# THE CORDILLERAN COMMUNICATION: 

THE BRIGADE SYSTEM OF THE FAR WESTERN FUR TRADE by
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## ABSTRACT

This thesis is an examination of the fur trade transportation system through the northern Cordillera of North America in the 19th century. An historical geographical approach is used to reveal the development of the fur brigade system in what are now British Columbia and Washington State between 1793 and 1885. The earliest European explorations across the Cordillera, discussed in the first chapter, provided a framework for the routes subsequently used by the fur brigades. Many of the routes were aboriginal trade corridors; native guides typically helped the explorers find their way through the Cordillera. Theoretical considerations are also posed in this chapter to place fur trade transportation in a broader context of transportation modeling. The brigade routes through the Cordillera are the focus of the second chapter but connections beyond the Cordillera and the larger context of the fur trade are important also. The fur trade was a transcontinental and international enterprise. A description and analysis is made of the major routes through the Cordillera used by the Pacific Fur Company until 1812, the North West Company until 1821, and the Hudson's Bay Company until 1846. The system of the Siberian fur trade in this period is also considered.

The third chapter describes the changes that occurred to the transportation system after 1846 with the settlement of the international boundary from the Rockies to the Pacific.

The Hudson's Bay Company searched for an all-British route north of the 49th parallel, settling on a trail across the cascade Mountains between forts Hope, Kamloops and Colvile.

Chapter four identifies the different components of the transportation system in the Cordillera, termed "brigades," including different modes of transportation - canoes and bateaux, horses, men's backs, and dogsleds (used in the winter). The problems of portages, the variety of goods and supplies transported, the regimen, including the scheduling and logistics of the brigades, are all analyzed. Considered also is the human organization of the brigades and the concomitant problems of discipline and protection. The brigade system was tenuously maintained; much was problematic.

The concluding chapter summarizes the development of $a$ transcontinental link and the problems of maintaining such a system of transportation and communication in the pre-railway west. Theoretical issues are raised. The Fraser River gold rush of 1858 impacted on the fur trade in general; the construction of the Cariboo Waggon Road through British Columbia in the early 1860 s further altered the system of fur trade transport. The surveys for a transcontinental railway after confederation and the union of B.C. with Canada in 1871 resulted in the demise of the fur brigade routes as important transportation corridors through the Cordillera.

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|  | ABBREVIATIONS |
| :---: | :---: |
| AO | Archives of Ontario, Toronto |
| BAN | Bancroft Library, Berkeley |
| $\begin{aligned} & \text { BCARS } \\ & (\text { PABC }) \end{aligned}$ | British Columbia Archives and Records Service (formerly Provincial Archives of British Columbia), Victoria |
| BCHQ | British Columbia Historical Quarterly |
| BCLS | British Columbia Legal Surveys, Victoria |
| BL | British Library, London |
| DFB | Dominion Field Books (SGB) |
| HBCA | Hudson's Bay Company Archives, Winnipeg |
| HBRS | Hudson's Bay Record Society, Winnipeg |
| KMA | Kamloops Museum \& Archives |
| NAC | National Archives of Canada |
| NMC | National Map Collection |
| OCHS | Okanogan County Historical Society |
| OHS (1) | Okanagan Historical Society (BC) |
| OHS (2) | Oregon Historical Society |
| PAC | Public Archives of Canada, Ottawa |
| PRO | Public Record Office, London |
| SGB | Surveyor General Branch, Victoria |
| UBC (SC) | University of British Columbia, Special Collections |
| USNA | United States National Archives |
| WHQ | Washington Historical Quarterly |
| WSHS | Washington State Historical Society |

## A note about spellings of place names and other style matters:

In a study of this nature, spellings of place names are often problematic. The spelling of place names has changed over the years. Historic place names are given their most familiar spellings. Some modern place names are included on the new maps produced for this study, in order to orient the reader.

Another consideration is the audience. American spellings are used for places south of the 49 th parallel where usage is familiar, Canadian spellings to the north. An important example is Okanagan Lake and River in British Columbia but Okanogan River and Fort Okanogan in Washington State. The spelling of the historical period being described is used as much as possible. For example, although Colvile is properly spelled with one "l" after Andrew Colvile of the Hudson's Bay Company, the present American spelling of the fort (and town) became common after the 1850s.

All distances, elevations and weights are given in the imperial system with metric conversions in brackets. Figures in quotations are not converted. All French words except for place names are underlined. Some words such as bateau have been adopted into English, although older quoted spellings of this word remain "batteau."

All words underlined in this thesis should be considered italicized.

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## INTRODUCTION

"Whatever course may be taken from the Atlantic, the Columbia is the line of communication from the Pacific ocean... By opening this intercourse between the Atlantic and the Pacific Oceans, and forming regular establishments in the interior...the entire command of the fur trade of North America might be obtained . . .! ${ }^{1}$

When Alexander Mackenzie wrote these words after his famous journey to the Pacific in 1793, he predicted the course of events that would unfold in western North America over the following decades. Although he had mistaken the Fraser River (which he had explored in its upper reaches) for the Columbia River (its mouth discovered a year earlier in 1792 by Robert Gray), Mackenzie had coincidentally envisaged the link between the two rivers, an overland route that would become a vital connection in the operation of the fur trade in the northern Cordillera, the mountain region of North America between the continental divide and the Pacific Ocean. ${ }^{2}$

Although the route that Mackenzie took "from Canada by land" was symbolically a "Northwest Passage" across the continent, it was not the fabled, navigable waterway sought by explorers since Columbus. There was, of course, no such passage except by means of long overland portages across the western Cordillera of the
${ }^{1}$ A. Mackenzie, in W.K. Lamb, ed., Journal of a Voyage from Fort Chipewyan to the Pacific Ocean in 1793, (Cambridge, 1970), 417 .

[^0]continent. The discovery of a practical route through the Cordillera would eventually be made south of Mackenzie's track, subsequent to Simon Fraser's exploration of the river bearing his name in 1808 and David Thompson's exploration of the Columbia River in 1811. The confusion over the courses of the Fraser River, or Ta-cout-ché Tesse ("River of the Tacully nation") as it was called by the Athapaskan-speakers, ${ }^{3}$ and the Columbia River, or Nch'i-Wána ("The Big River") as it was called by Sahaptinspeakers, ${ }^{4}$ was subsequently resolved and an overland connection between the rivers was established. The route between the Fraser and Columbia rivers eventually became known as a "brigade trail," ${ }^{5}$ partly explored by the Pacific Fur Company, made practical by the North West Company and later regularly used by the Hudson's Bay Company. In effect, the trail provided the missing link of a transcontinental "Northwest Passage" through the Cordillera together with another integral part of the transcontinental brigade system, an "express" route via Athabasca Pass and the Columbia River.

The ideal of a monopoly, the goal of the early fur trade companies, was eventually realized by the Hudson's Bay Company, which sought to integrate the fur trade on a continental basis.

[^1]For a time the Hudson's Bay Company possessed a transcontinental monopoly, and the routes by which the fur trade was facilitated were part of that system.

The brigade routes alone, however, are not the full object of this study. The routes formed a system -- a social and economic network -- that was an integral part of the European penetration of the continental interior. What made the brigade system in the Cordillera unique was the way in which the physical context molded prior modes of transportation in the fur trade to this part of the continent. The "Communication," as the transportation network was referred to by the fur traders, was subject to changes and modifications over the long period of its use. Many factors impinged on the system: physical (topography, natural hazards, availability of sustenance and animals, materials for boats and canoes); economic (cost, supply and demand); company/Indian relations (rivalries, conflict, war); personnel (availability of brigade leaders, boatmen, native help); and corporate (competition, company policies and geopolitics).

Geographer John Alwin conducted an earlier study of the Hudson's Bay Company transportation system between Hudson Bay and the Rockies but no similar study has been made of the Cordillera. ${ }^{6}$

[^2]Alwin emphasizes a cultural and historical rather than a purely economic approach, as expressed by Benjamin Thomas, looking at the following: the means of transport (mode); the routes followed and how they changed over time (pattern); and the timing of movements and flows of various cargoes (pulse). ${ }^{7}$ As well, Alwin has emphasized the relationship between transportation and the physical environment.

Similarly, this thesis of fur trade transportation in the Cordillera attempts to provide a holistic view. Transportation routes, whether waterways or roads, cannot be separated from their physical and human context. Neither can the transportation system be isolated from the entire operation of the fur trade. But analysis must begin at some point and end at another; and synthesis must be based on the available data for a delimited time and place. The parameters of this study are the Cordilleran region analogous to the area known as the Oregon Country between the years 1793 and 1885.

