Captain Death Strikes Again: Tuberculosis and the Stó:lō 1871-1907

A Thesis Submitted to the College of
Graduate Studies and Research
in Partial Fulfillment of the Requirements
for the Degree of Master of Arts
in the Department of History
University of Saskatchewan
Saskatoon

By
MacKinley Darlington

© Copyright MacKinley Gail Darlington, 2010. All rights reserved.
Permission to Use

In presenting this thesis in partial fulfillment of the requirements for a Masters of Arts degree from the University of Saskatchewan, I agree that the Libraries of this University may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by the professor or professors who supervised my thesis work or, in their absence, by the Head of the Department or the Dean of the College in which my thesis work was done. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of Saskatchewan in any scholarly use which may be made of any material in my thesis.

Requests for permission to copy or to make other uses of materials in this thesis/dissertation in whole or part should be addressed to:

Head of the Department of History
University of Saskatchewan
Saskatoon, Saskatchewan S7N 5A5
Canada

or

Dean
College of Graduate Studies and Research
University of Saskatchewan
107 Administration Place
Saskatoon, Saskatchewan S7N 5A2
Canada
Abstract

Tuberculosis has cast a long shadow on the history of Native-Newcomers relations in the Pacific Northwest. Malicious and deadly, it has dramatically affected the lives of thousands of Aboriginal people and become a permanent part of life in Stó:lô communities. However, its history, especially the period 1871-1907, has been underrepresented in historical scholarship. Due to perceived scarcity of available quantitative information, scholars in general have paid little attention to tuberculosis, focusing instead on the early contact period, the sanatorium period that began in British Columbia in 1907, or on another disease altogether, usually smallpox. Moreover, when tuberculosis has been studied, it has been approached as a disease within a western bio-medical perspective.

In contrast to much of this historiography, this thesis examines tuberculosis more holistically as an illness best understood culturally, as it has been experienced by communities as well as by the individual. Through story and song as well as a thorough reading of familiar government records under a different lens, this thesis engages the perceptions and understandings of both Aboriginal people and Euro-Canadians, patients and government agents, to produce a more balanced, meaningful, and culturally reflexive understanding of the history of tuberculosis. Following a historiographical discussion in the introduction, chapter two explores Stó:lô oral archival sources to engage Stó:lô people’s perspective of tuberculosis and illness. These stories and songs, generated by Stó:lô people themselves, demonstrate the profound influence that tuberculosis has had on Stó:lô communities throughout the latter part of the nineteenth century. With this new framework in mind, chapter three re-examines the historical record and specifically government documents created by the Department of Indian Affairs and other preceding agencies. This more holistic interpretation of tuberculosis reveals that rather than alleviating the severity and prevalence of tuberculosis in Stó:lô communities, certain DIA initiatives likely exasperated its affects. By thus addressing the historiographical gap in tuberculosis literature and by generating a more meaningful, balanced, and culturally reflexive analysis of the history of tuberculosis among the Stó:lô, this thesis contributes to Canadian medical history, the history of Native-Newcomer relations, and the history of the Stó:lô people.
Acknowledgments

My experiences in Stó:lō territory have challenged me to think about history in a different way, in a more holistic and encompassing way, and this journey has significantly shaped my understandings of culture, history, and ultimately my thesis work. Specifically, I would like to thank Sonny McHalsie for sharing his invaluable knowledge and influence; Tia Halstead for all of her assistance at the Stó:lō Nation Archives; and the countless others who have given their time and energy to help make the Ethnohistory Fieldschool, and my subsequent visits to the community, such a significant learning experience. The generosity and eagerness displayed by members of the Stó:lō community in welcoming students into their homes, culture, and history is truly amazing.

I am also heavily indebted to my advisor, Dr. Keith Carlson. I have great appreciation for the support and confidence that Keith has shown me throughout my time as a graduate student. He has displayed understanding and innovation in dealing with my unique needs and circumstances. From Keith, I have always received the supports needed to continue my academic growth. Thank you also to the members of my committee, Dr. J.R. Miller and Dr. Brett Fairbairn. The perspective and guidance they, along with my external examiner Dr. Paul Hackett, provided was extremely helpful. There are numerous others within the History Department that have supported me along my way, perhaps none as influential as Prof. Leung - without his mentorship I would have been on a very different path.

Finally, I could not conclude without thanking my family. Their unwavering love and support is with me always. Liam, without the countless hours of assistance, reassurance, and encouragement you provided, I would never have been able to finish this project. I hope to one day return the favour.

Thank you.
Table of Contents

Permission to Use ..............................................................................................................i
Abstract...........................................................................................................................ii
Acknowledgments..........................................................................................................iii
Table of Contents...........................................................................................................iv

Chapter One ..................................................................................................................1
Introduction: The History of Tuberculosis in Native-Newcomer Relations

Chapter Two ................................................................................................................22
Oral Archive: Myth, Music and History

Chapter Three .............................................................................................................46
The Written Archive: Tuberculosis, the Stó:lō and the Department of Indian Affairs

Chapter Four ..............................................................................................................72
Conclusion: Re-Evaluating the History of Tuberculosis Among the Stó:lō

Bibliography ..............................................................................................................80

List of Images

Image 1.1 ....................................................................................................................18
Map of Stó:lō Territory

Image 2.1 ....................................................................................................................23
Albert (Sonny) McHalsie in front of Kawkawa Lake

Image 2.2 ....................................................................................................................37
Kawkawa Lake

Image 2.3 ....................................................................................................................42
No.5 Song When Treating Hemorrhage from the Lungs

Image 3.1 ....................................................................................................................60
Return showing the number of cases receiving Medical Treatment and Medicines, 1878

Image 3.2 ....................................................................................................................61
Return showing the number of cases receiving Medical Treatment and Medicines, 1879


Chapter One

Introduction: The History of Tuberculosis in Native-Newcomer Relations

Tuberculosis has a long association with the Pacific coast of North America and the history of Native-Newcomer relations in Canada. Early voyages from Europe to modern-day British Columbia were unforgiving and rife with physical danger. Aside from shipwrecks, tuberculosis was a leading cause of death in the eighteenth and nineteenth centuries. For example, Charles Clerke, the man who assumed command of the James Cook expedition after the famous Captain’s death in the Hawaiian Islands, died from tuberculosis before the expedition made it back to England. A few years after the expedition’s return, James King, Clerke’s replacement, also died of tuberculosis.¹ When Captain George Vancouver embarked on his voyage to the Northwest Coast in 1791, he was already ill. Although Vancouver lived through his explorations, he succumbed, less than three years later, to what is generally believed to have been tuberculosis.²

The threat of tuberculosis was not limited to explorers; its affliction was indiscriminate, affecting virtually all of Europe. Tuberculosis was so destructive, in fact, that it became popularly known as ‘Captain Death,’ a phrase coined by 15th century theologian and philosopher John Bunyan. In The Life and Death of Mr. Badman, Bunyan vividly describes the eventual death of the protagonist and the impact of tuberculosis: “Yet the Captain of all these men of death, that came against him to take him away, was the consumption [tuberculosis], for it was that that brought him down to the grave.”³ So poignant was Bunyan’s description that ‘the

¹Robert E. McKenchnie, Strong Medicine, (Vancouver: J.J. Douglas, 1972), 78.
²Ibid., 79.
captain of these men of death’ became almost synonymous with the illness, as illustrated by the titles of several works including Thomas Daniel’s *Captain of Death: The Story of Tuberculosis* and Greta Jones’ "*Captain of All These Men of death*": *The History of Tuberculosis in Nineteenth and Twentieth Century Ireland*. Other popular descriptions of tuberculosis have included the ‘White Plague’, ‘Wasting’, ‘Pott’s disease’, and ‘White Swelling’, but ‘Captain Death’ remains the most popular.

Despite tuberculosis’s devastating European legacy, the term ‘Captain Death’ is perhaps more applicable to Aboriginal North America. As the men of Captain Cook’s ships stepped onto the soil of the Northwest coast in 1776, they unknowingly unleashed the most influential agent of change Aboriginal people would ever know - introduced disease. The first documented case of tuberculosis among Aboriginal peoples living in the area was recorded at Nootka Sound, on Vancouver Island, in May 1793 by Archibald Menzies. He observed a young man much emaciated with pulmonary consumption, frequent short cough, and purulent expectoration. Since then, tuberculosis has claimed countless lives and caused widespread cultural trauma. In oral based societies, it is elders who hold and transmit the traditional knowledge contained in language, spiritual and ceremonial practices, kinship ties and subsistence activities. Elders were also most susceptible to introduced disease. Combined with high morbidity and mortality rates,

---


5 McKenchnie, *Strong Medicine*, 78. It is not the intent of this thesis to argue whether or not tuberculosis affected pre-contact peoples on the Northwest Coast but it is important to recognise that mycobacterial disease, that of which tuberculosis is one, was known to pre-contact peoples of the western hemisphere, and that there is a debate over whether the Northwest coast was affected. If the Northwest coast was affected prior to European contact, it was not with same vigour that occurred after Europeans arrived. For the purposes of this examination, tuberculosis will be treated as an introduced disease. “Several of the officers aboard the explorers’ ships suffered and died from chronic debilitating illnesses that have been presumed to be tuberculosis.”
this disruption seriously jeopardised the transmission of cultural knowledge from one generation to the next. So damaging was the introduction of tuberculosis that it remains one of the most traumatic and critically important events in the history of Native-Newcomer relation.

Tuberculosis, however, is underrepresented in historical scholarship. It is a malicious disease that scholars have overlooked for a number of reasons. Unlike smallpox and other epidemic diseases, tuberculosis is a far more veiled killer and, therefore, difficult to study. Although tuberculosis dates back into antiquity, its many symptoms were not linked to a single disease until 1882. Before that, tuberculosis diagnoses were limited to ailments affecting the lungs, now called pulmonary tuberculosis. The disease, however, affects other parts of the body with the same frequency, presenting a wide range of seemingly unconnected symptoms. Finding tuberculosis references prior to the twentieth century, therefore, requires considerable research but can also make valuable contributions to the existing historiography.

Common frameworks used for studying the history of tuberculosis are also problematic; understanding tuberculosis only as a disease is very limiting. Tuberculosis has almost always been studied from a Euro-centric perspective, potentially obscuring the understandings of Aboriginal peoples. To examine the cultural history of tuberculosis, we must contextualise it not only within the medical or lay western communities that interpret tuberculosis scientifically, but also within the Aboriginal communities that have experienced it. In oral cultures, the most significant historical information is found in oral sources, particularly stories. Rather than fictional tales, they are tools used to communicate culturally important information from one generation to the next and are just as important to oral cultures as documents are to written ones. These stories, myths, and songs are, in effect, the repository of historical information; an oral archive of history. The purpose of using oral sources therefore is not to corroborate written
documentation but rather to find new information and engage new perspectives. Oral history is independent of and just as valid as written history, and using it allows me to engage the history of tuberculosis in the late nineteenth century within a culturally-reflexive framework.

To emphasise and engage the perspective of both doctors and patients, this thesis differentiates between ‘disease’, defined in Western biomedical terms as being caused by a Mycobacterium, and ‘illness’, meaning a shared cultural perceptions of disease within a distinct cultural worldview, thereby permitting a more inclusive and meaningful history of tuberculosis among Aboriginal communities. By taking a broad view of tuberculosis and engaging both western and Aboriginal histories of illness in general, this thesis reinterprets the historical record within a more balanced and reflective framework that is equally meaningful to both doctors and patients, westerners and Aboriginal peoples. What I find is that tuberculosis was affecting Aboriginal people earlier than the existing historiography indicates and actually intensified in the late nineteenth century. As demonstrated by oral and written records, policies designed by the Department of Indian Affairs to combat the spread of disease actually had the perverse effect of increasing infection rates. Therefore, despite increased government surveillance and intervention as well as scientific breakthroughs that helped them to better understand and identify tuberculosis as a disease, many Aboriginal people continued to experience it as an illness that required the comfort, solace, and meaning only found in treatments provided by

---

6A culturally reflexive framework is one that engages Stó:lô perspectives, beliefs and understandings of their relationship with tuberculosis.


8Better scientific understandings of tuberculosis as well as increased surveillance and record keeping may have also contributed to the increase in reported cases of tuberculosis. But, the historical record demonstrates that DIA policy was a major factor.
traditional healers. For the Stó:lô, a group of First Nations whose traditional territory covers much of British Columbia’s lower Fraser River Valley, and who are the focus of this study, Captain Death represents a constant and deadly illness that infiltrated aspects of culture in a visible and enduring manner more than two centuries ago and remained a fatal threat well into the twentieth century.

Through this investigation of the history of tuberculosis in the final decades of the nineteenth century, I hope to contribute to the methodological development of medical, Canadian, and Native-Newcomer historiographies as well as the history of the Stó:lô people. Perhaps even more important is the contemporary relevance of this study to healthcare relationship between Aboriginal and non-Aboriginal Canadians. Due to the recent recurrence of tuberculosis in Aboriginal communities, medical practitioners and government officials would do well to remember the cultural context in which illness is understood and experienced. The social and cultural context of tuberculosis the illness is just as important as the physical and biological understanding of tuberculosis the disease. In order for prevention and treatment methods to be successful in Aboriginal communities, they must work to treat tuberculosis as it is understood by the members of that community.

**The Anatomy of Captain Death**

Captain Death may be considered an illusionist of sorts, exhibiting many seemingly unrelated symptoms known by many names. In fact, it was not until 1882 that scientist Robert Koch revealed the illusionist and connected his various symptoms and terms to a single cause: Tubercle Bacillus Mycobacterium Tuberculosis. Once it entered a host, this bacterium, Koch found, could settle as a small nodule, or tubercle, almost anywhere in the body. For example,
pulmonary tuberculosis, the most common form of tuberculosis, manifests as progressive
emaciation, coughing, languidness (deficiency in mental and physical alertness and activity),
fever and the expectoration of blood, often described as ‘blood in the handkerchief’.9 When
bones and joints are affected, on the other hand, pain in the affected area is the primary
symptom, and when lymph glands are affected significant swelling results. Tuberculosis can also
infect the kidneys, gastrointestinal tract, adrenal glands, lymph nodes, bones, joints and the eyes.

Tuberculosis of the brain and/or spinal cord, known as either tuberculosis meningitis or
tuberculomas, is particularly relevant to this study. Tuberculosis meningitis occurs when a
tubercle in the brain ruptures and spills into the meningeal space surrounding the brain and spinal
cord.10 Early symptoms include irritability and restlessness followed by a stiff neck, headache,
vomiting, seizures, changes in mental condition or behaviour, and even coma. When a tubercle in
the brain becomes encased rather than ruptured, tuberculomas occurs. Due to the pressure this
mass places on the brain, seizures are the most common, and often the only, manifestation.11

Captain Death’s many manifestations have resulted in the use of a variety of names, often
based on symptoms, both scientific and lay. When tuberculosis affected the lymph glands of the
neck, for example, it was referred to as scrofula, or, less commonly, struma.12 The most popular
English lay term used in the fifteenth century to describe scrofula was the ‘King’s Evil’.13

Pulmonary tuberculosis, on the other hand, was often called phthisis, literally meaning ‘wasting’.

