification that have been developed for historical archaeology and specifically fur trade archaeology. Those that were considered suitable to develop a classification scheme for Fort Churchill included Adams (1978), and Hamilton (1979). However, the most widely employed is Stanley South's (1977) model of artifact classification which has been used on York Factory collections (Adams and Burnip 1981). Another important classification system that was examined is a Parks Canada publication by author Kevin Lunn (1985). Lunn's analysis using a large collection from York Factory categorized artifacts into functional categories and was based on Sprague (1981) classification system. The York Factory collection will provide a neighbouring and contemporaneous assemblage that will represent similar functional categories and from which comparisons can be drawn.

A combination of South's (1977) model and Lunn's (1985) classification system of York Factory materials, was employed a classification system was created that represents everyday categories to decipher specific functional meanings (Table 3.3). Specific focus on those categories related to the most traded material items based on the historic accounts will be examined to determine the degree of continuity and change in each artifact class. Of the 10,422 artifacts from the total Fort Churchill assemblage, 6,994 were

able to be placed within a functional category. Each artifact description included the quantity of artifacts represented, material composition, and method of manufacture.

Table 3.3. Classification for Fort Churchill Artifacts (based on South 1977, and Lunn 1985).

Category	Subcategory	Object Type	Totals
Activities	Accounting	Scales	1
	Fishing	fishhooks, sinkers, harpoons	1
	Gardening	hoe, rakes, spade, shovel	1
	Hand Tool	Plane, bit, file, chisel, axe head, saw, punch	9
	Hardware	bolts, nuts, chain, washers, rivets, grommet, stripstrap, wire	316
	Heating	coal, stove	23
	Hunting/Trapping	traps, snare wire, spring	2
	Storage	barrel bands, rivets, pail	6
	Transport	boat rove and nail	1
Architectural	Chinking		22
	Hardware	hinges, staples, pintles, shutter hooks, door lock, bolt	8
	Floor Covering	Linoleum	25
	Foundation	brick, floor lathing, timber, concrete	28
	Nails	Round, machine-cut, hand-wrought	1258
	Paint		8
	Roof Covering	shingle, tar paper	227
	Screws		10
	Spikes		30
	Tacks		12
	Window	glass pane, lead window cames, window caulking	623
Arms	Gun Parts	gunflints, gun spalls, gun parts, bullets	10
	Ammunition	shell casing, musket balls, shot, sprue	2405
	Blade Weapon	knife, pocket knife	3
Clothing	Several Types	buckles, beads, buttons, buckles, footwear, zipper, safety pins	1023
	Sewing Kit	needles, thread, scissors, thimbles	4
Furniture	Furniture Hardware	hinges, knobs, pulls, escutcheon plates, locks, keyhole surrounds, handles	9
Kitchen	Ceramic	flatware, hollowware	102

Category	Subcategory	Object Type	Totals
	Container	bottle, glass plates, tin can, lead foil, vase, glass stoppers, corks	413
	Tableware	cutlery, knives, forks, spoons	0
	Kitchenware	pots, pans, metal teapots, kettles, coffee pots, sieves, metal plate etc	14
Leisure Activity	Smoking	pipe bowl, stem	383
	Toys		1
	Writing	pencil, lead, ink bottle, slate board, ruler	8
Personal	Adornment	bells, tinklers, rings, brooches, etc	4
	Toiletries	combs, toothbrushes, tweezers, brushes, mirror	1
	Coins		1
	Medical	Thermometer	1
	Security	Keys	1
		Total	**6994**

The faunal remains were further identified using comparative collections at the University of Manitoba. The faunal material was initially divided into identifiable and unidentifiable groups. The identifiable fauna was then classified to the lowest possible taxonomic category and portion and side were noted. If a species could not be identified, bones were recorded within categories of small, medium or large mammal, sea mammal, bird, fish, and mollusk. There are ten taxonomic categories of mammals recovered from the excavation of Fort Churchill (Table 3.4). Of these mammals, Sus sp. is the only domestic animal likely imported from Europe as food stuffs and is represented by a single element, the proximal end of an Ulna. Birds represented six taxonomic categories have been identified (Table 3.5). Grouse and Ptarmigan have been combined in the catalogue due to their very similar bone structure and identifying attributes.

Fish, and mollusks comprise the remaining taxonomic categories, however identifiable feature and elements were not present in order assign family or species

taxomony. Faunal that was unable to be classified into a taxonomic group were put in the unidentifiable category (n=1084) or 49% of the total faunal assemblage.

Table. 3.4 Generic and Common Names of Mammals Identified from Fort Churchill.

Order	Family	Species	Common Name
Artiodactyla			
	Cervidae		
		Alces alces	Moose
		Rangifer tarandus	Caribou
	Suidae		
		Sus sp.	Pig
Rodentia			
	Castoridae		
		Castor Canadensis	Beaver
Carnivora			
	Canidae		
		Vulpes sp.	fox (red, silver, cross)
		Canis lupus	Wolf
	Cricetidae		
		Ondatra zibethicus	Muskrat
	Felidae		
		Lynx Canadensis	Lynx
Lagomorpha			
	Leporidae		
		Lepus sp.	Rabbit
Pinnipedia			
			seal, walrus

Table. 3.5. Generic and Common Names of Birds Identified from Fort Churchill.

Order	Family	Species	Common Name
Anseriformes			
	Anserinae		Goose (Canada or Snow)
	Anatinae		Duck
Charadriiformes			
	Laridae		Gull
Falconiformes			
	Haliaeetus		
		H. leucocephalus	Bald Eagle
Galliformes			
	Tetroanidae		Grouse
	Phasianidae		Ptarmigan

3.4 Conclusions

This chapter has provided types of information available from existing historic and archaeological collections which will be used to examine Dene participation at Fort Churchill during the 19th century. Context and validation for the types of records examined was also discussed. The following chapter will refine the raw data using quantitative and qualitative analysis to provide a model to examine the degree the assemblage changed or remained stable over time.

Chapter IV: Analysis and Interpretation

4.1 Introduction

Historic records and the archaeological assemblage collected through the Fort Churchill excavation will provide the data necessary to fulfill the previously stated research objectives. Both sets of data have been quantified into averages of trade goods per year, number of artifacts, number of traders, and have been categorized into a functional classification. The next step is to take the data and conduct an intensive analysis in order to provide correlations and answers to those questions that have been asked. In order to derive underlying or complex relationships and meanings, statistical and comparative analyses will be employed.

4.1.1 Application of the Method

The analytic method outlined in Chapter 3 will be implemented as follows. The two data sets, historical and archaeological, will be analyzed both quantitatively and qualitatively. To do this, a functional classification will be applied to both data sets. The historic data set will be divided into two periods, 1820s and 1860s, and the archaeological data set will be divided into early and late 19th century. This latter step will be done on the basis of chronologically indicative artifact types and historical documentation. Next, each data set will be analyzed quantitatively using Spearman's Rank Order Correlation Coefficient to determine if the earlier and later materials traded between the HBC and the Dene changed markedly over time as would be expected according to the hypotheses that have been derived from World Systems Theory (see Chapter 1). Finally, the two data sets

are considered qualitatively to determine which categories, if any, appear to have changed, either in quantity or variety, between the two periods. The implications of these analyses are then discussed in terms of the original hypotheses.

Statistical analysis can assist in providing context to the data set and to determine if the two sets of data from each historic period have varied directly or inversely or have remained stable over time. Spearman's Rank Order Correlation, also known as Spearman's Rho, is the measure of statistical dependence between the ranks of two variables. This measure was selected as the principal means of examination because of its role as a non-parametric test which does not make assumptions about a population's distribution along a Gaussian function (informally known as a Bell Curve). Due to the smaller sample size of the Fort Churchill data sets, the distribution of results along a normal Gaussian function is unknown and therefore the result cannot rely on a central limit theorem which may result in an inaccurate p-value (Motulsky 1995). All non-parametric tests rank the variable outcome from low to high and then analyse the ranks. The result of Spearman's rho analysis provides rho and p-values. The rho value is a value within a range of +1 to zero. If Y tends to increase when X increases, the correlation coefficient is positive, with stronger correlations reaching +1. A result closer to zero indicates that there is no tendency for Y to either increase or decrease when X increases. The p-value is calculated for the null hypothesis that the two population means are equal, and any discrepancy between the two sample means is due to chance. By using a hypthetico-deductive method the chosen level of significance for the p-value is 0.05 or less. Any result that is below the significance level rejects the null hypothesis. When the null hypothesis is rejected, the result is said to be statistically significant and that the rank

variables in one case can be used to predict the rank of variables in the other case. The second statistical model that was employed in this analysis is the Chi-square test. The chi-square test is useful to examine the relationship between two categorical variables. A cross-classification of the data provides a count of the number of cases sharing a given combination of categories.

4.2 Historic Data

The account books from the 1820s and 1860s periods provided a quantified list of trade goods purchased at Fort Churchill. Initial quantities of goods from each period were tabulated and assigned to functional categories. A rank order of the top twenty trade goods that were purchased at Fort Churchill was created based on the percentage of Dene traders that selected that particular good. This was completed for all trade goods present in the account books for both the1820s and 1860s periods. A second analysis was conducted using the quantitative data of average number of each trade good purchased per year in each period.

