

An Extensive and Unknown Portion of the Empire:  
The Montreal Natural History Society's Survey of Rupert's Land, 1827-1830

Geoffrey Robert Little

A Thesis  
in  
The Department  
of History

Presented in Partial Fulfilment of the Requirements  
for the Degree of Master of Arts (History) at  
Concordia University  
Montreal, Quebec, Canada

September 2015

© Geoffrey Robert Little, 2015

**CONCORDIA UNIVERSITY**

**School of Graduate Studies**

This is to certify that the thesis prepared

By: Geoffrey Robert Little

Entitled: An Extensive and Unknown Portion of the Empire:  
The Montreal Natural History Society's Survey of Rupert's Land,  
1827-1830

and submitted in partial fulfilment of the requirements for the degree of

**Master of Arts (History)**

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final Examining Committee:

\_\_\_\_\_  
Dr. Andrew Ivaska

Chair

\_\_\_\_\_  
Dr. Elsbeth Heaman

Examiner

\_\_\_\_\_  
Dr. Ted McCormick

Examiner

\_\_\_\_\_  
Dr. Gavin Taylor

Supervisor

Approved by \_\_\_\_\_  
Chair of Department or Graduate Program Director

\_\_\_\_\_ 2015

\_\_\_\_\_  
Dean of Faculty

## **ABSTRACT**

### **An Extensive and Unknown Portion of the Empire: The Montreal Natural History Society's Survey of Rupert's Land, 1827-1830**

Geoffrey Robert Little

Shortly after it was founded in May 1827, the Montreal Natural History Society constituted an Indian Committee to study the “the native inhabitants...and the Natural History of the Interior, and its fitness for the purposes of commerce and agriculture.” The Interior was Rupert's Land, the territory to the west and the north of Montreal governed by the Hudson's Bay Company (HBC). In 1828 the Committee had a survey containing 253 questions on the climate, geography, inhabitants, and resources of Rupert's Land distributed to HBC traders and individuals living in the Interior, along with instructions on how to prepare specimens to send to the Society's museum. Intervention by the HBC's Governor and London Committee meant that no replies were received in Montreal and the Society's project was unrealized.

This thesis explores the Society's interest in the development of the Interior as well as in gathering data about its Aboriginal population within the contexts of westward expansion across North America and Aboriginal policy in Upper and Lower Canada and the United States after the end of the War of 1812. It also examines the history and practice of natural history in the early nineteenth-century Anglo-American world and efforts by the Society to establish itself as a node within international scientific networks. This study fills a gap in the history of science and western exploration in pre-Confederation Canada and will help historians understand how the Montreal Natural History Society imagined an Interior transformed through settlement, commerce, and agriculture into a productive, peopled, and civilized part of the British Empire.

## **DEDICATION**

For my parents, Diane and Robert (1946-2004)

## TABLE OF CONTENTS

List of Figures	vi
Note on Terminology	vii
Introduction	1
Chapter 1. Historiographical Overview	9
Chapter 2. “The Nomination of the Visible:” Natural History, Exploration, and Fur	26
Chapter 3. Scientific Networks, Colonization, and Empire: The Creation of the Montreal Natural History Society	38
Chapter 4. “All the Indians in the Universe”: Aboriginals in the Interior and the Canadas After 1815	66
Chapter 5. “The Replies with which we May be Favored”: Gathering Data from the Interior	86
Conclusion	115
Bibliography	124
Appendix. “Queries Connected with the Natural History of the Honorable Hudson’s Bay Company’s Territory and the Indian Territories of British North America, Addressed to the Gentleman in the Interior”	139

## **LIST OF FIGURES**

Figure 1. British North America in 1825	8
Figure 2. “Louisiana Purchase and Controversies, 1803-1819”	65

## **NOTE ON TERMINOLOGY**

The term “Aboriginal” is used throughout this thesis to refer to the descendants of the original inhabitants of North America. “Indian” is used in a few instances to refer to cultural or visual tropes. The term “Métis” is used to refer to the distinct Aboriginal peoples of mixed European and Aboriginal heritage with historical roots in the Canadian West. The names of specific Aboriginal groups are used as appropriate.

“The Interior” and “Rupert’s Land” are used interchangeably to describe the part of North America granted to the Hudson’s Bay Company by its 1670 charter. The Montreal Natural History Society occasionally also referred to it as the “Indian Country” or “Indian Territory.”

## INTRODUCTION

On the last day of February 1828, five members of the Montreal Natural History Society gathered to hold the first meeting of the Society's Indian Committee. Struck seven months after the Society had been founded in May 1827 by twenty-six members of Montreal's anglophone elite, including six medical doctors, three Presbyterian ministers, two lawyers, a dentist, and assorted merchants and tradesmen, the Indian Committee had two objectives: to study the "intellectual and moral conditions" of the Aboriginal inhabitants of Upper and Lower Canada, including their "habits, customs, manners, language, and institutions," and, "connected with that subject, the Physical Geography and Natural History of the Interior and its fitness for the purposes of commerce and agriculture."<sup>1</sup> The Interior, which the Committee would later describe as an "extensive and almost unknown portion of the empire," was Rupert's Land (Figure 1), the territory of almost four million square kilometres to the west and north of Montreal that had been granted by Charles II to the Hudson's Bay Company (HBC), the privately controlled London-based fur trading concern, in 1670.<sup>2</sup> To meet these objectives, in spring 1828 the Indian Committee prepared a request for specimens and two identical surveys with 253 questions on the geography, environment, resources, climate, and Aboriginal inhabitants of Rupert's Land, one addressed to individuals living in the Interior or who had spent time there, and the other to men employed by the HBC at its forts and trading posts (Appendix). Distribution of the survey meant for HBC employees was facilitated by George Simpson (1786/87-1860), a member of the Indian Committee

---

<sup>1</sup> "Minutes of the Indian Committee of the Natural History Society of Montreal, 29 February 1828," QH1 N274, Blacker-Wood Manuscripts, Department of Rare Books and Special Collections, McGill University Library (hereafter "Minutes of the Indian Committee").

<sup>2</sup> "First Report of the Indian Committee of the Natural History Society of Montreal Read at the Meeting of that Society on the 26<sup>th</sup> May 1828," Appendix C [Circular], MS Folio QH1 N2698 1828, Blacker-Wood Manuscripts, Department of Rare Books and Special Collections, McGill University Library (hereafter "First Report of the Indian Committee;" specific appendices will be indicated in the notation).



and since 1826 governor-in-residence of the HBC's North American territories. After 1821 these included the Columbia Department (Figure 1), the area west of the Rocky Mountains to the Pacific Ocean claimed by both Britain and the United States but open to both nations as a result of the Treaty of 1818. The Indian Committee's project was compromised, however, when the HBC's Governor and London Committee learned about the survey and ordered their employees to send documentation and specimens to the imperial capital instead of Montreal. Other efforts to acquire survey responses appear to have been unsuccessful. As a result of a lack of data, the Montreal Natural History Society abandoned its study of the Interior and after 1830 there are no references to the Indian Committee or its project in the Society's publications or archive, now part of the Blacker-Wood Library of Zoology and Ornithology's collection of manuscripts in the Department of Rare Books and Special Collections at the McGill University Library.

Historians of Canadian science and western exploration point to the Montreal Natural History Society and to the Indian Committee as proof of an interest in science in British North America before 1842, the year that the Canadian Geological Survey was established, or as evidence that the Hudson's Bay Company had become more willing to support Canadian scientific and exploratory initiatives after its merger with its Montreal rival the North West Company (NWC) in 1821. Both of those arguments are true, but this thesis contends that the Indian Committee's project was more sophisticated and complex than has been described in the literature to date. Most studies, including very recent ones, describe the Indian Committee's survey as an interesting but unrealized attempt by well-meaning amateurs to undertake a significant scientific and ethnographic project in the absence of government or military support or funding. This conclusion has minimized and underemphasized the project's value to historians of the Canadian West and to historians of science in pre-Confederation Canada.

This thesis argues that the Indian Committee's survey of the Interior was a challenge to what A.A. den Otter has claimed was the dominant British view of Rupert's Land, that "it was a vast, isolated, and untamed wilderness" and that the "original human inhabitants of the northern expanse were but components of an uncivilized nature...a homogenous people with a simple, undiversified culture."<sup>3</sup> Instead the Indian Committee's project had as its goal the increase of the geographic, physical, and demographic knowledge of the Interior available to men in Montreal with the goal of opening it up to development and settlement. It was an overtly imperial project, but one not organized in Whitehall or by the Admiralty or Royal Engineers, but by members of Montreal's commercial anglophone elite who saw potential in the Interior and who wanted to extend British influence across the middle of the continent to the Pacific coast.

This thesis also argues that Indian Committee's project was shaped by and in response to a number of complex factors and pressures in post-1815, post-1821 British North America including increased immigration to and colonization of the Canadas after the Napoleonic Wars; concerns over civil defence and colonial security in the period following the end of the War of 1812 as well as anxiety at American expansion into the West and Pacific Northwest in the decades following the Louisiana Purchase; and the ambiguous status of the Columbia Department as a jointly occupied American-British space to the west of the Interior. In every instance geographic and environmental information from the Interior was useful not just for its own sake or for specific scientific purposes, but because it could be translated into power and profit and used to shape

---

<sup>3</sup> A.A. den Otter, *Civilizing the Wilderness: Culture and Nature in Pre-Confederation Canada and Rupert's Land* (Edmonton: University of Alberta Press, 2012), 224.

government policy and public opinion. As Anya Zilberstein has written, “enumerating populations, resources, goods and expenses proved useful for managing them.”<sup>4</sup>

The Indian Committee’s survey speaks to a desire by the Montreal Natural History Society to learn about and document the Aboriginal population of the Interior, including its size, characteristics, culture, and potential to affect future British settlement or the development of the Interior’s natural resources. A lack of widely available knowledge about the Interior’s Aboriginal inhabitants in 1828 stands in contrast to more than two centuries of sustained, documented contact between Aboriginals and Europeans and the creation of complex relationships between these groups in what had become Upper and Lower Canada and the colonies of Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland. The Indian Committee’s interest in the Aboriginals of the Interior stands in further contrast to Britain’s post-War of 1812 policy to transition its former Aboriginal allies in Upper and Lower Canada from warriors into wards by encouraging them, with varying degrees of success, to give up nomadic lifestyles and by negotiating the surrender of huge swathes of Aboriginal land, particularly in Upper Canada.<sup>5</sup> Two members of the Indian Committee were actively engaged in administering this policy in Lower Canada as employees of the Indian Department, a military office that reported to the governor-in-chief of British North America, signalling some level of informal government interest in learning more about Aboriginals in this unsettled, unimproved part of British North America. As well, the Committee’s project must be viewed through the lens of efforts by the American government and its agents, including Lewis and Clark, but also Jedidiah Morse and Lewis Cass, to assess and

---

<sup>4</sup> Anya Zilberstein “The Natural History of Early Northeastern America,” in *New Natures: Joining Environmental History with Science and Technology Studies*, Dolly Jørgensen, Fine Arne Jørgensen, and Sara B. Pritchard (Pittsburgh: University of Pittsburgh Press, 2013), 25.

<sup>5</sup> Robert S. Allen, *His Majesty’s Indian Allies: British Indian Policy in the Defence of Canada, 1775-1815* (Toronto: Dundurn Press, 1992), 178.

measure its Aboriginal population, particularly in the Michigan Territory and parts of Upper Louisiana, along increasing calls for the American government to organize Indian removal to free land for settlement in the eastern United States and to preserve Aboriginals from corrupting influences and, ultimately, racial extinction.

Shot through these motivators was an historic and longstanding interest in the Interior as a place for British settlement and expansion, combined with a similarly historic and longstanding distrust of the HBC by factions in both Britain and Canada because of the Company's perceived reluctance to share information about Rupert's Land and its aversion to projects or schemes to promote it for colonization or agriculture. The survey and the data that were to be collected were thus means by which the Indian Committee and the Montreal Natural History Society could encourage the development of the Interior as well as its incorporation into the British Empire, of which Montreal was one of its largest overseas centres and the economic capital of British North America. To quote from Suzanne Zeller's study of Humboldtian science in the Canadian Northwest, it was a project that "blurred traditional dichotomies between imperial and colonial, center and periphery, known and unknown, wasteland and homeland, present and future."<sup>6</sup>

Despite a growing literature on the history of Canadian scientific exploration, the period before the creation of the Canadian Geological Survey in 1842 remains relatively under-researched and invites investigation. Moreover, a study of the Indian Committee's project is important because it represents the first locally organized, sponsored, and executed attempt to undertake scientific exploration and ethnographic study in British North America in contrast to projects organized by the British or colonial Canadian governments, the Hudson's Bay Company, or a learned scientific society. Scientific expeditions to and surveys of parts of present-day Canada had

---

<sup>6</sup> Suzanne Zeller, "Humboldt and the Habitability of Canada's Great Northwest," *Geographical Review* 96, no. 3 (2006): 383.

been undertaken since the eighteenth century by naval officers like Cook and Vancouver and after 1815 by Ross, Parry, and Franklin, as well as by army officers like John Jeremiah Bigsby (1792-1881) who explored the geology of Upper Canada in 1819, or professional surveyors like Titus Smith (1768-1850) who surveyed parts of Nova Scotia in 1801, but these were sponsored or organized by the British or colonial governments, often with the support of groups like the Royal Society and usually included the presence of trained scientists and draughtsman amongst the expedition parties.<sup>7</sup> Expeditions sent into the West and North by the HBC and the NWC like those lead by Turnor, Pond, Mackenzie, Thompson, Hearne, and others provided data about the geography, contours, and inhabitants of the Interior as well as descriptions of the Pacific and Arctic coasts, but there were usually not shared with governments or scientific societies. Information gathering by these two commercial firms was motivated by profit rather than science, civil defence, or a desire to expand the commercial or settled boundaries of the British world into the North American West.

This study will throw light on efforts by early nineteenth-century Canadians to undertake an environmental and ethnographic survey of the British North American interior and will fill a lacuna in the history of Western exploration and of the history of Aborigines in pre-Confederation Canada. This thesis will first describe natural history as a discipline and practice in the nineteenth-century Anglo-American world and its uses in describing the natural environment and for explaining and creating differences between animals, plants, minerals, and humans. It will discuss the creation of the Montreal Natural History Society, situating it within a network of like-minded natural history and scientific organizations in Europe and the United States. Next, it will explore

---

<sup>7</sup> Suzanne Zeller, "Nature's Gullivers and Crusoes: The Scientific Exploration of British North America, 1800-1870," in *North American Exploration*, vol. 3, *A Continent Comprehended*, ed. John L. Allen (Lincoln: University of Nebraska Press, 1997), 198-204; 207-09.

the Society's and the Indian Committee's interest in the settlement and development of the Interior as well as in gathering data about its Aboriginal residents within the contexts of westward expansion across North America and Aboriginal policy in British North America and the United States after 1815. Finally, this thesis will examine the Indian Committee's survey instrument itself, along with prefatory text and instructions that accompanied it, to examine the use and application of data gathering and scientific method in British North America, as well as what the survey questions reveal about early nineteenth-century British and Canadian knowledge of the geography, resources, and inhabitants of Rupert's Land. A better understanding of the Indian Committee's project will add to our knowledge of early Canadian interest in the exploration and settlement of the West as well as how natural history was practiced in pre-Confederation Canada and how it was used in an attempt to gather information about a part of the continent that was conceived of as British and wild at the same time. This study will help us understand how the Indian Committee and its members imagined an Interior transformed through settlement, commerce, and agriculture into a productive, peopled, and civilized part of the post-1815 British Empire.



Figure 1. British North America in 1825. Historical Atlas of Canada.

## CHAPTER 1: Historiographical Overview

In its study of the Indian Committee's project to gather information about the geography, environment, and Aboriginal inhabitants of the Interior, this thesis draws on the literature of several historical subfields including the history of natural history in Canada and the scientific exploration of the Canadian West and North, the history of Rupert's Land and the fur trade, and the history of North America's Aboriginal inhabitants with particular emphasis on Aboriginal-settler relations in British North America after the end of the War of 1812.

The histories of Canadian exploration, science, and natural science are deeply intertwined. In their introduction to a 2008 special issue of *Scientia Canadensis* on natural history in Canada, co-editors Victoria Dickenson and Elsbeth Heaman write that:

For much of Canadian history, most of the science that took place in Canada took place within the bounds of natural history....Early [European] naturalist-explorers scoured the landscape, studying minerals, plants and animals, as well as human artifacts, in quest of commercial, scientific, or military uses. Stories and samples of diamonds, gold, copper, and other metals, or the 'vegetable gold' of ginseng or even mast trees, provoked royal and commercial support for further voyages of exploration and conquest.<sup>8</sup>

They also note, "At the same time, however, the history of Canadian science has long been an amateur business, done by interested scientists or popular historians," many of whom were self-taught or who developed into historians of science after starting their careers in various historical subfields.<sup>9</sup> It is only within the past two decades that the study of Canadian science history, including environmental history, history of technology, and history of natural history, has become established as a viable avenue for investigation and research through the graduation of PhDs and

---

<sup>8</sup> Victoria Dickenson and Elsbeth Heaman, "Introduction: Natural Science in the New World: The Descriptive Enterprise," *Scientia Canadensis* 31, no. 1-2 (2008): 1.

<sup>9</sup> Ibid.



recent hiring by Canadian history departments.<sup>10</sup> This argument is supported by the age and scope of the literature on the history of natural history, science, and scientific exploration in Canada, which emerged in the last quarter of the twentieth century as a by-product of investigations into Canada's intellectual development leading up to and following Confederation in 1867.

### **Science and the Canadian Project**

Interest in the history of Canadian science and natural history emerged in the late 1960s within the context of a growing sense of nationalism focused around the country's 1967 centennial. Scholars like W.L. Morton attempted to identify and describe the intellectual forces that helped to create Canada and a sense of Canadianness in the period before and after 1867. For historians like Morton, science, rather than literature or theology, was the most substantial intellectual achievement of Victorian Canada.<sup>11</sup> One of the earliest and most important works to give a sense of form to the history of Canadian science within the context of intellectual history was Carl Berger's 1983 monograph *Science, God, and Nature in Victorian Canada*, based on his 1982 Joanne Goodman lectures at the University of Western Ontario. Berger contends that science, particularly the study of natural history, had a significant impact on the development of Canada and its intellectual culture. According to Berger, science was a tool by which Victorian Canadians studied and made sense of their vast new country. Colonial Canada was also a "collecting ground and an exporter of raw materials" and supplied scientists from Britain and the United States with a landscape from which to gather specimens from the animal, vegetable, and mineral kingdoms.<sup>12</sup> As in Britain and the United States, natural history in Canada was both a "disciplined scientific

---

<sup>10</sup> Ibid., 10.

<sup>11</sup> W.L. Morton, ed. *The Shield of Achilles: Aspects of Victorian Canada* (Toronto: McClelland and Stewart, 1968), 330.

<sup>12</sup> Carl Berger, *Science, God, and Nature in Victorian Canada* (Toronto: University of Toronto Press, 1983), 3.

quest and a fashionable diversion” and was practiced by curious amateurs as well as by those with formal training in science, medicine, and theology.<sup>13</sup> Berger points to the creation of the Montreal Natural History Society as evidence of interest in science by a small group of amateur elites in early nineteenth-century British North America. Despite a genuine desire to promote scientific culture, however, the Society, “seemed on the whole more intent on popularizing natural science than in original research” and until the creation of the Canadian Geological Survey, which Berger describes as “the most important scientific institution in Victorian Canada,” Canadian natural history and science in general were “scattered and tentative.”<sup>14</sup> Maturity and long-term viability of scientific projects required self-sustaining scientific societies in places like Toronto, Halifax, and Hamilton, as well an active interest in and support for science by the colonial, and later dominion, government. Although by the 1890s interest in natural history had faded largely as a result of the impact of Darwinian science, Berger believes that natural history’s lasting influence in shaping Canadian historical analysis is found in works by Harold Innis and Arthur Lower, historians of the Laurentian School whose scholarship attempted to prove how much the natural world shaped the development of Canada and the course of the Canadian experience. Berger also finds a legacy of natural history in works of literature and cultural criticism by Charles G.D. Roberts, Ernest Thompson Seton, and Frederick Philip Grove.<sup>15</sup>

More recently, historians have fruitfully explored the relationship between science, natural history, and the exploration of Canada, particularly the Canadian West and North. Signal work has been done by Suzanne Zeller starting with her 1987 monograph *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation*, based on her PhD thesis at the University of

---

<sup>13</sup> Ibid., 9.

<sup>14</sup> Ibid., 5.

<sup>15</sup> Ibid., 77-78.

Toronto. A revised edition was published in 2009. Zeller argues that pre- and post-Confederation Canadians leveraged science to improve their lives and to develop the potential and resources of the young country. Science offered Canadians progress and a “chance for prosperity, more than mere survival.”<sup>16</sup> It was also a tool for nation building and westward expansion as it gave Canadians a lens through which they could view a bi-coastal nation emerging from what had been a collection of disparate and sparsely populated British colonies.<sup>17</sup> Zeller also uses the term “inventory science” to describe the practice of natural history, including the mapping and cataloguing of British North America and its resources, and she presents the Montreal Natural History Society as evidence of the importance placed on this kind of science. She notes the Society’s particular interest in geology and its role as an advocate in the 1830s and 1840s for a geological survey of British North America as a means of further uniting the colonies through science.<sup>18</sup> Zeller is also the author of a succinct booklet on Canadian science history published by the Canadian Historical Association in 1996, as well as several articles and a lengthy 1997 chapter in the third volume of a history of North American exploration edited by John L. Allen. In her booklet, Zeller briefly outlines the development of science in Victorian Canada and contends that science became more important as the nineteenth century wore on, both as a means for helping Canadians make sense of their country and as a method for developing its natural resources. Canada was only a “land of promise” if systematically and properly explored through the application of science.<sup>19</sup>

---

<sup>16</sup> Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation*, rev. ed. (Montreal: McGill-Queen’s University Press, 2009), 3.

<sup>17</sup> *Ibid.*, 5-7.

<sup>18</sup> *Ibid.*, 32.

<sup>19</sup> Suzanne Zeller, *Land of Promise, Promised Land: The Culture of Victorian Science in Canada* (Ottawa: Canadian Historical Association, 1996), 1.

Zeller's 1997 chapter is a much longer, fuller study of scientific exploration in British North America, particularly exploratory projects sponsored by the imperial government, including the Admiralty, and often with the participation of groups like the Royal Society. She contends that after 1815 Britain became more interested in its remaining North American colonies, which had supplied essential natural resources during the Napoleonic Wars and which were about to absorb waves of British immigrants. British as well as Canadian explorers undertook surveys and expeditions to gather scientific data to assess the "habitability of the earth and of making better use of its resources to predict and control the quality of life."<sup>20</sup> She invokes Lemuel Gulliver and Robinson Crusoe to describe the two main lines of scientific inquiry in British North America during this period. "Gullivers" were British explorers and military officers eager to venture into the unknown and report discoveries back to the metropolis while "Crusoes" were the inhabitants of the fledging colonies who wanted to make sense of their land while attempting to replicate as much of the old country as possible. Scientific exploration of Canada and the identification of new plants, animals, and minerals thus had multiple purposes that functioned in concert: a desire to locate new sources of fuel, to establish settlements, to identify trade routes like the Northwest Passage, to cement political or military control, to learn about new plants and animals encountered on a daily basis, or to locate the magnetic north. Colonial natural history societies, like the Montreal Natural History Society and the Literary and Historical Society of Quebec, founded by Governor-in-Chief Lord Dalhousie in 1824, saw themselves as "clearinghouses for useful information about the Canadas" and they promoted British North America as a place of untouched beauty and wonder, full of specimens unknown to Europeans.<sup>21</sup> They also sought to raise the level of general interest in science and natural history amongst the colonial public. At the same time,

---

<sup>20</sup> Suzanne Zeller, "Nature's Gullivers and Crusoes," 190.

<sup>21</sup> *Ibid.*, 212-13.

Zeller's conclusion is that these amateur societies were unable to undertake serious scientific work due to the lack of government support, as well as a the lack of a critical mass of scientifically trained members and unsustained interest in science and natural history in their communities.

The argument that colonial natural history societies sought to expand and enhance the role of science in early nineteenth-century British North America is supported by a 2010 PhD dissertation in the Department of History at Concordia by Harry Kuntz. Kuntz attempts to situate the creation of the Montreal Natural History within a broader cultural network in Lower Canada that included the Mechanics' Institute and other like-minded organizations and societies. He concludes that the Montreal Natural History Society's Indian Committee was established as a by-product of ongoing efforts by British explorers and surveyors to discover the Northwest Passage.<sup>22</sup> In a broad survey of the history scientific practice published in 1999, Lewis Pyenson and Susan Sheets-Pyenson use the creation of the Montreal Natural History Society to illustrate how the enthusiasm for science and the model for local scientific societies spread outside Britain in the early nineteenth-century and as evidence of an ongoing tradition of participatory science amongst amateurs. Given the Society's dependence on volunteers throughout its entire existence, it also "illustrates the high degree of dependence of local scientific societies on individual initiative and enthusiasm. They prospered so long as volunteers actively supported their endeavours; they waned whenever that spirited collapsed."<sup>23</sup>

Despite brief references to the Montreal Natural History Society and its Indian Committee in many survey histories of Canadian science and exploration, the Society has been the subject of just two dedicated journal articles. A 1982 study by Stanley Brice Frost summarized the Society's

---

<sup>22</sup> Harry Kuntz, "Science Culture in English-Speaking Montreal, 1815-1842" (doctoral thesis, Concordia University, 2010), 88, <http://spectrum.library.concordia.ca/979513/1/NR71149.pdf>.

<sup>23</sup> Lewis Pyenson and Susan Sheets-Pyenson, *Servants of Nature: A History of Scientific Institutions, Enterprises and Sensibilities* (London: HarperCollins, 1999), 335.

history from its creation to its dissolution in 1925. The Indian Committee is not mentioned at all. Frost emphasized the presence of medical doctors and clergy amongst the Society's founding members, highlighting the relationship between medicine, science, and theology in the early nineteenth-century Anglo-American world. He noted that the Society was entirely anglophone and Protestant in composition and outlook with no French Canadian or female founding members.<sup>24</sup> By establishing a library and a museum that was open to the public and by holding open meetings and offering prizes for papers, the Society tried to advance public appreciation for science and the training of Canadian scientists. During the 1830s and 1840s the Society became one of the leading voices for the creation of a national geological survey, which, as demonstrated by historians like Berger and Zeller, was a tool by which Canadians could imagine the creation of a unified country amongst Britain's North American colonies.<sup>25</sup> In 1994 Hervé Gagnon studied the creation of the Natural History Society's museum and its significance in nineteenth-century Quebec. He argued that the practice of natural history was part of a strategy to shape a national vision in support of a pan-Canadian narrative and that the Society's museum "acted as a window on the national future as seen by its elite."<sup>26</sup>

Francophone historians of science in Quebec treat the Montreal Natural History Society in roughly the same manner as their anglophone colleagues. In their 1987 French language monograph on the history of science in Quebec, published in an expanded edition in 2008, Luc Chartrand, Raymond Duchesne, and Yves Gingas describe the creation of the Montreal Natural History Society within the context of the development of intellectual and scientific culture in

---

<sup>24</sup> Stanley Brice Frost, "Science Education in the Nineteenth Century: The Natural History Society of Montreal, 1827-1925," *McGill Journal of Education* 17, no. 1 (1982): 32-33.

<sup>25</sup> *Ibid.*, 40.

<sup>26</sup> Hervé Gagnon, "The Natural History Society of Montreal's Museum and the Socio-Economic Significance of Museums in 19th-Century Canada," *Scientia Canadensis* 18, no. 2 (1994): 105.

Quebec. They also view the creation of the Society as an example of ongoing rivalry between Quebec City and Montreal: “L’apparition de la LHSQ [Literary and Historical Society of Quebec] ne satisfait pas tout le monde. Les Montréalais, notamment, qui se sentaient un peu exclus, fondent, en 1827, la Natural History Society of Montreal.”<sup>27</sup> Some evidence to justify this claim is that Lord Dalhousie became patron of the Montreal Natural History Society within its first year of existence, but otherwise this notion of civic rivalry is absent from English-language histories of science in Quebec.

### Science and Imperialism

Historians have long been interested in the relationship between science and the imperial enterprise. Exploration, natural history, and colonization reinforced and sustained each other. Janet Browne has described how the study of animals, plants, and minerals in the eighteenth- and nineteenth-century British world was:

...one of the most obviously imperial sciences in an age of increasing imperialism...[As] concepts of ‘empire’ and ‘imperialism’ were being dramatically forged on the anvil of colonization, the conceptual framework, methodologies, and practical techniques to deal with foreign animals and plants took their tone directly from those used in national expansion.<sup>28</sup>

In practical terms, science helped engineers, geographers, explorers, and military planners. Jeffers Lennox, for example, writes about the surveying and mapping of Halifax and the construction of a British space in what had been perceived as wilderness.<sup>29</sup> These efforts made natural history a means by which settlers constructed a local identity separate from, but not necessarily in conflict

---

<sup>27</sup> Luc Chartrand, Raymond Duchesne, and Yves Gingas, *Histoire des sciences au Québec de a Nouvelle-France à nos jours*, rev. ed. (Montréal: Boréal, 2009), 82.

<sup>28</sup> Janet Browne, “Biogeography and Empire,” in *Cultures of Natural History*, eds. N. Jardine, J.A. Secord, and E.C. Spary (Cambridge: Cambridge University Press, 1996), 305. See also, Thomas R. Dunlap, *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand* (Cambridge: Cambridge University Press, 1999).

<sup>29</sup> Jeffers Lennox, “An Empire on Paper: The Founding of Halifax and Conceptions of Imperial Space, 1744-55,” *Canadian Historical Review* 88, no. 3 (2007): 373-412.

with, that of the metropolis or the places from which they came. Helen Dewar's study of three eighteenth-century British travel narratives reminds us that in many cases it was the "natural curiosities"—the flora, rivers, lakes, and land masses—that attracted the most attention from the men (and women) who made trips to British North America, often within the context of potential settlement.<sup>30</sup> Kirsten Greer, writing in the issue of *Scientia Canadensis* edited by Dickenson and Heaman, makes a similar claim that ornithology, the branch of natural history that studies birds, emerged in Upper Canada as a by-product of colonization that helped reinforce British identity in the New World, but that also relied on the participation of Aboriginals as well as tourists from America and Britain. She asserts that Canadian natural scientists had access to American scientific networks and did not rely solely on British knowledge systems, networks, and communications circuits.<sup>31</sup> Angela Byrne's 2013 monograph on the Arctic in the British imagination during the Romantic Era situates, in brief, the Montreal Natural History Society and the Indian Committee within a network of British efforts to develop museums and collections of animal, vegetable, and mineral specimens and Aboriginal artifacts gathered in the northernmost parts of the Empire. Byrne concludes that specimens gathered by British explorers, military personnel, and amateur scientists working for the Hudson's Bay or North West Companies were both natural curiosities and sources of information about British overseas possessions. Specimens from the three kingdoms were seen as representing what Byrne calls a "living past" as well as evidence of "the new knowledge to be gained in the north."<sup>32</sup>

---

<sup>30</sup> Helen Dewar, "Old World Conventions and New World Curiosities: North American Landscapes through European Eyes," *Journal of the Canadian Historical Association* 14, no. 1 (2003): 50.

<sup>31</sup> Kirsten A. Greer, "Placing Colonial Ornithology: Imperial Ambiguities in Upper Canada, 1791-1841," *Scientia Canadensis* 31, no. 1-2 (2008): 90, 100-02.

<sup>32</sup> Angela Byrne, *Geographies of the Romantic North: Science, Antiquarianism and Travel, 1790-1830* (London: Palgrave Macmillan, 2013), 84.



## Rupert's Land, the Fur Trade, and the Far West

Paul Mapp contends that Canadian historians have paid much more attention to the Far West of the North American continent than their United States colleagues, largely as a result of the role that the fur trade played in the exploration and development of the country.<sup>33</sup> Starting in the eighteenth century, the fur trade sent men into and across what would become Canada with the goal of identifying profitable areas for fur trapping and hunting. It also brought Europeans and Canadians into sustained contact with diverse Aboriginal groups from the Pacific Coast to the Great Plains to the Lower Arctic to the Canadian Shield. The study of the fur trade, including the study of Rupert's Land, has become increasingly sophisticated over the past four decades. Until the 1970s the study of Rupert's Land and its economic *raison d'être*, the fur trade, was assumed to be "the domination of European metropolitan centres over an ever-expanding and increasing hinterland."<sup>34</sup> Economic histories like Harold Innis' 1930 *The Fur Trade in Canada* dominated. Rupert's Land was important because of its fur bearing populations and the profits they generated for men in Montreal and London. In succeeding years scholars have sought to reorient the study of the fur trade and to "write in" different groups into the history of the Canadian West. Jennifer S.H. Brown's 1980 monograph *Strangers in Blood: Fur Trade Company Families in Indian Country* and Sylvia Van Kirk's 1984 study *Many Tender Ties: Women in Fur-Trade Society, 1670-1870* gave new voices to European, Aboriginal, and Métis women who were involved in fur trade communities and demonstrated how they were both successful and unsuccessful in exercising

---

<sup>33</sup> Paul W. Mapp, *The Elusive West and the Contest for Empire, 1713-1763* (Chapel Hill: Omohundro Institute of Early American History and Culture and University of North Carolina Press, 2011), 16n.

<sup>34</sup> John Foster, "Rupert's Land and the Red River Settlement, 1820-70," in Lewis G. Thomas, ed. *The Prairie West to 1905: A Canadian Sourcebook* (Toronto: Oxford University Press, 1975), 20-21.

economic, cultural, and social agency.<sup>35</sup> John Foster, Jacqueline Peterson, Frits Pannekoek, and others began to study the Métis, a previously marginalized group that had been profoundly shaped by and had given shape to Rupert's Land.<sup>36</sup> The subtitle of a collection of essays published in 1988 described Rupert's Land as a "cultural tapestry" and the introduction by Richard C. Davis urged scholars to undertake "much needed rethinking" about the history of the territory.<sup>37</sup> More recently, studies like Carolyn Podruchny's *Making the Voyageur World: Travellers and Traders in the North American Fur Trade*, published in 2006, and Jean Barman's 2014 *French Canadians, Furs, and Indigenous Women in the Making of the Pacific Northwest* have significantly increased our knowledge of French Canadians' contributions to the fur trade and to the history of Rupert's Land and the Pacific Northwest.<sup>38</sup>

---

<sup>35</sup> The historiography of the West is, however, strongly gendered male. None of the fifteen essays in *The West and the Nation: Essays in Honour of W.L. Morton* (Toronto: McClelland & Stewart, 1976) were authored by women. Twenty-five years later, *From Rupert's Land to Canada* (Edmonton: University of Alberta Press, 2001), a collection of essays on Rupert's Land history published to honour John E. Foster, included four female authors out of fifteen, or an increase of (only) 27% compared to the 1976 volume. A forum on gender published in the November 2010 issue of the *Pacific Historical Review* featured five important female Western historians writing on questions of gender, race, and power in Western historical scholarship. In general, their responses do not make for happy reading. In particular, Susan Lee John's article, "Nail This to Your Door: A Disputation on the Power, Efficacy, and Indulgent Delusion of Western Scholarship that Neglects the Challenge of Gender and Women's History," (pp. 605-617) excoriates the profession for overlooking the contribution of women and women's and gender history to the study of the West. One year later, Margaret Jacobs concluded that "that the field of western women's and gender history has made little impact on the larger field of western history." See Margaret Jacobs, "Western History: What's Gender Got to Do with It?" *Western Historical Quarterly* 42, no. 3 (2011): 297-203, especially p. 298. Jacobs does, however, praise female Canadian scholars for their work since the 1970s on women in the fur trade.

