

**The 1819-20 Measles Epidemic: Its Sociocultural and Economic Consequences in
the Brandon House Area**

By

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

MASTER OF ARTS

**Department of Native Studies
University of Manitoba
Winnipeg, Manitoba**

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LORI NORDLAND

A Thesis/Practicum 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

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ABSTRACT

The Plains Cree, Assiniboine and Ojibwa of the Brandon House area were afflicted by the 1819-20 measles epidemic. Each group experienced different mortality rates as a result of differences in their coping strategies. This study examines the various mortality rates through factors such as nutritional intake, suitable housing and overall health. It then attempts to apply the Human Behaviour Model, as developed by Michael Trimble, to the situation at Brandon House and look for anomalies in his model. Finally, this thesis seeks to take a holistic approach in understanding the interrelationship between the local and global events occurring in the early part of the 1800s, as well as the political, social and economic changes experienced by the First Nations peoples. At this time, these people experienced sociocultural and economic changes that both impacted and were impacted by the 1819-20 measles epidemic.

In examining the diffusion of the 1819-20 measles epidemic, Michael Trimble's model is based upon the Mandan-Hidatsa horticultural community. While some aspects of his model are applicable to the hunting-based economy of the First Nations people at Brandon House, socioeconomic factors including alcohol consumption are neglected. In addition, a more in-depth analysis of nutritional intake (diet) and social and mental health illuminate the importance of these factors on the immune system and their impact on mortality rates. As nutritional deficiency increases and health decreases, the immune system becomes compromised and a person becomes more susceptible to disease and secondary infections. As the Plains Cree and Assiniboine experienced a decline in their role as middlemen in the fur trade, they began to lose their economic and political position with the Mandan First Nations. Within the historical fur trade literature, political

and socioeconomic events such as the “Horse Wars” appear to be removed from the affects of the disease, this is not always the case. Thus, the consequences of the 1819-20 measles epidemic were influenced by human behaviour since the cultural responses to disease are as important as the epidemiological factors.

ACKNOWLEDGEMENTS

I would like to thank the Hudson's Bay Company Archives for allowing me to conduct research and quote from their vast collection of fur trade material. As well, I am grateful to the archivists for their help and guidance over the course of my research. I owe also a considerable debt to my advisor Dr. Fred Shore, and my committee members Dr. Skip Koolage, Dr. Robin Brownlie and Mr. Maurice Montreuil whose help and encouragement have been instrumental to my graduate career. Special mention must be made to the graduate students in Native Studies who helped to make this journey enjoyable and as stress-free as possible. Finally, I must thank my family and husband, Jon, who have remained by my side throughout my stay in University. It is to them that I owe the greatest gratitude and debt for without their sacrifices and unwavering support none of this would have been possible.

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CHAPTER ONE

Introduction: A Microhistorical Approach to the 1819-20 Measles Epidemic

The competition between the North West and the Hudson's Bay Companies overshadowed the 1819-20 measles epidemic at Brandon House, Manitoba. Information from the post journals and correspondence focused on the rivalry over control of the fur trade while the main thrust of the competition was to penetrate the Athabasca district by any means possible. Rivalry between the companies was not the only issue to take precedence to the epidemic. The Board of Governors for the Hudson's Bay Company in London was preoccupied with such matters as the Selkirk Settlers, the conclusion of the Napoleonic Wars, and growing political tensions in Canada. As a result of the disruption of trade, the Hudson's Bay Company adopted a new economic policy of reorganization and retrenchment. Consequently, there has been little documentation regarding the diffusion and impact of the measles epidemic.

During the course of the measles epidemic, Aboriginal people experienced changes in their social, political and economic structures. The loss of community members resulted in blended families including the amalgamation of villages and nations, creating new social and political alliances. Aboriginal people suffered economic hardships following the death of their trappers and hunters. This resulted in a decrease in the amount of furs traded at the post as well as a shortage of food supplies. Malnutrition and the use of alcohol were other factors that increased the Aboriginal peoples' susceptibility to the measles virus. In turn, their ability to effectively combat the epidemic was compromised and this translated into increased mortality (death) and morbidity (illness) rates.

In examining epidemics during the fur trade, the prevailing literature has focused on depopulation and diffusion (Decker, 1989; Hackett, 1991 and 1999; Ray, 1974). For example, Paul Hackett's Masters thesis "attempts to illuminate the progress and mortality effects of this [measles] disease in the Petit Nord¹,... [and] to establish the origins of this disease episode, and the circumstances under which this virgin soil epidemic penetrated into the... Northwest" (Hackett, 1991:1). He furthers this research in his dissertation which describes the "geographical examination of the introduction and spread of directly transmitted, acute infectious diseases [in the Petit Nord]... between 1670 and 1846" (Hackett, 1999:1). Paul Hackett (1999:1), like Jody Decker (1989), has based his main objectives on Arthur Ray's pioneering study (1974) *Indians in the Fur Trade*. However, their focus remains on the diffusion processes and spatial patterns of historical epidemics. In a different approach, Michael Trimble (1989) attempts to emphasize both the dynamics of the disease systems and individual and community responses. Unfortunately, the social, economic and political impact of an epidemic is left unexplored. By expanding upon previous research through a microhistorical approach, this thesis attempts to examine the impact of the 1819-20 measles epidemic on the social, political, and economic organizations of the Plains Cree, Assiniboine and Ojibwa peoples.

¹ This is a specific area known as the Petit Nord, and was bordered on the south by Lake Superior, on the west by Lake Winnipeg, north to the edge of the Hudson Bay Lowland, and east between the Albany and Moose rivers (Lytwyn, 1986:i).

Objectives and Organization

Initially the purpose of this research was to examine the changes in trade patterns at the Brandon House post during the 1819-20 measles epidemic. At the basic level, trade constituted the reciprocal exchange of furs for provisions and other necessities. At the economic level, furs were calculated against the trapper's credit² and used to purchase new supplies so that the trade pattern could continue. The increased morbidity and mortality rates from the epidemic caused a disruption in this exchange process. Trappers were unable to accumulate furs as they had previously, but they were still reliant on provisions from the posts. Thus, low fur returns were recorded.

During the 1819-20 measles epidemic, several factors caused a disruption in the trade. First, low fur returns were partly affected by the competition between the Hudson's Bay and North West Companies. Furs in the Brandon House area were becoming scarce (PAM HBCA B.22/a/21, fo.49d, 51d; Peers, 1994:64), while at the same time the expansion into the Athabasca district became a priority (Yerbury, 1986:84). The Hudson's Bay Company's adoption of the Retrenchment System³ also impacted their fur profits. Second, increased susceptibility to the measles epidemic occurred on various levels. Changes in the dietary needs and a trend towards poor nutrition compromised the people's immunity to illness (Podolsky, 2000:5; Wirsing, 1985:307). In the case of airborne diseases, housing types and lifestyles need to be considered in terms of disease transmission (Cohen, 1989; Podolsky, 2000:4). In order to understand the changes in

² Credit, or "debt" as the traders called it, referred to goods that were advanced to the Aboriginal trappers each autumn and spring (Peers, 1994:33; Ray, 1974:138). In the following year, the traders would collect the furs as payment for the previous year's goods.

³ The Retrenchment System was a plan for revising the Hudson's Bay Company's management of their trade within the interior of Canada (Rich, 1960:292).

overall trade patterns, the above factors will be studied to learn how Aboriginal people effectively combated the high mortality and morbidity rates associated with the 1819-20 measles epidemic.

The effects of the measles epidemic on the economy of the fur trade are numerous. During such times, starvation, illness, and death, as well as modifications in the sociocultural and political systems of Aboriginal peoples, resulted. To understand how these factors impacted the Aboriginal trading practices and patterns, the following topics will be examined:

1. Historical overview of the general fur trade and the events prior to the 1819-20 measles epidemic;
2. Northern Plains groups' coping strategies and responses towards acute infectious diseases;
3. Changes in Aboriginal social, political, and economic organizations as a result of the 1819-20 measles epidemic; and
4. Factors impacting the profit of the Hudson's Bay and North West Companies.

Methodology

The post journals describe the daily events of the Hudson's Bay Company employees and offer insight into the lives of those Aboriginal peoples who frequented the posts for provisions and to trade furs. Chief factors or post masters in charge of the posts recorded their perceptions of events impacting the fur trade as it related to their post. The journals give information on the quantity and quality of furs traded, as well as who were

trading the furs. Not all post journals included the names of the Aboriginal men who traded at the post. In the case of the Brandon House post journal, Peter Fidler has written some of the names of the Aboriginal men. Even if the names of the trappers were not recorded, the number of those coming to the post, as well as the distinction between gender and age, offer valuable insights into the changes in the trade patterns. For example, one pattern demonstrated that trade at the posts was conducted between the men. Women and children engaging in similar trade activities could be considered an exception. Following an increase in the mortality and morbidity rates, a change in the gender responsibilities of the men and women resulted. As the prominent trapper of the household became ill, this created a void in his role. Others of the household then became responsible to fill the vacancy. This could be the women or children; therefore, what could be considered a traditional male role in the fur trade now becomes part of the domain of women and children. Recording such changes may illustrate new trade patterns.

The comparatively few studies that examine historical epidemics have raised some interesting questions and theoretical issues about the significance of trade practices and the applicability of various epidemiological models. In so doing, questions relating to the impact of an epidemic on trade patterns and practices need to be resolved. By understanding the role of exchange as an acculturation process, and as a mixture of economic, social, and political relationships, the development of a comparative epidemiological paradigm evolves through the broader theoretical issues of fur trade studies.

Historically, people have the ability to manipulate their circumstances and environment. The Aboriginal trappers and European traders made choices within the social, cultural, and political systems that governed them during the fur trade. In turn, these choices affected their perspective and comprehension of the measles epidemic. How the people defined and coped with the epidemic was related to their acculturation process. Thus, Giovanni Levi (1991:94) has argued, "all social action is seen to be the result of an individual's constant negotiation, manipulation, choices and decisions in the face of a normative reality which, though pervasive, nevertheless offers many possibilities for personal interpretations and freedoms."

Reducing the "scale" of the study from the broader, generalized fur trade to a specific post and time reveals factors that were previously unobserved. New meanings arise as a result of altering the scale of observation (Levi, 1991:98). It is this microscopic analysis that delves into an intensive study of the documentary material of post journals and correspondence. These studies may then be used to "draw far wider generalizations although the initial observations were made within relatively narrow dimensions and as experiments rather than examples" (Levi, 1991:98).

As a research tool and methodology, microhistory is an "attempt to study the social not as an object invested with inherent properties, but as a set of shifting interrelationships existing between constantly adapting configurations" (Levi, 1991:110). Microhistory approaches the impact of the measles epidemic as having multiple layers on trade patterns. The broader perspective of fur trade history equated disease with starvation and death resulting in low fur returns, as indicated by Arthur Ray (1974) and Harold Innis (1930/1999) among others. However, in taking a microhistorical approach

focusing on the 1819-20 measles epidemic, and the occurrences at Brandon House, it becomes clear that several factors were involved in the increase of morbidity and mortality rates. As mentioned above, factors (or layers) include poor nutrition and housing, as well as fetal alcohol syndrome/effects (FAS/FAE), which had a bearing on a person's susceptibility to disease (Shostak and Brown, 1995:42). Deeper layers suggest irrevocable changes to the social and cultural aspects of the Aboriginal people within the area. These changes may not be directly related to disease and epidemiology, but they did play a role in the coping strategies and comprehension of the measles epidemic. Once again, FAS/FAE is related to both the sociocultural changes and immunity to disease. Morbidity rates peaked during an epidemic amplifying the loss of traditional knowledge and changes in spirituality. The broad generalization that epidemics related to an increase in morbidity and mortality rates, which, in turn, caused a decrease in the fur returns, can no longer hold true. In fact, epidemics were part of a more complex string of events.

To further analyze epidemics within the fur trade history, the methodology of ethnohistory has relevance to this study. Commonly used in Native Studies, ethnohistory focuses on "the significant role played by indigenous societies in structuring the history of the colonial powers" (Rogers and Wilson, 1993:8). It attempts to create an Aboriginal perspective from a non-Aboriginal bias found in primary documents such as those located in the Hudson's Bay Company Archives. As with the microhistorical approach, ethnohistory stresses the use of singular cross-cultural case studies, as this can have more impact as a total system of knowledge than a broad, general history of many groups

(Fenton, 1962). William Fenton (1962) reminds us that this is an approach, not a discipline, that can be used in addressing the problems with studying culture history.

Ethnohistory began with the American Indian Ethnohistoric Conference in 1954, which formed the base for the journal, *Ethnohistory* (Klein, 1997; Euler, 1972; Jennings, 1982). As a derivative of the terms *ethnos* (culture) and *historia* (history) (Klein, 1997), this approach is a combination of anthropology and history. Ethnohistory is characterized as utilizing sources from archival documents, linguistic evidence, and oral history which are combined with historical techniques to describe the history of pre-contact peoples (Brown, 1991). However, it is not without its problems. Jennifer Brown (1991:120), president of the American Society for Ethnohistory, remarked that although some integration has occurred, anthropologists and historians continue to be ignorant of each other's fields. DeMallie (1993:533) described the tension between the two disciplines as historians having interesting stories whereas anthropological analysis is useful only for chronological events. Throughout its evolution, ethnohistorians have, to borrow from Bernard Cohn as quoted by Brown (1991:117), studied other culture histories in time and space.

In her presidential address at the 1990 Annual Meeting of the American Society for Ethnohistory, Jennifer Brown (1991:115-6) stated that: "we borrow other people's methods, concepts, and tool kits, from linguistics, archaeology, geography, and literary criticism, and we thereby enrich our analyses, even if we risk making them more complicated and ourselves more confused." In his article, *What is Native Studies*, Peter Kulchyski expressed a similar sentiment albeit from the opposite perspective. He described Native Studies as a "lack of discipline," although it is also referred to as

multidisciplinary, bringing together academics from various disciplines such as history, anthropology, sociology and others (Kulchyski, 2000:20). Brown (1991) and Kulchyski make valid points; Native Studies is not fenced in by departmental disciplines. There is the freedom to study beyond any boundaries and constraints associated with traditional academic research. However, Native Studies is still responsible to the basic principles of academic research and ethical regulations.

One such example of the ethnohistorical approach is the human behaviour model created by Michael Trimble (1989). He combined epidemiology with historical information to examine the general variables and factors that influence the disease process. This model applies the basic concepts and principles of epidemiological theory to the various ethnohistorical data from primary sources of journals and diaries written during the corresponding time period. Trimble identifies the variables of disease, culture, biology, and environment, and how each variable works in relation to the others. Within the model, these two research methods are used to “integrate disparate information on epidemics and [provide] a means for evaluating the effects of disease on all aspects of [Aboriginal] society” (Trimble, 1989:42).

Disease variables include the pathogens, or infectious agents, as well as the stimuli had adverse physical, mental and social effects on Aboriginal people’s coping strategies. The concepts or methods used for controlling the immediate environment are the cultural variables. Biological variables are defined as changes in the genetic composition of individuals as a result of their coping strategies, and environmental variables include geographic location and climate (Trimble, 1989:42-43).

Trimble's model also takes into account the limitations of historical data. Since post journals, diaries, and correspondence were predominately written by Europeans, there is little to no Aboriginal perspective. These writers also incorporated their biases into the records. In addition, chief factors and post masters had little medical training, which resulted in the misdiagnosis of diseases and illnesses in many of their observations. This reduces the reliability of the records when researching information on specific diseases.

Trimble's objective is to construct a framework that will identify where specific disease-related behaviours could have occurred within a Plains village (Trimble, 1989:52). These behaviours center on the epidemiological factors of low birth rates, increases in mortality and morbidity, and diffusion through social contact. Unfortunately, the sociocultural consequences of an epidemic are neglected. The decreased capability to provide subsistence needs through trapping and trading also bear on the epidemiological factors (Taylor, 1977; Ray, 1991; Peers, 1994). In the case of the 1819-20 measles epidemic at Brandon House, other factors played a role in altering the cultural make-up of the Northern Plains groups. The Hudson's Bay Company was experiencing changes in their economic policy due to the Napoleonic Wars, as well as the introduction of new agricultural pursuits in the Red River settlement. To make Trimble's model applicable in studying the measles epidemic, it will need to be modified to include these factors.

Disease in Historical Literature

New mosaics of identity and ethnicity were created in the Aboriginal population in the Brandon House area following epidemics. Blended families, loss of role models, and unions between Aboriginal nations occurred, which changed people's familial, cultural and national identities. The concept of ethnicity adopted by Laura Peers (1994) from Fredrick Barth is useful in examining these relationships of cultural changes. Ethnicity involves the "feeling of belonging to a group of people" who share a similar background and lifestyle, which is passed on from generation to generation (Peers, 1994:xi).

The economy of the fur trade was based on the success of the trappers whose economic prestige was related to the quantity and quality of the beaver pelts trapped (Sharrock, 1977). The Native Plains people, such as the Plains Cree and Assiniboine, trading at the posts and factories of the Hudson's Bay Company, were generally the middlemen of the fur trade (Giannettino, 1977:25; Milloy, 1990:55). During times of epidemics, the economy of the fur trade suffered disruptions.

A general increase in trade practices after a major epidemic has been recorded; yet little research has been done to comprehensively examine these economic consequences (Taylor, 1977). John Taylor (1977:63) pointed out this gap in the literature, and noted that "no study of the Hudson's Bay Company or American Fur Company records has been made to investigate this phenomenon." More than a decade later, Michael Trimble (1989:41) also recognized that "... the role of infectious disease in altering Plains lifeways has been, by and large, a neglected topic." Still much required research needs to be done since, at best, articles such as those by Taylor (1977) and

Trimble only highlight some of the epidemiological consequences that impacted fur trade practices and patterns. The result is a collection of studies containing vague generalities and lacking deeper analysis of comparative theoretical issues. The literature still needs to examine the causes and consequences of epidemics on the social, political, and economic practices in the fur trade.

Arthur Ray's (1974) groundbreaking *Indians in the Fur Trade* explores migration, epidemics and population changes as a geographic collective process. He combines ethnohistorical data with geographical methodology thereby reinterpreting Aboriginal history. Unfortunately, the cultural aspects of the Northern Plains way of life were of secondary importance in the study. In so doing, Ray generalizes the various Northern Plains cultural responses to an epidemic as a single phenomenon where all groups acted and reacted in a similar fashion. For instance, during the 1780-82 smallpox epidemic, Ray (1991:105) describes the *stereotypical* response of the *non-identified* Indian:

Lacking any immunity to this European disease, the Indians suffered terrible losses. These losses were further increased by the Indians' reaction to smallpox after they contracted it. Once a victim came down with the disease, he and his companions generally considered his fate to be sealed and he was abandoned.

Scholars have shown a tendency to generalize such responses into broad, universal statements resulting in overgeneralization. It becomes difficult to research the differences in coping responses and strategies between various groups since there is a lack of specific data in the historical literature. In various fur trade literature, at best scant references are made about the trade at the posts. Harold Innis' (1930/1999) *The Fur Trade in Canada*, briefly mentions that the 1781 smallpox epidemic negatively affected the fur returns for that year. "Unfortunately smallpox had spread to the

Athabasca country and returns were light in 1782” (Innis, 1930/1999:199). This typical response illustrates how little research has been done to examine the consequences and changes in trade patterns. Furthermore, any data that is available has also been overshadowed by continuing research on the diffusion of disease, migration and depopulation.

In his doctoral dissertation, Paul Hackett (1999:7) acknowledged that each Northern Plains group responded differently to the cultural stresses caused by epidemics. As epidemics vary in their intensity, impact, and duration, each region experiences a different form of the epidemic. In extreme cases, as in the measles and whooping cough epidemic, some regions were not affected while others suffered moderate to severe increases in morbidity and mortality rates. It stands to reason that the descriptions and data from one area are not applicable to another or, at the least, should be used with caution.

According to Hackett (1991:1), the significance of epidemics has been underestimated as a factor of cultural change in the historical literature. Most epidemics were rarely examined or considered inconsequential to the acculturation process and the role of exchange in Aboriginal and fur trade history. The few studies that have focused on the cultural impact of epidemics have just begun to understand its significance. Trimble (emphasis in original; 1989:42) states: “evidence now suggests that epidemics represent one of the *major factors* responsible for altering traditional societies on the northern Plains, beginning perhaps as early as the seventeenth century and certainly occurring during the eighteenth century.” There is still a need to examine *how* epidemics altered the Northern Plains societies, especially at the individual group level.

One of the major effects of epidemic was depopulation. Arthur Ray (1974), Russell Thornton (1987), and Alfred Crosby (1976), as well as many others scholars, have examined mortality rates of Aboriginal populations since European contact. Old World diseases significantly impacted the pre-Contact population of the Americas. As a result, census data has become an important part of Aboriginal history, and epidemiological studies are no exception. Ray's (1974) *Indians in the Fur Trade* devotes a chapter to the mortality rates among various Aboriginal groups. In addition, Thornton's research concentrates on the impact of epidemics through depopulation. Mortality and morbidity rates have become a central issue in research that studies the effects of European contact.

Diffusion of epidemics has been linked with most epidemiological studies. Paul Hackett's (1991; 1999) Master's thesis and doctoral dissertation as well as Jody Decker's (1989) dissertation have extensively researched the diffusion of epidemics during the fur trade. Studying the social transmission of disease, the frequency of epidemiological eruptions, and the dynamics of the geographical distribution of epidemics, has shed new light on the predictability of epidemics, locations of epidemics, and when epidemics were most likely to occur. This research has increased the comprehension of the devastation of epidemics, and dismissed epidemics as a "wild card" in altering Aboriginal societies (Hackett, 1991:2). Epidemics can now be understood in the overall historical framework as a predictable occurrence with significant implications on Aboriginal and fur trade history.

CHAPTER TWO

Historical Overview: Understanding the Brandon House Fur Trade

In 1534, Jacques Cartier established the French fur trade in Canada. Sixty years later, Samuel Champlain expanded the trade network along the St. Lawrence and Great Lakes region. In the 1650s, acting on information from the Cree, Pierre Esprit Radisson and Médard Chouart Des Groseilliers sought financial assistance to find an alternative route into the interior of Canada. King Charles II of England financed the expedition and on 2 May 1670, granted a charter for the purpose of exploration and trade. The Company of Adventurers of England trading into Hudson's Bay (Hudson's Bay Company) was established.