4.2.1 Statistical Analysis

Using Spearman's Rank Order Correlation, the ranking of the top twenty common goods (N=14) from each period were compared based on percentages of Dene traders who purchased the trade good (Table 4.1). The result of the analysis was a fairly strong correlation between the two periods with a rho value of 0.595 and a probability value of 0.002. A second analysis incorporated the goods from the first list but also included those unmatched goods that were present in either the 1820s or 1860s lists but not both, resulting in a list of 26 trade goods (Table 4.2). This ensured that the original results were

not biased to only those common trade goods. The Spearman's analysis provided a rho value of 0.445 and a p-value of 0.01, slightly lower than the original result, however still strongly correlated and not random. The end product of the Spearman's Rank Order analysis suggests that purchasing practices did not significantly change over time at Fort Churchill and that similar types of goods were present in each of the two time periods.

Table 4.1. Spearman's Rho Calculation of Top Twenty Ranked Trade Goods Based on Percentage of Traders from Fort Churchill Account Books.

	Common Trade Goods	Category	1820 Rank	1860 Rank	Difference	D2 squared
Top 20 analysis	Cloth	Clothing	1	2	1	1
	Measure Power	Arms	2	1	1	1
	Tobacco	Leisure	3	9	6	36
	Blanket	Clothing	4	4	0	0
	Measure Shot	Arms	5	7	2	4
	File	Activities	6	12	6	36
	Ball Shot	Arms	7	6	1	1
	Kettle	Kitchen	8	10	2	4
	Gun	Arms	9	8	1	1
	Shirt	Clothing	10	5	5	25
	Capot	Clothing	11	3	8	64
	Flints	Arms	12	13	1	1
	Powder Horn	Arms	13	14	1	1
	Trousers	Clothing	14	11	3	9
						184

Rho value = 0.595, p-value 0.02

Table 4.2. Spearman's Rho Calculation of Top Twenty-six Ranked Trade Goods Based on Percentage of Traders from Fort Churchill Account Books.

	Trade Goods	Category	1820 Rank	1860 Rank	Difference	D2 squared
Top 26 analysis	Ball Shot	Arms	7	7	0	0
	Blanket	Clothing	4	5	1	1
	Capot	Clothing	13	3	10	100
	Chisel	Activities	11	22	11	121
	Cloth	Clothing	1	2	1	1
	Cloth Cap	Clothing	26	20.5	5.5	30.25
	Coloured Belt	Clothing	17	9.5	7.5	56.25
	File	Activities	6	16	14	196
	Flints	Arms	14.5	18	2.5	6.25
	Frying Pan	Kitchen	24	13	11	121
	Gartering	Clothing	19	25.5	6.5	42.25
	Gun	Arms	10	9.5	0.5	0.25
	Handkerchief	Clothing	24	4	20	400
	Hatchet	Activities	8.5	25.5	17	289
	Hooks & Needles	Clothing	20	23	3	9
	Kettle	Kitchen	8.5	12	3.5	12.25
	Knife/Pocket Knife	Arms	21.5	14	7.5	56.25
	Measure Power	Arms	2	1	1	1
	Measure Shot	Arms	5	8	3	9
	Moose Skin	Clothing	14.5	24	9.5	90.25
	Porringer	Kitchen	21.5	18	4.5	20.25
	Powder Horn	Arms	17	20.5	3.5	12.25
	Shirt	Clothing	12	6	6	36
	Tobacco	Leisure	3	11	8	64
	Trousers	Clothing	17	15	2	4
	Twine	Activities	24	18	7	49
						1727.5

Rho value = 0.445, p-value 0.01

The variation in the rho-values between the two sets of ranking tables is caused a small number of goods that show a degree of change. The following chart (Figure 4.1) demonstrates those trade goods that are outside the correlation range and cause a slight decrease in the rho value. A descriptive analysis will attempt to align the results with a

probable causation as to why the Dene changed their preferences of certain items over time.

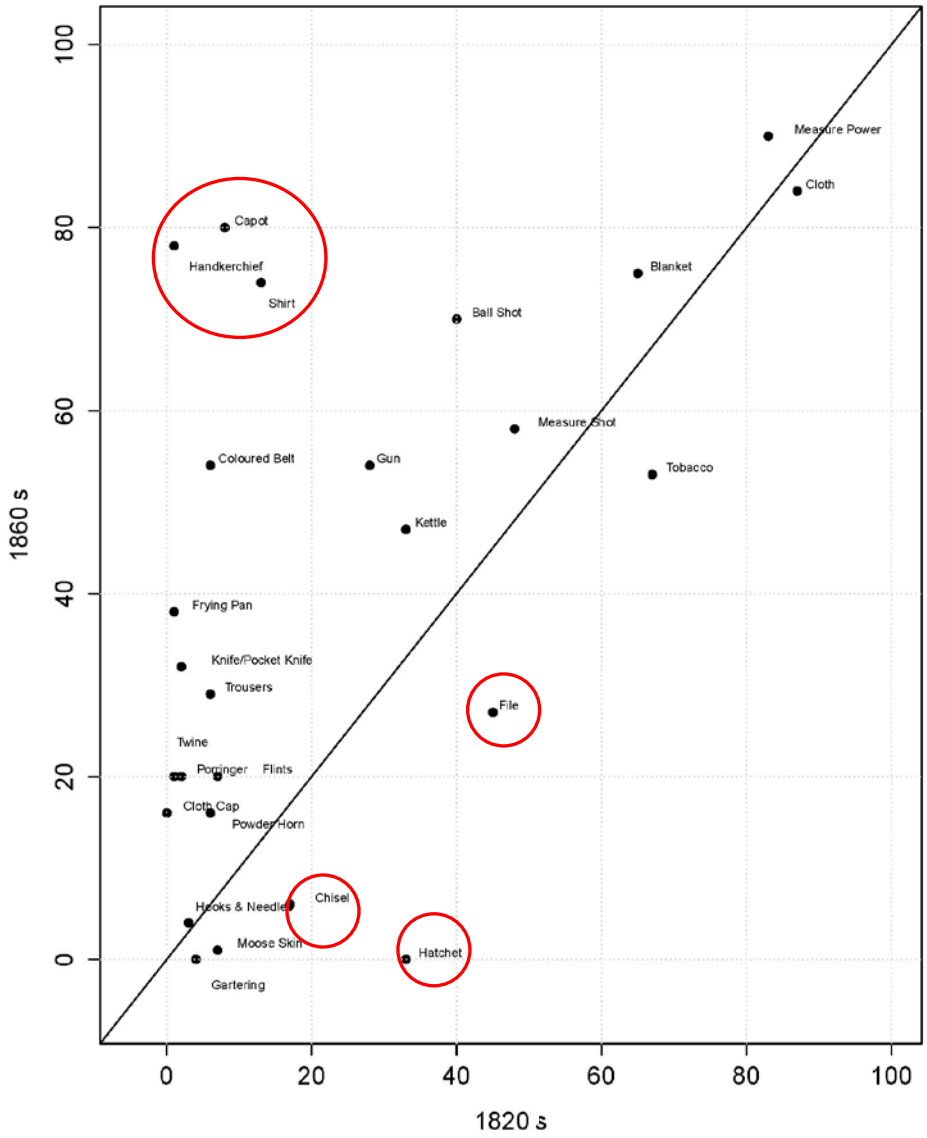

Figure 4.1. Chart demonstrating the 1820s percentage of goods plotted against the 1860s percentage of goods.

The graph indicates that despite the correlation between the two historic accounts, certain items from the Clothing category had significantly increased in occurrence by the 1860s such as Capot, Shirt and Handkerchief. This may indicate a growing preference for

European clothing over traditional clothing provided by caribou. The Kitchen functional category also demonstrates a slight increase in items such as porringer (a type of shallow metal pan), kettle and frying pans. Alternatively there were those items that were more strongly represented in the 1820s, items such as hatches, chisels and files that relate to the Activities category decreased over time. A potential explanation of this result of decrease in the activity group is that the European goods provided for trade were designed for more sedentary functions and could not relate to the migratory subsistence economy that was employed by the Dene. The Arms and Leisure categories remained stable through both eras, although with a slight increase in ball shot and guns which is predictable due to the requirement for arms in either trapping of hunting economies.

A second approach to viewing the historic data is to employ a basic quantification of trade goods from the Fort Churchill "Indian Debt" Account Books. The use of quantities provides an interesting insight into overall frequency of each type of good. Using the average quantities per year of trade, a list of top ranked goods for each period was created for the quantity of each item purchased per year (Table 4.3). A general observation is that the table shows a significantly higher number of overall purchased goods from the 1860s (n=3643) compared with the 1820s totals (n=727).

Table 4.3. Quantities of Top-Ranked Trade Goods from the Fort Churchill Accounts.