<sup>36</sup> See John Foster, "The Metis: The People and the Term," *Prairie Forum* 3, no. 1 (1978); Jacqueline Peterson, "Prelude to Red River: A Social Portrait of the Great Lakes Metis," *Ethnohistory* 25 (1978): 41-67; and Frits Pannekoek, *A Snug Little Flock: The Social Origins of the Riel Resistance of 1869-70* (Winnipeg: Watson & Dwyer, 1991).

<sup>37</sup> Richard C. Davis, "Introduction," in *Rupert's Land: A Cultural Tapestry*, ed. Richard C. Davis (Calgary: University of Calgary Press), 12.

<sup>38</sup> Carolyn Podruchny, *Making the Voyageur World: Travellers and Traders in the North American Fur Trade* (Lincoln: University of Nebraska Press, 2006); Jean Barman, *French Canadians, Furs, and Indigenous Women in the Making of the Pacific Northwest* (Vancouver: University of British Columbia Press, 2014).

Aboriginal history, like most forms of social history, profited from the cultural shifts of the 1960s and 1970s. In a recent historiographical essay, however, Nicolas Rosenthal has written that despite scholarship of the highest quality, Aboriginal history “has remained isolated from larger currents of North American history.”<sup>39</sup> He believes that “For American historians in-training [in the 2000s], the message seemed to be that after 1800, American Indians ceased to be central to the development of North America, and their experiences did little to inform the major currents defining American society.”<sup>40</sup> Whether because of the fur trade or other political or cultural influences, Canadian historians began to recalibrate their investigations of Aboriginal cultures much earlier than their American counterparts. For example, in 1974 Arthur Ray published *Indians in the Fur Trade: Their Roles as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870*, which demonstrated that Aboriginals were active participants in the trade with complex motivations and self-interest. A revised edition was published in 1998. While events acted upon Aboriginals (particularly disease), they were never passive spectators. In a book chapter published in 1978, Ray proposed a radical reorientation of fur trade scholarship, arguing that historians should consider the history of the fur trade as simply one aspect of a broader and much more complex history of Canada’s Aboriginal people.<sup>41</sup>

American scholars have, however, paid far more attention to the history of anthropology in their country and the use of science to explain or create differences between whites and Aboriginals. Important studies on the origins and particular uses of racial differentiation in the United States include Reginald Horsman’s 1981 study *Race and Manifest Destiny: The Origins of*

---

<sup>39</sup> Nicolas G. Rosenthal, “Beyond the New Indian History: Recent Trends in the Historiography on the Native Peoples of North America,” *History Compass* 4-5 (2006): 963.

<sup>40</sup> *Ibid.*, 964.

<sup>41</sup> Arthur Ray, “Fur Trade History as an Aspect of Native History” in *One Century Later: Western Canadian Reserve Indians Since Treaty 7*, eds. Ian A.L. Getty and D.B. Smith (Vancouver: University of British Columbia Press, 1978), 7-19.

*American Racial Anglo-Saxonism*, Robert Bieder's 1986 monograph *Science Encounters the Indian 1820-1880: The Early Years of American Ethnography*, Francis Jennings's 1993 *The Founders of America: How Indians Discovered the Land, Pioneered in It, and Created Great Classical Civilizations*, and Joyce Chaplin's 2001 *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676*.<sup>42</sup> Studies like Anthony F.C. Wallace's 1999 *Jefferson and the Indians: The Tragic Fate of the First Americans* and Gary Anderson's 2014 *Ethnic Cleansing and the Indian* have convincingly argued that early American policies towards Aborigines constituted nothing less than genocide. Canadian scholars have not yet attempted the same kinds of studies for Canada's pre-Confederation period.<sup>43</sup> Robert L.A. Hancock, however, points out that while there were no Canadian anthropologists until the twentieth century, work that could be recognized as anthropological had been taking place in Canada for centuries. He terms the period from European contact to the nineteenth century "the Missionary Era" and writes that the origins of organized study of Aborigines have their roots in the *Jesuits Relations*.<sup>44</sup> The Missionary Era was succeeded by what Hancock terms the "Amateur Era," which saw anthropology taken up by talented, untrained amateurs. It is within this period that the Montreal Natural History Society undertook its project.

---

<sup>42</sup> Reginald Horsman, *Race and Manifest Destiny: The Origins of American Racial Anglo-Saxonism* (Cambridge: Harvard University Press, 1981); Robert Bieder, *Science Encounters the Indian 1820-1880: The Early Years of American Ethnography* (Norman: University of Oklahoma Press, 1989); Francis Jennings, *The Founders of America: How Indians Discovered the Land, Pioneered in It, and Created Great Classical Civilizations* (New York: Norton, 1984); Joyce E. Chaplin, *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier* (Cambridge: Harvard University Press, 2001);

<sup>43</sup> Anthony F.C. Wallace, *Jefferson and the Indians: The Tragic Fate of the First Americans* (Cambridge: Belknap Press, 1999); Gary Clayton Anderson, *Ethnic Cleansing and the Indian: The Crime that Should Haunt America* (Norman: University of Oklahoma Press, 2014). James Daschuk's recent study *Clearing the Plains* (Regina: University of Regina Press, 2013) looks at state-organized attempts to bring Aborigines on the Prairies under government control after Confederation.

<sup>44</sup> Robert L.A. Hancock, "Toward a Historiography of Canadian Anthropology," in *Historicizing Canadian Anthropology*, eds. Julia Harrison and Regna Darnell (Vancouver: University of British Columbia Press, 2006), 32.

The history of the Hudson's Bay Company has generated a vast literature. The standard history of the HBC is E.E. Rich's *History of the Hudson's Bay Company, 1670-1870*, published in 1958-59.<sup>45</sup> A significant category of work on the HBC's history has also examined the Company's interest (or lack of interest) in science and the natural history of its North American territories during the eighteenth and nineteenth centuries, as well as its role in the exploration, surveying, and mapping of Canada. Early studies include two by R.P. Stearns and James L. Baillie, Jr., who published brief articles in the mid-1940s on the Company's historical interest in science in the *Beaver*, a magazine established by the Company to promote its history and that of Canada.<sup>46</sup>

In the 1980s, scholars began to look at the Company's support for scientific projects organized in British North America rather than the imperial capital. Greg Thomas's 1985 article "The Smithsonian and the Hudson's Bay Company" described a relationship between the Hudson's Bay Company and the Smithsonian Institution in the 1860s when the Company worked with explorer and naturalist Robert Kennicott (1835-1866) to identify and transmit specimens from the Canadian West and Northwest to Washington, D.C. Thomas situates the Company's involvement in natural history after 1821 when its economic prospects had improved following its merger with the North West Company and he points to the HBC's partnership with the Montreal Natural History Society in 1828 as a precedent for future work with natural history groups. He also writes that the "very existence [of the Montreal Natural History Society] indicated that the colonial society was beginning to establish its own cultural institutions, however fragile their support might be."<sup>47</sup> Debra Lindsay analyzed surveyor, map maker, and fur trader Peter Fidler's personal library

---

<sup>45</sup> E.E. Rich, *The History of the Hudson's Bay Company, 1670-1870* (London: Hudson's Bay Record Society, 1959-59).

<sup>46</sup> R.P. Stearns, "The Royal Society and the Company," *The Beaver* (June 1945): 9; James L. Baillie, Jr., "Naturalists on Hudson Bay," *The Beaver* (December 1946): 36.

<sup>47</sup> Greg Thomas, "The Smithsonian and the Hudson's Bay Company," *Prairie Forum* 10, no. 2 (1985): 287.

in a 1986 book chapter to demonstrate the existence of a scientific culture in Rupert's Land in the eighteenth and nineteenth centuries, as well the existence of a community of readers interested in consuming and collecting scientific texts to both enrich their personal lives and support their professional careers.<sup>48</sup> Suzanne Zeller looked at the collecting of natural history specimens by Hudson's Bay Company employees in the Canadian Northwest during the late eighteenth- and nineteenth- centuries in a 1989 article in *Scientia Canadensis*. Company employees collected, organized, and described specimens from the natural world as a way to deal with long winters or boredom at isolated trading posts, but they also read and shared scientific publications and engaged in correspondence with like-minded colleagues in North America and Europe. Science was a social enterprise, "a community activity generated both by a community of co-workers and for the community at large."<sup>49</sup> Science and natural history were thus important for the common good and it is within this context that Zeller notes the Company's collaboration with the Montreal Natural History Society. Governor George Simpson's membership on the Society's Indian Committee demonstrated the HBC's willingness to promote scientific investigations in its territories, but its support only went so far as Zeller describes how data collected from Company employees in the context of the Indian Committee's project, as well as specimens, was sent to London for the benefit of the Company, not the Society.<sup>50</sup>

Writing in the 2008 issue of *Scientia Canadensis* edited by Dickenson and Heaman, Brian Schefke explores the use of natural history by Hudson's Bay Company in the Pacific Northwest as a tool to cement its control of the area's fur and commercial trades during the first half of the

---

<sup>48</sup> Debra Lindsay, "Peter Fidler's Books: Philosophy and Science in Rupert's Land," in Peter F. McNally, ed., *Readings in Canadian Library History* (Ottawa: Canadian Library Association, 1986): 209-29.

<sup>49</sup> Suzanne Zeller, "The Spirit of Bacon: Science and Self-Perception in the Hudson's Bay Company, 1830-1870," *Scientia Canadensis* 13, no. 2 (1989): 86.

<sup>50</sup> *Ibid.*, 88.

nineteenth century. For the HBC, “knowledge of natural history was key for an understanding of the Pacific Northwest and its potential for profit. Hence, the abilities of naturalists working in the region were of considerable value to the HBC.”<sup>51</sup> Schefke goes to lengths to describe the Hudson Bay Company’s interest in natural history and science from an early relationship with the Royal Society to its participation in data gathering exercises in British North America. He contends that while the Hudson’s Bay Company exercised state powers on behalf of the British government, it also acted as node within a network of scientific societies that helped support and shape imperial priorities and commitments.<sup>52</sup>

Most recently, Ted Binnema’s 2014 monograph, *Enlightened Zeal: The Hudson’s Bay Company and Scientific Networks, 1660-1870*, attempts to position the Hudson’s Bay Company at the centre of scientific exploration and development in Canada from the seventeenth century onwards, although he acknowledges that the Company had little to do with Canadian science before 1821 when it merged with the North West Company. In 1826 George Simpson established his, and thus the Company’s, Canadian headquarters at Lachine, a Montreal suburb just west of Montreal, and began to participate in the city’s economic and cultural life, one aspect of which was his membership in the Montreal Natural History Society. Otherwise, Binnema writes that the Company’s post-1821 interest in Montreal-based scientific efforts was lukewarm until the 1850s when John William Dawson (1820-99) became principal of McGill University and a member the Montreal Natural History Society.<sup>53</sup>

---

<sup>51</sup> Brian Schefke, “The Hudson’s Bay Company as a Context for Science in the Columbia Department,” *Scientia Canadensis* 31, no. 1-2 (2008): 71.

<sup>52</sup> *Ibid.*, 84.

<sup>53</sup> Ted Binnema, *Enlightened Zeal: The Hudson’s Bay Company and Scientific Networks, 1670-1870* (Toronto: University of Toronto Press, 2014), 210.

A study of the Montreal Natural History's Society's Indian Committee and its project to survey the Interior will fill a significant gap in the literature on the history of science and exploration in the early nineteenth-century Canadian West. It will also provide a much-needed re-examination and reappraisal of what has to this point been presented by scholars as a well-meaning but failed attempt by amateurs to undertake a scientific and environmental survey in pre-Confederation Canada or as evidence of an embryonic Canadian intellectual or scientific culture. The absence of this kind of study poses a challenge to our understanding of the history of natural history in pre-1867 Canada as well as to our knowledge of local, rather than metropolitan, desires and ambitions to improve, develop, and civilize a vast part of British North America.



## CHAPTER 2: “The Nomination of the Visible”: Natural History, Exploration, and Fur

Despite the widespread popularity of natural history in Europe and North America from the mid-seventeenth to the late nineteenth centuries, historians have had difficulty defining “natural history” itself. While Paula Findlen has written that natural history was “perhaps the most widely discussed and hotly debated discipline among Renaissance natural philosophers,” Sue Ann Prince has called it a “curious term. Neither ‘natural’ nor essentially ‘historical,’ it is both a concept and a practice.”<sup>54</sup> Carl Berger echoes this statement, describing natural history as having “vague boundaries,” while Michel Foucault deemed it the “nomination of the visible.”<sup>55</sup> Prince contends that at the core of natural history was the belief that humans should and could exercise power over the natural world and come to know it better by classifying, naming, organizing, labelling, collecting, and displaying it.<sup>56</sup> As understood by the founders of the Montreal Natural History Society and by practitioners in the early nineteenth-century Anglo-American world, natural history encompassed not just the study of plants, animals, and minerals (botany, zoology, and mineralogy), but subfields like ornithology and hydrology as well as other branches of knowledge including chemistry, anatomy, astronomy, agriculture, and theology. Starting in the late seventeenth century, the creation of societies and groups dedicated to natural history and its study led to the development of classification schemes by which to organize nature and the things found in it. These schemes were applied to humans and, over the course of the nineteenth century, came to be used to explain

---

<sup>54</sup> Paula Findlen, “The Formation of a Scientific Community: Natural History in Sixteenth-Century Italy,” in *Natural Particulars: Nature and the Disciplines in Renaissance Europe*, eds. Anthony Grafton and Nancy Siraisi (Cambridge: MIT Press, 1999), 169; Sue Ann Prince, “Introduction” in *Stuffing Birds, Pressing Plants, Shaping Knowledge: Natural History in North America, 1730-1860*, ed. Sue Ann Prince (Philadelphia: American Philosophical Society, 2003), 2.

<sup>55</sup> Berger, *Science, God, and Nature*, xi; Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (London: Taylor & Francis, 2005), 144.

<sup>56</sup> Prince, “Introduction,” 2.

and account for differences within the human race and to establish scientific claims of racial superiority or inferiority.

The popularization of natural history was a result of the creation in 1660 of the Royal Society of London for Improving Natural Knowledge. The Royal Society and its founding fellows were proponents of the “new science” of Francis Bacon (1561-1626) who argued that experimentation and observation, rather than authority and tradition, should define scientific methods and investigations.<sup>57</sup> The creation of Society also sparked what Susan Scott Parrish has called “a London-centered global epistolary network of natural history” that spread to continental Europe, but also eventually to the New World.<sup>58</sup> The use of printing with movable type helped scholars share their work and increasingly sophisticated book illustration processes allowed for the dissemination of accurate and detailed reproductions of animal, mineral, and plant specimens, as well as maps and graphs.<sup>59</sup> Printing also helped standardized scientific and medical texts, although Elizabeth Eisenstein has argued that the creation of printed reference works like calendars, dictionaries, atlases, and anatomical diagrams were of more importance to scholars, including natural historians, since they fixed alphabets, formulas, locations, and images for readers scattered across Europe.<sup>60</sup> Improved roads in Great Britain and new postal systems across Europe allowed amateur natural historians living in various parts of the world to communicate new ideas

---

<sup>57</sup> John Anderson, *Deep Things Out of Darkness: A History of Natural History* (Berkeley: University of California Press, 2013), 52.

<sup>58</sup> Susan Scott Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill: University of North Carolina Press, 2006), 21.

<sup>59</sup> For an overview of the relationship between book history and natural history see Adrian Johns, “Natural History as Print Culture,” in *Cultures of Natural History*, eds. N. Jardine, J.A. Secord, and E.C. Spary (Cambridge: Cambridge University Press, 1996), 106-24.

<sup>60</sup> Elizabeth Eistenstein, *The Printing Revolution in Early Modern Europe* (Cambridge: Cambridge University Press, 1983), 41-90. See also, Foucault, *The Order of Things*, 147-48.

and theories with each other and to share information about the physical and environmental characteristics of the places in which they lived or had travelled.<sup>61</sup>

The history of natural history is also, as Dickenson and Heaman have written, bound to the history of North American exploration and settlement. European explorers who ventured to the New World described its geography, rivers, wildlife, and inhabitants to governments or commercial backers or in published memoirs and travel narratives published for European readers. They also brought back specimens that prompted debate and discussion in learned circles from Madrid to London to Paris. The first European voyages to the New World were motivated by commerce and a desire to find a direct water route to Asia, the fabled Northwest Passage, but also by a desire to acquire natural resources. Behind Jacques Cartier's 1534 voyage to North America was an order to "discover certain islands and lands where it is said that a great quantity of gold, and other precious things, are to be found," and to discover a route to Asia.<sup>62</sup> Almost one hundred years after Cartier's first voyage, in 1618 Samuel de Champlain outlined an colonization scheme for New France, which had been settled starting in 1608, built on a "great and permanent trade" in natural resources including cod, salmon, and sturgeon fisheries, whaling, timber, hemp, silver, iron, and lead mining, fur, and livestock, the revenues from which would flow to the French Crown.<sup>63</sup> The quest for the Northwest Passage, which would give access to the resources of the Orient, specifically silks, spices, and ceramics, engaged English explorers like Frobisher, Hudson,

---

<sup>61</sup> For example, in his study of English newsbooks, Joad Raymond describes how highways and the post contributed to the spread of print culture in England in the early 1600s, accelerated in the 1640s by the increasing tensions between the King and Parliament. See Joad Raymond, *The Invention of the Newspaper: English Newsbooks, 1641-1649* (Oxford: Clarendon Press, 1996), 238-240.

<sup>62</sup> Marcel Trudel, "Cartier, Jacques," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 26, 2015, [http://www.biographi.ca/en/bio/cartier\\_jacques\\_1491\\_1557\\_1E.html](http://www.biographi.ca/en/bio/cartier_jacques_1491_1557_1E.html).

<sup>63</sup> Marcel Trudel, "Champlain, Samuel de," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 26, 2015, [http://www.biographi.ca/en/bio/champlain\\_samuel\\_de\\_1E.html](http://www.biographi.ca/en/bio/champlain_samuel_de_1E.html).

Baffin, and Fox. Towards the middle of the seventeenth century British settler colonies were established on the eastern seaboard of what would become the United States, leading to tensions and conflict with the French and Dutch, but also with Aborigines, for resources and land.

After the end of the Seven Years War in 1763, Britain began to support and sponsor dedicated voyages of scientific exploration. Motivated by the French, who undertook a voyage to survey the transit of Venus in 1766, and by growing commercial interests in the East, the British organized James Cook's (1728-79) first tour of the Pacific, completed in 1771.<sup>64</sup> Joseph Banks (1743-1820), the botanist, ornithologist, and naturalist, received permission to accompany Cook, bringing along with him Swedish naturalist Daniel Solander (1733-82), as well as a small staff of scientists and draughtsman. Banks, who had visited Newfoundland and Labrador in 1766, became a member of the Royal Society that year and its president in 1788. His participation in Cook's first voyage set a precedent for including scientists on all subsequent British voyages of discovery, a practice reinforced by the scientific value ascribed to the specimens and data gathered by Banks and his colleagues. Glyndwr Williams writes that the state-sponsored publication of Cook's journals in 1773 lent additional prestige and authority to the expeditions.<sup>65</sup> A second Pacific voyage was followed by a third with the aim of locating the Northwest Passage via the Pacific Ocean. Cook did not locate the passage, but he spent the spring and summer of 1778 surveying and charting the coastline of the Pacific Northwest from Nootka Sound to the Bering Strait. Eleven years later the Admiralty sponsored another expedition under the command of George Vancouver (1757-98), who had sailed on Cook's second and third voyages, to receive Nootka Sound back from the Spanish who had seized it, along with four British ships, in 1789 and to "acquire 'accurate

---

<sup>64</sup> Binnema, *Enlightened Zeal*, 79.

<sup>65</sup> Glyndwr Williams, "Cook, James," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 26, 2015, [http://www.biographi.ca/en/bio/cook\\_james\\_4E.html](http://www.biographi.ca/en/bio/cook_james_4E.html).

information with respect to the nature and extent of any water-communication' which might 'in any considerable degree' serve as a northwest passage for the purposes of commerce.'"<sup>66</sup>

Vancouver surveyed large sections of the coasts of what are now British Columbia, Washington, and Oregon. As with Cook, the Admiralty paid for a narrative of Vancouver's journey to be published after his return in 1795, which helped establish an official, state sanctioned history of British exploration and discovery in the New World.

By the middle of the eighteenth century the Hudson's Bay Company, a private commercial firm based in London, was organizing exploratory expeditions into the Canadian Interior and Northwest with the goal of expanding its economic reach and profits by identifying new sources of fur. The Hudson's Bay Company had been founded by a group of investors, including several members of the Royal Society, to develop a trade in furs originating from the area around Hudson Bay. They applied to Charles II for a charter in order to protect their interests and were incorporated on May 2, 1670, as the "Company of Adventurers of England Trading into Hudson's Bay," better known as the Hudson's Bay Company. The charter gave the Company control over all waterways and lands that drained into Hudson Bay, a vast demesne comprised of several different kinds of physiographic regions including the Interior Plains, the Hudson Bay and Arctic Lowlands, and the Canadian Shield. Although the Adventurers were aware that some Aboriginals lived around or in proximity to the Bay, they had no knowledge of the extent of the Aboriginal population, which was made up of a number of largely nomadic groups including Cree, Blackfoot, Dakota, Ojibwa,

---

<sup>66</sup> W. Kaye Lamb, "Vancouver, George," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed August 9, 2015, [http://www.biographi.ca/en/bio/vancouver\\_george\\_4E.html](http://www.biographi.ca/en/bio/vancouver_george_4E.html).

Nakota, Assiniboine, and Inuit, who utilized distinct language groups, including regional dialects.<sup>67</sup>

For its first seventy years, the HBC's operations in the Interior, which was also called Rupert's Land in honour of the Company's first governor, Prince Rupert of the Rhine, were limited to seasonal visits to the shores of Hudson Bay to trade with Aboriginal fur hunters. As a result of competition from French and Canadian fur companies based out of Montreal, starting in the mid-1750s the Company adopted a policy of dispatching traders into the Interior to live and trade with Aboriginals and to encourage them to visit Company forts and settlements as a way to acquire furs more efficiently, but also to create a system of reliance on the Company by Aboriginals, who would trade for European goods like guns, cloths, tools, and other implements. The fall of New France in 1760 meant a recalibration of the North American fur trade. French and Canadian traders were forced to abandon their posts, generating opportunities for the HBC to move further into the Interior. In 1762 Moses Norton, chief factor at Prince of Wales's Fort near present-day Churchill, Manitoba, sent two men on an expedition to the north. When they returned an astounding five years later in 1767, they described "a River wh<sup>ch</sup> Runs up between 3 Cooper mines . . . and is a very Plentifull Country of ye Best of furs," prompting Norton to travel to London to ask the Company to sponsor a European-led expeditionary project.<sup>68</sup> A young HBC employee, Samuel Hearne (1745-92), was selected for the task and, after two false starts, he left Prince of Wales's Fort in 1770, eventually becoming the first European to see the Arctic Ocean and Great Slave

---

<sup>67</sup> Keren Rice, "Aboriginal Languages of Canada," in *Canadian Encyclopedia*, Historica Canada, accessed August 16, 2015, <http://www.thecanadianencyclopedia.ca/en/article/aboriginal-people-languages/>.

<sup>68</sup> C. S. Mackinnon, "Hearne, Samuel," *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 26, 2015, [http://www.biographi.ca/en/bio/hearne\\_samuel\\_4E.html](http://www.biographi.ca/en/bio/hearne_samuel_4E.html).

Lake.<sup>69</sup> Hearne's travels brought little reward to the HBC, but they demonstrated that the Company could benefit by moving operations into Rupert's Land. Accordingly, in 1774 Hearne established Cumberland House, the HBC's first inland post, in what is now east central Saskatchewan. Despite some proactive expansion, William Goetzmann has written that the HBC displayed extreme caution and conservatism in exploration as it "was a diversion from the normal business concerns, and was only undertaken when it would yield a clear financial return...Even then, the typical Hudson's Bay explorer looked primarily for beaver and portage routes."<sup>70</sup> Although several Adventurers, including Prince Rupert, were members of the Royal Society, the HBC's early years were marked by a significant lack of cooperation and geographic information sharing with scientific communities, as well as the cultivation of a culture of corporate secrecy, which Glyndwr Williams has characterized as obsessive.<sup>71</sup> This is not surprising as the HBC's operations in its early years were precarious. Moreover, it was a private firm designed to generate income for its shareholders and information gathered in the field was not shared in order to protect the Company's commercial interests.

A relaxation of trading regulations in the 1760s as well as the exhaustion of fur-bearing populations in the eastern parts of Rupert's Land prompted Montreal-based Canadian and British trappers, as well as New England trappers, to push west in order to find new sources of fur. In 1779 a group of Scottish fur traders in Montreal pooled their resources and established themselves as the North West Company (NWC). The firm quickly demonstrated a fanatical desire to advance itself against the Hudson's Bay Company and to expand the scope of its trading activities across

---

<sup>69</sup> Ibid.

<sup>70</sup> William H. Goetzmann, *Exploration and Empire: The Explorer and the Scientist in the Winning of the American West* (New York: Alfred A. Knopf, 1966), 9.

<sup>71</sup> Glyndwr Williams, "The Hudson's Bay Company and its Critics in the Eighteenth Century," *Transactions of the Royal Historical Society* 20 (1970): 151.

North America, a result of which was that it mapped and surveyed large parts of the continent. Goetzman has described the NWC as more daring than its competitors largely as a result of necessity: “Blocked by the Americans to the south and the Hudson’s Bay posts on the north, and denied access to Hudson Bay itself, the Northwest Company pursued a policy of survival through expansion that involved exploring the country to the westward in search of a northwest passage or a river route to a port on the Pacific.”<sup>72</sup> In 1784 the NWC’s partners informed Governor Frederick Haldimand (1718-91) that they wanted to explore “at their own Expence, between the latitudes of 55, and 65, all that tract of country extending west of the Hudson’s Bay to the North Pacific Ocean.”<sup>73</sup> The effort came to nothing, but it demonstrated the Company’s wish to grow and extend its reach westward, even if that meant encroaching on the HBC’s monopoly. In 1789 NWC employee Alexander Mackenzie (1764-1820) left Fort Chipewyan in what is now northern Alberta near the Manitoba border in a failed attempt to find the Northwest Passage, but he succeeded in becoming the first European to reach what was eventually called the Mackenzie River. Four years later he left Fort Chipewyan on another expedition and reached the Pacific coast at Bella Coola in July 1793. Mackenzie’s travel narrative, *Voyages from Montreal through the Continent of North America to the Frozen and Pacific Oceans in 1789 and 1793* was published in 1801 and was read widely in British North America, the United States, and Great Britain. A number of scholars have speculated that Mackenzie’s voyages were partially responsible for triggering the Lewis and Clark Expedition into the western United States. Eric Jay Dolin writes that Thomas Jefferson (1743-1826) acquired a copy of the Mackenzie’s history in summer 1802 and what he read “shook

---

<sup>72</sup> Goetzmann, *Exploration and Empire*, 9.

<sup>73</sup> W. Kaye Lamb, “Mackenzie, Sir Alexander,” *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed June 24, 2015, [http://www.biographi.ca/en/bio/mackenzie\\_alexander\\_5E.html](http://www.biographi.ca/en/bio/mackenzie_alexander_5E.html).



Jefferson to the core,” prompting him to send his confidential message to Congress in January 1803 asking for funds to organize an American expedition up the Missouri River.<sup>74</sup>

European incursions into the Interior and the establishment of permanent trading posts resulted in sexual relationships that produced a new group of Aboriginals, the Métis. The French and their NWC successors utilized relationships with Aboriginal women to their advantage, helping them build familial and kinship ties to support their commercial ventures. These relationships, referred to as “country marriages,” could be longstanding and were held to be as binding as solemnized marriage, although many traders had no compunction in leaving their wives and children behind when they returned east. By comparison, the HBC forbade country marriages between its employees and Aboriginal women, although this was hard to enforce and the Company relaxed its policy after seeing how successfully the NWC leveraged country marriages and kinship relationships to further its trading activities.<sup>75</sup> Many Métis also entered the fur trade, working as trappers, fur company employees, or independent suppliers.

Following the merger of the NWC and HBC in 1821 after years of increasingly violent conflict that had threatened the entire Canadian fur trade, the British government granted the HBC a trading monopoly in the Columbia Department, also referred to as the Oregon Country or Territory (Figure 1). The Company was also granted civil authority over the territory.<sup>76</sup> This effectively made the HBC the face and force of the British government in that part of North

---

<sup>74</sup> Eric Jay Dolin, *Fur, Fortune, and Empire: The Epic History of the Fur Trade in America* (New York: W.W. Norton, 2010), 171. See also Keir B. Sterling, “Alexander Mackenzie” in *Biographical Dictionary of American and Canadian Naturalists and Environmentalists* (Westport, CT: Greenwood Publishing, 1997), 490-92; and David L. Nicandri, “Lewis and Clark: Exploring Under the Influence of Alexander Mackenzie,” *Pacific Northwest Quarterly* 95, no. 4 (2004): 171-81.

<sup>75</sup> Sylvia Van Kirk, “The Impact of White Women on Fur Trade Society,” in *Sweet Promises: A Reader on Indian-White Relations in Canada*, ed. J.R. Miller (Toronto: University of Toronto Press, 1991), 180-81.

<sup>76</sup> John S. Galbraith, *The Hudson’s Bay Company as an Imperial Factor* (Berkeley: University of California Press, 1957), 8.

America and extended quasi-state powers to a private commercial concern. The Columbia Department was in flux and Daniel Francis has written that the “Hudson’s Bay Company on the Columbia was venturing into a political void.”<sup>77</sup> While the Louisiana Purchase extended the United States’ borders westward, it did so only until the crest of the Rocky Mountains. Beyond that point the British, Spanish, Russians, and Americans had competing claims on the area. In 1818 the British and Americans negotiated the boundaries between the United States and British North America but could not agree on the status of the Columbia Department, which included a number of posts staked by the North West Company, but also lands and posts claimed by John Jacob Astor’s (1763-1848) Pacific Fur Company, including Fort Astoria, established at the mouth of the Columbia River in 1811. Fort Astoria was sold under duress to the NWC during the War of 1812, but American traders returned to the area after the end of hostilities. Both countries had economic reasons to claim the territory and were only able to come to a temporary agreement formalized in Article III of the Treaty of 1818, which granted joint occupancy to both countries for a period of ten years, at which point the question would be revisited.

Neither the HBC nor Astor entirely believed that the Columbia Department was valuable in and of itself. Astor saw it as a gateway to the tea, silks, and spices of Asia, while the HBC sought to benefit from the access it gave to furs from the north.<sup>78</sup> In February 1822 the Governor and London Committee wrote to George Simpson, who had joined the HBC in 1820 and who was then governor of the Northern Department of Rupert’s Land:

---

<sup>77</sup> Daniel Francis, *Battle for the West: Fur Traders and the Birth of Western Canada* (Edmonton: Hurtig Publishers, 1982), 141.

<sup>78</sup> Dolin, *Fur, Fortune, and Empire*, 194.

We understand that hitherto the trade of the Columbia has not been profitable, and from all that we have learnt on the subject we are not sanguine in our expectations of being able to make it so in the future. But if by any improved arrangement the loss can be reduced to a small sum, it is worth a serious consideration, whether it may not be good policy to hold possession of that country, with the view of protecting the more valuable districts to the North of it.<sup>79</sup>

The Columbia Department was important because it offered geographic protection to the HBC's northern fur supply. Increased HBC activity in the Columbia could, however, also act as a buffer to American traders, trappers, and settlers. To discourage American interest in the area, the Company purposefully engaged in a program of aggressive over trapping to create a "fur desert" in what was called the Snake Country in the southern part of the territory.<sup>80</sup> This creative but largely unsuccessful attempt at environmental engineering did little in the long term to dampen American interest in the territory or simmering tensions between increasing numbers of American settlers and the HBC.

The Hudson's Bay Company could boast an impressive number of self-taught amateur natural historians in its ranks, especially those living at forts and posts in Rupert's Land or the Columbia Department. Some of these men had a serious interest in science while others, particularly Scots, saw moral and intellectual benefit in making a study of the world around them.<sup>81</sup> Others recorded observations about the weather and the plants, animals, and geographic formations they encountered as a way of combating boredom and long winters in the wilderness. One of the Company's keenest amateur naturalists was George Simpson. During his first visit to the Columbia Department in 1824 Simpson recognized the diversity of the region, which he wrote:

---

<sup>79</sup> George Merk, ed., *Fur Trade and Empire: George Simpson's Journal, 1824-25* (Cambridge: Harvard University Press, 1931), 175.

<sup>80</sup> Jennifer Ott, "Running the Rivers in the Snake Country: The Hudson's Bay Company's Fur Desert Policy," *Oregon Historical Quarterly* 104, no. 2 (2003): 166-95; Lorne Hammond, "Marketing Wildlife: The Hudson's Bay Company and the Pacific Northwest, 1821-49," *Forest & Conservation History* 37, no. 1 (1993): 14-25.

<sup>81</sup> Zeller, "The Spirit of Bacon," 81.

...presents a wide field for botanical research as there is a very great variety of Plants to be found every where; I regret that my ignorance of that interesting branch of Science prevents my attempting any description of them, indeed any one of experience in the study of natural history generally would add much to his stock of knowledge therein by a visit to this part of the World. Specimens of every kind within our reach will this season be sent Home.<sup>82</sup>

Despite a modesty not otherwise found in Simpson's character, his 1824-25 diary provides a wealth of sharp observations on the climate, geography, plants, and animals of the Interior and the Pacific Northwest, in addition to descriptions of Aborigines and settler communities. It also shows that he firmly believed in the value and development of the Columbia Department to the HBC, as well as to the economic development of British North America, claiming that "at no very distant period [it could] become an important branch of Commerce in a national point of view."<sup>83</sup>

The size of the HBC's commercial empire following its merger with the NWC in 1821 and an increase in profits thanks to work by Simpson to streamline operations and improve trade in the Pacific Northwest meant the translation of the HBC's headquarters from York Factory in what is now northeastern Manitoba to Lachine in 1826, the same year in which Simpson was made governor over all HBC territories in North America. Lachine was the site of the NWC's fur warehouses, but it was also closer to London, New York, Halifax, and Boston, and to networks of individuals interested in the economic growth of British North America and the development of new markets for Canadian resources and goods. Situation in Lachine meant that Simpson was able to participate in Montreal's commercial and social worlds and to assume an important role as a leader in both spheres. Simpson's position with the HBC and his status in Montreal would have a direct impact on the Montreal Natural History's project to survey the Interior.

---

<sup>82</sup> Merk, *Fur Trade and Empire*, 111-12.

<sup>83</sup> *Ibid.*, 91-92.

### **CHAPTER 3: Scientific Networks, Colonization, and Empire: The Creation of the Montreal Natural History Society**

In 1827, the year the Natural History Society was established, Montreal was the largest city in British North America and its economic capital.<sup>84</sup> Originally settled by the French as a missionary colony in 1642, during the second half of the seventeenth century Montreal became the centre of the Canadian fur trade and profit, rather than faith, propelled the city's growth over the next one hundred and fifty years. After the end of the Seven Years' War the city attracted a significant influx of English and Scottish immigrants, particularly Highland Scots, as well as American colonists and French Canadians from the surrounding countryside. Loyalists came to the city during and after the American Revolution. Montreal was also home to a small but not insignificant population of blacks, either former slaves, most of whom were brought to Canada by the Loyalists, or the descendants of slaves.<sup>85</sup> French Canadians living in the country on and off the island of Montreal, as well as Mohawks and the descendants of German soldiers who had received grants of land in the Eastern Townships after the American Revolution, visited the city to trade or to buy and sell goods.

---

<sup>84</sup> The British maintained Quebec City as the capital of the Province of Quebec following the Conquest. After the union of the Canadas in 1840 the capital moved several times and was hosted by Montreal between 1844 and 1849, when English rioters burned down the legislature to protest the Rebellion Losses Bill. The capital moved between Quebec City and Toronto between 1849 and 1866.