Competition from the French traders and, later, the Canadian freemen forced the Hudson's Bay Company to expand their trade inland in the early 1770s. As a result, the fur trade entered into a new economic and political arena. The intense competition and expansion decreased monetary profits, especially for the Hudson's Bay Company, and rendered the trade an expensive endeavour (Bumsted, 1999:16). Although the Hudson's Bay Company's organization appeared to be stable, this was hardly the case for their main opposition, the North West Company. From the 1790s to 1804, the North West Company was plagued with the political restructuring of its partners. Ultimately, the Hudson's Bay Company took control of the North West Company, and the two amalgamated in 1821.

The fur trade companies were not the only ones to experience change. Aboriginal people were adapting to a new way of life as a result of the fur trade. Those living on the northern plains such as the Cree, Assiniboine, and Ojibwa, encountered numerous

transformations to their culture. The Cree went from a canoe/river-based culture to one that focused on the horse and plains (Milloy, 1988). The Assiniboine, who are close political and economic allies of the Cree, also experienced similar changes (Milloy, 1988; Ray, 1974). However, the fur trade did not economically drive the Ojibwa to the same degree as the Cree and Assiniboine (Peers, 1994). Within the fur trade, there occurred new economic endeavours for Aboriginal people; unfortunately, contact was also associated with the introduction of new diseases, such as the virgin soil measles epidemic of 1819-1820.

Establishment of Inland Fur Trade Posts and Routes

By the turn of the eighteenth century, French posts were established near Thunder Bay, at Rainy Lake, and Lake of the Woods (Lytwyn, 1986:5). In addition to this, outposts were located at the head of the Albany River, and along the Winnipeg, Saskatchewan, and Assiniboine Rivers. The French were further able to expand their network through the use of *coureurs de bois* who travelled to the trappers' tents to trade for furs (Lytwyn, 1986:6). The French maintained an active trade in this area until 1760 (Lytwyn, 1986:9).

The French shipped their goods along the Grand Portage route. Setting off from Montreal, voyageurs traveled to Lake Superior, then west through Rainy River. From Rainy Lake, the route leads to Lake of the Woods and the Winnipeg River system. From there, the *voyageurs* had the option of travelling north through Lake Winnipeg to the northern Manitoba and Saskatchewan areas, or south along the Red River to the Forks.

The French “pedlars” and the Canadian Freemen also followed the Grand Portage route since they received their year’s trading outfit in Montreal. These men were independent traders and were competition for the Hudson’s Bay and North West Companies. While a few independent traders still traded, by the late 1790s and early 1800s, most had joined with either the Hudson’s Bay or the North West Company.

The Hudson’s Bay Company remained closer to the Bay, establishing Albany House, York Factory, Fort Prince of Wales (Churchill), Moose Factory, and Eastmain House along the coast of Hudson Bay. Henley House was later established inland along the Albany River. By the late 1790s, an additional inland post was built at Lac Seul (Osnaburgh House) as well Martin’s Fall and Gloucester House were erected further up the Albany River. Initially these posts were built to compete with the *coureurs de bois*. Eventually the main role of the two latter posts became that of a supply and provisioning depot.

At Albany House, for instance, goods off the English ships were sent inland for trade with the Plains Cree, Assiniboine, and Ojibwa among others. These goods were shipped by canoe and *bateaux* along the Albany River to Lake St. Joseph. From there, the brigades continued through the English River to Winnipeg River and, eventually, to the southeastern shore of Lake Winnipeg. Similarly, the Hudson’s Bay Company men had the option to go south to the Forks or north into the Athabasca district.

The fur traders frequently located their posts beside lakes and rivers since the dispersion of trade goods depended upon the waterways (see figure 1). It also made sense to build posts at strategic points along these routes. First, erecting near the rivers and lakes meant little or no hauling of goods overland to and from the post. Second,

Figure 1

Hudson's Bay Company Fur Trade Posts 1832



Source: Williams, 1975: end map

posts were visible to the local Aboriginal peoples as they canoed along the waterways. Although a cursory glance at any fur trade map appears to illustrate that posts were erected en route, this is not the case. According to Wayne Moodie (1987:360), the Northwest fur trade “evolved independently, and in parallel stages, within the major economic regions [of] ... the Petit Nord ... and the Grand Nord...” The period between 1789 and 1804 is marked by a progressive in-filling of posts, as opposed to the monopoly era, which was dominated by the close proximity of rival trading posts (Moodie, 1987:372). The changing numbers and distribution of posts were a consequence of economic resources in furs and intense competition between the Hudson’s Bay and North West Companies (Moodie, 1987:372). Although the posts were not erected chronologically from east to west, there is a definite pattern as the location of the posts paralleled the expansion of the fur trade into the Petit Nord and the Grand Nord.

Local Aboriginal people were also influential in deciding the individual location of a post. It was beneficial for the trade to have a post in the vicinity of the trappers. Edward Clouston, a Hudson’s Bay Company employee, had been guided by the Ojibwa trading captain Matchey Huggemaw (the Bad Governor) in selecting the location of Winnipeg Lake Post near the mouth of the Manigotogan River (PAM HBCA B.236/a/1). Matchey Huggemaw encountered Clouston and his party waiting out a windstorm.

Clouston wrote:

at 4 PM an Indian called the bad Gov^r came to us in a Canoe and informed me that his & Wajseys family are laying about 3 miles from us and wants me to settle here at the Indians request I have come to a determination to settle hereabouts (PAM HBCA B.236/a/1, fo.2).

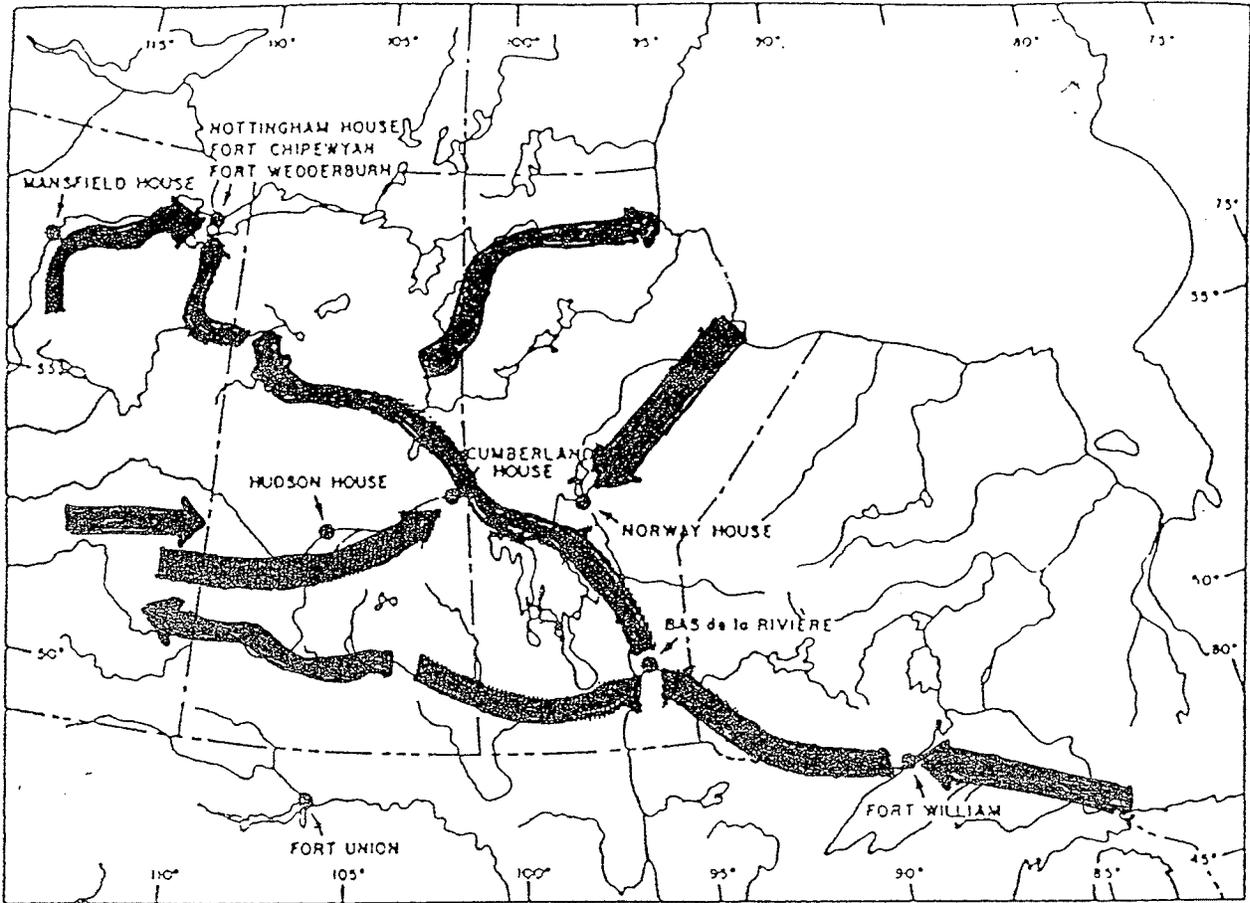
Clouston met up with Matchey Huggemaw somewhere near Lake Winnipeg in the Winnipeg River system, indicating that the waterways were a common mode of transportation. Canoeing offered the ability of quickly traversing long distances while carrying heavy cargo. In addition, the fur traders regularly followed the same routes making it easy to connect with the Aboriginal people. John Best's journals for the Hudson's Bay Company post at Red Lake (1791-93) (PAM HBCA B.177/a/2-4) and Bloodvein River (1794-95) (PAM HBCA B.254/a/1) as well as Edward Clouston's journal for 1796-97 (PAM HBCA B.236/a/1) illustrate that Matchey Huggemaw had been expecting their return to this area. The Ojibwa trading captain knew when and where to find these two Hudson's Bay Company men. These vast waterways were the "highways" of the fur trade; routes upon which the fur traders carried their goods, established their posts, and joined up with the Aboriginal people (see figure 2).

The Hudson's Bay and North West Companies

Following the Treaty of Paris in 1763, Britain gained control of the territory previously held by New France and subsumed the French trade. Originating in the French headquarters of Montreal, England's new expanded inland trade extended through Rupert's Land, which belonged to the Hudson's Bay Company, and continued outward to the Pacific Coast (Morton, 1967:38-39). Having conquered New France, the English were able to dominate the fur trade, for a short time at least. However, in the early 1770s, the Hudson's Bay Company began to report the return of the "pedlars," or the Canadian

Figure 2

Map of Fur Trade Routes



Source: Ray, 1984:264; Ray & Freeman, 1978:28

freemen, who would eventually form partnerships that led to the formation of the North West and XY Companies (Morton, 1967:38-39).

In 1795, the independent firms of Forysth, Richardson and Company; John Mure of Quebec; Parker, Gerrard and Ogilvy and Company; Phynn, Inglis and Company; and Leith, Jamieson and Company opted not to join with the old North West Company under the command of Simon McTavish and his nephew, William McGillvray (Rich, 1967:190). Instead, these firms continued to finance and organize free traders to compete with the Hudson's Bay and North West Companies. As E.E. Rich (1967:190) noted, "These [firms] were serious rivals in Canada in 1795, to add to [the] competition with the Hudson's Bay Company and to dispute the North West Company's plans for monopoly." In addition to this, Sir Alexander Mackenzie, backed by Forysth, Richardson and Company, created a new North West Company, also known as the XY Company, that was composed of old North West Company winterers/inland traders. After the death of McTavish in 1804, the two North West Companies amalgamated and "now got strength from both the McGillvrays and from Sir Alexander Mackenzie, both from the London agencies of McTavish, Frazer and Company and from Forysth, Richardson and Company" (Rich, 1967:195).

During the North West Company's period of reorganization, they continued to expand their trade network throughout the interior of Canada. The company expanded by taking control of other outfits, as in the case of Duncan Cameron. Cameron was supplied by Forsyth, Richardson and Company who shortly afterwards amalgamated with the North West Company (Lytwyn, 1986:81). As a result, Cameron became a wintering partner to the North West Company. In this manner, the North West Company quickly

absorbed the Canadian trade, and thus, competed directly with the Hudson's Bay Company (Lytwyn, 1986:81).

In the years leading to the merger of the Hudson's Bay and North West Companies, the competition intensified. Neither company would relinquish the upper hand to their competitors, even if this meant trading at a loss. This was definitely the case between the Hudson's Bay and North West Companies. Rich noted (1967:216):

The Nor'westors were well aware of the economics of competition. They were prepared to trade at a loss where there were rivals in the field, both to win over the Indians and to drive the opposition to a losing trade; where they had the whip hand they exploited their advantage and recouped their losses. The Hudson's Bay men therefore concluded that they could not "avoid this Species of Malicious opposition by any partial concession." To make an arrangement in one district would only be to unleash greater strength against themselves elsewhere. Competition must be total. Accordingly, in 1814 the Company decided that it must undertake a vigorous, even an expensive, campaign in Athabasca.

Although the inland country could support all the Companies' fur trade, the Hudson's Bay Company chose to adopt a more aggressive policy. Edward Umfreville of the North West Company wrote to Albany House that: "the Country is big enough for us all, there are animals enough, but Indians diminish fast by ye operation of your Brandy and Canadian Rum" (PAM HBCA B.3/b/22, fo.44). However, Edward Jarvis, the chief factor at Albany House, thought otherwise and was determined to drive the Canadian and North West Company traders out of the area (Lytwyn, 1986:50). In following the policy of inland expansion, new posts were erected to increase the fur trade competition. As will be noted later on, this policy mirrored that of the push into the Athabasca.

Between 1783 and 1821, competition intensified between the Hudson's Bay and North West Companies with a record number of posts and fur traders in operation from 1790 to 1810 (Lytwyn, 1993:377). This increase in the number of posts is accounted for

by the fur trade companies building next to each other. In 1795, Chief Factor Joseph Colen had instructed William Sinclair “to pursue every necessary Plan to promote the Honble’ Company’s Interest Keep a watchful Eye over the Canadian Traders and wherever they remove to build follow them and erect a House near” (PAM HBCA B.239/b/56, fo.28). The return of the “pedlars” forced the Hudson’s Bay Company to be more active inland, and to adopt aggressive trade policies to compete with the opposition. This period has been characterized by acceleration in the building of posts due to intense competition.

The Hudson’s Bay Company began experiencing financial difficulty in 1801, which ten years later led to their Retrenching System. The annual dividend paid to the shareholders dropped from six to four percent, where it remained until 1806 (Rich, 1967:186). Although the shareholders were untroubled by the depreciation in the Company, it was reported in 1809, that “the Affairs of the Company at their Factories and Settlements in Hudson’s Bay continue to prosper” (PAM HBCA A/1/49/78, 85 cited in Rich, 1967:187). Such prosperity was to be ensured by minimizing frivolous expenses and a thorough auditing of the accounts, as well paying the superintendents, factors, and traders a share of the profits for their trade in furs (Rich, 1960:292). Known as the Retrenching System, this reorganization would help to strengthen the Company as it prepared to further expand into the Athabasca district.

As part of the Retrenching System, the Hudson’s Bay Company divided its territory into two departments, the Northern and Southern. The Northern Department consisted of the posts lying to the west of the Lake Winnipeg drainage system (Lytwyn, 1986:129). This included York Factory, Churchill, and their outposts, the posts along the

Saskatchewan River, and those located to the south and west of Lake Winnipeg (Harris, 1994:14). The posts lying to the east of the Lake Winnipeg basin, which included Albany, Moose, Eastmain, and their outposts, were relegated to the Southern Department (Harris, 1994:14; Lytwyn, 1986:129). To aid in the Company's management of their new departments, the position of Governor-in-Chief was created and, in 1815, each department answered to a new governor (Harris, 1994:14).

In addition to the administrative and policy changes, the establishment of an agricultural community had evolved from the Retrenching System. Historian W.L. Morton (1967:44) argued that the Retrenching System was partly founded on the "establishment of an agricultural colony at Red River." For Lord Selkirk, his plan of colonization fostered his involvement in the fur trade (Bumsted, 1999:18). Selkirk, along with his brother-in-law Andrew Wedderburn-Colvile, envisioned a long-term reorganization that was based upon the legality of the Charter granted to the Company (Bumsted, 1999:21). Wedderburn-Colvile focused on the business aspects, while Selkirk proceeded with his plan of establishing his Red River settlement. This settlement would play a dual role in the fur trade. First, it would help to defray some of the expense of transporting food and supplies for the fur trade by supplying agricultural produce to the posts and brigades (Morton, 1929:103). Second, as the employees retired from the service of the Company, they were offered a parcel of land on which to settle and further contribute to the agricultural community (Morton, 1929:103). In 1812, Lord Selkirk saw his plan implemented with the arrival of settlers in Red River, and the beginnings of a community, which was located along the canoe route to Brandon House.

While the Hudson's Bay Company was experiencing financial difficulties during the first decade of the 1800s, Great Britain was contending with two wars. In the Americas, the War of 1812 was fought for several reasons including control of the St. Lawrence Seaway (Naylor, 1987:160). With the American capture of Detroit and control of the seaway, the North West Company had little choice but to proposition the Hudson's Bay Company to allow temporary passage into Hudson Bay (Rich, 1960:311). While this had been granted to the North West Company in 1813, they were unable to renew the concession the following year (Rich, 1960:311). In 1814, Britain saw the end of the Napoleonic Wars when France had attempted to exterminate British access to export and trade (Naylor, 1987:154). By disrupting and blockading trade routes, Napoleon had hoped to "undermine [Britain's] public and private credit," and thus render it unable to engage in warfare and to safeguard its colonial trade (Naylor, 1987:154-55). Although Napoleon nearly collapsed the British economy, he was unable to capitalize on Britain's economic difficulties and the markets opened to trade once again, by which the Hudson's Bay Company prospered (Naylor, 1987:155; Rich, 1967:216).

By 1811, the competition in the fur trade could be described as hostile, bloody, and ruthless. The "fur trade wars," aptly characterized by Jack Bumsted (1999), would not come to an end until 1821 when the North West and Hudson's Bay Companies amalgamated. In 1816, hostilities climaxed at Seven Oaks, ending in the death of several men. This event has been blamed on an antagonistic North West Company attempting to lessen the economic advantages of the Hudson's Bay Company (Bumsted, 1999:141-48). It was also a consequence of the Aboriginal and Métis people's grievances towards the Hudson's Bay Company and the Crown (Bumsted, 1999:150). Although it appears that

the Hudson's Bay Company successfully won the fur trade wars, they continued to encounter active competition from the Canadian freemen, old North West Company men and the Métis for several years.

The Ojibwa, Cree and Assiniboine

Aboriginal peoples played a strong role in the development of the fur trade. They fulfilled the roles of trappers, voyageurs, and guides, to name but a few. In addition to these roles, they supplied pemmican and other country foods to fuel the brigades that traversed the country. Aboriginal peoples were the foot soldiers and middlemen of the fur trade, and the means by which the fur trade progressed.

Scholars have debated the plausibility of a Cree westward migration as a result of the fur trade. Historical geographer Arthur Ray (1974) and historian John Milloy (1988) postulate that as early as the 1690s the Cree and Assiniboine expanded south and westward into the plains area. Entries from explorer and fur trader Anthony Henday's 1754 journal indicates that the Assiniboine traveled as far as Battleford, Saskatchewan to trade with the Blackfoot (Milloy 1988:10). Like the Assiniboine, the Cree also expanded westwards; however, their movement was in a northerly direction into the area between Lake Athabasca and Reindeer Lake (Ray, 1974:22). After 1720, the Cree expansion took a more southerly course due to armed conflict between the Cree and neighbouring Aboriginal peoples (Ray, 1974:23). According to Arthur Ray (1974:22-23), the Cree and Assiniboine's territories paralleled each other across Manitoba and Saskatchewan, ending on the eastern edge of Alberta. He (Ray, 1974:23) attributes the Cree and Assiniboine's

territorial expansion, including a shift in a northwestwardly direction, to their participation in the fur trade and, in particular, to their involvement with the Hudson's Bay Company. After 1763, the migration of the Cree and Assiniboine stabilized, with only minor territorial adjustments occurring afterwards (Ray 1974:23).

Dale Russell (1991) argues that there is no evidence for a Cree migration. He (Russell, 1991:61, 82) states that the hypothesis of a Cree migration reflects the Europeans westward advancement into the interior instead of Aboriginal peoples. According to several archival sources, Russell (1991:131) determines that the homeland of the Cree and Assiniboine was in the Manitoba Lakes area. First-hand accounts from Henry Kelsey and Father Silvy, for example, support Russell's (1991:130-32) hypothesis that the Cree and Assiniboine were already residing in this area by the advent of the fur trade. Kelsey's use of Cree words for the Red Deer and Assiniboine Rivers (although he was travelling with the Assiniboine), and Father Silvy's entry regarding the location of their villages being fifteen to twenty days from York Factory provide some of the earliest historical documentation for the existence of a southern homeland (Russell, 1991:130-32).