This thesis is a study of the modes, techniques and routes of transportation and communication in the Cordilleran fur trade. The study spans a technological transition between pre-industrial and industrial transportation systems. It focuses on the challenge presented by the Cordillera beginning in the last decade of the 18 th century, attaining its apogee with the extension of a fur trade monopoly across the continent after
${ }^{7}$ Thomas, quoted in Alwin, Mode, Pattern and Pulse, 6-7.

1821, and finally coming to an end by industrial capitalism's westward thrust to the Pacific in the mid-1880s with the completion of the transcontinental railways. The dream of a "Northwest Passage" spurred the fur trade to the Pacific Slope in the last quarter of the 18th Century and formed the realization of a transcontinental transportation and communication system. This transcontinental system was briefly interrupted by events in the 1850 s and was not attained again until the last quarter of the 19th century. The ways in which transportation, or "communication," was expedited in the Cordillera also reveal how commercial capitalism extended its values and precepts into the wilderness. The role of communication systems as part of an imperialistic enterprise is thus an underlying theme. As part of the larger context of European expansion in North America, the fur trade brigade system spans a century of transportation development in the Cordillera between prehistoric migration routes and transportation as a catalyst of modern settlement. Today, the routes through the Cordillera can be traced through archival documents. Journals, reports, letters, and maps provide the basis for the reconstruction of the brigade system. The geography of the Cordilleran brigade routes is best revealed in a score of key maps created between 1793 and the early twentieth century. ${ }^{8}$ From the first crossing of the

[^3]continental divide by Europeans to the completion of the transcontinental railways in the northern Cordillera, maps at different scales have been instrumental in sorting out the geography of the region and delineating the network of transportation routes across the Pacific Slope.

This study describes the historical geography of a transportation system that has its legacy in the Cordillera's modern human landscape.

[^4]
## CHAPTER 1

## TRANSPORTATION AND THE FUR TRADE

"The character of transportation as a whole and in detail, at any particular time and throughout its history, is altogether determined by its interrelations with physical and social forces and conditions." ${ }^{9}$

Transportation is a supremely geographical theme which has been addressed by various geographers over the years. ${ }^{10}$ Economic historians have also made important contributions which provide a basis for further geographical studies of transportation. ${ }^{11}$ As well, disparate studies of technology and human organization have relevance to the study of human movement.

However, although much has been written on the western fur trade of North America, systematic and theoretical studies of transportation in connection with the fur trade are sparse. The early historiographical accounts of the western fur trade, including the works of Bancroft, Begg, Burpee, Howay and Scholefield, and Gibbon, deal at length with the search for the "Northwest Passage" and mention to some extent the evolution of

[^5]fur trade transportation and the "brigade system" through the Cordillera. ${ }^{12}$ These narratives were superseded by more analytical twentieth-century treatments, such as Harold Innis' classic book on the Canadian fur trade and G.P. deT. Glazebrook's work on transportation in Canada.

In 1930, Innis, an economic historian, published the first major history of the fur trade of Canada, out of which his "staples theory" developed. Codfish, fur, timber, and grain, according to Innis, are the historical resources or "staples" of the Canadian economy. ${ }^{13}$ Innis' theories of staple products and their role in the development of a uniquely Canadian economy were based not only on a study of supply and demand, of resource and market, but included an investigation of ecology, technology and institutions. Part of Innis' purview was the influence of geography, especially waterways, and of the adoption of aboriginal modes of travel by the fur trade to cross the continent. "Mobility over long water distances," Innis held, "was the key to the economic occupation of the West." His views

[^6]${ }^{13}$ H.A. Innis, The Fur Trade in Canada: An Introduction to Canadian Economic History, (Toronto: University of Toronto Press 1930), 383-402.
developed into the "Laurentian" or "waterways" school which argued that Canada did not develop in spite of its geography but because of it. ${ }^{14}$ "Cheap water transportation favoured the rapid exploitation of staples..."15 The central problem of 19 th century fur trade transportation was basically to determine which route could provide cheaper and more efficient access in less time to far-flung trading posts.

The transportation systems of the land-based fur trade in North America were solutions to the problem of moving staple resources in bulk form to the sites of their processing into products for market consumption, and to the problem of shipping trade goods. This was a global system in the late 18th and 19th centuries by which ships from Europe travelled to North America to obtain raw furs which were then transported back to Europe and elsewhere. The heartland, or core of the fur trade, was originally a continent away in France and Great Britain. Gradually, a French North American heartland developed in the Great Lakes and St. Lawrence Lowlands; Montreal became the headquarters of the North West Company formed in 1784. From its founding in 1670, the Hudson's Bay Company headquarters were in London. Trade goods were sent by the fur companies to supply the trading posts which exchanged them with native people for furs. Interior posts were supplied by the network of waterways that

[^7]drain the heart of North America. By the early 19th Century, western North American fur trade posts were supplied via the Pacific as well as the Atlantic oceans.

But even Innis, despite the promise of his staples theory in conceptualizing the fur trade, pays scant attention to its application on the Pacific Slope; on the other hand, although less well-known and appreciated, his later theories of communication and technology appear to be immensely relevant to a theoretical approach to fur trade transportation in the Cordillera. Changes in media, Innis suggests, always appear in the hinterlands -- on the borders of empire .- where competitive forces or stresses create the need for new "efficiencies." Innis notes:

The effectiveness of the competition of the Hudson's Bay Company was dependent in part on the shorter route from Hudson Bay to the interior and the use of the York boat. The Northwest Company route from Fort William to Lake Winnipeg dependent on the expensive canoe was abandoned and the York boat was supreme. ${ }^{16}$

If Innis may seem overly simplistic, it may be that the basis of fur trade transportation is just that elemental.

Glazebrook provides an exposition of the fur trade transportation across the Canadian Northwest but like Innis, does not dwell much on the Pacific Slope. ${ }^{17}$ As Glazebrook shows, in the fur trade of western North America, transportation
${ }^{16}$ H.A. Innis, The Fur Trade in Canada, 289.
${ }^{17}$ G.P. de T. Glazebrook, A History of Transportation in Canada, Volume I, 24-58; \& II, 26-34, (Toronto: McClelland and Stewart Limited, 1964).
was based in large part on indigenous methods until the beginning of the 19th century. Transportation west of the Red River settlement before 1820 was by birchbark canoe; York boats, clinker-built craft of European origin, were dominant after 1821. After 1840, wheeled vehicles -- the famous Red River carts -were used on widened trails on the Interior Plains. But farther west until mid-century, the Rocky Mountains and the western Cordillera as a region formed an obstacle for the use of wheeled vehicles. The problems of difficult terrain and expense of construction prevented the development of roads and railways until population and political pressures eventually diminished the barriers to the implementation of wheeled and steam technology by the 1860s.

Harold Innis' first book, A History of the Canadian Pacific Railway, provides a description of the Pacific trade that reveals the connection and transition between the pre-industrial fur trade and the industrial age that followed the construction of the CPR. ${ }^{18}$ It is this period and place -- between the first European explorations and the completion of the first transcontinental railways through what is now British Columbia and Washington state, and between the Interior Plains and the Pacific Ocean -- that form the framework for this analysis of the fur trade transportation system, specifically the trails

18 H.A. Innis, A History of the Canadian Pacific Railway (Toronto: University of Toronto Press, reprinted 1971), 3-21.
and waterways that provided the main early linkages across the Cordillera.

## From Canada and America by Land

The early European and American explorers to the Pacific Northwest opened up the region to the fur trade. North West Company explorers Alexander Mackenzie, Simon Fraser and David Thompson, and American explorers Meriwether Lewis and Wiliiam Clark were all instrumental in exploring the rivers and trails of the region and in providing the geographical knowledge for a fairly accurate map of the Cordillera that finally revealed a transcontinental route for the fur trade.

The search for a transcontinental "Northwest Passage" involved the penetration of the Cordillera by several approaches including river corridors and portages over mountain passes. Three main passes through the Rocky Mountains figure in the evolution of a transcontinental fur trade transportation system from the east -- the Peace River Canyon, Yellowhead Pass and Athabasca Pass. Howse Pass was earlier tried but soon abandoned. Another route, Simpson Pass, was later considered but not used by the fur trade. South of the 49th parallel, Lewis Pass, Lemhi Pass and South Pass were all explored by the fur trade but never utilized until American migration after 1840. On the western slope, two rivers, the Columbia and the Fraser, presented access to the interior from the Pacific (see locator map, Figure
1.1). ${ }^{19}$ Farther north, the Skeena River would later afford a route from the coast to the interior in the late 19 th Century.