<sup>85</sup> Marcel Trudel believes that slavery had largely disappeared in Quebec by 1800. The last documented slave sale took place in 1797, but the last recorded instance of a slave transaction was 1821 when a woman named Marie-Marguerite was donated to the Montreal General Hospital. She died that same year. Trudel finds no further evidence of slavery in Lower Canada after that point, although he quotes a Benjamin Sulte who believed that several Montreal slaves received their freedom as a result of the Slavery Abolition Act, which came into force in 1834. See Marcel Trudel, *Canada's Forgotten Slaves: Two Hundred Years of Bondage*, trans. George Tombs, rev. English ed. (Montreal: Véhicule Press, 2013), esp. 233-53.

Early nineteenth-century Montreal enjoyed a reputation for its beauty and situation. In 1815 Bouchette called the city handsome while an 1819 visitor wrote that his first impressions of the city were entirely pleasing and provided him with evidence of a “growing inland emporium.”<sup>86</sup> Thomas Doige’s 1819 municipal directory described the city’s architecture in a way that recalled its French heritage, but that also reflected its new position as a cosmopolitan, commercial city within the post-Napoleonic British Empire:

The old houses are of the fashion of those found in the ancient towns of France; but such buildings as have of late been erected are mostly of cut stone, built in the modern style possessing a very handsome appearance. Among the most prominent may be noticed the public edifices of the English Church, the Court-House, the Jail,...the Montreal Bank, and the Mansion House Hotel. There are many equally handsome...private houses...Several brick yards are established, where very handsome and durable bricks are manufactured, and many extensive modern brick houses have been built, which for fashion and elegance, would not discredit the most beautiful squares in London.<sup>87</sup>

Street lamps were installed in 1816 (although they proved ineffectual) and Doige told his readers that by 1820 every household in the city would have running water thanks to the efforts of the Montreal Water Works Company.<sup>88</sup>

Following the end of the Napoleonic Wars Montreal enjoyed more than a decade and a half of prosperity. The population had more than doubled between 1800 and 1825 and British immigration, particularly after 1820, was changing the character of the city.<sup>89</sup> Montreal was home to the first bank established in British North America, the Bank of Montreal, founded in 1817 and chartered in 1822, as well as insurance companies, the Molson and Dow breweries, flourmills,

---

<sup>86</sup> Joseph Bouchette, *A Topographical Description of the Province of Lower Canada* (London: W. Faden, 1815), 153; Alfred Sandham, *Ville-Marie, or Sketches of Montreal* (Montreal: G. Bishop, 1870), 99-100.

<sup>87</sup> Thomas Doige, *An Alphabetical List of the Merchants, Traders, and Housekeepers Residing in Montreal to which is Prefixed a Descriptive Sketch of the Town* (Montreal: James Lane, 1819), 12-13.

<sup>88</sup> *Ibid.*, 21.

<sup>89</sup> Leslie Roberts, *Montreal: From Mission Colony to World City* (Toronto: Macmillan of Canada, 1969), 143.

foundries, and factories for steam engines, boots, tools, and rope.<sup>90</sup> The Lachine Canal, designed to bypass hazardous rapids on the St. Lawrence River, opened in 1825 and had made the city more accessible to American markets and capital. The city also boasted a number of active cultural and civic institutions. A subscription library, the Montreal Library, was founded in 1796 and offered readers a not insignificant selection of books in French and English, including histories, theological and classical texts, pamphlets, novels, and works of science.<sup>91</sup> By 1811, and perhaps at the urging of John Strachan (1778-1867), the Anglican minister and school master, James McGill (1744-1813), a Scottish-born fur trader and legislator, created a provision in his will to endow a much-desired college to be established by the Royal Institution for the Advancement of Learning.<sup>92</sup> The college obtained a charter in 1821, but it was not until 1829 that classes were offered at what would eventually become McGill University.<sup>93</sup> A general hospital had been set up in 1822 and several social charities operated in the city, as did a temperance society, which was founded in 1828, the same year as the Mechanics' Institute, an institution imported from the United Kingdom to educate tradesmen and the labouring classes.<sup>94</sup> The city's Roman Catholic residents could find spiritual relief at one of three churches or chapels, while Presbyterians were provided with two establishments. Anglicans and Methodists had one dedicated place of worship each. Despite a growing population and evidence of cultural, educational, and religious activities, Doige described Montreal in 1819 as not "overburdened with amusements." Assemblies and the theatre were the

---

<sup>90</sup> Ibid., 149.

<sup>91</sup> Yvan Lamonde, *The Social History of Ideas in Quebec, 1760-1896*, trans. by Phyllis Aronoff and Howard Scott, vol. 1 (Montreal: McGill-Queen's University Press, 2013), 53.

<sup>92</sup> Stanley Brice Frost, *McGill University: For the Advancement of Learning*, vol. 1, 1801-1895 (Montreal: McGill-Queen's University Press, 1980), 21

<sup>93</sup> J.I. Cooper, "McGill, James," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed September 6, 2015, [http://www.biographi.ca/en/bio/mcgill\\_james\\_5E.html](http://www.biographi.ca/en/bio/mcgill_james_5E.html).

<sup>94</sup> Roberts, *Montreal*, 151-52.

primary winter distractions while promenades on the Champ de Mars and concerts by military bands diverted “people of fashion” during warmer months.<sup>95</sup>

The Montreal Natural History Society originated in the manse of the St. Gabriel Street Presbyterian Church on May 12, 1827. The Reverend Henry Esson (1793-1853) and “a few gentleman, casually met together” struck upon the idea of forming a society devoted to the study of the three kingdoms.<sup>96</sup> Six days later, a much larger group of twenty-six men reconvened at Esson’s residence and the Montreal Natural History Society was founded.<sup>97</sup> Despite local circumstances for its creation, including, perhaps, a desire to increase the number of amusements available to “people of fashion” and residents of a certain social standing and character, the Society was part of a larger movement in the Anglo-American world to promote the study and practice of natural history. From its very beginnings, natural history attracted practitioners from diverse fields. It encouraged communities of practice and knowledge and the sharing of information and new discoveries. Starting in the seventeenth century after the creation of the Royal Society, natural historians organized themselves into societies of like-minded individuals. In Britain these included London-based scientific institutions like the Linnean Society (1788), the Royal Institution to Promote Agricultural Improvements (1799), the Horticultural Society (1804), the Geological Society (1807), and the Astronomical Society (1820), as well as natural history societies in the country’s principle cities including Edinburgh (1808), Dublin (1820), Manchester (1821), and Belfast (1821). These societies often operated museums of varying sizes that included plant, animal, and mineral specimens, but they also offered free lectures and maintained libraries that allowed members to borrow, read, and consult natural history texts, journals, and pamphlets. At

---

<sup>95</sup> Doige, *An Alphabetical List*, 25

<sup>96</sup> Frost, “Science Education in the Nineteenth Century,” 32.

<sup>97</sup> Ibid.



the same time, natural history across Europe was becoming increasingly supported by the state through museums or museum departments like the Natural History Department in the British Museum, the Zoological Gardens in London, Muséum national d'histoire naturelle in Paris, Rome's Museo del Gabinetto di Zoologia e Zootomia, Museo di Zoologia in Naples, and the Museum für Naturkunde in Berlin.<sup>98</sup> Most practitioners of natural history in North America, as well as in Europe, though, were enthusiastic amateurs whose authority came from their work and positions in other spheres.<sup>99</sup>

The growing interest in natural history during the seventeenth through to the nineteenth centuries was mirrored in the territorial and commercial expansion of Britain's overseas empire. Donald Fleming has written that the pursuit of natural history in settler colonies was "a fundamental part of the quest for a national identity in societies where the cultural differentiation from Britain was insecure and the sense of the land correspondingly important for self-awareness."<sup>100</sup> The introduction and shared practice of natural history in Britain's overseas colonies was also a way in which the idea of a British Empire became fixed and established in the minds of individuals living across scattered territories that shared a common language and monarch. This created and promoted a sense of cultural and intellectual worth amongst colonists, reinforced by the establishment of formal and informal scientific groups or societies like the Montreal Natural History Society, corresponding membership in British or American scientific societies, or the publication of travel narratives describing the sights, specimens, and people of the new world. Kathleen S. Murphy has written "the growth of British colonies in North America both

---

<sup>98</sup> Dorinda Outram, "New Spaces in Natural History," in *Cultures of Natural History*, eds. N. Jardine, J.A. Secord, and E.C. Spary (Cambridge: Cambridge University Press, 1996), 250.

<sup>99</sup> Zilberstein, "The Natural History of Early Northeastern America," 24.

<sup>100</sup> Donald Fleming, "Science in Australia, Canada, and the United States: Some Comparative Remarks," in *Actes du dixième Congrès Internationale d'Histoire des Sciences* (Paris: Hermann, 1962), 183.

increased the ‘stuff’ of natural history and created the prosperity necessary to pursue such studies,”<sup>101</sup> while Parrish asserts that by making observations and gathering of specimens for circulation, colonial Americans could participate in networks of British scientific correspondence that linked them to the metropolis and that reinforced their British identity. By sending animal, mineral, and plant specimens, as well as scientific data, to the imperial capital, Parrish argues that natural history reduced colonials’ anxieties that they were simply consumers of goods, fashions, culture, and science originating from London.<sup>102</sup>

Mirroring Europeans, colonial Americans began to amass collections of specimens, opened museums to put them on display, and established learned societies. The American Philosophical Society was established in 1743 to pursue “all philosophical Experiments that let Light into the Nature of Things,” including agriculture, manufacturing, and transportation, areas of study that would also benefit colonial society and, after 1783, the new American nation.<sup>103</sup> The Charleston Library Society set up the first dedicated natural history museum in what would become the United States in 1773, followed by Charles Willson Peale’s Philadelphia Museum in 1786. By the start of the nineteenth century Harvard, Yale, Pennsylvania, and Columbia had established chairs in natural history and collections of specimens could be found at these schools, as well as at the College of New Jersey in Princeton, Amherst College, and Transylvania University in Lexington,

---

<sup>101</sup> Kathleen S. Murphy, “Portals of Nature: Networks of Natural History in Eighteenth-Century British Plantation Societies,” (doctoral thesis, Johns Hopkins University, 2008) 5.

<sup>102</sup> Parrish, *American Curiosity*, 103-04.

<sup>103</sup> American Philosophical Society, *Proceedings of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge* 3-4 (1843): 9.

Kentucky.<sup>104</sup> Practitioners and enthusiasts also established natural history societies in cities like Boston (1813), New York (1817), and Albany (1823).

Andrew J. Lewis has argued that natural history played an important role in the early American republic. Faced with the task of developing a shared narrative for the young nation after 1783, natural history allowed citizens to catalogue and explore the land. It was a pursuit believed to benefit both the individual and the country by improving the mind, refining morals, and preventing vice.<sup>105</sup> Natural history was also promoted for its commercial benefit to the American nation. A notice in the first volume of the *Annals of the Lyceum of Natural History of New York* published in 1824 declared that “the attention bestowed on it [science], in our own country, has already been amply repaid. A great variety of new, useful, and elegant productions have been discovered; and important facts, connected with the agricultural, commercial, and manufacturing interests have been elucidated.”<sup>106</sup> Knowledge of the natural environment sustained public morality and built character, but it could also be used to generate profit and drive economic development.

Natural history was an attractive occupation for British North Americans and it became a “way for [them] to add to the stock of knowledge and assert a certain intellectual status.”<sup>107</sup> The founding membership of the Montreal Natural History Society was composed of the city’s male, anglophone, Protestant elite. The original members included solicitors J.S. McCord and Stephen Sewell (1770-1832), who was then the senior attorney for the Royal Institution for the

---

<sup>104</sup> A. Hunter Dupree, “The National Pattern of American Learned Societies, 1769-1863,” in *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War*, eds. Alexandra Oleson and Sanborn C. Brown, (Baltimore: Johns Hopkins University Press, 1976), 28-30.

<sup>105</sup> Andrew J. Lewis, *A Democracy of Facts: Natural History in the Early Republic* (Philadelphia: University of Pennsylvania Press, 2011), 107.

<sup>106</sup> “Advertisement,” in *Annals of the Lyceum of Natural History of New York* 1 (1824): 2.

<sup>107</sup> Berger, *Science, God, and Nature*, 9.

Advancement of Learning; J.R. Spooner, a Massachusetts-born dentist and the inventor of “Spooner’s mineral teeth;”<sup>108</sup> Robert Cleghorn, proprietor of Blinkbonny Gardens, one of two commercial nurseries in the province and a well-respected and well-connected botanist;<sup>109</sup> John Try, a successful real estate developer; and H.H. Cunningham, a book seller, printer, and publisher. In addition to Henry Esson, who appears to have had no particular interest in science aside from a purely amateur one, Montreal’s two other Presbyterian ministers, the Reverend James Somerville (1775-1837) and the Reverend Alexander Mathieson (1795-1870), were founding members. The Anglican rector of Montreal, the Reverend John Bethune (1791-1872), joined the Society in its first year. Doctors formed another well-represented constituency amongst the founding membership. Six medical doctors and one practicing surgeon, all of whom had some training in or knowledge of anatomy and other branches of medical science, were counted as original members, including Andrew Fernando Holmes (1797-1860), a founder of the Montreal General Hospital and the Montreal Medical Institution, its teaching wing and the forerunner of the McGill Faculty of Medicine, where he served as professor of chemistry and anatomy as well as librarian. Frost contends that Holmes was likely the moving spirit in the creation of the Society.<sup>110</sup> Born on a Spanish ship to British parents immigrating to Montreal, Holmes undertook his medical training at the University of Edinburgh and was a member of the school’s natural history society, the Wernerian Society, founded in 1808 by Robert Jameson (1774-1854). Jameson had studied natural history at Edinburgh and in Germany and assumed the chair in natural history at Edinburgh in 1804, the same year in which he was appointed Keeper of the university’s natural history

---

<sup>108</sup> Thomas Spooner, *Records of William Spooner, of Plymouth, Mass., and His Descendants*, vol. 1 (Cincinnati: Press of F.W. Freeman, 1883), 572.

<sup>109</sup> Alexander Gordon, “Observations on the Present Appearance and Prospects of Gardening in the Canadas,” *The Gardeners Magazine & Register of Rural and Domestic Improvement* 6 (1840): 68.

<sup>110</sup> Frost, “Science Education in the Nineteenth Century,” 32.

museum.<sup>111</sup> He held both posts for the rest of his life and was responsible for training important figures in British natural history, including Holmes. Holmes had acquired important plant and mineral specimen collections during his studies in Scotland, which he brought back to Montreal, and he enjoyed a reputation in both North America and Europe for his work as a scientist, physician, and educator.<sup>112</sup>

Despite a large British garrison at Montreal, only one army officer, Lieutenant-Colonel William McKay (1772-1832), was listed as a founding member, although several more, particularly officers of the Royal Engineers, joined in the Society's first year. McKay's family was Loyalist and he had come to Upper Canada from New York as a child. He joined the North West Company in 1790 and had traded in the upper Mississippi Valley and around present-day Winnipeg. He became an NWC partner in 1796 and retired in 1807. McKay was also a veteran of the War of 1812 and in 1814 had led the capture of Prairie du Chien, a small but strategically situated American post near the confluence of the Minnesota and Mississippi Rivers. By the end of the war McKay had been assigned to the Indian Department and was stationed first at Michilimackinac and later at Drummond Island, British posts located where Upper Canada met the upper peninsula of Michigan and longstanding gathering places for Aboriginals and the British. By 1828 McKay had been transferred to Montreal where he was responsible for the administration of the Crown's relations with the Aboriginals of Lower Canada.<sup>113</sup>

---

<sup>111</sup> Dennis R. Dean, "Jameson, Robert (1774-1854), in *Oxford Dictionary of National Biography*, Oxford University Press, accessed August 16, 2015, <http://0-www.oxforddnb.com/mercury.concordia.ca/view/article/14633>.

<sup>112</sup> Edward Horton Bensley, "Holmes, Andrew Fernando," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 26, 2015, [http://www.biographi.ca/en/bio/holmes\\_andrew\\_fernando\\_8E.html](http://www.biographi.ca/en/bio/holmes_andrew_fernando_8E.html).

<sup>113</sup> Robert S. Allen, "McKay, William," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 27, 2015, [http://www.biographi.ca/en/bio/McKay\\_william\\_6E.html](http://www.biographi.ca/en/bio/McKay_william_6E.html).

The Montreal Natural History Society had as its chief objects the “investigation of the natural history of Canada” and the creation of a museum and library through which to promote the study and appreciation of science in Montreal.<sup>114</sup> The number of potential members was not limited and three categories of membership were established: individual membership for those resident in Montreal (annual fee of \$5 or £10 for life), corresponding membership for those living at a distance, and honorary membership reserved for individuals who had attained distinction in their fields of study.<sup>115</sup> The constitution and bylaws established a cabinet (or museum) and a library, both of which were administered by Librarian-Cabinet Keeper, an officer of the Society who was to maintain separate catalogues for each collection. The cabinet was to be divided into four departments: zoology, botany, mineralogy and miscellanies. All members had access to the cabinet, but no specimens were to be removed without permission and no individual cabinet cases were to be opened without the Keeper’s authority.<sup>116</sup>

The Society’s desire to sponsor a “general spirit of scientific and literary research” in Montreal took form seven months later when it established the Indian Committee on December 28, 1827.<sup>117</sup> The resolution that established the Committee declared that a portion of the Society’s work ought to consider:

Man, who occupies the utmost link in the chain of being, that not only his mere physical nature considered as an animal be examined, but that also by all the means with which the Society may be favourable—his intellectual and moral condition as a rational being displayed in his habits, customs, manners, language, and institutions as the aboriginal inhabitants of this and [its] Sister Province should be thoroughly investigated.<sup>118</sup>

---

<sup>114</sup> Montreal Natural History Society, *Constitution and Bye-Laws of the Natural History Society of Montreal* (Montreal: Montreal Gazette, 1828), 2.

<sup>115</sup> Ibid.

<sup>116</sup> Ibid.

<sup>117</sup> Zeller, *Inventing Canada*, 31.

<sup>118</sup> “First Report of the Indian Committee.”

Allied to this was the study of the fitness of the Interior, and its “physical geography and Natural History...and the state of the country as adopted for the purposes of commerce and agriculture [which], seriously demand the attention of the Society.”<sup>119</sup> Accordingly, the motion called for the creation of a committee “whose duty is shall be to immediately prepare a series of queries connected with the manners, habits, customs, language, and institutions of the native inhabitants of the two Provinces and with the physical geography and Natural History and the Interior...and to direct the said Queries to such individuals as they may deem most advisable, with liberty to meet...as may seem most convenient.”<sup>120</sup> The motion was carried and a committee of seven members was duly constituted.

The use of a survey by which to pose questions and to seek answers from respondents had, as Adam Fox has written, long been utilized in Europe, and particularly in Great Britain, as a means of gathering information.<sup>121</sup> The progenitor of the survey as a scientific tool was Francis Bacon, who compiled series of questions in the 1620s in support of his work in natural philosophy.<sup>122</sup> By the last quarter of the seventeenth century, the printed survey questionnaire has become a “normal research method” employed by English antiquaries and natural historians.<sup>123</sup> Allied to the survey was the practice of chorography, which Barbara Shapiro has described as “a rather peculiar early modern genre,” to describe a region’s geography and environment as well as its political and socioeconomic conditions.<sup>124</sup> The most common form of chorography was the county history, which included information about major centres of population, significant

---

<sup>119</sup> Ibid.

<sup>120</sup> Ibid.

<sup>121</sup> Adam Fox, “Printed Questionnaires, Research Networks, and the Discovery of the British Isles, 1650-1800,” *Historical Journal* 53, no. 3 (2010): 594.

<sup>122</sup> Ibid., 595.

<sup>123</sup> Ibid., 601.

<sup>124</sup> Barbara J. Shapiro, *A Culture of Fact: England, 1550-1720* (Ithaca: Cornell University Press, 2000), 65-69.

environmental features, and attractions like monoliths that would interest antiquaries, historians, and topographers. Ted McCormick has also written about William Petty's 1686 "Quaeries concerning the nature of the Natives of Pennsylvania," that asked questions about the language, religion, and social organization of the Aboriginal inhabitants of that colony, as well as questions about demographic characteristics.<sup>125</sup> In specifically mandating the Indian Committee to draft a survey, the Society was employing a familiar and frequently used method for data collection.

The first meeting of the Indian Committee took place on February 28, 1828. William McKay was appointed chair and Robert Armour, Jr., a member of a prominent Montreal merchant family, was made secretary. McKay and Armour were joined on the Committee by Andrew Holmes, J.S. McCord, and William Parry (died 1832), a British army staff surgeon who had come to Canada during the War of 1812, after which he obtained his medical degree from the University of Vermont in 1818,<sup>126</sup> and by Lieutenant-Colonel Duncan Campbell Napier (ca. 1788-1865), a British veteran of the War of 1812 and head of the Indian Department at Montreal. The seventh member of the Indian Committee, but the one whose name was listed first on the roll, was George Simpson.<sup>127</sup> As governor-in-residence of the Hudson Bay Company's territories, Simpson was one of the most powerful men in Montreal, but he was also, as noted earlier, a lay natural historian whose diaries are full of immensely detailed observations about the geography, plants, and inhabitants of the Interior and the Pacific Northwest. His participation was essential: as the Company's chief employee, he could grant or deny the Indian Committee access to HBC employees living in the Interior or to data already in the possession of the Company.

---

<sup>125</sup> Ted McCormick, "Governing Model Populations: Queries, Quantification, and William Petty's 'Scale of Salubrity,'" *History of Science* 51, no. 2 (2013): 181.

<sup>126</sup> P.J. Anderson et al., *Roll of Commissioned Officers in the Medical Service of the British Army...20 June 1727 to 23 June 1898* (Aberdeen: University of Aberdeen Press, 1917), 236

<sup>127</sup> Simpson and McCord were not present at the Committee's first meeting in February 1828.



The Indian Committee's broad ambitions were reflected in its mandate, the language of which echoed Thomas Jefferson's 1803 instructions to Meriwether Lewis (1774-1809) to explore the Missouri River and any other rivers connected with it to identify "the most direct & practicable water communication across this continent for the purposes of commerce."<sup>128</sup> Jefferson needed to know about the geography and scale of the territories America had acquired as a result of the Louisiana Purchase (Figure 2), but his instructions to Lewis reinforced the centrality of commerce and development in the North American exploratory endeavour. James Ronda has written that Jefferson's use of the word "commerce" in his instructions had two meanings: the fur trade and a desire by Jefferson to establish an American trading system that would frustrate the British and their exploration and development of the Interior, but also a diverse economic structure including banks, transportation systems, markets, consumers, and trade with foreign nations. Ronda writes "Land and commerce were to join forces in the West to ensure the republic's future."<sup>129</sup> Almost three decades later in Montreal, commerce, agriculture, and settlement were to ensure the future of British North America.

Lewis received additional instructions from Jefferson aimed at expanding American knowledge of Louisiana's geography and environment. Jefferson wanted specific information on the new territories including:

---

<sup>128</sup> Thomas Jefferson, "Life of Captain Lewis," in *History of the Expedition Under the Command of Captains Lewis and Clark*, vol. 1 (Philadelphia: Paul Allen, 1814), xiv.

<sup>129</sup> James Ronda, "Exploring the American West in the Age of Jefferson," in *North American Exploration*, vol. 3, *A Continent Comprehended*, ed. John L. Allen (Lincoln: University of Nebraska Press, 1997), 22-23.

The soil & face of the country it's growth & vegetable productions, especially those not of the US. The animals of the country generally, & especially those not known in the US. The remains & accounts of any which may be deemed rare or extinct; the mineral productions of every kind; but more particularly metals; limestone, pit-coal, & salt-petre; salines & mineral waters, noting the temperature of the last & such circumstances as may indicate their character; volcanic appearances; climate, as characterized by the thermometer, by the proportion of rainy, cloudy, & clear days, by lightening, hail, snow, ice, by the access & recess of frost, by the winds prevailing at different seasons, the dates at which particular plants put forth or lose their flower, or leaf, times of appearance of particular birds, reptiles or insects.

The expedition party was also to gather information on Louisiana's Aboriginal inhabitants and Lewis was instructed to become acquainted:

...with the names of the [Indian] nations & their numbers; the extent & limits of their possessions; their relations with other tribes of nations; their language, traditions, monuments; their ordinary occupations in agriculture, fishing, hunting, war, arts, & the implements for these; their food, clothing, and domestic accommodations; the disease prevalent among them, & the remedies they use; moral & physical circumstances which distinguish them from the tribes we know; articles of commerce they may need or furnish & to what extent. And, considering the interest of every nation has in extending & strengthening the authority of reason & justice among the people around them, it will be useful to acquire what knowledge you can of the state of morality, religion, & information among them; as it may better enable those who may endeavor to civilize & instruct them, to adapt their measures to the existing notions & practices of those on whom they are to operate.<sup>130</sup>

Jefferson's detailed instructions were first printed in "Life of Captain Lewis," a memoir by the former president published in 1814 as part of the three-volume *History of the Expedition Under the Command of Captains Lewis and Clark*. An 1815 British edition of the work, *Travels to the Source of the Missouri River and Across the American Continent to the Pacific Ocean*, is found in the 1824 catalogue of the Montreal Library, the subscription library established in 1796.<sup>131</sup> Indeed, the Montreal Library's catalogue sheds much light on the availability of scientific and natural history texts in the city. Not only did library members have access to a history of the Lewis and Clark expedition, but two copies of Mackenzie's *Voyage from Montreal to the Pacific Ocean*

---

<sup>130</sup> Jefferson, "Life of Captain Lewis," vol. 1, xv.

<sup>131</sup> Montreal Library, *Catalogue of the Books in the Montreal Library* (Montreal: The Library, 1824), 43.

(1801) and important natural history texts including editions of Buffon's *Natural History of Birds* (1792); Paley's *Philosophy* (1795) and *Natural Theology* (1810), an undated edition of Bacon's *Works*, Hull's *British Flora* (1799); Hooker's *Flora Scotica* (1821); an undated edition of Lee's *Introduction to Botany*; Derham's *Astro-Theology* (1731) and *Physico-Theology* (1798); Charles Stewart's *Elements of Natural History* (1801); Heron's *Extracts of Natural History* (1792); Imison's *Elements of Natural Philosophy* (1808); and more than a dozen exploration and travel narratives like Franklin's *Narrative of a Journey to the Shores of the Polar Sea* (1823). One of the most popular texts of amateur natural history, Gilbert White's *Natural History and Antiquities of Selbourne* (also known as *The Natural History of Selbourne*), first published in 1789, is absent from the catalogue as are works by Isaac Newton. Despite some noticeable gaps, the Montreal Library's collection held many important works on natural history, including recently published ones, and may have incubated and nurtured some of the thinking that motivated the creation of the Indian Committee and the formulation of its mandate.

The Montreal Natural History Society's particular interest in the potential of the Interior for settlement and commerce continued a longstanding curiosity about that part of British North America. Despite the mapping and surveying of swathes of the Interior by the HBC and NWC starting in the mid-eighteenth century, this information was not made available to governments, learned societies, or the general public. As a result, almost everyone except individuals living in the Interior, some retired traders in Montreal, and a handful of clerks at the HBC's headquarters in London were, according to D. W. Moodie, "essentially ignorant" of the geography, resources, climate, and inhabitants of Rupert's Land.<sup>132</sup> At the same time, though, members of the Indian Committee had more information about the Interior than Jefferson had about Louisiana. Traders

---

<sup>132</sup> D.W. Moodie, "Early British Images of Rupert's Land," in *Man and Nature on the Prairies*, ed. Richard Allen. (Regina: Canadian Plains Research Center, 1976), 12.

from Montreal had been travelling to the Interior and Far West for the better part of two hundred years and a significant portion of the city's recent wealth had been built on the western fur trade. Voyages by NWC men like Mackenzie had been organized and sponsored by Montreal investors, a number of whom were members of the Natural History Society. With the establishment of George Simpson's headquarters at Lachine, correspondence, geographic information, men, and furs flowed east from the Interior to Montreal and then to London, while the same (minus furs but now including supplies) went west from Montreal.

Despite Moodie's claim of British ignorance of the Interior, it had long existed in parts of the British imagination as a place that could support agriculture and settlement. This notion had been promoted since the 1740s by men like Arthur Dobbs (1689-1765), the engineer, Irish parliamentarian and colonial governor of North Carolina, who believed that a stronger British presence in the centre of North America was of vital strategic interest to Great Britain and her growing commercial ambitions. In 1744 he published a book with a title that left no question as to the position of its author:

*An Account of the Countries Adjoining to Hudson's Bay in the North-West Part of America: Containing a Description of their Soil and their Methods of Commerce, &c. Shewing the Benefit to be made by settling Colonies, and opening a Trade in these parts; whereby the French will be deprived in great Measure of their Traffick in Furs, and the Communication between Canada and Mississippi be cut off. The Whole Intended to Shew the Great Possibility of a North-West Passage, So Long Desired; and Which (If Discovered) would be of Highest Advantage to these Kingdoms.*<sup>133</sup>

Dobbs claimed that settling Rupert's Land was possible as it was on the same latitude as parts of Northern Europe, including Poland and Germany, in which case the climates would be roughly the same and therefore suitable for food crop development and permanent human habitation.<sup>134</sup>

---

<sup>133</sup> Arthur Dobbs, *An Account of the Countries Adjoining to Hudson's Bay in the North-West Part of America* (London: Printed for J. Robinson, 1744).

<sup>134</sup> Moodie, "Early British Images of Rupert's Land," 5.

Colonization would also have an immediate strategic benefit as it would establish an uninterrupted line of British settlement between James Bay and Pennsylvania, effectively cutting off French access to the centre of North America. At the same time, westward expansion would eventually result in an overland route to the Pacific Ocean, guaranteeing British hegemony in the interior of the continent, but also giving access to trade with Asia.<sup>135</sup> Dobbs's views were shared by others, including Henry Ellis (1721-1806) who been part of an expedition in 1746-47 that had attempted to find the Northwest Passage. Ellis's subsequent 1748 narrative, *A Voyage to Hudson's Bay*, supported Dobbs's claims and offered additional eyewitness testimony to the area's ability to support food crops and to its temperate climate.<sup>136</sup> Ellis also pressed for further exploration in order to find the Northwest Passage, a discovery that would "immediately be turned to the Benefit of the Nation" by expanding British commerce and trade all the way across the top of the North American continent.<sup>137</sup>

Dobbs and his party were frustrated by the HBC's policy of secrecy and its refusal to follow the spirit of its 1670 charter, which encouraged it to engage in a program of discovery to benefit the nation.<sup>138</sup> Anti-HBC opinion in the middle of the eighteenth century was such that a House of Commons inquiry was struck in 1749 to investigate "the State and Conditions of the Countries adjoining to Hudson's Bay, and of the trade carried on there; and to consider how these countries may be settled and improved."<sup>139</sup> Despite numerous witnesses who testified against the Company, including Dobbs, the inquiry found no fault with the HBC, but the investigation did little to

---

<sup>135</sup> Ibid.

<sup>136</sup> Ibid., 8-9.

<sup>137</sup> Henry Ellis, *A Voyage to Hudson's Bay* (London: Printed for H. Whitridge, 1748), 97.

<sup>138</sup> Dobbs could point to terms in the Charter calling on the Company to undertake ventures to the "Advantage to Us and Our Kingdom" and to pursue "Endeavours tending to the publick Good of our People." See: Hudson's Bay Company, "Corporate Collections: The Charter," accessed July 24, 2015, <http://www.hbcheritage.ca/hbcheritage/collections/archival/charter/charter>.

<sup>139</sup> Moodie, "Early British Images of Rupert's Land," 11.

improve the Company's public image, nor did the HBC offer evidence that large parts of Rupert's Land were not suited for agricultural development or year-round human habitation. As a result, claims of the Interior's fecundity and its strategic importance to Britain continued to appear in print, as did criticisms of the HBC, including one published by a former employee, Joseph Robson (fl. 1733-63). In 1752 Robson produced his famous condemnation of the HBC: "The Company have for eighty years slept at the edge of a frozen sea; they have shewn no curiosity to penetrate farther themselves, and have exerted all their art and power to crush that spirit in others."<sup>140</sup> Another positive view of Rupert's Land's potential for settlement, particularly after the loss of the American colonies, came from Edward Umfreville (fl. 1771-89), a writer and accountant who had been in the employ of both the HBC and the NWC and the author of *The Present State of Hudson's Bay*, published in 1790. Umfreville wrote:

It is a matter of reproach to the Hudson's Bay Company, and they have never been able to wipe off those several censures and accusations,....that they do not augment and make a greater national advantage of their trade, as is capable of so much improvement. At a time when the defection of our American colonies, has put a stop to the consumption of so considerable part of our manufactures, is it not somewhat extraordinary that no person has yet represented the benefits which would accrue to this country, from exploring and examining the countries about Hudson's Bay? The laying open the trade to the industrious adventurers of this nation, would be an act worthy [of] a patriotic administration; as it would be the means of enriching the commercial interests of the kingdom...<sup>141</sup>

Umfreville assured his readers that the area around Hudson's Bay was "capable of much improvement, by agriculture and industry... What advantage might not then arise to the nation from this branch of trade alone, were it laid open!"<sup>142</sup> The Company received particular criticism for the

---

<sup>140</sup> Joseph Robson, *An Account of Six Years Residence in Hudson's-Bay from 1733 to 1736, and 1744 to 1747* (London: Printed for J. Payne and J. Bouquet, 1752), 21

<sup>141</sup> Edward Umfreville, *The Present State of Hudson's Bay: Containing a Full Description of that Settlement and the Adjacent Country* (London: Printed for Charles Stalker, 1790), 5-6

<sup>142</sup> *Ibid.*, 98

way it managed Rupert's Land, particularly its lack of interest in improving it and developing it not just for its own sake, but also for that of the British nation and its trade:

When we reflect how little we are acquainted with the its soil or productions, and how ignorant we are with respects to its capability of improvement;—when we further consider that no care has been taken to cultivate a reciprocal friendship with remote nations of Indians; but on the contrary that those we are already acquainted with have been vitiated by the introduction of spirituous liquors, and disgusted by ill-usage; such reflections naturally excite in the bosom of every one that has the good of their country at heart, and with that so extensive and improvable a country were in the possession of those who would take more pains to render it more beneficial to the mother country.<sup>143</sup>

Not surprisingly, Umrefreville's employment with the HBC was terminated after the publication of his book. Samuel Hearne, who had established the Company's Cumberland House trading post, produced a more positive account of the HBC's management of Rupert's Land in a posthumous 1795 narrative of his journey to the Arctic Ocean, which was published with the sanction of the HBC in an attempt to rebuff the criticisms of Dobbs and his confreres, but it revealed nothing of the Interior's potential (or lack of) for agricultural development.<sup>144</sup>

While the grant of land by the HBC to Lord Selkirk in 1811 for the purposes of a settlement to support retired fur traders and the creation of the Red River Colony demonstrated that some parts of the territory could support agriculture and permanent human habitation, albeit not without significant complications, the HBC was reluctant to entertain ideas of large scale colonization, which had the potential to disrupt the fur trade and threaten its profits. Settlement and agriculture would encroach on fur bearing lands, but they might also encourage nomadic or semi-nomadic Aboriginal trappers to leave the trade for a sedentary life amongst civilized whites. Moreover, it would remove Aboriginals from the Company's influence, as many of them were dependent on the HBC for guns, gun powder, blankets, tools, and foodstuffs.

---

<sup>143</sup> Ibid., 102

<sup>144</sup> Moodie, "Early British Images of Rupert's Land," 18.