As the Europeans moved westward from Hudson Bay, they encountered three tiers or groups of Cree – the southern, central and northern tiers. The southern tier, which is the focus of this thesis, included the Cree who lived to the “west and south of Lake Manitoba and Lake Winnipegosis” (Russell, 1991:129). In 1691, Henry Kelsey's journal indicates that there were Cree in the upper Assiniboine area (Russell, 1991:130). The French presence in this area during the early eighteenth century meant that the Cree and Assiniboine had little need to travel to or trade with the Hudson's Bay Company on the

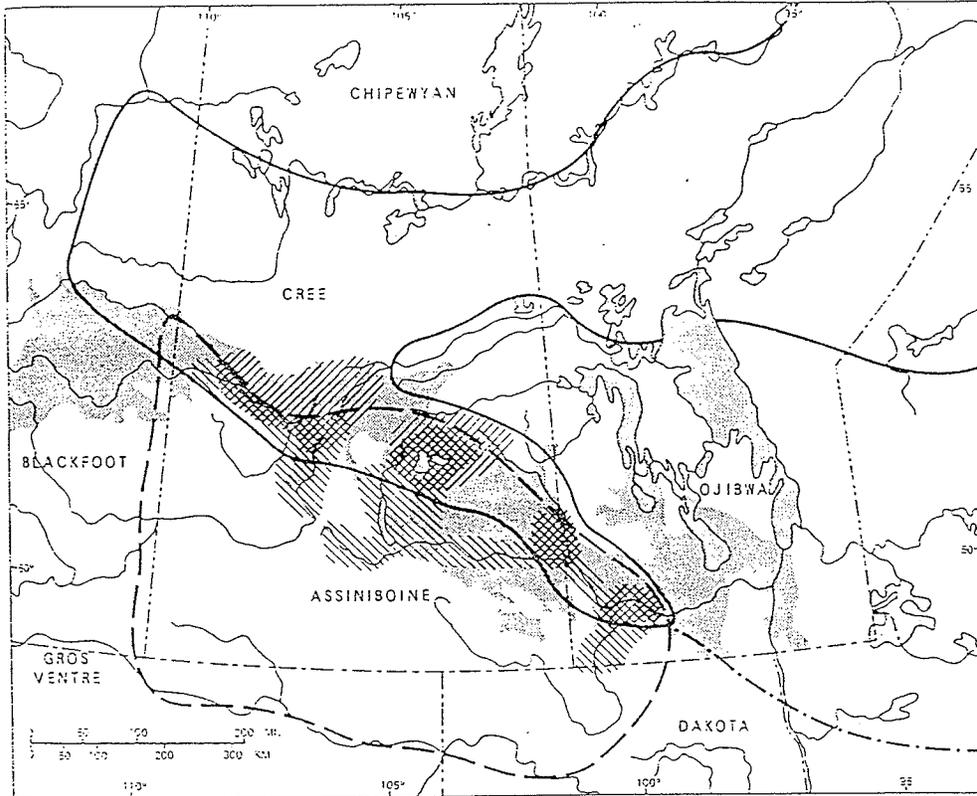
Bay, and thus, there is little recorded information on these Aboriginal peoples (Russell, 1991:129). However, the identities of various Cree and Assiniboine groups and their homelands have been tracked. Following Russell's (1991:133-136) argument, it appears that the Cree of Brandon House may have been the Mountain or Askee Cree of the Manitoba Escarpment region. However, Ray (1974:21, 57) determines that this mountain area was further west, stretching from the Upper Missouri River to the Rockies; as well, he identified the former as Mandan or Hidatsa, and the latter as the Gros Ventre. Furthermore, Ray is unclear in identifying any specific group of Cree and Assiniboine living near the Manitoba Escarpment and, in particular, near the Souris and Assiniboine Rivers prior to the 1790s. After this time period, Ray (1974:95, 97, 100) maps the distribution of the Little or Young Girl Assiniboine and the Brandon House Cree in the areas of the Souris and Assiniboine Rivers (see figure 3).

Historians also proposed a westward migration of the Ojibwa; however, it is not known whether the ethnonym (the name *Ojibwa*), or the people travelled onto the prairies and parkland (Peers, 1994:4-5). In her comprehensive study of Ojibwa history, Laura Peers (1994:4-21) outlines the two schools of thought on this argument. Early records and research⁴ indicate that the Ojibwa originated in the Lake Superior area. Later on, Alexander Henry the Elder noted in his 1775 journal that a large population of Ojibwa had existed in the Boundary Waters area whose numbers were diminished by warfare. Although there were hostilities between the Ojibwa and Sioux over the Boundary Waters

⁴ For more information Adolph Greenberg and James Morrison (1982) wrote an article on the migration of the Ojibwa entitled "Group Identities in the Boreal Forest: The Origin of the Northern Ojibwa" in *Ethnohistory* v.29.

Figure 3

Delineations of Territories



TRIBAL DISTRIBUTIONS IN 1821

- Approximate limits of Cree Territory
- - - Approximate limits of Assiniboine Territory
- · · Approximate limits of Ojibwa Territory
- ▨ Principal wintering grounds of the Plains Cree*
- ▧ Principal wintering grounds of the Assiniboine*
- ▩ Parkland Belt

*Brandon District Report 1322-23, PAC HBC B 27/e/2 and Carlton District Report 1315, PAC HBC B 22/e/1.

Source: Ray, 1974:101

area, the Ojibwa continued to move westward into the territory left vacant by the Cree and Assiniboine migration. This “vacuum” created by a Cree and Assiniboine migration may not have existed since there is no conclusive evidence of the Cree and Assiniboine leaving the area. As well, it is highly probable that the Ojibwa could have peacefully coexisted with other groups. Peers also points out that the name Ojibwa may not refer to the same group today as it did in the seventeenth and eighteenth centuries. Thus, the question remains as to why there occurred an arrival of Ojibwa people in the west.

Laura Peers (1994:4) answers this question by arguing that the “emergence of the western Ojibwa is tangled with the development of the fur trade and, ultimately, with the very reasons for Native participation in the trade.” Prior to the fur trade, like so many other First Nations, the Ojibwa were already involved in an Aboriginal trading network. Thus, the fur trade and European goods were easily adapted into existing Ojibwa culture (Peers, 1994:10). As the fur trade continued its expansion, this brought new economic opportunities, especially with the North West Company. During the 1780s and 1790s, a period of intense competition, the North West Company encouraged Ojibwa participation in the fur trade and their subsequent move out west (Peers, 1994:14). Hudson’s Bay Company employee Peter Fidler records that circa 1797, the North West Company “introduced [the Ojibwa who were].... induced by the Reports of the Canadians that Beaver abounded here” (PAM HBCA B.51/e/1, fo.15d). Although the Ojibwa did not sign any “formal” contracts with the North West Company, two arrangements made to bring the Ojibwa west are known in the archival records (Peers, 1994:14-16). One was reported in the Edmonton House journal of 1795, making reference to the Ojibwa coming

to Red River with the “new company.”⁵ The other is an arrangement made by David Thompson to bring the Ojibwa to hunt in the foothills. To maintain their valuable position as trappers, the Ojibwa found it lucrative to take advantage of the abundant resources and furs in the west (Peers, 1994:17-18).

After 1760, the Ojibwa had established themselves west of the Boundary Waters area and, by the early decades of the 1800s, they were in the vicinity of the Red River (Peers, 1994:5, 49). While the advancement into new territory was partly due to the fur trade company’s encouragement (Ray, 1974:104), the Ojibwa also migrated for sociocultural desires (Peers, 1994:7). Following the smallpox epidemic of 1780-83, the Ojibwa population had been devastated and the land to the west offered the possibility of better economic opportunity without the harsh reminder of death (Peers, 1994:18-21). With the creation of new alliances with the Cree and Assiniboine, the Ojibwa continued to expand westward, and some eventually resided around Brandon House.

Beginning in the 1760s and by the 1770s, the Cree and Assiniboine had established their role as middlemen in the parkland region of the North Saskatchewan and Missouri Rivers (Giannettino, 1977:25; Ray, 1974:90). As middlemen, these two groups were in a lucrative position in the fur trade. They had the ability to control the distribution of furs and trade goods between the Europeans and other Aboriginal trappers who were located on the periphery of the trade.

Information from Anthony Henday (Milloy, 1988:17; Ray, 1974:90) and Matthew Cocking’s (Milloy, 1988:11) journals illustrate the economic potential of the middleman. Rather than “being a slave to the fur trade” spending the majority of their time on

⁵ The “new company” possibly refers to the XY Company, which was also called the New North West Company (Rich, 1967:191; Yerbury, 1986:68). The XY and North West Companies were both in operation at this time, until they amalgamated to form the North West Company in 1804.

trapping, the Cree and Assiniboine had the opportunity to concentrate on subsistence hunting. This enabled them to be independent of the fur trade for necessities while taking advantage of the luxuries associated with new European goods. In 1755, Heday described the Cree and Assiniboine as traveling between York Factory and the distant Blackfoot nations in Saskatchewan. He observed that the Cree and Assiniboine “purchased great number of Wolves, Beaver and Foxes...which proves what the Woman formerly told me concerning the Natives getting part of their Furs from the Archithinue [Blackfoot] Indians” (PAC M.G. 19, A18 D5B cited in Milloy, 1988:17). Matthew Cocking wrote a similar description seventeen years later (Milloy, 1988:11). The Blackfoot had little interest in travelling long distances to York Factory to trade; thus, Cree and Assiniboine traders visited the Blackfoot each March to collect furs, and returned each winter with European goods. The Blackfoot were content to trade through Cree and Assiniboine middlemen and fashioned these circumstances into their own advantages.

The middleman role was not simply a matter of denying access for other Aboriginal peoples to trade at the posts. Middlemen also maximized the benefits of their geographic position and manifested their role as traders (Milloy, 1988:16). Throughout the eighteenth century, the Cree were able to utilize their control over the plains to determine who would receive European goods upon which they set a high tariff or tax (Milloy, 1988:16). Cree traders understood the necessity of sharp bargaining skills and had the ability to maintain their economic status within the fur trade system.

As the trade expanded inland, new Aboriginal groups held this middleman position. Susan Giannettino (1977:23) termed this, “the middleman role complex,” a

process of political and socio-economic relations between trading groups. Often there occurred new patterns of alliances between different Aboriginal nations. As noted earlier, in the eighteenth century the Cree and Blackfoot maintained a successful alliance. However, this began to break down in the early 1800s with a realignment of the Cree-Blackfoot alliance. The Cree military and trade patterns were altered “as a consequence of the changes in fur-trade organization and this social transformation” (Milloy, 1988:xv). Ultimately, conflict occurred “as a direct response to the middleman trade position” (Giannettino, 1977:23). Politically and economically, various Aboriginal nations would join together to maintain and protect this lucrative position, or to compete for control of the trade as it moved inland through the prairies and parkland.

Brandon House

Towards the end of the 1700s, the North West and Hudson’s Bay Companies had established posts on the Assiniboine and Rainy Rivers. Expansion into this area was not solely for the acquisition of furs, for “the regions around these posts were important for their supplies of pemmican and birchbark canoes respectively” (Lytwyn, 1986:73). In 1793, the Hudson’s Bay Company established Brandon House as a supply and provision post for the fur trade (PAM HBCA Brandon House Search File). Built near the junction of the Souris and Assiniboine Rivers, Donald McKay considered this location as “being in the Center of this Country and in the mid[d]le [?] among the Canadians” (PAM HBCA B.22/a/1, fo.8). On 16 October 1793, he christened the post, and treated his men “with

Grogg to drink [to] the Companys health & success, as Canadians is going up to [the opposition to trade]” (PAM HBCA B.22/a/2, fo.8d).

Donald McKay was correct in his observation that Brandon House was erected among the Canadian freetraders and the North West Company men. Ten years later John McKay, who was in charge of Brandon House, wrote several entries in his journal complaining about the competition with the XY and North West Companies (PAM HBCA B.22/a/10). Particularly, John McKay had concerns about the XY Company men who were characterized as crude rascals and thieves (PAM HBCA B.22/a/10, fo.7). He disapproved of the XY Company men trading “Silver trinkets Wampum Beads, Cloth and Blankets for meat, A Body would think they came here merely to eat, not to get Furrs” (PAM HBCA B.22/a/10, fo.3). Apparently, the trade in this area focused more on meat than acquiring furs.

Brandon House’s primary role was to supply pemmican to fuel the Athabasca brigades. Pemmican, made from dried buffalo meat and fat with occasional berries, was the ideal food source for the fur trade. Because it could be carried easily and did not rot quickly, pemmican could be made in advance and stored until required. Buffalo were plentiful in the area, and the Aboriginal hunters brought “nothing but Meat, Meat for ever” (PAM HBCA B.22/a/10, fo.5d).

Supplying the pemmican and bags for the posts created an economic opportunity for the local Aboriginal hunters and their families. In his journals for 1817-18 and 1818-19, Peter Fidler recorded the local Aboriginal women making bags to contain the pemmican (PAM HBCA B.22/a/20-21). Unfortunately, there are no entries regarding the remuneration for the women’s labour; however, it is probable that the women would have

received some form of payment. Aboriginal men hired as hunters did receive skins and a supply of ammunition for their services from the Hudson's Bay Company (PAM HBCA B.22/a/20, fo.21).

Aside from its involvement in the fur trade, Brandon House played an important role as a protector for Lord Selkirk's Settlement, and as a provider of agricultural provisions, when required. For instance, three years after the Seven Oaks Massacre, the post assisted the settlers from any further harassment by the North West Company (PAM HBCA B.22/a/21, fo.31). As well, in the early years of the settlement, and following lean winters when crops were poor, Peter Fidler provided supplies to the colonists (PAM HBCA B.22/a/21, fos.31, 50d). Prior to the measles epidemic of 1819-1820, Fidler's obligations to aid the fledging colony increased. With a summer plagued by grasshoppers and a scarcity of buffalo, there were little provisions for the people. Combined with the Aboriginal people succumbing to measles, this increased the difficulties of ensuring adequate food for all.

Competition between the Hudson's Bay and North West Companies accelerated the inland expansion of posts and created economic opportunities for the Plains Cree, Assiniboine and Ojibwa. Aboriginal people became heavily involved as trappers, *voyageurs* and middlemen in the fur trade. It was this latter role that impacted their economic system the most. As middlemen, they traveled between peripheral Aboriginal communities and the posts. Their movement, whether as individuals or groups (such as the Ojibwa), reflected the expansion of inland posts and the development of the fur trade. However, the spread of disease mirrored the increased activity of the competition in the

Petit Nord and, consequently, the contact between Aboriginal peoples and European traders resulted in the outbreak of virgin soil epidemics.

CHAPTER THREE

1819-1820 Measles Epidemic: Transmission, Diffusion, and Health

In discovering the New World, Christopher Columbus exposed the indigenous populations to new diseases. Since there was no previous exposure to Old World diseases, the indigenous people had no acquired immunity and suffered high morbidity and mortality rates. Epidemics such as smallpox, whooping cough, and measles, decimated entire villages and nations resulting in the severe loss of kinship and community members. Those who survived sustained immense cultural and social changes. Over time, epidemics immeasurably altered the demographics of the indigenous people, creating a new environment different from their old one to which they could never return.

The spread of disease preceded direct contact between Europeans and Aboriginal peoples. Changes that resulted from the spread of disease would also have occurred prior to contact, and thus, any records would reflect post-epidemiological behaviours. As well, mortality rates and, by extension, pre-contact population counts are, at best, educated guesses. Various scholars have estimated the North American population on the eve of contact from 900,000 to 18,000,000 (Ubelaker, 1992:171). Post-contact estimates have fared no better. In the *General Report of the Red River District by Peter Fidler 1819 May*, Fidler provides minimal detail of the number and location on the Assiniboine, Cree and Sioux (Ojibwa) of the area (PAM HBCA B.22/e/1). However, John McDonald's 1822 report on the same area is more explicit, allowing for a better understanding of demographic changes (PAM HBCA B.22/e/2). Although this type of research is based

upon estimates and guesses, the severity of an epidemic as it quickly diffuses through the population is well known.

Transmission and diffusion of highly infectious diseases are generally carried out through direct contact. The rate of recovery may be increased by good health, proper living conditions, and good nutrition. These factors boost the immune system, which combats invading infections and viruses. Once recovered from diseases such as smallpox, measles, and whooping cough, there occurs permanent, or life-long, immunity, in which there is no further possibility of contracting or transmitting the disease. In virgin-soil⁶ epidemics, such as the 1819-1820 measles epidemic, the morbidity rates could reach as high as one hundred per cent; however, poor health decreased the chance of recovery and increased mortality rates.

Characteristics of the Measles Virus and Its Transmission

Viruses are categorized as either directly or indirectly transmitted. Direct transmission follows a direct pathway from person to person (Ramenofsky, 1987:145). Humans are also the only host for a directly transmitted virus, and where it spends its entire lifecycle in its human host. A few common examples of such viruses include smallpox, influenza, and colds. It should be noted that an indirectly transmitted virus has a more complicated lifecycle. These viruses spend a part of their lifecycle in a non-human intermediate host, such as an animal, or in the soil (Cohen, 1989:33; Ramenofsky, 1987:145). Zoonotic infections are transmitted to humans through vectors, or

⁶ Virgin-soil epidemics refer to the introduction of a disease or virus into a population that has no previous exposure, and is typically characterized by high morbidity and mortality rates (Hackett, 1991; Ramenofsky, 1987).

anthropods, such as mosquitoes (malaria and yellow fever), rodents and fleas (Bubonic Plague), and soil-borne bacteria (tetanus and botulism) (Cohen, 1989:32-5). Smallpox (*Variola major*), although considered a directly transmitted disease, may also be transmitted indirectly through fomites, which are inanimate and personal articles such as blankets or clothes (Hackett, 1991:14, nf. 2; Roberts, 1978:2). Since zoonotic infections are spread indirectly between people, they tend to have lower mortality rates than directly transmitted viruses (Cohen, 1989:35).

Measles is considered an acute infectious disease that is transmitted directly between individuals. Acute crowd infections are characterized by “abrupt onsets, relatively short durations, and nonrecurrence” through lifelong or permanent immunity (Ramenofsky, 1987:139). Because the measles virus infects only those who have had no previous exposure, the disease flares up quickly within a population, and remains viral until all are immune or everyone has died. Once an acute crowd infection has faded out, it needs to be reintroduced into the population by external individuals who have no immunity. With acute crowd infectious diseases, the virus remains viable only when the population can maintain an epidemic state. Once the number of people drops below this critical level, the virus dies out and, can only be reintroduced by people immigrating into the community who are not considered immune. The cycle begins again, as the virus is transmitted via people.

Viruses classified as directly transmitted are also highly infectious and are generally transmitted through inhalation, except for smallpox (*Variola major*), which may also be spread through contaminated articles, as noted above. Viral acute crowd infections are spread by droplets of moisture or mucus while talking, coughing, or

sneezing, and enter through the upper respiratory tract (Ramenofsky, 1987:146). Once infected, symptoms include coughs, fevers, rashes, and pustules. The period of communicability (contagiousness) and virulence varies among infections. Colds are contagious for approximately twenty-four hours whereas smallpox and measles can be transmitted from one to two weeks (Ramenofsky, 1987:146-47; Hackett, 1991:14). As a result, directly transmitted viruses with a longer period of communicability have the ability to diffuse quickly throughout a population.

A population affected by an acute crowd infection (resulting in permanent immunity) may be divided into three categories: susceptibles, infectives, and immunes (Hackett, 1991:16). Susceptibles are those who are at risk of contracting the virus. This section of the population has never been exposed to the virus; and therefore, have no immunity. Infectives are those who are infected with the virus and have the ability to transmit it to others. Immunes have recovered from the virus and cannot become susceptible to the virus or transmit it to others. This last category is considered to have permanent immunity, ensuring nonreoccurrence of the virus.

The occurrence of the virus in disease form may be either endemic or epidemic. Under endemic conditions, the majority has become immune, and “act to dilute the susceptible population, limiting or slowing [the] diffusion [of the virus]” (Hackett, 1991:16). Immunity is maintained within the population due to repeated exposure. Isolated outbreaks of the infection maintain the disease, so that it does not die out entirely (Ramenofsky, 1987:139). However, when the majority of the population are susceptibles, an epidemic becomes possible (Hackett, 1991:17). Since the population lacks immunity, the epidemic becomes “a concentration of disease in time and space”

(Ramenofsky, 1987:139). Compared to endemic conditions, epidemics randomly affect all community members, regardless of age or gender, resulting in characteristically high mortality and morbidity rates. This is especially prevalent when the virus, or disease, is introduced to a previously unexposed population.

Virgin soil epidemics refer specifically to the introduction of a new virus into a population. However, historical geographer Paul Hackett (1991:16, nf. 5) argues for a broader definition, which permits for subsequent outbursts of the epidemic. A reintroduction of the virus into a population with very few immune individuals “would have little effect on the course of an epidemic,” and thus, would behave in a similar manner as a virgin soil epidemic (Hackett, 1991:16, nf. 5). Extremely high mortality and morbidity rates would result with morbidity (sickness) rates reaching nearly one hundred per cent. By adopting Hackett’s broader definition, it is acceptable to consider multiple epidemics as virgin soil, as in the case of the 1819-20 measles epidemic.

The physical manifestations of the virus become distinguishable as the infection progresses. The measles virus⁷ has three stages, each with different characteristics. The first stage consists of the latent phase. This lasts from eight to twelve days, and does not show any visible symptoms. Next, the prodromal phase (pre-warning or pre-eruptive stage) is marked with “reddened, watery eyes, nasal discharge, coughing, fever, and a reddened mucosal lining of the mouth with clustered white spots call Koplik spots” (Ball, 1977:239; Brincker, 1938:807; cited in Hackett, 1991:13). This stage lasts approximately two to four days. The prodromal phase is the most critical for the spread of the virus as during this time only the cold-like symptoms are displayed and isolation of the infected

⁷ The infectious agent for the measles virus is a member of the Paramyxovirus group, and should not be confused with German measles, which is Rubella (Cliff, Haggatt, and Ord, 1986:10-11; Ramenofsky, 1987:147).

individual is less likely to occur (Cliff, Haggert, Ord and Versey, 1981:42). The measles is easily diagnosed in its final stage, or external phase. Its characteristic red rash begins behind the ears, then spreads to the face, body, and limbs (Hackett, 1991:13-14). The duration of the external phase may be as short as four days, or as long as seven to ten days. According to Paul Hackett (1991:14), it is during the prodromal and early part of the external phase that an infected person is capable of transmitting the measles virus (see table 1).

Two smallpox epidemics had occurred, one prior to and the other following the 1819-20 measles epidemic. As mentioned above, the layman can easily and correctly diagnose the symptoms of measles during its final stage. Since diagnostic information is contained within the historical records, which are written by non-medical persons, it is difficult to distinguish diseases at the onset and during the early stages. Rashes or pustules, for instance, characterize both smallpox and measles. Smallpox pustules also form on the bottom of the hands and feet, and erupt leaving pock marks over the entire body (Fenner, Henderson, Arita, Jezek and Ladnyi, 1988:19-23, 49). Symptoms of whooping cough are difficult to distinguish from measles during its coughing or catarhal stage (Hackett, 1991:14). It is only with the appearance of the Koplik spots and the rash that measles can be distinguished apart from smallpox and whooping cough (Fenner et al., 1988:61; Hackett, 1991:14).