The earliest explorations were largely disappointments. The search for a route for the fur trade across the Pacific Slope began with Alexander Mackenzie's exploration in 1793 which discovered an overland route to the Pacific that was used by native people but which would not be integrated into a transcontinental fur trade. Simon Fraser, who followed, opened up New Caledonia via the Peace River but in 1808 found the river named after him to be impassable for long stretches as a fur trade route.

Alexander Mackenzie's journey to the Pacific, however, followed a route that would figure in later explorations through the Cordillera. On 9 May 1793 departing from Fork Fort, in a twenty-five foot ( 7.6 metre) canoe with nine men, Mackenzie travelled up the Peace River (or Unjigah River of the Sekani) west to the Rocky Mountains. They portaged around the Peace Canyon rapids and on 30 May reached the forks of the Peace River, followed its southern tributary, the Parsnip, and crossed a low divide to a tributary of the Fraser River. ${ }^{20}$ Alexander Mackenzie's map of 1801 reveals the initial approach to the

[^8]

Figure 1.1. Physiography of the Cordillera.

Cordillera via the Parsnip River and the famous portage between the Arctic and Pacific drainages (Figure 1.2), a route largely followed by Simon Fraser in 1805.

In the following years the North West Company made further advances across the Rockies via the Peace River, following Alexander Mackenzie's route. Old Beaver River Fort, or Rocky Mountain Fort, was established near the mouth of the present Moberly River in $1794 .^{21}$ John Finlay ascended the Peace in 1797, exploring the northern branch (named after him) and the southern branch, the Parsnip, nearly to its source. ${ }^{22}$ In 1805 James MacDougall built Rocky Mountain Portage House (opposite the present town of Hudson's Hope), replacing Rocky Mountain Fort and facilitating the trade westward across the Rocky Mountains. Later in 1805, Simon Fraser established the first post west of the Rockies at Trout Lake (afterwards called McLeod Lake) in what became known as New Caledonia (now north-central British Columbia).

Fraser's route west of the Rockies was the same that Mackenzie had explored a dozen years previously. In 1805 he followed Mackenzie's route up the Peace and Parsnip rivers to the Bad River (present James Creek) with Mackenzie's journal in hand. Over the next few years, Fraser established several fur trade posts in the Cordillera for the North West Company. He returned to New Caledonia in 1806 to establish a post on the "Carriers"
${ }^{21}$ HBCA, B. 119/a/1.
22 Referred to by Fraser and Stuart.


Figure 1.2 Alexander Mackenzie's Route through the Rocky Mountains, 1793.
lake" (Stuart's Lake as it shortly became known), earlier discovered by James MacDougall. MacDougall had travelled from McLeod Lake to Carrier Lake in three and a half days, but Fraser followed a longer, circuitous water route to Stuart's Lake that took him more than a month. Stuart's Lake post became the headquarters of New Caledonia (renamed Fort St. James in 1822). ${ }^{23}$ (See Figure 1.3).

In 1800-1801 Duncan McGillivray and David Thompson, also of the North West Company, ventured towards the Cordillera from (the other) Rocky Mountain House on the upper North Saskatchewan River, but it was not until 1807 that Thompson of the North West Company made the first trip across the Rockies to the Columbia River headwaters where he established Kootenai House. On 23 December 1806 it was reported in a letter from HBC Chief Factor James Bird to John McNab that

> Mr. David Thompson is making preparations for another attempt to cross the Mountains, pass through the [Kootenay's] Country and follow the Columbia River to the Sea... the object of his enterprise is said to be to ascertain positively whether a Trade can be formed with that Country valuable enough to be worth pursuing thro' the difficulties with which it must be attended, and if it should, the uniting of the commerce of the two seas [Atlantic and Pacific] ${ }^{24}$

Thompson travelled via the Howse Pass, or Portage as it was called, by a very narrow, bad road which had not been improved as

23 According to A.C. Anderson years later, the name New Caledonia became affixed to a fur trade region comprising the Fraser River watershed and its tributaries from the Rocky Mountains to the Coast Range and from 57 degrees N. latitude to a point about twenty miles south of Alexandria near present Soda Creek.

24 HBCA B60/a/6.


Figure 1.3. New Caledonia routes and posts, 1793-1828.
directed by Jaco Finlay and a few men, "engaged last summer to clear the Portage Road." Finally in 1809, Joseph Howse of the Hudson's Bay Company crossed the continental divide through the pass named after him and also explored a portion of the Columbia River. Howse returned the following year but the 1810-11 winter at Flathead Lake (in present Montana) was the last HBC venture across the mountains until the merger with the North west Company in 1821. Owing to the hostility of the Peigan Indians, Thompson later explored the Rockies farther north for a new pass: "I had often requested permission to change the route across the Mountains, as we must sooner, or later, be cut off by the Peagan Indians..."25 In winter 1811 he traversed the Athabasca Pass.

A dozen years after Mackenzie's voyage, Lewis and Clark's expedition in 1805 found an overland route across the continent through the central Cordillera via Lemhi Pass to the lower Columbia River. This part of the Columbia would later be integrated into a transcontinental transportation route, first in conjunction with the fur trade, then with American settlement to the Oregon Territory. When Lewis and Clark arrived at the lower Snake River in October 1805 they made four large and one small Indian-style canoes out of cottonwood. At the "first falls or great rapids" (the Dalles) they had to portage 1300 yards "over bad ground". The canoes crossed to the south side of the river "as the natives said that this was the best side of the
${ }^{25}$ Journal 75, AO, see Barbara Belyea, ed., David Thompson's Columbia Journals (Montreal: McGill-Queens, 1994).
river to take them down." The party then safely let the canoes down with the use of ropes. ${ }^{26}$ Lewis and Clark's expedition resulted in the first detailed map showing the lower course of the Columbia River. Two large-scale sketch maps (published in 1814, shown side by side, Figure 1.4) reveal the main portages on the lower Columbia at the Dalles and Cascades, respectively (Fig. 2.8 supra). ${ }^{27}$

As Lewis and Clark were retracing their steps back east along the Columbia in 1806, Simon Fraser, a thousand kilometres to the north, established a post at Fraser Lake in the same year. Fraser then built Fort George at the junction of the Nechako and Fraser rivers in 1807 and by 1808 prepared to journey down the river later to be named after him by fellow Nor'Wester David Thompson. Fraser passed Mackenzie's most southerly advance on the Fraser River (near present Soda Creek) and continued toward its mouth, reaching the forks of the Fraser and the Thompson rivers at an Indian village called Camchin (modern Lytton) where his party entered the main canyon and were forced to portage their canoes and baggage, abandoning their canoes at times and obtaining assistance from the "Hacamugh" ('Nlaka'pamux) and "Ackinroe" (Stó:lo) nations.

In 1811, a half dozen years after Lewis and Clark's

26 Sergeant Patrick Gass, Gass's Journal of the Lewis and Clark Expedition, (Chicago: A.C. McClurg \& Co., 1904), 162.

From History of the Expedition of Captains Lewis and Clark 1804-5-6, reprinted from the edition of 1814 with introduction and index by James K. Hogmer, (Chicago: A.C. McClurg \& Co., 1902) facing p. 250.


Figure 1.4 Lewis and Clark's Exploration of lower Columbia River, 1805.
expedition, the Pacific Fur Company, a subsidiary of the American Fur Trade Company based in St. Louis, established itself at the mouth of the Columbia River and spread inland via the Columbia and its tributaries, establishing the posts of Astoria, Okanogan and Spokane, among others. At the same time the Pacific Fur Company was entering the Columbia scene, in the fall of 1810, David Thompson for the North West Company set out to cross the Athabasca Pass with 24 horses each loaded with 140 to 180 pounds ( 64 to 82 kg ). By spring 1811, Thompson made the great journey down the Columbia after crossing Athabasca Pass, arriving at the mouth of the Columbia on 15 July, and confirming Fraser's discovery three years earlier that the Fraser and Columbia rivers were distinct drainages. On the return voyage, Thompson travelled with the first trading expedition up the Columbia to the interior.

Mackenzie's voyage in 1793, Lewis and Clarks' exploration in 1805, and Fraser's journey in 1808, followed by Thompson's explorations in 1811, established an accurate outline of the hydrography of the Cordillera.

## Aboriginal Trade Routes

The starting point in this thesis, Alexander Mackenzie's transcontinental trek, may seem to be typically Eurocentric; an alternative First Nations' viewpoint would have required research into oral sources beyond the scope of this study. I have, however, described and acknowledged an essential fact:
nearly all of the routes of European explorers and fur traders in the Cordillera were ancient aboriginal pathways pre-dating European explorations. In this sense, the fur trade followed indigenous patterns of commerce and social activity. To the extent that the fur trade was integrated in a native world, the brigade routes comprise a native legacy. But the fur trade also represented the introduction of a new culture and in this way the trails and waterways created new connections, meanings and purposes.