By 1827 this unease on the part of the HBC was in tension was a renewed impetus to investigate the suitability of the Interior for agriculture, commerce, and colonization. Now, however, the goal was not to cut off the French from the middle of the continent or to locate the Northwest Passage, but a response to several factors active since the end of the War of 1812 and the merger of the HBC and NWC in 1821 including increased settlement of British North America and fears over American invasion. Immigration to Canada from the British Isles had come to a standstill during the Napoleonic Wars but had resumed slowly after 1815. After three years of tepid, but not insignificant, arrivals from Britain, 15,136 arrivals to British North America were recorded for 1818, followed by 23,534 in 1819 and 17,921 in 1820.<sup>145</sup> Average immigration held at around 10,000 arrivals per year during the 1820s, although very many of those who landed in British North America immediately continued south to the United States.<sup>146</sup> Regardless, increased immigration during the 1820s meant more British subjects to settle on the land and to defend from possible American aggression. The British government promoted immigration as a way to deal with a depressed economy and a demobilized army after the Napoleonic Wars, while Canada boosters welcomed immigration to build up the population in response to the threat posed to the colony by the United States starting immediately after the creation of the republic. For example, the Nova Scotia Society for the Promotion of Agriculture was established in December 1789 to develop husbandry in the colony and to share agricultural practices from Britain and the United States, but it also believed that there was a “necessity for our Legislature, and all friends of the

---

<sup>145</sup> Stanley C. Johnson, *A History of Emigration from the United Kingdom to North America, 1763-1912* (London: George Routledge & Sons, 1913), 344,

<sup>146</sup> Jean-Claude Robert, “An Immigration Population” in *Historical Atlas of Canada*, vol. 2, *The Land Transformed*, eds. R. Louis Gentilcore and Patrick Macklem (Toronto: University of Toronto Press, 1987), 22.



Province to unite, and fall on proper measures to procure inhabitants.”<sup>147</sup> A need to attract and grow a significant population and to develop infrastructure was magnified during the War of 1812 when the Americans invaded parts of the Canadas and seized towns like York. During the course of the war it became obvious to British and Canadian authorities that transportation and communication systems in Upper and Lower Canada were woefully insufficient. For example, it took almost two weeks and cost £1,000 to ship a single cannon from Quebec to Kingston.<sup>148</sup> Before the end of hostilities the Royal Engineers, a British army corps, drew up plans to create the Lachine and Rideau Canal systems to improve navigation between Montreal and Kingston.<sup>149</sup> Fears of American expansionist ambitions continued after the end of the war. John Quincy Adams (1776-1848), president from 1825 to 1829, made it known that he considered the boundaries of the United States to include Canada and during the 1820s disputes between Britain and the United States over access to the St. Lawrence River and to West Indian ports significantly increased tensions, as did the American program of canal building.<sup>150</sup> Anticipation by both the British and colonial Canadian governments of another American invasion drove infrastructure projects. In 1825, a full decade after the end of the war, the report of a commission established in Upper Canada to study the feasibility of a system of canals in both provinces concluded:

---

<sup>147</sup> Nova Scotia Society for the Promotion of Agriculture, *Letters and Papers of Agriculture Extracted from the Correspondence of a Society Instituted at Halifax for Promoting Agriculture in the Province of Nova-Scotia*, vol. 1 (Halifax: John Howe, 1791), 9-10.

<sup>148</sup> Robert Legget, *Rideau Waterway* (Toronto: University of Toronto Press, 1955), 24-25.

<sup>149</sup> Ibid.

<sup>150</sup> Kerry A. Trask, *Black Hawk: The Battle for the Heart of America* (New York: Henry Holt, 2013), 125-26.

In the event of war protracted as the last, the safety and the saving of transport conducted by such a channel would, it is believed, fully compensate to the nation the charge of the improvement, and it is most evident that to give full effect to the sound and liberal policy which has created the military settlements on the Rideau and introduced since the war a loyal population of more than ten thousand inhabitants, and which is now surmounting, at considerable expense, the interruptions of navigation, on the Ottawa, it is necessary to perfect the water communication removed from the enemy's frontier and leading in truth from the Ocean to Kingston.<sup>151</sup>

During war, canals could move troops, artillery, and supplies, but they could move settlers and goods in times of peace. Canals were also a transportation technology by which people living in the east could take advantage of resources in the west. In the United States work began in July 1817 on what would become the New York State Barge Canal, or Erie Canal, linking Lake Erie with the Hudson River. The canal was “the first breach in that great barrier to the western economic development, the Appalachian Mountains” and provided “the means to bind together the sector of an enormous country.”<sup>152</sup> Work also began in 1817 on the Champlain Canal to connect upstate New York with the Hudson River. In Lower Canada the Lachine Canal had been imagined during in 1815, but work only began in 1821 when it was feared that the Erie Canal would direct trade and commerce away from Montreal towards Albany and New York.<sup>153</sup> The construction of the Welland Canal in Upper Canada, designed to facilitate shipping between Lakes Erie and Ontario and to avoid Niagara Falls, began in 1824. At the canal's sod turning in November 1824, its moving spirit, William Merritt, told the gathered crowd that the development of the canal would be of immense benefit to not only local businesses, but to Upper Canada as well as to the whole of British North America:

---

<sup>151</sup> Legget, *Rideau Waterway*, 29.

<sup>152</sup> Carter Goodrich, *Canals and American Economic Development* (New York: Columbia University Press, 1961), 15.

<sup>153</sup> Ibid.

Instead of remaining in this dull, supine state in which we have been for years past, we will mingle the busiest and active scenes of our business; our commodities will be enhanced in value, and a general tide of prosperity will be witnessed on the whole line and surrounding country. In short, gentleman, we are situated in a country favored with every advantage, both in soil and climate and situation. Its resources only remain to be known to draw men of capital amongst us; and we trust, now improvement have commenced, it will increase, and that we may witness the same spirit of enterprise here, which our neighbours, the Americans, possess in so eminent a degree.....[The canal] will be the means of the more closely united the interests of the two Provinces and increasing the character and reputation of our country abroad.<sup>154</sup>

A short description of the canal authored by Merritt and published by him in 1828 noted that the canal's construction afforded "geological information representing this portion of the country, which we have never seen noticed" including soil and rock conditions and the height, features, and contours of geological features as well as the depths of rivers and streams.<sup>155</sup> Development and improvements to the land could aid the gathering of scientific information, which in turn could be used to imagine and plan future settlements and improvement projects across British North America.

The 1820s and 1830s also saw the creation of land development companies or schemes designed to promote organized immigration and settlement. One such enterprise, the Canada Company, had been established in 1826 to settle large parts of Upper Canada with British immigrants. In an 1828 pamphlet it advertised its acquisition of the Huron Tract, 2.5 million acres in what is now southwestern Ontario, and its great desire to commence "the settlement and improvement of those lands." The Company described Upper Canada as having a temperate climate like England's that was warm for nine months of the year. This was noted to dispel the idea that the winters of Upper and Lower Canada were similar given the infamous severity of that season in Quebec. The Company also held to the common belief that deforested lands heated up:

---

<sup>154</sup> J.P. Merritt, *Biography of the Hon. W.H. Merritt, M.P.* (NP: St. Catherines, 1875), 66-67.

<sup>155</sup> William Hamilton Merritt, *Account of the Welland Canal, Upper Canada* (NP, 1828), 5.

It is well know that in North America, and especially in the great valley of the St. Lawrence, the warmth of the climate increases, even in the same latitude, according to the distance westward from the Atlantic Ocean and the distance from Quebec to the [Huron] Tract is upwards of 700 miles. It is also well known in America, that the climate always improves, or rather increases in warmth, with the destruction of the forest and the cultivation of the soil.<sup>156</sup>

Settlement and colonization were thus allied to improvement, warmth, cultivation, and growth. The pamphlet went on to quote members of the Huron Tract exploring party who praised the fertility of the soil, the affordance of waterways, and the quantity and quality of the trees. Even swamps presented improving opportunities as they provided ideal growing conditions for hemp.<sup>157</sup>

The Montreal Natural History Society's interest in promoting the development and settlement of British North America was articulated in the Indian Committee's mandate and mission, but the Society also wanted to advertise its interest in colonization and to situate itself within international scientific networks. Zilbertstein has written that scientific relationships across the Atlantic remained intact after the Revolutionary War.<sup>158</sup> The same is true of the period after the War of 1812. The Society's membership list for 1828 includes the names of the twenty-six original members who met in 1827, but also other individuals who had joined since that point, including Lord Dalhousie (George Ramsay, 1770-1838), the governor-in-chief, who bestowed both his patronage on the Society and his scientific authority as the founder of the Quebec Literary and Historical Society. Dalhousie was noted natural historian; a graduate of the University of Edinburgh, he had sent Canadian bird specimens to its natural history museum and corresponded with like-minded experts in Britain.<sup>159</sup> In addition to securing a vice-regal imprimatur, the Society

---

<sup>156</sup> Canada Company, *Lands in Upper Canada to be Disposed of by the Canada Company* (London: Marchant, 1828), 2.

<sup>157</sup> Ibid.

<sup>158</sup> Zilberstein, "The Natural History of Early Northeastern America," 24.

<sup>159</sup> Peter Burroughs, "Ramsay, Geoge, 9th Earl of Dalhousie," *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed August 5, 2015, [http://www.biographi.ca/en/bio/ramsay\\_george\\_7E.html](http://www.biographi.ca/en/bio/ramsay_george_7E.html).

advertised prominent American and British honorary members like Royal Navy officers and explorers Basil Hall (1788-1844), John Franklin (1786-1847), and John Richardson (1787-1865) as well as men connected to land development schemes like William “Tiger” Dunlop (1792-1848) and John Galt (1779-1839), administrators of the Canada Company, and Cadwallader David Colden (1769-1834), a former mayor of New York City and president of the Morris Canal and Banking Company, which was building a canal across northern New Jersey to connect the Delaware and Hudson Rivers.<sup>160</sup> British and American scientists and natural historians were well represented amongst the honorary membership including John Torrey (1796-1873), professor of chemistry and botany at Columbia University in New York, Robert Jameson in Edinburgh, Benjamin Silliman (1779-1864), professor of chemistry at Yale, William Spence (ca. 1783-1860), a British etymologist and economist, Samuel Mitchill (1764-1831), professor of botany and mineralogy at Columbia’s medical school, Thomas Nuttall (1786-1859), a British-born explorer and curator of the Harvard Botanical Gardens, and Jacob Bigelow (1787-1879), author of *American Medical Botany*, published between 1817 and 1820, and a professor at the Harvard medical school.<sup>161</sup> The Society also boasted international corresponding members, including five resident in the United States, three in Scotland, and one in Mauritius. There were four corresponding members in Upper Canada, including the retired NWC surveyor David Thompson (1770-1857), and one in Newfoundland. A corresponding member of no small significance residing in Quebec City was Major-General H.C. Darling, military secretary to the governor-in-chief and the army officer with overall responsibility for Aboriginal affairs in Upper and Lower Canada. In summer 1828 Darling would undertake his own six-week survey of Aboriginal

---

<sup>160</sup> Ronald E. Shaw, *Canals for a Nation: The Canal Era in the United States* (Lexington: University of Kentucky Press, 2014), 93.

<sup>161</sup> Montreal Natural History Society, *Constitution and Bye-Laws*, 24.

conditions in the Canadas and recommended that the imperial government confirm Aboriginal land rights to ensure their survival and their loyalty to the Crown.<sup>162</sup> In advertising Canadian, British, and American honorary and corresponding members of significant scientific, political, and social standing, the Society could see itself as a node in a network of like-minded individuals and groups dedicated to using science to learn about the natural environment for the good of all.

The Montreal Natural History Society's interest in the settlement and development of the Interior reflected a desire to use science to benefit the colony, which, by extension, would benefit the British world, of which members of the Society were a part. It was also a product of long-standing curiosity about a part of North America that was British but also uncivilized, yet which provided the colony with a significant amount of its wealth. The Society's interest in developing and improving the land was mirrored in the second stated objective of the Indian Committee: a study of the "moral and physical condition" of the Aboriginal inhabitants of the Interior and Upper and Lower Canada. In the case of the former, this group constituted a largely unknown demographic in Rupert's Land. Some, including many Métis, supported the fur trade, but these could not be the whole of the Aboriginal population. Moreover, knowledge about Aboriginals in the Interior stood in significant contrast to that of Aboriginals in the Canadas. A desire to learn about Aboriginals was also motivated by studies in the United States, where, by the middle of the 1820s, public discourse and government policy towards Aboriginals increasingly called for removal from eastern lands and resettlement in the west, along with programs of civilization through education and the regulation of Aboriginal commerce. By undertaking a survey and study of Aboriginal inhabitants in the Interior, the Society wanted to engage in the accumulation of data

---

<sup>162</sup> John F. Leslie, *Commissions of Inquiry into Indian Affairs in the Canada's 1828-1858: Evolving a Corporate Memory for the Indian Department* (Ottawa: Indian Affairs and Northern Development Canada, 1985), 20-21.

and knowledge in order to shape public policy and discourse around Aboriginals in British North America.

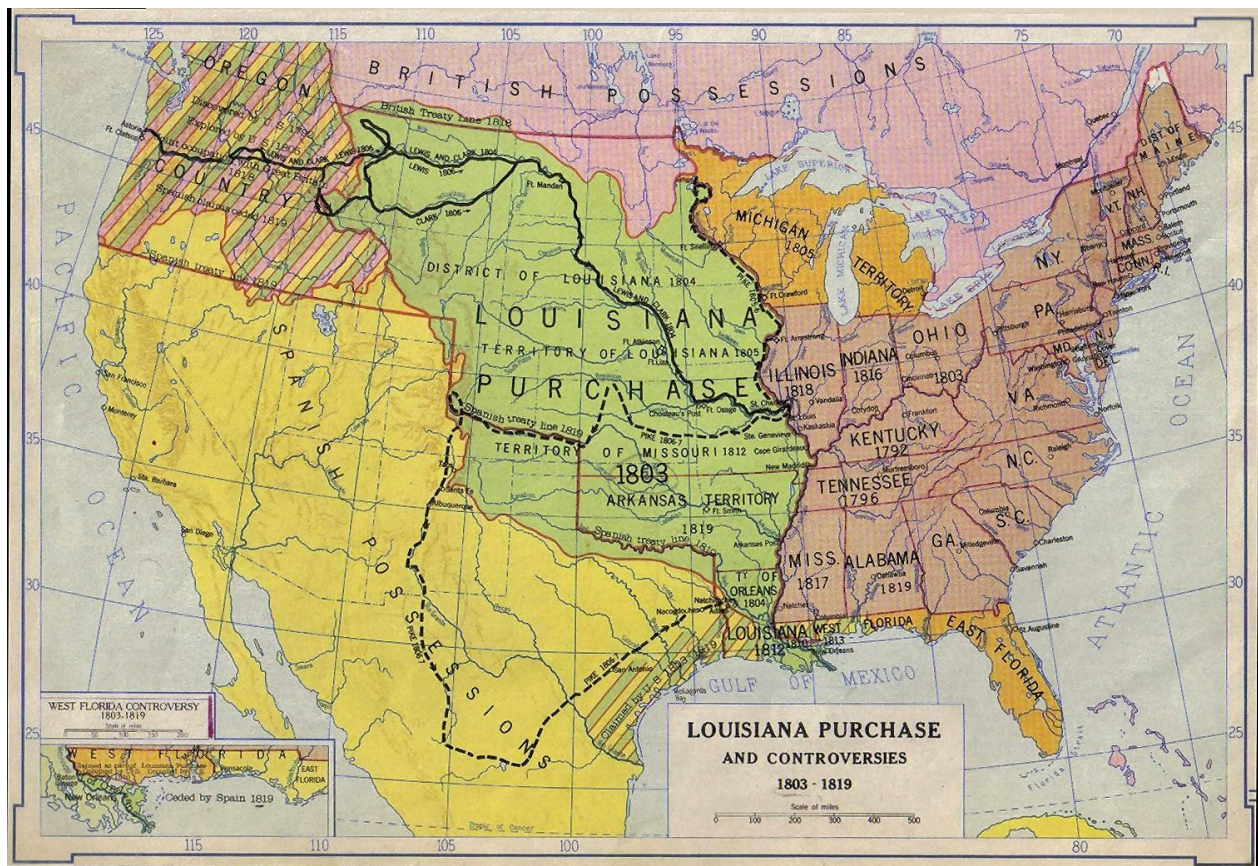


Figure 2. “Louisiana Purchase and Controversies, 1803-1819,” Denoyer-Geppert Co., ca. 1944.



**CHAPTER 4**  
**“All the Indians in the Universe:”**  
**Aboriginals in the Interior and the Canadas After 1815**

The Indian Committee’s specific interest in the “moral and physical character” of the Interior’s Aboriginals and its desire to learn about the “manners, habits, customs, languages, and institutions of the native inhabitants” of Upper and Lower Canada and the Interior reflected a preoccupation by Europeans in Aboriginals dating from the very first points of contact. Within the context of the Committee’s project to survey the Interior with the goal of opening it for commerce and agriculture, the drive to learn about its Aboriginal inhabitants took on new impetuses. Settlement of the Interior meant that Aboriginals in Rupert’s Land could, at a point in the future, come under the authority of the British or colonial governments, in which case knowing as much about them as possible was important for the ability to control and monitor them and to assess their potential as a hindrance to colonization. Knowledge about the Aboriginal population was not only in the best interest or future best interest of the colonial state, but also the commercial and civic interests represented by the members of the Indian Committee. In thinking about ways to count and describe the Aboriginals, the Indian Committee could look to recent efforts to enumerate Aboriginals in the United States in the early part of the century. Lewis and Clark accumulated large amounts information and statistics that were later published and widely consumed, as did Jedidiah Morse in a survey sponsored by the American War Department. More recently, a survey by Michigan governor Lewis Cass in 1821 of Aboriginals living in the Michigan Territory provided the Indian Committee with an example of questions to be put to respondents. Cass had begun to publish on the “Indian question” in the mid-1820s and had established himself as an authority on the subject. In all instances, Indian Committee members could see first-hand how

information about Aboriginals could be used to shape government policy and influence public thinking.

Running parallel to a desire to gather information in order to assess, measure, and extend control was an urgency reflecting the widely held consensus in North America that “‘the red race’ would sooner or later completely vanish” as a result of various factors connected to their contact and interaction with Europeans.<sup>163</sup> Anxieties about and towards Aboriginals in both Canada and the United States were often articulated using a rhetoric of morality, virtue, and character and the belief in the inability of Aboriginals to use European goods responsibly, particularly alcohol and firearms, hence the Indian Committee’s interest in the moral condition of the Interior’s Aboriginal residents. Those who believed that Aboriginals could be saved from extinction were convinced that they needed to be civilized by exposure to North American and European culture, specifically Christianity, education, and agriculture. Having current and accurate data and information would enable governments, charities, and religious groups to develop policies to bring Aboriginals into the civilized white fold. In the melancholy, but not especially tragic, event that Aboriginals did in fact “disappear,” evidence of their existence, number, languages, and customs, along with specimens of their clothing, weapons, and crafts, would be valuable for posterity and would be displayed in museums like the one being set up in Montreal.

These competing priorities and tensions existed in parallel with each other and were not mutually exclusive, but they also existed within the context of Britain’s post-1815 Aboriginal policy in Upper and Lower Canada which sought to transform Aboriginals from warriors to wards by demilitarizing them and turning them into a settled, peaceful, agricultural population. This was to be partly achieved by extinguishing claims to their lands, which would then be used for white

---

<sup>163</sup> Patrick Brantlinger, *Dark Vanishings: Discourse on the Extinction of Primitive Races, 1800-1930* (Ithaca: Cornell University Press, 2003), 56.

settlement or for infrastructure projects. This policy, administered in Lower Canada by two members of the Indian Committee, Lieutenant-Colonel William McKay and Lieutenant-Colonel Duncan Napier in their capacities as officers in the Indian Department, reflected a combination of paternalism, racial determinism, and settler colonial nationalism.

When Europeans began to venture to the New World they encountered groups of Aboriginals who had been living on the continent for thousands of years. From the first points of contact Europeans began to document not only what they saw, but also the peoples they met and traded with. The first description of Christopher Columbus's voyage to the New World was published in Basel in 1494 and described lands inhabited by a race of people he called Indians.<sup>164</sup> A narrative of Jacques Cartier's second trip to North America during which he encountered the Iroquoian settlement of Hochelaga on what is now the island of Montreal was published in 1545.<sup>165</sup> Aboriginals were essential to the foundations of European discovery and settlement: they acted as translators and guides and were sources of information about the geography, flora, fauna, food sources, and minerals of the New World. They were also themselves specimens to be studied, collected, and exhibited by explorers. Columbus sent several Arawaks, not all of whom survived the voyage, as slaves from the New World to Spain, while Jacques Cartier returned to France in 1534 with two sons of the Iroquois chief Donnacona (died ca. 1539), who himself would later travel to France.<sup>166</sup> In 1616 the Virginia Company sent Pocahontas (ca. 1595-1617), a member of

---

<sup>164</sup> "The Basel 1494 Columbus Letter-Translation," Osher Map Library, University of Southern Maine, accessed August 12, 2015, <http://oshermaps.org/special-map-exhibits/columbus-letter/iii-translation>.

<sup>165</sup> Trudel, "Cartier, Jacques."

<sup>166</sup> Kirkpatrick Sale, "Columbus, Christopher." In *The Oxford Companion to United States History*, Oxford University Press, accessed July 29, 2015, <http://0-www.oxfordreference.com/mercury.concordia.ca/view/10.1093/acref/9780195082098.001.0001/acref-9780195082098-e-0329>; Marcel Trudel, "Donnacona," in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed July 10, 2015, [http://www.biographi.ca/en/bio/donnacona\\_1E.html](http://www.biographi.ca/en/bio/donnacona_1E.html).

the Powhatan Confederacy, and her husband John Rolfe (1585-1622), along with several Powhatans, to England to advertise what the Company had achieved in the New World, including the conversion of the daughter of an Indian “king.”<sup>167</sup>

Exploration of North America and ongoing European-Aboriginal interaction generated scores of what can be considered ethnographic texts and images, the most notable being the *Jesuit Relations* published between 1632 and 1673 that documented and described the geography and resources of the New World and its inhabitants, as well as Jesuit attempts to convert them. Margaret Welch has described how, through the production and circulation of descriptions of Aboriginals in print and in images, European explorers, missionaries, colonists, and artists established the Aboriginal inhabitants of North America as “the other,” depicting them as human and granting them some human characteristics shared with Europeans, but denying them the intelligence or emotional characteristics of Europeans, as well as membership in an advanced civilization.<sup>168</sup> Aboriginals not only looked different, but, as Joyce Chaplin has shown, settlers believed their bodies functioned differently and they were, unless converted, heathens who would suffer eternal torment.<sup>169</sup> This differentiation created a tension that defined European-Aboriginal relations in North America for the next three hundred years. Reginald Horsman has described how:

From the beginning of English settlement...there had been a dual image of the North American Indian. There had always been both an admiration for the supposed simple life as well as hatred for “savage” violence. The Puritans at first had high hopes of saving souls in North America and at first thought in terms of Indian acculturation...A rapid disillusionment set in as the Indians protected their way of life and land by warfare. Throughout the colonies, the Indians came to be viewed as a stumbling block to civilization...[and] by the latter years of the seventeenth century were despised.<sup>170</sup>

---

<sup>167</sup> David A. Price, *Love and Hate in Jamestown: John Smith, Pocahontas, and the Start of a New Nation* (New York: Knopf, 2007), 163-64.

<sup>168</sup> Margaret Welch, *The Book of Nature: Natural History in the United States, 1825-1876* (Boston: Northeastern University Press), 16.

<sup>169</sup> Chaplin, *Subject Matter*, 244-46.

<sup>170</sup> Reginald Horsman, *Race and Manifest Destiny: The Origins of American Racial Anglo-Saxonism* (Harvard: Harvard University Press, 1981), 103.

By the late seventeenth century Horsman contends that American colonists began to take an interest in Aborigines as objects of serious study as settlement expanded and as colonists began to push west from the east coast at the same time as European weapons and diseases rendered them less threatening in some parts of North America.<sup>171</sup> This coincided with efforts by natural historians and scientists in Europe to create classification systems “to make sense of what was, and still is, an uncomfortable and untidy natural world.”<sup>172</sup> Schemes, like that developed by Carl Linnaeus (1707-78), enabled natural historians to describe and classify animals, plants, and minerals, as well as humans. Linnaeus divided the human species into four groups: European, American, Asiatic, and African.<sup>173</sup> Linnaeus’ scheme, and other like it, became a way by which natural historians could explain and prove racial and national differences and characteristics and a way for Europeans to fix Aboriginal identity by describing them as a group that was weak and underdeveloped and likely to disappear. Classification schemes also allowed Europeans to think of Aborigines as a race of noble savages that could be educated and civilized by exposure to European culture and art, or, by the mid-nineteenth century, a scientifically inferior people who presented an obstacle to the development of the American continent.

The biological weakness of North America’s Aborigines was advanced by George-Louis Leclerc (1707-88), Count de Buffon and director of the Jardin du Roi in Paris, who authored a monumental text on natural history, *Histoire naturelle générale et particulière*, first published in thirty-six volumes between 1749 and 1788. Buffon produced a theory of environmental degeneration, arguing that differences between animals, plants, and peoples found on different

---

<sup>171</sup> Ibid., 104.

<sup>172</sup> Prince, “Introduction,” 2.

<sup>173</sup> Horsman, *Race and Manifest Destiny*, 47.

continents were the result of climate. Buffon postulated that since the geography and environment of North America were younger and less developed than that of Europe:

Animated nature, therefore, is in this portion of the globe less active, less varied, and even less vigorous; for by the enumeration of the American animals we shall perceive, that not only the number of species is smaller, but that in general they are inferior in size to those of the old continent.<sup>174</sup>

North America's Aboriginal inhabitants also displayed the characteristics of a weak and inferior race:

In the savage the organs of generation are small and feeble; he has no hair, no beard, no ardour for the female; though more nimble than the European, from being habituated to running, he is not so strong; possessed of less sensibility, yet he is more timid and dastardly; he has no vivacity, no activity of soul, and that of the body is less a voluntary exercise than a necessary action occasioned by want. Satisfy his hunger and thirst and you annihilate the active principle of all his motions; and he will remain for days together in a state of stupid inactivity.<sup>175</sup>

Buffon's view of North American Aboriginals as feckless, lazy, and devoid of sexual drive and sensory abilities was shared by William Robertson (1721-93), a Presbyterian minister and historian who served as principal of Edinburgh University from 1762 until his death. A significant part of Robertson's three-volume *History of America* published in 1777 dealt with the character of the North American Indian, whom he portrayed as "feeble, indolent, improvident, lacking in the virtues engendered by developed property interests, intellectually unimaginative, devoid of love between the sexes, and near anarchists in civil affairs."<sup>176</sup> A 1780 edition of Robertson's history and a 1791 English translation of Buffon's *Natural History*, are found in the 1824 catalogue of the

---

<sup>174</sup> Georges-Louis LeClerc, Count de Buffon, *Buffon's Natural History. Containing a Theory of the Earth, a General History of Man, of the Brute Creation, and of Vegetables, Minerals, &c. &c.*, ed. James Smith Barr (London: Printed by T. Gillet, 1807), 7:27.

<sup>175</sup> *Ibid.*, 7:39-40.

<sup>176</sup> E. Adamson Hoebel, "William Robertson: An 18<sup>th</sup> Century Anthropologist-Historian," *American Anthropologist* 62, no. 4 (1960): 652.

Montreal Library and may have played in a role in influencing or shaping some Indian Committee members' opinions of Aboriginals in British North America.<sup>177</sup>

Buffon's claims of New World inferiority were, not surprisingly, poorly received by North Americans and his conclusions were most forcefully rejected by Thomas Jefferson, who had left office as governor of Virginia in 1781, the year in which he completed the first draft of *Notes on the State of Virginia*, a work written as a response to a series of questions from François Barbé-Marbois (1745-1837), secretary of the French delegation in Philadelphia, and which combined his personal and political philosophies with statistics and information about Virginia. Jefferson upbraided Buffon for his inaccurate depiction of North American Indians, describing them as brave, unafraid of death or torture, and capable of offering friendship to those around them. He rejected Buffon's claim that Aboriginals were "wanting genius," explaining "letters have not been introduced among them."<sup>178</sup> He compared Aboriginals to Northern Europeans who had to wait sixteen centuries after Roman conquest before "a Newton could be formed," implying that with time, teaching, and exposure to European and American culture, Aboriginals could perhaps be raised to a similar level of civilization.<sup>179</sup> Jefferson also rejected the notion that climate was able to change the human body or human emotional characteristics, a theory that had wide currency in both Europe and North America. For example, Joyce Chaplin describes how both Cotton Mather and William Byrd believed that climate could "Indianize" Europeans living in the New World, making them sluggish, lazy, and prone to new diseases.<sup>180</sup>

The assertion that Aboriginals were scientifically and biologically different from Europeans, and in some ways inferior to them, was held in parallel with the common assumption

---

<sup>177</sup> Montreal Library, *Catalogue of the Books in the Montreal Library*, 17.

<sup>178</sup> Thomas Jefferson, *Notes on the State of Virginia* (London: Printed for John Stockdale, 1797), 106.

<sup>179</sup> Ibid., 106-07.

<sup>180</sup> Chaplin, *Subject Matter*, 176.

that they were in the process of extinction, in which case it was important to document them and their existence for future study, but also to attempt to save them or to slow their disappearance. Estimates of the Aboriginal population of the Americas north of present-day Mexico circa 1500 CE have ranged from a high of eight million to a low of 900,000.<sup>181</sup> Russell Thornton places it at seven million with just over two million living in modern-day Canada.<sup>182</sup> Contact with Europeans and the introduction of diseases and viruses to which Aboriginals had no immunity had a devastating impact on populations and the development of the fur trade created significant tensions amongst some Aboriginal groups leading to wars, migrations, and disruptions to social culture. By 1800, Douglas H. Ubelaker contends that the population of Aboriginals in the two areas where the majority of the HBC's trading occurred, the Plains and the Subarctic, stood at 120,330 down from 189,100 in 1500 and 76,350 down from 103,400 in 1500, respectively.<sup>183</sup>

The trope of the "vanishing Indian," which developed in response to seemingly shrinking Aboriginal populations, was distilled from the concept of the noble savage that had existed in the European mind since the seventeenth century and that had been reproduced and interpreted in art, literature, and philosophy. By the eighteenth century the figure of the idealized, uncorrupted savage had been translated into the figure of the vanishing Indian who was under threat from the advance of white civilization, although some scholars have argued that the trope was present as early as the 1640s.<sup>184</sup> The vanishing Indian and the assumption of Aboriginal extinction gained widespread acceptance in the late eighteenth century as Europeans assumed hegemony over the

---

<sup>181</sup> Russell Thornton, "Population of Native North Americans," in *A Population History of North America*, eds. Michael R. Haines and Richard H. Steckel (Cambridge: Cambridge University Press, 2000), 13.

<sup>182</sup> Ibid.

<sup>183</sup> Douglas H. Ubelaker, "North American Indian Population Size, AD 1500 to 1985," *American Journal of Physical Anthropology* 77 (1988): 292.

<sup>184</sup> Kristina Bross, "Dying Saints, Vanishing Savages: 'Dying Indian Speeches' in Colonial New England Literature," *Early American Literature* 36, no. 3 (2001): 325-52.



settled eastern parts of North America and began to explore and colonize lands to the west. Henry Knox (1750-1806), George Washington's secretary of war, believed that Aboriginal extinction was a sad inevitability: "It is painful to consider that all the Indian tribes existing in those states now the best cultivated and most populous, have become extinct. If the same causes continue, the same effects will happen; and, in a short period, the idea of an Indian on this side of the Mississippi will only be found in the pages of the historian."<sup>185</sup> The vanishing Indian also appeared in art and literature on both sides of the Atlantic. James Fenimore Cooper's bestselling 1826 novel considered *The Last of the Mohicans* while Benjamin West's 1759 painting *Death of General Wolfe* included a contemplative Indian warrior looking pensively at the dying British hero. Vivien Green Fryd has argued that the warrior, who does not depict an individual present at the death scene, was interpreted by contemporary viewers as both the noble savage free from "society's encumbering practices" and the melancholy Indian contemplating the end of his race and the transfer of dominion over the New World from the Indian to the white man.<sup>186</sup>

Jefferson's *Notes on the State of Virginia* were, in addition to a rebuke to Buffon, a description of Virginia's history and contained observations about Aboriginal tribes that had disappeared from the state since European settlement, as well as statistics on Aboriginal populations and territories across the United States. Jefferson noted that of the 1,500 Onondagoes described by Bouquet living in central New York State in 1764, only 230 were recorded by Dodge in 1779. Dodge in turn reduced the 250 Wyandots recorded by Hutchins living near Detroit in 1768 to 180 just a decade later.<sup>187</sup> While Aboriginals might, over time and through exposure to

---

<sup>185</sup> Brewton Berry, "The Myth of the Vanishing Indian," *Phylon* 21, no. 1 (1960): 52-53.

<sup>186</sup> Vivien Green Fryd, "Rereading the Indian in Benjamin West's 'Death of Wolfe,'" *American Art* 9, no. 1 (1995): 80-81. Fryd notes how the Indian was described as early as 1793 as an allegorical figure "demonstrating that 'the country was his'" but had now passed to Europeans (78).

<sup>187</sup> Jefferson, *Notes*, 169-70.

arts and culture, produce their own Newton, Jefferson's statistical display implied that the disappearance of North American Indians was a sad matter of course. This conclusion helped to intellectually minimize the threat of Aborigines to the new republic, depicting them as a shrinking race against a rising American population and expanding westward settlement.

The conviction that Aborigines were on a path to extinction was not confined to the United States. John West (1778-1845), the Hudson's Bay Company's chaplain in Rupert's Land from 1819 to 1824, recorded his thoughts in the preface to the 1827 edition of his memoir *Substance of a Journal During a Residence at the Red River Colony, British North America; And Frequent Excursions Among the North-West American Indians in the Years 1820, 1821, 1822, 1823*. He described how:

Commerce has traversed the desert and Colonies have been planted in "the waste-places," which are preparing a way, through Divine Providence, for the conversion of "the uttermost parts of the earth"....[May] the Gospel be propagated "not in word only but also in power," through-out the destitute Settlements, and among our Red Brethren in the wilderness, who are "fast melting away," to use their own beautiful metaphor, "like snow before the sun," as the whites advance, and colonize their soil.<sup>188</sup>

West, who would earn George Simpson's wrath for attempting to establish permanent Aboriginal schools in HBC territories and for encouraging Aborigines to leave the fur trade and take up agriculture at Red River, linked progress and the rise of civilization in the North American West to the decline of Aboriginal peoples.<sup>189</sup> The advance of the Gospel, and thus civilization, in the Interior required the displacement and eradication of Aboriginal culture, languages, and customs, making the Indian Committee's efforts to capture data about them essential before all was lost in

---

<sup>188</sup> John West, *Substance of a Journal During a Residence at the Red River Colony, British North America; And Frequent Excursions Among the North-West American Indians in the Years 1820, 1821, 1822, 1823*, 2nd ed. (London: L.B. Seeley & Son, 1827), xi.

<sup>189</sup> Richard A. Willie, "West, John," *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed August 18, 2015, [http://www.biographi.ca/en/bio/west\\_john\\_7E.html](http://www.biographi.ca/en/bio/west_john_7E.html).

the advancing creep of white settlement in Rupert's Land, the American interior, and in the Pacific Northwest.