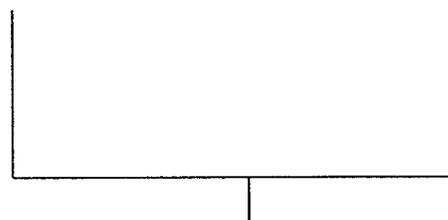
Over time, the virulence of a disease stabilizes and settles at an equilibrium value determined in part by population size and density (McGarth, 1988:236). Janet McGarth (1988:236) argues that the “stable state of disease prevalence” oscillates around the equilibrium value until the virus and population “evolve into a state of mutual

accommodation.” At this point, the virulence decreases to a moderate stage through mutation or becomes a childhood disease. As the older population becomes immune, and the disease is endemic, children provide the “continual pool of individuals necessary for perpetuation of [acute infectious] viruses, and this pattern leads ... [to] the designation of ... [these] infections as childhood diseases” (Ramenofsky, 1987:148).

Table 1

Characteristics of the Measles Virus

	Latent stage	Prodromal stage	External stage
Description of stage	no visible symptoms	reddened watery eyes; nasal discharge; cough; fever; Koplik spots	characteristic red rash
Length of stage (days)	8 – 12 days	2 – 4 days	4 – 7 or 10 days



During the prodromal and early external phases a person is most capable of transmitting the measles virus.

Source: Hackett (1991) and Ramenofsky (1987)

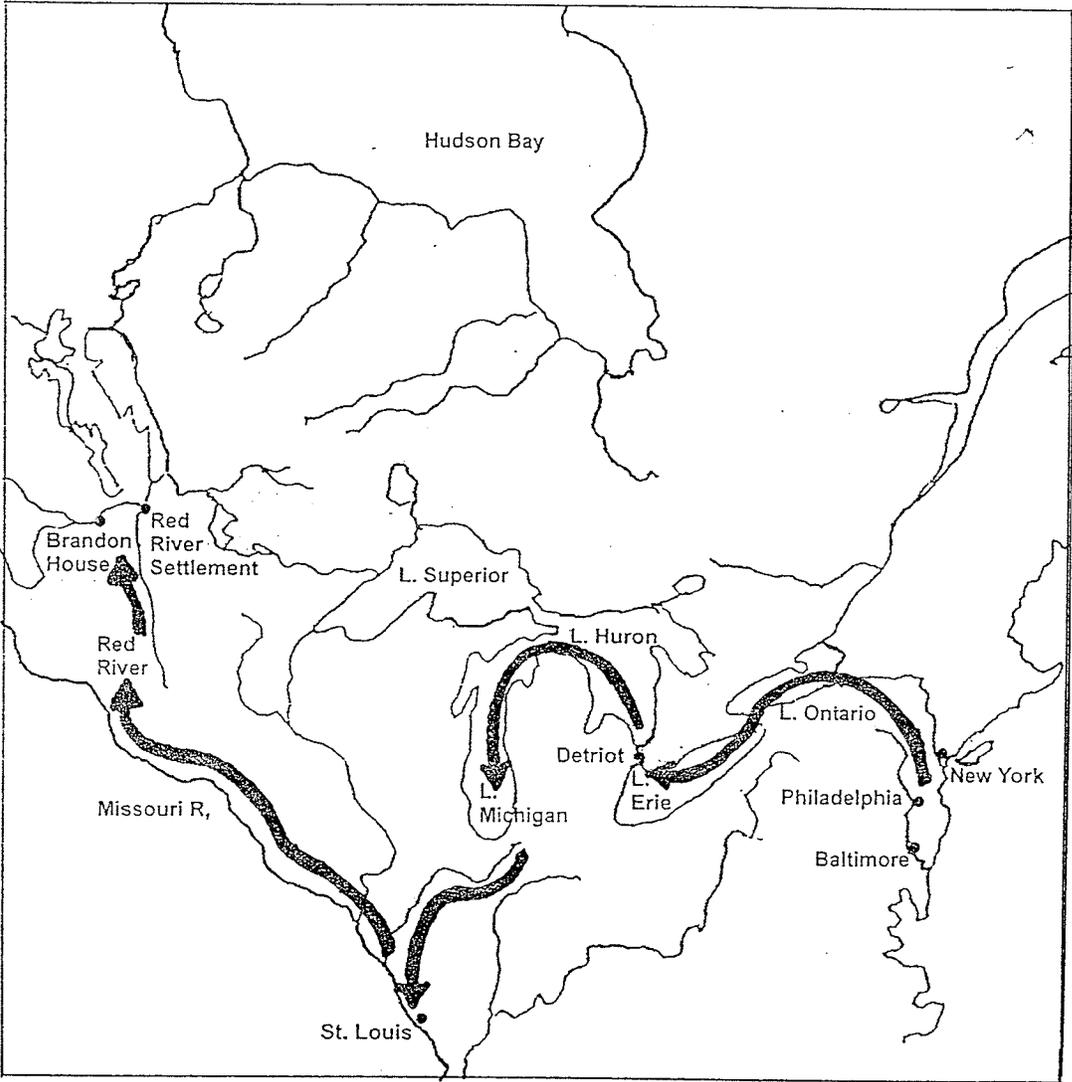
Diffusion of the 1819-20 Measles Epidemic

In his master's thesis, Paul Hackett (1991) focused on the origin and diffusion of the 1819-20 measles epidemic. His extensive research of archival and primary sources indicates that measles was already endemic in North America. In order for endemicity to exist, the measles virus required an urban centre with a population of 200,000 to 500,000 (Hackett, 1991:20; Ramenofsky, 1987:149). If the number of susceptibles falls below this critical level, the disease fades out until a sufficient population of non-immune people exists (Hackett, 1991:20). At the time, there were no urban centres that exceeded 200,000; thus, special circumstances formed to maintain the measles virus at an endemic level. Urban centres within close proximity to each other allowed for frequent travel, and by combining the population of these urban centres, the critical level of 200,000 was reached and maintained. Furthermore, such a conglomeration would increase the spacing between individuals, which would lessen the opportunity of transmission, and thereby slowing the diffusion process (Hackett, 1991:21). As a result, fewer susceptibles are required to maintain the disease. In such a situation, movement of people provided the opportunity to disseminate the virus, while children provide the needed pool of susceptibles (Hackett, 1991:21).

The measles epidemic spread from the Eastern Seaboard into the plains area and to Brandon House (see figure 4). Hackett (1991) traced the diffusion of the epidemic from its origin to the Petit Nord. According to his research, the urban agglomeration of the cities of New York, Baltimore, and Philadelphia provided the source of the epidemic. People travelling mostly by boat between New York City and Detroit via the Great Lakes

Figure 4

Diffusion of the 1819-20 Measles Epidemic from the Eastern Seaboard to Brandon House



Source: Hackett, 1991

spread the virus into the region⁸. Over the winter of 1818, the disease appeared “dormant”; however, the nearby French riverlots acted as a reservoir, slowly diffusing the virus among the settlers. It is probable that a family from the area, or people who were in contact with those infected, carried the virus to St. Louis. Possible infected employees of the Missouri Fur Company carried the virus along the Missouri River into the related region. The epidemic was then dispersed among the Aboriginal populations, including the Mandan who lived south of Brandon House. The virus was transmitted to an Ojibwa party from Brandon House while they were visiting one of the Mandan villages (see figure 4). Governor Williams’s correspondence corroborates a southern entry (PAM HBCA D.1/2 fo.11d):

The disease has been introduced from some of the American Out Posts on the River Missouri, and first shewed themselves at the Mandan Villages and has from them spread all over the Country like contagions with a rapidity almost beyond belief ...

The Mandan occupied a key location in the transportation and trading of goods. They had contact with the Plains Cree, Assiniboine, and southern groups such as the Crow, Comanche, and Arapaho. In the case of the Mandan, the measles epidemic spread outward, in a contagious pattern, or Expansion diffusion. Generally, epidemics follow a contagious pattern, which “involves the general spread of a disease from infective to susceptible, without regard to any characteristics of the latter individual except immune status” (Hackett, 1991:17). Henry Dobyns’s analysis of fur trade centres supports the expansionist diffusion from the Mandan villages. Trade centres act as foci, in which the epidemic “radiates outwards” from its source (Dobyns; 1992:215-6). The Mandan had a widespread trading network, were heavily involved in the horse trade, and acted as

⁸ The measles epidemic also diffused into the Petit Nord through a less complex route along the trade routes from Lakes Huron and Superior to Fort William (Hackett, 1991:59).

middlemen between the northern and southern Aboriginal groups, as well as trading with the Hudson's Bay, North West, and Missouri Fur Companies (Dobyns, 1992:215; Milloy, 1988:47).

Trading centres acted as foci in two ways (Dobyns, 1992:215-6). First, diseases converged at the trading centre. Infected travellers carried the disease to the posts or villages. Second, disease radiated outwards through expansion. According to Dobyns (1992:215-6), trading centres experienced a demographic shift due to the influx of people from different areas. Altering the ratio of susceptibles within the population increased the chances of transmitting contagious diseases with resulting epidemiological consequences. Entries in the Brandon House journals (PAM HBCA B.22/a/20, fo.24d; B.22/a/21, fo.40) agree with Dobyns's analysis of the Mandan villages as trade centre foci. American traders, Hudson's Bay Company men, and Canadian freemen converged at one or two Mandan villages to trade, temporarily increasing the village's overall population as either susceptibles or infectives.

While the path of the epidemic to the upper Missouri area is unclear, the timing of the outbreak at the Mandan villages is apparent. Peter Fidler kept a detailed record of the traders, settlers, and Aboriginal parties travelling to and from the Mandan villages. Examining the 1819 post journals for Dauphin and Brandon House, several trips to the Mandan were recorded; however, it was not until June 1819 that the first mention of measles and whooping cough appear in either journal. Prior to May of that year, it can be deduced that the measles epidemic had not spread throughout the five Mandan villages. During the annual winter trade rendezvous with the Mandan, Fidler does not mention the measles epidemic. If it had infected the Mandan, there would have been enough contact

between the various people to transmit and spread the virus to Brandon House and the Red River Settlement.

Information from the Brandon House and Dauphin Post journals, as well as Governor Williams's correspondence, indicate that measles diffused from the Mandan villages to Brandon House. Fidler records that "about the 10 May Capt Grant⁹ & 15 Bungees [Ojibwa] gone to the Mandans as friends" (PAM HBCA B.22/a/21, fo.51). In his Dauphin Post journal, Fidler notes on 27 June 1819 the return of Captain Grant: "Grant & party bro[ugh]t it [measles and whooping cough] from the Mandans last Month when they visited them" (PAM HBCA B.51/a/2, fo.6d). The latter entry confirms that Oo ke mow es cum (Captain Grant) and his party had visited the Mandan in May. By the beginning of June, the majority of Fidler's men were infected as well five Cree and four Assiniboine who had succumbed to the disease (PAM HBCA B.51/a/2, fo.6d). Throughout the summer, the measles epidemic raged throughout the Red River District, including the Red River Settlement and Swan River district.

The mode of transportation, and the routes people traversed, affected the diffusion of the measles epidemic. Canoe and horseback accelerated the speed at which distances were travelled; therefore, trips were completed in a shorter time frame. Canoes covered longer distances in a shorter period of time as compared to travelling by foot. In regards to the measles epidemic, infectives travelling by canoe and boat had the ability to travel greater distances during the maximum twenty-one day incubation period (Hackett, 1991:32); thus, changing the diffusion of the epidemic. Distant regions that may have not

⁹ This is an Ojibwa captain also known as Oo ke mow es cum. Along with six or eight other Ojibwa people, they established a small agricultural settlement known as Half Way Bank, which was located approximately halfway between Brandon House and Portage la Prairie (PAM HBCA B.51/e/1, fo.18d; Hackett, 1991:55; Moodie and Kaye, 1986:175).

been originally reached within the incubation period could now contract the virus. While canoes and boats made the trips quicker, people were limited to the lakes and rivers as transportation routes, and thus, travel inland was less frequent. The waterways, therefore, became an important diffusion mechanism. The measles epidemic, as mentioned above, was transmitted via people as they travelled through the Great Lakes, and along the Mississippi and Missouri Rivers. George Nelson, a North West Company employee, records a Lac la Ronge man's account of the diffusion of the 1819-20 measles epidemic and its boundary to the waterways (Brown and Brightman, 1988:50, emphasis in original):

“When I was a young man, he appeared to me, and told me his name was Sickness; and that every time a *general* sickness was to take place amongst us he would come and forwarn me. See: Four winters ago (in 1819) after we had taken debt in the fall and were proceeding each of us to our hunting Grounds he appeared to me one night and said, ‘I am come to tell you to get out of the way of all *Large waters* (i.e., Lakes and rivers) and pitch off immediately into the woods:.... Keep off, always from Large waters, for I am on a circuit round the earth: I shall follow the travelling waters (i.e., the routes or roads usually frequented or navigated) and smite all those I there find with sickness: in the interior, or to one side I shall not go.”

During the fur trade period, waterways were the main travel routes, the vehicle for the transportation of goods, and the source of transmission for disease. European traders shipped furs to the posts for delivery to Europe while goods were carried inland for trade with Aboriginal peoples. The nature of the fur traders's travel maintained their dependency on the waterways. Transmission of disease was primarily through contact between traders and Aboriginal peoples along these routes. This resulted in a decrease in the population of Aboriginal peoples and a temporary abandonment of the waterways with serious implications for the Aboriginal economy and the fur trade.

George Nelson's account illustrates the Aboriginal peoples' perceptions of the waterways as the main route for disease transmission. Arthur Ray (1974:107, figure 35) also indicates that disease spread in areas noticeably associated with the main trade routes, and later radiated outwards. As a result, the waterways became routes which connected disease and economy to diffusion and trade. There is a direct connection between temporary waterway abandonment, disease, and negative economic return for both Aboriginal peoples and fur traders (see chapters four and five).

Health, Housing and Diet

In a holistic approach to health, it is important to consider the physical, social, and mental well-being of an individual, especially when examining the trauma of an epidemic and its related effects of colonial oppression (Harrod, 1995). Lola Romanucci-Ross, Daniel Moerman, and Lawrence Trancredi (1991:421, emphasis in original) state the importance of a comprehensive approach: "A medical event is both biological *and* cultural, and since investigators are usually aligned with one aspect or the other of such an event, the simultaneity of the two aspects needs to be acknowledged." Social and mental health has as much impact on understanding the sociocultural effects of the measles epidemic as the physical condition of an individual or community. The recovery of a person afflicted with an illness or disease is dependent upon the state of their physical and mental health and the social support of their community.

Social and mental health is a factor that affects the overall demographics of a population. Generally, this focuses on acts of violence, which include suicide and

homicide. Mental health involves the capacity of the individual, community and environment to interact in ways that promote well-being, the development and use of mental abilities (cognitive, affective, and relational), as well as the achievement of goals, and preservation of equality (Tregunna, 1990:90). Social health focuses on the community rather than the individual (Young, 1994:189). It is a reflection of the community's self-esteem, ability to cope as a unit, the prevailing socioeconomic conditions, and the cultural effects derived from colonial oppression (Waldram, Herring and Young, 1995:92; Young, 1994:199). The breakdown of social and mental health is associated with epidemics, and may also be linked with the economic upheaval of the major fur trade companies (see chapter five). Due to the high mortality and morbidity rates following a series of epidemics (1780, 1819, and 1836) occurring in less than sixty years, there resulted a deterioration of family life and lack of positive role models; depression, loss of traditional culture and beliefs, low community morale; rapid social and cultural changes; loss of control over economic and land bases; and lack of ability to determine change and development (Shkilnyk, 1985:46-7; Young, 1991:63, 133).

These underlying cultural and social determinants affect the ability to manage stress, enhance coping strategies, and prevent acts of violence. High levels of stress manifest in physical symptoms, including poor social and mental health outcomes (Frankel, Speechley and Wade, 1996:160; Helman, 2000:203-4). It is important to understand Aboriginal concepts of healing and illness when examining methods of health care practice, which includes a strategy "designed to help to discover and apply knowledge needed to solve mental and physical health problems" (Gellman, Lachaine and Law, 1980:283). Strong social support helps to lower the risk of stress while a

holistic approach to personal and community development focuses on well-being and the promotion of a balanced lifestyle. Contemporary health care strategies have evolved from the crisis created by epidemics and the traumatic effects of colonial oppression, to include an Aboriginal perspective to address cultural diversity, and incorporate positive spiritual and mental well-being (Meilicke and Storch, 1980:3).

Lifestyles also impact the rate of transmission of acute crowd infectious diseases. Mark Cohen (1989) and Rolf Wirsing (1985) take an anthropological-epidemiological approach in studying the health and nutrition of indigenous societies. One aspect of health focuses on environmental adaptation, such as settlement structure and subsistence (dietary) practices. As small groups are acculturated into larger industrialized societies, the afflictions caused by infectious diseases tend to increase (Cohen, 1989:32). Contrasts between the lifestyles of the Mandan to the Plains Cree, Assiniboine, and Ojibwa support Cohen's hypothesis.

Cohen and Wirsing compared sedentary settlements to mobile groups and found that, overall, people living a mobile lifestyle were healthier. Agricultural-based sedentary populations, such as the Mandan¹⁰, are inclined to live in sturdy, permanent housing structures. According to Cohen (1989:39-40), sedentary people spend a greater amount of time indoors; as well, these structures "provide enclosed air circulation that facilitates transmission of airborne disease." Mobile groups, like the Plains Cree, Assiniboine, and Ojibwa, live in portable or temporary shelters, and perform tasks outdoors. Consequently, the spread of disease decreases since people are less confined to completing tasks indoors and within close proximity to each other. Furthermore,

¹⁰ For the purpose of this research and subsequent argument, the Mandan will be considered a sedentary population, as opposed to the Plains Cree, Assiniboine, and Ojibwa who will be described as mobile; however, it is understood that neither of the groups are truly sedentary or mobile.

mobility decreases waste accumulation and associated parasitic infections due to the continued relocation of campsites. Movement minimizes the introduction of new infections into the group, whereas sedentary villages become a convergence point for Aboriginal peoples, European traders, and disease (Dobyns, 1992:215-6; Podolsky, 2000:3; Waldram, Herring and Young, 1995:55-6). Increased involvement in trade; therefore, disrupts the established patterns of immunity to local parasitic and bacterial infections through the introduction of foreign infections carried by visiting traders. The accumulation of waste products, and the introduction of new infections lower the people's immune response, making them susceptible to an epidemic. Although sedentary populations were more susceptible to disease, it was easier to care for the infirm without having to travel constantly. Thus, there was less risk of death for the infirm in sedentary populations. As a final point, Wirsing (1985:307-8) argues that the diverse diet of mobile groups ensures good health. On the other hand, agricultural-based settlements appear to be more dependent upon a single food source, resulting in qualitative malnutrition¹¹ and a higher risk of becoming sick.

Nutritional deficiency adversely affects the immune system, especially when compounded by infections such as measles, pneumonia, bacterial and viral diarrhoea, and tuberculosis (Chandra, 1999:681). Diet plays an important role in nutritional status. A varied diet high in protein, essential fatty acids, vitamins and trace elements increases immune efficiency, whereas undernutrition induces immunodeficiency (Chandra, 1999:682; Lesourd and Mazari, 1999:692). The immune response, therefore, increases the rate of mortality and morbidity (Semba, 1999:720-21). Another factor affecting the

¹¹ Sedentary agriculturalists may have a diet consisting of plenty of food, but are at risk of qualitative malnutrition "because they concentrate on the crop with the largest yield" (Wirsing, 1985:307). This does not provide all the essential nutrients and vitamins needed to remain healthy (Podolsky, 2000:5).

immune response is malnutrition. Although enough food may be consumed, the diet lacks the necessary vitamins, protein and other essentials to combat infection (Podolsky, 2000:5; Wirsing, 1985:307). R. D. Semba's (1999:720) research determined that "immune suppression often accompanies measles infection and is thought to increase the susceptibility to secondary infections." Thus, people suffering from under- or malnutrition are more at risk to contract the virus and suffer from additional illnesses such as pneumonia, and whooping cough, a secondary epidemic which accompanied the 1819-20 measles epidemic making it a dual epidemic. In fact, the immune response is adversely affected shortly after the onset of nutritional deficiency (Chandra, 1999:682).

Protein from wild animals constitutes a major ($\geq 56-65\%$) portion of a traditional hunter-gatherer diet (Cordain et al., 2000:687). In the study conducted by Cordain et al. (2000), they analyzed three subsets of subsistence: hunting, fishing, and plant gathering. An average plant to animal subsistence ratio is 40:60, with the focus on animal protein (Cordain et al., 2000:687). Although this ratio may increase its focus to an almost sole dependence on fished and hunted foods, there exists no pre-agricultural society which was solely dependent on gathered plant foods. Furthermore, at latitudes greater than 40° North or South, reliance on plant food decreases and consumption of fished food increases (Cordain et al., 2000:687-88). One of the major findings reported in this study is the correlation between dietary protein and body fat by weight percentages in wild animals (specifically ungulates, or hoofed, animals such as bison) (Cordain et al., 2000:688). Consumption of lean animal meat as the primary energy source results in a condition where a person suffers nausea, then diarrhoea, followed by death. This is due to the liver being unable to eliminate high amounts of nitrogen as urea, which in turn,

produces the above symptoms also known as “rabbit starvation” (Cordain et al., 2000:688-89). More energy, and improved health occurs when dietary protein comes from animals with a higher body fat content commonly found in the larger herd animals.