1820s Rank	1820s Trade Good	Quantity per Year	1860s Rank	1860s Trade Good	Quantity per Year
Arms	Measure Power	244	Arms	Ball Shot	2587
Leisure	Tobacco	110	Leisure	Tobacco	371
Clothing	Cloth	98	Arms	Measure Powder	258
Clothing	Blanket	76	Clothing	Cloth	150
Arms	Measure Shot	43	Clothing	Handkerchief	45
Arms	Ball Shot	28	Clothing	Capot	37
Activities	File	25	Clothing	Blanket	36
Kitchen	Kettle	21	Clothing	Shirt	34
Activities	Hatchet	18	Arms	Measure Shot	26
Clothing	Gartering	15	Arms	Flints	25
Arms	Gun	13	Arms	Gun	13
Activities	Chisel	10	Kitchen	Kettle	13
Clothing	Shirt	7	Activity	Twine	9
Clothing	Capot	5	Kitchen	Frying Pan	9
Arms	Flints	4	Clothing	Trousers	8
Clothing	Moose Skin	4	Activity	Pocket Knife	7
Arms	Powder Horn	4	Activity	File	6
Clothing	Trousers	3	Kitchen	Porringer	4
Clothing	Coloured Belt	3	Arms	Powder Horn	3
Clothing	Hooks & Needles	2	Clothing	Cloth Cap	3
		727			**3643**

A statistical analysis was conducted on the quantitative data of each trade good to measure correlations between the two sets of quantitative data (Table 4.4). Tests were conducted on the top twenty trade goods, which resulted in a list of 14 items, and then a second table shows those goods incorporated from the first list but also included those unmatched goods that were present in either the 1820s or 1860s lists but not both, resulting in a list of 26 trade goods (Table 4.5).

Table 4.4. Spearman's Rho Calculation of Top Twenty Ranked Trade Goods Based on Quantities from Fort Churchill Account Books.

	Trade Good	1820s Quantity/yr	1860s Quantity/yr	Rank 1820s	Rank 1860s	Difference
Top 20 Analysis	Cloth	98	150	3	4	-
	Measure Power	244	258	1	3	-
	Tobacco	110	371	2	2	=
	Blanket	76	36	4	6	-
	Measure Shot	43	26	5	8	-
	File	25	6	7	13	-
	Ball Shot	28	2587	6	1	+
	Kettle	21	13	8	10.5	-
	Gun	13	13	9	10.5	-
	Shirt	7	34	10	7	+
	Capot	5	37	11	5	+
	Flints	4	25	12.5	9	+
	Powder Horn	4	3	12.5	14	-
	Trousers	3	8	14	12	+

Rho value = 0.665, p-value = 0.01

Table 4.5. Spearman's Rho Calculation of Top Twenty-six Ranked Trade Goods Based on Quantities from Fort Churchill Account Books.

	Trade Good	1820 Quantity/yr	1860s Quantity/yr	Rank 1820s	Rank 1860s	Difference
Top 26 Analysis	Measure Power	244	258	1	3	-
	Tobacco	110	371	2	2	=
	Cloth	98	150	3	4	-
	Blanket	76	36	4	7	-
	Measure Shot	43	26	5	9	-
	Ball Shot	28	2587	6	1	+
	File	25	6	7	16	-
	Kettle	21	13	8	11.5	-
	Hatchet	18	0	9	23.5	-
	Gartering	15	0	10	23.5	-
	Gun	13	13	11	11.5	=
	Chisel	10	0	12	23.5	-
	Shirt	7	34	13	8	+
	Capot	5	37	14	6	+
	Flints	4	25	15	10	+
	Moose Skin	4	0	16	23.5	-
	Powder Horn	4	3	17	18.5	-
	Trousers	3	8	18	15	+
	Coloured Belt	3	0	19	23.5	-
	Hooks & Needles	2	0	20	23.5	-
	Handkerchief	0	45	21	5	+
	Frying Pan	0	9	22	13.5	+
	Pocket Knife	0	7	23	16	+
	Twine	0	9	24	13.5	+
	Porringer	0	4	25	17	+
	Cloth Cap	0	3	26	18.5	+

Rho value = 0.4525, p-value = 0.02

The statistical analyses based on quantities of trade goods resulted in fairly strong correlations and are not random. The end product of the Spearman's Rank Order analysis suggests that purchasing practices did not significantly change over time at Fort Churchill and that similar types of goods were present in each of the two time periods.

Table 4.6 examines functional category in relation to overall quantities. Discrepancies across time can be seen in the types of functional classes. The Arms category represents the most prevalent category in the 1860s data and comprises the majority at almost 80% of the entire assemblage. The 1820s data is more evenly distributed across categories with Clothing and Leisure categories represented alongside the Arms Category forming large portions of the overall goods purchased.

Table 4.6. Functional Categories and Frequency from the Fort Churchill Accounts.

Category	1820s	%	Category	1860s	%	Difference
Activities	52	7	Activities	22	1	-
Arms	334	46	Arms	2912	80	+
Clothing	209	29	Clothing	312	9	+
Kitchen	21	3	Kitchen	26	1	=
Leisure Activities	110	15	Leisure Activities	371	10	+
Personal	0	0	Personal	0	0	=
Total	**727**	**100**	**Total**	**3643**	**100**	

4.2.2 Fur Analysis

The historic accounts provided additional aspects of the trade to assist in determining Dene involvement in the trade. The types of furs being brought into the post for purchasing credit will demonstrate the economic focus of the Dene whether it was subsistence-based hunting caribou economy or one based on trapping fur-bearers. The records provide a list of 23 types of animal resources that were brought into the post by the Dene.

This analysis concentrates on distinguishing caribou versus prime fur-bearing animals, the beaver and marten that will demonstrate the two main economic options - subsistence in the form of hunting versus trapping. The large variety may indicate that the

HBC was not selective in the types of furs being brought in for trade. The analysis consisted of totaling the percentage of Dene traders who brought in the fur type against the overall quantity of each. The results shown in Table 4.7 illustrate that the quantities of each of these animals did in fact change over time.

Table 4.7. Fort Churchill "Indian Debt Account Book 1822-24 Caribou, Beaver, Marten Comparisons.

1820s	Beaver	Marten	Caribou	1860s	Beaver	Marten	Caribou
Quantity/year	274	1094	1	Quantity/year	285	859	83
% of Traders Supplying Fur	74%	91%	2%	% of Traders Supplying Fur	85%	85%	75%

There was a significant emergence of caribou by the 1860s as 75% of traders brought in some quantity of the good compared to only 2% of traders in the 1820s. Beaver and marten fur numbers were maintained between the two periods. The increase in caribou furs may indicate that the Dene were beginning to impose their selected type of currency – based on the resources of the traditional caribou hunt – into the fur trade market economy. The HBC may have had to accommodate and include caribou in the types of purchased furs in order to obtain the more prized types of fur such as beaver and martin.

4.3 Archaeological Data

The artifact assemblage that was used in this thesis was derived from the 1992 - 1995 excavations at Fort Churchill. These excavations opened 31 units that comprised 44% of the trade shop. In order to provide stratigraphic control over the archaeological assemblage, artifacts from test pitting, trenches, surface collection, or backfill were not

included in the analysis due to the lack of provenience. The 1996 artifacts had not been catalogued due to time constraints and were not included in the analysis. The total of 10,422 artifacts and faunal material remains were recovered from the controlled excavations. These recoveries are sufficient in number to provide an adequate representation of the trade shop deposits because they constitute 76% of the total floor area.

The cataloguing process for the artifact assemblage and the faunal material as described in Chapter Three, involved a re-analysis of the artifacts and cataloguing all faunal materials. Functional category identification followed South (1977) and Lunn (1985) artifact classification schemes that allow for simple transfer of data into a functional classification table. The classification consists of eight functional categories that relate to European trade items recovered from Fort Churchill, which include: Activities, Architectural, Arms, Clothing, Furniture, Kitchen, Leisure Activities, and Personal artifact groups.

Following the re-analysis and classification of artifacts into functional classification, contextualizing the artifacts to answer the research questions outlined in this thesis was undertaken using a variety of dating techniques and statistical analysis. Therefore the artifacts had to be assigned into the two comparative time periods which will demonstrate continuity or change over time.

4.3.1 Dating of Artifacts and Assigning Stratigraphic Dates

The archaeology of Fort Churchill was excavated in controlled 3cm levels. This provides for a precise interpretation of how artifacts relate to stratigraphic layers. Calculating quantities based on stratigraphically distinct deposits provides insight into

temporal changes in the relative frequencies of the recovered artifact or taxa (Orchard 2007:181).

A small number of artifacts from the assemblage provided chronological time markers for dates of manufacture. These artifacts were then associated with the stratigraphic layers from which they were recovered. Therefore a general chronology could be developed for the overall stratigraphy of the site.

The date ranges of artifacts and their applicability to the stratigraphy reveal two general periods of the assemblage. The first period contains artifacts dating to the early half of the 19th century through to approximately 1860 A.D. These artifacts were recovered from levels IV through IX (9 to 27cm dbs). Artifacts from this period include: an 1806 King George III half penny coin recovered from level V at a depth of 12-15cm; an HBC "Beaver Button" was recovered from level IV and assigned a date range of 1790 to 1805 (K. Brownlee, Manitoba Museum, personal communication May 31, 2012); and percussion caps found in levels IV, V and VIII first manufactured in 1807 and later replaced by cartridge ammunition by the 1860s (Adams 1985:99, 104).

The artifacts that provided dates from the second period of 1860 to the early part of the 20th century were only found in the first three levels (0 to 9cm). They include cartridge shell casings, which were common by the 1870s. Bakelite, a precursor to plastic, provided an early 20th century context for the first three levels of the excavation.

The number of artifacts that could be assigned to functional categories totaled 45% of the assemblage, excluding the faunal materials. Employing functional categories sorted by stratigraphic periods demonstrates how each category has changed over time relative to selection processes.

4.3.2 Statistical Analysis

Due to issues with preservation and deterioration of a number of goods, the archaeological data had to be dealt with in a different manner, as specific trade goods could not be determined based on the archaeological remains. To elicit the overall function and purpose and to correlate with the historic records, the archaeological data was analysed using the functional categories.