During the Seven Years War, both the British and French employed military alliances with Aboriginal groups. After the war the Royal Proclamation of October 1763 established the boundaries of the new colony of Quebec, but it also established a line between Aboriginal and colonial settlements. Aboriginal policy in British North America was not, however, uniform. In Quebec the British inherited a system established by the French in which no treaties or land surrenders had been negotiated. Instead, the French Crown had granted lands to religious orders charged with civilizing and educating Aboriginals, as a result of which Catholic priests acted as both missionaries and government agents.<sup>190</sup> In the American colonies before the Revolution, the Lords of Trade promulgated a plan for the "Future Management of Indian Affairs in America" in 1764, giving control of Aboriginal policy and trade with Aboriginals to superintendents and their agents in two districts, the Northern and Southern.<sup>191</sup> This was ostensibly to prevent unscrupulous colonists from cheating Aboriginals, but it was also a way to regulate Aboriginal economic and commercial agency. Colonists easily ignored all regulations and by 1768 Robert Allen writes that the Crown was unable to maintain its authority on the frontier and returned Aboriginal affairs and trade to colonial legislatures.<sup>192</sup> Britain's Aboriginal policy in the American colonies was one of the many catalysts of the Revolution and the Declaration of Independence excoriated George III for, among other things, unleashing "on the inhabitants of our frontiers, the merciless Indian

---

<sup>190</sup> Douglas Leighton, "Napier, Duncan Campbell," *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed August 12, 2015, [http://www.biographi.ca/en/bio/napier\\_duncan\\_campbell\\_9E.html](http://www.biographi.ca/en/bio/napier_duncan_campbell_9E.html).

<sup>191</sup> Allen, *His Majesty's Indian Allies*, 34-35.

<sup>192</sup> *Ibid.*, 36.

savages, whose known rule of warfare, is undistinguished destruction of all ages, sexes and conditions.”<sup>193</sup>

The treaty that ended the Revolutionary War in 1783 made no mention of Aboriginals or their status in the new republic. Britain’s Aboriginal allies were purposefully excluded from treaty negotiations and its final terms ignored previous agreements made with the British.<sup>194</sup> Some administrators in Britain’s remaining North American colonies, including Frederick Haldimand, who became governor of Quebec in 1778, believed that Aboriginals could be important allies in any possible future conflict with the United States and attempted to compensate Aboriginals for their losses through land grants in the new colony of Upper Canada. On the whole, however, Aboriginals were left to fend for themselves, especially after the British withdrew from the Ohio Valley in 1796.<sup>195</sup> They faced renewed harassment from what Anthony Wallace has called “frontier whites,” but they also now had to contend with an American government that saw them as a threat and as objects of antiquarian interest.<sup>196</sup> Despite the assumptions of Henry Knox and others, Aboriginals did not yield sovereignty as readily as might have been imagined or desired. There were significant conflicts between American soldiers and Aboriginal groups, specifically the Wyandot, Lenape, Miami, and Kickapoo, in the Northwest Territory in the late 1780s and into the mid-1790s. Aboriginal efforts to resist American force during this period benefited the sparsely populated British colonies to the north and “halted the steady flow north and west of the American

---

<sup>193</sup> “The Declaration of Independence: A Transcription,” National Archives, accessed August 15, 2015, [http://www.archives.gov/exhibits/charters/declaration\\_transcript.html](http://www.archives.gov/exhibits/charters/declaration_transcript.html)

<sup>194</sup> Colin C. Calloway, *Crown and Calumet: British-Indian Relations, 1783-1815* (Norman: University of Oklahoma Press, 1987), 10.

<sup>195</sup> Ibid., 14; Allen, *His Majesty’s Indian Allies*, 84-86.

<sup>196</sup> Wallace, *Jefferson and the Indians*, 166.

frontier for a decade. As a consequence....settlements in Canada were allowed to grow...unhindered by American and republican intrusion.”<sup>197</sup>

The British renewed their Aboriginal alliances during the War of 1812, which many in the Canadas saw as a fight to preserve the colony from American annexation. Allen has claimed that “the employment of Indian allies by the British crown during the War of 1812 was the single most important factor in the successful defence of Upper Canada,” a view not shared by Colin Calloway who concluded that “the British believed that the advantages offered by Indian allies tended to be negative...but it was better that they should be fighting with rather than against the British.”<sup>198</sup> Evidence to support this conclusion is supplied by Indian Committee member William McKay, who wrote that the Aboriginal warriors who helped him capture Prairie du Chien in July 1814 “proved to be perfectly useless,” although he did credit them with a victory over an American relief force a few days later.<sup>199</sup> Aboriginals and British claimed that the other was unreliable or did not provide what had been promised, but military cooperation between the two groups achieved several strategic victories including those at Detroit, Fallen Timbers, Queenston Heights, and Beaver Dam.

Despite their exclusion from peace negotiations at Ghent in 1814 (a replay of their exclusion from the negotiations at Paris in 1782-83), Aboriginals had reason to believe that Britain would be able to restore to them lands seized by the Americans. Early in the negotiations the British proposed the creation of a permanent Indian Territory comprising parts of present-day Ohio, Minnesota, Indiana, Michigan, Illinois, and Wisconsin, an idea firmly rejected by the

---

<sup>197</sup> Allen, *His Majesty's Indian Allies*, 85.

<sup>198</sup> Ibid., 129; Calloway, *Crown and Calumet*, 206. Calloway gives example after example of British wariness towards their Aboriginal allies, although he does conclude that “the Indian alliance and American incompetence saved Britain's North American colonies” (p. 221).

<sup>199</sup> Allen, “William McKay.”

Americans, after which the British dropped the idea.<sup>200</sup> The Treaty of Ghent was ultimately based on the premise of *status quo ante bellum*, the state that had existed before the war. It deprived Canada of American territories and forts acquired during the conflict, including Fort Niagara, parts of Maine, Michilimackinac, and Prairie du Chien, effectively cutting off Canadian access to the Mississippi River and the fur resources of the American interior, dealing the Montreal-based trade a particular blow.<sup>201</sup> The treaty was also an astounding defeat for Aboriginal interests, which were sacrificed to Britain's post-1815 fiscal policy. Britain had exhausted itself waging war against Napoleon and the North American conflict, which the foreign secretary, Lord Castlereagh, had described as "millstone," diverted troops, ships, and money away from Europe.<sup>202</sup> By 1815 Britain was virtually bankrupt and the national debt stood at 200% of gross domestic product.<sup>203</sup> The country could no longer afford to wage the North American war and treaty negotiations were accordingly conducted with some haste. Britain could also no longer afford to support its Aboriginal allies and in 1815 Sir Gordon Drummond (1772-1854), commander of British forces in the Canadas, was ordered by Whitehall to immediately reduce "the Indian Establishment to the footing upon which it stood in the Year 1811."<sup>204</sup> This meant the dissolution of Aboriginal militias organized during the war and the end the system of gifts of tobacco, guns, blankets, medals, money, and other supplies, distributed by Indian agents and army officers to Aboriginals. The British also counselled their former allies to end guerrilla hostilities against American settlements in the

---

<sup>200</sup> Donald R. Hickey, *The War of 1812: A Short History* (Urbana-Champaign: University of Illinois Press, 2012), 107

<sup>201</sup> Jean Morrison, "To Promote the Interest and Security of the North West Company: Canada's Fur Trade and the War of 1812," *Ontario History* 109, no. 1 (2012): 182-184.

<sup>202</sup> Bradford Perkins, *Castlereagh and Adams: England and the United States, 1812-1823* (Berkeley: University of California Press, 1964), 152.

<sup>203</sup> Jaume Ventura and Hans-Joachim Voth, *Debt into Growth: How Sovereign Debt Accelerated the First Industrial Revolution*, (Zurich: Department of Economics, University of Zurich, 2005), 5.

<sup>204</sup> Allen, *His Majesty's Indian Allies*, 173.

Michigan and Missouri Territories. This advice was most often received with incredulity by Aboriginals who had given military support to the British with the expectation that they would be restored to lands that the Americans had taken from them. The American government patently ignored the peace treaty requirement to return Aboriginal lands to their pre-1812 contours and after 1815 encroachments on Aboriginal lands in the United States increased and government policy became increasingly punitive.<sup>205</sup> Indeed, historians of the War of 1812 have categorized the outcome of the war for Aboriginals in the United States as a disaster, marking the end of their role as a military counterweight in North America and the start of their subjugation by the American government.<sup>206</sup>

Much of the work in carrying out the new British policy of Aboriginal demobilization in British North America was undertaken by officers attached to the Indian Department, a branch of the military secretary's office, including two future members of the Indian Committee, Lieutenant-Colonel William Mckay and Lieutenant-Colonel Duncan Napier. In 1815 Mckay was appointed deputy superintendent of the Indian Department at Michilimackinac and it fell to him to deal with Britain's unhappy Aboriginal allies at regular councils. In summer 1817 he met with representatives from the Sioux, Winnebago, Menominee, Ottawa, and Ojibwa who wanted assurances that the British would support them against American settlers encroaching on their lands. Mckay could not commit military assistance and offered token gifts of tobacco and gunpowder instead. When pressed, he told the assembled warriors, "I have my Great Father's orders to obey and all the Indians in the universe will not make me deviate from them. The Council is ended and you must withdraw."<sup>207</sup> Despite a total absence of British support for Aboriginals

---

<sup>205</sup> Anderson, *Ethnic Cleansing and the Indian*, 140-41.

<sup>206</sup> Calloway, *Crown and Calumet*, 245; J.C.A. Hickey, 117-18; Stagg, *The War of 1812: Conflict for a Continent* (Cambridge: Cambridge University Press, 2012), 155.

<sup>207</sup> Allen, *His Majesty's Indian Allies*, 176; Calloway, *Crown and Calumet*, 252.

living in the Michigan Territory, their visits to British posts were a source of tension for Americans during the 1820s: “The specter of a revived British-backed Indian confederacy haunted the imaginations of American agents and officials on the frontier, who saw evidence of British intrigue behind every manifestation of Indian discontent.”<sup>208</sup> In reality, officers like McKay, who was promoted to superintendent of Indian Affairs at Drummond Island in 1820 and served there until a transfer to Montreal in 1828, could do little except provide hospitality to Aboriginal visitors and advise them to come to some kind of terms with an increasingly hostile American government.

The end of the war in British North America also meant the resumption of negotiations for Aboriginal land surrender, particularly in Upper Canada. Although Canada lacked the “rapidly expanding and land-ravenous population” of the United States, extinguishing Aboriginal land claims was essential for improvement—the planning and building of uninterrupted canals and direct roads and for the marketing of large plots for white settlement.<sup>209</sup> These infrastructure projects had acquired a new impetus as immigration dramatically increased after the end of the Napoleonic Wars. Not only were Aboriginals physically removed from the landscape, but so was much of the evidence of their existence on it. For example, in advertising the work it had done to prepare the land of the Huron Tract in 1828, the Canada Company announced that it had renamed the Menestung River “as the Indian name...is rather unpronounceable,...it is now proposed, in compliment to the Lieutenant-Governor, to call this river the *Maitland*,” the name it bears today.<sup>210</sup> Further evidence of Aboriginals were selectively obliterated as North Americans attempted to make the land more like that they had left behind by felling trees, cultivating crops grown in the British Isles, and creating pastures for cattle and sheep.

---

<sup>208</sup> Calloway, *Crown and Calumet*, 253.

<sup>209</sup> *Ibid.*, 254.

<sup>210</sup> Canada Company, *Lands in Upper Canada*, 2.



In the period after the end of the War of 1812, the study and knowledge of British North America's Aboriginal population was important for purposes of state power and control. J.L. Heilbron has written that "population could be considered an instrument, and its reading an indicator of health or decline."<sup>211</sup> In the 1820s the American state began to show a specific interest in counting and describing its Aboriginal population, reflecting its status as a decreasingly threatening demographic in large parts of the United States that needed to be monitored and controlled as white settlers took up surrendered Aboriginal lands or moved into areas in proximity to unceded territory. The notion that Aboriginals were destined to vanish was still widely held, but expressed in less romantic, elegiac terms. In 1825 Secretary of State Henry Clay (1777-1852) told President Adams that he believed that Indians "were destined to extinction, and though he would never use or countenance inhumanity towards them, he did not think them, as a race, worth preserving. He considered them as essentially inferior to the Anglo-Saxon race which were now taking their place on this continent."<sup>212</sup> Concurrent with this theory was a growing sense of mission amongst evangelical Protestant Christians who held that the only way to save the Indians from vanishing was to civilize them, a position advocated by many charities and missionary groups, as well by James Monroe's secretary of war, John C. Calhoun (1782-1850), who believed that successful policies for civilizing and thus subduing America's Aboriginal populations, including groups like the Seminole and Choctaw now under American authority as a result of the Treaty of 1819 that gave Florida, as well as Spanish claims to the Pacific Northwest, to the United States, demanded the "most satisfactory information respecting the Indians that can be obtained."<sup>213</sup> In

---

<sup>211</sup> J.L. Heilbron, "Introductory Essay," in *The Quantifying Spirit in the 18<sup>th</sup> Century*, eds. Tore Frägsmyr, J.L. Heilbron, and Robin E. Rider (Berkeley: University of California Press, 1990), 11.

<sup>212</sup> Horsman, *Race and Manifest Destiny*, 198.

<sup>213</sup> Sean P. Harvey, *Native Tongues: Colonialism and Race from Encounter to the Reservation* (Cambridge: Harvard University Press, 2015), 148.

1820 Connecticut geographer Jedidiah Morse (1761-1826), a member of the Northern Missionary Society of New York who had worked for the Society in Scotland for the Propagation of Christian Knowledge and the father of Samuel F.B. Morse (1791-1872), applied for and received \$500 from Calhoun's War Department to visit tribes living at the edges of the border of the United States and the Michigan and Missouri Territories. His remit included gathering demographic information, but he was also charged with observing the moral characteristics of the Aborigines, including details on efforts to civilize them through missions and Indian schools. Morse left Connecticut for the territories on May 10, 1820, making a stop in the Upper Canadian capital of York to confer with civic and religious leaders there. After a meeting with Lieutenant Governor Sir Peregrine Maitland (1777-1854), namesake of the Maitland River in the Huron Tract, Morse wrote to Calhoun that the Indian question was no less pressing north of the border and he was convinced that the United States and the Canadas could look forward to:

...future intercourse and cooperation between the Governments, and respectable and influence individuals in these Provinces, and our own Government and individuals connected with it, which will tend to harmonize and strengthen the efforts which shall in future be made, each within their respective jurisdictions, to raise the long neglected native tribes, whom the Providence of God has placed under our care, as Christian nations, from their present state of ignorance and wretchedness, to the enjoyment, with us, of all the blessing of civilization and of our holy religion.<sup>214</sup>

Morse's report was published in 1822 and numbered 523 pages, including several dozen pages of statistics. He told his reader that he had given a "liberal construction to this article," admitting that some of his numbers were conjectural.<sup>215</sup> These figures were, however, advertised as being procured for the government and acquired with government support, lending them credibility and authority. Morse's report included recommendations that reflected his own evangelical

---

<sup>214</sup> Jedidiah Morse, *A Report to the Secretary of War of the United States on Indian Affairs* (New Haven: S. Converse, 1822), 20.

<sup>215</sup> Ibid., 23; Tim Rowse, "Population Knowledge and the Practice of Guardianship," *American Nineteenth Century History* 15, no. 1 (2014): 18.

Christianity. He advocated for the government to assume a stronger role as guardian over the Aboriginals in the United States. He suggested creating an Indian college to provide university education to Aboriginals, as well as removing smaller groups to lands in the west while letting larger tribes remain where they were and establishing a company to exercise a monopoly over Indian trade, ostensibly guaranteeing that monies flowed back to Aboriginal communities. Morse advocated admitting into the company only men “cordially disposed to promote the desires of the government in regard to the improvement of the condition of the Indians,” a recommendation designed to ensure almost absolute government control and regulation of all parts of Aboriginal trade.<sup>216</sup> Tim Rowse concludes that Morse’s recommendations were “based not on demographic analysis but on his own and many others’ quoted observations of Indian ‘civilization’ and on his own (and others’) conviction that the nation’s honor demanded such efforts.”<sup>217</sup> Statistics were useful, but they could not overwhelm ideology. A further sign of the American government’s interest in extending its guardianship and control over Aboriginals living in its borders was the creation in 1824 of the Office of Indian Affairs in the War Department, which established a central bureaucracy dedicated to the administration of Aboriginal policy and management in the United States.

A desire to learn about the Aboriginals of the Interior and the Canadas satisfied several particular desires and objectives at the core of the Indian Committee’s project. A study of the inhabitants of the Interior would supply basic information about a group of Aboriginals in another part of British North America, as well as specimens from relatively unknown lands to the west. This information could then be used to promote further exploration and eventual British settlement and development in the Interior. Understanding the size and characteristics of the Aboriginal

---

<sup>216</sup> Morse, *A Report to the Secretary of War*, 61.

<sup>217</sup> Rowse, “Population Knowledge,” 19.

population would be useful for the purposes of monitoring it and for regulating trade, but it was also important information to record for posterity for natural historians, as well as missionary groups or organizations desirous to improve the moral and physical conditions of the Interior's Aborigines in order to save them from extinction. The Indian Committee had examples of what could be done with data and information on Aboriginal populations, but it needed to look elsewhere for examples of how to construct a survey, as well as instructions for the acquisitions of specimens for its museum. Moreover, the Committee had to identify who would receive the survey and how.

## CHAPTER 5

### **“The replies with which we may be favored”: Gathering Data from the Interior**

The motion that established the Indian Committee on December 28, 1827, empowered it to:

...immediately produce a series of queries connected with the manners, habits, customs, language, and institutions of the native inhabitants of the two Provinces, and with the physical Geography and Natural History of the Interior...and to direct the said Queries to such individuals as they may deem most advisable, with liberty to meet and to report their proceedings at such periods as may to them seem most convenient.<sup>218</sup>

To produce its “series of queries,” the Indian Committee could look to several recent environmental, social, and ethnographic surveys: a suite of questions about the Aboriginal inhabitants of Louisiana compiled by William Clark in 1804, Jedidiah Morse’s 1820-22 study of Aborigines on the American frontier, and Lewis Cass’s 1821-22 surveys of Aborigines in the Michigan Territory, as well as Robert Grouley’s 1817 survey of Upper Canada, a project that contributed to his eventual expulsion from British North America. Given the Indian Committee’s interest in the geography and environment of the Interior and its ability to support commerce and agriculture, the Committee also drew on examples of contemporary practice in how to process and document specimens and how to articulate the survey questions. The underlining goal of the Committee’s project was to gather as much data and information about the Interior with which to produce materials that could shape and influence policy and projects to develop the Interior and manage its Aborigines, but that would also demonstrate the Natural History Society’s authority in and commitment to the development and improvement of British North America.

The Indian Committee’s survey exists in only one copy each of the two versions, one version for HBC employees and the other for those with knowledge of the Interior: “Queries Connected with the Natural History of the Honorable Hudson’s Bay Company’s Territory and the

---

<sup>218</sup> “First Report of the Indian Committee,” Appendix C [Circular].

Indian Territories of British North America, Addressed to the Gentleman in the Interior” and “Queries Addressed by the Indian Committee of the Natural History Society of Montreal, to Individuals Resident in the Interior, to Which Answers Are Requested as Soon as Possible.” Except for the titles, the two surveys ask the same 253 questions. In its first annual report submitted to the Montreal Natural History Society on May 26, 1828, the Committee recorded that it:

...did not deem it advisable to draw separate and distinct queries for those who have left the Interior from those which they intended to address to persons still resident under a supposition that by a variation in the terms of the circulation requesting the former in their replies to consider the queries as addressed to them at the posts or districts which they have visited, the same objects would be attained without any additional expense.<sup>219</sup>

The Committee also reported that it applied to George Simpson in order to gain access to HBC employees with knowledge about “the very extensive portions of British North America, comprising the Territories of the Honorable Hudson’s Bay Company.”<sup>220</sup> Simpson indicated that he would be happy to distribute surveys to HBC employees in the Interior, but that his subordinates would be required to send their replies not to Montreal, but to London for inspection by the Governor and London Committee. Simpson promised that relevant information would be shared with the Indian Committee in due course. As this would have significantly frustrated the purpose of the project, the Committee attempted to strike a compromise:

By a subsequent interview with Mr Simpson it was agreed that instead of sending the answers to London after their receipt, the Queries should by the Secretary of the Committee be immediately submitted to the Governor and Committee in London for their sanction and approbation, and from the instructions concerning the answers, that would be made by the gentleman in the Interior, and praying that the [replies] when received in Montreal may be communicated to the Society, subject to the examination of the agents of the Company in this Province and to the expurgation of anything that might be deemed injurious to the interests of that Company. This agreement was entered into with Mr Simpson to prevent the loss of time which would have elapsed before a permission from London could be obtained.<sup>221</sup>

---

<sup>219</sup> Ibid.

<sup>220</sup> Ibid.

<sup>221</sup> Ibid.

Despite Simpson's membership on the Indian Committee and his own personal interest in natural history, he was, at the first and to his core, an employee of the Hudson's Bay Company and its chief official in North America. He knew that despite the monopoly the HBC enjoyed in North America after 1821, the Company continued to place a premium on the control of information that could support or hinder its commercial interests. Information from the Interior collected in Montreal could, for example, fall into the hands of John Jacob Astor's American Fur Company, which was in the process of establishing posts along that Missouri River that would attract furs from southern Rupert's Land away from the HBC, or unscrupulous individuals could use the data to profit at the Company's expense.<sup>222</sup> It was likely not lost on Simpson that one member of the Indian Committee, William McKay, had been a partner with the HBC's great rival, the North West Company, and old suspicions may have lingered. Given Simpson's negative reaction to John West's efforts to create Aboriginal schools and to encourage Aboriginal trappers to take up agriculture, he was likely wary of a project that could ultimately lead to the disruption of the HBC's trade and profits, or that could generate criticism of the Company's management of the territory or its treatment of the Aboriginals who lived there. Despite the complicated protocol for having the survey approved and for examining responses, the compromise worked out by the Committee and Simpson was deemed satisfactory to both parties.<sup>223</sup>

Simpson left Lachine for Fort Vancouver, the HBC's headquarters in the Columbia Department, on May 1, 1828, taking eighty copies of the survey with him.<sup>224</sup> The Indian

---

<sup>222</sup> Binnema, *Enlightened Zeal*, 208.

<sup>223</sup> There is no evidence, however, that the queries were submitted to the Governor and London Committee before they were distributed. Assuming a two week crossing period in each direction, the timing between the first meeting of the Indian Committee (February 28, 1828) and the date at which George Simpson left for Fort Vancouver (May 1, 1828) would have barely allowed for the drafting of questions in Montreal, transmission to London, review by the HBC's Governor and London Committee, transmission back to Montreal, revision, and printing.

<sup>224</sup> "First Report of the Indian Committee."

Committee's annual report noted that it made its own arrangements to distribute the other version of the survey to "gentleman of respectability who have resided in the Interior," although insufficient time had lapsed to have received any replies.<sup>225</sup> The Committee indicated that it also planned to survey individuals who worked for smaller private fur trading companies so as to acquire as much information as possible about the Interior.<sup>226</sup> Referring to its mandate to study the Aborigines of Upper and Lower Canada as well as Rupert's Land, the Committee recorded that in February 1828 it had approached Andrew Stuart (1785-1840), the Quebec City lawyer serving as one of the two commissioners of a survey established by the colonial government to "explore the country between the waters of the S<sup>t</sup> Maurice and the Saguenay instructions in relation to the Natural History and Geography of that [part of the] Interior," with a request that his party answer a similar, but not exact, set of questions about that part of the province and its Aboriginal inhabitants. A formal answer had not been received from Stuart, who was a corresponding member of the Society, by the time the Committee's report had been submitted, but it was recorded that he and his co-commissioner David Stuart, another corresponding member, had signalled a "willingness to favor the views of the Society."<sup>227</sup>

Despite the lengths to which the Committee went to identify groups to survey, it gave no thought to surveying the Aboriginal inhabitants in the Interior, either directly or indirectly through interlocutors, despite Aborigines having been essential sources of geographic and cultural knowledge about the Interior and about themselves since the first points of contact, but particularly during efforts by the HBC and NWC to survey the Interior in order to locate new sources of fur. For example, Richard Ruggles lists ten Aborigines who drafted maps of the Interior for the two

---

<sup>225</sup> Ibid.

<sup>226</sup> Ibid.

<sup>227</sup> Ibid. The results of the survey were published in 1831 as *Report of the Commissioners for Exploring the Country Lying between the Rivers Saguenay, Saint Maurice and Saint Lawrence*.



companies between 1767 and 1827 as well as nineteen Aboriginals who provided sketches and geographic descriptions for maps prepared by HBC employees Peter Fidler and Philip Turnor between 1791 and 1810.<sup>228</sup> Moreover, many residents of the Interior, specifically the significant Métis population at Red River, but also at places like York Factory and Cumberland House, had access to geographic, spatial, linguistic, and cultural knowledge, or access to communities of Aboriginals throughout the Interior.

Both surveys were prefaced by a circular, a covering document that reproduced the December 1827 motion that established the Indian Committee and that also gave an explanation of the Committee's and the survey's purpose. Employing a rhetoric of improvement, the circular told its readers that the survey had been prepared "with the intention of obtaining the necessary information concerning this very extensive and almost unknown portion of the empire," assuring them that accurate and detailed scientific information and knowledge obtained in the Interior and used in Montreal would be of direct national, and therefore imperial, benefit.<sup>229</sup> Accompanying the circular were printed "Instructions for Preserving Objects of Natural History Respectfully Addressed by the Natural History Society of Montreal to Persons Willing to Assist Its Labours and Add to its Museum," which told readers how to preserve, process, and pack quadruped, bird, insect, and shellfish specimens, as well as plant and mineral specimens, for transport to Montreal. Readers were told that the Society was "anxious that its Cabinet should contain a specimen of every known product of the three kingdoms of nature."<sup>230</sup> It is likely that the instructions were drafted by Andrew Holmes, the only member of the Committee who had had any formal training in natural

---

<sup>228</sup> Richard I. Ruggles, *A Country So Interesting: The Hudson's Bay Company and Two Centuries of Mapping, 1670-1870* (Montreal: McGill-Queen's University Press, 2011), 266.

<sup>229</sup> "First Report of the Indian Committee," Appendix C: [Circular].

<sup>230</sup> "First Report of the Indian Committee," Appendix A: "Instructions for Preserving Objects of Natural History."

history and, through his studies with Robert Jameson in Edinburgh, exposure to contemporary museum practices for preparing and displaying specimens. Jameson's influence is supported given that they bear resemblance to instructions prepared by him in 1817 and published in the *Edinburgh Review*.<sup>231</sup> Jessie Sweet noted that Jameson compiled these kinds of instructions on request, especially if the requesting party was willing to donate specimens to the University of Edinburgh's museum, and during the early part of the nineteenth century Jameson's work was employed by British natural historians undertaking field work in India, New South Wales, Brazil, Mexico, and the Arctic.<sup>232</sup> There is, however, no evidence that Jameson provided Holmes with instructions for the Montreal Natural History Society's project. Other passages from the Indian Committee's Instructions were lifted, almost verbatim, from a contemporary manual of taxidermy and animal skin preparation, Sarah Bowdich Lee's *Taxidermy: Or, The Art of Collecting, Preparing, and Mounting Natural History*, first published in London in 1820.<sup>233</sup> For example, Lee told her readers "The mammifera, sufficiently small to be enclosed in a bottle or barrel, ought to be put into some spirituous liquor," while the Indian Committee instructed that "Quadrupeds sufficiently small to be enclosed in a bottle ought to be put into spirituous liquor."<sup>234</sup> In addition to specimens from the three kingdoms, the Society assured readers that it welcomed samples of water, gases,

---

<sup>231</sup> Jessie M. Sweet, "Instructions to Collectors: John Walker (1793) and Robert Jameson (1817); With Biographical Notes on James Anderson (LL.D.) and John Anderson (M.D.)," *Annals of Science* 29, no. 4 (1972): 402-06.

<sup>232</sup> *Ibid.*, 400-01.

<sup>233</sup> Sarah Lee (1791-1856) appears to have been a remarkable individual. A largely self-taught natural historian, at twenty-five she made a voyage from England to Africa to join her husband, a writer in the Royal African Company. Her *Oxford Dictionary of National Biography* entry notes that on the voyage to Cape Coast Castle in 1816 she caught a shark and helped put down a mutiny. In 1819 she and her husband moved to Paris where she became a pupil of Georges Cuvier. From the mid-1820s onwards she made her living as a writer and illustrator. See: Donald deB. Beaver, "Lee, Sarah (1791-1856)" *Oxford Dictionary of National Biography*, ed. H. C. G. Matthew and Brian Harrison, Oxford University Press, <http://0-www.oxforddnb.com/mercury.concordia.ca/view/article/16310> (accessed July 28, 2015).

<sup>234</sup> Sarah Lee, *Taxidermy: Or, the Art of Collecting, Preparing, and Mounting Objects of Natural History* (London: Longman, Hurst, Rees, Orme, and Brown, 1820), 122; "First Report of the Indian Committee," Appendix A: "Instructions."

sand, and meteors, and details were provided on how to pack these materials. Readers were also assured that “All dresses, weapons, utensils, manufactures, or productions of the natives will always be highly acceptable to the Society.”<sup>235</sup>

The author or authors of the circular and instructions placed great emphasis on observation, detail, and measurement, all of which had become increasingly more important to the scientific pursuit starting in the seventeenth century, but particularly during the first half of the nineteenth century due to the work of disciples of Alexander von Humboldt (1769-1859), the Prussian explorer, naturalist, and geographer and the progenitor of “Humboldtian science.” Susan Faye Cannon defined Humboldtian science, the practice of science that emerged through Humboldt’s direct and indirect influence in Europe and the Americas, as “accurate, measured study” that relied on direct observation, modern tools, and defined units of measurement.<sup>236</sup> Humboldtian science sought to identify relationships in the natural environment and encouraged practitioners to consider how, for example, geography, climate, soil, and temperature affected vegetation and plants. Humboldt also believed that scientists needed to amass large amounts of data from all around the globe in order to understand the natural world.<sup>237</sup> Zilberstein has written that the practice of natural history in the early northeastern United States was an “unavoidably imperfect science.” She provides as an example Timothy Dwight’s 1821 *Travels in New England and New York* in which he documented the “natural history of the region with ‘a good degree of exactness’ because anything more definitive, he concluded, was ‘unattainable.’”<sup>238</sup> In its survey, however, the Indian

---

<sup>235</sup> “First Report of the Indian Committee,” Appendix A: “Instructions.”

<sup>236</sup> Susan Faye Cannon, *Science in Culture: The Early Victorian Period* (New York: Science History Publications, 1978), 104-105. See also: Zeller, “Humboldt and the Habitability of Canada’s Great Northwest,” 328-86. By way of comparison, Cannon describes Baconian science as “the collection of facts, lots of facts, in all sorts of places, and on queer applied subjects; the absence of an analytical theory or of sophisticated mathematical tools....” (p. 73).

<sup>237</sup> Pyenson and Sheets-Pyenson, *Servants of Nature*, 259.

<sup>238</sup> Zilberstein, “The Natural History of Early Northeastern America,” 22.

Committee encouraged the opposite. Great emphasis was placed on accuracy with a goal of obtaining “measurement, qualification, and explanation” to produce “certain, durable, and universal facts.”<sup>239</sup> The circular requested that recipients answer the queries as soon as possible, but it also made a plea for thoroughness and comprehensiveness:

You cannot be too full and particular in your communications, and we hope that you will not allow yourself to indult a supposition that any information you may possess is too insignificant or unworthy to be communicated. The hurry in which these Queries have been prepared, may have caused many particulars to be entirely forgotten but the undersigned [committee members] trust that nothing will be omitted in the replies with which we may be favored, that can in the least degree throw light upon any of the subjects which are comprised in the Queries.<sup>240</sup>

Accurate and detailed information were obviously more useful, but a preoccupation with precision engaged the classification schemes established by Linnaeus and others. These schemes encouraged natural historians to classify, organize, and assign established categories to minerals, plants, and animals or to create new ones. Accordingly, having detailed, accurate, and copious documentation at hand was a way by which natural historians could make sense of and manage the environment and geographic diversity.<sup>241</sup>

The assurance that respondents could “not be too full and particular in their replies” reflected the desire of scientists in both Europe and North America to move “from the world of ‘more or less’ to the universe of precision.”<sup>242</sup> In 1803 Jefferson ordered Lewis to take observations with “great pains & accuracy to be entered distinctly, & intelligibly for others as well as yourself, to comprehend all the elements necessary” to record the longitude and latitude of the various rivers

---

<sup>239</sup> Ibid.

<sup>240</sup> “First Report of the Indian Committee,” Appendix C: [Circular].

<sup>241</sup> James Larson, “The Most Confused Knot in the Doctrine of Reproduction,” in *The Quantifying Spirit in the 18<sup>th</sup> Century*, eds. Tore Frängsmyr, J.L. Heilbron, and Robin E. Rider (Berkeley: University of California Press, 1990), 268. See also Sven Widmalm, “Accuracy, Rhetoric, and Technology: The Paris-Greenwich Triangulation, 1784-88,” in *The Quantifying Spirit in the 18<sup>th</sup> Century*, 179-206, esp. 195-200.

<sup>242</sup> H. Floris Cohen, *The Scientific Revolution: A Historical Inquiry* (Chicago: University of Chicago Press, 1994), 86.

and waterways by which he travelled, and to ensure that measurements and data were kept safe and protected.<sup>243</sup> The Montreal Natural History Society directed participants of its project that plant specimens were to be accompanied by labels giving the name of the country in which they were found, the spot from where they were taken, and the date. The exact height of plants was to be recorded, as well as the height of their location above sea level, the colour of any flowers, and their odour. Readers of the instructions were assured that “We shall always feel gratified, even for the slightest favors and acknowledgements, but at the same time we would hint, that the more attention you can afford to our instructions, the more you will realize our views for the benefit of science and our country,” re-emphasizing the moral and material benefits that better and more detailed information about the Interior and its inhabitants, would render not just to members of the Montreal Natural History Society, but all residents of British North America.<sup>244</sup>

The Montreal Natural History Society’s archive does not indicate who drew up the survey questions. Holmes’s participation is again highly likely given his training and background. Many of the questions, however, specifically related to the Aboriginal inhabitants of the Interior, bear resemblance to those composed by William Clark in 1804 based in part on lists of questions received from Benjamin Rush (1746-1818), Caspar Wistar (1761-1818), and Benjamin Smith Barton (1766-1815), three Philadelphia physicians and natural historians, as well as some suggestions from Jefferson.<sup>245</sup> William Clark’s questions were divided into ten categories: “1st. Physical History and Medicine; 2nd. Relative to Morals; 3rd. Relative to Religion; 4th. Traditions or Natural History; 5<sup>th</sup>. Agriculture and Domestic Economy; 6th. Fishing & Hunting; 7th. War; 8th. Amusements; 9th. Clothing Dress & Ornaments [sic]; [10th.] Customs & Manners

---

<sup>243</sup> Jefferson, “Life of Captain Lewis,” vol. 1, xiv.

<sup>244</sup> “First Report of the Indian Committee,” Appendix A: “Instructions.”

<sup>245</sup> Wallace, *Jefferson and the Indians*, 97.

Generally.”<sup>246</sup> Wallace has written that Clark’s categories capture much of what a modern anthropologist would include under the rubric of culture, except that questions about political culture and kinship are absent.<sup>247</sup> While Clark’s collated list of questions was not printed until 1962 in the *Letters of the Lewis and Clark Expedition*, it is not impossible that manuscript copies of the questions circulated amongst communities of natural historians.<sup>248</sup>

Angela Byrne has claimed that Indian Committee’s “questions regarding population figures, life expectancy, occupation, age of marriage, and birth rates look not dissimilar to the census of population conducted in Britain and Ireland every decade from 1821,” yet the 1821 British census asked a total of seven questions, three of which dealt with the characteristics of habitations, one with occupations, one with the number of persons found in a parish, township or place, and two asking the recorder to account for any differences in population and to account for any other interesting facts or phenomena.<sup>249</sup> Despite this slightly weak connection, Byrne’s conjuring of the census and her attempt to connect it to the survey testifies to the growing use of the census in the late eighteenth and early nineteenth centuries as a tool for building and supporting state power. Bernard Cohn and Nicholas Dirks have described the nation state’s interest in the census to help it “mark space, to record transactions such as the sale of property, to count and classify their populations...and finally to become the natural embodiment of history, territory, and

---

<sup>246</sup> Donald Jackson, ed. *Letters of the Lewis and Clark Expedition with Related Documents*, vol. 1, rev. ed. (Urbana: University of Illinois Press, 1978), 50-51, 157-61.