The diets of the Plains Cree, Assiniboine, and Ojibwa consisted of buffalo, some cereal crops and garden produce, and fish. Buffalo meat was consumed fresh or dried in the form of pemmican. According to Father Provencher, the buffalo were scarce in the year of the measles epidemic (Moodie and Ray, 1976:49). In addition, Peter Fidler remarked that 1818 was marked by “the great & almost continued drought,” and a plague of grasshoppers (PAM HBCA B.22/e/1, fo.7d). Crops of vegetables, potatoes, turnips, and barley were destroyed, “so that there was not the least benefit derived from the labor” (PAM HBCA B.22/e/1, fo.7d). Because the prairie climate is prone to drought, crop failures and famines are relatively common (Newman, 1962:24). Fortunately, the Ottawas at Plantation Island (Lake of the Woods) were regarded as an important source of agricultural produce for the Hudson’s Bay and North West Companies (Moodie and Kaye, 1969:521). According to Wayne Moodie and Barry Kaye (1969:522), the “Indian gardens afforded the traders a small, but dependable, supply of corn.” The Ojibwa also had a garden at the Half Way Bank, and grew Indian corn and potatoes (Moodie and Kaye, 1969:517). Sturgeon was another important food source for the Ojibwa and, like buffalo meat, was either eaten fresh or as type of pemmican (Peers, 1994:22-3).

Consequently, the Ojibwa had a healthier and a more diverse diet compared to the Cree, which was reflected in the Ojibwa’s post-epidemic population census (Ray, 1974:1974).

Aside from pestilence, weather affected the quantity and quality of the crops. Brian Fagan (2000) researched the impact of the Little Ice Age (c.1300 to c.1850) on

history. He (Fagan, 2000:178-79) describes how the cold turn in temperatures resulted in low agricultural productivity of poor grain and potato harvests. The cold years of 1812 to 1820, shortened the growing season creating an insufficient amount and inferior quality of food. This was further compounded by the 1815 eruption of Tambora in Indonesia, which changed the weather patterns around the world for several years. Moreover, Fidler observed that, “since 1812 there were always good crops of every thing until 1816 when the dry summer commenced” (PAM HBCA B.22/e/1, fo.7d). Possibly, the “dry summer” stemmed from the Tambora eruption. As Alexander Stollenwerk points out: “in 1740, most deaths resulted from infectious diseases fostered by malnutrition [as opposed to starvation]” (Fagan, 2000:177). This observation is applicable to the situation in 1819 and 1820, where the people’s immune system had been compromised by a poor diet and the onset of a dual epidemic.

Impact and Effects of Alcohol

Alcohol is another factor that compromises immunity. Consumption and its related effects, including fetal alcohol syndrome/effects (FAS/E), weaken the immune system and increase a person’s susceptibility to diseases. The impact of alcohol consumption may either be short or long term; however, alcohol does play a negative role on the social, mental, and physical health of people.

The behaviour surrounding alcohol consumption is complex and may be thought of as part of a continuous series of sociocultural practices. The effects of alcohol differ according to the environment and circumstances, the occasion including the length of

time, and amount of alcohol consumed (Loewen, 2000). During the fur trade, alcohol was consumed at the completion of the outfit year, during the spring trade, and given as a gift or reward. However, it is probable that additional alcohol was consumed at multiple posts throughout the year, a fact which would not have been recorded in the journals. In addition, it is indeterminate the amount of alcohol consumed, especially for women, during these occasions. Although alcohol use is considered a social behaviour; alcohol consumption impacts both the social and physical health of people.

Alcohol consumption impairs the immune response, which “is pivotal in increased susceptibility to various infections” (Szabo, 1999:831). Thus, the immune system becomes prone to a variety of pathogens, including bacteria and viruses. Moreover, animal studies have indicated that this impairment lasts from three to twenty-four hours following consumption (Szabo, 1999:831). In other words, alcohol users have a greater risk of becoming ill during this period. As well, prolonged drinking damages the brain, liver, heart, lungs, and stomach and, chronic users have an increased rate of developing cancers (Kopperman, 1996:453; Szabo, 1999:830). The increased incidence and severity of infections suffered by chronic users has caused them to be referred to as “immunocompromised hosts” (Szabo, 1999:832).

Gyongyi Szabo (1999) summarized recent studies examining the immunomodulatory effects of acute (moderate) and chronic alcohol use. The studies show that “acute alcohol consumption may significantly modulate responses to subsequent challenges to the immune system, whether it is a bacterial, viral pathogen or trauma injury” (Szabo, 1999:837). The immune system is modulated at various levels, including innate (non-specific) or acquired (specific) immune responses (Szabo,

1999:830). Acquired immunity is triggered by an exposure to foreign substances called antigens, as opposed to innate immunity, which already exists without prior exposure to pathogens. For example, smallpox, measles, and whooping cough result in acquired immunity. Because alcohol use impairs the immune defence against bacterial infections, and damages the specific immune system, intoxicated individuals would be at greater risk of contracting the measles virus, and more exposed to secondary infections, such as pneumonia. According to Szabo (1999:837), the effects of moderate alcohol consumption are impermanent, and of a short duration; however, the overall impact of moderate alcohol use is unknown.

During the fur trade, women's attitudes toward alcohol consumption were ambiguous. However, the narrative of John Tanner's captivity (James, 1956) offers some insight into the drinking practices of women. Although women did consume alcohol, it is unclear if this was related to social and economic status, age, or some form of cultural prohibition, such as menstruation, breast-feeding, or pregnancy. Tanner recounts two drinking incidents involving his elderly Ojibwa step-mother Net-no-kwa (James, 1956:27-8; 84-7). In the first incident, Net-no-kwa is overwhelmed with grief from the loss of her husband and son. As Tanner recalls: "in consequence of all the misfortunes and losses she had encountered since she left her own country, began to drink, which was unusual with her, and soon became drunk" (James, 1956:27). In this case, it is clear that the consumption of alcohol was an anomalous occurrence affected by circumstance. The second incident illustrates Net-no-kwa's participation in drinking during the spring trade, and subsequent visits by the fur traders. There is no indication that this is "unusual" behaviour, and Tanner also mentions his cousin's wife as being intoxicated. Following

the trader's visit to Tanner's camp, the drinking lasted for two days (James, 1956:87), and it appears that the people at the camp discontinued drinking once the alcohol was consumed. Therefore, a pattern of binge drinking appeared to be the practiced norm, as opposed to a continual state of intoxication.

During pregnancy, a woman's health affects her unborn child. For example, pregnant women suffering from undernutrition and malnutrition tend to experience a prolonged labour and problems with lactation, which has been associated with a rise in infant mortality (Newman, 1962:26). It is now known that alcohol use during pregnancy contributes to fetal alcohol syndrome and fetal alcohol effects. Fetal alcohol syndrome (FAS)¹² refers to "the pattern of physical malformations and behavioral and growth disturbances in infants by the mothers' ingestion of alcohol during pregnancy," (Shostak and Brown, 1995:41) subjecting the child to nutritional deficiency (Chandra, 1999:683). As well, children with a low birth weight "have a suboptimal immune response and are susceptible to infection.... [and their] immunocompetence is more marked and longer lasting ...with higher morbidity and mortality" (Chandra, 1999:683). In relation to the 1819-20 measles epidemic, the use of alcohol impacted the adults but immunocompromised children as well.

Alcohol consumption during pregnancy may result in death, malformations, growth deficiency, or Central Nervous System dysfunction of the child (Shostak and Brown, 1995:39). Studies indicate that the amount and timing of drinking determines the type and severity of these conditions (Shostak and Brown, 1995:41-4). In the first

¹² Fetal Alcohol Syndrome children are diagnosed with facial characteristics, growth deficiencies, and psychomotor disturbances, which includes low birth weight, growth retardation, impaired Central Nervous System, and characteristic facial features (Shostak and Brown, 1995:39). Children who have been affected by alcohol exposure, but meet only some of these diagnostic criteria, are considered to have fetal alcohol effects, or alcohol-related birth defects (Shostak and Brown, 1995:39).

trimester, the organs and, especially the brain, are vulnerable; as well, there is an increased risk of low birth weight, and head and facial abnormalities. Moreover, during the second trimester the chance of miscarriage is accelerated. In the third trimester, “high blood alcohol concentrations interfere with rapid brain growth and neurophysiological organization that occurs [at this time] resulting in impaired central nervous system development and limited cognitive and behavioral abilities” (Shostak and Brown, 1995:44). Consequently, children born with fetal alcohol syndrome/effects are viewed as multihandicapped, and suffer from heart defects, spinal bifida, and facial dysmorphology (resulting in feeding and speech problems) to name a few. Furthermore, poor nursing ability, seizures, sleeping problems, including a general failure to thrive, and other attention disorders were observed in infants. Thus, fetal development is determined by the “peak blood alcohol concentration.... which is higher after binge drinking” (Shostak and Brown, 1995:44). As indicated earlier, the drinking behaviour of women appears to follow a binge pattern, increasing their unborn children’s risk of developing fetal alcohol syndrome/effects.

It is unknown how much alcohol may be safely consumed without causing permanent damage to the child during a woman’s pregnancy. However, high concentrations of alcohol within a short period of time (“binge drinking”) have a greater effect on the child as opposed to a constant amount, which is more characteristic of chronic/continual drinking. Historically, fetal alcohol syndrome was not as problematic as it is today. It is important to this research since alcohol and fetal alcohol syndrome impact the health of fetal and post-natal children. Children were also susceptible to the measles epidemic, and experienced high mortality and morbidity rates; children’s health

is as important as adults, a fact which has been overlooked in epidemiological and historical fur trade literature. At the time of the 1819-20 measles epidemic, alcohol use among Aboriginal peoples had been documented and, it is probable that alcohol consumption led to an increase in the morbidity and mortality rates among adults, and in the case of pregnant and nursing women, compromised the immunity of their children.

Just prior to the 1819-20 measles epidemic, Aboriginal people were inundated by various cultural, social, and ecological circumstances, which affected their general health. Proper nutrition, good housing, and optimal weather conditions assist in maintaining the immune system, and combating infections. Unfortunately, drought and pestilence caused famines, which resulted in malnutrition. The changing economic practices of the Hudson's Bay and North West Companies, as well as a decline in the local beaver population created social stress as the Aboriginal people were losing control over their economic viability. Ultimately, the immune response of the Plains Cree, Assiniboine, and Ojibwa, was adversely affected, increasing the mortality rate.

CHAPTER FOUR

Social, Political, and Economic Organizations of the Aboriginal Peoples

Epidemics produced significant changes in the social, political and economic organizations in the fur trade. As a result of a reduced population among the First Nations peoples, different groups took advantage of new economic opportunities, which corresponded to significant changes within the sociocultural system. On the other hand, the high rates of illness and death corresponded to low fur returns for the fur trade companies. Furthermore, Aboriginal lifestyles faced dramatic adjustments. Within generations, new groups formed to fulfil the economic and social roles left void by the 1819-20 measles epidemic. Consequently, these demographic changes influenced political unions among First Nations and the fur trade companies.

The fur trade, in and of itself, relates to the role of exchange as an acculturation process (Ray and Freeman, 1978:3). European traders and Aboriginal peoples, as well as the existing First Nations networks, functioned in a combination of social, political and economic relationships. Aboriginal economic networks easily adopted the trading practices implemented by the fur trade which, for its part, continuously modified existing practices over time. As a result, the subsequent development and structure of the fur trade affected the First Nations' way of life. In general, the fur trade moulded the social, political and economic organizations of the Plains Cree, Assiniboine and Ojibwa First Nations.

The 1819-20 measles epidemic arose during a dynamic period in the Plains Cree, Assiniboine and Ojibwa First Nations' history. In less than fifteen years, the Plains Cree and Assiniboine experienced an economic and political crisis as their middleman status

slowly disappeared. On the other hand, the Ojibwa made the transition to a Plains way of life, as they moved into the Red River Valley. Although the epidemic impacted their social, political and economic structures, these cannot be studied in isolation from one another. This chapter takes a holistic approach in understanding the impact of the 1819-20 measles epidemic on First Nations' social, political and economic organizations. By attempting to examine how these themes are interrelated, there is potential for an in-depth analysis of the impact of disease experienced by the Plains Cree, Assiniboine and Ojibwa First Nations.

First Nations Demographics in the Early 1800s

In less than sixty years, three major epidemics occurred in the Petit Nord. Two smallpox epidemics occurred in 1780-81 and 1838¹³. The 1819-20 measles epidemic happened almost forty years after the first smallpox epidemic and twenty years before the second one. As John Taylor (1977:56) points out, the epidemics struck about every generation, or "...more specifically, when cohorts of women who had been born after the previous epidemic entered their reproductive period." In other words, three to four generations of First Nations peoples were exposed to diseases to which they had almost no immunity. With mortality and morbidity rates of twenty-five per cent and greater, population rebound was almost impossible.

What were the consequences of a continuous series of epidemics? First, there occurred depopulation, or the death of community members. Second, these losses

¹³ In 1846, another measles epidemic occurred followed by a smallpox outbreak in 1869 (Ray, 1974:191-92; 1976:151). For more information on the diffusion of diseases, see Arthur Ray's chronology of epidemics in the *Geographical Review* v.66 (2).

impacted the social and cultural structures within the community. Third, the sudden loss affected the political and economic policies with the fur trade companies and other First Nations peoples. The above are also interwoven with each other. For example, a political leader might also be a spiritual guide who maintained important ties between families and other communities. In hunting and gathering societies such as the Plains Cree, Assiniboine and Ojibwa, the death of a hunter, for instance, threatened the survival of the family (Peers, 1994:20). As Peers (1994:20) states, high mortality rates resulted in the loss of grandparents (or other elders), parents, children, leaders and teachers. The loss of individuals with powerful guardian spirits resulted in profound social consequences as "...there might be no one to plead for supernatural assistance" (Peers, 1994:20). Such losses were especially devastating in that a breakdown in the community cohesion would lead to physical and social illnesses (as discussed in chapter three). Furthermore, Aboriginal peoples had multifaceted relationships that existed in a complex and dynamic environment.

In order to comprehend the trauma that resulted from the introduction of disease, population statistics are useful in illuminating the quantitative aspect of epidemics. The mortality and morbidity rates relate to changes of group dynamics in relation to density and population size. Using a microhistorical approach, a singular outbreak of a virgin soil epidemic can be examined within the context of the resulting depopulation to indicate the approximate percentage of those who perished and, just as importantly, those who survived. In some cases, there may have been a moderately low death rate, and for others, the entire community may have succumbed to the disease¹⁴. As well, Aboriginal

¹⁴ Mortality rates ranged from moderate to severe for the 1819-20 measles epidemic, where two-thirds of the population at Lac Seul perished whereas at Garden Island, it was much lower (Hackett, 1991:141).

peoples sometimes joined together to create a new political and sociocultural nation, such as the Mandan-Hidatsa after the 1837 smallpox epidemic. However, without some understanding of population and demographic changes, the impact on the social, economic and political structures for many First Nations peoples is hard to determine.

Between 1809 and 1860, the Plains Cree experienced a drop in their population followed by a large increase (Milloy, 1988:70-75). William McGillivray estimated the Cree population at 4,900 individuals in 1809 (PAC MG 19 B4, cited in Milloy, 1988:72-73). One year later, Alexander Henry the Younger estimated a similar population figure of 4,200 (Milloy, 1988:72). Ray (1974:110), however, has a much lower estimate of the Cree population prior to the 1819-20 measles epidemic. He (Ray, 1974:110) suggests that the Plains Cree had a population range of 2,000 to 2,700 in 1815 which then decreased to 1,600 individuals by 1822. Unfortunately, Milloy does not include any statistical data for the period from 1815 to 1822. Both Ray (1974:110) and Milloy (1988:72) agree that the population of the Plains Cree remained constant prior to the measles epidemic. According to Milloy's (1988:72-73) research, census data indicates that the Cree population ranged from 3,000 in 1829 to 7,440 in 1833. Furthermore, over the next thirty years it appears that an increase of approximately 5,600 individuals occurred. David Mandelbaum's 1860 estimate and an American War Department's report for the same year lend credence to Milloy's theory of population expansion and growth (Milloy, 1988:72). This coincides with the fact that the Cree were vaccinated against smallpox in 1837 and therefore experienced low morbidity rates and, as a result, greater population expansion.

The Plains Cree numbered about one hundred and thirty tents in the 1819 Hudson's Bay Company district report for the Red River area (PAM HBCA B.22/e/1, fo.12). This is further broken down into approximately 200 adult men, 260 women and 800 children for a total of 1,260 individuals. However, the census total does not include the elderly and, as a result, the overall numbers are slightly low. In comparison to William McGillivray's estimates of 1809, Peter Fidler's total amounts to one-fourth of McGillivray's estimate of the Cree population. This may be due in part to a Cree westward migration but, as is more likely, McGillivray's census included a larger geographical area. Furthermore, a downward trend continued into 1822-23. At this time, the Cree population dropped to seventy-five or ninety tents (PAM HBCA B.22/e/2:7). John McDonald attributed part of the loss in population to migration; "since [the fur trade] has been exhausted they have gradually left their own Lands and emigrated to the Westward, as most Indians do" (PAM HBCA B.22/e/2:7). This is probably the case as information from the district report also indicates that the majority of the population traded at posts located further west. There is no indication in the report that the Cree suffered a severe loss in population due to the measles epidemic. Bearing in mind that the 1819-20 measles outbreak was a virgin soil epidemic and the Assiniboine lost forty to fifty per cent of their population; the Cree also probably experienced a similar loss. Therefore, it may be more accurate to say that the downward trend of 130 tents to 75 or 90 tents was a result of the epidemic (see table 2).

William McGillivray's population estimate for 1809 indicates that the Assiniboine had a slightly smaller population with 4,508 individuals, which was approximately four hundred persons less than the Plains Cree (PAC M.G. 19 B4, cited in

Milloy, 1988:72-73). Assuming that McGillivray’s estimate and Ray’s interpretation of the historical material are accurate, the Assiniboine experienced a small increase in their population over the next six years. Arthur Ray (1974:108) estimates that the Assiniboine numbered around 5,000 people by 1815. His (Ray, 1974:108) data is derived from Peter Fidler’s 1815 estimate of eleven people per lodge and Alexander Henry the Younger’s

Table 2
Plains Cree, Assiniboine and Ojibwa Population Censuses (1809 – 1822)

Year	Plains Cree	Assiniboine	Ojibwa
1809	4,900 individuals	4,508 individuals	336 individuals
1810	4,200 individuals	--	--
1815	2,000 – 2,700 individuals	5, 000	--
1819	≈1,260 individuals (130 tents)	≈7,500 individuals (≈687 tents)	≈500 – 576 individuals (80 tents)
1822	75 – 90 tents	2,800 – 3,150 individuals	≈500 – 576 individuals

Source: PAM HBCA B.22/e/1-2; Milloy, 1988; Peers, 1994; Ray, 1974

1805 count of 460 lodges. In 1819, Fidler described the Assiniboine as “by far the most numerous” consisting of 1,080 men, 1,620 women and 4,860 children residing in the Brandon House area (PAM HBCA B.22/e/1, fo.11).

John McDonald echoes the same perception as Fidler on the Assiniboine population in his 1822 district report. He wrote that, “The Assiniboine is the most numerous nation in this River, and perhaps, throughout the Country” (PAM HBCA B.22/e/2:5). McDonald estimates that there were four hundred to four hundred and fifty

tents with “seven souls” in each tent (PAM HBCA B.22/e/2:6). Therefore, McDonald’s estimate is approximately 2,800 to 3,150 individuals, which corresponds to a survival rate of 37% to 42%, respectively (58-63% mortality rate). However, Ray (1974:108) believes that McDonald’s post-epidemic estimate is too high, and that a more accurate count would be 370 tents. Nevertheless, Ray neglected to include in his estimate unknown Assiniboine group called the “Flying Indians”¹⁵ who were also mentioned in McDonald’s report (PAM HBCA B.22/e/2:6; Ray, 1974:108). The Flying Indians would increase the number of tents, making Ray’s estimate of 2,600 individuals low. Nevertheless, following the 1819-20 measles epidemic, more than half of the Assiniboine had succumbed to the disease (Ray, 1974:108).

The Ojibwa had the smallest population in the district. In 1809, William McGillivray estimated that the Ojibwa population consisted of 336 individuals (PAC M.G. 19 B4, cited in Milloy, 1988:72-73). By 1819, eighty tents were listed in the Brandon House district report (PAM HBCA B.22/e/1, fo.12d). Unfortunately, there is no information on the number of individuals per tent. Laura Peers (1994:123) notes that, “[i]n 1822, there were at least 180 adult male Ojibwa (representing a population of about 500 in all) trading at Fort Garry and the Netley Creek and Pembina outposts.” Ray’s (1974:110-11) research for the Manitoba Lake and Dauphin Districts for 1819-20 indicates that the Ojibwa population remained relatively stable with an enumeration of 550 to 572, respectively. However, only ten tents were trading in 1822-23 at Brandon House (PAM HBCA B.22/e/2:7). Because the data regarding the population for the Ojibwa is limited, it is more difficult to determine the mortality and morbidity rates for these people.

¹⁵ McDonald does not offer any information, other than their name, on this group in his 1820 district report.

At the height of the epidemic, Fidler's entry in his Dauphin House journal indicates that eight people, including an "Indian woman named Cawcack," died within six weeks (PAM HBCA B.51/a/2, fo.11d). On 17 August 1819, Fidler wrote the following entry: "The Indian woman Cawcack Died of the same complaint [measles] as the children we buried her near dusk, along with 7 other Indians who died of the same disorder & buried here within these 6 weeks 300 yards below our House" (PAM HBCA B.51/a/2, fo.11d). Unfortunately, Fidler does not mention any mourning practices of the Cree, Assiniboine, or the Ojibwa First Nations. This information, however, may be gathered from other secondary sources such as John Taylor (1977), John Milloy (1988) and Laura Peers (1994). Taylor (1977:57-8) points out that many Aboriginal peoples lacked the necessary knowledge of minimizing transmission and development of, as well as curing many acute infectious diseases such as smallpox and measles. In fact, Taylor (1977:58) argues that many traditional remedies increased the morbidity and mortality rates. These remedies included the sweatlodge and cold water plunge which resulted in the onset of pneumonia and heart failure due to the temperature shock of the cold water (Peers, 1994:20; Taylor, 1977:58). In addition, the emotional trauma of an epidemic led to physical stress and often suicide (Milloy, 1988:71; Peers, 1994:20). During the smallpox epidemics (1780-83; 1836-37), many Aboriginal people committed suicide upon learning that they had contracted smallpox. William Tomison, factor at York Factory in 1781, noted that "many put an end to their own existence to end the pain, and others for grief at the loss of their families" (PAM HBCA B.239/a/80, cited in Peers, 1994:20). Events, such as this, contributed to an increase in the mortality as a result of an epidemic.