10Neil W. Schluger, M.D. and Timothy J. Harkin, M.D. Tuberculosis Pearls, (Philadelphia: Hanley &
Belfus, 1996), 56.
11Ibid., 56.
12Daniel, Captain of Death: The Story of Tuberculosis, 23.
13It was a popular assumption in nineteenth century England that this ailment could be cured by the touch
of the King. Thus, it became known as the King’s Evil.
Although this term originated thousands of years ago in ancient Greece and Rome,\textsuperscript{14} it remained the preferred medical term into the twentieth century. ‘Consumption’, derived from a term used in the Old Testament to identify tuberculosis, is the lay equivalent of phthisis and is regularly encountered in historical records, including those of the Department of Indian Affairs.\textsuperscript{15} The Halkomelem term for tuberculosis, and the one most commonly used in Stó:lô communities, is \textit{toteqw’õ: mestem},\textsuperscript{16} a derivative of the root word meaning ‘to cough’, and is indicative of the pulmonary form.

By linking these various symptoms and names, Koch’s discovery thus revolutionised scientific understandings of tuberculosis, especially in medicine and healthcare. Its dissemination, however, was not immediate. Most people, including government officials and academics, continued to use earlier terminology well into the 1890s and early 1900s. Studying tuberculosis during this period is therefore considerably more difficult, as its historiography shows.

\textbf{Captain Death in Canadian History}

Due to the many forms he takes, Captain Death has received far less attention from Canadian historians and other academics compared to other, more easily recognisable diseases, especially smallpox. Aboriginal people infected with the illness are particularly disadvantaged in that their experiences, culture, and history are often glossed over, essentialised, or ignored altogether; standardising the symptoms and terminologies associated with tuberculosis has not

\textsuperscript{14}Daniel, \textit{Captain of Death: The Story of Tuberculosis}, 17.

\textsuperscript{15}Ibid., 17.

removed all the historiographical obstacles. As recent scholarship shows, new methods and frameworks also are necessary.

Although tuberculosis was introduced to North America hundreds of years ago, the study of tuberculosis in what is now Canada has been confined almost exclusively to the twentieth century. In *The Miracle of the Empty Bed: A History of Tuberculosis in Canada*, for example, George Jasper Wherrett, is only concerned with the disease’s recent history despite stating that “at the time of Confederation in 1867 recurring epidemics were the main problems of public health and tuberculosis was the greatest cause of death”. Building on his work with the Royal Commission on Health Services and its 1965 publication, Wherrett’s book, like many others in the field, also adopts a heavily quantitative approach to the study of tuberculosis that obscures the experiences of patients and privileges western medical perspectives.

Wherrett’s earlier work, “Tuberculosis in Canada,” adopted a similar approach in assessing the “general fear that the Indians could infect the white settlements.” Again relying largely on statistical information, Wherrett argues that “Indians and Eskimos have constituted a special problem with tuberculosis control” and it is the responsibility of the government to ensure they are quarantined and treated. To its detriment, Wherrett’s study assumes that consumption was a genetic disease to which certain races were more susceptible. Although these


18 Notable exceptions to the reliance on quantitative data at the expense of Aboriginal perspective are geographer Paul Hacket, in his 2002 book *A Very Remarkable Sickness: Epidemics in the Petit Nord to 1846*, and historian Maureen Lux in *Medicine that Walks: Disease, Medicine and Canadian Plains Native People, 1880-1940*.


misconceptions do reflect certain real epidemiological patterns and reflect the thinking of its time, his focus on race obscures more important socio-economic conditions. These and other early works on the history of tuberculosis in Canada are less concerned with the wellbeing of Aboriginal people than they are of non-Aboriginal Canadians who could become infected by sick Indians, a great irony given that westerners were the ones that introduced tuberculosis to Aboriginal North America.

Concern over the spread of tuberculosis to non-Aboriginal Canadians was extremely influential in informing governmental strategies, so much so that the fear invoked by tuberculosis helped to initiate a philosophy for Canadian healthcare services that is still visible today. In “The Social and Political Implications of Tuberculosis among Native Canadians”, Corinne Hodgson explores the fear-based relationship between illness, Aboriginal peoples, and the Canadian government which culminated, in the 1880s and 1890s, with the Public Health Movement. One of its primary goals was to prevent the spread of illness by addressing health-related issues like sanitation and living conditions. Although examining tuberculosis as a social rather than strictly biological disease is a useful and informative approach, Hodgson’s work focuses on the Canadian government’s interpretation and response to tuberculosis and not the relationship between illness and Aboriginal populations. Like many other works on the history of tuberculosis in Canada, Hodgson’s article organises its data according to social divisions based on citizenship – Canadian (but not Indian), Immigrant, or Indian – but does not examine the relationship


22 Ibid., 502-503.
between Aboriginal groups and illness. Aboriginal people are depicted as the source of the problem but largely excluded from the solution.

Canadian studies that do address Aboriginal experiences with tuberculosis often approach First Nations as a homogenous unit, thereby obscuring individual and community uniqueness. In *The Weariness, the Fever, and the Fret: The Campaign against Tuberculosis in Canada 1900-1950*, for example, Katherine McCuaig advocates large scale studies, not individual oral histories, which examine tuberculosis within the larger context of health and welfare: “The problem of disease among native peoples, a very serious one, would be better studied as part of the whole issue of health services in general among the native peoples, who were a federal responsibility.” Therefore, although McCuaig very effectively identifies the nature and complexities of tuberculosis, including a comprehensive explanation of the disease and the importance of engaging community attitudes, her broad approach presumes uniformity in the way that illness is internalised and experienced by Aboriginal people regardless of the group, timing, cultural framework, and even the type of ailment. This euro-centric framework effectively privileges the wellbeing and perspective of uninfected, non-Aboriginal peoples ahead of the Aboriginal people living with the illness.

In “Tuberculosis: The Native Indian Viewpoint of Its Prevention, Diagnosis, and Treatment”, medical student Don Jenkins sets out to incorporate Aboriginal interpretations of the tuberculosis problem in order to improve communication and strategies for delivering healthcare benefits to Aboriginal Canadians. On the surface Jenkins’ article seems to be very promising as

---

23 Wherrett, *Royal Commission on Health Services: Tuberculosis in Canada*, Table 2: *Active Tuberculosis, Ontario 1961, Rate by Country of Birth* illustrates this divide.

both the subject matter and methodology appears on topic and relevant to this historical examination of tuberculosis and the Stó:lô; however, it does not live up to the expectations generated by the title. Attempting to engage an “Indian view of tuberculosis”\(^{25}\) – a unique approach among studies of tuberculosis in Canada, Jenkins uses the results of a 1976 survey that asked 190 Aboriginal British Columbians to comment on their level of knowledge and attitude towards methods of diagnosing and treating tuberculosis. His analysis does highlight still relevant areas of concern in the delivery of healthcare services to Aboriginal Canadians; for example, “Roughly one-third of the people surveyed felt that the local nurse had no understanding of their culture and 18% felt that they were not comfortable with the nurse and the nurse was not comfortable with them.”\(^{26}\) This lack of cultural understanding, however, is also a fundamental flaw of the survey, results, and accompanying analysis provided by Jenkins. Regardless of the implications suggested by the title, this work does not truly engage with an Aboriginal viewpoint as it assumes that Aboriginal people identify with tuberculosis as a scientific and bio-medical phenomena. As with many studies of tuberculosis in Aboriginal communities, Jenkins’ work does not engage with Aboriginal perspectives because it does not consider that tuberculosis is understood culturally as an illness and not simply as a disease to be treated medically. By failing to recognise Aboriginal understandings of tuberculosis at this underlying level, the limitations of cross-cultural communication are reinforced rather than broken down and prevention, diagnosis, and bio-medical treatment methods will likely remain poorly received by many in Aboriginal communities.


\(^{26}\)Ibid., 549.
James Waldram et al.’s *Aboriginal Health in Canada: Historical, Cultural, and Epidemiological Perspectives* perhaps best exemplifies the benefits and importance of questioning western scientific framework but it too is very broad and general in its treatment of Aboriginal people. Operating within a social science framework that incorporates Aboriginal source material, the authors construct a more comprehensive and thorough study of health in Aboriginal Canada that is relevant to both an Aboriginal and non-Aboriginal audience. As the title suggests, Waldram et al. focus not only on epidemiological perspectives and scientific understandings of disease but also on cultural and historical understandings of illness. After tracking disease epidemics among different Aboriginal groups in Canada, the authors discuss why epidemics and illness have affected Canadian Aboriginal populations in such an aggressive manner. However, despite the many contributions this work makes to the history of Aboriginal illnesses, its broad focus subsumes specific illnesses, such as tuberculosis, and individual Aboriginal groups, on the Northwest coast for example, within a general, rather impersonal, survey that potentially obscures local experiences.

Waldram’s *Revenge of the Windigo: The Construction of the Mind and Mental Health of North American Aboriginal Peoples* is another example of exceptional scholarship at the national level. In this work, intellectual history is used to re-examine western traditions and understandings of ‘truth’ and history that inform the way Aboriginal reality has been interpreted. Through an inter-disciplinary approach, Waldram challenges the tendency to focus on ‘what is’ rather than the cultural/societal ideas that inform it. In working to understand the potential for

---


multiple realities, Waldram also challenges scientific understanding of mental health. However, despite offering an alternative framework for understanding and studying the health of Aboriginal peoples, Waldram does not delve into how this alternative methodology can be actualised or how it can be applied to individual communities.

Other works adopt a more localised approach. Pat Sandiford Grygier in *A Long Way from Home*, for example, explains how geographic and cultural isolation affected Inuit peoples’ experiences with tuberculosis. For the Inuit, both the illness and its treatment were personally and collectively destructive. Because treatment meant removal, isolation, and quarantine not only from the community but the whole of the north, patients experienced significant physical and cultural separation. Those who survived to be released from the tuberculosis hospitals and sanatoria faced another dangerous task: the journey home. Although transportation to treatment facilities in the south was often provided, government assistance was rarely available for the return trip. These unique local experiences and perspective provide meaningful insights into the history of tuberculosis in northern Canada, and contribute significantly to the national narratives written by Wherrett, Hodgsen, Waldram, and others.

Canada’s west coast has also received some attention from scholars. In her acclaimed book *Colonizing Bodies: Aboriginal Health and Healing in British Columbia 1900-1950*, Mary-Ellen Kelm uses oral histories to explore the effects of an expanded understanding of colonization on the study of Aboriginal health. The main temporal focus of many studies,

---

29 The principal centres where the Inuit were treated were in Edmonton, at the Charles Camscell Indian Hospital, and in Hamilton, at the Mountain Sanatorium. Pat Sandiford Grygier, *A Long Way from Home: The Tuberculosis Epidemic among the Inuit*, (Montreal & Kingston: McGill-Queen’s University Press, 1994), 104.

30 Finding scholarship that deals, in any depth, with Tuberculosis on the Northwest Coast has proven difficult. Occasionally a mention of tuberculosis will make its way into a work dedicated to another illness, most often to smallpox, but beyond this casual mention, tuberculosis is absent from discussions that centre on a time prior to the early twentieth century.
however, is the first years of contact in the late seventeenth and early eighteenth centuries, not the ‘late contact era’ as defined by Kelm. Although her focus is illness and disease generally, Kelm pays scant attention to tuberculosis despite stating that “of all the diseases, tuberculosis, by, far, casts the longest shadow.” 31 Like many of her peers, Kelm limits her study to the twentieth century because, she says, most of the historical work done on Aboriginal bodies has focused on the diseases of the ‘contact era’.32

The periodisation of history evident in Kelm’s work has also had a negative impact on the history of tuberculosis in Canada.33 For example, Kelm’s classification of the entire pre-1900 era as ‘contact period’ implies a uniformity, both in the history of illness and the way it is studied, that simply does not exist. Studies of the early contact era are not applicable to the closing decades of the nineteenth century, and few scholars cover both. Other scholars have divided the pre-1900 era into the pre-contact, early contact, and reservation periods in order to emphasise its changing historical circumstances.34 According to this periodisation, the early contact period for the Northwest coast spans from the late eighteenth to mid nineteenth centuries35 while the ‘reservation period’ corresponds roughly with “the second half of the


32 Ibid., 177.

33 It is important to note that these eras are specific to the Northwest coast and the timeframes do not transfer to other regions.


nineteenth century through World War I”\textsuperscript{36}. Although this temporal framework may appear to be a closer approximation of the historical epochs that comprise the first century and a half of Native-Newcomer relations, its boundaries are also problematic and do not represent the experiences of all Northwest coast Aboriginal groups or settlers. The Stó:lō First Nation, for example, traditionally inhabited lands that are now part of Washington State, the history of which is markedly different from lands that eventually became part of Canada. Moreover, these somewhat arbitrary, conflicting periodisations have contributed to a gap in the scholarship that essentially ignores the pre-1900 reservation period.

Other examples of Northwest Coast scholarship, and prominent examples of this ‘contact era’ scholarship, include the works of Wilson Duff, Cole Harris and Robert Boyd.\textsuperscript{37} Duff’s \textit{The Indian History of British Columbia: The Impact of the White Man}, for example, examines disease and illness within the context of Native-Newcomer relations. He also states that “Smallpox was not the only disease that cut deeply into the Indian population. Epidemics of measles, influenza, tuberculosis, and others also took their heavy tolls.”\textsuperscript{38} But like Kelm, he provides little supplementary evidence about the history of tuberculosis in British Columbia, especially between contact and the twentieth century. Harris’s \textit{The Resettlement of British Columbia: Essays on Colonialism and Geographic Change}\textsuperscript{39}, a collection of previously

\textsuperscript{36}Boyd, \textit{The Coming of the Spirit of Pestilence: Introduced Infectious Diseases and Population Decline among the Northwest Coast Indians, 1774-1874}, 273.


\textsuperscript{38}Wilson Duff, \textit{The Indian History of British Columbia, Volume 1: Impact of the White Man}, (Vancouver: University of British Columbia Press, 1997), 60.
published essays on the alienation of traditional Aboriginal lands in the Pacific Northwest, also
documents the devastating effects of introduced disease. Chapter one, “Voices of Smallpox
around the Strait of Georgia” focuses specifically on the 1782 smallpox epidemic and provides a
wealth of documentary information regarding the disease’s spread as well as infection and
mortality rates.\textsuperscript{40} Again, tuberculosis is left largely unexamined, especially in the late nineteenth
century, as are the voices of the Aboriginal people who experienced it.

Boyd’s \textit{Commentary on Early Era Smallpox in the Pacific Northwest} also is limited
mainly to the early contact period and only addresses the history of tuberculosis peripherally.
Because the epidemiological traits of smallpox are very different than those of tuberculosis –
they infect the body differently, are spread differently and are understood differently – they
should be studied differently. Studying tuberculosis therefore requires different sources and types
of evidence than does the study of smallpox. For example, although mortality rates are an
important indicator of the effect tuberculosis has on a community, they are far more relevant to
smallpox epidemics. Morbidity rates, on the other hand, provide greater insight into the social
consequences of tuberculosis outbreaks. As a result, the statistical evidence often used by
quantitative historians studying smallpox requires supplementary qualitative evidence, such as
the oral testimony or reminiscences of survivors, to adequately understand the history of
tuberculosis.

Boyd does, however, provide a particularly useful framework for engaging illness on the
Northwest Coast. Specifically, Boyd demonstrates that the database on early northwest smallpox,
and disease in general, consists of three categories of evidence. The first category, historical in

\textsuperscript{39} Cole Harris, \textit{The Resettlement of British Columbia: Essays on Colonialism and Geographic Change},
(Vancouver: UBC Press, 1997).