Beginning with the eight functional categories that were identified in the archaeological assemblage, the assemblage was limited to those categories that would be directly applicable to the Dene. Therefore the Architectural and Furniture categories, which are related to European building structures, were removed from the analysis. Using the remaining six functional categories, Activities, Arms, Clothing, Kitchen, Leisure Activities, and Personal artifact groups, a statistical analysis was undertaken.

The statistical analysis of the archaeological assemblage using Spearman's Rank Order Correlation compared the functional categories over time as represented by the two stratigraphic periods (Table 4.8). The distribution of goods over time as one of the research questions was to identify the types and quantities of trade goods brought into Fort Churchill for trade with the Dene over the 19th century. As the archaeological data is unable to assign direct correlation to a specific trade good, as was provided by the historic inventory, the quantity of artifacts assigned to each functional category and frequency of each is provided (Table 4.9). Therefore, the archaeological data can indicate changes in the quantities of each functional category over time which may indicate Dene incorporation into the fur trade over the 19th century.

Table 4.8. Spearman's Rank Order Analysis of Artifact categories.

Category	Level 1 to 3 (late 1800s)	Level 4 to 9 (early 1800s)	Difference	D2 squared
Activities	3	5	2	4
Arms	1	1	0	0
Clothing	4	2	2	4
Kitchen	2	4	2	4
Leisure Activities	5	3	2	4
Personal	6	6	0	0
				16

Rho value = 0.54, p-value = P>0.10

The result of the test provides a Spearman's rho value shows a significant result therefore there is correlation between the two periods, however the p-value is larger than 0.10 which indicates that the data is not strong enough to reject the null hypothesis and that the two data sets show some difference. However, due to the small number of variables tested (n=6), the results may be somewhat subjective.

Each category was divided into the two previously determined chronological periods, each with an approximate representation of 50 years. The following step in the analysis was to create a comparison table of each time period using overall quantity of artifacts from the six functional categories. These numbers were then averaged using quantity of goods, averaged over an approximately 50 year period, and formed an overall percentage (Table 4.9). The results suggest that the distribution of functional categories is different between the two time periods. The more recent stratigraphic layers I through III dating to the late 19th century contained approximately one-third less artifacts (n=1,154) compared to the early 19th century (n=3,557).

Table 4.9. Functional Categories and counts from the Fort Churchill Artifact Assemblage by Quantity.

Category	Level 4 to 9 (Early 1800s)	% Frequency	Level 1 to 3 (Late 1800s)	% Frequency	Difference
Activities	85	2.4%	272	23.5%	+
Arms	2030	57.0%	388	33.6%	-
Clothing	867	24.4%	159	13.7%	-
Kitchen	230	6.4%	282	24.4%	+
Leisure Activities	342	9.6%	49	4.3%	-
Personal	3	0.2%	4	0.5%	=
Total	**3557**	100%	**1154**	100%	

Upon examination of the data, there are significant changes to some of the functional categories between periods. The Arms category while ranked first overall in both eras, actually decreased in quantity in the 1860s. This is likely due to the presence of large amounts of lead shot found in levels IV and V, and primarily from unit 53. The Clothing group also decreased over time. The Activities and Kitchen category increased over time. Personal category remained stable with low overall quantities and ranking. The examination of quantity of Leisure items in the early 1800s is fairly high based on overall number but when contrasted to overall percentages it diminishes. This is mitigated by examining the ranking which places Leisure at a rank of three, midway in importance for the early period.

4.3.3 Faunal Analysis

The faunal assemblage from the excavation of the Fort Churchill trade shop provided a total of 2, 212 faunal remains (21.2% of the archaeological assemblage), and a list of 18 identified taxonomic species (see Chapter 3). Identifiable elements resulted in 49% of the faunal assemblage that were then categorized into taxonomic categories. Birds, primarily Goose, Ptarmigan and Grouse, were the main class present (n=504 or

23%), with Mammal (n=450 or 20%) and Fish (n=150 or 6%) completing the identified assemblage.

The large presence of bird species, specifically goose, verifies the historic records that state that the Dene were asked to participate in the spring and fall goose hunts as part of maintaining their trade relationships.

The low numbers of fish remains is consistent with historic accounts that reveal the Dene's limited inclusion of fish in their diet.

The examination of mammal species provides context for the research questions, and only those animals that would act as indicators of economic subsistence were considered. The animal that would relate a traditional subsistence is caribou, while beaver and marten would reflect a trapping and fur trade economy. Caribou was found in both time periods, with 17 elements found in levels I through III and 15 elements found in levels IV through IX. These numbers can be considered to have a correlation between periods; however caribou only represented 1% of the entire assemblage. Unfortunately the archaeological assemblage did not result in any positive identification of marten; and only a single beaver element was recovered from level III.

The number of identified specimens, or NISP, is defined as the number of identified specimens for a given taxon at the class, order, family, genus or species level. A specimen is "a bone or tooth, or fragment thereof" (Grayson 1984:16, Lyman 1994:100), whereas an element as "a single complete bone or tooth in the skeleton of an animal". The NISP was calculated for each Class found in the archaeological assemblage of the Fort Churchill trade shop and provides an estimate of taxonomic abundance for the faunal assemblage. NISP however may tend to inflate the number of individuals due to

sample and taphonomic processes which may cause undue fragmentation of specimens, especially those of larger animals that are more likely to be processed for bone marrow. Table 4.10 summaries the relative proportion (%NISP) of the most commonly occurring classes of the Fort Churchill faunal assemblage.

Table 4.10. Faunal assemblage of Identified Taxa, NISP and %NISP.

	Level 1 to 3 (Late 1800s)		**Level 4 to 9 (Early 1800s)**	
Class	**NISP**	**%NISP**	**NISP**	**%NISP**
Class Aves				
Anseriformes (Duck, Goose)	38	6%	49	10%
Charadriiformes (Gull)	1	0.2%	3	0.6%
Falconiformes (Eagle)	1	0.2%	0	0%
Galliformes (Grouse, Ptarmigan)	46	7%	56	12%
Aves spp.	155	25%	155	33%
Aves Subtotal	**241**	**38%**	**263**	**56%**
Class Mammalia				
Artiodactyla (Moose, Caribou)	20	3%	16	3%
Rodentia (Beaver)	1	0.2%	0	0%
Carnivora (Fox, Wolf,)	40	6%	32	7%
Lagomorpha (Rabbit)	1	0.2%	0	0%
Pinnipedia (Seal, Walrus)	43	7%	19	4%
Mammalia spp.	57	9%	22	5%
Large Mammal	77	12%	31	6%
Medium Mammal	31	5%	13	3%
Small Mammal	21	3%	26	5%
Mammalia Subtotal	**291**	**45%**	**159**	**33%**
Class Osteichthyes subtotal	**100**	**16%**	**50**	**11%**
Total	**632**	**99%**	**472**	**100%**

Based on NISP, the Mammal taxa slightly outranked the Bird category in the latter half of the 19th century at 45% and 38% respectively. However, the opposite is true for the early

period where Birds outnumbered Mammals 56% to 33%. Comparing overall quantities from each class by the number of years for each period can provide some further clarification of the faunal data. Both the late and early period can be divided in to approximately 50 year spans. This number divided by the overall number of each class shows that the bird class in both periods can be averaged to 5 birds/year. The mammal class shifts from 3/year in the early 1800s to 3/year by the late 1800s, a increase of 50%. Large mammals, in particular showed a quantity increase in the late period. While this information is not indicative of trade, it does demonstrate that there may have been an increase in caribou provisioning.

4.4 Interpretations

4.4.1 Historic Results

The historic record provided detailed accounts of the Dene trade good selection process. The "Indian Debts" account books that were available from the 1820s and the 1860s provided lists of individual names of traders, the types and number of goods that were purchased, and the types of furs that were brought into the post for credit. The historic account books were extremely valuable in providing specific details that allowed for insights into the research questions.

First, the accounts ensured that only those goods that were preferred specifically by the Dene were discussed. This allowed removal of those European goods that were brought to the post for servants or for Cree traders. Secondly, the account books provide dates when each trader came to the post to trade. This allows for an insight into the seasonality of the Dene, when they were arriving at the post, how long their stay was and

occasionally where they were going to and from within their seasonal round. The 1820s show a random pattern of trade, where trade was occurring throughout the year. However by the 1860s, traders only arrived at the post in spring and then again in fall, following seasonal mobility patterns based around the caribou migratory season. The caribou seasonal round of calving and migration occurred in spring when herds moved out of the boreal forest to their breeding grounds on the tundra and in late autumn when they returned was a time for a large gathering of Dene in the transitional zone of the subarctic (Sharp 2002, Reid 1996). Lastly the accounts provide the types and numbers of animal furs that were brought for trade. These represent very specific economic patterns. Fur bearers such as beaver and marten are found within the boreal forest zone typically not the traditional lands of the Dene, while caribou is primarily found within a subarctic tundra ecozone. The fact that very few caribou skins were traded in the early 19th century indicates that the Dene were very much attempting to focus on the furs that were encouraged by the HBC. However by the 1860s, percentages of traders bringing in caribou and fur bearers were relatively even. An explanation of this result may indicate a return to more traditional modes of subsistence. A second explanation for the reintroduction of caribou is that the HBC was aware of the Dene preference for hunting caribou and as a means of attracting them to trade included the skins as a trade item.