Aside from depopulation, the number of births also caused changes in the population demographics (Kunitz, 1994:9; Thornton, 1987:53-54). According to Russell Thornton (1987:54), “[d]iseases present in a population affect fertility by delaying marriage, lowering sexual desire, and producing coital inability, conceptive failure, and pregnancy loss.” Some women may have experienced an inability to conceive children or carry to term (pregnancy loss), and both men and women were susceptible to sterility and coital inability (inability to engage in intercourse) (Kunitz, 1994:9; Thornton, 1987:53-54). Subfecundity (a diminished ability to reproduce) is connected to a lack of suitable marriage partners (Kunitz, 1994:9; Thornton, 1987:53-54). Inevitably, marriage was delayed due to the death of eligible partners or disrupted after a spouse passed away (Kunitz, 1994:9). If this occurred during childbearing years, then fewer children were born. In effect, mortality affects not only the number of people who survive but also their reproductive capability.

The ratios of disease-induced infertility and population statistics are ambiguous since there is little information in the records. For the Cree, Assiniboine and Ojibwa, the demographic distribution of age groups is the only indication of the consequences of infertility related to disease. Ray (1974:111-13) examines the period between 1763 and 1821, which includes the 1781 smallpox and the 1819-20 measles epidemics. The trend in the population growth for the Cree increased gradually as compared to the Assiniboine who experienced a rapid expansion. Unfortunately, there is no statistical data for the Ojibwa since very few records exist and they had recently migrated to the area. However, those Ojibwa who lived further to the east were partly sustained by agriculture and wild rice that enabled them to support a higher population in the lower age groups.

Both the Assiniboine and the Ojibwa First Nations had a higher standard of living, and thus, had an increased growth rate (Ray, 1974:111-13).

The post-epidemic trend showed a decrease in the number of lodges and persons per lodge. Although the morbidity and mortality rates were high, these were not uniform for each family. Tanner describes that “of the ten persons belonging to our family” only he and Net-no-kwa remained uninflected and, although Tanner’s family recovered, others perished in the village (James, 1956:18). The measles virus also struck Peter Fidler’s children and his youngest child passed away as a result of the disease (PAM HBCA B.51/a/2, fos.8, 9). Ray’s (1974:106) argument that men, women and children were equally susceptible to the virus bears out the fact that the 1819-20 measles epidemic was considered virgin soil. Thus, it is unknown how the epidemic affected familial structure, other than that the size decreased. When the next census was completed, and if blending of families occurred, the number of persons per lodge, on average, would have remained fairly constant.

It is possible that a blending of families occurred so that the division of labour within the family could still be maintained. As Ray (1974:106) points out, the Assiniboine were a hunting-based economy and, out of necessity, women and children may have moved into another man’s lodge after the death of the woman’s partner. The Ojibwa, however, were dependent upon the women for subsistence food (Peers, 1994; White, 1999). In this case, the men may have either taken on another wife or resided in an extended family’s lodge. Surviving children without a parental unit would be adopted by their extended family or by another couple who had no children. There are three basic possibilities that could have occurred to create blended families. The first possibility

entails the surviving woman (and her children) taking a new partner and moving into his lodge, or rejoining the lodge of an extended family member. The second possibility is the same as the first, except the surviving man either takes on a new (or another) wife/partner who then resides in his lodge or he and other extended family members join into one lodge. The last possibility concerns the surviving children who are adopted into an extended or new family. It is an acceptable practice for most First Nations to incorporate people, even those outside of the consanguine or conjugal family, into their own family during times of need¹⁶. These are simple possibilities that can be modified for complex situations.

The Plains Cree, Assiniboine and Ojibwa all experienced a decrease in the total number of lodges for the Brandon House area directly after the 1819-20 measles outbreak. Using only the information from the district reports, it appears that the Assiniboine experienced the greatest loss. According to the 1819 report, they had a population that was just over 7,500 souls. In the year following the measles epidemic, this total dropped to approximately 3,000 individuals. If the number of persons per lodge remained stable between 1815 and 1819, which in all probability it did, then there were approximately 687 lodges in 1819. This means that approximately sixty-six per cent (two-thirds) of the lodges remained. However, this does not mean that there was a mortality rate of thirty-three per cent. McDonald's report points out that the number of individuals in each lodge also dropped from eleven to seven. Thus, the Assiniboine not only experienced a thirty-three per cent decrease in the number of lodges, but each lodge (on average) decreased by the same amount. This indicates that the familial structure

¹⁶ Laura Peers (1994:22) research on the Ojibwa is a good example of the flexibility within the local group or lodge ("tent bandlet").

became smaller as the number of persons per lodge decreased which, in turn, resulted in a smaller overall population.

Detailed pre and post-epidemic censuses are lacking which has created difficulties in determining the mortality rate for the 1819-20 measles epidemic (Hackett, 1991:125-26). However, Ray (1974), Taylor (1977) and Decker (1989) have attempted to estimate the general mortality rates for the Plains region. Ray (1974:108, 110) has calculated a mortality rate of approximately fifty per cent for the Assiniboine and Plains Cree. Decker (1989:57) calculated a lower a rate of mortality of just over twenty-five per cent. Taylor's (1977:78) estimate for the Assiniboine and Cree is higher than twenty-five per cent, but less than fifty. As mentioned above, the Assiniboine, Plains Cree and Ojibwa did suffer high mortality rates as a result of the measles epidemic. Ramenofsky (1982:5, cited in Hackett, 1991:121) states that without outside intervention and assistance, mortality rates can range from thirty to one hundred per cent. Furthermore, two virgin soil measles epidemics (1904 and 1909) in Denmark and Iceland had comparable mortality rates between twenty and forty per cent (Cliff et al., 1982:64). These mortality rates are lower due to the implementation of a quarantine policy as well as accessibility of hospitals and modern medicine to control and prevent the onset of secondary infections (Cliff et al., 1981:64-65). Taken in conjunction with the information from the reports and that mortality rates might be greater than thirty per cent without intervention, Ray's estimate becomes more acceptable.

Middleman Role Complex as a Political and Economic Relationship

The middleman role complex is both a political and economic relationship. Politically, the Cree-Assiniboine-Mandan-Hidatsa alliances were manipulated by this role. For example, as the Cree lost their power as middlemen in the fur trade, their alliances with the Mandan began to breakdown (Milloy, 1988:56-58). This had an economic impact since the Cree were no longer able to participate as partners in the Mandan-Hidatsa trade system but instead were now considered as patrons. As the Cree lost their economic status, they also lost their political power since they were no longer the sole providers of European goods. Economically, those in the position of middlemen found themselves controlling the distribution of European goods to other Aboriginal groups. Thus, political power and economic status are considered intertwined.

Middlemen were intermediaries between European posts and Aboriginal peripheral groups creating a complex set of political and economic goals within the Aboriginal structure (Giannettino, 1977:23). The indirect trade and its resulting position among the First Nations is described as follows:

The magnitude of the profit and power held by the middlemen prompted the development of a new pattern of conflicts and alliances that soon came to dominate interethnic relations. In addition to the traditional reasons for conflicts and alliances, conflict began to occur as a direct response to the middleman position; or in efforts to rise from a subordinate position and assume the middleman role. Native groups united to maintain and protect their middleman position; for protection against the groups holding the middleman role; or to rise from a peripheral position and become the middlemen themselves. The process involved in trading through middlemen, and the associated interrelationships of the participating ethnic groups, I term the 'middleman role complex'.

Giannettino (1977:24) uses an example of Inuit-Kutchin¹⁷ relations to illustrate the middleman role complex and the political and economic structures between these two groups. Prior to Kutchin involvement in the fur trade, there is some evidence that both groups were amicable. However, the advent of European traders into the area escalated any aggression that may have existed between them as they vied for control over trade goods. Thus, the efforts of the Kutchin to prevent the Inuit from reaching the fur traders resulted in hostilities from the Kutchin's "...desire to retain middleman dominance" (Giannettino, 1977:24). The Cree alliances with the Mandan parallels the change in Kutchin and Inuit relationship as they struggle for control over the middleman role.

Horse Wars and Military Alliances

The period from the mid-1770s to the amalgamation of the Hudson's Bay and North West Companies in 1821 has been described as a "competitive era" (Lytwyn, 1981; Thistle, 1986; Yerbury, 1986). According to Paul Thistle (1986:51), this era was "ushered in by the establishment of Cumberland House in the heart of the Western Woods Cree territory." The establishment of the Hudson's Bay Company post inland was well located for the Cree and enabled them to take advantage of the economic competition between the various fur trade companies. However, the Cree were losing their middleman status but retained it until 1850 (Milloy, 1988:69; Thistle, 1986:51). Thus, the "competitive era" focuses on both the increasing competition between the fur trade companies, as well as the economic relations between the various First Nations.

¹⁷ Although Giannettino uses the term Eskimo, it has been replaced with Inuit in this thesis.

John Milloy (1988:69) has labelled the years between 1810 and 1850 as the "Horse Wars". During this time, the demand for horses increased, which was followed by the deterioration of the middleman role complex for the Plains peoples. As American, Canadian and British fur trade posts expanded throughout the interior of the Red River and Missouri areas, European goods become readily available through direct trade to many groups that had previously been considered peripheral. For example, American fur trade companies, beginning in 1807, opened up the market for the Mandan to obtain European goods, which previously had only been available to them via the Cree-Assiniboine middleman trade network connected to the Hudson's Bay and North West Companies. Consequently, the Plains Cree and Assiniboine were no longer able to maintain their lucrative position as middleman traders of European goods to the Mandan.

The early part of the nineteenth century was a turbulent time for the Plains Cree and Assiniboine. Changes in their policies on trade and military excursions were a direct result of the circumscription of the Cree and Assiniboine's role as middlemen and their involvement in the Horse Wars. Milloy (1988:69) describes this period (1810-1850) as a "distinct era in the history of the Plains Cree [and Assiniboine]....which existed between two eras of significant change." At the same time that their roles were being undermined by the expansion of inland trade, the Cree and Assiniboine entered into a plains way of life, which was dependent upon horses. The combination of the loss of economic and political power associated with the middleman role and the need to acquire horses led to the breakdown of the Cree-Assiniboine-Mandan relationship. The Cree and the Assiniboine resorted to horse stealing and raids when they could not afford Mandan prices (Milloy, 1988:57). Consequently, hostilities increased between the groups and

raiding became a military excursion as well as an economic activity that functioned “as an individual status quest mechanism” (Milloy, 1988:80).

The eighteen hundreds were characterized by a reconfiguration of First Nation alliances between the Cree, Assiniboine and Mandan. Between 1818 and 1820, the Cree-Mandan relationship changed from antagonistic to friendly. At this time also, Milloy (1988:62) notes that the Cree and Assiniboine relationship experienced conflict as Cree military and economic policies were periodically opposed to that of their Assiniboine allies. The Assiniboine’s relationship to the Mandan continued to be hostile throughout the Horse Wars; yet, in the 1819 Dauphin House post journal, there are several references to a more amicable relationship among the Mandan and the Cree. However, this was short-lived and, by 1833, the Cree-Assiniboine-Mandan alliance had completely broken down (Milloy, 1988:65).

In September of 1817, Peter Fidler records that the Cree and Assiniboine were anticipating war with the Mandan (PAM HBCA B.22/a/20, fo.20d). However, in October of 1818, Fidler records that “4 Indians....speak of going soon to the Mandan Villages to purchase Horses *as they are friends*” (PAM HBCA B.22/a/21, fo.34; emphasis mine). Although it is unknown which group this is, it may be possible that they are Ojibwa or Cree. The Ojibwa both traded and raided for horses, but were known to be friends with the Mandan on various occasions between 1817 and 1819 (PAM HBCA B.22/a/20, fo.20d; B.22/a/21, fo.51; Peers, 1994:78). For example, in May 1819, the Ojibwa left for the Mandan villages “as friends” (PAM HBCA B.22/a/21, fo.51). On the other hand, Milloy (1988:63) argues that these Indians could have been Cree, as they also were involved in amicable trade interactions with the Mandan for horses. It is most likely

these people were Cree since Peter Fidler mentions that “[s]ome of the Crees have lately been at the Mandan Villages” as friends (PAM HBCA B.22/a/21, fo.37). Furthermore, good relations continued through to December 1818, as a group of Cree have gone “to his friends,” the Mandan; even though, the Assiniboine and Mandan relationship continued to deteriorate (PAM HBCA B.22/a/21, fo.39d). In August of 1819, the Cree-Mandan alliance was aggravated once again. Fidler recorded a military excursion being organized by the Cree against the Mandan. However, this excursion may have been motivated by revenge for the measles outbreak rather than for horse-raiding. Fidler notes on 4 August that Yorstons Guide, the North West Company Cree chief, was upset with the Red River colonists who were responsible for the epidemic (PAM HBCA B.51/a/2, fo.10d). Three weeks later, Yorstons Guide and an undisclosed number of Cree were travelling to the Mandan villages to make war (PAM HBCA B.51/a/2, fos.12d-13). Since the relations had been friendly until this time and that Yorstons Guide was “shaking very badly against the English” in regards to the measles outbreak, it appears that Yorstons Guide’s anger over the high mortality rate had been redirected to the Mandan (PAM HBCA B.51/a/2, fo.10d).

In May 1819, the Assiniboine continued to remain “afraid of an attack from the Mandans and other Missouri Indians” as the political and military alliances between the groups broke down (PAM HBCA B.22/a/21, fo.53d). One month later, relations between the Assiniboine and Mandan had not improved, even though the Breast, an Assiniboine chief, and twenty-three of his men pursued peaceful negotiations between the two groups (PAM HBCA B.51/a/2, fos. 4-4d). At the same time Yorstons Guide organized a military raid of seventy Assiniboine men to go to the Mandan Villages; only seven men returned

(PAM HBCA B.51/a/2, fos.12d-13). There is no indication in the record for the trip, except for the early entry on 4 June as mentioned above (PAM HBCA B.51/a/2, fos. 4-4d).

Politically and militarily, the Assiniboine suffered a great loss of men on this trip. Fidler recorded that, “70 Stone [Assiniboine] Indians lately went to the Mandans at the Missouri & only 7 returned all died by the way, in their return supposed by the Indians to the small pox¹⁸” (PAM HBCA B.51/a/2, fo.13). In this case, the Assiniboine lost ninety per cent of the men as a result injuries sustained from the raid and mortality caused by the measles virus. This would be a substantial loss that could potentially cripple any future military campaigns for some time until their numbers rebounded through natural population growth or by combining with another group. Furthermore, the group population had lost sixty-three men, which negatively impacted the social dynamics of the community and the overall population.

Social Impact of Alcohol

Alcohol use played a role in the social structure of the Aboriginal peoples. While it may seem that alcohol use was continuous, people consumed alcohol in a binge pattern. John Tanner’s narrative supports this as well as post journals and descriptions of the Aboriginal peoples at the time. Thus, it may be inferred that binge drinking was the predominate pattern. Indeed, alcohol was not readily available in the encampments on a daily basis to support a continual drinking habit.

¹⁸ Fidler had mistaken the measles for smallpox as the disease had already diffused into the area sometime between the end of May and early June and the Assiniboine military excursion occurred in August (PAM HBCA B.22/a/21 fo.51; PAM HBCA B.51/a/2 fos. 6d, 13).

Alcoholism, as witnessed today, probably did not exist during the fur trade. However, as indicated above, the availability and amount of alcohol could not support chronic alcohol use. In examining the documents and literature relating to the fur trade, it is unknown how much alcohol was consumed at any given time. While alcohol was used in gift giving and as an exchange for food items (White, 1999), the amount of alcohol given by the traders is unclear. Historians and researchers have made the assumption or created the impression that significant amounts were distributed to the people. Tanner's narrative and the post journals indicate that the amount of alcohol was only substantial enough for one to three days of drinking (James, 1956; PAM HBCA B.22/a/20-21; PAM HBCA B.51/a/2). Although it may also be argued that fondness for alcohol is consistent with alcoholism, the frequency of demand belies the assumption of alcohol dependency as well. Further studies may indicate that a fondness for alcohol had a different connotation when viewed in a political and economic context between the fur trade companies and the Aboriginal peoples.

Women's Role in the Fur Trade

Although primary sources contain few references to Aboriginal women's roles in the fur trade, this does not indicate that women lacked the resources to be active participants. By the nature of the documents and their creators, the fur trade has been considered a predominantly male realm. Furthermore, within the documents, Aboriginal

peoples were treated as “silent partners¹⁹.” Consequently, most of the information contained within post journals, for example, focuses on the daily routines occurring at the posts. Little was written regarding the local Aboriginal peoples, especially the women, and the activities regarding women trading at the post are, at best, sketchy. Contrary to this, women were strongly involved in direct transactions with traders (White, 1999).

Furthermore, Bruce White (1999:122) cautions historians that:

...scholars may assume that, without contrary evidence, all named persons in traders’ narratives are men. This may not always be a safe assumption. Nor is it safe to assume that because a particular trader never mentions women, he never had dealings with them.

Bruce White (1999) cites several examples of women’s involvement throughout the fur trade period. He (White, 1999:121-24) focuses on Ojibwa women’s participation as providers of provisions (country produce), such as maple sugar, rice and meat.

Traders often relied on country produce for their survival over the winter and, women would barter food for desired trade goods. Canoes were also traded by women, even though it was a product of women and men’s labour. In particular, gum, birch bark and spruce roots, used for maintaining and fixing canoes, were obtained from the women (White, 1999:125). At Brandon House, women also made pemmican bags and candles (PAM HBCA B.22/a/21, fos .41, 46, 47). Although Peter Fidler does not mention the method of payment for these services, there was probably some form of exchange through barter or direct trade. As Bruce White (1999:125) points out, “women were more often involved in direct trade [as opposed to obtaining debt] than men.”

¹⁹ In the colonial paradigm, Aboriginal history is created and written by European scholars. Its effect, although unintentional (i.e. Harold Innis, Victor Lytwyn and Arthur Ray), has been to eradicate the Aboriginal voice. Thus, Aboriginal peoples within the fur trade and continuing into the contemporary period have been perceived as “silent partners.” (See also Laura Peers’s (1996) article, “Subsistence, Secondary Literature, and Gender Bias: The Saulteaux”.)

Ceremonial trading was also considered to be a predominately male role and played an important part in the annual visits at the posts. The male-orientated position is further exemplified by the presentation of a man's coat and dress to the trading captain (Peers, 1994:58; White, 1999:126). These signified the prestige, rank and social status of a successful trapper, who maintained his loyalty to the trader's post by returning annually to pay his debt (Peers, 1994, 12-13, 35-36; Ray, 1974:138-39). However, in some cases, women could also be awarded the status of a trading captain (James, 1956:86; White, 1999:126). One such example is Net-no-kwa, Tanner's adoptive mother, who was adorned with "a chief's coat and ornaments" (James, 1956:86). This is befitting a woman whom Tanner describes as being "regarded as principal chief of the Ottawwaws" (James, 1956:15). It may be surmised that Net-no-kwa's authority and position as a trading captain was independent of her husband or other male family members' political and economic status with the fur trade companies. On several instances, Net-no-kwa was respected by the European traders, such as when she commandeered a canoe from a Frenchman and received annually the chief's dress and ornaments (James, 1957:27, 86).

Women played an important role in the trade patterns and were involved in the trade on a regular basis (White, 1999). Laura Peers (1996:40) argues that, women's contributions ensured "...a wider, stronger, more flexible subsistence base better able to cope with ecological fluctuations and historical change [such as an epidemic]..." However, during such traumatic historical changes, there is little information regarding women's exact involvement within the fur trade. Whether women subsumed male trader/trapper roles is almost unknown, but it may be surmised that the division of labour among women, men and children became blurred over time. Although new trade patterns

may not have occurred following an epidemic, women's existing roles within the fur trade did gain greater importance.

The Plains Cree, Assiniboine and Ojibwa were experiencing several cultural changes during the last years of the fur trade. As the Plains Cree and Assiniboine made a transition into a plains way of life dependent upon buffalo hunting and adapting to equestrian mobility, the Ojibwa migrated into a new territory to become more involved as fur hunters and trappers. Laura Peers (1994) describes the early 1800s as a transitional period characterized by adaptation and resourcefulness for the Ojibwa. This is equally applicable for the Cree and Assiniboine. It is problematic to separate events such as the Horse Wars and the decline of the middleman role from the 1819-20 measles epidemic as they are intertwined with each other. By understanding that culture and people are dynamic and ever changing, the Horse Wars, middleman roles and the sociocultural milieu had a significant influence on the diffusion and spread of the measles epidemic. This transitional period illustrates the dynamics of Aboriginal cultures as they continuously changed to meet and overcome new challenges within the fur trade.

The Plains Cree and Assiniboine experienced higher mortality rates as compared to the Ojibwa. This was related to their nutritional standards as well as their reproductive ability. The lodge size had also declined during the 1819-20 measles epidemic, which was reflected in changes in the familial structure. Furthermore, the Cree and Assiniboine faced new economic and political circumstances during the "Horse Wars" and the Competitive Fur Trade Era. On the eve of the epidemic, the Cree's economic and political association with the Mandan was in constant flux ultimately breaking down during the "Horse Wars." As the fur trade expanded inland, the middleman role was no

longer a lucrative and powerful position by which the Cree and Assiniboine had been able to control their relationships with other First Nations as well as the Hudson's Bay and North West Companies. With the restructuring of the Hudson's Bay Company, the Plains Cree, Assiniboine and Ojibwa continued to experience economic stress while starting a new lifestyle based upon buffalo hunting and supplying pemmican to fur trade brigades.