\textsuperscript{40} Cole Harris, “Voices of Smallpox around the Strait of Georgia” \textit{The Resettlement of British Columbia},
nature, includes the journals of early explorers, fur traders, missionaries and other Euro-Canadians, while the second category is rooted in oral tradition and myth texts created by Aboriginal people themselves. 41 The third category of evidence focuses on village abandonment in both the historical and archaeological records. 42 This structure, as well as much of Boyd’s research and analysis, has directly influenced the format and content of this paper. So too have the other works summarised here. However, although each of these scholars has contributed greatly to our collective knowledge of the history of tuberculosis and illness during the early contact period and in twentieth century Canada from within a largely western scientific framework, the late eighteenth century and the experiences of Aboriginal people remain understudied. Clearly, there is a significant contribution to be made by studies that examine tuberculosis at the local level through both western and Aboriginal lenses.

Methodology and Organization

To provide a detailed analysis of the history of tuberculosis in the late nineteenth century, this thesis focuses on the region traditionally occupied by the Stó:lō. 43 The Stó:lō, whose name means ‘people of the river’, consist of twenty-four First Nation communities in British Columbia’s Fraser River Valley between Yale and Tsawwassen (see Image 1.1) and speak

---


42 Tuberculosis can be a slow and constant killer therefore people do not die in large epidemic breakout trends. An outbreak of a disease like smallpox devastates a population and then moves on, while Tuberculosis may never move on- it is a constant in a community. Thus, for the purpose of my research, a Tuberculosis outbreak is defined as a greater than expected number of active Tuberculosis cases in a given area over a defined time period.

43 The term Sto:lo is derived from the word used to description the river. Duff, *The Indian History of British Columbia, Volume 1: Impact of the White Man*, 1.
Halkomelem, a linguistic subdivision of the Coast Salish. As suggested by the term ‘Stó:lô’, the Fraser River watershed is central to the economic, political, and social lives of Stó:lô people. It is the single most important source of food and transportation, and an integral part of both the physical and spiritual worlds. Therefore, although individual Stó:lô communities are unique, their cultural and historic similarities, combined with the relative abundance of documentary information, make the Stó:lô a practical and effective case study. And although this thesis focuses specifically on the Stó:lô, many of its conclusions are broadly applicable to other nearby groups.

Image 1.1: Map of Stó:lô Territory

Stó:lô territory extends from the mouth of the Fraser River, near modern day Vancouver, up the river to Yale. (*A Sto:lo-Coast Salish Historical Atlas*)
The time period examined here, 1871 to 1907, is especially appropriate to the study of tuberculosis in Stó:lô territory. The entrance of British Columbia into Confederation in 1871 initiated a period of sustained observation by government officials, especially the Department of Indian Affairs, created in 1880. During the subsequent four decades, Indian Agents, doctors, and other state officials, as well as members of various churches and the growing Euro-Canadian populace, penned a multitude of documents related to tuberculosis and Aboriginal people. These documents are central to this thesis and my re-interpretation of the history of tuberculosis. The study concludes in 1907 with the beginning of a ‘sanatorium era’ in British Columbia, which marks a shift in the understanding and treatment of tuberculosis in light of new scientific advances as well as significant growth in the amount of secondary scholarship being produced. Wedged between the contact/early settlement period and the sanatorium era, the period 1871-1907 thus remains relatively undeveloped within the history of tuberculosis.

In order to engage the perspectives and histories of both Aboriginal people and government officials during this period, the body of this thesis is divided into two chapters, each of which is devoted specifically to one type of source and the group it represents. The first of these is chapter two, ‘Myth, Music and Stó:lô History’, which explores the historical significance of tuberculosis among the Stó:lô through ethnographic sources including oral narratives, stories, and songs. These sources make up the repository of historical knowledge for the Stó:lô and other oral based cultures. They contain the most significant historical information passed from one generation to the next and represent the most complete archive of Stó:lô history. One story in

44 Prior to 1880, Aboriginal affairs in British North America were the responsibility of the Indian Department. For simplicity purposes, all Indian Department documents that date prior to 1880 will also be cited and described as DIA documents.

45 The first Sanatorium was opened in Canada in 1897 at Muskoka Lake, Ontario. King Edward Sanatorium was the first of its kind in British Columbia which was opened at Tranquille in 1907. The Sanatorium was often used as a live-in treatment center for tuberculosis patient.
particular, the sxwo:yxwey origin story, forms the core of this chapter. Although most scholarly analyses have focused on the mask, dance, and the ceremonial regalia associated with it, the sxwo:yxwey origin story also provides valuable insight into Stó:lô relationships with illness; especially as it has been disseminated across the lower mainland and southern Vancouver Island. Also examined in this chapter are songs used by a Stó:lô healer to treat patients afflicted by tuberculosis and other ailments. In both cases, these non-traditional, ethnographic, sources of history help to engage Stó:lô understandings of tuberculosis and illness in general.

The third chapter, ‘Tuberculosis, the Stó:lô and the Department of Indian Affairs’, adopts a more traditional historical approach to engage the perspective of the government officials and medical practitioners responsible for treating tuberculosis among the Stó:lô. Central to this chapter are the Department of Indian Affairs (DIA) Annual Reports, a rich collection of historical information that are re-examined here in light of the cultural insights learned in chapter two. Working within a culturally reflexive framework can be challenging; however, attempting to engage the system of understanding adopted by those under study allows for a broader and more meaningful understanding of tuberculosis while also inviting a re-evaluation of our own understandings of tuberculosis and its history. Similarly, when working with the written record not only to mine for new data but also to see the record differently (ie. within a cultural system or framework), a more holistic understanding of tuberculosis begins to emerge, one that is supported by data as well as narrative and the meaning people bring to narrative. As tuberculosis reached epidemic proportions among Canadian Aboriginal populations in the late nineteenth century, the DIA embraced, and was heavily influenced by, the growing Public Health Movement and its emphasis on sanitation and healthy living conditions. In response, government officials implemented an aggressive campaign to modernise on-reserve housing and standards of
cleanliness. Operating within a race-based framework that depicted Aboriginal people as inherently inferior to Euro-Canadians, government officials assumed that extending ‘civilisation’ to Aboriginal communities would guarantee progress. Ironically, these measures were not simply ineffective; in many cases they actually increased the frequency and severity of tuberculosis outbreaks.46

From this analysis, it becomes clear that tuberculosis was a significant historical force decades before the term ever appeared in a DIA report. By the time Indian agents entered the newly confederated province of British Columbia, Captain Death had already become a permanent part of life in Stó:lō communities and continued to affect widespread demographic and cultural trauma well into the twentieth century. Nowhere is this devastating history more poignantly captured than in Stó:lō stories and songs. These enduring oral histories allow us to meaningfully engage and understand Stó:lō relationships with tuberculosis and illness in general. Moreover, they challenge us to rethink the way we study tuberculosis within a western scientific framework that privileges the written record. Upon re-examination, it becomes clear that the means adopted by government officials between 1871 and 1907 to treat tuberculosis were, on the whole, negative and largely ineffective. By addressing the historiographical gap in tuberculosis literature and by generating a more meaningful, balanced, and culturally reflexive analysis of the history of tuberculosis among the Stó:lō, this thesis contributes to Canadian medical history, the history of Native-Newcomer relations, and the history of the Stó:lō people.

46Housing and sanitation strategies are parts of a larger agenda of assimilation and colonization employed by the Canadian government. For the purpose of this study, housing and sanitation strategies have been singled out as examples of government activity that directly affected the rise of tuberculosis in Stó:lō territory; however, it is important to remember that specific strategies are representative of the broad colonial project and context and therefore are only part of a series of policies, activities, and assumptions being delivered at any given time.
Long ago a man determined to commit suicide because some disease was marting his face. He wandered away to Kawkawa Lake near Hope and, seeing some coho salmon in the water, caught one and cooked it. While he was gazing at the cooked fish, his nose began to twitch and, presently, one tiny frog after another leapt from it into the salmon. Greatly depressed, he climbed a neighbouring cliff and leapt into the water, but as he sank below the surface his feet touched a board and he sighted a house. Its inmates, who had heard his descent, led him inside, where many sick people were lying on the ground, and a voice said, “The stranger perhaps can heal them.” He looked at the sufferers, and noticing spittle on this one’s arm, that one’s shoulder and that one’s back – wherever in fact they were feeling pain – he removed it with a stick and healed them, for he now possessed great medicine-power. Then someone who was wearing a masked-dance costume said to him: “I will guide you home. There is a passage from here to the Fraser River.” So his guide conducted him to his home and disappeared in the water again.

When the man entered his house, he said to his sister: “Throw my fishing line as far out into the lake as you can. Don’t be terrified by what it catches.” The woman threw out the fishing line and drew in the masked-dance costume that the guide had worn. Her brother permitted her to keep it and later, when she married a Hope Indian, she took it to Hope. One of her daughters married an Indian of Musqueam, and a descendent married a Cowichan Indian. That is why the masked dance has established itself in those places. The costume consisted of a mask of cedar and leggings made either from young goatskin of from the skin or the white swan after removal of the larger feathers.\(^\text{47}\)

I had the privilege of hearing the sxwo:yxwey origin story for the first time from Sonny McHalsie, a Stó:lô cultural advisor, who was sharing the story at Kawkawa Lake, one of the locations described in the above account, near Hope, British Columbia. He had learned the story from Stó:lô elder Amelia Douglas. The passion with which Sonny shared the story helped us to appreciate the power of the place made the story resonate with me – I was captivated. Initially, I had no academic ambitions for using the story shared at Kawkawa Lake or any of the subsequent

versions I encountered; I began examining the sxwo:yxwey origin story purely for my own interest. During this time, I came across several accounts of the story, most of which had been recorded in oral interviews. The version of the origin story reprinted above was told by Mrs. Bob Joe to anthropologist Wilson Duff and published in 1949. This version is generally considered to represent the common elements shared by all other accounts.\(^4\) As I continued to think about the sxwo:yxwey origin story, I soon realised that besides the similar structure and purpose of the accounts, there are several aspects of Stó:lō culture embedded within each of the narratives. The importance of the watershed and family as well as the role of salmon in Stó:lō culture are all present in the sxwo:yxwey origin story. Also present, but outside my initial interest, was the legacy of illness.

\textbf{Image 2.2 Albert (Sonny) McHalsie in from of Kawkawa Lake}

(Photo Courtesy of Liam Haggarty, 2005)

These stories, however, are not often viewed by historians as legitimate records. Until relatively recently, clear distinctions have been made between history – facts – and myth –

\(^4\)Ibid., 10.
fiction. Good history was that which relied exclusively on verifiable facts and omitted stories, myths, legends, and other ‘subjective’ sources. This began to change as innovative approaches to history challenged ideas about objectivity and the polarization of fact and fiction. Aboriginal history in particular has greatly benefited from and contributed to these new frameworks by embracing myth as a valuable historical resource and tool for engaging the perspectives of worldviews of members of oral cultures. Like documents in an archive, these cultural stories, myths, and legends contain valuable historical knowledge and represent an alternative worldview absent from traditional sources. In conducting ethnohistorical analysis, these oral archives are invaluable. Using the sxwo:yxwey origin story and several healing songs as case studies, this chapter engages Stó:lō perceptions and histories of tuberculosis and illness in general to develop a more balanced, meaningful, and reflexive history. By recognising the profound impact tuberculosis has had on Stó:lō communities throughout the nineteenth century, we can then begin to re-examine ‘traditional’ historical sources. In the process, I also hope to demonstrate the historical value of myths, stories, songs, and other types of oral evidence.

Sxwo:yxwey in History and Myth

The sxwo:yxwey can best be described as a Stó:lō institution represented by mask, dance, and song as well as a story detailing the origin of these cultural symbols. It is rooted in history and shared cultural experience and has reserved a place in contemporary Stó:lō society because of its tradition and power. In practice, the sxwo:yxwey is performed on special occasions to demonstrate the importance of the event and promote a shared identity. It serves as a sort of cleansing tool during significant rites of passage including naming, puberty, marriage and funeral
ceremonies.\textsuperscript{49} The element most commonly association with sxwo:yxwey is the mask, which can be used on its own or in combination with other sxwo:yxwey regalia, song, and dance. Only a privileged few are given the privilege of learning and performing sxwo:yxwey, adding to the significance not only of the practice but also of the event. The sxwo:yxwey origin story, in contrast, is not as closely guarded as contemporary activities and is shared with both members of the Stó:lō community as well as with outsiders.

The earliest recorded version of the sxwo:yxwey origin story that I have encountered was documented by Franz Boas in 1894. In addition to this 1894 account, Helen Codere documents versions recorded along the Fraser River in 1895, 1902, and 1908.\textsuperscript{50} These dates suggest that the sxwo:yxwey origin story was in active use during the time period under consideration in this study.

To date, most of the scholarly attention the sxwo:yxwey has received focuses on the contemporary usage of the mask, the associated regalia, dance and, songs, not the sxwo:yxwey origin story itself. In \textit{Indian Masks and Myths of the West}, for example, Joseph Wherry discusses the importance of masks not only as religious icons but also as a way for the wearer to transform into the spirit portrayed by a mask.\textsuperscript{51} Similarly, Wayne Suttles in “The Halkomelem Sywayxwey”, echoes the religious and spiritual significance of the sxwo:yxwey mask while stressing that its overall performance, the combination of the mask with associated song and dance, acts as a potent cleansing device.\textsuperscript{52} Discussion focused on the ceremonial traditions of

\textsuperscript{49}Ibid., 10.

\textsuperscript{50}Helen Codere, “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas”, 6: 239 (January-March 1948), 7.

sxwo:yxwey provide insight into the complexity of cultural and religious life but do not necessarily provide the historical understanding that the origin story can. Moreover, focusing on ceremonial traditions risks cultural insensitivity.

As anthropologist Crisca Bierwert argues in *Brushed by Cedar. Living by the River*, scholars must approach topics like the sxwo:yxwey with caution and sensitivity. There are aspects of cultural and spiritual life that may not be appropriate for academic discussion: “People most involved in the longhouse were most specific about what should be excluded from print: details about initiation procedures, burnings for the dead, and curing practices.” These same questions of appropriateness arise with the sxwoy:yxwey. In practice, the sxwo:yxwey is used as a cleansing tool during significant ceremonial events; however, its traditions are fiercely guarded in the interest of preservation, attesting to its considerable cultural importance. Although scholars and other outsiders are sometimes allowed to witness healing activities, the subsequent discussion should focus not on the value of the rituals themselves but rather on the origin story so as to engage Stó:lô perspectives on the history being studied, in this case illness.

Some anthropologists have approached sxwo:yxwey in a holistic and sensitive manner. In her article “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas”, for example, Helen Codere uses three versions of the mask’s origin story to demonstrate the diffusion and integration of culture into an intermediary cultural zone, the

---


54 Waldram et. al, *Aboriginal Health in Canada: Historical, Cultural, and Epidemiological Perspectives*, 97.
Middle Fraser River. This is how anthropologist Franz Boas sees culture “reflected in mythology both in terms of detailed ethnographic information encapsulated within the content of myths and in terms of the secondary explanations which the myths themselves provided to integrate traits from disparate historical sources into the coherent patterns of culture.” Cultural ideas and themes can be displayed in mythology. For the Stó:lō, myths act as an educational tool to convey experience, culture, and history within the community and, therefore, are valuable resources for engaging Stó:lō perspectives of the history of illness in Stó:lō communities.