<sup>247</sup> Wallace, *Jefferson and the Indians*, 99-100.

<sup>248</sup> Donald Jackson also notes the existence of a series of questions prepared in 1819 by the American Philosophical Society for Major Stephen Long. See *Letters of the Lewis and Clark Expedition*, 161n.

<sup>249</sup> Byrne, *Geographies of the Romantic North*, 97; “The Questions, by Means of Which was to be Ascertained the Number of Houses, Families, and Persons (with the Ages of Persons in the Year 1821),” *Vision of Britain*, accessed June 13, 2015, [http://www.visionofbritain.org.uk/census/SRC\\_P/2/GB1821PRE](http://www.visionofbritain.org.uk/census/SRC_P/2/GB1821PRE).

society.”<sup>250</sup> Foucault has also written about the rise of “governmentality” and its various apparatuses and the relationship between state power and population knowledge starting in the eighteenth century when governments began to take an interest in demography and statistics for the purposes of control.<sup>251</sup> The most obvious form of population monitoring was the census, which Patrick Carroll has described as both a tool for counting people and goods, but also a technology for fixing geographic boundaries, and divisions.<sup>252</sup> Regular decennial censuses began in the United States in 1790 and in Great Britain in 1801.<sup>253</sup> In 1821 the British government ordered colonial governors to prepare annual reports on their colonies for dispatch to London. Printed in duplicate on blue paper, these became known as the “Blue Books,” however Bruce Curtis has described how the governments of Upper and Lower Canada lacked the administrative capacity to undertake anything other than basic statistical gathering or analysis until the 1840s.<sup>254</sup> The inability of colonial Canadian governments to gather either population data or to organize comprehensive scientific surveys was likely a strong motivator for groups composed of commercial and civic elites like the Montreal Natural History Society, who wanted to expand British political and commercial interests and who attempted to take up the statistical role the colonial government could not assume.

It is also possible that the Indian Committee had Thomas Newenham (1762-1831) and his work on population, land use, housing, and the economic and moral condition of early nineteenth-

---

<sup>250</sup> Bernard Cohn and Nicholas Dirks, “Beyond the Fringe: The Nation State, Colonialism, and the Technologies of Power,” *Journal of Historical Sociology* 1, no. 2 (1988): 224.

<sup>251</sup> Michel Foucault, “Governmentality,” *Ideology and Consciousness* 6 (1979): 5-21, esp. 16-21.

<sup>252</sup> Carroll, *Science, Culture, and Modern State Formation*, 92-95.

<sup>253</sup> Catherine Hakim, “Census Reports as Documentary Evidence: the Census Commentaries, 1801-1951,” *Sociological Review* 28, no. 3 (1980): 551.

<sup>254</sup> Bruce Curtis, “The Canada ‘Blue Books’ and the Administrative Capacity of the Canadian State, 1822-67” *Canadian Historical Review* 74 (1993): 537, 542.

century Ireland in mind when undertaking its project.<sup>255</sup> Newenham's arguments were disseminated in two books including *A View of the Natural, Political, and Commercial Circumstances of Ireland*, published in 1809, a copy of which was in the collection of the Montreal Library in 1824.<sup>256</sup> Newenham held that detailed, accurate, and current information was essential to the good government and trade of the British nation and empire, yet very little was available about Ireland, a kingdom of strategic value. He was specifically interested in Irish land use and claimed that millions of acres were underutilized, including fallow meadows and bogs and swamps that could be drained and turned to corn, flax, or potatoes.<sup>257</sup> Moreover, Britain's role as an imperial power meant that it had to use information about its colonies in new and better ways for the improvement and good of the whole:

...the prosperity of an empire, thus constituted, being evidently proportionate to the conjunct prosperity of its constituent parts; not to that of either alone. Without such knowledge, measures reciprocally beneficial to both parts, and thus specially eligible, will seldom be devised; while others may possibly be adopted, pregnant with much immediate benefit to the principal part of the empire, but perhaps detrimental to the inferior one, as to occasion, ultimately, a diminution of imperial prosperity.<sup>258</sup>

Newenham was writing about Ireland and its relationship within the United Kingdom in this instance, but his arguments likely resonated with a group of men in Montreal who saw Rupert's Land as a "vast and almost unknown portion of the empire" to be developed and improved, which in turn would bring benefit to the commercial and geographic aspirations of British North America and the British Empire of which it was a part.

---

<sup>255</sup> Carroll, *Science, Culture, and Modern State Formation*, 91.

<sup>256</sup> The copy of Newenham's *A View of Ireland* in the Montreal Library's catalogue is incorrectly dated 1801. See *Catalogue of the Books in the Montreal Library*, 49.

<sup>257</sup> Thomas Newenham, *A View of the Natural, Political, and Commercial Circumstances of Ireland* (London: Printed for T. Cadell and W. Davies, 1809), xi.

<sup>258</sup> *Ibid.*, 3.



A view towards developing the economic potential of Upper Canada was foremost in the work of Robert Gourlay (1778-1863), a Scottish farmer and political reformer who travelled to Upper Canada in 1817 to deal with land inherited by his wife, Jean Henderson. Gourlay found the “province simmering with discontent.”<sup>259</sup> The economy was depressed after the end of the War of 1812 and immigration had stalled, in large part due to the refusal of the colonial government to make land grants to American settlers. Gourlay, who in 1809 had published a pamphlet outlining a radical and exceptionally complicated plan for reforming the British electoral system, prepared a survey of thirty-one questions on the colony’s population, agricultural conditions, labour markets, and local settlement or improvement projects which he had printed in the *Upper Canada Gazette* and mailed to several hundred township officials.<sup>260</sup> The result was a two-volume account published in London in 1822 in which Gourlay outlined, according to the work’s subtitle, a “grand system of emigration”. S.F. Wise contends that Gourlay’s questions were largely modelled on those composed by Sir John Sinclair in his *Statistical Account of Scotland*, published in twenty-one volumes between 1791 and 1799.<sup>261</sup> The final question in Gourlay’s survey made plain his own opinion of the colony’s situation: “What, in your opinion, retards the improvement of your township in particular, or the province in general; and what would most contribute to the same?”<sup>262</sup> Gourlay was also critical of efforts to settle the colony to date, including “the mischief done by the Duke of Richmond [Charles Lennox, 1764-1819] in...hurrying poor emigrants into the depths of the wilderness, without thought or preparation,” such that they suffered from

---

<sup>259</sup> S.F. Wise, “Gourlay, Robert,” in *Dictionary of Canadian Biography*, University of Toronto/Université Laval, accessed September 7, 2015, [http://www.biographi.ca/en/bio/gourlay\\_robert\\_fleming\\_9E.html](http://www.biographi.ca/en/bio/gourlay_robert_fleming_9E.html).

<sup>260</sup> Ibid.

<sup>261</sup> Ibid.

<sup>262</sup> Robert Gourlay, *Statistical Account of Upper Canada* (London: Simpkin & Marshall, 1822), 1:274. The Duke of Richmond served as governor-in-chief of British North America from 1818 until his death from rabies in August 1819.

“discomfort, want, ague, and death.”<sup>263</sup> Gourlay received over fifty replies to his survey and an immense amount of data and statistics on the population, economy, agricultural potential, and social life of the colony. The first volume of his report ended with a section dedicated to listing factors that “retarded the improvement of the Province” including want of population, absentee landlords, poor navigation on the rivers, “want of rousing up” and a “defect in the system of colonization,” which Gourlay blamed on ignorant ministers in London and hyperconservative colonial administrators.<sup>264</sup> Gourlay’s agitation for political reform and his abrasive egomania resulted in charges of seditious libel in 1818. He was acquitted, but faced additional charges towards the end of the year and he spent most of 1819 in jail awaiting trial. He was banished from British North America in August 1819 and spent the rest of his life attempting to vindicate his work in Upper Canada.<sup>265</sup> Gourlay’s project demonstrated that surveys and improvement projects could be viewed as dangerous by the colonial administration as the responses he received from the townships demonstrated a desire to improve the province by the reform of land administration, specifically the abolition of the Crown and Clergy Reserves, a controversial and politically charged proposition that threatened the authority of the government and the hegemony of the Protestant religious establishment.

The Indian Committee could also look to recent ambitious work by Lewis Cass (1782-1866), a veteran of the War of 1812 and Governor of the Michigan Territory since 1813, to gather information on the Aborigines of the Michigan and Missouri Territories. As governor, Cass had been responsible for acquiring huge tracts of Aboriginal land in the Michigan Territory, including the last two million acres of unceded land in northwest Ohio, as well as most of central and lower

---

<sup>263</sup> Ibid., 1:i.

<sup>264</sup> Ibid., 1:623-25.

<sup>265</sup> Wise, “Gourlay, Robert.”

Michigan and parts of Wisconsin. These were primarily set aside for white settlement, but they also had strategic significance since a larger American population around Detroit and in Ohio and Michigan would cut off Aborigines in the Michigan Territory and the American interior from British military posts and settlements in places like Amherstburg and Drummond Island, thereby reducing their military capabilities and their ability to collude with foreign enemies.<sup>266</sup> It would also place a larger American population at the border with Upper Canada, which could both repel an attack from the north or better support a future American invasion. Cass was a political protégé of John Calhoun and his project, like Jedidiah Morse's, was in response to Calhoun's desire for "satisfactory information respecting the Indians." In 1821, Cass printed and distributed a survey of 345 questions, titled "Inquiries, Respecting the History, Traditions, Languages, Manners, Customs, Religion, &c. of the Indians, Living within the United States," to Indian agents, missionaries, and fur traders.<sup>267</sup> Like Morse in 1820, Cass sought to learn more about the "constitution of their [Indians'] minds, or their moral habits."<sup>268</sup> A second set of inquiries on Aboriginal languages was issued in 1822 and both sets of questions were printed together in 1823. Cass's 1821 questionnaire was divided into twenty sections: "Traditions" (seventeen questions); "Government" (thirty-three questions); "War and its Incidents" (forty-one questions); "Peace" (eleven questions); "Death and its Incidents" (seventeen questions); "Birth, and its Incidents" (twenty-nine questions); "Marriage and its Incidents" (twenty-seven questions); "Family, Government, Social Relations, &c." (nine questions); "Medicine" (medicine questions); "Astronomy, Mathematics, &c." (sixteen questions); "Music and Poetry" (eleven questions); "Religion" (nineteen questions); "General Manners and Customs" (twenty-two questions); "Food,

---

<sup>266</sup> Anderson, *Ethnic Cleansing and the Indian*, 138-39.

<sup>267</sup> C.A. Weslager, *The Delaware Indian Westward Migration* (Wallingford, PA: Middle Atlantic Press, 1978), 85.

<sup>268</sup> Ibid.

Mode of Living, Cooking, Meals, &c.” (fifteen questions); “Games, Dances and Amusements” (twelve questions); “Peculiar Societies” (ten questions); “International Law and Relations” (eight questions); “Hunting” (fifteen questions); “Constitution, Personal Appearance, Dress, &c.” (fourteen questions); “Belts, Strings of Wampum, Hieroglyphics, Representations, &c.” (twelve questions) and twenty-seven questions on language.<sup>269</sup> These questions treated almost every aspect of Aboriginal culture and society in exhausting detail; as C.A. Weslager concluded, “It would be difficult to find a subject that his questions did not cover.”<sup>270</sup> In a short preface to the 1823 collection, Cass wrote that Aboriginals were on the verge of extinction, telling his readers “The time for collecting material to illustrate the past and present condition of the Indians is rapidly passing away,” in which case it was essential to capture data to use in future historical studies.<sup>271</sup>

It is not known who received Cass’s surveys or how they were distributed or who replied, but at least one literate Seneca, Jacob Jameson (ca. 1800-40), who had been educated at Dartmouth, replied to the surveys at a point between 1821 and 1825.<sup>272</sup> Cass received enough replies to his surveys from other respondents that by the middle of the 1820s he was able to write with some recognized authority on the Delaware, Shawnee, Miami, Kickapoo, and Wyandot.<sup>273</sup> He subsequently authored three influential articles on Aboriginals published in the *North American Review*, one of the most widely read American periodicals, which solidified his reputation as an expert on Aboriginal policy. In 1826 he produced a long piece on the state of North America’s

---

<sup>269</sup> Lewis Cass, *Inquiries Respecting the History, Traditions, Languages, Manners, Customs, Religion, etc., of the Indians Living within the United States* (Detroit: Sheldon & Reed, 1823).

<sup>270</sup> Weslager, *The Delaware Indian Westward Migration*, 85.

<sup>271</sup> Cass, *Inquiries*, 10.

<sup>272</sup> William N. Fenton, ed, “Answers to Governor Cass’s Questions by Jacob Jameson, A Seneca [1821-1825],” *Ethnohistory* 16 (1969): 113-15.

<sup>273</sup> Ibid; Rowse, “Population Knowledge,” 21. Part of Weslager’s study is a fifty-nine-page reply to Cass’s *Inquires* headed “Answers to the questions proposed in the Pamphlet By the Delaware and Monsies.” The author of the answers is not known. See Weslager, *The Delaware Indian Westward Migration*, 86.

Indians in which he argued that despite having lived together for almost three hundred years on the same continent, Americans still knew very little about Aboriginals' moral or physical character. He blamed whites for many of the problems facing Indians including a displacement from their lands and their need for guns, cloth, and "other tempting articles," specifically alcohol.<sup>274</sup> Cass believed in the notion of a noble savage that could be brought to civilization, but he was scornful of historic attempts by groups like Catholic missionaries to lead Aboriginals to knowledge, industry, and commerce. Aboriginals owed the missionaries "not one valuable improvement in the arts; nor a single principle, which can restrain their passions, or give hope to principle, motive to exertion or confidence to virtue." Instead, "Our hopes must rest on the rising generation" being education at Protestant missionary schools who would adhere to American, not Indian, values. Cass concluded, however, that the best thing to do for the Aboriginals was to do nothing. He asked his reader, "How are we to afford the Indians any aid? How are we to preserve them from decline and extinction?...The whole subject, however, is involved in great doubt and difficulty, and it is better to do nothing than to hazard the risk of increasing their misery."<sup>275</sup> Cass, like Morse, concluded his essay with a series of moralistic recommendations designed to make the government the guardian of the Indian race, including prohibiting alcohol on Aboriginal lands, enforcing trade laws, excluding trappers and hunters from Indian Territory, encouraging Aboriginals to become property owners, and appropriating \$10,000 to a fund to encourage civilizing efforts. After that, Cass, wrote, "We should leave their fate to the common God of the white man and the Indian."<sup>276</sup> Despite Cass's desire to preserve the status quo, as territorial governor he had shown an almost

---

<sup>274</sup> Meriwether Lewis also blamed Europeans for corrupting the morals of Aboriginals by making them dependent on European goods. See Meriwether Lewis, "Appendix" in *History of the Expedition Under the Command of Captains Lewis and Clark to the Sources of the Missouri: Thence Across the Rocky Mountains*, vol. 2 (Philadelphia: Bradford and Inskeep, 1814), 436.

<sup>275</sup> Cass Lewis, "Indians of North America," *North American Review* 22, no. 50 (1826): 118-19.

<sup>276</sup> *Ibid.*, 119.

boundless enthusiasm to acquire Aboriginal land for the United States and he invested \$20,000 of his own money in the building of canals in the Michigan Territory, developments that would significantly displace its Aboriginal inhabitants.<sup>277</sup>

Cass's 1826 essay also engaged with the question of Indian removal. As early as 1803 Congress had considered a policy of government-organized removal during debates on the appropriations bill attached to the Louisiana Purchase and by the middle of the 1820s removal was becoming an increasingly attractive policy option for the American government.<sup>278</sup> In his January 1825 message to Congress, President Monroe wrote that he was:

...deeply impressed with the opinion that the removal of the Indian tribes from the lands which they now occupy within the limits of the several states and Territories . . . is of very high importance to our Union.

The removal of the tribes from the territory which they now inhabit... would not only shield them from impending ruin, but promote their welfare and happiness. Experience has clearly demonstrated that in their present state it is impossible to incorporate them in such masses, in any form whatever, into our system. It has also demonstrated with equal certainty that without a timely anticipation of and provision against the dangers to which they are exposed, under causes which it will be difficult, if not impossible to control, their degradation and extermination will be inevitable.<sup>279</sup>

Not only would removal free land for settlement, industry, and agriculture, but it would also protect and shield Aborigines from influences that would hurry their extinction. Through this discourse of humanitarian intervention, Patrick Brantlinger writes that removal advocates could "see removal as 'philanthropy' rather than tyranny, forced diaspora, or genocide."<sup>280</sup> Despite the American government's increasing interest in organized removal, Cass cautioned against it his

---

<sup>277</sup> John A. Andrew, *From Revivals to Removal: Jeremiah Evarts, the Cherokee Nation, and the Search for the Soul of America* (Athens: University of Georgia Press, 2007), 146.

<sup>278</sup> Anderson, *Ethnic Cleansing and the Indian*, 115-16.

<sup>279</sup> James Monroe, "Special Message to Congress, January 27, 1825," The American Presidency Project, University of California, Santa Barbara, accessed July 4, 2015, <http://www.presidency.ucsb.edu/ws/?pid=66430>.

<sup>280</sup> Brantlinger, *Dark Vanishings*, 57.

1826 essay and again in another article published in 1827. By 1830, however, Cass had wholeheartedly embraced removal, which had become the stated policy of Andrew Jackson's administration.<sup>281</sup>

In addition to Andrew Holmes's involvement in the creation of the circular and "Instructions," it is likely that William McKay had a role in helping to compose the survey's questions given his experience in the Interior as an NWC trader and his liaison work with Aborigines during and after the War of 1812. McKay had served for almost a decade at one of the largest gathering places for Aborigines in northern Michigan and the southern part Upper Canada, and he may have been sent a copy of one or both of Cass's surveys in the hope that he himself would respond to the questions, or he may have come across the surveys as a result of his work at the border of the United States and British North America.

The Indian Committee's survey is divided into five thematic sections that cover almost every aspect of the geography, environment, and inhabitants of the Interior: "General Queries," four questions (or 1.5% of the whole) related to where the survey taker was located, when Europeans first came that part of the Interior, and where he had been stationed previously; "Of the Geography of the Country," twenty questions (or 7.9% of the whole) on physical geography including waterways, mountains, tree coverage, soil conditions, and access to the sea; "Of the Inhabitants," seventy-two questions (or 30% of the whole) on the Aboriginal residents including population, dress, customs, language, economy, and communications; "Of the Natural Productions of the Country," one hundred and thirty-five questions (or 53.7% of the whole) on animals, birds, reptiles, insects, plants, and minerals; and "Of the Climate, & the Country," fourteen questions (or

---

<sup>281</sup> Cass's subsequent articles were published in volumes 24 and 30 of the *North American Review*. In 1831 Cass was appointed Secretary of War in Andrew Jackson's administration and would have political authority for Aboriginal policy in the United States until 1836.

5.9% of the whole) on the weather, seasons, when rivers or lakes froze, the presence of the northern lights, and the frequency of rain, thunder, and earthquakes.<sup>282</sup>

The majority of questions dealt with the geography and “natural productions” of the Interior, testifying to the Indian Committee’s interest in the resources, animals, and minerals that could be farmed, harvested, killed, and mined. The second section, “Of the Geography of the Country,” asked respondents about local rivers, lakes, mountain ranges, and proximity to the ocean. Question 17 asked if the survey taker had been to the Pacific or Arctic Oceans or to Hudson’s Bay; Question 18 then asked about the potential for shipping that might have been observed, while Question 19 asked for a description of the coastline as well as a sketch. Question 23 asked about soil conditions and the fitness for agriculture of wherever the survey taker was located; he was asked to provide specifics as to nature of the soil and if it was “rocky, sandy, clayey, &c.”<sup>283</sup> Mirroring Lewis Cass’s and William Clark’s surveys, the seventy-seven questions “Of the Inhabitants” of the Interior asked a range of demographic, cultural, and anthropological questions: “What Tribe or Tribes inhabit your district, what is their present number—both of families and of individuals?,” “What is the number of warriors in each Tribe?,” and “Is the number of Indian inhabitants increasing or decreasing—if decreasing to what cause do you attribute it?” There were also questions on medicine and epidemiology: “What are the most common diseases in your districts—are any epidemical and in what month do they rage?,” as well as questions about gender relations, marriage and mourning customs, child rearing, and pastimes: “Are the children that are deformed, of deficient in members, suffered to live, or are they destroyed or deserted?,” How long do the women continue to bear among the Indians and

---

<sup>282</sup> “First Report of the Indian Committee,” Appendix B: “Queries Addressed by the Indian committee of the Natural History Society of Montreal to Individuals Resident in the Interior.”

<sup>283</sup> Ibid.



are the pains of labour comparatively easy?,” and “What knowledge have they of music, and have they any airs with which you could favour the society?”<sup>284</sup> The survey also asked questions about languages, tools, weapons, clothing, and transportation methods.

The survey questions on Aboriginals did not assume a population untouched by contact with Europeans or North Americans. Respondents were asked “At what time was your district first visited by Europeans traders?,” “What number of *metis* or *bois brulés* [emphasis in original], are there in your district?” and “What kind of barter or trade do the Indians carry on with the Europeans, and of what commodities?,” a recognition of longstanding relationships of proximity, commerce, and intermarriage created by interaction between whites and Aboriginals in the Interior.<sup>285</sup> The questions on Aboriginal characteristics, though, exist between the two poles of what Sean P. Harvey has described as the “‘savage mind’ capable of improvement and a fixed ‘Indian mind,’ seemingly ‘doomed to extinguishment by some inscrutable fiat...like the primitive inhabitants of Canaan.”<sup>286</sup> The survey asked, “What is the general character of the Indians and what are their virtues and vices? State if they are faithful, industrious, sincere, cheerful, enduring &c. or the contrary.”<sup>287</sup> The question presented a binary: Aboriginals were faithful or they were not. Respondents were also asked questions like: “In what manner do the Indians express joy or grief?,” “In what way do they reckon the measure of liquids?,” and “Have they any notion of a future state, or a state of bliss in a future world?”<sup>288</sup> These questions displayed a kind of late Enlightenment philosophy in which Aboriginals were acknowledged as human and were endowed with some human characteristics related to emotion, comprehension

---

<sup>284</sup> Ibid.

<sup>285</sup> Ibid.

<sup>286</sup> Harvey, *Native Tongues*, 146.

<sup>287</sup> “First Report of the Indian Committee,” Appendix B: “Queries.”

<sup>288</sup> Ibid.

of justice and the afterlife, and the ability to make basic calculations, yet were held to be savage and in need of exposure to civilization.<sup>289</sup>

The fourth section, “Of the Natural Productions of the Country,” was the longest and inquired after quadrupeds, birds, fish, snakes, insects, molluscs, trees and plants, rocks and boulders, minerals, and sand. Questions related to the resources of the Interior existed alongside questions that sought to gather scientific information and data. The survey was interested in all aspects of mammalian, fish, reptile, and insect reproduction, behaviour, and how they were used by Aboriginals, either as food or as medicine or as a product to treat and trade like fur. Many times respondents were asked to give the Aboriginal words or names for creatures or implements, “distinguishing the language of each tribe.”<sup>290</sup> The survey also wanted to know about the various kinds of plants of the Interior, including their uses for food or as poisons, as medicine, in dyes, or for making intoxicating liquors. Questions were also asked about the presence of fossils in rock formations as well lichen, stalagmites and “very large bones occasionally found in the earth, or bogs, and swamps which, apparently, do not belong to any animal now common to the country or neighbourhood.”<sup>291</sup> The longest question in the survey, Question 219, indicated a belief in Humboldt’s theory about the relationship between plants, geographical location, and climate:

---

<sup>289</sup> For a discussion of late Enlightenment attitudes towards North American Aboriginals, particularly those articulated in *L'Histoire philosophique et politique des établissements et du commerce des Européens dans les deux Indes* (1770) compiled by Guillaume Thomas Raynal (1713-96), see Harry Liebersohn, *Aristocratic Encounters: European Travellers and North American Indians* (Cambridge: Cambridge University Press, 2001), esp. 13-38 and Nathaniel Wolloch, “Barbarian Tribes, American Indians and Cultural Transmission: Changing Perspectives from the Enlightenment to Tocqueville,” *History of Political Thought* 34, no. 3 (2013): 507-539, esp. 525-27.

<sup>290</sup> “First Report of the Indian Committee,” Appendix B: “Queries.”

<sup>291</sup> Ibid.

Have you observed that as you advance into the country that trees, shrubs and plants which were common appear to decrease in number, and others make their appearance in quantities which were previously scarce; or, in other words, that there are limits to the country producing such plants? If so, state where such changes are perceptible, and whether owing to difference of climate, soil, or situation?<sup>292</sup>

Humboldt's belief that the presence of plants was predicated on climate, including temperature and soil conditions, was first promulgated in *Essai sur la géographie des plantes*, published in Paris in 1805 and based on observations collected during a trip through the Americas between 1799 and 1804. The Montreal Library's 1824 catalogue includes three English translations of works by Humboldt: *Researches Concerning the Institutions & Monuments of the Ancient Inhabitants of America* (1814), *Personal Narrative* (1814), and *Political Essay on the Kingdom of New Spain* (1811), which included astronomical observations and meteorological data from Mexico.<sup>293</sup> Humboldt's work had a significant impact on North American natural history and exploration. William Goetzmann called Europeans who ventured into the West "Humboldt's children."<sup>294</sup> These included Thomas Nuttall, whom Kent Mathewson has described as "one of North America's earliest and most eminent natural scientists working in the Humboldt tradition."<sup>295</sup> Nuttall's honorary membership in the Montreal Natural History Society is evidence that the Society imagined itself as a node in an international Humboldtian scientific network in which data was being gathered from all corners of the globe for the benefit of mankind.

The last section of the Queries treated climate and weather, including the general climate of the region, but also the beginning and ends of the seasons, when rivers and lakes froze (and if not, why), the frequency of rain, hail, thunder, meteors, and earthquakes, and, in another nod to

---

<sup>292</sup> Ibid.

<sup>293</sup> Montreal Library, *Catalogue of the Montreal Library*, 35.

<sup>294</sup> A chapter in Goetzmann's, *New Lands, New Men: America and the Second Great Age of Discovery* (New York: Viking, 1985) was titled "Humboldt's Children."

<sup>295</sup> Kent Mathewson, "Alexander von Humboldt's Image and Influence in North American Geography, 1804-2004," *Geographical Review* 96, no. 3 (2006): 422.

accuracy and observation, if thermometer readings were available. Question 250 sought to clarify the behaviour of the northern lights: “Is the aura borealis or northern lights ever seen in your district, and are they heard to crackle as some persons have said?”<sup>296</sup> The ultimate question, Question 253, held out hope for additional information: “Is there any other thing connected with any of the foregoing subjects which you think worthy of communication, if so, state it fully as if questioned on that point,” echoing the circular’s exhortation that respondents could not be too full in their replies.<sup>297</sup>

The Indian Committee’s annual report pointed to what it planned to do with the information gathered from the Interior. It recommended that the Society permit it to continue its work or that it strike a new committee in order to:

...prepare an extensive detail of the manners, customs, languages, and institutions of the Indian tribes of North America, of former days and of times present, but more particularly of the British possession—of the Physical Geography and Natural History of the Interior and its fitness for the purposes of agriculture and Commerce. This work may appear at first sight laborious and extensive, but may in reality be easily perfected by engaging the various subjects in detail.<sup>298</sup>

The Committee most likely had in mind to produce studies that would establish its reputation, replicating those by Cass or several by Meriwether Lewis like “Observations and Reflections on the Present and Future State of Upper Louisiana, in Relation to the Government of the Indian Nation” and “Estimate of the Western Indians” that included the names of Aboriginal groups, their places of residence, the number of habitations, and the “probable number of souls” published in the 1814.<sup>299</sup> In the absence of the administrative ability of the Canadian state to gather data and in the context of Aboriginal policy dictated by Whitehall and executed by officers of the British army,

---

<sup>296</sup> “First Report of the Indian Committee,” Appendix B: “Queries.”

<sup>297</sup> Ibid.

<sup>298</sup> Ibid.

<sup>299</sup> Lewis, “Appendix,” 434-535

the Indian Committee wanted to assume an authoritative voice that would have the power to shape policy and influence decision makers in London and Quebec City, but that would also be considered knowledgeable on the topic of colonization and Aboriginal policy in places like Washington, New York, Boston, and across the British Empire, as well as in the pages of respected journals and scientific publications.

Despite the participation of George Simpson and his promises of support, the HBC's Governor and London Committee had a very different notion of how its employees should participate in the Indian Committee's project. In their reply to a letter from Simpson in which he described the survey and the arrangement he had come to with the Indian Committee, his superiors wrote:

We have received your letter of the 27<sup>th</sup> April from La Chine, and the only part which at present requires noticing is that relating to the Natural Historical Society of Montreal [sic], and we have to desire that the officers at the different settlements reply as fully as possible to the several printed queries but that they do not on any account forward them to the Society at Montreal, but transmit them to us as early as possible.<sup>300</sup>

Accordingly, the antepenultimate item in the minutes of the Rupert's Land Northern Department council held at Norway House on June 22, 1829, almost fourteen months after Simpson left Lachine with the surveys, ordered HBC employees to deliver completed questionnaires to York Factory, the administrative capital of Rupert's Land, for dispatch to London:

That Chief Factors, Chief Traders, and Clerks in charge of Districts and Posts be directed to prepare answers to certain Queries connected with the Natural History of this Country as p[er]. printed list, and deliver the same at the Depot next year for the purpose of being transmitted to the Governor and Committee.<sup>301</sup>

---

<sup>300</sup> R. Harvey Fleming, ed. *Minutes of Council, Northern Department of Rupert Land, 1821-31* (Toronto: Champlain Society and Hudson's Bay Record Society, 1940), 248n. Simpson's letter of April 27 has not been located in the Hudson's Bay Company Archives in Winnipeg.

<sup>301</sup> *Ibid.*, 248.

The HBC had no compunction in seizing data or information that could be to its benefit or that could potentially threaten its authority in the Interior. It was a privately held company responsible to no one except its small group of British shareholders and it wanted information about its North American territories available to it in London, rather than in the hands of assorted amateur natural historians in Montreal. Given the Company's historic disinclination to support colonization projects, it is highly likely that the Governor and London Committee were suspicious of and not entirely pleased with the Society's project to investigate the fitness of Rupert's Land for commerce and agriculture. The Company may also have been unsettled by several questions, including Question 30, which asked "Is the number of Indian inhabitants increasing or decreasing—if decreasing to what cause do you attribute it?"<sup>302</sup> This introduced the possibility of declining numbers of Aborigines in lands administered by the HBC and could have been taken as a criticism of the Company's treatment of the Interior's indigenous populations, particularly in the years leading up to the creation of the Aborigines' Protection Society by British evangelicals in 1837 to promote the well-being of Native peoples in Britain's overseas possessions. Question 104, "Are they [quadrupeds] numerous or scarce, and are they less numerous than in former years," could have been read as a criticism of the Company's management of the Interior's fur-bearing populations.<sup>303</sup>

It would appear, however, that the Indian Committee and the Montreal Natural History Society were oblivious to the HBC's actions for a significant amount of time. The Committee's 1828 annual report described how it looked "forward to much valuable information that will be received at the close of this and the succeeding years" from the HBC as a result of the survey.<sup>304</sup>

---

<sup>302</sup> "First Report of the Indian Committee," Appendix B: "Queries."

<sup>303</sup> Ibid.

<sup>304</sup> "First Report of the Indian Committee."

While Suzanne Zeller and Ted Binnema have written that replies to the survey were received in Montreal, there is no evidence to indicate such in the Society's archive at McGill.<sup>305</sup> Additional evidence that survey replies and materials bypassed Montreal entirely is found in the Society's annual report for 1830. Andrew Holmes, the Society's recording secretary, reported that it had received a significant but unrecorded financial donation from the Hudson's Bay Company as well as:

...a promise of assistance of a kind highly important to the Society. The Honourable Company expresses their desire to aid the view of the Society, in obtaining all the productions of the British Possessions and intimate their intention of contributing, from time to time, to the Society's Museum, such specimens as may be procured by their Agents in the Indian Country.<sup>306</sup>

Holmes also reported, "It was probably by means of the answers made to the queries of the Society, and the collections intended for it, and forwarded to England by the Company's ships, that the Company became aware of the existence of the Society."<sup>307</sup> The HBC, however, knew about the project because George Simpson, like Holmes, was a member of the Indian Committee and Simpson had alerted his superiors to its work in April 1828. Given the lack of archival documentation, it is not known how or when the Committee and Society were informed or realized that no data would be sent to Montreal. In 1830 Holmes and his colleagues might still have been waiting for replies from the Interior, or his report may have been a diplomatic concession as the Society could not afford to offend George Simpson or the HBC, and assistance on their terms was better than no assistance at all. The Company's unrecorded donation to the Society and promises of specimens from the Interior, meanwhile, may have been an attempt to placate the disgruntled group of amateur naturalists. Regardless, the HBC's actions must have been a profound

---

<sup>305</sup> Binnema, *Enlightened Zeal*, 210; Zeller, "Spirit of Bacon," 88.

<sup>306</sup> Montreal Natural History Society, *Third Annual Report of the Natural History Society of Montreal* (Montreal: Montreal Gazette Office, 1830), 2.

<sup>307</sup> *Ibid.*, 4

disappointment to the Indian Committee and to the Society. There is also no evidence that the Committee received replies from those individuals to whom it sent the alternate version of the survey document, including the Saguenay survey directed by Andrew Stuart, or from traders connected with private fur companies. One obvious cause may have been the sheer length of the survey document itself and the level of detail respondents were asked to provide. Individuals who received the survey may have had varying levels of literacy, limited access to paper, pens, and ink with which to compose replies, or they may have believed that they had no relevant knowledge of some or all of the topics included in the survey.<sup>308</sup> Moreover the efforts that individuals needed make in order to acquire and preserve specimens would have likely tested patience and local supplies of glass bottles, “spirituous liquors,” needles, rope, twine, and wooden crates. There is also no evidence of completed surveys in the Hudson’s Bay Company’s Archives in Winnipeg. As a result, we cannot know if the data gathered by HBC employees in the field about the environments in which they were living and working was analyzed or put to use by the Company in planning and decision making or in the creation of maps and charts.

Despite significant gaps in what is known about the fate of the Indian Committee’s survey, the survey instrument itself, along with the prefatory circular and the instructions for the treatment, packing of specimens, sheds light on how the Committee approached the task of acquiring information about the Interior in the way that the questions were formatted and organized. The preponderance of questions related to the geography and natural productions of Rupert’s Land reflected the Committee’s and Society’s specific interest in the resources, space, and contours of Rupert’s Land for the purposes of agriculture, settlement, and colonization. The questions about the Aboriginal inhabitants indicated a desire to gather information on a population that was both a

---

<sup>308</sup> Weslager notes that Lewis Cass was disappointed in the replies he received to his 1821 survey. See Weslager, *The Delaware Indian Westward Migration*, 85-86.



possible threat to settlement, but also a population that was under threat of extinction, in which case data could be used to manage and move them, but also to plan projects to civilize them. The lack of any data and specimens, however, meant that the Indian Committee could not execute its project nor could it attempt to formulate policies for the development of the Interior or recommendations for engaging with its Aboriginal population.