General cultural patterns have emerged through the analysis of the historic data from the 19th century. Archaeological and historic data have shown the traditional means of survival for the Dene was based on subsistence on the caribou; however this appeared to undergo a slight deviation in the early 19th century as a new market emerged, one focused on fur-bearers. This is demonstrated by the initial focus on the economic

practices of the fur trade both by the relative absence of caribou in the historic fur accounts (n=1) and the continual visits to Fort Churchill. However, change in the participation in the market economy was demonstrated by the 1860s as yearly visits were limited to twice a year, and an increase in caribou skins indicate a shift back to traditional subsistence practices based on caribou. The numbers of traders remained stable between the two periods, not an increase as predicted by world-systems theory.

The incorporation of European goods such as clothing became more important as a trade item through the 19th century as well as a slight increase in Kitchen-related activities. This indicates a shift. Alternatively, the historic records show a slight change between functional categories from activity-based to clothing shows insight to a social dynamic that was increasingly interested in European goods.

4.4.2 Archaeological Results

There are limitations associated with the analysis of the Fort Churchill artifact collection. The collection is made up of all types of goods that were intended for all cultural groups trading at the post as well as those local HBC servants. For the faunal assemblage, it is unknown why the remains are present in the trade shop when a provisions store was situated elsewhere in the fort complex. It can be interpreted that these remains are due to trade. However, processing of furs may have occurred off-site at the location of the initial processing. Therefore certain remains will not be present such as the less choice cuts of meat and elements from limbs and skull of large animals which would not provide much of value. Regardless, the following interpretations are based on the premise that the artifact collection represents, to a reasonable degree, the types of material culture available to the Dene who traded at Fort Churchill. This has been

mitigated through the use of applying the historic record and the use of functional categories.

Correlating the archaeological record into functional classification system allowed for an understanding of items that related specifically to economic activity or those that were used predominantly for personal adornment, or utilitarian activities. Each of these categories were ranked and quantified to show degree of presence in the fur trade market economy.

The archaeological analysis showed differences between the two time periods based on overall distribution of quantities. Increasing Activity and Kitchen groups showed larger quantities in the latter half of the 19th century, while Arms and Clothing decreased in quantity over time.

The faunal analysis of the archaeological assemblage was unable to provide verification that the Dene maintained reliance on the caribou, largely because Fort Churchill is not a Dene site and the archaeological record does not provide the specific context as seen in the historic records. However, the archaeology did provide validation that the goose hunt was important to the overall provisioning of the post throughout the 19th century. The influence of the fur trade in the early 1800s was the introduction of hunting geese in order to provision the post and it servants for the year. Table 4.10 demonstrated that birds composed the majority of the assemblage in the early 1800s and shows a slight decrease in the latter half of the century when traditional modes resumed. The lack of caribou remains may have a two-fold cause. First that the processing of caribou likely occurred at the primary kill site, therefore only those elements that were related to choice meat cuts would be present. Secondly, the processing of caribou may

have resulted in fragmentation of bone elements making identification to species difficult. The result of the NISP and %NISP demonstrate that the Mammalia Class did increase by the latter half of the 19th century. These materials may be proven to be related to caribou species; however this would entail extensive DNA and genetic testing.

4.4.3 Comparisons between Historic and Archaeological Results

The result of the archaeological analysis is somewhat contradictory to the historic record analysis when examining comparisons between functional categories over time. Table 4.11 compares the functional categories for each the historic and archaeological results for overall increases or decreases for each category.

Table 4.11 Comparison of Historic and Archaeological Functional Categories.

Historic Category	Change over Time	Archaeological Category	Change over Time	Result
Activities	-	Activities	+	**Opposite**
Arms	+	Arms	-	**Opposite**
Clothing	+	Clothing	-	**Opposite**
Kitchen	=	Kitchen	+	**Even**
Leisure Activities	+	Leisure Activities	-	**Opposite**
Personal	=	Personal	=	**Even**
Total		**Total**		

The historic records show an increase in the Clothing group and a decrease in the Activities group, whereas the archaeological records reveal an increase in the Activities and decrease in Clothing. This dissimilarity is especially represented in the Arms category, where the historic record shows a significant increase by the late 19th (N=334 increases to 2912) while the archaeological data shows an opposite trend (N=2030 decreases to 388). Where both data sets agree is the stability and slight increase in the Kitchen and Personal categories over time.

Variations between the archival and archaeological records could occur because items belonging to the Clothing category were perishable and not usually found in archaeological contexts. Another explanation is the archaeological assemblage could include those goods that relate to items that were intended for the post or its servants, rather than specific items selected by the Dene. This is a possibility because items not expected in the trade shop, such as the large presence of faunal materials, would indicate that the trade shop was also used as a provisions store and therefore could have been utilized in other post activities. However, a general pattern that arises is the most heavily purchased goods according to the accounts books are the least represented in the archaeological assemblage – they are inversely proportional. The result is the records validate each other by communicating those items that were traded would not be found in the archaeological record at Fort Churchill as they were purchased and taken away with the Dene traders.

Chapter V: Summary and Conclusions

5.1 Summary

The research presented in this thesis describes a diachronic examination of historic, ethnological, and archaeological data from Fort Churchill, a Hudson's Bay Company trade post dating to the 19th century. This thesis has outlined that it is important to provide an opportunity to reveal all participants in a fur trade community. Therefore the main objective of the study was to examine the continuity and change of economic practices of the Dene over the 19th century through the material culture of Fort Churchill balanced against the historic and ethnohistoric records. Therefore, the objective was to gain a greater understanding of the degree to which the Dene were influenced by the trade over time. This thesis has taken a European fur trade post artifact assemblage and attempted to elicit the 'other,' the historically silent trade partners who were active and selective participants with the HBC.

The Fort Churchill trade shop operated between 1800 and 1901. The structural remains were first located in 1989 and initial testing in 1990 revealed in situ material culture. Formal excavations occurred from 1992 to 1996 directed by Petch (1992, 1994) and served as the basis for this research.

Using multiple lines of evidence, an understanding of Dene involvement in the fur trade at Fort Churchill was achieved and could not have otherwise been gained using one source alone. The baseline was the ethnohistoric accounts that stated the Dene reluctance to enter into the trade, and how the caribou provided all material requirements. Historic records, and ethnographic accounts combined with the archaeological data allow for

many levels of understanding. The raw data provided through the historical records and archaeological artifact and faunal assemblages were the focus of the analysis for this thesis. The analysis consisted of recording and quantifying both the historic and archaeological records; identifying a chronological sequence; developing a method which could monitor the economic selection processes, and to comparing the results to the ethnographic accounts of the Dene.

That the success of the Hudson's Bay Company was founded on the Aboriginal trade and meant their company's overall profitability, economic well-being and the continued trade is supported by the results of the analysis. The success of Fort Churchill in the trade was dependent on continuing trade with Dene, and may have had to adapt their market economy to those animals and provisions that were selected for and preferred by the Dene. The results of the analysis demonstrate that the early period of trade in the early 19th century saw many Dene moving deep into the boreal forest and into the direct production of fur as seen in the varied visits to the post throughout the year. However, by the latter half of the 19th century the market was secondary to the Dene traditional economy based on the caribou hunt with visits to the post only twice a year. Additionally, the number of traders did not increase over time, which suggests that any long-term HBC influence was only moderately effective.

Indication of change in Dene selection processes related to incorporation into the fur market economy would be considered as any significant increase in quantities and types of trade goods present in the Fort Churchill data sets. As suggested by world-systems theory, those cultures at the Periphery of the system would be subordinated to those at the Core. The analysis demonstrates that the case study at Fort Churchill does not

conform to the expected results. The historic records show that the overall variety of trade goods remained stable over time with significant correlation existing between the two periods of study. Increases to certain facets of the historic data set, while significant to hunting practices, does not indicate overall increasing consumerism. The archaeological assemblage as categorized into functional categories balances the results of the historic records by showing the early 19th century levels contained three times as many materials as the later levels suggesting that there was less demand for trade goods by the Dene. In addressing the consumerism of the Dene at Fort Churchill, one can say that while a single category of goods significantly increased as seen in the historic dataset, this was not seen in the overall variety of goods and not in the archaeological record, thereby denying the concept of increasing consumerism amongst the Dene.

5.2 Applications to World Systems Theory

The World Systems Theory framework predicts that cultures at the system periphery will be subordinated to the needs and wants of the culture(s) at the core of the system. From that prediction, certain expectations can be derived for Fort Churchill, as stated in Chapter 1:

1) Material culture uptake by the Dene should be progressive over time, both in variety and quantity;
2) Trips by Dene traders should increase over time;
3) The number of Dene traders should increase over time;
4) The traditional subsistence round should alter to accommodate trading trips to the fort; and

5) The faunal evidence should show a shift from the traditional caribou-based economy to one in which fur-bearing animals become a larger component of the assemblage.

Based on the results presented above, the expectations outlined by world-system theory are not met in the Fort Churchill data sets. The examination of the historic rank of trade goods indicates correlation in the types of goods available to the Dene throughout the 19th century. Few new trade items were introduced, and few were removed from the trade circulation. While overall quantities of purchased goods from the historic accounts increased over time, specifically in the Arms category, the majority of categories remained stable rather than the expected increase in variety and quantity. The historic records provide detail on the occurrences of trade, noting dates of all purchases. The result is that the number of traders remained stable between the 1820s and 1860s accounts with 87 traders and 89 traders respectively. The 1820s accounts demonstrate a variety of visits to the post throughout the course of the year. This practice changed by the 1860s and became limited to two yearly visits that would coincide with the caribou hunt based around the seasonal migrations of the caribou.