While Boas argues that myth echoes culture, anthropologist Claude Levi-Strauss considers myth to be an instrument for rationalising reality or making sense of the world. In *The Way of the Masks*, Levi-Strauss discusses the sxwo:yxwey and other Pacific Northwest Coast masks to determine the historical value of origin stories, including the sxwo:yxwey. “Each type of mask” he states, “is linked to myths whose objective is to explain its legendary or supernatural origin and to lay the foundation for its role in ritual, in the economy, and in the society.” Although his examination of origin stories is primarily a means for gaining a better understanding of the masks, Levi-Strauss explicitly connects the importance of myth to societal

---

55 Codere, “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas, 1.


57 Codere, “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas,” 17.

58 In “An Overview of Northwest Coast Mythology”, Jay Miller identifies that there have been four scholars, including Franz Boas and Calude Levi-Strauss, who have been influential in the interpretation of Northwest Coast literature. Miller also identifies Melville Jacobs and Dell Hymes, as being influential however, these scholars are better known for their work in linguistics.

teachings and cultural and historical understanding. For the Stó:lō, myth is a powerful socio-political tool for the communication of important information. Moreover, mythology on the Northwest Coast, according to Levi-Strauss, is a sort of problem solving tool for actualising cultural norms, a rationalisation of the world and reality. In this way, it plays a role similar to the one science plays in western, industrialised societies.60

Historians, however, have been slower to appreciate the scholarly value of myth, often seeing it as inherently inferior compared to written records. Robert Boyd, for example, divides oral evidence “embedded in oral traditions and myth texts”61 into two distinct categories. Oral tradition, on one hand, is evidence supported by written records and, therefore, the category of oral evidence most comfortably used by western academics. It allows for a familiar pattern of making an argument and supporting it with written verification. The absence of such evidence renders an account to be ‘myth’, a fictional story. All oral narratives are rendered fictional if they can not be supported by written documentation. This classification system is reminiscent of the work of anthropologist Jan Vansina which, more than thirty years earlier, also imposed external categories on oral narratives. In his work, “Ethnohistory in Africa”, Vansina distinguishes between traditions of ‘flourishing’ cultures and the oral narratives that ‘no longer represent living cultures’.62 Only cultures that are still ‘alive’, one that still exists in a ‘traditional’ tribal state, can produce legitimate sources of oral historical information. Like Vansina, Boyd sees oral tradition, and stories in particular, as a way to supplement the historical record and useful only when written histories are inadequate.

60 Miller, “An Overview of Northwest Coast Mythology,” 132.


But these stories are only ‘fictional’ within frameworks that privilege written records. For the Stó:lō, as well as other oral cultures, myth is not only a legitimate form of knowledge, it is profoundly meaningful. And there is no need to distinguish myth from reality. Rather than being in conflict, they are complementary – both are truths. The difference between tradition, story, and myth has nothing to do with the validity of the account and everything to do with the type event being described; the event determines the appropriate means for transmission. ‘Oral tradition’, for example, refers to all aspects of Stó:lō society that is passed on through verbal communication. Oral narratives, on the other hand, represent the cultural teachings of history, philosophy, and morality and are divided into two categories: sqwelqwel and sxwox’wiyam. Sqwelqwel describe contemporary or recent historical experiences while sxwox’wiyam are set in the distant past and often explain the origin of things. Because Stó:lō understandings of time and history are non-linear, classifying a story as either sxwox’wiyam or sqwelqwel is not necessarily straightforward. “Stó:lō existence,” as historian Keith Carlson notes, “is a never ending story in which the ancestors of the past interact with people of the present in shaping the future.” Yet, as Carlson notes, for members of the Stó:lō community there are clear distinctions between the two types of narrative, and although both styles are intended to educate and provide a sense of shared experience, sxwox’wiyam tend to adhere to a more formal arrangement. The audience and circumstance for sharing a story affect how the sxwox’wiyam is supported in detail;


however, the plot and main themes of the story remain constant.\textsuperscript{65} As long as they are properly orally footnoted, all the necessary evidence of accuracy is provided in the narrative itself.

As with all Stó:lō narratives, each version of the sxwo:yxwey origin story includes an explanation of how the story was learned, thereby legitimizing the family’s claim to that version of the story.\textsuperscript{66} Just like hereditary names and fishing sites, sxwo:yxwey belongs to certain Stó:lō families who, by tracing hereditary lines, are connected to its origin.\textsuperscript{67} The first time I heard the sxwo:yxwey origin story, for example, Sonny McHalsie used oral footnoting to authenticate his version by tracing its provenance. The process by which the origin story is passed through hereditary lines is thus embedded within the narrative itself. Mrs. Bob Joe’s account provided at the beginning of this chapter, also explains how the sxwo:yxwey and its origin story were disseminated:

The woman threw out the fishing line and drew in the masked-dance costume that the guide had worn. Her brother permitted her to keep it and later, when she married a Hope Indian, she took it to Hope. One of her daughters married an Indian of Musqueam, and a descendent married a Cowichan Indian. That is why the masked dance has established itself in those places.\textsuperscript{68}

We see from this section of the story that the sxwo:yxwey has been passed down the hereditary line on the female side. As Levi-Strauss notes, these privileges were transmitted through inheritance or marriage: “a woman, member of mask-owning lineage, passed this right on to the children she bore her husband.”\textsuperscript{69} Although men hold official leadership positions in Stó:lō

\textsuperscript{65}Ibid., 188.

\textsuperscript{66}The origin story serves to legitimizes a family’s right and ability to use the sxwo:yxwey. As a result, the dissemination of the sxwo:yxwey origin story mirrors the dissemination of the sxwo:yxwey mask, dance and regalia.

\textsuperscript{67}Levi-Strauss, \textit{The Way of the Mask}, 17.

society, most communities, like other Aboriginal groups of the Northwest Coast, employ a hybrid system in which knowledge and power flows through women as a way to preserve the family’s bloodline. In all versions of the sxwo:yxwey origin story, it is the protagonist’s sister who receives the sxwo:yxwey mask, dance, regalia, and, therefore, origin story which she then passes to her children and so on. The only guarantee for keeping the sxwo:yxwey or any other culturally important item within a particular family line is to follow the bloodline.  

Incongruencies between different accounts, therefore, do not compromise a story’s veracity or historical significance as it would with western narratives. In the sxwo:yxwey origin story, for example, the protagonist, who is about to eat the salmon he had just prepared, has an unintended encounter that ruins his meal and causes him to jump into the lake. Depending on the account, either the salmon turns into a frog or, as in the Mrs. Bob Joe account, a series of tiny frogs jump out of his nose and land in his salmon. This variation, however, is unimportant relative to the overall themes and messages that the origin story conveys; there is room for variation in details as long as the overarching message remains intact. Variation, in fact, is expected as a story is passed through the generations and across the Coast-Salish world. Within this range of acceptable variation, particular family or community groupings are able to express messages of local importance within a broad, regionally-important narrative. The different accounts of the sxwo:yxwey origin story depict real experiences and, as with all sxwox’wiyan or sqwelqwel, unique versions of this story are shared because they communicate important cultural

---


70 Because blood brothers and sisters share the same mother, the brother would also, without question, be related to his sister’s children.
and historical lessons. After all, the sxwo:yxwey origin story shares with those in the present experiences that originally took place hundreds if not thousands of years ago.  

The content, preservation, and transmission of these myths contain valuable historical insight into different cultural perspectives that require engagement with alternative historical frameworks and structures. Unlike western narratives that follow a prescribed path with a beginning, middle, and end, these stories can be non-linear and highly variable. Levi-Strauss, for example, examines different versions to shed light on social structures and, more importantly, human relationships with one another. Non-human relationships, including those with the natural and supernatural worlds, are also important. From a Stó:lō perspective, these relationships are not independent of one another; in fact, it can be difficult to tell them apart. Similar to the non-linear way in which the Stó:lō view time, the division between the natural and the supernatural does not exist. It is especially common for sxwo:’wiyam storylines to incorporate elements from all worlds which together form the one ‘world’ in which Stó:lō people reside.

The sxwo:yxwey origin story and other “mythic” narratives, therefore, reflect elements of importance in Stó:lō culture and history that transcend the human world, such as relationships to place, and offer scholars a virtual window into an alternative worldview. Anthropologist Julie Cruikshank, for example, uses oral traditions to gain an understanding of local knowledge and environmental history in Do Glaciers Listen?: Local Knowledge, Colonial Encounters, And Social Imagination.  

As anthropologist Robin Ridington notes, stories are windows into the

---

71As discussed in “Sxwo:yxwey Origins and Movements,” the sxwo:yxwey can be traced back to 1780 by following family lineage and assuming 20 years between generations. However, the associated healing significance and connection to status goes back much farther – it is thousands of years old. McHalsie, “Sxwo:yxwey Origins and Movements,” 10.

thought world of Aboriginal people, a statement that supports historian R.G. Collingwood’s argument that without studying people’s thoughts, “there can be no history.” By privileging western constructions of history and historical knowledge, scholars potentially discard important sources of Aboriginal history or distort their meaning. In order to construct a history that actively engages Stó:lô perspectives, tradition, story, and myth must therefore be treated as reliable historical sources within their cultural contexts.

From a Stó:lô perspective, myths and stories are, therefore, crucial to understanding history, including that of illness. As one of the most culturally significant stories told in Stó:lô territory, the sxwo:yxwey origin story is particularly useful in this regard. It is important to the Stó:lô collective identity and the mask, dance, regalia, and songs associated with it are used in a variety of ceremonies. Although rarely the focus, illness is a central part of the sxwo:yxwey narrative and features prominently in every version of the story. This is what Robert Boyd refers to as the oral category of evidence, but it is not simply the inclusion of new historical data; it is an engagement with another historical perspective. The purpose, therefore, is not to use oral history to corroborate or challenge the written record or to speak for the Stó:lô. Rather, I am utilizing oral accounts as stand alone, independent histories that are equally valid as the more familiar written ones and that allow me to engage in a dialogue with Stó:lô people about their past. As Keith Thor Carlson notes, “The point, is not to think like another, or speak for another, but to think in ways that allow us to speak with another in a manner that recognises difference as

---


opportunities for improving understanding.76 By examining the sxwo:yxwey origin story and other facets of Stó:lō oral history, the next section of this chapter engages Stó:lō perspectives of the history of tuberculosis, and illness in general, within a Stó:lō framework of understanding.

Stories of Illness

Since contact, illness and disease have featured prominently in the lives of Aboriginal people and the stories they tell. Their devastation is most evident in the massive declines in northwest coast Aboriginal populations since contact.77 As a result, most scholars have focused on how Aboriginal responses to introduced diseases unknowingly helped it spread and increased morbidity and mortality rates. But the impact of introduced disease is more enduring than demography alone suggests. As George M. Guilment et al. demonstrate, there were also long-term consequences for the structure and character of traditional cultures. In Stó:lō and other oral societies, knowledge is held by elders and passed down through generations by way of myth, legend, and story. Due to high mortality rates among elders, some of these cultural traditions were lost,78 but as Guilment et al. demonstrate, commonly repeated information often survived, especially if it helped explain or make sense of the world during times of significant change.79 The teachings that survived, therefore, were of the utmost importance, and the ones most


79 Ibid., 23.
frequently repeated because they helped explain the agent of change, in this case disease and illness.

The sxwo:yxwey origin is a prime example of this type of myth. Because it both explains the origin of and reaction to illness while providing hope for the future, it has become one of the most culturally important stories in Stó:lō territory. Although all events depicted in the story are assumed to have occurred where the story begins, the sxwo:yxwey and its origin have been extended to other Coastal Salish communities on the mainland of modern day British Columbia, Vancouver Island and the United States. For the Stó:lō, the origin story is most often tied to a small area between Hope and Yale, a location also referenced, according to Claude Levi-Strauss, by the “Thompson Indians of the Utampt group”, but other areas are also mentioned. Levi-Strauss, for example, heard a slightly different version in which the mask was fished out of Harrison Lake. In this account the protagonist had two sisters, both reluctant to marry, who were sent by their brother to retrieve the mask from the lake. Eventually, the sisters concede to get married and the sxwo:yxwey origin story documents which communities they married into. Another version recorded by Levi-Strauss from the Lummi, a Coast Salish group from what is now Washington State, is unique and noticeably different from other Stó:lō accounts in that, for instance, the main character received the mask from two men originally appearing in the protagonist’s dream. Overall, however, there is much coherency among the mainland versions compared to those accounts recorded on Vancouver Island.

80 Helen Codere also references the similar location described in different accounts of the sxwo:yxwey origin story in “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas”. Levi-Strauss, The Way of the Mask, 24.


82 Ibid., 26-27.
Stó:lô people’s connection to place, especially the local watershed and resources it provides, is central to Stó:lô identity and readily evident in each sxwo:yxwey origin story. The Stó:lô, or ‘people of the river’, rely on the Fraser River and its tributaries, including Kawkawa Lake, for much of their livelihood. In addition to being a major route for transportation, the Fraser River also allows access to salmon, without question the most vital resource of the Stó:lô. In the introduction to her work on salmon and geo-political boundaries, historian Lissa Wadewitz traces the development of the culturally essential relationship between Aboriginal groups on the Northwest Coast and salmon:

archaeologists believe the reliability of the salmon runs and the ability to preserve salmon were crucial to the evolution of a more sedentary lifestyle for Northwest natives. Once native peoples possessed a stable food source and more permanent villages, they would have been in a position to evolve more complex social relations, trade networks, art production, and religious ceremonies.  

The availability of salmon allowed for the creation of sedentary societies that in turn permitted various activities to develop and expressions of culture to flourish. Not surprisingly salmon finds a place in the sxwo:yxwey origin story as well as countless others.

Illness is another important non-human relationship found in all versions of the sxwo:yxwey origin story. The listener is first presented with illness at the same time that the story’s protagonist is introduced. In fact, anxiety about illness is what drives him to attempt suicide and, in turn, meet the water people who provide his family with the sxwo:xywey. Illness appears again when the protagonist meets the inhabitants of the house after he jumps into the lake. In some accounts, the underwater residents are sick because of the actions of those in the natural world, making the relationship between illness and the Stó:lô one of both cause and


effect. Characters in the story are not simply passive victims; individual agency can potentially mitigate and even cure illness. In the account shared by Dan Milo, it is the protagonist who is responsible for the illness affecting those living in Kawkawa Lake:

And these people asked him if he knowed anything about these kids sickness – those kids have got a pain somewhere around the body. He looked at them and he could see that was his spit, when he was up there; so he went to work and just wipe that off and the kid got alright, didn’t pain no more.85

Even when the protagonist is not to blame for the condition of the people in Kawkawa Lake, he actively treats the sick inhabitants of the cabin and is rewarded with the sxwo:xywey.

---

depending on the version of the sxwo:yxwey origin story being shared. Smallpox has been identified most often by academics analysing the origin story. The illness described in the story told by Mrs. Bob Joe has been traced back to a 1780 smallpox epidemic.\textsuperscript{86} An account collected in 1945 from Mrs. Bertha Peters, on the other hand, states that the central character “had a skin disease all over his body”,\textsuperscript{87} while a version published by historian Hill-Tout states that the young man was “afflicted with skom (leprosy)”.\textsuperscript{88} The description of illness that most piqued my interest, however, is the Dan Milo version told to Oliver Wells. After the protagonist cooked his salmon,

a frog jumped from his nose – that was his disease – it jumped right into that cooked fish. He walked away from it; he went as far as the lake. He began to wonder. (The Indians back in those day said there were people down under the lake, that’s where they lived.) Well, he thought himself that he’d jump into the lake. Well, he jumped right in. He kind of fainted – I guess he didn’t know. He came to, just like he’d been sleeping. He was laying there, just where he had jumped from. The third time he jumped into the lake he run into a kind of cabin, the old house like there used to be long ago – that’s where he landed, on the top of the roof. Well the people came out and took him down, took him rights into this cabin down in the bottom of the lake; and there were was a lot of little kids lying in bed, sick, real sick, down there…..