## CONCLUSION

The failure of the Indian Committee to acquire any data from the Interior marked the end of attempts by the Montreal Natural History Society to directly organize scientific fieldwork. No further references to the Indian Committee are found in the Society's records after 1830. Instead, it directed its efforts towards its museum, which included over 1,400 specimens by 1830, and organizing public lectures and events designed to promote and popularize science amongst Montreal residents.<sup>309</sup> William McKay's death from cholera in 1832 meant the loss of the Society member with the strongest connection to the Interior and to Aboriginals in the Canadas, which may have contributed to the abandonment of additional projects. As Zeller and others have noted, during the 1830s the Society became the leading advocate for the creation of a government-funded and administered geological survey. In 1837 it petitioned the legislature of Lower Canada to establish a survey, hoping that its success would motivate the creation of one in Upper Canada, but no action was taken due to the rebellions that broke out that year.<sup>310</sup> A subsequent petition to the government of the Province of Canada in 1841 was better received and a geological survey for the colony was established at Kingston in 1842. Before the end of the year the Survey had moved to Montreal and its scientifically educated staff joined the Natural History Society. The Society's fortunes were likely buoyed by proximity as the Geological Survey shared the Society's offices on Little St. James Street for several years.<sup>311</sup> In the mid-1850s McGill principal and palaeontologist John William Dawson became a member of the Society and served on its board in various

---

<sup>309</sup> Frost, "Science Education in the Nineteenth Century," 36; Gagnon, "The Natural History Society of Montreal's Museum," 111.

<sup>310</sup> Zeller, *Inventing Canada*, 34.

<sup>311</sup> Frost, "Science Education in the Nineteenth Century," 36.

capacities for almost thirty years, lending it prestige as he grew McGill's reputation for scientific research during the same period.

The publication of Charles Darwin's *The Origin of Species* in 1859 marked the end of natural history's heyday and the beginning of professional science that rejected many of natural history's basic assumptions, most notably any connection between the divine and the natural world.<sup>312</sup> By the start of the 1880s, the Society had begun a long, slow decline. In 1881 the Geological Survey moved to Ottawa, taking many important Canadian specimens that had been on loan to the Society's museum with it and the opening of the Redpath Museum at McGill in 1882 lured away visitors and donors of funds and specimens. By 1884 the Society's collection was judged as having "nothing especially noteworthy" with little hope for improvement through acquisitions or conservation of existing specimens.<sup>313</sup> In 1906 the Society put its collections in storage in anticipation of a move to new premises, but delay lead to further delay and, homeless for almost twenty years, the Society finally decided to dissolve itself in 1925 when faced with debts of \$60,000.<sup>314</sup> Two years shy of its centennial, the Society's collections of books and specimens were divided between McGill's library and herbarium and the McCord and Redpath Museums.<sup>315</sup>

The decades between 1830 and the absorption of Rupert's Land into Canada in 1870 were ones of change and flux in the Interior and in the West. The merger of the North West and Hudson's Bay Companies in 1821 had a significant long-term impact on Aboriginal trapping, trading, and

---

<sup>312</sup> Suzanne Zeller, "Natural History," in *Oxford Companion to Canadian History*, ed. Gerald Hallowell (Toronto: Oxford University Press, 2006), 436.

<sup>313</sup> Gagnon, "The Natural History Society of Montreal's Museum," 127.

<sup>314</sup> Ibid., 128.

<sup>315</sup> Frost, "Science Education in the Nineteenth Century," 41.

migratory practices in the years that followed, combined with declining fur stocks.<sup>316</sup> Disease would also have devastating and long-lasting effect on Aboriginal populations on both the Pacific Coast and in the Interior. An 1830-33 malaria epidemic, likely combined with typhus and influenza, killed between 70 to 90% of Aboriginals living on the lower Columbia River while HBC traders estimated that a smallpox epidemic wiped out almost half the Aboriginal population of the Great Plains between 1837 and 1838.<sup>317</sup> The Métis, however, represented a growing population in Rupert's Land, growing from 300 to 1,500 (or a 160% increase) between 1821 and 1831.<sup>318</sup> By 1850 the population of Red River stood at 5,000 and transportation and communication systems between the colony and American settlements at Duluth and St. Paul were becoming more regular and reliable and drawing Aboriginal trade away from the HBC.<sup>319</sup>

Aboriginals on the American Great Plains faced hostility from an increasingly menacing United States government and from waves of settlers from the east looking for available land. The Jackson administration's Indian Removal Act of 1830 meant the forced resettlement of tribes from the East, Midwest, and South to reserved lands west of the Mississippi and new Indian and Intercourse Acts in 1834 increased the regulation of Aboriginal commerce and land ownership and expanded the guardian role the state had formally assumed starting in the 1820s.<sup>320</sup> By the beginning of the 1850s Americans were beginning to homestead on what had been reserved lands,

---

<sup>316</sup> Innis, *The Fur Trade in Canada*, rev. ed. (Toronto: University of Toronto Press, 1967), 332; Arthur J. Ray, *Indians in the Fur Trade: Their Role as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870*, rev. ed. (Toronto: University of Toronto Press, 1998), 202.

<sup>317</sup> James R. Gibson, "Smallpox on the Northwest Coast, 1835-1838," *BC Studies* 56 (1982-83): 61-62; Ray, *Indians in the Fur Trade*, 188. Clyde Dollar has written that the 1837-38 epidemic was so severe that groups like the Mandan were "virtually wiped from the face of the earth." See Clyde D. Dollar, "The High Plains Smallpox Epidemic of 1837-38," *Western Historical Quarterly* 8, no. 1 (1977): 29n.

<sup>318</sup> Ray, *Indians in the Fur Trade*, 205.

<sup>319</sup> Galbraith, *Hudson's Bay Company as an Imperial Factor*, 356.

<sup>320</sup> Francis Paul Prucha, *American Indian Policy in the Formative Years: The Indian Trade and Intercourse Acts* (Cambridge: Harvard University Press, 1962), 251-73.

forcing many Aboriginal groups to relocate even further west to the Indian Territory (present-day Oklahoma), which eventually became a “dumping ground for dispossessed tribes.”<sup>321</sup> American settlement in California and in the Pacific Northwest displaced Aboriginal populations there, with reserves established in California starting in 1851.<sup>322</sup> The scientifically racist notion of the “Indian mind” and character would become increasingly popular and acceptable in North America during the 1830s and 1840s through work by men like Samuel G. Morton (1799-1851), a Philadelphia physician and naturalist and the author of *Crania Americana*, a text on American Indian skulls published in 1839.<sup>323</sup>

Aboriginals in Canada fared better on the whole than those in the United States, if only because the country lacked the same rapidly expanding population and the overwhelming demand for land that it generated, but also because Aboriginal policy was haphazard and uncoordinated across British North America. Starting in the 1830s, however, Aboriginals in the Canadas found their agency increasingly constrained by both the imperial and colonial governments. By the mid-1830s the Upper Canadian government had acquired millions of acres of Aboriginal land for settlement prompting the imperial parliament to pass the Crown Lands Protection Act in 1839, which gave the Crown guardianship of all Aboriginal land. This was designed to curtail land speculation at the expense of Aboriginals and to prevent squatting by settlers, but its primary goal was to facilitate colonization. It denied Aboriginals the right of land ownership and it weakened their ability to negotiate favourable treaties.<sup>324</sup> The 1844 report of the Bagot Commission on the

---

<sup>321</sup> Brad A. Bays, “Indian Territory,” *Encyclopaedia of the Great Plains*, University of Nebraska, Lincoln, accessed August 15, 2015, <http://plainshumanities.unl.edu/encyclopedia/doc/egp.na.050>.

<sup>322</sup> Anderson, *Ethnic Cleansing and the Indian*, 210.

<sup>323</sup> Samuel G. Morton, *Crania Americana: Or a Comparative View of the Skulls of Various Aboriginal Nations of North and South America* (Philadelphia and London: J. Dobson and Simpkin, Marshall, & Co., 1839).

<sup>324</sup> C.L. Higham, *Noble, Wretched, & Redeemable: Protestant Missionaries to the Indians in Canada and the United States, 1820-1900* (Calgary: University of Calgary Press, 2000), 38.

state of Aboriginal affairs in the Canadas recommended that the government encourage Aboriginals to give up nomadic lifestyles for agriculture, but it also called for the creation of Indian schools and the subsidization of religious education for Aboriginals.<sup>325</sup> These recommendations came to define Canada's Aboriginal policy for over one hundred years and marked the start of the residential school system.

Despite the HBC's claim to the Privy Council in 1838 that it was doing a service to the "mother country in securing to it a branch of commerce which they are at present wrestling out of the hands of foreigners, subjects of Russia and the United States of America," by the end of the 1830s neither successive Whig nor Tory governments at Westminster saw much benefit to supporting the Company's monopoly given increasing demands for free trade.<sup>326</sup> Calls for the Company to surrender its charter and monopoly over trade in Rupert's Land and the Columbia Department were emerging from several quarters. In 1846 Aborigines' Protection Society member and prominent British Quaker Charles Gilpin wrote that he cared less that "the Hudson's Bay Company's monopoly is not productive of the slightest advantage to the Budget of the mother country" than that the Company's actions had created a "state of utter dependence" amongst Aboriginals on the Company, thus condemning them to "darkest heathenism."<sup>327</sup> In the Pacific Northwest, American migration into the Columbia Department and California during the 1840s, combined with varying degrees of disinterest shown in the Department by successive British governments, undermined the HBC's authority in the region. The 1846 Oregon Treaty, which gave the United States all lands south of the 49<sup>th</sup> parallel while Britain retained lands to the north as well

---

<sup>325</sup> Ibid.

<sup>326</sup> Merk, *Fur Trade and Empire*, 342. The repeal of the Corn Laws in 1846 marked the end of many protectionist economic measures in Britain.

<sup>327</sup> Charles Gilpin, *A Few Words on the Hudson's Bay Company* (London: Charles Gilpin, 1846).

as the whole of Vancouver Island, meant the sacrifice of the HBC's commercial interests by the imperial government to more pressing concerns of Anglo-American peace.<sup>328</sup>

Canadians were also losing patience with the Company. In 1856 Philip VanKoughnet, a minister in the Taché-Macdonald government, openly called into question the validity of the HBC's charter and declared that Canada needed to absorb Rupert's Land so that it could extend its borders to the Pacific Ocean, a call repeated by the colonial government itself several months later.<sup>329</sup> That same year the Aborigines' Protection Society published a pamphlet addressed to the colonial secretary advocating for the surrender of the Company's charter. The Society condemned "the evils which press on the Aborigines in every place under the sway of the Hudson's-Bay Company," but, more seriously, it went on to accuse the Company of undermining British commercial interests by forbidding British ships to trade with Aborigines on the Pacific coast but allowing American vessels to do so, the result of which was the increase of "the fierce passions of savage life."<sup>330</sup> The only solution was an end to the HBC's monopoly and the extension of Canadian, and thus British and Christian, influence from one coast of British North America to the other.

Pressure from many sides resulted in a British parliamentary select committee convened in 1857 to review the Hudson's Bay Company charter. George Simpson, who was still governor-in-residence and who had been knighted in 1841, appeared in London and answered familiar questions about the state of Rupert's Land for agriculture and settlement and about the extent of its resources. He was also asked to account for the Company's treatment of the Aborigines who

---

<sup>328</sup> Galbraith, *The Hudson's Bay Company as an Imperial Factor*, 284-49.

<sup>329</sup> John S. Galbraith, *The Little Emperor: Governor Simpson of the Hudson's Bay Company* (Toronto: Macmillan, 1976), 194.

<sup>330</sup> Aborigines' Protection Society, *Canada West and the Hudson's-Bay Company: A Political and Humane Question of Vital Importance to the Honour of Great Britain, to the Prosperity of Canada, and to the Existence of the Native Tribes* (London: William Tweedie, 1856): 6-7.

traded with it. Simpson was able to deflect most of the criticisms, but the committee's final report reflected a consensus that the Hudson's Bay Company's hegemony over Rupert's Land should draw to a close.<sup>331</sup> While the committee recommended that the Province of Canada be allowed to annex Rupert's Land at a point in the near future, it softened its recommendation by suggesting that the Company's charter and monopoly stand until that time.

A desire amongst Canadians to learn about the geography, resources, and potential of the West continued unabated. After 1842 the Canadian Geological Survey, along with the Royal Geographical Society and increasingly expansionist governments in the Province of Canada, sponsored or organized a number of exploratory projects in the West including those lead by George Gladman (1857-58), Henry Youle Hind (1858, 1861), James Dawson (1858) and John Palliser (1857-59), greatly increasing the amount of scientific and geographic information available from the Interior. Attempts to find the Franklin expedition in the 1840s and '50s undertaken by John Richardson (1848-49), John Rae (1848-49, 1853-54), Edward Belcher (1852-54), and Francis McClintock (1857-59) were also responsible for mapping and surveying large parts of the Arctic and the northern reaches of Rupert's Land.<sup>332</sup> In 1860, the Duke of Newcastle, colonial secretary in Lord Palmerston's second ministry, floated a scheme for the imperial government to buy Rupert's Land from the HBC to enable the creation of an intercontinental railway and telegraph system, a proposition roundly rejected by the Company.<sup>333</sup> This represented the last successful rebuff by the HBC against attempts on its control of the Interior. In 1863 a party sympathetic to an end to the HBC's monopoly acquired a majority interest on its board. A

---

<sup>331</sup> Innis, *The Fur Trade in Canada*, 337.

<sup>332</sup> W. Gillies Ross, "Nineteenth-Century Exploration of the Arctic," in *North American Exploration*, vol. 3, *A Continent Comprehended*, ed. John L. Allen (Lincoln: University of Nebraska Press, 1997), 280-294.

<sup>333</sup> Galbraith, *The Hudson's Bay Company as an Imperial Factor*, 365-67.



subsequent corporate reorganization was designed to facilitate the transfer of Rupert's Land to Canada, but negotiations between the parties stalled until Colonial Secretary Lord Granville imposed a settlement on the Company and the Canadian government in March 1869.<sup>334</sup> The surrender of Rupert's Land by the HBC to the Crown and then its transfer to Canada on July 15, 1870, and the creation of the province of Manitoba, as well as the creation of the province of British Columbia in 1871, meant the end of the Hudson's Bay Company's North American empire. This coincided with the exhaustion of free land in the Western United States and an influx of migrants to the Canadian Prairies. It also marked the start of treaty negotiations with Aboriginals and the extension of the reserve system to the West.

Despite the failure of the Indian Committee's project to gather data on the geography, contours, resources, and inhabitants of the Interior, its attempted survey of Rupert's Land should be seen as an important local effort by Canadians to study a vast part of British North America and its Aboriginal inhabitants. It was an attempt to learn about a part of the continent that might yield important scientific information, but that was also valuable for settlement and agriculture. This in turn would extend and strengthen a British presence across the Interior and westward to the Pacific Ocean. The survey project was also a response to pressures like immigration, British-American-Canadian relations, and increasing nationalism on both sides of the post-1815 border. Partnering with the Hudson's Bay Company was pragmatic and practical and offered the possibility to gather information from men, many of whom had spent years in the Interior and who had developed a deep knowledge of its environment, geography, and resources, as well as its Aboriginal inhabitants. In utilizing and employing scientific and ethnographic methods from Europe and the United States, the Committee sought to acquire detailed and accurate data with which to make the

---

<sup>334</sup> Ibid., 390, 423.

most informed decisions for the benefit of British North Americans and the British Empire. For its part, the HBC was happy to support scientific discovery and exploration, but it had no compunction in seizing information that might compromise or promote its economic interests in Rupert's Land. The Montreal Natural History Society's project ultimately frustrated by overriding commercial interests, yet circumstances in the Interior and the Canadas changed quickly as British North Americans began to imagine a country stretching from the Atlantic to the Pacific. The members of the Indian Committee could not know it in 1827, but within a relatively short period time their desire develop and improve this "extensive and almost unknown portion of the empire" and to measure and manage its Aboriginal population had been achieved.

## BIBLIOGRAPHY

### PRIMARY SOURCES

#### Archives

Montreal Natural History Society Collection. Blacker-Wood Manuscripts, Department of Rare Books and Special Collections. McGill University Library.

“First Report of the Indian Committee of the Natural History Society of Montreal Read at the Meeting of that Society on the 26<sup>th</sup> May 1828,” MS Folio QH1 N2698 1828.

“Minutes of the Indian Committee of the Natural History Society of Montreal, 29 February 1828,” QH1 N274.

#### Print

Aborigines’ Protection Society. *Canada West and the Hudson’s-Bay Company: A Political and Humane Question of Vital Importance to the Honour of Great Britain, to the Prosperity of Canada, and to the Existence of the Native Tribes*. London: William Tweedie, 1856.

American Philosophical Society. *Proceedings of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge* 3-4 (1843).

Anderson, P.J., et al., *Roll of Commissioned Officers in the Medical Service of the British Army...20 June 1727 to 23 June 1898*. Aberdeen: University of Aberdeen Press, 1917.

Buffon, George-Louis Leclerc, Comte de. *Buffon’s Natural History. Containing a Theory of the Earth, a General History of Man, of the Brute Creation, and of Vegetables, Minerals, &c.* Vol. 7. Edited by James Smith Barr. London: Printed by T. Gillet, 1807.

Canada Company. *Lands in Upper Canada to be Disposed of by the Canada Company*. London: Marchant, 1828.

Cass, Lewis. “Indians of North America.” *North American Review* 22, no. 50 (1826): 53-119.

———. *Inquiries Respecting the History, Traditions, Languages, Manners, Customs, Religion, etc., of the Indians Living within the United States*. Detroit: Sheldon & Reed, 1823.

Commission for Exploring the Country Lying between the Rivers Saguenay, Saint Maurice and Saint Lawrence. *Report of the Commissioners for Exploring the Country Lying between the Rivers Saguenay, Saint Maurice and Saint Lawrence*. Quebec: NP, 1831

- Dobbs, Arthur. *An Account of the Countries Adjoining to Hudson's Bay in the North-West Part of America*. London: Printed for J. Robinson, 1744.
- Doige, Thomas. *An Alphabetical List of the Merchants, Traders, and Housekeepers Residing in Montreal to which is Prefixed a Descriptive Sketch of the Town*. Montreal: James Lane, 1819.
- Ellis, Henry. *A Voyage to Hudson's Bay*. London: Printed for H. Whitridge, 1748.
- Fleming, R. Harvey, ed. *Minutes of Council, Northern Department of Rupert Land, 1821-30*. Toronto: Champlain Society and Hudson's Bay Record Society, 1940.
- Gilpin, Charles. *A Few Words on the Hudson's Bay Company*. London: Charles Gilpin, 1846.
- Gordon, Alexander. "Observations on the Present Appearance and Prospects of Gardening in the Canadas." *The Gardeners Magazine & Register of Rural and Domestic Improvement* 6 (1840): 63-69.
- Gourlay, Robert. *Statistical Account of Upper Canada*. Vol 1. London: Simpkin & Marshall, 1822.
- Jefferson, Thomas. "Life of Captain Lewis." In *History of the Expedition Under the Command of Captains Lewis and Clark*. Vol. 1. Philadelphia: Paul Allen, 1814.
- . *Notes on the State of Virginia*. London: Printed for John Stockdale, 1797.
- Lee, Sarah. *Taxidermy: Or, the Art of Collecting, Preparing, and Mounting Objects of Natural History*. London: Longman, Hurst, Rees, Orme, and Brown, 1820.
- Lewis, Meriwether. "Appendix." In *History of the Expedition Under the Command of Captains Lewis and Clark to the Sources of the Missouri: Thence Across the Rocky Mountains*. Vol. 2. Philadelphia: Bradford and Inskeep, 1814.
- Lyceum of Natural History of New York, *Annals of the Lyceum of Natural History of New York* 1 (1824).
- Merritt, J.P. *Biography of the Hon. W.H. Merritt, M.P.* St. Catherines: NP, 1875.
- Merritt, William Hamilton. *Account of the Welland Canal, Upper Canada*. NP, 1828.
- Mackenzie, Alexander. *Voyages from Montreal, on the River St. Laurence, Through the Continent of North America, to the Frozen and Pacific Oceans*. London: T. Cadell, Jun. and W. Davies, 1801.

- Montreal Library. *Catalogue of the Books in the Montreal Library*. Montreal: The Library, 1824.
- Montreal Natural History Society. *Constitution and Bye-Laws of the Natural History Society of Montreal*. Montreal: Montreal Gazette, 1828.
- . *Third Annual Report of the Natural History Society of Montreal*. Montreal: Montreal Gazette Office, 1830.
- Morse, Jedidiah. *A Report to the Secretary of War of the United States on Indian Affairs*. New Haven: S. Converse, 1822.
- Morton, Samuel G. *Crania Americana: Or a Comparative View of the Skulls of Various Aboriginal Nations of North and South America*. Philadelphia and London: J. Dobson and Simpkin, Marshall, & Co., 1839.
- Newenham, Thomas. *A View of the Natural, Political, and Commercial Circumstances of Ireland*. London: Printed for T. Cadell and W. Davies, 1809.
- Nova Scotia Society for the Promotion of Agriculture, *Letters and Papers of Agriculture Extracted from the Correspondence of a Society Instituted at Halifax for Promoting Agriculture in the Province of Nova-Scotia*. Vol. 1. Halifax: John Howe, 1791.
- Quebec Historical and Literary Society. *Report of the Commissioners for Exploring the Country Lying Between the Rivers Saguenay, Saint Maurice and Saint Lawrence*. Quebec: NP, 1831.
- Robson, Joseph. *An Account of Six Years Residence in Hudson's-Bay from 1733 to 1736, and 1744 to 1747*. London: Printed for J. Payne and J. Bouquet, 1752.
- Spooner, Thomas. *Records of William Spooner, of Plymouth, Mass., and His Descendants*. Vol. 1. Cincinnati: Press of F.W. Freeman, 1883.
- Umfreville, Edward. *The Present State of Hudson's Bay: Containing a Full Description of that Settlement and the Adjacent Country*. London: Printed for Charles Stalker, 1790.
- West, John. *Substance of a Journal During a Residence at the Red River Colony, British North America; And Frequent Excursions Among the North-West American Indians in the Years 1820, 1821, 1822, 1823*. 2nd edition. London: L.B. Seeley & Son, 1827.

## Online

Hudson's Bay Company. "Corporate Collections: The Charter." Accessed July 24, 2015.  
<http://www.hbcheritage.ca/hbcheritage/collections/archival/charter/charter>.

Monroe, James. "Special Message to Congress, January 27, 1825." American Presidency Project, University of California at Santa Barbara. Accessed August 11, 2015.  
<http://www.presidency.ucsb.edu/ws/?pid=66430>.

National Archives. "The Declaration of Independence: A Transcription." Accessed August 15, 2015.  
[http://www.archives.gov/exhibits/charters/declaration\\_transcript.html](http://www.archives.gov/exhibits/charters/declaration_transcript.html).

Osher Map Library, University of Southern Maine. "The Basel 1494 Columbus Letter-Translation." Accessed August 12, 2015. <http://oshermaps.org/special-map-exhibits/columbus-letter/iii-translation>.

Vision of Britain. "The Questions, by Means of Which was to be Ascertained the Number of Houses, Families, and Persons (with the Ages of Persons in the Year 1821)." Accessed June 13, 2015. [http://www.visionofbritain.org.uk/census/SRC\\_P/2/GB1821PRE](http://www.visionofbritain.org.uk/census/SRC_P/2/GB1821PRE).

## SECONDARY SOURCES

### Print

Allen, Robert S. *His Majesty's Indian Allies: British Indian Policy in the Defence of Canada, 1775-1815*. Toronto: Dundurn Press, 1992.

Anderson, Gary Clayton. *Ethnic Cleansing and the Indian: The Crime that Should Haunt America*. Norman: University of Oklahoma Press, 2014.

Anderson, John. *Deep Things Out of Darkness: A History of Natural History*. Berkeley: University of California Press, 2013.

Andrew, John A. *From Revivals to Removal: Jeremiah Evarts, the Cherokee Nation, and the Search for the Soul of America*. Athens: University of Georgia Press, 2007.

Baillie, James L., Jr. "Naturalists on Hudson Bay." *The Beaver* (December 1946): 36-39.

Barman, Jean. *French Canadians, Furs, and Indigenous Women in the Making of the Pacific Northwest*. Vancouver: University of British Columbia Press, 2014.

Berger, Carl. *Science, God, and Nature in Victorian Canada*. Toronto: University of Toronto Press, 1983.

- , and Ramsay Cook, eds. *The West and the Nation: Essays in Honour of W.L. Morton*. Toronto: McClelland & Stewart, 1976.
- Berry, Brewton. "The Myth of the Vanishing Indian." *Phylon* 21, no. 1 (1960): 51-57.
- Bieder, Robert. *Science Encounters the Indian 1820-1880: The Early Years of American Ethnography*. Norman: University of Oklahoma Press, 1989.
- Binnema, Ted. *Enlightened Zeal: The Hudson's Bay Company and Scientific Networks, 1670-1870*. Toronto: University of Toronto Press, 2014.
- , Gerhard J. Ens, and Roderick Macleod, eds. *From Rupert's Land to Canada: Essays in Honour of John E. Foster*. Edmonton: University of Alberta Press, 2001.
- Brantlinger, Patrick. *Dark Vanishings: Discourse on the Extinction of Primitive Races, 1800-1930*. Ithaca: Cornell University Press, 2003.
- Bross, Kristina. "Dying Saints, Vanishing Savages: 'Dying Indian Speeches' in Colonial New England Literature." *Early American Literature* 36, no. 3 (2001): 325-52.
- Browne, Janet. "Biogeography and Empire." In *Cultures of Natural History*, edited by N. Jardine, J.A. Secord, and E.C. Spary, 305-21. Cambridge: Cambridge University Press, 1996.
- Byrne, Angela. *Geographies of the Romantic North: Science, Antiquarianism and Travel, 1790-1830*. London: Palgrave Macmillan, 2013.
- Calloway, Colin C. *Crown and Calumet: British-Indian Relations, 1783-1815*. Norman: University of Oklahoma Press, 1987.
- Cannon, Susan Faye. *Science in Culture: The Early Victorian Period*. New York: Science History Publications, 1978.
- Carroll, Patrick. *Science, Culture, and Modern State Formation*. Berkeley: University of California Press, 2006.
- Chaplin, Joyce E. *Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier*. Cambridge: Harvard University Press, 2001.
- Chartrand, Luc, Raymond Duchesne, and Yves Gingas. *Histoire des sciences au Québec de a Nouvelle-France à nos jours*. Revised edition. Montréal: Boréal, 2009.
- Cohen, H. Floris. *The Scientific Revolution: A Historical Inquiry*. Chicago: University of Chicago Press, 1994.

- Cohn, Bernard, and Nicholas Dirks. "Beyond the Fringe: The Nation State, Colonialism, and the Technologies of Power." *Journal of Historical Sociology* 1, no. 2 (1988): 224-29.
- Curtis, Bruce. "The Canada 'Blue Books' and the Administrative Capacity of the Canadian State, 1822-67." *Canadian Historical Review* 74 (1993): 535-65.
- Daschuk, James. *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life*. Regina: University of Regina Press, 2013.
- Davis, Richard C. "Introduction." In *Rupert's Land: A Cultural Tapestry*, edited by Richard C. Davis, 1-12. Calgary: University of Calgary Press, 1988.
- Dewar, Helen. "Old World Conventions and New World Curiosities: North American Landscapes through European Eyes." *Journal of the Canadian Historical Association* 14, no. 1 (2003): 45-63.
- Dickenson, Victoria and Elsbeth Heaman. "Introduction: Natural Science in the New World: The Descriptive Enterprise." *Scientia Canadensis* 31, no. 1-2 (2008): 1-11.
- Dolin, Eric Jay. *Fur, Fortune, and Empire: The Epic History of the Fur Trade in America*. New York: W.W. Norton, 2010.
- Dollar, Clyde D. "The High Plains Smallpox Epidemic of 1837-38," *Western Historical Quarterly* 8, no. 1 (1977): 15-38.
- Dunlap, Thomas R. *Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand*. Cambridge: Cambridge University Press, 1999.
- Dupree, A. Hunter. "The National Pattern of American Learned Societies, 1769-1863." In *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War*, edited by Alexandra Oleson and Sanborn C. Brown, 21-32. Baltimore: Johns Hopkins University Press, 1976.
- Eisenstein, Elizabeth. *The Printing Revolution in Early Modern Europe*. Cambridge: Cambridge University Press, 1983.
- Fenton, William N. ed. "Answers to Governor Cass's Questions by Jacob Jameson, A Seneca [1821-1825]." *Ethnohistory* 16 (1969): 113-15.
- Findlen, Paula. "The Formation of a Scientific Community: Natural History in Sixteenth-Century Italy." In *Natural Particulars: Nature and the Disciplines in Renaissance Europe*, edited by Anthony Grafton and Nancy Siraisi, 369-400. Cambridge: MIT Press, 1999.



- Fleming, Donald. "Science in Australia, Canada, and the United States: Some Comparative Remarks." In *Actes du dixième Congrès Internationale d'Histoire des Sciences*, 176-96. Paris: Hermann, 1962.
- Foster, John. "The Metis: The People and the Term." *Prairie Forum* 3, no. 1 (1978): 19-27.
- . "Rupert's Land and the Red River Settlement, 1820-70." In *The Prairie West to 1905: A Canadian Sourcebook*, edited by Lewis G. Thomas, 19-69. Toronto: Oxford University Press, 1975.
- Foucault, Michel. "Governmentality." *Ideology and Consciousness* 6 (1979), 5-21.
- . *The Order of Things: An Archaeology of the Human Sciences*. 2nd revised edition. London: Taylor & Francis, 2005.
- Fox, Adam. "Printed Questionnaires, Research Networks, and the Discovery of the British Isles, 1650-1800." *Historical Journal* 53, no. 3 (2010): 593-621.
- Francis, Daniel. *Battle for the West: Fur Traders and the Birth of Western Canada*. Edmonton: Hurtig Publishers, 1982.
- Frost, Stanley Brice. *McGill University: For the Advancement of Knowledge*. Vol. 1, 1801-1895. Montreal: McGill-Queen's University Press, 1980.
- . "The Natural History Society of Montreal, 1827-1925." *McGill Journal of Education* 17 (1982): 31-43.
- Fryd, Vivien Green. "Rereading the Indian in Benjamin West's 'Death of Wolfe.'" *American Art* 9, no. 1 (1995): 72-85.
- Galbraith, John S. *The Hudson's Bay Company as an Imperial Factor, 1821-1869*. Berkeley: University of California Press, 1957.
- . *The Little Emperor: Governor Simpson of the Hudson's Bay Company*. Toronto: Macmillan, 1976.
- Gagnon, Hervé. "The Natural History Society of Montreal's Museum and the Socio-Economic Significance of Museums in 19th-Century Canada." *Scientia Canadensis* 18, no. 2 (1994): 103-135.
- Gibson, James R. "Smallpox on the Northwest Coast, 1835-1838." *BC Studies* 56 (1982-83): 61-81.
- Goodrich, Carter, *Canals and American Economic Development*. New York: Columbia University Press, 1961.

- Goetzmann, William H. *Exploration and Empire: The Explorer and the Scientist in the Winning of the American West*. New York: Alfred A. Knopf, 1966.
- . *New Lands, New Men: America and the Second Great Age of Discovery*. New York: Viking, 1985.
- Greer, Kirsten A. "Placing Colonial Ornithology: Imperial Ambiguities in Upper Canada, 1791-1841." *Scientia Canadensis* 31, no. 1-2 (2008): 85-112.
- Hakim, Catherine. "Census Reports as Documentary Evidence: the Census Commentaries, 1801-1951." *Sociological Review* 28, no. 3 (1980): 551-580.
- Hammond, Lorne. "Marketing Wildlife: The Hudson's Bay Company and the Pacific Northwest, 1821-49." *Forest & Conservation History* 37, no. 1 (1993): 14-25.
- Hanock, Robert L.A. "Toward a Historiography of Canadian Anthropology." In *Historicizing Canadian Anthropology*, edited by Julia Harrison and Regna Darnell, 30-43. Vancouver: University of British Columbia Press, 2006.
- Harvey, Sean P. *Native Tongues: Colonialism and Race from Encounter to the Reservation*. Cambridge: Harvard University Press, 2015.
- Heilbron, J.L. "Introductory Essay." In *The Quantifying Spirit in the 18<sup>th</sup> Century*, edited by Tore Frängsmyr, J.L. Heilbron, and Robin E. Rider, 1-23. Berkeley: University of California Press, 1990.
- Hickey, Donald R. *The War of 1812: A Short History*. Urbana-Champaign: University of Illinois Press, 2012.
- Higham, C.L. *Noble, Wretched, & Redeemable: Protestant Missionaries to the Indians in Canada and the United States, 1820-1900*. Calgary: University of Calgary Press, 2000.
- Hoebel, E. Adamson. "William Robertson: An 18<sup>th</sup> Century Anthropologist-Historian." *American Anthropologist* 62, no. 4 (1960): 648-55.
- Horsman, Reginald. *Race and Manifest Destiny: The Origins of American Racial Anglo-Saxonism*. Cambridge: Harvard University Press, 1981.
- Innis, Harold. *The Fur Trade in Canada*. Revised edition. Toronto: University of Toronto Press, 1967.
- Jackson, Donald, ed. *Letters of the Lewis and Clark Expedition with Related Documents*. Vol. 1. Revised edition. Urbana: University of Illinois Press, 1978.
- Jacobs, Margaret. "Western History: What's Gender Got to Do with It?" *Western Historical Quarterly* 42, no. 3 (2011): 297-203.

- Jennings, Francis. *The Founders of America: How Indians Discovered the Land, Pioneered in It, and Created Great Classical Civilizations*. New York: Norton, 1984.
- John, Susan Lee. "Nail This to Your Door: A Disputation on the Power, Efficacy, and Indulgent Delusion of Western Scholarship that Neglects the Challenge of Gender and Women's History." *Pacific Historical Review* 79, no. 4 (2005): 605-617.
- Johns, Adrian. "Natural History as Print Culture." In *Cultures of Natural History*, edited by N. Jardine, J.A. Secord, and E.C. Spary, 106-24, Cambridge: Cambridge University Press, 1996.
- Johnson, Stanley C. *A History of Emigration from the United Kingdom to North America, 1763-1912*. London: George Routledge & Sons, 1913.
- Lamonde, Yvan. *The Social History of Ideas in Quebec, 1760-1896*. Translated by Phyllis Aronoff and Howard Scott. Vol. 1. Montreal: McGill-Queen's University Press, 2013.
- Larson, James. "The Most Confused Knot in the Doctrine of Reproduction." In *The Quantifying Spirit in the 18<sup>th</sup> Century*, edited by Tore Frängsmyr, J.L. Heilbron, and Robin E. Rider, 267-90. Berkeley: University of California Press, 1990.
- Legget, Robert. *Rideau Waterway*. Toronto: University of Toronto Press, 1955.
- Lennox, Jeffers. "An Empire on Paper: The Founding of Halifax and Conceptions of Imperial Space, 1744-55." *Canadian Historical Review* 88, no. 3 (2007): 373-412.
- Leslie, John F. *Commissions of Inquiry into Indian Affairs in the Canada's 1828-1858: Evolving a Corporate Memory for the Indian Department*. Ottawa: Indian Affairs and Northern Development Canada, 1985.
- Lewis, Andrew J. *A Democracy of Facts: Natural History in the Early Republic*. Philadelphia: University of Pennsylvania Press, 2011.
- Liebersohn, Harry. *Aristocratic Encounters: European Travellers and North American Indians*. Cambridge: Cambridge University Press, 2001.
- Lindsay, Debra. "Peter Fidler's Books: Philosophy and Science in Rupert's Land." In *Readings in Canadian Library History*, edited by Peter F. McNally, 209-29. Ottawa: Canadian Library Association, 1986.
- McCormick, Ted. "Governing Model Populations: Queries, Quantification, and William Petty's 'Scale of Salubrity,'" *History of Science* 51, no. 2 (2013): 179-197.