The functional categories provided evidence of certain indicators of socio-economic change over time because overall percentages differed between time periods. The historic records indicate that the Arms and Clothing categories increased in occurrence, along with a slight increase in Leisure-related items, while there was a decrease in the Activity group. The archaeological data, while statistically unable to support the result, showed that the Clothing category decreased in the last half of the 19th century, while the Activities and Kitchen categories increased. Examining the overall quantities of

archaeological materials from each time period provided a simple yet straight-forward result in that the number of items was much larger in the early half of the 19th century compared to the later period. This may have been due to initial provisioning and durability of certain types of goods as they were used over time. Activity-related items may have lasted within the archaeological record and therefore are more represented than cloth items.

The faunal materials from the archaeological data were unable to provide evidence of caribou in either of the two time periods. This is balanced with the negligible presence of fur-bearer remains in the assemblage. Therefore, it cannot be said that there was a shift in traditionally-based economy in favour of the new fur market economy.

A world-system has been described as a social system, made up of the conflicting forces which hold it together and tear it apart as each group seeks eternally to remold it to its advantage (Wallerstein 1974:347). The Dene of the 19th century were able to participate in a world-system market economy without having to be subservient to it, and were able to negotiate items and goods that were beneficial to their socio-economic system. The experience at Fort Churchill seems to have been a unique partnership between the HBC and the Dene in which one group was unable to be a dominant force but each still received advantages that were mutually beneficial to both. The expectations of world-systems theory are not completely met based on the results of this study. This may serve as a cautionary tale to future researchers that one should not embrace a theory completely, as there are many possible exceptions and explanations for certain human behaviours.

5.3 Critique

Through the process of examining how the Dene negotiated their way through the fur trade, certain reflections on the process suggest themselves. Some considerations may have improved the overall approach such as employing additional sources of historic data such as post journals and incoming supplies lists. This would have shown all types of goods that would be present at the trade shop, which may align better with the archaeological record and also perhaps provided actual quantities of goods purchased per year. As such, there is no support or context for the artifact assemblage besides the functional value of the artifacts themselves. The choice in analytic tools to examine the historic record used both the percentages of traders selecting each material along with overall quantities of each trade good provided different results. The choice to use functional categories instead of specific trade good in the archaeological assemblage may also have contributed to the disparity in results between the historic and archaeological data. A more detailed faunal analysis could have provided examination of cut-marks and age indicators that would show food utility indices and seasonality for the assemblage.

The use of archaeological material collected from a largely inexperienced workforce led to the coarseness of the artifact collection. Certain controls which may have been in place for diagnostic materials may have been better able to distinguish finer levels correlated to deposition.

5.4 Future Directions

This study has provided one aspect of the interactions between the Dene and the HBC within the framework of the 19th century Fort Churchill trading shop. However, a

balance is required that could be achieved by examining inter-site comparisons. An expansion of the study entailing archaeological excavation of a contemporaneous Dene settlement or series of campsites would provide ratios of European goods versus traditional materials over time. Analysis of faunal remains from these sites could provide evidence for ratios of caribou versus fur-bearers that, following from the results of this thesis, could indicate a degree of participation in the western market economy. Alternatively, a comparison to a contemporaneous trade shop within similar ecozones, such as York Factory, could make use of the approach taken in this thesis to contrast various Aboriginal cultural groups, e.g. Dene versus Cree, who participated in the fur trade.

Further archaeological excavation of the remaining structures and features at Fort Churchill, specifically the provisions store, could provide the missing evidence of caribou remains that were lacking in the trade shop assemblage.

Broader implications of the results of this thesis could be employed in culture-contact studies where the British Empire established trade connections tailored specifically to local and regional resources. The expected outcome based on world-systems theory could be compared cross-culturally and within intra and inter-site analyses providing perhaps a new understanding regarding the uptake and mitigation of trade by indigenous peoples.

Literature Cited

Abel, K.
1993 Drum songs: glimpses of Dene history. McGill-Queens University Press, Montreal.

Adams, G.
1978 The Motherwell Farmstead, Artifact Distribution Analysis. Parks Canada National Historic Parks and Sites Branch Manuscript Report Series No. 276.
1981 Fur Trade Archaeology in Western Canada: a Critical Evaluation and Bibliography. In Saskatchewan Archaeology 2(1-2):39-53.
1985 York Factory Archaeology: Interim Report 1981-1982. Ms on file, Archaeological Services, Parks Canada, Wpg, MB.

Adams, G. and M. Burnip
1981 York Factory Archaeology: Interim Report (1978-1980). Parks Canada Microfiche Report Series No. 27. Ottawa, ON.

Alcock, F.
1916 The Churchill River. In Geographical Review 2(6):433-448. American Geographical Society.

American Society for Ethnohistory (ASE)
2007 American Society for Ethnohistory Brochure. Electronic document downloaded May 18, 2012. http://www.ethnohistory.org/ase-brochure/

Tanner, J. and A. Rigney
2003 Athabasca Chipewyan First Nation Traditional Land Use Study.

Bamforth, D.
1993 Stone Tools, Steel Tools: Contact Period Household Technology at Helo. In Ethnohistory and Archaeology: Approaches to Postcontact Charnge in the Americas, edited by J. Daniel Rogers and Samuel Wilson, pp. 49-72. Plenum Press, New York.

Bedard, E.
1990 The Historic and Ethnographic Background of Fort D'Epinette (HaRc-27): Considerations for the Archaeological Determination of Ethnicity. M.A. Thesis Simon Fraser University.

Beverly and Qamanirjuaq Caribou Management Board (BQCMB)
1999 Protecting Beverly and Qamanirjuaq Caribou and Caribou Range Part I: Background Information. Artisan Press Ltd, Yellowknife, NT.
2000 'Range Map'. Electronic document access March 28, 2012 <http://www.arctic-caribou.com/range_map.html>

Birket-Smith,
1930 Contributions to Chipewyan Ethnology. New York: AMS Press.

Bishop, C. and A. Ray
1976 Ethnohistoric research in the central Subarctic: some conceptual and methodological problems. Western Canadian Journal of Anthropology 6(1):116-144.

Bradley, J.
1987 Evolution of the Onondaga Iroquois: Accommodating Change, 1500-1655. Lincoln and London: University of Nebraska Press.

Brumbach, H. and R. Jarvenpa
1989 Ethnoarchaeological and Cultural Frontiers: Athapaskan Algonquian and European Adaptations in the Central Subarctic. American University Studies. Peter Lang, New York.
1997 Ethnoarchaeology of Subsistence Space and Gender: A Subarctic Dene Case. American Antiquity 62(3):414-436.

Burch, E.
1978 Caribou Eskimo Origins: An Old Problem Reconsidered. Arctic Athropology 15(1).

Burley, E.
1993 Work, Discipline and Conflict in the Hudson's Bay Company, 1770 to 1870. Ph.D. dissertation, University of Manitoba, Canada.

Burley, D. G. Horsfall, and J. Brandon
1992 Structural Considerations of Metis Ethnicity: An Archaeological, Architectural, and Historical Study. Vermillion, SD: The University of South Dakota Press.

Campbell, L
1997 *American Indian Languages: The Historical Linguistics of Native America*. Oxford: Oxford University Press.

Carlos, A.
1981 The Causes and Origins of the North American Fur Trade Rivalry: 1804-1810. Journal of Economic History 41(4):777-794.
1982 The Birth and death of predatory competition in the north American fur trade:1810-1821. Explorations in Economic History, Elsevier 19(2):156-183.

Carlos, A. and F. Lewis
1993 Indians, the Beaver, and the Bay: The Economics of Depletion in the Lands of the Hudson's Bay Company, 1700-1763. In The Journal of Economic History 53(3):465-494.

1999 Property rights, competition, and depletion in the eighteenth-century Canadaian fur trade: the role of the European market. Canadian Journal of Economics 32(3):705-728.
2001 Agents of Their Own Desires: Indian Consumers and the Hudson's Bay Company 1700-1770. Discussion Papers in Economics. Working Paper No. 01-10. Center for Economic Analysis Department of Economics, University of Colorado.

Carlos, A. and E. Hoffman
1986 The North American Fur Trade: Bargaining to a Joint Profit Maximum under Incomplete Information, 1804-1821. Journal of Economic History 46(4):967-986.

Chase-Dunn, and P. Grimes
1995 World-Systems Analysis. In Annual Review of Sociology 21:387-417.

Churchill Northern Studies Centre
2005 Wildlife of the Churchill Area. Electronic document http://www.churchillscience.ca/index.php?page=ab_attrac_other accessed April 8, 2012.

Downes, P.G.
1943 Sleeping Island: The Story of One Man's Travels in the Great Barren Lands of The Canadian North. Coward-McCann, New York.

Eccles, W.
1983 *The Canadian Frontier 1534-1760* - Revised edition. University of New Mexico Press. Albuquerque.

Elias, P.
2003 Athabasca Denesuline Territory: 2,600 Years of History Final Report. Written for The Athabasca Denesuline Negotiation Team.