Although, Milo does not identify a specific illness, there are several elements in the story that speak to the possibility of the disease being tuberculosis. During the preliminary states of tuberculosis meningitis, patients may become irritable and restless, eventually developing a stiff neck, headache, vomiting, seizures, changes in mental condition or behaviour, and coma. Irritability, for example, could explain why the central character decided he would attempt

\textsuperscript{86}It is not my intention to refute these findings but rather the variation leads me to believe that this origin story is not speaking of only one illness in particular but rather several that have been devastating the Stó:lō. McHalsie, “Sxwo:yxwey Origins and Movements,” 10.

\textsuperscript{87}Codere, “The Swai’xwe Myth of the Middle Fraser River: The Integration of Two Northwest Cultural Ideas,” 4.

\textsuperscript{88}Ibid., 1.
suicide after the salmon was ruined. Restlessness and a change in mental condition and
behaviour may have caused him to leave home and jump into the water to live with the people
under the lake, and his loss of consciousness could be explained by tuberculosis meningitis.
Similarly, the ‘fits’ experienced by people at the bottom of the lake could be a sudden seizure of
epilepsy, hysteria, apoplexy (uncontrolled bleeding into an organ), coughing, fainting or
paralysis, with unconsciousness or convulsion, all of which are symptomatic of pulmonary
tuberculosis.

Clearly, it is impossible to know definitively what illness is being described in the
sxwo:yxwey origin stories shared by Milo, Joe and others. The purpose of these accounts,
however, is not to identify a particular illness but to communicate the cultural and historical
significance of illness in general. In fact, this ambiguity allows local issues and community-
specific illnesses to be integrated into the shared origin story. Just as the story of the two sisters
reluctant to wed was modified to include local experiences and record appropriate responses, the
nature of the illness described in the story is likely to change based on the location and history of
the person or family sharing it. That smallpox is identified by scholars as a central theme in some
stories does not mean that it was the only or the most important illness affecting Stó:lô people.
Whereas one community may interpret the protagonist’s illness to be smallpox, another might
key on another illness, such as tuberculosis, that has a meaningful legacy to that particular
location. Moreover, as the story is passed on, new illnesses may become the focus of these
constantly shifting narratives.\(^{89}\) What does not change is the presence of illness. So important is
legacy of illness, and the history of tuberculosis specifically, that it remains a vital component of
one of the most important stories in Stó:lô culture.

\(^{89}\)Recording or writing down stories may have consequence for these types of shifting narratives. That is,
the stories are less likely to change to incorporate new illnesses once they’ve been written down.
Music of Illness

Aside from stories, music also expresses Stó:lō relationships with illness. Songs and drumming in particular have played a very significant role in traditional responses to illness and provide a window into cultural representations of its history. In *Music of the Indians of British Columbia*, Frances Densmore records, in the 1920s, the songs of two medicine men: Tasalt, also known as Catholic Tommy, and Skwealke, or John Butcher, both of whom used song as their chief means of treating the sick.90 Because Tasalt is from the Chilliwack area in Stó:lō territory91, his life provides a valuable case study in representations of illness in music.

Songs, like stories, are integral to Stó:lō culture, but unlike oral narratives, the knowledge contained in song is not necessarily passed linearly from one generation to the next. For example, although Tasalt’s mother also treated the ill by using song, she did not pass her knowledge down to her son.92 Instead, Tasalt acquired his knowledge from the spirit world, from guardian spirits who helped ensure the proper transfer and retention of knowledge contained in the songs he was taught.93 Although this may seem unorthodox from a western historical perspective, acquiring knowledge metaphysically is neither uncommon nor overly problematic within a Stó:lō historical frameworks. As Carlson notes, dreams can be a conduit through which people are able to communicate with and learn from ancestors and others.94

---


91 John Butcher lived in Lytton on the Thompson River.


From this spiritual knowledge, Tasalt learned different songs to treat each ailment he encountered, thereby leading him to accumulate a bank of helpful musical pieces. In addition to No. 1: Introductory Song With Treatment of the Sick, Densmore recorded five songs dedicated to specific illnesses: Smallpox, Fever, Pneumonia, Palsy, and Hemorrhage of the Lungs. Tasalt footnoted orally that he learned No. 4 Song When Treating Palsy, from a spirit called ha’wil and No. 5 Song When Treating Hemorrhage from the Lungs from a spirit called skeup’. The latter song is of particular interest to this study as it seems to be a musical treatment for pulmonary tuberculosis, the iconic symptom of which is spitting or coughing up blood. Densmore records that this song had a different structure than other healing songs performed by Tasalt: “This is the gentlest melody recorded by Tasalt, with no rhythms that would excite a patient.” Just as tuberculosis does not present in the same sudden and forceful way as do outbreaks of smallpox or pneumonia, the song used to treat this illness is steady and smooth.

95 John Butcher applied a more general approach in that he identified songs only as being treatment for the sick.


97 Although Tasalt could not describe this spirit, he did say that the spirits went away when the white men came. Densmore, Music of the Indians of British Columbia, 22.

98 In Illness as a Metaphor, Susan Sontag discussed how Tuberculosis is understood to have many visible symptoms which include progressive emaciation, coughing, languidness which is a deficiency in mental and physical alertness and activity, fever and then the dramatically revealed blood in the handkerchief. Doc Holliday, the famous cowboy of OK Corral fame, comes to mind when I think of ‘blood in the handkerchief. He died of Tuberculosis when he was 36. Susan Sontag, Illness as Metaphor and AIDS and Its Metaphors, (New York: Picador, 1989).

99 Densmore, Music of the Indians of British Columbia, 23.
Perhaps Tasalt, and the Stó:lô generally, recognised the distinct nature of tuberculosis compared to other illnesses. Clearly, it was prevalent enough that it required a song dedicated to the treatment of those it infected.

Singing was also accompanied by drumming and occasionally other non-musical treatments. Drumming and singing, like storytelling, were practiced in ceremony as well as in every day life. While Tasalt was treating patients, his wife would sometimes drum and accompany him in song. According to anthropologist Jay Miller, “Song, emphasized by percussion, was and is the basic idiom for life and potency in Native America, both in belief and in practice, because its rhythm, measure pace, and beauty duplicates the potent flow believed to be animating the universe.”

In addition to singing and drumming, Tasalt recommended that

---

when dealing with fever, the patient refrain from drinking water.\textsuperscript{101} Also accompanying each song is what Densmore refers to as ‘Free translations’, translated lyrics, which, despite being two sentences in length, frequently mentioned being cured.

A week after performing several songs for Densmore, “Tasalt returned and said that he did not record the song for the treatment of pneumonia and wished to record it in order to fulfill his promise.”\textsuperscript{102} Densmore goes on to say that “After singing each song as transcribed, Tasalt repeated a portion of the melody, taking care to bring his performance within the length of the phonograph cylinder,” to ensure accuracy.\textsuperscript{103} Claiming to have helped all but two of the cases he had been presented with,\textsuperscript{104} it would appear that Tasalt had a gift for understanding Stó:lô relationships with illness and felt great responsibility for the knowledge he had acquired. Tuberculosis, as well as the other ailments he treated, was a serious challenge facing Stó:lô people.

These stories and songs illuminate the holistic relationship that Stó:lô people have with illness. Both the cause and treatment of the illness as well as the identity of the infected individual are connected within a larger cultural framework that approaches illness not as an independent, strictly biological phenomenon, but as the physical manifestation of a larger problem that affects the entire person and perhaps his or her family or community. Identifying causes of illness within a Stó:lô framework, therefore, goes beyond western bio-medical aetiology; for the Stó:lô illness results either from disobedience or infringement of accepted cultural norms by the patient or a member of the patient’s family or community, or from the


\textsuperscript{102}Ibid., 18.

\textsuperscript{103}Ibid., 18.

\textsuperscript{104}Ibid., 17.
malevolent work of another party. Consequently, treatments are designed to aid not only the symptoms of disease but the person and possibly his or her family and community, may focus on mending the breach of accepted norms or combating the malevolent act. That these diagnoses and treatments do not conform to western scientific understandings of medicine and medical treatment is largely irrelevant. Far more important is the acknowledgement of and engagement with an alternative approach to illness, for it is within these cultural frameworks that Stó:lō people have remembered and interpreted tuberculosis and other introduced diseases.

**Conclusion**

Through stories and songs, the Stó:lō communicate to each other and outsiders the great historical significance of tuberculosis and illness in general. The sxwo:yxwey origin story and Tasalt’s healing songs in particular provide scholars with a window into Stó:lō understandings of illness both in the past and in memory. These types of oral sources comprise an oral archive that allows for a more complete, meaningful, and culturally reflexive understanding of tuberculosis. The sxwo:yxwey origin story, one of the single most important origin stories in the Coast Salish world, conveys the depression experienced by a youth infected by illness and the gratitude shown by an underwater community cured of its ailments. Illness threatened individuals and communities, both present and future, and required holistic remedies that targeted spiritual as well as physical ailments. Even in the late nineteenth and early twentieth centuries as Stó:lō

---

105 In this case the term ‘outsider’ does not pertain to only non-Aboriginal outsiders but also Aboriginal outsiders and outcasts that are not part of a particular family or community.

106 There are four main causes of illness in Aboriginal aetiology: soul loss, spirit intrusion, object intrusion and witchcraft. Traditionally, there were different types of responses to treatment and prevention depending on the cause of the illness. “At the core of many responses, however, was an abiding belief in their own notions of disease aetiology” See Mary-Ellen Kelm, “British Columbia First Nations and the Influenza Pandemic of 1918-1919” *BC Studies*, No. 122 (1999).
people came to better understand tuberculosis as a disease, they continued to suffer from illness and sought appropriate treatment. One such remedy are Tasalt’s healing songs, taught to him by the spirit world and specifically designed for the treatment of the most prevalent illnesses, including tuberculosis. Comprised of singing and drumming, these songs represent a holistic approach to the wellbeing of the patient, family, and community. Moreover, they, along with the sxwo:yxwey origin story, demonstrate the profound influence tuberculosis had on Stó:lō communities throughout the latter part of the nineteenth century. The next chapter in this thesis re-examines the written record in light of these oral sources generated by Stó:lō people themselves.
Chapter Three

The Written Archive: Tuberculosis, the Stó:lō and the Department of Indian Affairs

The historical significance of tuberculosis, as demonstrated by the sxwo:yxwey origin story and other oral sources, compels us to reconsider the written record, to juxtaose the oral and written archives. Having already examined oral historical sources from within a culturally reflective context, this chapter examines the written archive within a similarly sensitive framework. The western written record is part of a constructed cultural framework in the same way that the Stó:lō oral archive is understood to be. Therefore, when working with the written record, this study will not only mine for new data but will also engage with the record differently, within a culturally reflexive system or framework which allows for a more holistic understanding of tuberculosis to emerge, one that is supported by data as well as narrative. Just as story and song are the main repositories of historical information for Stó:lō people, written documents represent the main source of information for the non-Aboriginal people that lived and worked in Stó:lō territory at this time.

The best source of historical documentation relating to tuberculosis and the Stó:lō between 1871 and 1907 is the Federal government’s Department of Indian Affairs (DIA) Annual Reports. As part of its agenda of assimilation, the Canadian government constantly tried to align the health, cleanliness and overall lifestyle of Aboriginal people with an ideal western model. Indian Agents’ surveillance thus created a rich record of the health, living, and sanitation problems facing Aboriginal people and the means adopted to combat them. No other written record provides this type of systematic evidence in a relatively standardised format for this time period. It is these records, along with the less systematic documents created by early explorers, fur traders, and missionaries that comprise what anthropologist Robert Boyd calls the historical
category of evidence for use in studying illness in Aboriginal populations.\textsuperscript{107} Despite being produced by the colonizer, and not necessarily reflective of Aboriginal people’s perspectives and sensibilities, these records are of particular value to the history of tuberculosis.

This chapter provides a critical re-appraisal of DIA records from British Columbia’s entrance into Confederation in 1871 to the start of the sanatorium period in 1907. Although the term tuberculosis is not used until 1899, a careful reading of Indian Agents’ records and accounting information demonstrates that tuberculosis was not only present before that date, it was a major preoccupation of DIA officials. Contrary to many Canadian medical history texts, smallpox was not the only or most significant illness Aboriginal people faced. So significant were concerns about tuberculosis, in fact, that, beginning in the late 1880s, the DIA implemented an aggressive plan designed to decrease the disease’s frequency by improving the living, sanitation, and health conditions of all Aboriginal people in the province. However, due to flawed understandings of introduced disease and ‘race’, DIA policies during the era of public health actually increased the frequency and severity of tuberculosis among the Stó:lō prior to the twentieth century. Ironically, what the DIA considered to be improved living situations inadvertently provided optimal conditions for the escalation of tuberculosis to epidemic proportions. By re-examining these records in light of the information provided by the sxwo:yxwey origin story and other oral narratives, the deep historical roots and traumatic cultural legacy of tuberculosis become readily apparent.

\textsuperscript{107}Euroamerican is the term used by Boyd to identify those of European decent that live or have spent a significant amount of time in America. However, because the time period of this study precedes Euroamerican settlements, DIA annual reports constitute the bulk of data in this chapter. Boyd. “Commentary on Early Contact Era Smallpox in the Pacific Northwest,” 308.
Illness in the Written Record

For the most part, the methodology used to study illness, and smallpox in particular, has focused on mortality rates and demographic change among indigenous populations. Statistical information has proven crucial to these studies – above all it is a numbers game. In the 1990s, for example, scholars Robert Boyd and Cole Harris debated the timing of outbreaks and population changes resulting from smallpox in the early-contact period. Boyd’s 1996 article “Commentary on Early Contact-Era Smallpox in the Pacific Northwest” is a direct response to Harris’s “Voice of Disaster Smallpox around the Strait of Georgia in 1782” published two years earlier. As Boyd himself notes, “Both essays agree that smallpox was present in epidemic form in the Pacific Northwest during the late 1700s and that it had devastating demographic effects. Beyond this however, we interpret the data differently.”  

Although this discussion is crucial to understanding the spread of introduced disease, it does not consider the relationship people had with a particular illness. By effectively removing all non-quantifiable data from consideration, these authors leave unanswered important socio-cultural questions.

Aside from Boyd and Harris, few scholars have conducted thorough analysis of illness prior to 1900 due in large part to the lack of sources, especially statistical information, and the nature of the disease itself. As historian Mary-Ellen Kelm states, “At least in part, this academic amnesia is due to an absence of reliable data”. Moreover, tuberculosis is particularly difficult to study prior to the turn of the century as a result of its various symptoms and terminology. Because tuberculosis is chronic in nature, it can persist in an individual in a dormant state for

---

108 Ibid., 307.

years or even decades. Epidemic outbreaks of tuberculosis differ from those caused by other illnesses, such as smallpox. As discussed in the introductory chapter, an outbreak of a disease like smallpox devastates a population and then it moves on. Tuberculosis, on the other hand, is chronic in nature, often acting like a slow and constant killer. A tuberculosis ‘outbreak’, therefore, should be considered when an unusually high number of active cases are present in a given area over a specific time. As a result, it looks very different than a smallpox outbreak and is far more likely to be overlooked. In fact, an individual may live his or her whole life with tuberculosis and never show symptoms. Therefore, unlike smallpox and other epidemic diseases that are measured by mortality rates, morbidity is a more telling and appropriate statistic in studying tuberculosis. It is therefore important to critically assess the reliability and validity of written records for this period, including DIA reports.