Ancient travel routes in the Cordillera, in the form of trails, are vestiges of the early Holocene migrations of PaleoIndians who likely followed megafauna through the transmontane region after the last ice age. Trails leave longer-lasting traces, but only prolonged and heavy use has left imprints that can be dated to pre-contact times. In some areas in western North America, trails have been in continuous use for centuries, even thousands of years. ${ }^{28}$ Geographer Carl Sauer in his seminal essay, "The Road to Cibola," emphasizes the "large measure of survival of the earlier historic and prehistoric highways."29 Overland trails, including portages or "carrying places," provide the connective evidence of ancient transportation systems in North America. Alexander Caulfield Anderson noted in 1872

[^9]...from time immemorial a system of roads or rather trails, has existed throughout [the interior of British Columbia], which, originally traced by the natives for mutual intercourse, served, until recently, for all the purposes of communication and transport. ${ }^{30}$

Waterways have been especially significant in opening up the eastern half of the North American continent to European colonization and settlement, but "the presence, navigability and interrelationship of inland waterways were first discovered by Native peoples." ${ }^{31}$ While rivers and lakes may provide hints of trading patterns, waterways provide no lasting clues of transportation except for possible artifacts found on the bottom of rivers and lakes. ${ }^{32}$ In the Cordillera, the role of waterways was important, but waterways were discontinuous in the ability to navigate them long distances with out many portages.

Trails are linear archaeological features, often the only obvious vestiges of former inhabitation of a region. Charles Trombold, who distinguishes between formal and informal routes in Mexico, states: "Roads are the only tangible evidence of a prehistoric population's structural organization across
${ }^{30}$ A.C. Anderson, The Dominion At the West, 15.
${ }^{31}$ Douglas Birk, "When Rivers Were Roads: Deciphering the Role of Canoe Portages in the Western Lake Superior Fur Trade, "in Jennifer Brown et al, The Fur Trade Revisited: Selected Papers... (East Lansing: Michigan University Press, 1994), 361.

32 An aboriginal canoe was recently discovered near Albas on Shuswap Lake. Shards of clay pipes and other artifacts, used by the voyageurs, have been found in eastern Canadian rivers.
geographical space."33 He contrasts formal routes showing "evidence of planning and purposeful construction" with informal routes "that have minimal or no labor directed to their creation or maintenance."34 Aboriginal trails in the Cordillera were informal routes which provided the trading links between various native tribes.

In the northern Cordillera there were historically three major aboriginal cultural groups comprised of several tribal groups whose territories were later crossed by fur traders: Athapaskan in the north (Dunne-za, Sekani, Dakelhne); Interior Salish (Secwepemc, 'Nlaka'pamux, Okanagan, Lakes); Sahaptin (Wenatchee, Sanpoil, Spokane, Yakima, Umatilla, Wishram, Nasco and Tenino) ; and Coast Salish (Chinook on the lower Columbia River, Halkomelem on the lower Fraser River).

Archaeological sites, such as pit-house remains and rock art near trails and rivers, suggest a long, traditional use of these routes by aboriginal people. Rock art was prevalent along stretches of the now-flooded Columbia River Valley, especially at the Dalles; the Fraser River has numerous pictographs and petroglyphs along its course. A great number of rock art sites are also found along the Similkameen River and there are some sites along Okanagan Lake very close to the main trail later used

[^10]by the fur trade. Some archaeological sites along these routes date from 4000 to 6000 B.P., but there is probably no way that the age of trails adjacent to these sites can be ascertained. Pictographs are evidently hundreds of years old but are difficult to date; an exception is the Hedley site in the Similkameen River Valley which depicts several riders on horseback, certainly no more than 300 years old.

Knowledge of aboriginal trails in the northern Cordillera is not limited to archaeological remains. Franz Boas and James Teit in the late 19th century provide the first comprehensive ethnographic information on native trade routes. ${ }^{35}$ Foot and canoe travel were the only means of transport before the arrival of the horse:

In some places a few people occasionally made special trading trips across mountain ranges and through uninhabited country to distant neighbors. After horses had come into use these trips developed into important affairs, undertaken regularly by large parties. ${ }^{\frac{3}{6}}$

According to Teit, before the arrival of the horse, trade was conducted by canoe on Okanagan River, Okanagan Lake and Shuswap Lake.

From the head of Okanagan Lake the Shuswap had only a short distance to carry their goods to the navigable waters of Spellumcheen river, Shuswap Lake and South Thompson River to Kamloops, which was a central point.... No doubt, also, some

35 Franz Boas and James Teit, Coeur d'Alene, Flathead and Okanogan Indians (Fairfield, WA: Ye Galleon Press, 1985), 212-219.

36 James Teit, "The Okanogan", The Salishan Tribes of the Western Plateaus, 214.
trade went overland, by routes later used by horses, such as the Similkameen River. ${ }^{37}$

George Dawson, working in B.C. for the Geological Survey of Canada in the 1880s, followed many native trails on his explorations. Travelling along Okanagan Lake, he noted the "rather rough and bluffy trail, fitted in along the faces of the hills \& cliffs as found possible without work. An Indian or 'natural' trail." ${ }^{38}$

The earliest written references to Cordilleran trails, however, were made by the first European fur traders to enter the region. Alexander Mackenzie acknowledged that the trails he followed in 1793 were aboriginal. At the height of land between the Peace and Fraser rivers (the Arctic and Pacific drainage basins respectively), Mackenzie's party had to portage their canoe along an ancient, native route: "We found a beaten path leading over a low ridge of land eight hundred and seventeen paces in length." ${ }^{39}$ At what later became known as Fort George Canyon on the Fraser River, Mackenzie followed a native portage on the left (east) bank, covering half a mile in four hours. At Cottonwood Canyon they had to make another portage: "The carrying

[^11]place is about half a mile over, with an Indian path across it." ${ }^{40}$ The most significant trail Mackenzie encountered was from the Fraser River heading west (at the West Road River, now also called the Blackwater) to the Pacific Ocean, the "grease trail" by which trade was conducted between the coastal and interior tribes. Mackenzie's native informants described this route:

They assured us that the road was not difficult, as they avoided the mountains, keeping along the lowlands between them, many parts of which are entirely free of wood.... According to their account, this way is so often travelled by them, that their path is visible throughout the whole journey... With this route they all appeared to be well acquainted. ${ }^{41}$

Simon Fraser's party also learned of aboriginal trails, including many portages around rapids in the Fraser River and an overland route across the Fraser Plateau. Between Riske Creek and the Chilcotin River they made a portage "about a mile long; the ground rough; but there is a beaten path. "42 Near the mouth of the Chilcotin River an Indian informed Fraser. that
a certain distance below was impracticable, and advised us to leave our canoes in their charge and proceed on our journey by land to a great river [the Thompson] that flows from the left [east] into this communication. The country, they said, consisted of plains, and the journey could be

[^12]performed with horses in four or five days, thence we should have smooth water to the sea. ${ }^{43}$

This is likely the earliest historical reference to an overland trail between the Fraser and the Thompson river drainages; it appears to have been used by the Interior Salish people on horseback before the arrival of the white man. John Stuart, Fraser's assistant, followed this route in May 1813 from New Caledonia south to the Okanagan Valley.

Other aboriginal trails evidently existed, as Fraser recounts. In the Fraser Canyon they "had to pass where no human being should venture. Yet in those places there is a regular footpath impressed, or rather indented, by frequent travelling upon the very rocks". ${ }^{44}$ On the return journey to Stuart's Lake, some of Fraser's men wished to abandon the Fraser River and follow a trail (probably the later-named Douglas Portage between present Yale and Spuzzum) that avoided the worst parts of the lower Fraser Canyon. In another instance, when Fraser met the Indians at the Chilcotin River on his return journey, he notes, "They had information of our return from the lower parts of the river by messages across the country." ${ }^{45}$

It is clear from the numerous references in the fur trade literature that an elaborate system of trails had been well-used

[^13]long before the first Europeans arrived in the region.
Transportation routes are ultimately tied, of course, to nodes of settlement or areas of resource extraction. Aboriginal systems of trade (including the trade of fur peltries between native groups) extended throughout the Cordillera. There was continual movement of people between neighboring tribes and, by extension, across vast stretches of the continent. Natural terrain favoured some trails over long distances. That the fur traders chose to establish forts near aboriginal settlements reinforced the use of the pre-existing trading network. But unlike the ancient aboriginal system, fur trade routes were joined into a transcontinental and intermodal system which involved carriers travelling thousands of miles along both waterways and trails in a single season.