- Mapp, Paul W. *The Elusive West and the Contest for Empire, 1713-1763*. Chapel Hill: Omohundro Institute of Early American History and Culture and University of North Carolina Press, 2011.
- Mathewson, Kent. "Alexander von Humboldt's Image and Influence in North American Geography, 1804-2004." *Geographical Review* 96, no. 3 (2006): 416-38
- Merk, George, ed. *Fur Trade and Empire: George Simpson's Journal, 1824-25*. Cambridge: Harvard University Press, 1931.
- Moodie, D.W. "Early British Images of Rupert's Land." In *Man and Nature on the Prairies*, edited by Richard Allen, 1-20. Regina: Canadian Plains Research Center, 1976.
- Morrison, Jean "To Promote the Interest and Security of the North West Company: Canada's Fur Trade and the War of 1812," *Ontario History* 109, no. 1 (2012): 162-84.
- Morton, W.L., ed. *The Shield of Achilles: Aspects of Victorian Canada*. Toronto: McClelland & Stewart, 1968.
- Murphy, Kathleen S. "Portals of Nature: Networks of Natural History in Eighteenth-Century British Plantation Societies." PhD diss., Johns Hopkins University, 2008.
- Nicandri, David L. "Lewis and Clark: Exploring Under the Influence of Alexander Mackenzie," *Pacific Northwest Quarterly* 95, no. 4 (2004): 171-81.
- Ott, Jennifer. "Running the Rivers in the Snake Country: The Hudson's Bay Company's Fur Desert Policy." *Oregon Historical Quarterly* 104, no. 2 (2003): 166-95.
- Otter, A.A., den. *Civilizing the Wilderness: Culture and Nature in Pre-Confederation Canada and Rupert's Land*. Edmonton: University of Alberta Press, 2012.
- Outram, Dorinda. "New Spaces in Natural History." In *Cultures of Natural History*, edited by N. Jardine, J.A. Secord, and E.C. Spary, 249-65. Cambridge: Cambridge University Press, 1996.
- Pannekoek, Frits. *A Snug Little Flock: The Social Origins of the Riel Resistance of 1869-70*. Winnipeg: Watson & Dwyer, 1991.
- Parrish, Susan Scott. *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World*. Chapel Hill: University of North Carolina Press, 2006.
- Perkins, Bradford. *Castlereagh and Adams: England and the United States, 1812-1823*. Berkeley: University of California Press, 1964.
- Peterson, Jacqueline. "Prelude to Red River: A Social Portrait of the Great Lakes Metis," *Ethnohistory* 25 (1978): 41-67.

- Podruchny, Carolyn. *Making the Voyageur World: Travellers and Traders in the North American Fur Trade*. Lincoln: University of Nebraska Press, 2006.
- Price, David A. *Love and Hate in Jamestown: John Smith, Pocahontas, and the Start of a New Nation*. New York: Knopf, 2007.
- Prince, Sue Ann. "Introduction." In *Stuffing Birds, Pressing Plants, Shaping Knowledge: Natural History in North America, 1730-1860*, edited by Sue Ann Prince, 1-9. Philadelphia: American Philosophical Society, 2003.
- Prucha, Francis Paul. *American Indian Policy in the Formative Years: The Indian Trade and Intercourse Acts*. Cambridge: Harvard University Press, 1962.
- Pyenson, Lewis, and Susan Sheets-Pyenson. *Servants of Nature: A History of Scientific Institutions, Enterprises and Sensibilities*. London: HarperCollins, 1999.
- Ray, Arthur J. "Fur Trade History as an Aspect of Native History." In *One Century Later: Western Canadian Reserve Indians Since Treaty 7*, edited by Ian A.L. Getty and D.B. Smith, 7-19. Vancouver: University of British Columbia Press, 1978.
- . *Indians in the Fur Trade: Their Role as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870*. Revised edition. Toronto: University of Toronto Press, 1998.
- Raymond, Joad. *The Invention of the Newspaper: English Newsbooks, 1641-1649*. Oxford: Clarendon Press, 1996.
- Rich, E.E. *The History of the Hudson's Bay Company, 1670-1870*. 2 vols. London: Hudson's Bay Record Society, 1959-59.
- Robert, Jean-Claude. "An Immigration Population." *Historical Atlas of Canada*. Vol. 2, *The Land Transformed*, edited by R. Louis Gentilcore and Patrick Macklem, 21-23. Toronto: University of Toronto Press, 1987.
- Roberts, Leslie. *Montreal: From Mission Colony to World City*. Toronto: Macmillan of Canada, 1969.
- Ronda, James. "Exploring the American West in the Age of Jefferson." In *North American Exploration*. Vol. 3, *A Continent Comprehended*, edited by John L. Allen, 9-74. Lincoln: University of Nebraska Press, 1997.
- Rosenthal, Nicolas G. "Beyond the New Indian History: Recent Trends in the Historiography on the Native Peoples of North America." *History Compass* 4, no. 5 (2006): 962-74.

- Ross, W. Gillies. "Nineteenth-Century Exploration of the Arctic." In *North American Exploration*, vol. 3, *A Continent Comprehended*, edited by John L. Allen, 244-331. Lincoln: University of Nebraska Press, 1997.
- Rowse, Tim. "Population Knowledge and the Practice of Guardianship," *American Nineteenth Century History* 15, no. 1 (2014): 15-42.
- Ruggles, Richard I. *A Country So Interesting: The Hudson's Bay Company and Two Centuries of Mapping, 1670-1870*. Montreal: McGill-Queen's University Press, 2011.
- Schefke, Brian. "The Hudson's Bay Company as a Context for Science in the Columbia Department." *Scientia Canadensis* 31, no. 1-2 (2008): 67-84.
- Shapiro, Barbara J. *A Culture of Fact: England, 1550-1720*. Ithaca: Cornell University Press, 2000.
- Shaw, Ronald E. *Canals for a Nation: The Canal Era in the United States*. Lexington: University of Kentucky Press, 2014.
- Stagg, J.C.A. *The War of 1812: Conflict for a Continent*. Cambridge: Cambridge University Press, 2012.
- Stearns, R.P. "The Royal Society and the Company." *The Beaver* (June 1945): 8-13.
- Sterling, Keir B. "Alexander Mackenzie." In *Biographical Dictionary of American and Canadian Naturalists and Environmentalists*, edited by Keir B. Sterling, 490-93. Westport, CT: Greenwood Publishing, 1997.
- Sweet, Jessie M. "Instructions to Collectors: John Walker (1793) and Robert Jameson (1817); With Biographical Notes on James Anderson (LL.D.) and John Anderson (M.D.)." *Annals of Science* 29, no. 4 (1972): 397-414.
- Thomas, Greg. "The Smithsonian and the Hudson's Bay Company." *Prairie Forum* 10, no. 2 (1985): 283-306.
- Thornton, Russell. "Population of Native North Americans." In *A Population History of North America*, edited by Michael R. Haines and Richard H. Steckel, 9-50. Cambridge: Cambridge University Press, 2000.
- Trask, Kerry A. *Black Hawk: The Battle for the Heart of America*. New York: Henry Holt, 2013.
- Trudel, Marcel. *Canada's Forgotten Slaves: Two Hundred Years of Bondage*. Translated by George Tombs. Revised edition. Montreal: Véhicule Press, 2013.
- Ubelaker, Douglas H. "North American Indian Population Size, AD 1500 to 1985." *American Journal of Physical Anthropology* 77 (1988): 289-94.

- Van Kirk, Sylvia. "The Impact of White Women on Fur Trade Society." In *Sweet Promises: A Reader on Indian-White Relations in Canada*, edited by J.R. Miller, 180-204. Toronto: University of Toronto Press, 1991.
- . *Many Tender Ties: Women in Fur-Trade Society, 1670-1870*. Winnipeg: Watson & Dwyer, 1980.
- Ventura, Jaume, and Hans-Joachim Voth. *Debt into Growth: How Sovereign Debt Accelerated the First Industrial Revolution*. Zurich: Department of Economics, University of Zurich, 2005.
- Wallace, Anthony F.C. *Jefferson and the Indians: The Tragic Fate of the First Americans*. Cambridge: Belknap Press, 1999.
- Welch, Margaret. *The Book of Nature: Natural History in the United States, 1825-1876*. Boston: Northeastern University Press, 1998.
- Weslager, C.A. *The Delaware Indian Westward Migration*. Wallingford, PA: Middle Atlantic Press, 1978.
- Widmalm, Sven. "Accuracy, Rhetoric, and Technology: The Paris-Greenwich Triangulation, 1784-88." In *The Quantifying Spirit in the 18<sup>th</sup> Century*, edited by Tore Frägsmyr, J.L. Heilbron, and Robin E. Rider, 179-206. Berkeley: University of California Press, 1990.
- Williams, Glyndwr. "The Hudson's Bay Company and its Critics in the Eighteenth Century." *Transactions of the Royal Historical Society*, 20 (1970): 149-71.
- Wolloch, Nathaniel. "Barbarian Tribes, American Indians and Cultural Transmission: Changing Perspectives from the Enlightenment to Tocqueville." *History of Political Thought* 34, no. 3 (2013): 507-39.
- Zeller, Suzanne. *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation*. Revised edition. Montreal: McGill-Queen's University Press, 2009.
- . *Land of Promise, Promised Land: The Culture of Victorian Science in Canada*. Ottawa: Canadian Historical Association, 1996.
- . "Natural History." In *Oxford Companion to Canadian History*, edited by Gerald Halliwell, 435-36. Toronto: Oxford University Press, 2006.
- . "Nature's Gullivers and Crusoes: The Scientific Exploration of British North America, 1800-1870." In *North American Exploration*. Vol. 3, *A Continent Comprehended*, edited by John L. Allen, 190-243. Lincoln: University of Nebraska Press, 1997.
- . "The Spirit of Bacon: Science and Self-Perception in the Hudson's Bay Company, 1830-1870." *Scientia Canadensis* 13, no. 2 (1989): 79-101.

Zilberstein, Anya. "The Natural History of Early Northeastern America." In *New Natures: Joining Environmental History with Science and Technology Studies*, edited by Dolly Jørgensen, Fine Arne Jørgensen, and Sara B. Pritchard, 21-36. Pittsburgh: University of Pittsburgh Press, 2013.

## Online

Allen, Robert S. "Mckay, William." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 27, 2015.  
[http://www.biographi.ca/en/bio/Mckay\\_william\\_6E.html](http://www.biographi.ca/en/bio/Mckay_william_6E.html).

Bays, Brad A. "Indian Territory." In *Encyclopaedia of the Great Plains*, edited by David J. Wishart. University of Nebraska-Lincoln, 2011. Accessed August 15, 2015.  
<http://plainshumanities.unl.edu/encyclopedia/doc/egp.na.050>.

Beaver, Donald deB. "Lee, Sarah (1791–1856)." In *Oxford Dictionary of National Biography*, ed. H. C. G. Matthew and Brian Harrison. Oxford University Press, 2004. Accessed July 28, 2016. <http://0-www.oxforddnb.com.mercury.concordia.ca/view/article/16310>.

Bensley, Edward Horton. "Holmes, Andrew Fernando." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 26, 2015.  
[http://www.biographi.ca/en/bio/holmes\\_andrew\\_fernando\\_8E.html](http://www.biographi.ca/en/bio/holmes_andrew_fernando_8E.html).

Burroughs, Peter. "Ramsay, George, 9<sup>th</sup> Earl of Dalhousie." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed August 5, 2015.  
[http://www.biographi.ca/en/bio/ramsay\\_george\\_7E.html](http://www.biographi.ca/en/bio/ramsay_george_7E.html).

Kuntz, Harry. "Science Culture in English-Speaking Montreal, 1815-1842." PhD diss., Concordia University, 2010. <http://spectrum.library.concordia.ca/979513/1/NR71149.pdf>.

Lamb, W. Kaye. "Mackenzie, Sir Alexander." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed June 24, 2015.  
[http://www.biographi.ca/en/bio/mackenzie\\_alexander\\_5E.html](http://www.biographi.ca/en/bio/mackenzie_alexander_5E.html).

———. "Vancouver, George." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed August 9, 2015.  
[http://www.biographi.ca/en/bio/vancouver\\_george\\_4E.html](http://www.biographi.ca/en/bio/vancouver_george_4E.html).

Leighton, Douglas. "Napier, Duncan Campbell." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed August 12, 2015.  
[http://www.biographi.ca/en/bio/napier\\_duncan\\_campbell\\_9E.html](http://www.biographi.ca/en/bio/napier_duncan_campbell_9E.html).

Mackinnon, C. S. "Hearne, Samuel." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 26, 2015.  
[http://www.biographi.ca/en/bio/hearne\\_samuel\\_4E.html](http://www.biographi.ca/en/bio/hearne_samuel_4E.html).



- Rice, Keren. "Aboriginal Languages of Canada." In *Canadian Encyclopedia*. Historica Canada. Accessed August 16, 2015. <http://www.thecanadianencyclopedia.ca/en/article/aboriginal-people-languages/>.
- Sale, Kirkpatrick. "Columbus, Christopher." In *Oxford Companion to United States History*. Oxford University Press, 2001. Accessed July 2, 2015. <http://0-www.oxfordreference.com.mercury.concordia.ca/view/10.1093/acref/9780195082098.001.0001/acref-9780195082098-e-0329>;
- Trudel, Marcel. "Cartier, Jacques." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 26, 2015. [http://www.biographi.ca/en/bio/cartier\\_jacques\\_1491\\_1557\\_1E.html](http://www.biographi.ca/en/bio/cartier_jacques_1491_1557_1E.html).
- . "Champlain, Samuel de." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 26, 2015. [http://www.biographi.ca/en/bio/champlain\\_samuel\\_de\\_1E.html](http://www.biographi.ca/en/bio/champlain_samuel_de_1E.html).
- . "Donnacona." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 10, 2015. [http://www.biographi.ca/en/bio/donnacona\\_1E.html](http://www.biographi.ca/en/bio/donnacona_1E.html).
- Williams, Glyndwr. "Cook, James." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed July 26, 2015. [http://www.biographi.ca/en/bio/cook\\_james\\_4E.html](http://www.biographi.ca/en/bio/cook_james_4E.html).
- Willie, Richard A. "West, John." In *Dictionary of Canadian Biography*. University of Toronto/Université Laval, 2003–. Accessed August 18, 2015. [http://www.biographi.ca/en/bio/west\\_john\\_7E.html](http://www.biographi.ca/en/bio/west_john_7E.html).
- Wise, S.F. "Gourlay, Robert." In *Dictionary of Canadian Biography*, University of Toronto/Université Laval, 2003–. Accessed September 7, 2015. [http://www.biographi.ca/en/bio/gourlay\\_robert\\_fleming\\_9E.html](http://www.biographi.ca/en/bio/gourlay_robert_fleming_9E.html).

## APPENDIX

QUERIES  
CONNECTED WITH THE NATURAL HISTORY  
OF THE  
HONORABLE HUDSON'S BAY COMPANY TERRITORY,  
AND THE  
Indian Territories of British North America,  
ADDRESSED TO THE GENTLEMEN IN THE INTERIOR

[Title of Alternate Version:]  
QUERIES ADDRESSED  
BY THE  
*INDIAN COMMITTEE*  
OF THE  
NATURAL HISTORY SOCIETY OF MONTREAL  
TO INDIVIDUALS RESIDENT IN THE INTERIOR,  
*AND TO WHICH ANSWERS ARE REQUESTED AS SOON AS POSSIBLE*

### GENERAL QUERIES.

1. In what part of the interior of British North America is the post in which you are now established—how long have you been there—and can you state in about what latitude or longitude it is situated?
2. At what time was your district first visited by Europeans traders, and was it by the English or French?
3. What is the extent of the district under your charge and superintendence?
4. Have you ever been stationed at other posts, or visited other districts? If so, give the same information concerning them, as you are required to give of that at which you now are.

### OF THE GEOGRAPHY OF THE COUNTRY.

5. What are the principal rivers within your district? Where do they rise? What is their length and general breadth, and into what other river, lake, or sea, do they run?
6. Which of these rivers are navigable, and at what seasons—and of what depth is the water?
7. If any portage occurs on the rivers, state the breadth and the extent of such portage, and from what cause it arises—if from rapids, or falls?
8. What smaller rivers or creeks fall into these larger rivers, and are any made use of for the purposes of trade?
9. What are the courses of these rivers, either from actual observations, from recollection or from the statement of Indians? If possible furnish a small sketch of the supposed route of these rivers.
10. What lakes are found within your district, and what is their extent and depth?

11. From what sources are these lakes supplied and in what direction do their waters find an outlet?
12. What are the names by which the native Indians distinguish these rivers and lakes mentioning in the language of what Tribe and how are they distinguished by European Traders?
13. Can you furnish any maps or charts made by the Indians on bark or any other substance, of the countries they may have visited?
14. Is the district in which you reside mountainous or level? If mountainous, is it in chains or solitary eminences?
15. What rivers arise from the mountains, if any—and what names do the mountains bear?
16. What are the probable heights of such mountains, if any? Are any of them volcanic at present or do any present the appearance of having so been?
17. Have you ever visited the sea coast along the northern portions of the Pacific and Atlantic oceans—or the shores of Hudson's Bay within the Indian Territories?—And in what latitude?
18. What depth of water did you generally find—what kind of anchorage and what protection for shipping?
19. What bays did the coast make, and did you take any notice of the trending of the land? If possible, furnish a sketch?
20. Are there any extensive marshes or swamps in your district—in what part of it, and of what extent and from what causes do they arise?
21. Are these swamps at any season passable—and are they unhealthy?
22. Is the country much wooded, or has the wood been much destroyed by running fires or other causes, and how?
23. Is the soil of your district barren, or fertile, as relating to its fitness for agriculture, is it rocky, sandy, clayey, &c. and of what nature?
24. When do the representative seasons begin and how do the native Indians and others reckon or name them?

#### OF THE INHABITANTS.

25. What Tribe or Tribes inhabit your district, what is their present number—both of families and of individuals?
26. What is the number of warriors in each Tribe—and the number of them devoted to any particular occupation?
27. Are the Indians in the habit of deserting the aged, or the sick, and or of dispatching them when arrived at a certain age, or when their recovery is despaired of?
28. Are the children that are deformed, of deficient in members, suffered to live, or are they destroyed or deserted?
29. From what country did they originally come, and have they any traditions respecting their origin?
30. Is the number of Indian inhabitants increasing or decreasing—if decreasing to what cause do you attribute it?
31. Can you state the number of inhabitants for any number of years?
32. Do many die during the course of the year—either by natural or accidental death, murder or suicide? And can you state the proportion out of a hundred that die annually?

33. What number of *metis* or *bois brulés*, are there in your district?
34. Do the Indians collect together during the summer or winter into villages—where are they situated and what [are] the extent of the population of each village?
35. What is the nature of their habitations in summer and winter—how made and how situated?
36. How do the Indians subsist—do they pay attention to [the] raising of crops?
37. What are the most common diseases in your district—are any epidemical and in what month do they rage?
38. How are diseases remedied by the Indians by what medicines and how prepared?
39. What is the usual age attained by the Indians, and what is the utmost instance of longevity that has come to your knowledge?
40. Are you aware of any causes that contribute to lengthen or shorten the lives of the Indian inhabitants of your district?
41. What are the usual occupations, besides hunting or fishing of the father and sons, in the family of an Indian?
42. At what age do the Indians generally marry and what the usual number of their families?
43. How long do the women continue to bear among the Indians and are the pains of labour comparatively easy?
44. Are women well or ill treated by their husbands? Are they employed solely in household and culinary work or do they engage in hunting and fishing with the rest of their family or what are the usual occupations of the females?
45. What is the dress of the natives both male and female—of what materials made, and generally of what colour?
46. How long will such dresses last them and what may be the supposed value of such dresses?
47. If any part of the dress is made of materials peculiar to the country—state of what kind of stuff—how made and prepared and from where procured?
48. Do they make use of any dye stuff for coloring any part of their dress or clothing. If so, what stuff, how used, and from what place are such materials procured.
49. What are the names given to each part of their dresses and are there any difference between their summer and winter dresses, or have they any dresses for particular occasions?
50. What are the utensils used by the Indians for dressing their victuals and of what made?
51. What tools or instruments are the Indians possessed of for making the various articles they made be in need of—of what made and whence procured?
52. What are the instruments or weapons made use of in hunting and fishing, of what made and whence procured?
53. What are the weapons made use of by the Indians in their wars with other tribes, of what made and whence procured?
54. What are the names which all these weapons, instruments or tools bear among the Indians themselves?
55. Can you furnish any of their articles, stating what they are and whence they came—or if not, with drawings of the same?
56. What the means of conveyance from one place to another made use of by the Indians, and how made?

57. What is the language spoken by the Indians in your district—is it a pure language or is it merely a dialect of some other language?
58. Can you furnish a vocabulary of that language detailing the names of most of the articles in daily use—or to which their general conversation relates?
59. In what manner do the Indians carry on war, and how are they commanded on such occasions?
60. Are they governed by Chiefs and Councils—if so how are they chosen or are their officers hereditary?
61. In what manner is justice distributed among the Indians—or does each man redress his own wrongs?
62. What regulations are there among the Indians to prevent the murder of each other, robbery or other crimes, or have they any notion of crime?
63. What are the ceremonies used at marriages among the Indians?
64. What ceremonies are used at births, and are there any ceremonies made use of at giving the name to young children?
65. What ceremonies are used at the interment of a warrior, chief, or other person?
66. What is the general character of the Indians and what are their virtues and vices? State if they are faithful, industrious, sincere, cheerful, enduring, &c, or the contrary.
67. Are they easily taught or any they dull of comprehension?
68. What knowledge have they of music, and have they any airs with which you could favour the society?
69. What is the age at which an Indian attains majority or is allowed to act for himself?
70. In the event of the death of the parents do the institutions of the tribe point out which of the relations should provide for the children?
71. If there is a system of criminal justice, what are the forms used to try offenders, how condemned and how is the punishment executed?
72. What knowledge have they of astronomy, and by what names do they distinguish the stars?
73. What are their ideas concerning the changes of the season, or weather, thunder, and lightening &c.?
74. What notions have they of a Supreme Being—how distinguished and what are his supposed powers?
75. Have they any notion of a future state, or a state of bliss in a future world?
76. Have they any idea that a life spent in good works will be succeeded by future rewards?
77. What method have they of communicating messages from one tribe to another?
78. In what manner do they convey to future generations, the accounts of the transactions of former years?
79. How are the Chiefs and Council, or other public characters of the tribe supported—is it by contribution from the tribe or how?
80. Do any of the tribe profess to be conjurors and what effect have they on the Indians?
81. Do they devote themselves exclusively to the manufacture of articles in daily use by the Indians?
82. What is the nature of the beds or couches used in the habitations of the Indians and how are the children provided in that respect?
83. How long are children suckled and how dressed?
84. What is the nature of the early education given to the Indian children?

85. Are they taught ferocity, or firmness of character and what duties are inculcated on the children by the parent?
86. Are they taught to fear or disregard death, dishonour and disgrace?
87. What are the games or amusements common to the Indians?
88. What is the appearance of the Indian tribes in your district, what their shape, bodily constitution and characteristic features?
89. What influence does the climate seem to have upon the mind and body of the inhabitants?
90. Do the Indians in any way disfigure themselves by artificial means and how?
91. Do their faculties seem only for some arts and what?
92. What men have existed in the tribe distinguished for bravery, talents or other accomplishments?
93. What prejudices and superstitions are the most general among the tribes you are acquainted with—and how have they arisen?
94. How do they behave with strangers, are they hospitable, or do they bear antipathy to particular tribes and to whom?
95. What kind of barter or trade do they Indians carry on with the Europeans or other tribes and of what commodities?
96. What are deemed articles of luxury among the Indians and whence procured?
97. In what manner do the Indians express their joy or grief at any event and how do they shew their mourning for the death of a relation?
98. In what way do they reckon the distance of one place to another, and what [are] the names of their various measures of distance?
99. In what way do they reckon the measure of liquids and what the names given to such measures?
100. In what way do they compute time and what [are] the names given for measure and space?
101. What is their notion of the comparative value of articles and how do they compute money or its representative and what is the representative?
102. In what manner do the Indians reckon the points of the compass, and by what means do they make their way through woods?

#### OF THE NATURAL PRODUCTIONS OF THE COUNTRY.

103. What are the quadrupeds found within the limits of your district?
104. Are they numerous or scarce, and are they less numerous than in former years?
105. Are the skins of any of them considered valuable in commerce and of what quadrupeds?
106. At what rate or value, according to European or Indian currency, are such skins reckoned?
107. At what seasons do the hunting of such quadrupeds commence, and in what manner are they taken or killed?
108. What use is made of the fat, offals, sinews, &c. Are they used in any part of the dress, weapons, or manufactures of the Indians?
109. By what names are they known by the Indians, distinguishing of what tribe?
110. To what complaints are they subject, which render them of less value to the traders?
111. Do they undergo any changes of colour during the winter, and what changes?

112. Are the skins of your district considered more valuable than those of others, and for what reason?
113. Upon what do the animals sustain themselves, whether on grass or as beasts of prey?
114. Do they live in herds, and do they make periodical visits to the district?
115. What are the numbers of young which they have, and at what time are they brought forth?
116. At what time of year is their rutting season, and how long does the female go with [her] young?
117. Does the female exclusively take charge of the young, and at what age are the latter able to provide for themselves?
118. Are any of these quadrupeds tamed by the Indians, and by what means?
119. Are any of them remarkable for any property or quality?
120. To what age do they generally live?
121. Are any of them remarkable for any singular instinct or habit, such as building, like the beaver?
122. In what manner and in what places, do they pass the winter?
123. What are the number of skins annually exported from your district during a period of years?
124. Are the bones of such quadrupeds found imbedded in the rocks, or bogs and swamps of the district?
125. What birds are found within your district?
126. Are they numerous, and have they decreased or increased within your knowledge?
127. Are any of them birds, and at what season do they make these migrations?
128. Are these migrations made in small numbers, or in large and extensive flocks?
129. Do any of them remain during Winter? Do they become torpid, or in what manner do they provide for themselves?
130. Are the skins of any of them considered of any value in the trade and commerce of the interior, and of what birds?
131. Are the skins or feathers made into ornaments or dresses?
132. At what seasons are such birds hunted, and in what manner are they taken or killed?
133. What use is made of any of the interior parts of birds?
134. By what names are the birds known by the Indians, distinguishing the language of each tribe?
135. Are the generality of them, birds of prey, or do they live on insects principally?
136. At what season do they couple, and prepare their nests?
137. How and of what materials are the nest composed and formed?
138. How many eggs does the female lay, how long does she sit before they are hatched, and how far is she assisted by the male?
139. What is the appearance and size of the eggs?
140. How soon after being hatched are the young birds able to provide for themselves?
141. Are any of them celebrated for the melody or sweetness of their voices?
142. Are the bones of any birds found imbedded in rocks, or in bogs and swamps?
143. What fishes are found in the rivers, lakes or sea coast within your district?
144. What are the more numerous, and which constitute the principal article of food?
145. At what season do they spawn, and do they spawn in great quantities and in what situations?

146. How, and at what season, are they caught, and are they exported to other parts, and in what quantity?
147. Are any of them cured and preserved, and in what manner?
148. Are the guts &c. made use of in any manner by the Indians?
149. By what names are such fishes known by the Indians, distinguishing the language of each tribe?
150. Are any of them peculiar to the rivers, lakes &c. of any district or are they common throughout the whole continent?
151. Are any of them possessed of extraordinary properties, such as the *electric eel*?
152. Are their bones or impressions of them ever found imbedded in the rocks of their district?
153. What serpents are found within the limits of your district?
154. What are the most numerous, and which are considered to possess an venomous bite?
155. Are any of them made use of by the natives as articles of food?
156. How, and in what manner are their bites cured?
157. Are the skins made use of in any part of the dress, or implements of the natives?
158. Do they shed their skins each year, or is the skin permanent?
159. In what manner do they bring forth their young, and in what season?
160. Have they power of fascinating or of rendering torpid the animals on which they prey?
161. What is the nature of their food and how obtained?
162. Are they less dangerous at certain periods than others?
163. Are any of them possessed of any remarkable properties?
164. How are they named by the Indians, distinguishing in the language of each tribe?
165. What other reptiles such as frogs, toads, lizards, &c. are found within your district?
166. Are any used as food by the Indians?
167. Are they useful in part of the implements, dresses or manufactures of the Indians?
168. Are they numerous in your quarter, or are they comparatively scarce?
169. Are any of them venomous, and if so, how are their bites or wounds cured?
170. How are they named by Indians, distinguishing the language of each tribe?
171. Are any of them possessed of remarkable properties, and of what kind?
172. What are the principal insects found in your district?
173. At what seasons are they most found, and under what circumstances?
174. To what birds or fishes do they afford food and sustenance?
175. Upon what do they sustain themselves, and what appears to be their food?
176. Are any of them venomous, and how are their bites cured?
177. Which of them build nests like the bee, ant &c. and in what manner, and at what season?
178. Could any of them be made use of with similar effects in medicine as the *Spanish fly*?
179. What transformations does each insect undergo, and at what season?
180. Upon what substances do they deposit their eggs, and how are they hatched?
181. Do any of the insects perform migrations like the *Locust*?
182. How are they named by the Indians, distinguishing the language of each tribe?
183. Are any of them possessed of remarkable properties, and of what kind?
184. Are the impressions of any of them occasionally found in the rocks of your district?
185. Are any crabs found within the limits of your district?
186. Do they inhabit the fresh or salt water, or are they land crabs, and upon what do they feed?
187. Are they made use of as food by the natives, or for any other purposes?



188. Have they the power of reproducing any of their broken members?
189. Do they annually cast their crust, and have you ever found in their stomach the small bead-like substances called crab's eyes?
190. How are they named by the Indians, distinguishing of what tribes?
191. Are any impressions of their shells found imbedded in the rocks?
192. Have you within the limits of your district any worms that eat through wood or bore through stones, and what is their appearance?
193. Have you any worms possessed of extraordinary properties, such as yielding a peculiar die, or being venomous?
194. What shells have you within the waters of your district, distinguishing these which are of fresh, from those of salt water?
195. Do any of the animals which are contained within the shell cast off that covering, and at what season?
196. Are any of them made use of as food by the Indians, and are any of them poisonous?
197. Are any of them possessed of remarkable properties?
198. Are any of them made use of for ornamenting the dresses of the Indians, for pointing weapons, for money, or for other purposes?
199. Are any shells found imbedded in the rocks, and of what description, and are they numerous or the contrary?
200. Are any corals or sponge found in the waters of your district?
201. Are any very large bones occasionally found in the earth, or bogs, and swamps which, apparently, do not belong to any animal now common to the country or neighbourhood?
202. What plants, shrubs and trees are found within your district, distinguishing the more common from those that are rare, and describing as minutely as possible the flowers, leaves, stalks, &c.?
203. Do any of them yield a wood which is serviceable in commerce, or which is used in making any of the implements, weapons, or furniture of the Indians?
204. Do any of them possess any medical properties, and how are they used, and for what diseases?
205. What juices, gums, and resins do they exude, and for what purposes are they used by the natives?
206. What is the nature of their fruits, stating which are considered poisonous, and which are considered wholesome?
207. If any are poisonous, how are persons cured who have partaken of them?
208. Are the poisons made use of to poison the arrows, darts, &c. of the Indians, and how applied?
209. Are any plants or grass employed as a substitute for hemp for flax in making thread, rope, or cloth for the use of the Indians, and in what manner are they prepared?
210. Are any plants used as dye-stuffs to give colour to any of their clothes or dresses, how prepared, and how applied?
211. Do any of them yield an intoxicating liquor, and how extracted?
212. Are any of them used as a bait or poison for animals, or to stupefy fish?
213. Are the roots of any of them made use of as food or converted to any use by the Indians?
214. Are any plants, vegetable, or grain cultivated by the Indians for their support, what kinds, and how sowed, reaped and gathered?

215. To what particular height or thickness do the trees generally attain, mentioning respectively of each kind?
216. What is the nature of the seeds of these trees, shrubs, plants, how enclosed, how wafted or distributed when ripe?
217. At what season of the year do they first make their appearance, flower, and ripen?
218. What is the nature of the soil in which they are found, whether in woods, meadows, marshes, swamps, rivers, salt lakes or mountains?
219. Have you observed that as you advance into the country that trees, shrubs and plants which were common appear to decrease in number, and others make their appearance in quantities which were previously scarce; or, in other words, that there are limits to the country producing such plants? If so, state where such changes are perceptible, and whether owing to difference of climate, soil, or situation?
220. Does the term *tripe de roche* apply to only one of those substances which grow on old rocks and occasionally used as food by the Indians and traders, or to all indiscriminately?
221. What effects are perceptible upon the human frame when the *tripe de roche* is the only food to be obtained by the traders and Indians?
222. What are the principal minerals found within the limits of your district?
223. Are they found in layers or apparently in solid masses? If in layers, are they horizontal or oblique, dipping into the earth?
224. Are any very large boulders or loose pieces of rock, which appear to have formed part of a solid mass, found in situations apparently not their original position, and to what causes do you attribute their being found in their present situation?
225. Are there any masses found in your district which either by condition or appearance are supposed, or by certainty are known to have fallen from the heavens, and at what time?
226. What are the principal metals and metallic substances found, and of what kind and have the Indians any means of reducing the ores of such metals, and to what purposes do they apply them?
227. Are there any salt mines or salt licks, and are there any streams, marshes or lakes which owe their origin to such mines?
228. Is such salt made use of by the Indians as baits for animals, for curing provisions, or for other purposes?
229. Are there any appearances of volcanoes in your district, and are there found any volcanic productions, such as cinders, lava, and &c.?
230. Of what minerals do the Indians make their arrow and spear heads, chisels, gouges, &c.
231. Are there any minerals of beauty which are made use of by the Indians for ornaments, and how used?
232. What minerals are used to make pots or vessels and other culinary implements by the Indians?
233. Are any minerals used by the Indians as medicines or as charms?
234. Do the rocks in your district present the appearance of petrifications of any animals or plants, or what description, and whether numerous or the contrary?
235. Are there any large tracks of sand or barren lands?
236. Are there any mineral springs to be found in your neighbourhood, to what do you attribute their origin, and are they made use of by the Indians?
237. Are any hot springs to be found in your neighbourhood, to what do you attribute their origin, and are they made use of by the Indians?

238. Are there any caverns of any extent in your district; have they in the interior any stalactities [sic] hanging from the roof or rising from the bottom; are they the resort of wild beasts or are they found to contain the bones of animals?

OF THE CLIMATE, &c. OF THE COUNTRY.

239. What is the nature of the climate in your district, whither dry or humid, cold or warm?  
240. At what periods do the seasons commence, and how are they reasoned by the Indians?  
241. Have you ever made any observations on the thermometer for any period of years, and do you observe any perceptible changes in the climate?  
242. At what time do the rivers and lakes freeze and break up again?  
243. What is the general thickness of the ice, and whether taken smoothly or rough?  
244. If the rivers or lakes never freeze, to what cause do you attribute that circumstance?  
245. Are the colours of the waters of the rivers or lakes peculiar, or to what causes do you attribute that colour?  
246. Are thunder and lightning common, and at what season?  
247. Are hail storms common within your district, and at what season?  
248. Is the quality of rain which falls considerable, and are there any seasons in which the rain is more common than others?  
249. Is the rain ever impregnated with any foreign substances?  
250. Is the aura borealis or northern lights ever seen in your district, and are they heard to crackle as some persons have said?  
251. Have you seen any meteors or unusual appearances in the heavens, if so, give a description of them, mentioning time and place?  
252. Have earthquakes ever been felt in your district, and at what time?  
253. Is there any other thing connected with any foregoing subjects which you think worthy of communication, if so state fully as it questioned on that point?

\*  
\*\*\*  
\*\*\*\*\*  
\*\*\*  
\*