Emberling, G.
1997 Ethnicity in Complex Societies: Archaeological Perspectives. Journal of Archaeological Research 5(4):295-344).

Esau, F.
1983 Annotations of Hudson's Bay Company District Reports From Fort Churchill 1818-19, 1819-20, 1820-21, 1821-22, 1822-23, 1825. Paper presented in History 7404-1 University of Manitoba.
1984 The Fort Churchill Homeguard: A Study of Change. Paper submitted for History 7404-1, University of Winnipeg, MB
1986 Chipewyan Mobility in the Early 19th Century: Chipewyan and Hudson's Bay Company Tactics and Perceptions. Master's thesis, University of Manitoba.

Evans, H.M
1999 The Syncretic Continuum: A Model for Understanding the Incorporation of European Goods at Le Caron, a 17th Century Huron Village Site, Ontario. Masters Thesis Trent University.

Farnsworth, P.
1989 The Economics of Acculturation in the Spanish Missions of Alta California. Research in Economic Anthropology 11:217-249.
1992 Missions, Indians, and Cultural Continuity. Historical Archaeology 26(1):22-36.

Fitting, J.
1976 Patterns of Acculturation at the Straits of Mackinac. In Cultural Change and Continuity: Essays in Honor of James Bennett Griffin, edited by C. E. Cleland, pp 321-334. Academic Press.

Forsman, M.
1999 A Model of Architectural Diversity in the Fur Trade. PhD Dissertation. University of Alberta.

Friesen, T. M.
1995 "Periphery" as a centre: Long-term patterns of intersocietal interaction on Herchel Island, Northern Yukon Territory. Unpublished Ph.D. dissertation, McGill University, Canada.

Gillespie, B.
1975 Territorial Expansion of the Chipewyan in the 18th Century. In Proceedings Northern Athapaskan Conference, 1971, Volume Two. McFadyen Clark, editor. National Museum of Man, Mercury Series, Paper No. 27.

Goldfrank, W.
2000 "Paradigm Regained? The Rules of Wallerstein's World-System Method. In Journal of World-Systems Research 6(2):150-195.

Gordon, B.
1975 Of Men and Herds in Barrenland Prehistory, Mercury Series No. 28. Ottawa, National Museums of Canada.
1976 Migon – 8,000 Years of Barrenland Prehistory. Mercury Series No. 56. Ottawa, National Museums of Canada.
1996 People of Sunlight, People of Starlight – Barrenland archaeology in the Northwest Territories of Canada. Mercury Series No. 154. Canadian Museum of Civilization, Archaeological Survey of Canada.

Government of Canada
2005 Costal Hudson Bay Lowland. Ecological Framework of Canada. Electronic document http://ecozones.ca/english/region/215.html Accessed March 21, 2012.

Grayson, D.
1984 Quantitative Zooarchaeology: Topics in the Analysis of Archaeological Faunas. Studies in Archaeological Science, Orlando, FL: Academic Press.

Hamilton, J.
1979 Interpretation of Ceramic Artifacts from Fort Walsh, a Late Nineteenth Century North West Mounted Police Post. Parks Canada National Historic Parks and Sites Branch Manuscript Report Series No. 409.

Hamilton, S.
1990 Fur Trade Social Inequality and the Role of Non-Verbal Communication. Ph.D dissertation, Simon Fraser University, Burnaby.
2000 Dynamics of Social Complexity in Early 19th Century British Fur Trade Posts. International Journal of Historical Archaeology 4(3):217-273.

Hansen, T. and Peter Seeberg
1964 Reports on the Jen Munk Memorial Expedition, 1964. Unpublished manuscript on file at Historic Resources Branch, Winnipeg, MB.

Hearne, S.
1971 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 Northwest Passage & c. In the Years, 1769, 1770,1771, & 1772. Reprinted, Edmonton, Alberta, M.G. Hurtig Ltd.
2001 Journey to the Coippermine River, 1769-1772. Edited by E. W. Nuffield, Haro Books.

Hill, D.N.
1994 History of the Reindeer and Nejanilini Lake District to 1820. M.A. Thesis, University of Manitoba.

Hodgetts, L.
2006 Archaeological Investigations on the Churchill West Peninsula, Manitoba 2005. Heritage Permit Number A16-05. Ms on file Historic Resources Branch, Winnipeg, MB.

Holland, L.
2001 Bibliography of Books & Articles on Dene. La Ronge, Saskatchewan.

Hoover, R.
1989 Spanish-Native Interaction and Acculturation in the Alto California Missions. In Columbian Consequences, Vol. 1 edited by D. H. Thomas, pp. 395-406.
1992 Some Models for Spanish Colonial Archaeology in California. Historical Archaeology 26:37-44.

Hudson's Bay Company Archives (HBCA)
1721 B.42/a/2 fo. 133. Fort Churchill Post Journal.
1724 B.42/a/4, fo. 23. Fort Churchill Post Journal.
1783 B.42/a/103 fo.4d Fort Churchill Post Journal
1819 B.42/a/144 fo. 8 Fort Churchill Post Journal
1823-1825 B.42/d/109a Churchill Indian Debts 1823, 1824.
1825 B.42/e/4 Fort Churchill Reports on Districts
1861-1865 B.42/d/221 Account Books (Indian Ledger)-Churchill 1861-1865
1885 B.42/e/10 Fort Churchill Reports on Districts
1889 B.42/e/11 Fort Churchill Post Reports

Innis, H.
1930 The Fur Trade in Canada: An Introduction to Canadian Economic History. University of Toronto Press, Scholarly Publishing Division.

Jarvenpa, R.
1977 Subarctic Indian Trappers and Band Society: The Economics of Male Mobility. Human Ecology 5(3):223-259.

Jarvenpa, R. and H. Brumbach
1988 Socio-Spatial Organization and Decision-Making Processes: Observations From the Dene. American Anthropologist 90:598-618.

Jeremie, N.
1926 Twenty years of York Factory, 1694-1714: Jeremies's account of Hudson Strain and Bay, tr from the French ed. Of 1720 with notes and intro, edited by R. Douglas and J. Wallace. Ottawa.

Jones, O. and C. Sullivan
1985 The Parks Canada Glass Glossary for the description of containers, tableware, flat glass, and closures. Ottawa: National Historic Parks and Sites Branch, Parks Canada.

Jordan, R.
1978 Archaeological Investigations of the Hamilton Inlet Labrador Eskimo: Social and Economic Responses to European Contact. Arctic Anthropology 15(2):175-185.

Kaplan, S.
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, edited by William Fitzhugh, pp. 45-69.

Kardulias, P.N.
1990 Fur Productivity as a Specialized Activity in a World System: Indians in the North American Fur Trade. In American Indian Culture and Research Journal 14(1):25-60.

Karklins, K.
1985 Glass Beads. Parks Canada. Studies in Archaeology, Architecture and History. Ottawa.

Kenney, J. F. (ed)
1932 The founding of Churchill: James Knight: Being the journal of Captain James Knight, governor-in-chief in Hudson Bay, from the 14th of July to the 13th of September, 1717. Toronto & London: J.M. Dent & Sons.

Kidd, K. and M. Kidd
1970 A Classification System for Glass Beads for the Use of Field Archaeologists. Occasional Papers in Archaeology and History No. 1:45-89. Ottawa: National Historic Sites Service.

Klimko,O.
1983 *The Archaeology and History of Fort Pelly 1, 1824-1856*. Regina: Saskatchewan Culture and Recreation.
1994 The Archaeology of Land Based Fur Trade Posts in Western Canada: A History and Critical Analysis. Ph.D. dissertation, Simon Fraser University, Burnaby.

Koolage, S.
1970 Adaptation of Chipewyan Indians and Other Persons of Native Background in Churchill, Manitoba. PhD. Dissertation, University of North Carolina.

Krech, S.
1980 Northern Athapaskan Ethnology: An Annotated Bibliography of Published Materials, 1970-79. Arctic Anthropology 17(2):68-105.

Lightfoot, K.
1995 Culture Contact Studies: Redefining the Relationship between Prehistoric and Historical Archaeology. In American Antiquity 60(2):199-217.

Lightfoot, K., A. Martinez, A. Schiff
1998 Daily Practice and Material Culture in Pluralistic Social Settings: An Archaeological Study of Culture Change and Persistence from Fort Ross, California. American Antiquity 63(2):199-222.

Lunn, K.
1985 Goods on the Bay: Material Culture from Archaeological Investigations of York Factory Hudson's Bay Company Post, 1788-1957. Canadian Parks Service. Microfiche Report Series #347.

Lyman, R.
1994 Vertebrate Taphonomy. Cambridge University Press.

Mann, R.
1999 The Silenced Miami: Archaeological and Ethnohistorical Evidence for Miami-British Releations, 1795-1812. Ethnohistory 46(3):399-427.

Marshal, Y. and A. Maas
1997 Dashing Dishes. World Archaeology 28(3):275-290.

McCarthy, M.
1985 Churchill: A Land-Use History 1782-1930. Microfiche Report Series, Parks Canada, Ottawa, ON.

McGuire, R.
1982 The Study of Ethnicity in Historical Archaeology. In Journal of Anthropological Archaeology 1:159-78.

McInnes, W.
1913 The Basins of Nelson And Churchill Rivers. Canada Department of Mines Geological Survey. Ottawa.