## Theoretical Considerations

An analysis of the transportation system in the Cordillera needs to be made against the background of an understanding of transportation systems and technology in general.

Jacques Ellul terms technology as la technique, referring to the rationality and efficiency revealed in modern modes of organization. ${ }^{46}$ Technology, thus, refers to the applied knowledge and socio-political context within which it is employed, as well as the tools and machinery more commonly considered. Marshall McLuhan suggests that technologies are
${ }^{46} \mathrm{~J}$. Ellul, The Technological Society, (London, 1965), 3-22.
extensions of our physical and nervous systems used to increase power and speed. ${ }^{47}$ The "lessening of degree" is the main principle of transportation systems, the use of least force in the shortest time. Speed is the fundamental test ${ }^{48}$ and "speedup" is probably the most self-evident trend of transportation. Transportation combines technique (knowledge, organization) and technology (artifacts) which inject speed into the movement of goods from one point to another, at the same time increasing the capacity for more goods to be carried. Time is diminished and space is modified as new transportation techniques and technology are introduced.

The term "communication" has long been used to emphasize the social component of transportation. C.H. Cooley used the term in "its widest sense" to refer to "the communication of ideas and goods between places spatially and temporally separated". He went further to differentiate between "material" and "psychical" communication. ${ }^{49}$ Transportation routes, thus, are not only physical systems but social and cerebral networks influenced by the organization and interaction of individuals, including the conceptualization of the system using maps, diaries and schedules by which regularity and efficiency can be measured and achieved.

[^14]The basic measures of all transportation systems, as identified by geographer James Vance, apply to the fur trade. Interrelated variables include: unit of service, frequency of service, speed, stage, competence, and financial and energy cost. ${ }^{50}$ "Unit of service" refers to the basic vehicle of conveyance: in the Cordilleran fur trade this varied from canoes, bateaux, horses, dog sledges, and to a limited extent, carts. The basic unit of service, men's backs, determined the "competence" or limit of cargo that could be carried. Packs of 90 lbs (41 kg, 84 pounds Troy weight) allowed transshipment to other modes of conveyance, such as canoes, boats or horses, without repacking. The unit was based on a seemingly "natural" order. As Innis succinctly put it, the mainstay of the fur trade, the beaver, which utilized the birch tree for its own purposes, found its pelt packed into standardized bales and stowed in bark canoes. ${ }^{51}$ "Frequency of service" relates to the truism that "the ideal form [of transportation] would furnish us with service the instant we realized we desired it."52 While footpower allows the greatest individual mobility, and could take place at any time of year, fur brigade movements, utilizing inter-modal transport by both land and water, were limited to the ice-free season on water. "Speed of movement" varied for the

[^15]different modes of transport and determined the "stage" or distance (and time) interval between necessary stops. "Financial and energy cost" was based on the lowering of costs, either by removing the points of greatest stress or by encouraging an increase in capacity of the route such that economies of scale would lower unit costs. Finally, Vance identifies the "measures of the facility itself" -- its relationship to terrain, preexisting settlements, and resources.

As well, transport structure (or "circulation") needs to be understood in terms of relationships to other elements in a general system. Eliot Hurst suggests several components related to the concept of circulation: mobile or fixed inventory (stock of road route miles, number of vehicles); network (the geometric structure of the route system) and the location of intersections, nodes, and terminals; distance travelled; flows (what movement occurs and how intensively); modal systems (what type of transport occurs) and their technical characteristics; historical evolution and regional growth patterns; and the interrelationships of the individual elements or subsystems. ${ }^{53}$

Related also to the characteristics of transportation and circulation is the geographical notion of diffusion, that is, the spread of phenomena over space and through time. Traditional diffusion studies have focussed on the adoption of innovations

[^16]modulated by physical and human resistances. ${ }^{54}$ Szostak notes that transport improvements result in increased information flows. ${ }^{55}$ Transportation itself has played an essential role in the transmission and development of new technology. Trails and waterways were used for the diffusion of goods and innovations by aboriginal populations. Many European introductions such as the horse, certain diseases and trade goods, found their way along trade routes to native populations in the Cordillera before the arrival of Europeans in person. ${ }^{56}$ In the fur trade, transportation as a diffuser of "technique" is seen in the spread of the use of boats from the Interior Plains through the Cordillera and the consequent decline in the use of canoes. Although the change from canoes to boats allowed for larger loads to be transported by fewer men, it did not appreciably change the pattern of communication. ${ }^{57}$ Units of cargo and routes remained the same. The use of horses, on the other hand, was the solution to limited water transport in the Cordillera.

Connected with the concept of diffusion is the North American notion of the "frontier". The idea of the "moving

[^17]frontier" has achieved more currency by American historians than by Canadians, but among the latter Barry Gough has applied the frontier notion to the $H B C$, describing the expanding zone of imperial administration emanating from London -- the source of the policies and dictates of the Company -- in combination with the heartland-hinterland model. ${ }^{58}$ Via the routes of the fur trade, Europeans extended their hegemony, extracted resources and carried their culture into the wilderness. The fur trade introduced European products to aboriginal peoples, completing a transaction that spanned great distances and involved considerable time. Not only goods but ideas were carried along the indigenous pathways. At one end of the trade network, hierarchical diffusion of commercial capitalism was at work arising out of the structural systems or "propagation structures"59 of European economic society. At the other end, the organization of the fur companies and their relationship with the aboriginal people with whom they traded influenced the nature of the diffusion process. The transportation system of the fur trade came head to head with the trading patterns and economies of aboriginal peoples. Culture contact resulted in transportation innovations and reveals the transportation system as a purveyor of ideas, ideologies and organization, most

[^18]particularly related to capitalism and power.
Cultural exchange was not one-way. Transportation and communication in the fur trade initially involved technology that was indigenous to North America but evolved in non-native ways. Native materials and techniques -- the use of the birchbark canoe, the tumpline or carrying strap, the moccasin and the snowshoe -- were adapted for fur trade transportation. But bark canoes for the fur trade were made much larger than their native counterparts in order to carry as many goods as possible. The canoe, early on, became the omnipresent transportation mode of this staple trade east of the Cordillera. These pre-industrial modes of transport, however, limited the amount of goods that could be carried and raised concerns about the size of the cargo that could be placed in a canoe, on a man's back, or on a horse -- the basic units of transportation.

Finally, the notion of transportation systems as types of social worlds with particular forms of order and conduct is a relatively unexplored area. The social makeup of the carriers and the creation of a regimen (routines and schedules) are important facets of the transportation system. Hurst has discussed the notion of human resources as both quantitative and qualitative in character. For example, manpower (or musclepower) alone does not explain economic activity; skills and desirable attributes are part of the human factor. ${ }^{60}$ Human variables

[^19]involve the application of particular techniques. These are part of the "techniques" of technology, defined by Ellul as "the totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity."61 In the fur trade, reward and punishment were common general techniques in the mastery of men, but rank, class, and race were other underlying forms of social control attained within a circumscribed or closed environment by which activity was accomplished. ${ }^{62}$ The diurnal effects on behaviour such as the need for sleep and sustenance, and the psychological propellant of fear of injury, calamity or death are relatively unstudied aspects of transportation geography.

Above all, the raison d'être of the fur trade transportation system was economic. In an economic model, transportation routes are responses to changing decisions based on the allocation of resources and generation of profit. But transportation systems, once developed, also generate inertia. After linkages and nodes have been established, only major events or changes in technology will alter the network. Political decisions, based on the exercise of power, can be a major factor in altering a transportation network to avoid conflict, loss, or simply greater costs.

[^20]Until the mid-19th century, fur trade transportation in Western North America can be described as pre-industrial in nature, characterized by the use of canoe and boat on waterways and movement along trails by horse and foot. Geographer John Borchert identifies this period in the United States as the "Sail-Wagon Epoch" between 1790 and $1830 .{ }^{63}$ Wheeled vehicles such as carts used in the vicinity of forts presaged the development of roads, but not until the 1860 s were roads in the Cordillera constructed in place of trails.

Pre-industrial modes of transportation on land could only move as fast and long as human or animal energy could be sustained. Steep grades could only be climbed for limited spans and lengths of time. Water transport was more variable; river transportation moving downstream varied little from the velocity of the stream but upstream travel took much longer. Navigable rivers were discontinuous west of the Rockies; and ice closed many waterways in the Cordillera to travel as it did to all in the east in the fur trade region. Lakes could be used by canoes or boats if they stayed close to shore; only larger craft could safely cross a wide body of water. Sails were used wherever possible.