In “British Columbia First Nations and the Influenza Pandemic of 1918-1919”, Kelm discusses the challenges she encountered regarding the reliability of statistical information. For example, she found that the DIA reported exactly the same number of births and deaths on reserves in British Columbia every year between 1917 and 1919. These stats are highly questionable given the estimated twenty-one million people that died worldwide during the 1918 epidemic. Luckily for Kelm there were other agencies that collected statistical information for this period. The Vital Statistics Branch, which began taking records among First Nations populations one year before the pandemic, found 670 flu-related deaths across the province. In light of this new information, Kelm dug deeper into DIA files and found that altogether Indian

---


112 Kelm indicates, however, that the Vital Statistics Branch would be reporting data that when received under reported the number of deaths.
Agents reported 1,139 related deaths on reserves in British Columbia, almost twice what the Vital Statistics Branch had reported. Clearly, the flu had been much more devastating for local Aboriginal populations than was reported by the DIA Annual Reports.\textsuperscript{113} Although the reason for these large discrepancies is unclear, the DIA did acknowledge factual errors in its annual reporting. For example, below an 1875 chart titled ‘population when last heard from regarding the Tribes or Bands in the province of British Columbia’ appears a side note explaining that the “figures given in the Reports last year are incorrect.”\textsuperscript{114}

Challenges regarding the reliability of statistical information, however, do not render the DIA annual reports useless. In fact, they oblige us to consider statistics and other quantitative information within their broader historical contexts. Despite their irregularities, DIA Annual Reports are rich in qualitative references to illness that, if examined in light of Stó:lō oral history rather than through a retrospective analysis based on western bio-medical understanding of disease, can help us understand how tuberculosis affected and was interpreted by the Stó:lō people. Assessed critically, the statistical information contained in DIA records remains a valuable, albeit labour intensive, resource. As Kelm observes “… the department figures make studying the impact of the flu [and tuberculosis] in British Columbia a very interesting and intense research question.”\textsuperscript{115}

\textsuperscript{113}Kelm, “British Columbia First Nations and the Influenza Pandemic of 1918-1919,” 22.

\textsuperscript{114}Canada, Department of Indian Affairs, Annual Report, 1875, Part I page 86.

**Bureaucratizing Tuberculosis**

Before analysing DIA records themselves, it is important to discuss the contexts within which they were created and how they have been used by historians of illness. Following Canadian Confederation in 1867, responsibility for Indians and reserves was transferred from individual colonies to the Federal government. The DIA, in turn, was created to be an official statistic-taking organization responsible for overseeing the transition of Aboriginal people from ‘savagery’ to ‘civilization’ as well as the creation and administration of Indian Treaties. Part of this surveillance focused on the health of Aboriginal people and the spread of infectious diseases, including tuberculosis. The term tuberculosis, however, did not find its way into DIA Annual Reports for Stó:lō territory until 1899, seventeen years after Robert Koch linked the various symptoms of this complicated illness to a single common ailment for the first time. Although Koch’s findings were quickly accepted by the scientific community, it took some time before this information was disseminated to, and understood by, medical practitioners and the general population, including Indian Agents employed by the Federal government.

Lacking this scientific information, the DIA based its policies on what was, at the time, a common belief: some races were inferior to others. Arising from the opinion that people could be classified into biologically distinct units based on fundamental, observable, and inherited characteristics; the idea of racial susceptibility to illness had become prevalent. In an 1889 edition of *Science*, for example, Drs. Prudden, Biffs, and Loomis explain the link between tuberculosis and genetics: “So marked and so frequent is this liability [the spread of consumption], and so frequent is the development of the disease in particular families, that the

---


117 Waldram, et al. *Aboriginal Health in Canada: A Historical, Cultural, and Epidemiological Perspectives*, 263.
affection has long been considered hereditary.” As revealed by Joseph Hall, principal of Coqualeetza Industrial Institute, the Stó:lō were not immune to these perceptions: “Two children have died during this year, probably the result of inherited weaknesses, one being a case of consumption, the other of pneumonia.” It was not until the twentieth century that the medical profession was able to integrate scientific findings with methods of diagnosing and treating tuberculosis. Prior to that, misunderstandings about tuberculosis and those affected by it were often products of assumed racial and cultural superiority; that Aboriginal people were more likely to contract tuberculosis was deemed ‘natural’.

Although Aboriginal peoples were more susceptible to particular illnesses than were people of European descent, infection results depended on the nature of the illness rather than the nature of the race. When it came to tuberculosis, indigenous North Americans represented a population that acted as if it were a virgin soil population. Having no history of exposure to tuberculosis prior to contact, these populations experienced much higher rates of infection compared to European ones that, through long term exposure, had built up partial immunity.

---


119 Canada, Department of Indian Affairs, Annual Report, 1902, 412.


121 Although the first documented case of an Aboriginal person being affected with tuberculosis on the Northwest coast was in 1793, the Stó:lō, for the purposes of this study, are considered to be a virgin soil population. Virgin soil epidemics are characterised by high mortality rates with little preference to age. Typically, virgin soil epidemics occur because there exists no previous exposure to a particular aliment. Before 1871, the time that this study begins, Stó:lō residence patterns effectively limited the spread of tuberculosis and Stó:lō people did not build up anti-bodies to the disease. Therefore, during this study, Tuberculosis affected Stó:lō people as if they were a virgin soil population - they were affected in greater numbers than those who had previous exposure, such as those of European descent. Consequently, it is plain to see how the idea of racial susceptibility was a popular mis-understanding both locally and throughout the North American ‘New World’.
Indian Agents working in the late nineteenth century were operating according to medical assumptions regarding tuberculosis that had been prevalent in Europe for hundreds of years. Just as happened in ancient Greece and Rome, tuberculosis in indigenous North America could devastate one community and leave a neighbouring one virtually untouched; like all epidemic infectious illnesses, tuberculosis has its ebb and flow.\(^{122}\)

The popular perception that ‘primitive’ races were more susceptible to tuberculosis than Europeans and therefore more difficult to treat was reinforced by socio-economic conditions that appeared to follow racial lines.\(^{123}\) Although today the effects of colonialism and Euro-Canadian settlement are often cited as causes of poverty on reserves, Aboriginal people’s impoverishment at the time was seen to result from their inherent laziness and disregard for living in a civilised manner.\(^{124}\) According to the DIA, being civilised, or at least working toward that goal, was contingent on outward personal appearance. As one Indian agent observed, “Their habits of cleanliness are not to be boasted of, but require considerable improvement, although, whenever they go out to church or to take a holiday, they dress well, both men and women.”\(^{125}\) Clearly, there existed the potential for Aboriginal people to become more civilised in part by improving their outward appearance and personal hygiene. It was not lack of opportunity, colonizers thought, but rather lack of will, a trait inherent in Aboriginal people, that kept living conditions on reserves poor.\(^{126}\)

---


\(^{124}\) Harris, *Making Native Space: Colonialism, Resistance, and Reserves in British Columbia*, 291.

\(^{125}\) Canada, Department of Indian Affairs, Annual Report, 1881, 166.

DIA officials were not the first in Canada to introduce the concept of cleanliness as a strategy to civilize; early missionaries in Stó:lō territory began preaching this concept decades earlier. For Oblates, the ideal civilization was a Catholic-Christian one that emphasised morality and righteousness, characteristics also encouraged by strategies later implemented by the Department of Indian Affairs. Christian missionaries effectively laid the groundwork for government attempts to civilize, and many received compensation for their efforts to improve the wellbeing of the Aboriginal population in British Columbia after 1871. Methodist John Wesley’s adage that “cleanliness is, indeed, next to godliness”\textsuperscript{127} was quickly and readily accepted by the DIA and its employees.

Cleanliness was also a concern at this time for members of the general public who feared that illness among Aboriginal people would eventually increase tuberculosis infection rates among racially superior white settlements, an ironic inversion of the original direction of disease transfer. In the public mind, tuberculosis, considered to be in the same company as smallpox and cholera,\textsuperscript{128} quickly became the main public health issue of the day.\textsuperscript{129} This contributed, in the 1880s and 1890s, to the Public Health Movement in Canada, a movement that aimed to organise and legislate infrastructure in response to health concerns as well as to educate the public.\textsuperscript{130} Similar to the British model of public health which championed the importance of public health and living conditions, the Canadian one divided the country into health districts and devised

\textsuperscript{127}Karl Preuss, “Bias and Medical Reporting in the Department of Indian Affairs Annual Report for the Fraser Agency,” 2004, SNA.

\textsuperscript{128}Wherrett, The Miracle of the Empty Beds: A History of Tuberculosis in Canada, 14.

\textsuperscript{129}As expressed by scholars such as George Jasper Wherrett, The Miracle of the Empty Beds: A History of Tuberculosis in Canada, 9, and Julie Dlahanty, The Re-Emergence of Tuberculosis: Barometer of Social Welfare, (Ottawa: North-South Institute, 1997), 5.

\textsuperscript{130}Wherrett, The Miracle of the Empty Beds: A History of Tuberculosis in Canada, 9.
legislation to regulate individual housing situations and public buildings.\footnote{Margaret Coltart, Helen Raine, and Elizabeth Harrison, Social Work in Tuberculosis, (London: The Chest and Hearth Association, 1959), 118.} Because the Constitution made healthcare a Provincial matter, each province was responsible for enacting its own public health model,\footnote{Ontario became the first province to introduce public health provisions with all others, including British Columbia, following suit by 1893. McCuaig, The Weariness, the Fever, and the Fret: The Campaign against Tuberculosis in Canada 1900-1950, 6.} but as wards of the state, Aboriginal people remained under the jurisdiction of the Federal government. As an 1875 Report made by Agent James Lenihan notes, government observers devised their own plans to protect white populations:

\begin{quote}
\ldots made a personal visit to each Indian dwelling near this City [New Westminster], and also to those of Burrard Inlet, and had lime, soap, and brushes, distributed among them, at the same time urging the Indians to make a good use of them, advice which I was pleased to find was readily taken as a sanitary measure as well as because of the civilizing influence which it must exert upon the Indians. I would respectfully recommend that the same course may be followed every year; more especially among those Indians who reside in large centers of population.\footnote{Canada, Department of Indian Affairs, Annual Report, 1875, 55.}
\end{quote}

For agents like Lenihan, the health of Indians who resided in large population centers was the main priority.\footnote{Although it is unclear whether Lenihan meant large Aboriginal populations in cities or Aboriginal villages adjacent to large white populations, it is reasonable to infer based on the concerns of the time, that he meant large centers of non-Aboriginal populations.} Illness, especially tuberculosis, which heavily influenced the Canadian Public Health Movement, persuaded government officials to organise health services for Aboriginal people.\footnote{Waldram, et al. Aboriginal Health in Canada: A Historical, Cultural, and Epidemiological Perspectives, 260.}

During this civilizing process, the DIA generated thousands of documents related to Aboriginal health and wellbeing not only in the Fraser River Valley but throughout the province.
and across the country. The documents examined here are restricted to the agencies and larger geographic superintendencies that overlapped traditional Stó:lō territories. Because these agencies were in a constant state of flux, the DIA sphere responsible for Stó:lō territory underwent several name and boundary changes during the period of this study. The Fraser River Agency of 1881 best corresponds with traditional Stó:lō geographies. Other agencies carved out of the two British Columbia superintendencies include the West Coast Agency, Cowichan Agency, and Kamloops Agency among others. The reports from these agencies constitute the majority of the data for this chapter, but material is also drawn from adjacent agencies.

Of the statistical data produced by the DIA for these areas, two categories are most relevant to the study of tuberculosis and the Stó:lō. The first, ‘Medical Attendance and Medicine’, includes all expenses related to the treatment of tuberculosis as well as all other diseases. Unlike other categories, it is available in each Annual Report for the duration of this study’s focus. The second category, ‘Aid to Sick and Needy’, is more connected with public health concerns, including living and sanitation conditions, and is more variable than the first category. In some years, one or both of these categories fall under the heading ‘Sanitation and Housing’ or ‘Sanitation and Health’. Using these data, however, is not straightforward. Expense details, for example, mostly focus on the vendor to whom the reimbursement was allocated rather than the reason for it. Moreover, the term tuberculosis does not appear until well into my period of study. Instead, terms like phthisis, consumption, and scrofula are used most often.

---

136 In 1880, the structure of having two Superintendencies was abolished in British Columbia and replaced by a six Agency system which consisted of the: Cowichan Agency, Fraser River Agency, Kamloops Agency, Kwawkewlth Agency, Okanagan Agency and West Coast Agency. (www.collectionscanada.ca/02/0201200107/6_e.html)

137 This description is based on information provided by the Stó:lō Nation. (http://www.stolonation.bc.ca), accessed January 2010.
Supplementing these quantitative sources with qualitative material from the agents’ written reports is therefore crucial to uncovering the influence tuberculosis had on Stó:lō people at this time. To make these references more manageable, DIA records can be divided into four roughly chronological categories. The first category, which I refer to as the ‘statistical era’, covers the years 1877 to 1879. Containing the type of quantitative data most often used by historians, it consists of statistical charts detailing the number of cases requiring ‘Medical Treatment and Medicines’ during that period. The second category, the era of ‘casual mention’, is the longest in duration, lasting from 1880 to 1895, and includes a major shift in the DIA’s focus. As the Public Health Movement gained momentum in the mid-1880s, the DIA began focusing more on the prevention of illness through community cleanliness rather than on the treatment of infected individuals. During this era, statistical information is replaced by unstructured qualitative references recorded by individual agents.

The third category of evidence, ‘specific mention’, covers a roughly five year time span beginning in 1895. These references are more quantitative than information provided in the previous era and consist of short blurbs of information related to specific communities, including Stó:lō ones, making them particularity useful to this study. This represents the third category of evidence which, apart from the lack of reference to specific communities, is indistinguishable from the second. During this period of specific mention, the term tuberculosis is used on a consistent basis, indicating that Koch’s 1882 findings were beginning to disseminate throughout the Canadian government and society. After about 1901, references to tuberculosis stop

---

138 When smallpox is the only illness mentioned specifically, it can be assumed that all or most of the remaining expenses were allocated for the treatment of tuberculosis and cholera, the other two most important ailments of the period. See Wherrett, *The Miracle of the Empty Beds: A History of Tuberculosis in Canada*, 14.
mentioning specific communities, and by 1907 the occurrence of tuberculosis in the Aboriginal population is described only at the national level.

**Captain Death and the DIA**

Although tuberculosis was a concern for the DIA throughout the 1870s, expenses related to its treatment are not available until mid-decade. Charts published in the Annual Reports for the period 1 July 1877 to 30 June 1878 and 1 July 1878 to 30 June 1879, for example, show that Aboriginal people in Stó:lō territory sought medical treatment for a variety of ailments ranging from accidents to illness.\(^{139}\) Of these, 69 cases between 1877 and 1878 pertain directly to tuberculosis: 19 for ‘Inflammation of the Lungs’, 43 for phthisis, and 7 for scrofula.\(^{140}\) Because the skeletal structure is often affected by tuberculosis and fever is a common symptom of that form, additional instances of bone disease and fever could also result from tuberculosis. So too could some or all of the 40 reported cases of bronchitis which, at this time, was not yet linked to pulmonary tuberculosis.\(^{141}\) That year, the DIA also paid for medicines supplied to Missionaries for the use of the Indians totalling $764.37.\(^{142}\) In 1879, there were 28 cases of phthisis and 11 cases of scrofula reported, and a total of $1910.20 was spent on medical attendance and medicines for Indians, a substantial decrease from the $2844.86 it spent in 1876.\(^{143}\) This was also

\(^{139}\)Canada, Department of Indian Affairs, Annual Report, 1878, 81. and Canada, Department of Indian Affairs, Annual Report, 1879, 139.