Meyer, D.
1977 Pre-Dorset Settlements at the Seahorse Gully site. National Museum of Man, Archaeological Survey of Canada, Mercury Series No. 57. Ottawa.
1979 The Churchill Archaeological Investigations. Parks Canada Manuscript Report Number 368.

Meyer, D. and U. Linnemae
1980 Churchill Archaeological Research. Parks Canada Research Bulletin No. 148. November 1980.

Miller, C and G. Hamell
1986 A New Perspective on Indian-White Contact: Cultural Symbols and Colonial Trade. Journal of America History 73:311-328.

Minni, S.
1976 The Prehistoric Occupations of Black Lake, Northern Saskatchewan. Archaeologcaical Survey of Canada Paper No.53, National Museum of Man, Mercury Series, Ottawa, ON.

Morantz, T.
1980 The Fur Trade and the Cree of James Bay. In Old Trails and New Directions: Papers on the Third North American Fur Trade Conference, edited by Carol Judd and Arthur Ray, pp. 39-58. University of Toronto Press, Toronto.

Motulsky, H.
1995 Intuitive Biostatistics. Oxford University Press Inc. 512p. http://www.graphpad.com/www/book/Choose.htm

Nash, R.
1969 The Arctic Small Tool Tradition in Manitoba. University of Manitoba Press, Winnipeg.
1975 Archaeological Investigations in the transitional forest zone: northern Manitoba, southern Keewatin, N.W.T. Manitoba Museum of Man and Nature, Winnipeg, MB.

Noble, W.
1971 Archaeological surveys and sequences in central District Mackenzie, N.W.T. Arctic Anthropology VIII(1):102-135.

Oliver, E. (Editor)
1914 The Royal Charter Incorporating the Hudson's Bay Company, 1670. In the Canadian Northwest: Its Early Development and Legislative Records. Ottawa: King's Printer, pp. 135-154.

Orchard, T.
2007 Otters and Urchins: Continuity and Change in Haida Economy during the Late Holocene and Maritime Fur Trade Periods. Ph.D. dissertation, University of Toronto, Canada.

Parks Canada
1980 Microfiche Report Series No. 27, Parks Canada, Ottawa. 66

Payne, M.
1984 A Social History of York Factory, 1788-1878. Microfiche Report Series No. 110, Parks Canada, Ottawa.

Peach, A. K.
1993 Ethnicity and Ethnic Markers: A Fur Trade Example. In Manitoba Archaeological Journal 3(1-2):97-124.

Petch, V
1989 Report of Results of Aerial Photography Conducted on August 2, 1988 on the Churchill West Peninsula. Ms on file at Historic Resources Branch, Wpg, MB.
1990 Report of 1989 Archaeological Field Investigations on the Churchill West Peninsula Churchill, Manitoba. Heritage Permit Report A21-89. Ms on file Historic Resources Branch, Winnipeg, MB.
1991 Archaeological Field Report for the Churchill West Peninsula 1990. Heritage Permit Report A29-90. Ms on file Manitoba Legislative Library, Winnipeg, MB.
1992 Old Fort Churchill Archaeological Project End of Season Report, 1992. Heritage Permit A25-92.
1994 Old Fort Churchill Archaeological Project End of Season Preliminary Report, 1994. Ms on file Manitoba Legislative Library, Winnipeg, MB.

1998 Relocation and Loss of Homeland: The Story of the Sayisi Dene of Northern Manitoba. Dissertation, University of Manitoba. Winnipeg, MB.

Peterson, J. and J. Afinson

1985 The Indian and the Fur Trade: A Review of Recent Literature. Manitoba History (Atumn1985) 10:10-18. Electronic doucument accessed Nov 8, 2011 < http://www.mhs.mb.ca/docs/mb_history/10/indianfurtrade.shtml>

Petitot, E.

1865 Chipewyan Vocabulary and Notes: An Account of the Montagnais or Chippewyan Tribe, Their Habitat, and Division into Nations and Tribes. Manuscript No. 172 in National Anthropological Archives. Smithsonian Institution, Washington.

Pyszczyk, H.

1987 Economic and Social Factors in the Consumption of Material Goods in the Fur Trade of Western Canada. Doctoral Thesis Simon Fraser University.

1989 Consumption and Ethnicity: An Example from the Fur Trade in Western Canada. In Journal of Anthropological Archaeology 8:213-249.

Ray, A.

1974 Indians in the fur trade: their role as trappers, hunter and middlemen in the lands southwest of Hudson Bay 1660-1870. Toronto: University of Toronto Press.

1977 Why Study The Fur Trade. Paper Presented at the Ninth Annual Western Canadian Studies Conference. Calgary, Alberta Feb 18-19, 1977.

1999 Introduction. In The Fur Trade in Canada: An Introduction to Canadian Economic History, pp. v-xix. University of Toronto Press Inc., Toronto.

Reid, G.

1996 Dene. In the Encyclopedia of World Cultures. Electronic document accessed June 14, 2012. http://www.encyclopedia.com/topic/Dene.aspx#2

Rich, E.E.

1949 James Isham's Observations on Hudson's Bay, 1743, and Notes and Observations on a Book Entitled A Voyage to Hudson's Bay in the Dobbs Galley, 1749. The Champlain Publications, Hudson's Bay Company Series, No. 12. Toronto.

1958 The History of the Hudson 's Bay Company. 1670-1870. Hudson's Bay Record Society. Vol.2.

1960 Trade Habits and Economic Motivation Among the Indians of North America. In *Canadian Journal of Economics and Political Science*, 26:35-53.

Riddle, D.

1987 Report of Archaeological Survey of the Churchill West Peninsula , 1987. Manuscript on file at Historic Resources Branch, Winnipeg, MB.

Rogers, D.

1990 Objects of Change: The Archaeology and History of Arikara Contact with Europeans. Smithsonian Institution Press, Washington.

Ross, B.R.
1862 An Account of the Botanical and Mineral Products Useful to the Dene Indians of Canada. Canadian Naturalist and Geologist 7(2):133-137.

Rubertone, P.
2000 The Historical Archaeology of Native Americans. Annual Review of Anthropology 29:425-446.

Sharp, H.
1977 The Caribou-Eater Dene: Bilaterality, Strategies of Caribou Hunting, and the Fur Trade. In Arctic Anthropology 14(2):35-40.
2002 Dene. In Encyclopedia of World Cultures Supplement. Electronic document accessed June 14, 2012. http://www.encyclopedia.com/topic/Dene.aspx

Simmons, W.
1988 Culture Theory in Contemporary Ethnohistory. Ethnohistory 35(1):1-14.

Smith, J.
1975 The Ecological Basis of Chipewyan Socio-territorial Organization. In Proceedings of the Athabascan Conference. Edited by A. McFadyen Clark. Canadian Ethnology Service Paper 27. National Museums of Canada, Mercury Series Ottawa.
1976 Chipewyan Adaptations, Arctic Anthropology 13(1):12-24.
1981 Chipewyan. In Handbook of North American Indians, Vol 6.(Subarctic) ed. By June Helm. Smithsonian Institution, Washington.

South, S.
1977 Method and Theory in Historical Archaeology. Academic Press, New York.

Sprague, R.
1981 "A Functional Classification for Artifacts from 19th and 20th Century Historical Sites." North American Archaeologist 2(3):1980-81.

Stein, G.
2002 From Passive Periphery to Active Agents: Emerging Perspectives in the Archaeology of Interregional Interaction. American Anthropologist 104(3):903-916.

Sussman, L.
1979 The Ceramics of Lower Fort Garry: Operations 1 to 31. Canadian Government Publishing Centres, Hull.

Tanner, A. and A. Rigney

2003 Athabasca Chipewyan First Nation Land Use Study. Fort Chipewyan: Athabasca Chipewyan First Nation.

Trigger, B.
1989a A History of Archaeological Thought. Cambridge University Press, Cambridge.
1989b History and Contemporary American Archaeology: A Critical Analysis. In Archaeological Thought in America, edited by C. C. Lamberg-Karlovsky pp. 19-34. Cambridge University Press, Cambridge.

Tyrell, J. B.
1897 Across the sub-Arctics of Canada a journey of 3,200 miles by canoe and snowshe through the barrenlands: including a list of plans collected on the expedition, a vocabulary of Eskimo words, a route map and full classified indix. Toronto: W. Briggs
1911 A Journey from Prince of Wales' Fort in Hudson Bay to the Northern Ocean in the Years 1769, 1770, 1771 and 1772 by Samuel Hearne. Reprint, Greenwood Press, New York, 1968.

Vela, C.
2001 World Systems Theory. In ESD.83 – Fall 2001. Electronic document http://www.sociosite.net/topics/texts/martinez_vela_World_Systems_Theory.php > Accessed Feb 21, 2012.

Wallerstein, I.
1974 The Modern World-System I: Capitalist Agriculture and the Origins of European World-Economy in the Sixteenth Century. Academic Press, New York.

Wike, J.
1958 Problems in Fur Trade Analysis: The Northwest Coast. American Anthropologist 60:1086-1101.

Wilkinson, R.G.
1973 Poverty and Progress. Methuen & Co. Ltd., London.

Wolf, E.
1982 Europe and the People Without History. University of California Press, Berkley.

Wright, J.V.
1975 The Prehistory of Lake Athabasca: An Initial Statement. National Museum of Man, Mercury Series, Archaeological Survey Paper No. 29. Ottawa, ON.