Thus, in summary, transportation networks can be viewed as technological and social systems carried and maintained along natural routes by which culture itself is diffused. The

63 John Borchert, "American Metropolitan Evolution," Geographical Review 57 (1967): 301-332.
organization of the fur trade brigade system involved the extension of technology and technique into the Cordillera by which economic production was carried out and natural and human obstacles were overcome. With each successive passage of an individual or group, the transportation system was reinforced, modified or adjusted in different ways. Routes were sometimes abandoned when circumstances changed or, on the other hand, made more permanent by the establishment of forts at strategic points along the lines of movement, often the location of existing native settlements. A study of the physical and human factors of transportation routes through the Cordillera also provides an insight into the eclipse of pre-industrial modes by the industrial, steam-age transport systems that followed in the same region.

## CHAPTER II

THE COLUMBIAN COMMUNICATION: THE ROUTES OF TRADE TO 1846
"...it appears extraordinary how any human being should have stumbled on a pass through such a formidable barrier as we are now scaling and which nature seems to have placed here for the purpose of interdicting all communication between the East and West sides of the Continent. "64

The words of George Simpson in 1824 clearly express the significance of David Thompson's discovery of Athabasca Pass in 1811 to the transportation system of the fur trade. From the junction of the Athabasca and Whirlpool rivers, Thompson had followed a trail southward up the Whirlpool to Athabasca Pass, then down the wood River to the place that would later become known as Boat Encampment on the Columbia River. Thompson recognized that he was not the first fur trader to have ventured over the Athabasca Pass:"... a party of Nepussangues and Freemen passed a few years ago."65 But Thompson's discovery would prove the viability of a communication for the fur trade across the continent.

Although Athabasca Pass was the first transcontinental communication realized, it would quickly be surpassed by an easier although less direct route for the fur brigades across the Pacific Slope: a trail across the Fraser Plateau. The discovery
${ }^{64}$ George Simpson, in Frederick Merk, ed., Fur Trade and Empire: George Simpson's Journal... (Cambridge: Harvard University Press, 1931), 33.
${ }^{65}$ MGi9 A 13, NA 1021/Coues, 652. Freemen were former employees of a company who after their contract had decided to trade on their own, usually forming small groups of trappers.
of an overland route between the New Caledonia and Columbia districts (and the eventual combining of these two districts) would provide a Pacific orientation to the Cordilleran fur trade, although trancontinental communication would still be served by the Athabasca route.

It was Thompson who discovered that the Fraser and Columbia rivers formed separate west-flowing systems, both with sources in the Rocky Mountains and outlets on the Pacific. Thompson's 1814 map (Figure 2.1) incorporates Fraser's earlier explorations as well as his own. ${ }^{66}$ In the next few years, explorations north via the Columbia and south via the Fraser rivers filled in the map of the plateau region between the two drainages: the Pacific Fur Company in 1811 sent an expedition north from the Columbia mouth to "Cumcloups" (Kamloops), as the Indians called the confluence of the North and South Thompson Rivers. ${ }^{67}$ Kamloops, which would later figure importantly in the brigade system, for a brief time was the site of rival forts established in 1812 by both the Pacific Fur Company and the North West Company. The North West Company arrived at Kamloops in the fall of 1812, and set up a post "alongside."68 A year later in 1813, the short-

66 Thompson never explored the Fraser drainage; the portages shown along Fraser's River correspond to Fraser's journal.
${ }^{67}$ Ross, Adventures of the First Settlers..., 199. It is not clear by which direction the North west Company entered the southern interior and reached Kamloops, although the northern approach from new Caledonia seems most likely.
${ }^{68}$ The location of these first Kamloops posts is not known. The word "alongside" is suggestive that the forts may have been on the same side of the river, even contiguous with one another (as in the


Figure 2.1 David Thompson's map (part), 1814.
lived Pacific Fur Company was taken over by the North West Company and for the next seven years the Northwesters had a monopoly of the fur trade in the Cordillera between the columbia River and New Caledonia.

In November 1812 at Stuart's Lake, Daniel Harmon noted the arrival of John Stuart and J.G. McTavish from Fort Chipewyan. On 1 May 1813, Stuart left the lake (named after him) with six Canadians and two Indians to head south to the Columbia. Daniel Harmon in his journal entry of 13 May 1813 speculates:
... should Mr. Stuart be so successful as to discover a water communication between this and the Columbia, we shall, or the future, obtain our yearly supply of Goods from that quarter, and send our Returns out that way... ${ }^{69}$

On 25 September 1813 Harmon received a letter from Fort Okanogan describing Stuart's journey down the "Columbia" [sic] [the Fraser] for eight days (presumably to present Soda Creek) by canoe, then by horseback overland for 150 miles to Lake "O-ki-na-gun."70 Stuart reached Astoria in 1813 in time to take part in the negotiations for the transfer of Astor's fort to the Northwesters. The following year, the first inbound journey along the Okanagan-Fraser overland route was made. Harmon records on 18 October 1814,
case of Fort Carleton, Saskatchewan, in 1815).
69 W. Kaye Lamb, Sixteen Years in the Indian Country: The Journal of Daniel Williams Harmon, 1800-1816 (Toronto: MacMillan Company of Canada Limited, 1957), 159.

[^21]This afternoon, I was agreeably surprised by the arrival of Mr . J. LaRocque and company, in two canoes, laden with goods, from Fort George, at the mouth of the Columbia River, which place they left, the latter part of last August. ${ }^{71}$

It would appear, however, that this was a one-shot effort.
Kamloops was supplied from the Columbia but goods for New Caledonia and furs outbound continued to be supplied from the east via Peace River until $1820 .{ }^{72}$ Couriers, however, kept the communication open between New Caledonia and the Columbia districts. Finally, Fort Alexandria was established on the upper Fraser River in 1821 in anticipation of a regular communication overland. Later that year, the Hudson's Bay Company amalgamated with the North west Company and inherited the problem of rationalizing the transportation system in the Cordillera, but the main overland links across the continent had been found and tried.

The Arrowsmith firm of London produced a series of maps that exhibit the evolution of British North American exploration, including pivotal maps showing the Cordillera in 1819 (Figure 2.2) and 1824 (Figure 2.3), the transition period between the North West Company and the Hudson's Bay Company operations. The 1819 Arrowsmith map for the first time reveals an overland trail from Kamloops to Fraser's River, refined in the 1824 map to show "Ft. Alexandria" (established by the NWCo. in 1821), "Portage to
${ }^{71}$ Ibid.
72 That year, the outbound and return brigade was via the Columbia. HBCA B.188/a/a, 25d, October 20, 1820.


Figure 2.2 Arrowsmith map of Western North America (part), 1819.


Figure 2.3 Arrowsmith map of Western North America (part), 1824.

Thompson R.," and "old Portage" to "Camloop Lake" (from Fraser River), thus confirming the use of these routes by the North West Company by 1821. Arrowsmith's 1824 map (based on information to 1821) also includes the North West Company posts and, for the last time on their maps, the New Caledonia River. ${ }^{73}$

Similarly, Alexander Ross's 1821 map (with additions in 1849) (Figure 2.4) reveals the knowledge of the region based on North West Company explorations until union with the HBC. Of significance is the "Long Portage" between the "Lewis's [Snake] River" and "Spokan House." No trail is indicated along Okanagan Lake or River but a portage is noted between the north end of Okanagan Lake, along "Tsaen Creek" (Monte Creek) to Stuart's River (Thompson River), suggesting the possible use of canoes on Okanagan Lake, although Ross travelled by horse to Kamloops in 1812.

## The Athabasca Pass

Despite the "communication" discovered between the Fraser and Columbia drainages, after its takeover of the Pacific Fur Company in 1813, the North West Company continued to supply New Caledonia and the Columbia districts from both east and west.