\(^{140}\)There are a total of 553 cases reported during this year. The cases that pertain directly to tuberculosis equates to approximately 13% of the total cases. This percentage does not however, incorporate additional instances that may be a result of tuberculosis. Canada, Department of Indian Affairs, Annual Report, 1878, 81.

\(^{141}\)Canada, Department of Indian Affairs, Annual Report, 1878, 81.

\(^{142}\)Canada, Department of Indian Affairs, Annual Report, 1878, 81.
the year that ‘Care of Indians’ was first included in the spending reports for the Fraser West Agency. Clearly, tuberculosis was a serious health issue in Stó:lō territory more than twenty years before the term found its way into the records.

In the 1880s, some qualitative information was included to supplement these statistics. In 1881, for example, P. McTiernan, the Indian agent of the Fraser Agency reported: “At their villages I have seen a number of them sick, chiefly men. Their sickness is generally consumption.”\textsuperscript{144} That year $1,584.94 was designated for ‘Aid to Sick and Needy Indians’ and another $2,488.25 was allocated for medical attendance and medicines across the province.\textsuperscript{145} Although some detail is provided regarding the recipient, the purpose of the compensation is rarely described beyond ‘For supplies’. McTiernan makes a similar observation the following year: “I regret that a great many Indians are sick this season; their chief complaint appears to be consumption and spitting blood.” Spending on aid to the sick and needy Indians in the Agency, however, was reduced to $590\textsuperscript{146} and remained relatively constant until it dropped again to $158.48 in 1885.\textsuperscript{147}

\textsuperscript{143}Canada, Department of Indian Affairs, Annual Report, 1879. 67.

\textsuperscript{144}Still lacking a scientific understanding of tuberculosis that links its various symptoms, Indian Agents at this time normally used ‘consumption’ to describe pulmonary tuberculosis.

\textsuperscript{145}Canada, Department of Indian Affairs, Annual Report, 1881, 100.

\textsuperscript{146}Canada, Department of Indian Affairs, Annual Report, 1882, 111.

\textsuperscript{147}Canada, Department of Indian Affairs, Annual Report, 1885, 125.
<table>
<thead>
<tr>
<th>Period</th>
<th>Amount</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 6</td>
<td>1,144</td>
<td>583</td>
</tr>
<tr>
<td>10.2</td>
<td>11.4</td>
<td>583</td>
</tr>
<tr>
<td>11.1</td>
<td>12.10</td>
<td>583</td>
</tr>
<tr>
<td>102.12</td>
<td>239</td>
<td>583</td>
</tr>
<tr>
<td>12.1</td>
<td>1.22</td>
<td>583</td>
</tr>
<tr>
<td>22.3</td>
<td>23.37</td>
<td>583</td>
</tr>
<tr>
<td>4.36</td>
<td>4.36</td>
<td>583</td>
</tr>
<tr>
<td>Total:</td>
<td>1,508</td>
<td>583</td>
</tr>
</tbody>
</table>

**JAMES LENIHAN,**

Indian Superintendent

**NEW WESTMINSTER, 9th September, 1878.**
## Image 3.2: Return showing the number of cases receiving Medical Treatment and Medicines, 1879

(Department of Indian Affairs, Annual Report 1879)

<table>
<thead>
<tr>
<th>Period</th>
<th>Abscess</th>
<th>Accidents</th>
<th>Asthma</th>
<th>Bronchitis</th>
<th>Diarrhœa</th>
<th>Dysentery</th>
<th>Erysipelas</th>
<th>Fever, Typhus</th>
<th>Neurasthenia</th>
<th>Ophthalmia</th>
<th>Paresis</th>
<th>Pneumonia</th>
<th>Phthisis</th>
<th>Plague</th>
<th>Rheumatism</th>
<th>Scrofula</th>
<th>Stricture</th>
<th>Syphillis</th>
<th>Wounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1st July, 1878, to 30th June, 1879...</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>17</td>
<td>4</td>
<td>22</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>728</td>
<td>1</td>
<td>71</td>
<td>12</td>
<td>2</td>
<td>29</td>
<td>3</td>
</tr>
<tr>
<td>Medicines supplied by druggists on order.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**New Westminster, 14th August, 1879.**

**JAMES LENIHAN,**

*Superintendent.*
Despite these reductions in spending, agent reports suggest that tuberculosis remained a major concern throughout the 1880s. Writing in 1887, McTiernan describes the high mortality rates caused by tuberculosis in the Fraser agency:

I regret to have to report that large numbers of the Indians of this agency died last winter and spring. The greatest mortality among those located on the Fraser and Harrison Rivers. The chief disease among them is what appears at the first stage to be bronchitis, which rapidly develops into consumption. They linger only a short time before death carries them off.148

So serious were these concerns that, in 1886, the DIA placed renewed emphasis on the living and sanitation conditions on reserves. Rather than simply treating patients with tuberculosis and other diseases, the DIA was determined to prevent them. To do this, the DIA relied heavily on the civilizing effects of proper housing, sanitation, and hygiene.

**Too Good for Their Own Good Stó:lô**

Fuelled by the Public Health Movement and missionaries’ dislike of ‘immoral’ multi-family dwellings,149 the DIA began to actively enforce on-reserve housing in order to improve community health and prevent the spread of tuberculosis and other ailments. Still operating according to a race-based understanding of disease, the DIA blamed “the Indians’ own personal habits”, most notably their communal living patterns and general lack of knowledge regarding sanitation,150 for the frequency and spread of illness. Women in particular were criticised for their supposed inability to maintain clean and sanitary households and to adjust cleaning

148 Canada, Department of Indian Affairs, Annual Report, 1887. 111.

149 Kelm, Colonizing Bodies: Aboriginal Health and Healing in British Columbia 1900-1950, 44.

Improving the health and well-being of Aboriginal people was, from the DIA’s perspective, contingent on improving their way of life.

Indian Agents immediately took pride in, and were complimented extensively on, their ability to enforce the DIA-preferred, modern-style living and sanitation systems in Aboriginal communities. An almost celebratory tone accompanies each example of success: “The agent writes encouragingly of the conditions of other bands in his district. Many of them possess villages, which are models of cleanliness and care…”

Stó:lō communities appear to have been particularly successful in adopting these new living and sanitation standards. The 1887 report for the Fraser Agency testifies to the steady ‘improvements’ being made there:

It is pleasing to learn from the report of the Agent that the sanitary measures which the Department has enjoined on its agents to inaugurate among the various Indian Bands in the Dominion, have, in this agency, been so readily adopted by the Indians. The Agent is deserving of commendation for his zeal in endeavouring, by repeated visits to the various settlements to have the regulations carried into effect, and success appears to have attended his efforts, as he is able to report a vast improvements in and about their houses, which are now kept “clean and tidy, and in a sufficiently good sanitary condition.”

McTiernan also celebrated the “great improvements” made in Stó:lō living and sanitation conditions that year:

Since I received your instructions regarding the sanitary regulations to be introduced among the Indians of this agency, I have visited the different villages repeatedly and found them willing to adopt the measures I proposed to them in that respect. There is a vast improvement in and about their houses, which are kept clean and tidy and in a sufficiently good sanitary condition.

---


152 Canada, Department of Indian Affairs, Annual Report, 1886, 99.

153 Canada, Department of Indian Affairs, Annual Report, 1887, ixxii.

154 Canada, Department of Indian Affairs, Annual Report, 1887, 111.
Similarly in 1893, Agent Devlin reported that “I have had no difficulty in getting them to keep their premises in a clean and sanitary condition, as they realise the benefits to be derived from cleanliness.”

Not only were the Stó:lō excelling with regard to their living and sanitation conditions, their personal appearance, a recognisable indicator of the civilizing process, was also improving and was even on par with that of their non-Aboriginal neighbours. According to the Annual Report for 1888, “… their nice clean houses, with their fine church building, are a credit to them…. Sanitary regulations are strictly observed by them….They dress as well and as clean in their habits as white people.” Despite being described in the 1890s as merely satisfactory, Stó:lō communities continued to be praised for the progress they showed in the twentieth century. “The Indians throughout this agency,” stated the 1905 Annual Report, “are steadily improving, more especially in their home life. Their houses, which are built more with a view to health and comfort, are better furnished and more healthily kept than was formerly the case.”

In the United States, Dr. Ales Hrdlicka’s examination of the Quinaielt, a Coast Salish group in northwestern Washington State, presents similar findings. According to Hrdlicka’s 1904 government report \textit{Tuberculosis Among Certain Indian Tribes of the United States}, the Quinaielt were also keenly adopting new housing and sanitation measures:

The Quinaielt are quite advanced in civilization. They live in frame dwellings, the newest of which are, both in architecture and furnishing, comparable with similar dwellings among us. They dress as do the whites, and each family is provided with various utensils and other articles of civilized manufacture.

\footnote{\textit{Canada, Department of Indian Affairs, Annual Report, 1895}, 164.}
\footnote{\textit{Canada, Department of Indian Affairs, Annual Report, 1888}, xxxvi.}
\footnote{\textit{Canada, Department of Indian Affairs, Annual Report, 1894}, 207.}
\footnote{\textit{Canada, Department of Indian Affairs, Annual Report, 1905}, 219.}
These observations, language and tone used are similar to DIA reports and general confirm agents’ observations regarding Stó:lō adherence to on-reserve policies dealing with living condition. On both sides of the border, the Stó:lō were following the directives provided by appropriate federal agencies. From the perspective of the DIA, there was no doubt that these social improvements would effectively combat tuberculosis and greatly improve the health of all Aboriginal people.

Funding these new initiatives, however, was not cheap. Expenses related to health and sanitation in the Fraser Agency rose steadily in the mid 1880s, reaching $1941.12 in 1891. Money was also being distributed to missionaries at this time. In 1889, for example, Moore and Co. was allocated $40. 66 “for medicines supplied to the Rev. F Bramant for relief of Indians”. Although this payment was provided for ‘Indians of British Columbia’ generally, qualitative evidence shows that it was the Fraser Agency that paid the bill. Similarly, Sister M. Conrad received reimbursement from the Fraser Agency in 1889 and 1890 for attendance to a sick Indian at St. Mary’s Hospital. Again, statistical information about the illness being treated is vague, but a closer look at the records reveals that smallpox-related expenses were excluded; given the

---


160 Dr. Hrdlick is an independent observer asked to report on the situation to better inform the United States government of the health situation among American Aboriginal populations.

161 Canada, Department of Indian Affairs, Annual Report, 1891, 34. and Canada, Department of Indian Affairs, Annual Report, 1888, 149 and ixxxi.

162 Canada, Department of Indian Affairs, Annual Report, 1889, 27.

163 In 1889, $33.65 was allocated to Sister M. Conrad and in 1890 she received $26.00. Canada, Department of Indian Affairs, Annual Report, 1889, 33. and Canada, Department of Indian Affairs, Annual Report, 1890, 36.
prevalence of tuberculosis at the time, the exclusion of smallpox increases the likelihood that the patient would have been battling tuberculosis.

The description of spending in the DIA Annual Reports also underwent a change at this time. Rather than reporting individual agency reimbursements, the DIA began to use a grant summary system that tallied expenditures on medical attendance and medicines against the total grant. During the first year of this reporting system, only $6,011.80 of the $11,000 available in the province was used. By 1901, however, all but $1.67 was spent. The available grant for medical attendance and medicines, which fluctuated from year to year, peaked at more than $20,000 in 1906 and on several occasions overspent the total allowable grant. Most of this money was used to pay doctors and druggists for professional services, to buy and transport vaccines and medicines, and supply the medical needs of schools and hospitals. Treating tuberculosis, as well as other diseases, was becoming big business.

As the twentieth century approached, more attention was being paid to the second of the Public Health Movement’s main purposes: education. According to a report written by Joseph Hall, principal of Coqualeetza Industrial School, in 1897:

Much care is used to maintain perfect sanitary conditions, in fresh food, well prepared and abundant, in well aired dormitories, in cleanliness of the person; in seasonable and clean clothing; in regulating the temperature of the schoolrooms by the use of thermometers, by abundant exercise in the open air and by cheerful and exhilarating recreation, The general good health and cheerfulness of our pupils are remarked by almost all visitors.

---

164 Canada, Department of Indian Affairs, Annual Report, 1897, 496. and Canada, Department of Indian Affairs, Annual Report, 1901, 243.

165 In 1906, twenty thousand dollars was allocated and expenditures exceeded this amount by $709.08. The grant was reduced in 1907 to only fifteen thousand dollars and it was again exceeded as spending totalled $15,204. Canada, Department of Indian Affairs, Annual Report, 1906, 173. and Canada, Department of Indian Affairs, Annual Report, 1907, 164.

166 Canada, Department of Indian Affairs, Annual Report, 1897, 285.
These teachings, however, disseminated slowly and tuberculosis remained a constant threat in Stó:lō communities. In 1898, for example, “consumption” was the cause of two of the four deaths in the small Langley and Wharnock bands, located east of Vancouver, and nine deaths occurred from “measles, pneumonia and consumption” the following year. In 1900, Indian Agent Frank Devlin’s update on the Cheam Band, situated south west of Hope, illustrates that tuberculosis was affecting that community as well:

The health of these Indians has been good, no sickness of a contagious nature—excepting consumption having made its appearance among them. Of the six deaths, two were from consumption and one from old age; the other cases were those of children.

Even at the Coqualeetza Industrial Institute, the centre of education in Stó:lō territory, tuberculosis, according to Hall, continued to be the primary health concern:

We had occasion last year to remark upon the unusual healthfulness of the children; we have even more this year. There has been but one serious case. This was one of primary tuberculosis, in which without the least premonition a boy apparently as healthy as any of the school was seized with hemorrhage, which, followed by others, resulted in the breaking up of the tissue of the lungs, so that despite the utmost efforts of the physician, the attack in three weeks terminated fatally.

As late as 1907, P.H. Bryce, Chief Medical Officer, calculated that there were 1719 instances of tuberculosis and 979 instances of scrofula in the Canadian Aboriginal

---

167 Canada, Department of Indian Affairs, Annual Report, 1898, 222.

168 Canada, Department of Indian Affairs, Annual Report, 1899, 529.

169 Canada, Department of Indian Affairs, Annual Report, 1900, 243.

170 Canada, Department of Indian Affairs, Annual Report, 1903, 427-428. Students from outside of Stó:lō territory may have also been in attendance at this time but as the Principal’s report is included with other Fraser Agency reports, and the boy was attending the school when it was discovered that he had tuberculosis, it is acceptable to include this reference in a discussion of tuberculosis in Stó:lō territory despite being unable to verify that the boy was himself Stó:lō.
population. Despite the apparent success of DIA sanitation and housing programs, tuberculosis remained a serious and deadly threat to Aboriginal Canadians. In some cases, the illness’ frequency actually increased as a result of government intervention.