CHAPTER FIVE

The 1819-20 Measles Epidemic: Its Economic Impact on the Brandon House Fur Trade

The Industrial Revolution, the Napoleonic Wars and the changes in commercial policy impacted the Hudson's Bay and North West Companies' profit margins while the concurrent fur trade wars continued to lessen the trade balance surplus. In addition to the intense competition, the 1780-83 smallpox and 1819-20 measles epidemics further weakened the viability of the Hudson's Bay and North West Companies and the economic stability of the fur trade. Subsequently, the Hudson's Bay Company set up its Retrenching System, hoping to reorganize the company to prevent further accumulation of debt as well as to protect its profits. This resulted in the amalgamation of the Hudson's Bay and North West Companies as the heyday of the fur trade slowly came to an end.

The contest for control of the fur trade in the Petit Nord meant gaining control of the Athabasca district in the north. Although the North West Company was more aggressive in acquiring trade goods than the Hudson's Bay Company, any advantages that the North West Company had, were offset by its long routes into the interior. Although the "pedlars" had to contend with longer trade routes, ensuing a later arrival time than the Hudson's Bay Company men, the oppositions' aggressive trade policies made up for these disadvantages and nearly paralysed the Hudson's Bay Company trade. However, after the conquest of New France, Britain's political power aided the Hudson's

Bay Company to create a pseudo-monopoly by restricting the number of “pedlars” in the area. Thus, Britain mitigated the extent of rivalry for the Company in the interior.

At the time of the 1819-20 measles epidemic, the fur trade had suffered from the onset of an economic recession, hostile competition between the Hudson’s Bay and North West Companies, and a series of wars fought overseas and in the homeland. According to R.T. Naylor (1987:164), a sharp deflation in the European and Canadian economies occurred in the decade after the Napoleonic Wars. Furthermore, the intense competition in the fur trade produced a high market value for furs in Canada and parts of the United States. Not until the end of the Napoleonic Wars was Britain able to secure a timely and regular shipment of goods to Canada. These factors, combined with the disruptions in trade caused by the American Revolution and the Napoleonic Wars, made the fur trade in the late eighteenth and early nineteenth centuries “an expensive endeavour” (Bumsted, 1999:16).

Colonial Policy and the Industrial Revolution in the Early 1800s

Towards the end of the eighteenth century and the beginning of the nineteenth century, Britain began to switch from a mercantilist to a pre-Industrialized society. According to R.T. Naylor (1987:148), the Industrial Revolution represented a change in the rate of increased production as well as change in the mode of production. Consequently, Britain restructured its capitalist system and its existing political and social policies, which impacted British trade policies with its colonies and other nations. This new mode of production adopted by the wool-cloth industry provides an analogy for the

latter years of the fur trade. Naylor (1984:184) describes the process of mass production as follows:

The merchant who controlled the process leased raw materials, and often tools as well, to workers, especially in the rural areas. The workers, often entire families, were immobilized in country cottages that formed domestic sweat shops, trapped by debt to the supplying merchant. Division of labour took the form of the materials being moved from one set of workers to another, each performing in turn a higher function on the processing chain until at last the merchant received the final product and undertook its marketing. Thus, while the artisanal system of production was associated with small groups of skilled operators working on a single product usually for direct sale on local retail markets, the putting-out system presupposed mass markets for a basic commodity amenable to subdivision of labour and controlled by a wholesale merchant at both ends.

The description of mass production may be modified to the economic conditions of the fur trade. The merchant represents the fur trade company employee, such as a chief factor. Although the chief factor does not necessarily lease out the raw materials (furs), he does lease the tools, or the ammunition, guns, traps and other supplies used for procuring the furs. The lease is analogous to the system of credit or debt in that the tools are purchased against next year's fur returns. The trapper remains indebted to the chief factor and the fur trade company for the maintenance and additional supplies required to keep the tools in operation, and thus, the system acts in a similar manner to a lease.

Naylor describes the workers and their families as being "immobilized" and "trapped by debt" and this is also fitting for the Aboriginal trappers and their families. Arguably, the Aboriginal people were mobile as trappers; however, at the same time, they were restricted to the land to trap and were less able to acquire new economic pursuits such as horticulture and agriculture for their own consumption and profit. However, being trapped by debt was not the same as being dependent upon European goods. Aboriginal peoples experienced a deficit when more credit was owed than could possibly be repaid.

As a result, a cyclical pattern formed and the people became “trapped by debt.”

Fortunately, the fur trade system differed from the family “sweatshop” characteristic in mass production. Although a division of labour occurred in both systems through an “assembly line” process, Aboriginal families were not enslaved and working long hours each day. Division of labour occurred by gender and age groups – men hunted, women processed and children assisted in getting the furs ready for the chief factor at the post. Furthermore, direct sales had a greater impact on the fur trade companies and the market than the Aboriginal families.

From 1689 to 1815, Britain was involved in a series of wars that resulted in industrial consequences. Apart from the American Revolution, Britain had been victorious in every war, realized imperial aggrandizement and continued to control and expand her colonial markets (Naylor, 1987:151). Naylor (1987: 151) further argued that these consequences “necessitated reconsideration of British colonial and trade theory.” One of the changes was to increase the importance of Britain’s colonial markets. The colonial policy for trade focused on an economic domination without any formal political connections (Naylor, 1988:151). Trading posts rather than colonies or settlements were better able to accomplish this purpose (Naylor, 1988:151). However, the mercantilist notion of a trade balance surplus still prevailed, and was the method by which Britain measured its commercial success and advantage (Naylor, 1987:152).

According to Naylor (1987:162-63), the primary impetus for change came from the Industrial Revolution when Britain became dependent upon the colonies for raw materials such as grain, potash and timber. Instead of aiding in the production of sugar and other tropical staples, the raw materials were shipped to Britain to sustain the

industrial movement. In addition, the colonies gained importance as potential new markets for manufactured goods. For example, the Red River Settlement settlers would eventually become producers of grain and timber while concurrently consuming manufactured British goods such as dinnerware, cloth and other items. Thus, the settlers immigrating to Canada became producers as well as consumers. Ultimately, “[m]ercantilist notions of self-sufficiency flew out the window: Britain depended on the colonies not for luxuries for re-export, but for its daily bread – for grain as well as timber and raw cotton” (Naylor, 1987:163).

Combined, the Industrial Revolution and the Napoleonic Wars altered the British financial system and its external commercial relations (Naylor, 1987:163). Ties between England and Portugal grew closer as well Britain’s trade in the East Indies increased. Britain’s South American trade changed from sugar to gold, and over the eighteenth century, became the standard system of trade. As a result, silver, the mercantilist trade standard, was replaced by bank money paper and gold as higher-denomination specie. Furthermore, during the Napoleonic Wars London was established as the European financial centre and the British government negotiated overseas loans and investments through merchant banks such as Baring Brothers, Halifax and the Rothschilds (Naylor, 1987:163). With the gold standard formally adopted into the trade system and Britain’s recognition as the principle source for commercial and financial funding, mercantilism finally collapsed and was replaced by a British capital market run by an imperial commercial policy.

As the Napoleonic Wars were coming to an end in 1814, Britain and Europe suffered from economic deflation that “forced drastic reconsiderations of the principles of

foreign and imperial commercial relations” (Naylor, 1987:164). In 1820, members of the British parliament argued for a liberalization of trade that was based upon an exchange of equivalents as opposed to a trade balance surplus. British manufactures were exchanged at an equal “value” for raw materials and food from the colonies and other countries (Naylor, 1987:165). This meant a reduction and, ultimately, the elimination, of a protection or preference for domestic and primary colonial products. Between 1822 and 1832, economic liberalization and the principle of commercial reciprocity and colonial preference had been firmly embedded in British overseas trade regulations (Naylor, 1987:166). Consequently, many of the fifteen hundred acts that had been established in the early 1800s for regulating colonial trade were abolished as well several discriminatory practices, as a result of the Napoleonic Wars, were also changed. This promoted the ease of trade between Britain and other countries and the colonies began to have representation within the House of Commons. Following the 1832 Reform Act, British North America experienced economic liberation that followed the progress of political reform.

Colonial Policy and the Fur Trade Companies

The transformation to an industrial society coincided with the expansion of the fur trade in the Petit Nord. Following the conquest of New France, Britain gained economic power and control in the French Atlantic region and subsequently, into the interior (Naylor, 1987:164). Once France lost its hold on the St. Lawrence Seaway and suffered a decline in the number of its seaports, its trading system was shattered. Consequently,

Britain started monitoring the trade and goods coming into Canada (Innis, 1930/1999:166; Naylor, 1987:164). In addition, the British fur trade's economic power increased through control of shorter trade routes as well as benefiting from the industrial efficiency of manufactured British goods (Innis, 1930/1999:158, 166). As a result, the Hudson's Bay Company profited from Britain's economic power and the cheap transportation of the shorter trade routes from Hudson Bay (Innis, 1930/1999:158).

The impact of the Industrial Revolution and mass production, combined with the Hudson's Bay Company's ability to secure short trade routes, led to the conquest of New France in 1763 (Innis, 1930/1999:166). In following Harold Innis' (1930/1999:166-67) argument, the British supremacy of manufacturing goods enabled the country to dominate the fur trade market and ultimately, the fur trade itself. The specialization in the production of suitable goods such as blankets, cloth and metalware permeated other fur trade companies' merchandise. In essence, Britain monopolized the importation of European goods for the fur trade, effectively shutting out France as a competitive supplier. The Hudson's Bay Company, supplied by Britain, became more adept in utilizing their position along Hudson Bay to overcome their rivals and gain control of the fur trade.

Ideally situated on the shorelines of Hudson Bay, Hudson's Bay Company posts received their annual shipment of goods directly from the European merchant ships. Rather than having to dock at ports along the Eastern Seaboard or in the St. Lawrence Seaway and Great Lakes region, the ships sailed to the bayside posts at Fort Prince of Wales, Moose Factory and Albany House among others. However, the North West Company and other smaller independent outfits received their merchandise from

Montreal, Fort William or in the Eastern Seaboard region. As a result, those traders travelling from the east had to traverse a greater distance and consequently, arrived in the Petit Nord later than the Hudson's Bay Company employees. The increased distance and time created economic disadvantages through expensive transportation and a loss in prime beaver pelts. Higher costs were incurred from providing the *voyageurs* with food and other necessities while travelling between the depot and the posts. As mentioned above, the Hudson's Bay Company employees arrived at an earlier date in the Petit Nord and conducted their trade sooner with the Aboriginal trappers. Thus, on many occasions, the Hudson's Bay Company had the opportunity to obtain the first choice in prime beaver pelts. For the North West Company, the effects of the expansion of the trade increased their expenses due to longer trade routes and less trading time in the Petit Nord which was associated with a slower turnaround (Innis, 1930/1999:206).

As the Hudson's Bay Company sought control over the trade in the interior, the Grand Portage route continued in importance for the North West Company and the Canadian freemen. Because of the intensive nature of the fur trade, the beaver inhabiting the areas along the route and in the southern areas of the Petit Nord became over-harvested and their populations declined. Consequently, less beaver pelts were traded at the southern posts. At Brandon House, Fidler observed in March of 1818 that a significant beaver population existed near the Mandan villages along the Souris River (PAM HBCA B.22/a/20, fo.36d). However, other reports appear to stress the lack of beaver in the Red River District and at Brandon House (PAM HBCA B.22/a/20, fo.41; B.22/a/21 fo.49; B.51/a/2 fo.2). As a result, the push into the Athabasca region and the northern interior was to compensate for the decline in furs from the south (Innis,

1930/1999:149). The Athabasca trade dominated the Hudson's Bay Company policy and its efforts to maintain a competitive edge over its rivals.

Although the Hudson's Bay Company had several advantages over its opposition, the rigidity of the Company's organization and policy prevented any substantial trade with Aboriginal trappers. This was due in part to the Company's dependency on Aboriginal middlemen to obtain furs from other trappers living in the hinterland. Since the North West Company's organization, for example, fostered more independence between its men and the posts, the traders travelled inland to trade directly with the more distant Aboriginal First Nations as well as interacting with the middlemen. Consequently, the Hudson's Bay Company experienced economic losses in their trade as the Cree middlemen exchanged furs at a better price with the North West Company and Canadian freemen, instead of returning the Hudson's Bay Company's posts (Innis, 1930/1999:153-55). Once the opposition established a more favourable trade, they succeeded "in a remarkably short period of time to break up the organization of the [Hudson's Bay] Company" (Innis, 1930/1999:153). In order to recover its losses, the Company adopted a more aggressive policy. Deciding to expand inland and reorganize its corporate structure, the Company discarded its rigidity in order to improve its financial situation. As part of its new Retrenching System, the Hudson's Bay Company pushed into the Athabasca district. In spite of their competition with the North West Company and Canadian freemen, the Hudson's Bay Company continued to engage in a moderately successful trade as well as establish and maintain posts at key locations.

For the most part the Hudson's Bay Company maintained a viable trade with the Aboriginal peoples even though the Competitive Fur Trade Era was fraught with

hostility, aggression and fear. In the Athabasca district, the fur trade companies used every possible means to impede and acquire their opposition's trade. Although historians have portrayed the North West Company as the major instigators of unsavoury trade practices, the Hudson's Bay Company was equally guilty and, at times, condoned their rival's behaviour²⁰ (Thistle, 1986:74). The Hudson's Bay and North West Companies extracted furs from the Aboriginal trappers through several forms of "rough justice" which included harassment, assault and murder (Thistle, 1986:68-69). Unfortunately, such practices created fear and mistrust between the European traders and Aboriginal trappers. As well, hostilities were strong between the Hudson's Bay and North West Companies, following the North West Company's arrests of Hudson's Bay Company employees Colin Robertson and Miles McDonnell²¹.

According to historian Paul Thistle (1986:51), the impetus for the expansion of new posts came from the First Nations peoples who traded with the Hudson's Bay Company. As Thistle (1986:51) stated, First Nations people, in particular the Western Woods Cree, desired to "stimulate direct competition between the English and Canadian interests." Therefore, the Cree trappers could maximize the benefits of competition by manipulating rival traders. Unfortunately, the direct competition also resulted in an influx of the North West and XY Companies, Canadian freemen and, later on, new groups of Aboriginal peoples from the east. Competition for furs and country provisions

²⁰ Paul Thistle's (PAM HBCA B.49/a/27b, fos.4-5, cited in Thistle, 1986:74) example refers to Peter Fidler's entry in the 1796 Cumberland House journal in which Fidler states: "[the murder of Beardy] will be a means of deterring the furture and prevent [the Swampy Cree] from [illusing?] or [tallying?] any this while to come."

²¹ Peter Fidler recorded the arrests of Colin Robertson and Miles McDonnell in the 1818-19 Brandon House and 1819-20 Dauphin House post journals (PAM HBCA B.22/a/21; B.51/a/2). The Hudson's Bay Company attempted to retaliate against the North West Company's actions when the Governor Williams and his men meet with the "NW Masters from the Athapascan who had made Prisoner of Mr Robertson Last fall" (PAM HBCA B.51/a/2, fo.4d).

increased dramatically, until the local beaver population became almost extinct. Whereas direct competition initially favoured the Cree economic position, the declining beaver population and the increase of traders became a hindrance and, at times, the fur traders' attitudes towards the Cree became violent and life-threatening. Consequently, the Cree were subjected to constant harassment by the inland traders attempting to acquire the coveted furs. As the competition intensified and the quantity of furs diminished, more ruthless tactics were employed, which included stealing the trappers' pelts, physical abuse, and murder. Furthermore, the Western Woods and Basquiau Cree of the Cumberland House area could no longer hold on to their role as middlemen, and eventually the power of their lucrative position diminished (Thistle, 1986:51, 73). Although the Cree played a passive role, they continued to influence the fur trade in the Cumberland House area and the Athabasca region since the Hudson's Bay Company remained dependent on the Cree as tripmen and guides, as well as providing country provisions.

The Hudson's Bay Company's discontent over their economic situation reinforced the London Committee's mandate to reduce costly expenditures such as those caused by the employees' inability to transport goods to the posts via canoes (Thistle, 1986:54-60). Even though the short trade routes offered the Company some economic relief, this was overshadowed by the mounting costs of hiring Aboriginal tripmen. The Cumberland House journals contain several entries that describe the Western Woods Cree's policy of advanced payment for services and their exorbitant fees (Thistle, 1986:61). In addition, the Hudson's Bay Company experienced problems in hiring Orkney men due to the Napoleonic Wars. Edward Clouston illustrated this point in his

1797 journal entry: “the present War in Europe and scarcity of men in Orkney makes our men very saucy and demand exorbitant wages” (PAM HBCA B.236/a/1, fo. 21).

Suitable men who would have been engaged as employees of the Hudson’s Bay Company were involved in the Napoleonic Wars instead. However, those remaining were less than fit for the hardships of the fur trade. While it appeared that the Company was powerless to reduce their labour costs, Clouston suggested to the Committee that Canadians be employed as tripmen. He remarked that the Canadians were better fit to carry on the trade and had considerably better skills in navigating canoes than the Hudson’s Bay Company men (PAM HBCA B.236/a/1, fo.21). Ultimately, hiring Canadians would eliminate the Company’s dependence on the Cree and quell the Orkney men’s demands; thus, moderating financial losses and stabilizing the Company’s profits.

While the Hudson’s Bay Company had to contend with mounting labour costs, the Napoleonic Wars affected Britain’s access to the European market which, in turn, resulted in a reduced demand for furs (Carlos, 1986:79). According to Ann Carlos (1986:116), the closing of the markets resulted in a decrease in the demand for furs by over fifty per cent. When combined with inflation due to the Napoleonic Wars and the Hudson’s Bay Company’s decision to maintain their normal operations, the Company experienced severe financial pressure. Furthermore, the Hudson’s Bay Company’s decision “...of neither changing relative prices nor decreasing the number of furs exported from the Bay further added to the financial crisis of 1809/10” (Carlos, 1986:116-117). As a result, furs that would have been sold on the market were sitting in storehouses. Thus, the low sales revenue created a serious debt situation as the Company was unable to pay back its credit from the Bank of England (Carlos, 1986:80). Carlos

argues that the Hudson's Bay Company's policy and the above conditions led to the restructuring of the Company. In citing Oliver Williamson, Carlos (1986:117) states that following a direct deterioration in the market environment, a company will "tend to maximize its own short-run profits at the expense of longer-run industry profits". This was the case with the Hudson's Bay Company and its implementation of the Retrenching System.

In addition to the Napoleonic Wars, the American Revolution weakened Britain's financial and political control. In North America, the American Revolution brought about a decline in the number of British fur trade posts following Britain's cession of the Ohio Country²² to America (Naylor, 1987:134-36). This area bordered along the Great Lakes-St. Lawrence Seaway which then became controlled by the American colonies. However, Britain was still able to maintain some economic and political control in Canada (Naylor, 1987:135). As mentioned earlier, the number of markets for British manufactured goods increased, especially after France no longer had trading sanctions. Thus, the Great Lakes-St. Lawrence Seaway system was important to the British for transporting their manufactured goods into the interior (Naylor, 1987:135). In addition, Britain's control of the St. Lawrence Seaway, combined with the Hudson's Bay Company's vast northern waterways, drew the fur trade into the Athabasca district and away from the American interior thereby assuring British control of the fur trade market (Naylor, 1987:136).

²² The Ohio Country, located in the northern section of the United States, was a large section of the fur trade hinterland that some Imperial strategists felt was more important than Canada (Naylor, 1987:135).

Brandon House Fur Trade

From its onset, Brandon House was established not only for the acquisition of furs, but also as a pemmican depot. By 1818, the latter function became increasingly predominant as Peter Fidler was “having all the [Athabasca] Country & the rest of the most distant posts” including the Red River Settlement to supply with pemmican and provisions (PAM HBCA B.22/a/21, fos.37d, 51). In addition, the hostile relations that pervaded throughout the fur trade contributed to “a very great scarcity” of provisions in the northern and western districts (PAM HBCA B.22/a/21, fo.40). The Governor in Chief of the Hudson’s Bay Company requested Fidler to “purchase & encourage the Indians in this Quarter to make what they can” so that the Athabasca men could have food throughout the year (PAM HBCA B.22/a/21, fo.40). By February of 1819, Fidler was able to procure enough pemmican and dry provisions for his men until June, but continued to acquire these items for the remainder of the year (PAM HBCA B.22/a/21, fo.44d). Within the last few months prior to Fidler’s departure for Marten’s Fall to complete his year at Brandon House, his men made and packed over 300 bags of pemmican plus nearly 100 bundles of dry meat and salted tongues (PAM HBCA B.22/a/21, fos.50-53). These bundles were sent with Fidler to Marten’s Fall where the pemmican and dry provisions were redistributed for the brigades and outlying posts.

In the year prior to the measles epidemic, Fidler reported an increase in the annual value of the furs received at Brandon House (PAM HBCA B.22/a/20, fo.42d). He wrote that “...the whole value [of the furs packed for the year] is 1125.46.4 being the greatest by nearly half there has been got here these several years we have 7 2/3 Packs of Beaver skins” (PAM HBCA B.22/a/20, fo.42d). In addition, Fidler described the upper area of

the Souris River as “where the beaver are still high in number” (PAM HBCA B.22/a/20, fo.36d). The abundance of beaver and other fur-bearing animals corresponds to an increase in trapping activity. This meant that more fur-bearing animals were caught in 1817-18 than in the preceding years. Hence, Aboriginal trappers actively pursued trapping during this year in order to trade a greater quantity of pelts and furs. However, this increase in fur trapping may reflect the presence of different Aboriginal groups in the Brandon House area as well as indicating a transitional period from trapping to a plains economy.

According to Susan Sharrock (1977), fur traders categorized Aboriginal trappers into two ecological and socioeconomical groups based upon their involvement within the fur trade. She (Sharrock, 1977:9, 11) denotes these groups as Strong Wood (involved in a trapping economy) and Meadow (adapting to a Plains economy) Indians. Those who were dually adapted to both a plains and trapping economy “tended to be lumped with the beaver hunters” or the Strong Wood Indians (Sharrock, 1977:9). Although Fidler does not use these specific terms in his journals, the premise of these categorizations is applicable to the Aboriginal peoples who visited Brandon House. Those who actively participated could be deduced as belonging to the Strong Wood category and accounted for providing the majority of the furs that were brought to the post. Conversely, the Meadow Indians category was regarded as equestrian and buffalo-hunters, activities that were disdained by the traders. From the traders’ perspectives, the Meadow Indians were not industriously employed in procuring beaver and other fur-bearing animals; nevertheless, they supplied dry provisions and pemmican for the posts. Using these defining characteristics and analyzing the Brandon and Dauphin House journals,

individuals and/or groups may be identified within the Strong Wood or Meadow category.