[^22]

Figure 2.4 A. Ross, map of the Columbia region, 1821, (with additions, 1849)

The Columbia River and Athabasca Pass provided the "express" communication, as it was later called by the Hudson's Bay Company, across the Pacific Slope. (Figure 2.5 shows the fur trade routes used by the Pacific Fur Company and North West Company.) Alexander Ross noted that

The first step the North Westers took, after inheriting their new acquisition, was to dispatch two of their partners and twenty of their men in two boats to convey the gratifying news to Fort William, the chief depot of their inland trade on Lake Superior. ${ }^{74}$

The route through Athabasca Pass, the first truly
transcontinental communication, was used continuously from 1814
until 1849. Leaving Fort Vancouver about the first of April, brigades ascended the Columbia River to the height of navigation. The "first grand movement" as Ross described the brigade destined for the interior, comprised 124 men "exclusive of the people of the late Astor Company who were on their way to Canada by land." The whole embarked in "a squad of 14 boats" [from Fort George on the Columbia]. ${ }^{75}$ At Portage Point between the mouths of the wood and Canoe rivers, the voyageurs laid up their canoes and cached items they did not need. The method of preserving food supplies was ingenious: a hole was dug and an oil cloth was put at the bottom, the provisions placed on top and covered by the same tarp, and some removed earth returned. Then a camp-fire was made on the cache to remove any sign of

[^23]

Figure 2.5. Major explorations to 1812.
excavation or scent of food. Although canoes were sometimes sunk under water after being filled with sand and rock which prevented them from floating away, a more common method of caching a canoe, as described by Alexander Mackenzie, was to build a stage "on which the canoe was placed bottom upwards, and shaded by a covering of small trees and branches, to keep her from the sun. ${ }^{176}$

After making a cache, the party went by foot along Portage River (now wood River), carrying their 90 -pound ( 41 kg ) loads plus personal gear and food. The Portage River had to be forded continuously on the battures or "gravel flats"; human chains were made where the river was widest: "It is necessary in very powerful currents to pass in a body, the one supporting the other, in an oblique direction."77 Gabriel Franchère, one of 24 Astorians returning east from the Columbia, provides probably the earliest description of the Columbia brigade through the Athabasca portage in May 1814:

On... the 14th of May we began to climb the mountain... the snow was frozen hard enough to carry our weight. We had to rest every few minutes, the climb being very difficult and the exercise exhausting. Finally after two or three hours of unbelievable effort and fatigue we reached the summit and followed in the footprints of those who had gone before us. ${ }^{78}$

[^24]When Franchère's party had reached Rocky Mountain Fort, ${ }^{79}$ the Athabasca River could be navigated; Franchère notes that four pirogues were constructed out of poplar, which they "tied two by two" for the journey downstream. ${ }^{80}$ (On this trip, one pair was capsized in rapids resulting in the death of two Canadians.) Another account of the Athabasca route is provided by (former Astorian turned Nor'Wester) Ross Cox who in May 1817 led a large party eastward. Following the banks of Canoe River they reached the height of navigation on the upper Columbia River "obliged...to strike into the woods" where they "bivouacked about two miles beyond a long woody point" (the place later known as Boat Encampment). They then arrived at one of the crossing places of the river, named the Grand Traverse "owing to its great depth and breadth." The hardest traverse of the pass was travelling from west to east which involved the ascent of the Grande Côte -- the "Big Hill" -- where the trail climbed steeply for 2,500 feet ( 762 metres) from the battures of the wood River to the saddle between Jeffrey and Pacific creeks (See Anderson's map, Figure 3.11). The worst season for crossing was spring when the snow still lay deep, but Cox's party in 1817 accomplished the ascent in $41 / 2$ hours and "did not find it so difficult as we anticipated." In winter, pas d'ours ("bear-paw" snowshoes) were used in the woods. At the higher elevations snow was encountered and the lead men "had to beat down [the snow] to form

79 Known as Jasper's House after 1817.
${ }^{80}$ Ibid., 163-164. A pirogue is a dugout canoe.
a pathway for the loaded men." On the eastern slope they found L'encampment du fusil (Rifle Camp), "a charming spot of rich meadow ground" on present Kane Creek where they were met with the North West Company's horses. Upon arriving at the Rocky Mountain River (present Whirlpool River) the party built rafts and used poles to traverse Le Trou (the Hole), a dangerous ford where the river was between three and four hundred yards wide. After much hardship they eventually arrived at the "Old Fort" (Henry's House), where the Miette River enters the Athabasca River (near the present town of Jasper). Cox estimated the distance from the Columbia River to Rocky Mountain House to be eighty-five or ninety miles which took ten days to accomplish ${ }^{81}$ (Figure 2.6).

With the amalgamation of the North West Company and the Hudson's Bay Company in 1821, the new Governor of the Northern Department, which included the New Caledonia and Columbia districts, immediately began to rationalize the fur trade operations of the northern Cordillera. Governor George Simpson's first transcontinental journey in 1824 provides a detailed description of the route across the Cordillera via Athabasca Pass. ${ }^{82}$ The route taken -- from York Factory to Cumberland House, from there along the North Saskatchewan River
${ }^{81}$ Ibid., 290.
${ }^{82}$ Edited with an introduction by Frederick Merk as Fur Trade and Empire. George Simpson's Journal Entitled Remarks Connected With the Fur Trade in the Course of A Voyage from York Factory to Fort George and Back to York Factory, 1824-25 (Cambridge, MASS: The Belnap Press of the Harvard University Press, 1968).


Figure 2.6. Athabasca Pass (Rocky Mountain Portage) and Yellowhead Pass (Leather) Pass.
to Edmonton, then up the Athabasca River to Henry's House, from there to Athabasca Pass, and down to the Columbia -- Simpson proposed as an alternative route to the Peace River. ${ }^{83}$ He presents a vivid description of the eastern approach to Athabasca Pass on his voyage west:

As we proceed the road gets worse and the Mountains rise perpendicular to a prodigious height; the scenery wild and Majestic beyond description; the track is in many places nearly impassable... ${ }^{84}$

On 19 October 1824 Simpson noted his party's arrival at Boat
Encampment on the Columbia River, "having disposed of the celebrated Athabasca Portage, which altho' not exceeding from Jaspers House 120 miles and from Henry's House 80 to 90 occupied us six Days in crossing." ${ }^{85}$ As early as 1824 Simpson had augmented the herd of horses at Jasper House by ordering John Rowand of Fort Edmonton to provide " 20 good young cut Horses and a few breeding mares and entire Horses for the mountain transport."86 At Boat Encampment, Simpson's party used "Two Boats and a Cedar Canoe" for the journey down the Columbia, reaching Kettle Falls (the site of future Fort Colvile) on 26 October and Okanogan on 1 November (after a side trip to Spokane House). The Governor's party reached Fort George near the mouth of the Columbia River on 8 November 1824, a record 84 days from

[^25]York Factory, according to Simpson twenty days less from Hudson Bay to the Pacific than any previous party, despite breaks in the journey. Still, simpson thought they could do better:

I think the Journey can be performed in the height of the Season: in a light canoe, unencumbered with baggage, for the Water communication and with good horses for the Journey by Land, which may be about $1 / 6$ of the whole distance, in 2 months or 65 days by a different route to that which I took. ${ }^{87}$

Simpson was to realize his uncannily accurate calculation four years later.

Upon completing his tour of inspection, Simpson accompanied by Alexander Ross departed Fort Vancouver for the return journey east on 19 March 1825, taking the same route via the Columbia River and Athabasca Pass. At Boat Encampment, where boats were cached and the portage over the "Mountain" begun, Simpson was annoyed that the horses he had ordered to be sent to Camp du Fusil just east of the Great Divide had not arrived; the party distributed the baggage -- 60 pounds per man -- and walked. The people were each given a dram before starting to combat the cold water they had to wade through on the battures. The party forded the river 41 times during the course of the first day; the following day they forded it seventeen times before 6 a.m. ${ }^{88}$ Alexander Ross noted sixty-two crossings on the first day out from Boat Encampment. "Some of the people were so benumbed with

[^26]Cold that on getting out of the water they actually could not stand. 18990

Snowshoes were donned for part of the trip over the pass itself. Simpson writes: "towards the height of Land the Road is as bad and as dangerous as it can well be..."91 From Le Trou (the Hole), where the Athabasca River had to be crossed by a raft, 92 to Portage Point on the west end of the portage (later known as Boat Encampment) was forty-five miles (72 km) as the crow flies; Ross estimated the distance on the ground as eightyfive miles (137 km), Simpson slightly less.

At 9 a.m. Simpson's party got to l'Encampement du Fusil where they were snowed upon. Above the battures of Whirlpool River, much of the trail was bad going. They made camp on the Grand Batture, "every man of the party knocked up."93 The following day, after fording the Rivière du Trou and the Whirlpool River twenty-seven times, they arrived at l'Encampement d'Orignal (Moose Camp), the Halfway Camp of today
${ }^{89}$ Ibid.
90 It was on this journey that simpson named a tarn on the continental divide "Committee's Punch Bowl", in honour of the London Committee of the H.B.C., and celebrated the occasion with a glass of rum for all.
${ }^{91}$ Merk, Fur Trade and Empire, 34.
92 Ross Cox, The Columbia River, (Norman, OK: University of Oklahoma Press, 1957), 283-284.