DIA strategies for improving Aboriginal people’s health by modernizing living and sanitation infrastructure on reserves were flawed from the beginning. Rooted in race science and an incomplete understanding of the anatomy of Captain Death, DIA officials incorrectly assumed that indigenous cultures were inherently inferior to their European counterparts and that assimilation and the coerced spread of ‘civilisation’ was the best treatment. In retrospect, it is clear that racial inferiority was not the catalyst for the spread of tuberculosis. Rather, it was the very process of civilising Indians that had the greatest impact. Indian Agents, for example, did not realise that tuberculosis bacteria can live for years in a dark confined environment. Nor did they recognise the importance of light, either natural or artificial, and clean, fresh air. As Wherrett notes, modern houses were thus creating overcrowded, under-ventilated, unclean environments comparable to European low income neighbourhoods in which tuberculosis thrived:

In their crowded, smoke-filled rooms in which tuberculosis sputa often dried on the floor only to re-enter the air and hence the lungs of the inhabitants, the spread of consumption took place in much the same manner as it did among the poor urban classes.172

As a result, incidents of tuberculosis on reserves rose, as described in a 1905 report:

I regret, however, that consumption, that most fatal of diseases, seems to be on the increase in some of the agencies, not withstanding the steady advance of the efforts made to further improve conditions regulating their mode of life and habits

---

171 That tuberculosis is the only illness identified by name further demonstrating its frequency and prevalence. Canada, Department of Indian Affairs, Annual Report, 1907, 269.

generally, and the close observance on the part of the different agents to the carrying out of the wise regulations of the department as to sanitary measures and precautions.  

Tuberculosis at the turn of the twentieth century was quickly spreading through indigenous groups all across Canada; by firmly fixing Aboriginal people into permanent geographies, the reserve system, combined with new housing and sanitation strategies, inadvertently caused the illness to spread.  

Prior to the forced reservation period, many Stó:lō communities could still be described as “virgin soil” for tuberculosis. Although the first documented case of an Aboriginal person infected with tuberculosis on the Northwest coast occurred in 1793, the illness spread slowly due in large part to traditional Stó:lō living arrangements. Prior to the introduction of permanent, European-style housing, pit and plank houses were the traditional dwelling used in Stó:lō territory. Partially underground, a pit houses could have been poorly ventilated, thereby providing conditions favourable to the spread of tuberculosis. However, in the relatively moderate climate of Stó:lō territory, the larger and more common plank house was unlikely to be overcrowded and poorly ventilated, two factors that promote the spread of tuberculosis. As Captain James Cook wrote, plank houses did not keep the elements out; ventilation was not a problem. Because, as historian Mary-Ellen Kelm notes, there is no study of sanitation in the ethnographic or archaeological record pertaining to the period before sustained contact, it

---

173 Canada, Department of Indian Affairs, Annual Report, 1905, 261-262.

174 Housing and sanitation strategies are parts of a larger agenda of assimilation and colonization deployed by the Canadian government. As part of this larger process, these examples serve to demonstrate some of the effects that the broad process of colonialism had on Aboriginal communities in Canada. For the purpose of this study, housing and sanitation strategies have been singled out but they are certainly not the only colonizing strategies affecting the increase of tuberculosis in Stó:lō territory.

175 Kelm, Colonizing Bodies: Aboriginal Health and Healing in British Columbia 1900-1950, 43-44.
cannot be said with any certainty whether traditional lifestyles provided living conditions that helped limit the effects of illness on Aboriginal peoples. What is clear from the historical record, however, is that living conditions and health declined steeply as First Nation people were relocated from traditional communities to reserves.\textsuperscript{176}

Combined with the adoption of European style living and the appropriate levels of cleanliness, this increase in spending, it was assumed, would keep the disease at bay. Instead, not unlike the increased prevalence seen with the low income European counterparts, tuberculosis among the Stó:lō had grown to become a more serious issue.

Conclusion

By the first decade of the twentieth century, tuberculosis was widely recognised by government officials as one of if not the most serious threat to Aboriginal health in British Columbia and across the country. Tuberculosis, however, did not become a national concern overnight. As DIA expense reports and Indian Agent records demonstrate, tuberculosis was a major threat at least as far back as the 1870s. Initially, the DIA focused its resources on treating tuberculosis patients and relied substantially and the services of missionaries and other members of the Euro-Canadian population. Following the emergence of the Public Health Movement and growing concerns about Aboriginal health in the mid-1880s, the DIA adopted a more active approach that targeted on-reserve housing and sanitation. DIA officials believed that civilising racially inferior communities would inevitably improve their overall health; Aboriginal people, it was believed, were more susceptible to disease by the nature of their lifestyle.

\textsuperscript{176}Kelm references a speech by Andrew Paull delivered to the British Columbia Arts and Welfare Society in 1948 to demonstrate that the living conditions seen on reserves in British Columbia are a result of colonization. Kelm, \textit{Colonizing Bodies: Aboriginal Health and Healing in British Columbia 1900-1950}, 38-45.

70
These initiatives, however, failed to reduce the frequency or severity of tuberculosis outbreaks. In fact, the ‘civilised’ living conditions championed by the DIA may have inadvertently created ideal environments for the spread of tuberculosis. Confined to poorly lit, overcrowded, unclean, and under-ventilated government houses, Stó:lō and other Aboriginal people became more likely to contract tuberculosis. Despite being prized pupils of government projects of assimilation and civilisation, Stó:lō communities which include the Coqualeetza Industrial Institute in Sardis, experienced high infection rates of tuberculosis. In retrospect, traditional Stó:lō plank houses may have actually provided healthier living conditions for their inhabitants. Clearly, although historians of disease and illness have focused mostly on smallpox or the twentieth century, tuberculosis was a prominent part of the every day lives of Aboriginal people and their relationships with Newcomers.
Chapter Four
Conclusion: Re-Evaluating the History of Tuberculosis Among the Stó:lō

Captain Death has cast a long shadow on the history of Native-Newcomer relations in the Pacific Northwest. From first contact in the late eighteenth century through Canadian Confederation and into the twentieth century, tuberculosis has proven to be a deadly, malicious killer that has affected the lives of thousands of Aboriginal people. However, its history, especially the period 1871 to 1907, has received scant attention from historians due to the relative scarcity of available quantitative information. Instead, scholars have focused on the early contact period, the sanatorium period that began in British Columbia in 1907, or on another disease altogether, usually smallpox. Each of these topics offers considerably more statistical information that can be readily accessed and analysed by historians. Moving the study of disease history beyond these accessible topics requires the use of alternative source material, such as oral histories and myth, as well as alternative methodology, such as an ethnohistorical interpretive approach. This thesis contributes to the historiographies of disease and illness, Native-Newcomer relations, Canada, and the Stó:lō Nation by doing just that. Through story and song, as well as a thorough reading of familiar government records under a different lens, it engages the perceptions and understandings of both Aboriginal people and Euro-Canadians, patients and government agents to produce a more balanced, meaningful, and culturally reflexive understanding of the historical role played by Captain Death.

The findings of this study, and the culturally reflexive framework through which they were derived, have historical as well as contemporary value. Today, the socio-economic separation between Aboriginal and non-Aboriginal communities mirrors the situation at the turn of the twentieth century. The recent resurgence of tuberculosis in Aboriginal communities
should, therefore, come as little surprise. Medical practitioners and government officials would do well to recognise that the social and cultural context of tuberculosis as an illness is equally if not more important than the physical and biological understanding of tuberculosis the disease. Successful prevention, diagnosis, and treatment strategies should integrate Aboriginal understandings of tuberculosis and work towards bettering the physical as well as cultural effects of the illness. A vital step for combating tuberculosis today is recognising the socio-economic environment, including living and sanitation conditions, that has allowed this illness to thrive in Aboriginal communities. As demonstrated by this study, much of the devastation caused by tuberculosis between 1871 and 1907 was fuelled by a general lack of sensitivity to Aboriginal cultural diversity and a failure to recognise the socio-economic roots of infection. Today, these problems persist and require immediate attention of both government agencies and medical practitioners to help heal the history of tuberculosis in Aboriginal communities.

The lack of easily accessible sources about Captain Death in the late nineteenth century is due in large part to the nature of the disease itself. Tuberculosis can present many seemingly unrelated symptoms, including fever, emaciation, languidness, coughing blood, bone and joint pain, and swelling of glands, that were not linked to a single disease until 1882. As a result, a number of different terms, including, phthisis, scrofula, and consumption, became entrenched in both medical and public discourse and remained popular well into the twentieth century. For example, the term ‘tuberculosis’ does not even appear in DIA Annual Reports until 1899. Moreover, because tuberculosis is a chronic disease that can persist in a dormant state for months and even years, its infection and mortality rates are much harder to track than other epidemic diseases, such as smallpox, thereby making outbreaks more difficult to identify both at the time and in the historical record. Methods commonly used by historians of disease and illness,
therefore, are inadequate for studying tuberculosis; statistical information does not accurately reflect the damage done by Captain Death.

Quantitative analyses also do not adequately reflect the understandings and perceptions of tuberculosis patients, especially Aboriginal ones. For them, Captain Death was not a medical disease that could be studied and cured by science it was an illness that affected the entire being, physical and spiritual, which required a holistic approach to treatment. Even after tuberculosis the disease came to be better understood and more easily identified in the late nineteenth century, Stó:lō people continued to suffer from tuberculosis the illness and sought the care, comfort, and solace provided that could only be found in the treatments provided by traditional healers, stories, and song. To begin to understand these perspectives, historians must move beyond not only quantitative sources but the written record altogether. Engaging the perceptions of Aboriginal people, and the Stó:lō in particular, compels us to approach tuberculosis within a Stó:lō historical framework that recognises oral narratives, including myths, stories, songs, and dreams, as legitimate sources of knowledge. They are the single most important repository of historical information among the Stó:lō and other oral cultures. In so doing, we are better able to grasp the social and cultural influence tuberculosis has had on Aboriginal populations. In light of these methodological challenges, it is obvious why few historians have focused specifically on the history of tuberculosis between 1871 and 1907.

Moving beyond traditional methods and sources, however, can produce important insights into the history of tuberculosis. As chapter two demonstrates, Stó:lō historical relationships with tuberculosis and illness in general are most often expressed within the community and to outsiders through myth, story, and song – the oral archive. In particular, the sxwo:yxwey origin story and Tasalt’s healing songs provide a window into Stó:lō understandings
of illness both in the past and in memory. The sxwo:yxwey, one of the single most important origin stories in the Coast Salish world, highlights the destructive nature of illness for individuals and communities. It is responsible for the protagonist’s depression and the gratitude shown by the underwater people to an outsider able to cure them. From this perspective, the mask, dance, song, and other sacred aspects of the sxwo:yxwey trace their origins to illness. Because illnesses like tuberculosis threatened individuals and communities, both present and future, they required holistic remedies that targeted spiritual as well as physical causes. Tasalt’s healing songs, taught to him by the spirit world to combat tuberculosis and other prevalent illnesses represent a Stó:lô approach to treating illness. Comprised of singing and drumming, these songs focus on the wellbeing of the patient, family, and community. Moreover, they, along with the sxwo:yxwey origin story, demonstrate the profound effect tuberculosis had on Stó:lô communities throughout the latter part of the nineteenth century.

These types of oral sources, however, are not often viewed as legitimate historical records. The written word is privileged above all else. But as scholars have become more aware and sensitive to alternative frameworks, the polarization of fact and fiction, myth and history, has recently begun to lessen. Aboriginal history in particular has greatly contributed to and benefited from new approaches that embrace myth, and orality in general, as a valuable historical resource. Applied to the history of tuberculosis, these frameworks allow historians to engage the perspectives and worldviews of members of oral cultures, such as the Stó:lô, through stories, songs, and other oral narratives, thereby generating more balanced and culturally reflexive analyses. In so doing, these frameworks also provided a new lens through which other, more traditional sources can be re-evaluated.
Much of what we know about the history of tuberculosis, and disease in general, in Aboriginal communities comes from the records of the DIA. Although Captain Death was not widely recognised by government officials as one of the most serious threats facing Aboriginal health until the first decades of the twentieth century, a thorough reading of DIA expense reports and Indian Agent records demonstrates that tuberculosis was a major threat at least as far back as the 1870s. By working within a cultural system of understanding, the written record can be understood differently and mined for new data accordingly. By connecting with this cultural framework, a more holistic understanding of tuberculosis emerges and is supported by data as well as narrative. Initially, the DIA focused resources on treating tuberculosis patients and relied on the services of missionaries, including nuns, and other members of the Euro-Canadian population to provide basic health services. Following the emergence of the Public Health Movement in Canada and growing concerns about Aboriginal health in the mid-1880s, the DIA adopted a more active approach that targeted on-reserve housing and sanitation. Believing that Aboriginal people were inherently more susceptible to disease by the nature of their race and unclean, immoral lifestyle, DIA officials concluded that civilising their communities would inevitably improve their overall health. In their opinion, traditional Stó:lō lifestyles were less advanced and, therefore, dangerous, both physically and socially.

These DIA initiatives, however, failed to reduce the severity and prevalence of tuberculosis in Stó:lō communities. In fact, new ‘civilised’ living conditions inadvertently contributed to the creation of ideal environments for tuberculosis to thrive.\textsuperscript{177} Confined to poorly lit, overcrowded, unclean, and under-ventilated government houses, Stó:lō people became more likely to contract and spread tuberculosis. Despite being commended by DIA officials for readily

\textsuperscript{177} Again, although better scientific understandings of tuberculosis as well as improved record keeping may have also contributed to the increase in reported cases of tuberculosis, DIA policy was clearly a major factor.
adopting the new government policies, Stó:lō communities and government-run schools experienced increasingly high tuberculosis infection rates throughout the latter part of this study and well into the twentieth century. The irony here is obvious. The spread of a disease introduced by European explorers more than a century earlier was unknowingly being promoted by Euro-Canadian state officials, all in the name of progress and civilisation.

Today, tuberculosis is again a health concern among Aboriginal populations despite no longer being recognised as the Captain of Death it once was. Following major outbreaks in the early and mid-twentieth century, tuberculosis cases decreased, especially among non-Aboriginal Canadians, and other ailments, including HIV/AIDS and drug abuse, have become the focus of serious concerns. However, as this analysis of oral and written records demonstrates, Captain Death was a major historical force between 1871 and 1907; his legacy is not easily forgotten. Stó:lō and other Aboriginal people continue to talk about him in stories, songs, and other narratives of the past. His name, and all his aliases, litter the pages of government record books. He claimed lives, destroyed families, and severed generational ties. This kind of trauma is not easily forgotten – nor should it be. Tuberculosis, as well as other introduced diseases, is an important part of the history of Native-Newcomer relations, Canadian history, and the history of Aboriginal people everywhere. Although the disease itself may have been eclipsed and its significance downplayed, the illness, the combined physical and spiritual pain it has caused, continues to exert a toll and shape our collective history.
BIBLIOGRAPHY

Archives Abbreviation:

Stó:lō Nation Archives (Chilliwack British Columbia) SNA

Unpublished Ethnographic, Archival & Manuscript Collections:

Malloway, Richard. Interviewed by Gordon Mohs on March 7, 1986. SNA

Milo, Dan and John Hall. Interviewed by Casey Wells. SNA.

Preuss, Karl. “Bias and Medical Reporting in the Department of Indian Affairs Annual Report for the Fraser Agency.” 2004. SNA.

Wells, Harold. Interviewed by Brian Thom and Keith Carlson at Wells home on August 18, 1995. SNA.

York, Annie. Interviewed by Richard Daly in Spuzzum on June 10, 1988. SNA.

Published Primary Documents:

Anonymous. “American Climatology Association.” Science. 5: 23 (June 12, 1885): 480-481.


Published Sources:


Carlson, Keith Thor ed. *A Sto:lo-Coast Salish Historical Atlas*. Vancouver: Douglas & McIntyre, 2001, especially:


**Ph.D. and M.A. Theses:**


**Internet Sources:**