As mentioned above, some Aboriginal groups were dually adapted to both a trapping economy and a plains lifestyle. Sharrock's (1977) research implies that the transition between the woodland (beaver trapping) and the parklands (buffalo hunting) was effortless. In this case, the Aboriginal people were equally proficient in obtaining beaver pelts, managing a canoe, using a buffalo pound and riding a horse. The choice of lifestyle was voluntary and based upon the economic milieu of the fur trade. Sharrock (1977:11) states that if the trade at the posts did not persuade the Aboriginal peoples to return to beaver trapping, they would opt to move onto the plains to hunt buffalo. However, she (Sharrock, 1977) neglects to address that the time period of her study (late eighteenth century and early nineteenth century) was also a period of transition for many Cree and Assiniboine First Nations as they converted to a plains lifestyle (Milloy, 1988). Thus, the duality of their socioeconomic standing not only reflected their choice in living in the woodlands or parklands, but also a transitional period in which Aboriginal peoples took advantage of the specific economic situation at Brandon House, especially in the early part of the nineteenth century.

Brandon House proved to be an anomaly to Sharrock's (1977) argument as Fidler gave positive recognition to beaver trappers and buffalo hunters. His 1818-19 Brandon House journal contained two entries, one referring to Thumbby, an Assiniboine chief, and the other, an unknown Cree trapper, who was described as a good Indian and the best hunter at the post, respectively (PAM HBCA B.22a/21, fos.44, 46d). According to Sharrock (1977), these men would have been categorized as Strong Wood Indians. Fidler

wrote: “Thumby & a few Stone [Assiniboine] Indians came here with Provisions _ as this is a very good Indian, I rigged him and gave him a Small flag & a big Keg mixt rum” (PAM HBCA B.22/a/21, fo.44). Following Sharrock’s argument, Thumby, a buffalo hunter, should have been described as troublesome, lazy or indolent, characteristics of the Meadow category. Clearly, Fidler thought highly of this man and, rewarded him for his industriousness. Although the second example conforms to Sharrock’s theory, it also differs in that Fidler neglects to record the name of “the best Hunter we have seen this year” (PAM HBCA B.22/a/21, fo.46d). In addition, these examples illustrate the necessity of having country provisions and pemmican at Brandon House. For that reason, the Cree and Assiniboine First Nations peoples took advantage of buffalo hunting as one of the more lucrative economic activities. Furthermore, Brandon House was regarded as a pemmican supply depot for the brigades and, thus, Fidler was required and encouraged to trade for pemmican. In order for him to accumulate the necessary amount of provisions, his attitude towards the local trappers and hunters would influence a hunting-based occupation. Contrary to the Hudson’s Bay Company, the North West Company perceived buffalo hunters as troublesome, so much so that they decided to abandon their Qu’Appelle post as the local Aboriginal peoples were more involved with horse raiding than trapping beaver (PAM HBCA B.22/a/21, fo.38).

The decline in beaver at Brandon House was evident at the time of the measles epidemic compared to the previous year. In March of 1818, Fidler observed that the “Mandans and [the Cree chief] Little Sonneau to be hunting together in the upper parts of the Soorce [Souris] river, where the beaver are still high in number” (PAM HBCA B.22/a/20, fo.36d). However, nearly a year later Yorstons Guide, a Cree chief for the

North West Company, and twelve men arrived at Brandon House with no beaver (PAM HBCA B.22/a/21, fo.49). Furthermore, "Big Nose & Son returned from the Mandans & only brot 8 beaver skins & 1 otter" (PAM HBCA B.51/a/2, fo.2). In the district report, Fidler reports that (PAM HBCA B.22/e/1, fos.15-15d),

the Trade in Furs cannot be increased in this quarter even when the men & goods doubled There are even too many men at present employed for the value of the Trade procured & were it not from the absolute necessity of having dry provisions to carry on the Athabasca Trade all the furs in this district might be collected with less than half the number of men at present employed in it as I believe all our other Establishments to the South of Isle a la Crosse Could be carried on effectively without a single pound of provisions being taken from this District along the height of land which divides the waters that fall into the Mississippi Gulf of Mexico & Hudsons Bay between the Sieux & Satiaux & Cree country there are a considerable number of Beaver but being on the borders of the different Tribes are afraid to go to kill them Mr. Graham has been there this 3 Winters but has had little success in procuring Beaver tho' he has had a great supply of Men & Goods on the whole were the Colony to fetch up their season goods from the Bay The Athabasca entirely & firmly established there would not be the last occasion for half the number of men as at present in this River to purchase and Carey[?] away everything valuable.

The situation at Cumberland House from the 1770s until the early 1820s was comparable to Brandon House at the time of the 1819-20 measles epidemic. Thistle's research and the post journals for Brandon and Dauphin Houses illustrate some similarities. In 1781-82 Cumberland House had been infected with smallpox, resulting in a mortality rate of nearly one hundred per cent for the Basquiau Cree First Nations (Thistle, 1986:64-66). Shortly after the smallpox epidemic, an influx of new Aboriginal peoples occurred. Between 1784 and 1795, Swampy Cree and other groups such as the Bungee²³ (possibly Ojibwa or a new group of Swampy Cree) migrated west and north to the lower Saskatchewan region to replace those decimated by smallpox (Thistle, 1986:64-

²³ Paul Thistle (1986:69) argues that the term Bungee probably referred to Swampy Cree rather than Ojibwa First Nations. His evidence is based upon archaeological finds as well as inconsistency in use of the term by fur traders.

65). As the fur trade expanded further into the Athabasca district, Cumberland House was no longer a terminal point for the brigades. Goods were shipped further inland, bypassing Cumberland House, and the post changed into a pemmican supply depot.

Brandon House was similarly affected by 1819-20 measles epidemic. Although statistics for the mortality rates have not been determined, it is estimated that approximately greater than forty per cent²⁴ of the population had died. The Assiniboine First Nations population had declined as much as sixty-three per cent, and in one incident, the mortality rate reached as high as ninety per cent (PAM HBCA B.51/a/2, fos.2d-13). Although both posts experienced high mortality rates, the influx of new peoples followed the 1781-82 smallpox epidemic more so than the 1819-20 measles epidemic. As a result of the 1781-82 smallpox epidemic, the Cree and Assiniboine withdrew from the northern limits of their territories in the Athabasca and turned southwards to the parklands (Ray, 1974:98). This withdrawal coincides with the influx of the Bungee into the Cumberland House area. Between 1800 and 1808, the Cree and Assiniboine abandoned the area between Lake of the Woods and the east side of Lake Manitoba and, it was into this area that the Ojibwa migrated (Ray, 1974:99; Peers, 1994:5, 49). Although there are several reasons for their migration, the Ojibwa had been actively recruited as beaver trappers to the west by the North West Company (PAM HBCA B.51/e/1, fo.15d; Ray, 1974:104). Like Cumberland House, Brandon House experienced a decline in the number of beaver pelts traded at the post following the measles epidemic (PAM HBCA B.22/a/21). However, it appears that Fidler does not connect the decline in the fur trade to the epidemic, but he implicitly attributes this to a

²⁴ The Cree experienced a mortality rate of approximately forty to fifty per cent, whereas the Assiniboine had a higher mortality rate that ranged from fifty to sixty-three per cent. However, there is not enough data to estimate the mortality rate for the Ojibwa (see Chapter Four).

decline in the beaver population (PAM HBCA B.22/a/21). With the expansion of the fur trade, the primary purpose of Brandon House was to supply the brigades with pemmican and other country provisions, similar to Cumberland House's new role as additional inland posts became established in the Athabasca region.

The Hudson's Bay Company experienced financial hardship that was compounded by the 1781-82 smallpox and the 1819-20 measles epidemics. The smallpox epidemic of 1781-82 resulted in a substantial loss of credit and furs for the Hudson's Bay and North West Companies. Due to the high mortality rates of the Aboriginal peoples, the number of furs trapped during the epidemics declined critically. In addition, any credit that had been advanced to the afflicted trappers was irrecoverable. Consequently, the Hudson's Bay and North West Companies acquired less than the usual amount of furs for the year which, in turn, the Companies incurred as debt, themselves (Lytwyn, 1986:43-44; Naylor, 1987:188, 193). The loss of credit from the previous year's advancement to the Aboriginal trappers and their families was struck off and absorbed by the Companies. Furthermore, the North West Company and other independent firms accumulated even more financial hardship as they also were unable to pay off their creditors, as well as borrowing more in order to purchase goods for the following year²⁵ (Lytwyn, 1986:43-44; Naylor, 1987:188).

The change in the mercantile economy to industrialism changed the face of the fur trade in Canada. The beginning of the Industrial Revolution greatly impacted Britain's

²⁵ Lytwyn (1986:43) states that 1782-83 was "marked with a series of disastrous events which significantly affected the fur trade of the Little North." One of these events included the smallpox which occurred during this time period. As a result, independent firms, such as Ezekiel Solomon, found it difficult to pay his creditors since he received little or no furs that year from the Aboriginal trappers. As Lytwyn (1986:44) suggests: "The smallpox epidemic that had so ravaged the Indian population had also destroyed Solomon's trading system" as well as being a reason for other Canadian traders to leave the area.

economy which, in turn, was reflected in the overseas investments of the British gentry. The financial records of the Hudson's Bay Company indicate the financial losses between 1801 and 1809 in the dividends paid to the shareholders. In order to ease the financial hardship, the Retrenching System was created which led to the breakdown of the mercantilist system. Although it is difficult to determine the extent of which the 1819-20 measles epidemic impacted the Hudson's Bay Company's profits, the intense competition with the North West Company and the demise of mercantilism caused much economic strain. Furthermore, during the infancy of the Industrial Revolution, Europe's changes in its trade and colonial policies also impacted the viability of the Hudson's Bay Company. Fortunately, the 1781-82 smallpox epidemic serves as a basic model upon which the economic and sociocultural effects of the 1819-20 measles epidemic can be assessed.

CHAPTER SIX

Conclusion: Summary and Implications of a Human Behaviour Model

Beginning in the late 1700s and into the mid-1800s, the fur trade experienced a period of transition. At this time, the Hudson's Bay and North West Companies encountered political restructuring and financial hardship. The instability of the North West Company resulted in its amalgamation with its rival, the Hudson's Bay Company. Prior to the 1821 amalgamation, trading policies impacted the Companies' profits as the Aboriginal peoples manipulated the competitive trade to their advantage. The Plains Cree, Assiniboine and Ojibwa residing in the Brandon House area adapted to the unique economic conditions presented by the need for a supply of pemmican in the fur trade, as well as continuing to provide the Companies' main commodity, beaver pelts.

The Competitive Fur Trade Era and the Napoleonic Wars drained the financial resources of the Hudson's Bay Company. As the Company struggled to remain competitive with the North West Company and the Canadian freemen, the dividends paid to the British shareholders dropped from six to four per cent. By 1810, the London Committee realized the need for economic restructuring in order to bring its debt under control. To reduce expenditures, the Retrenching System adapted the North West Company's mandate of paying employees a share of the Company's profits rather than a standard salary wage. Although these changes alleviated part of the financial strain, the Napoleonic Wars also caused a fifty per cent decrease in the market demand for furs. Furthermore, the Hudson's Bay Company's decision to continue accumulating as many furs as possible at a time of high inflation generated low sales revenue. In its attempt to maximize the Company's short-term profits, they pushed into the interior and the

Athabasca region. Consequently, for the Hudson's Bay Company, their long-term profits suffered.

In 1817-18, Peter Fidler recorded an increase in furs of almost one hundred per cent whereas in the year of the epidemic, the fur trade appeared to be almost nominal. This reflected the Plains Cree and Assiniboine First Nations' involvement in a beaver trapping economy the year prior to the epidemic which was abandoned the next year. Although there is no concrete evidence to explain the decrease in the trade, abandonment of trapping during mourning and high mortality rates caused by the measles epidemic is one valid explanation. Fidler recorded a death rate of approximately eight people in six weeks plus an additional sixty-three Assiniboine men as a result of measles. Unfortunately, the mourning practices of the Cree, Assiniboine and Ojibwa were not recorded and, thus, must be surmised from other ethnohistorical sources. At the time of the 1819-20 measles epidemic, the Plains Cree, Assiniboine and Ojibwa First Nations in the Brandon House area support the above explanation regarding low fur returns.

Following the 1819-20 measles epidemic, the Plains Cree, Assiniboine and Ojibwa experienced mortality rates greater than forty per cent. The measles epidemic diffused from the trade centres of the Mandan villages located along the Missouri River. An Ojibwa trading party contracted the virus from the Mandan and brought it back to Brandon House. Although the Cree, Assiniboine and Ojibwa were affected by the measles, they experienced different mortality and morbidity rates. The Cree and Assiniboine experienced higher mortality rates, between fifty and sixty per cent, than the Ojibwa. Individual and community lifestyles impacted the mortality and morbidity rates. As discussed in chapter three, the main factors were physical health, nutrition, and

alcohol consumption. Poor physical health is characterized by an immunocompromised system that results in increased susceptibility to illnesses and diseases. In order to maintain optimal health, diet and nutrition plays a key role. A diversified diet helps to ensure that the required minerals, vitamins and proteins are consumed to boost immune efficiency. In addition, moderate alcohol consumption also adversely affected the immune system. When alcohol consumption is combined with a poor diet, physical health deteriorates quickly increasing the mortality rate of infectious diseases. In the case of the Ojibwa, their mortality rate was lower as they had the most diversified diet and better physical health as compared to the Plains Cree and Assiniboine.

Michael Trimble's (1989) human-behaviour model was designed to examine historical period disease phenomena using epidemiological and ethnohistorical theories. In his approach, he combined epidemiological variables with ethnohistorical data on interaction spheres to evaluate the spread of acute-infectious diseases. Trimble's (1989:42-3) general variables include disease, cultural, biological and environmental factors which are primarily concerned with the introduction, transmission and biological consequences of epidemic outbreaks. On the other hand, the interaction spheres (individual, household, extended family and clan, farther-ranging area of contact, production area, earthlodge village, and Euroamerican settlements) are "predicated on the notion that human behaviour influences the transmission of most communicable diseases" (Trimble, 1989:47). Thus, the "cultural responses to these [acute-infectious] diseases were as important as the diseases themselves in producing heightened morbidity and mortality" (Trimble, 1989:47).

General variables explain the spread of disease through the principles of organic pathogens (disease), changes in genetic composition to adapt to environmental changes (biological), geographic location (environmental) and techniques in controlling the immediate environment (cultural) (Trimble, 1989:42). These variables are “composed of a number of core factors that describe or affect the individual variables and represent the minimal units of observation employed when evaluating the spread of an epidemic” (Trimble, 1989:43). Pathogenicity and virulence, transmission, nutrition, resistance, and climatic factors are a few of the core factors used to evaluate the spread of disease as well as the impact on the rate of mortality. As discussed in chapter three, the mortality and morbidity rates increased due to the virulence of the disease and the overall health of the infected population which, in turn, is determined by the biological resistance to the disease. When combined with the cultural determinants associated with an historical period disease phenomenon, the specific behaviours of exposure, transmission and diffusion may be identified within the interaction spheres of a Northern Plains community (Trimble, 1989).

Trimble (1989) identifies seven interaction spheres within the Mandan, Hidatsa and Arikara villages. These are: the individual, the household, the extended family and clan, the farther-ranging area of contact, the production area, the earthlodge village, and the Euroamerican settlements (Trimble, 1989:53-8). The individual sphere focuses on personal hygiene, eating habits, and daily social behaviour. The household sphere is concerned with familial interactions and represents the “major focal points for the introduction and development of infectious disease within a Plains Village community” (Trimble, 1989:54-5). The third sphere, extended family and clan, deals with the

transmission of disease as influenced by work patterns and division of labour. This sphere is further divided into two sub-groups: the farther-ranging area of contact and the production area. In the farther-ranging area of contact, people experience periodic contact from other settlements as well as new physical and biological environments whereas the production area encompasses local activities within the home. Combined, the above spheres make up the earthlodge village sphere that also involves interaction among local families, other villages and outsiders. The Euroamerican settlements include all forms of contact between Aboriginal and non-Aboriginal peoples. As such, the fur trade posts and their employees, traders who travelled to the villages and modes of transportation (steamboat²⁶) that are able to transmit European diseases are categorized in the Euroamerican settlement sphere. It is the individual, farther-ranging area of contact, production area and the Euroamerican settlements spheres that are of particular interest to this thesis.

Trimble's human-behaviour model is applicable to studying the transmission of disease within a horticultural society; however, his seven interaction spheres need to be modified for the Plains Cree, Assiniboine and Ojibwa First Nations of the Brandon House area. In order to construct a paradigm that identifies specific disease-related behaviours, the individual, household, farther-ranging area of contact, production area, and Euroamerican settlements spheres are most influential for the transitional period of the 1819-20 measles epidemic. Although Trimble's model takes a more ethnographic approach to understanding disease transmission, the epidemiological theories provide stronger support for the behaviour model of the individual and household spheres.

²⁶ The 1837 smallpox epidemic had been transmitted via the passengers on the St. Peters steamboat.

However, he neglects the socioeconomic impact as another factor in understanding the effects of the transitional period and its corresponding impact on disease transmission.

As noted above alcohol consumption and poor nutrition adversely affected an individual's immune system which, in turn, increased the risk of contracting the measles virus. Food and beverage consumption is part of the individual sphere and the differences in mortality rates between the Cree, Assiniboine and Ojibwa reflect such an epidemiological pattern. Furthermore, the ethnohistorical material indicates that increased alcohol consumption occurred during an epidemic (as a part of the mourning behaviour). In addition, this behaviour would interfere with the ability to maintain a diversified diet and proper nutrition since energy would be diverted to drinking. In terms of socioeconomic activity, Aboriginal peoples lost hunters and trappers to the epidemic or were engaged in caring for the infirm and mourning the death of community members.

The household, according to Trimble (1989:54-5), was the focal point in the transmission and development of infectious diseases. Contrary to the Mandan, the household sphere of the Cree, Assiniboine and Ojibwa was mobile, living in less permanent housing and completing most activities outdoors. As a result, the transmission and development of air-borne infectious diseases was moderated. At this level, an infected member of the community would introduce the virus and it would spread to other people. The community, then, could be immobilized as people became infected and could no longer manage tasks essential to the community. Trimble (1989) divides these tasks into the farther-ranging area of contact and the production area spheres.

By the early part of the 1800s, the Plains Cree and Assiniboine participated in a dual lifestyle of beaver trapping and buffalo hunting and, thus, their sphere of farther-

ranging area of contact diversified. Buffalo hunting was conducted on the plains or parkland regions whereas beaver trapping took the Cree and Assiniboine into the woodlands. Thus, the Cree and Assiniboine's contact with other First Nations differed according to their economic pursuits of hunting or trapping and the timing of contact with other people. The Ojibwa, on the other hand, participated more in beaver hunting than buffalo hunting and, therefore, had less contact with the First Nations in the parkland regions. However, all three First Nations had contact with Mandan, albeit for different reasons. The Cree's political and economic relationship with the Mandan was in constant flux as the Cree's middleman role declined. The Assiniboine's relationship was less than amicable as the two groups considered each other enemies, and contact between them was limited to warfare. The Ojibwa and Mandan were involved in cordial economic alliances as Ojibwa trading parties frequently travelled to the Mandan villages. The farther-ranging area of contact and the production area are differentiated by the division of labour within the community. Whereas the former is generally the domain of men, the production area encompasses "man-environment activities" and falls under the sphere of women (Trimble, 1989:57). Activities such as food preparation, care of the young and infirm, trading and, at Brandon House, employment at the post were conducted by women. Together these two spheres aided the transmission and development of infectious diseases. The farther-ranging area of contact examines the mobility of people as potential agents for the introduction of a virus. At Brandon House, Capt Grant and his men had introduced measles after contracting the virus from the Mandan on a trading expedition. Furthermore, the production area facilitated the spread of the disease within the household and community. The measles virus was spread throughout the larger

community of Brandon House and the households of the Aboriginal peoples as the women worked at the post making pemmican bags and candles and became potential carriers between their immediate household and the community.

Brandon House was also part of the Euroamerican settlements sphere. Trimble (1989) implies that the transmission of disease travels from the fur trade post to the Aboriginal peoples; this was not the case. The measles epidemic was introduced into the Brandon House area via an Aboriginal trading party. Furthermore, following the introduction and transmission of the epidemic, Fidler's family was also afflicted with the virus, and his youngest child succumbed. At the same time, economic pressures from the London Committee impacted the rate of transmission of epidemics. The Napoleonic Wars had crippled Britain's ability to send trade goods to Canada, as well, intense competition during the fur trade resulted in new trade practices for both the Companies and the Aboriginal peoples as traders travelled more often into the interior, increasing the susceptibility of contact with an infectious disease. Furthermore, Aboriginal peoples suspended trapping and hunting as they mourned the death of family. Although the factors and employees at the posts respected the mourning period, pressure from the Hudson's Bay Company to maintain and continue trading practices added to the Aboriginal people's stress, adversely affecting their physical health. During these times, Aboriginal peoples suffered from the physical debilitation of an epidemic as well their mental and social health declined, resulting in high morbidity and mortality rates. Economically, this has been generally translated into low fur returns for the fur trade companies in the historical fur trade literature. In almost thirty years, the fur trade literature has done little in examining the impact of disease on First Nations cultures.

Although some historians and geographers, such as Arthur Ray (1974), John Taylor (1977), Michael Trimble (1989) and Paul Hackett (1991), have acknowledged that epidemics were one of the major factors in the acculturation process for Aboriginal peoples, the literature has yet to address how epidemics altered the Northern Plains societies. It is the hope that by examining factors such as health, diet and the fur trade economy have at least shed some light on the socioeconomic impact of the 1819-20 measles epidemic on the Aboriginal peoples of the Brandon House area.

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