93 Merk, Fur Trade and Empire, 145.
near the forks of the Middle Whirlpool ${ }^{94}$ where they finally met the men with horses which they rode to Jasper's House; at this place after crossing they took to canoes on the Athabasca River. The difficulties of the Athabasca Pass and the ultimate failure of the Columbia River route, at least in its upper reaches, as the main "fur highway" across the Cordillera, focussed attention again on the Peace River Pass. After Simpson's exploration in 1824, the Columbian communication was rejected in favour of the much longer Peace River route. However, based on Simpson's reconnaissance, Athabasca Pass continued to be used mainly for "express" brigades; as well, small quantities of leather and furs were transported over it. After the union of 1821, Norway House on Lake Winnipeg became the depot for outfitting New Caledonia. ${ }^{95}$ Until 1826 the whole transport of the annual supplies to New Caledonia was conducted from York Factory on Hudson Bay by the "very arduous" route of Peace River. Chief Factor John Stuart reported in 1824, three years after the union,
...the means of Transport are as usual to Athabasca from thence up Peace River to Finlay's Branch, then up the Parsnip nearly half way to its source at the height of land of Sir Alex: McLenzie, we then enter a small River issuing from the right leading to McLeods Lake where the navigation terminates, the property being from thence conveyed in

[^27]95 R. Harvey Fleming and E.E. Rich. Hudson's Bay Company, Minutes of Council, Northern Department of Rupert's Land, 18211831, eds. (London: Hudson's Bay Company Record Society, 1940), 17, 8 July 1822.
winter across land to the other Establishments; in the middle of Summer when the waters rise heigh Canoes with moderate loads might pass up the Parsnip to its source, and from thence down the Bad River to Frazer River.

However, the route was not at all satisfactory:
The extreme length and difficulty of this line of transport...made it impracticable to reach McLeod's Lake on the return from Rainy Lake (Fort Frances) before the winter and not seldom the canoes were stopped by ice before reaching their destination. ${ }^{96}$

The length of this route meant that New Caledonia's fur returns in 1822 were taken to Fort McLeod during the winter and the following spring were transported by canoe down the Parsnip River to Finlay's Branch of the Peace River.

In coming supplies received at McLeod Lake were afterwards distributed to the various posts by means of dog sledges... ${ }^{97}$

On the other hand, the Hudson's Bay Company continued to supply the Columbia District from the Pacific. In the early 1820s, the "inland brigades" arrived at Fort George at the end of April or the beginning of May, where they remained for several weeks until the arrival of the Company ship in June or July. But according to Simpson, this was a wasteful expense during "the three most valuable months of the year"; he immediately directed his attention to remedy this situation.

Simpson in 1826 thereby reorganized the Cordilleran trade by creating one vast administrative unit west of the Rockies known

96 Ibid., 11.
97 Ibid.
as the Columbia Department. "To turn it to the best advantage," he stated, "New Caledonia must be included and the Coasting trade must be carried on in conjunction with the inland business."98 Simpson's decision to re-orient the route of supply was probably influenced by John Stuart who argued in his 1823 and 1824 district reports that the Company resort again to the Columbia route. ${ }^{99}$

According to A.C. Anderson, "In 1827 ... it was determined
to open a route from Alexandria ...on the upper Fraser... with
horses by way of Kamloops to O'kinâgan on the Columbia." ${ }^{100}$
Following the reorganization, the communication between New
Caledonia and the Columbia was realigned thus:
...during the winter, the furs traded outside of water communication were brought to Fort St. James, the headquarters of the district, with dog sledges. As soon as the navigation was open in the spring, generally about April 20, the boats with their cargoes on board started down the Stuart branch and were met at the junction of the Fraser's Lake branch by a boat conveying the furs that had been collected at Fraser's Lake, which were then transshipped into the other boats and the Fraser's Lake boat returned. The boats then ran down to Alexandria, having taken the returns of Fort George at the junction of Tete Jaune's branch [the upper Fraser River] on the way. The horses, several hundred in number were then collected and by this means the whole returns of the district were conveyed to Okanagan, having been preceded or sometimes accompanied by the Thompson's River Brigade... ${ }^{101}$

The route of communication from the south was by way of the

[^28]Columbia River as far upstream as Kettle Falls (Fort Colvile) with boats; the New Caledonia brigade departed at Fort Okanogan and crossed the Interior Plateau with horses via Kamloops to Fort Alexandria on the upper Fraser River where boats were obtained and supplies distributed to outlying posts. Simpson in his Dispatch of 1829 notes that "North Canoes" were sent from "Alexandria to Stewarts [sic] Lake" and "from stewarts Lake to the outposts by $\dot{a}$ variety of conveyances, viz. large and small canoes, Horses, Dog Sleds and Men's backs."102 As soon as navigation opened in the spring, the furs were conveyed in the opposite direction by boat from Fort St. James to Alexandria, from there by horse overland via Kamloops to Fort Okanogan, and from Okanogan by boat to Fort Vancouver. According to A.C. Anderson, the return journey occupied from approximately the middle of April until the end of September ${ }^{103}$ (Figure 2.7). The lower Columbia was first explored by Lewis and Clark and then by the Pacific Fur Company which established forts at Astoria, Okanagan and Spokane. The portion of the Columbia between Astoria and the Snake River was the most dangerous part of the communication in the early years of the fur trade largely due to the passage through Indian territories. There were two main portages to be made at the Cascades and at the Dalles where

[^29]

Figure 2.7. Main inland routes, Columbia Department, after 1829.
native groups congregated and fur traders met resistance (Figure 2.8).

After 1818, to avoid the rapids on the Columbia River going upstream, horse brigades were organized between Fort Nez Percés and the upper Columbia. In the Nor'Wester days, Spokane House was the destination; in the Hudson's Bay Company era the portage continued to Fort Colvile. This route was mainly used by messengers and express parties. John Work in 1825 wrote:

It is indispensably necessary that these dispatches should be sent to Fort Vancouver as soon as possible, they must either be sent direct to Fort Nez Perces from this place or around by Spokane, by the former route they will reach Nezperces in four days, by the latter they will require six... ${ }^{104}$

Work was referring to alternate routes, the former via the Grand Coulee, the latter via the Palouse River, from there across the Columbia Plain. The earliest record of the Grand Coulee route was made by Alexander Ross who drove horses from Fort Okanogan to Spokane House in 1814. He states:
set of with all haste to Fort Spokane, distant 160 miles southeast from Oakinacken, with 55 of our horses; and on the way both going and coming, made a short stay at a place called the Grand Coule... ${ }^{105}$

Ross' map of the Columbia (Figure 2.4 , supra) shows the alternate route via "The Long Portage," along the Palouse River for a short way, and across the Columbia Plain. The distance between Nez

104 Lewis and Phillips, The Journal of John Work, 85.
105 Alexander Ross, The Fur Hunters of the Far West, 31-32. The name was given to this former channel of the Columbia River by the Canadian voyageurs, as recounted by David Douglas who also visited the area in 1826.


Figure 2.8. Lower Columbia River

Percés and Colvile by this route "was reduced by 150 miles ( 240 km ) compared to the Columbia River journey.

Part of Simpson's plan as the use of the Fraser River as a new line of communication to the interior and the establishment of Fort Langley as the major coastal outlet for the interior trade. Simpson was under the impression that the Fraser was, at low water, "a fine large deep navigable River" which had been "formed by nature as the grand communication with all our Establishments on this side of the mountain."106 Thus, Fort George at the mouth of the Columbia was replaced in 1825 by what was intended as a secondary post on the north side of the Columbia 90 miles ( 145 kilometres) inland and as a temporary headquarters before Fort Langley on the lower Fraser could be established in 1827.

It was long Simpson's desire to determine the navigability of the Fraser which he "always considered as likely to afford us a communication between the coast and the interior in the event of the Columbia being given up to the Americans..."107 On his second expedition west in 1828, from Fort St. James, Simpson's party took to the Stuart and Nechako rivers for 93 miles (150 km) to the Fraser River at Fort George, then descended the Fraser for about 100 miles ( 160 km ) to Fort Alexandria, approximately 425 miles ( 40 km ) south of present-day Quesnel. At Alexandria the group was divided: Mr. Yale and fourteen men (eight from

Alexandria) in two bark canoes continued down the Fraser while Simpson, McDonald and Hamlyn with five men proceeded overland on horseback to Kamloops following the brigade trail discovered and reportedly first used by John Stuart of the North West Company in $1813 .{ }^{108}$

Prior to Simpson's voyage, James Murray Yale and Archibald McDonald had made a preliminary reconnaissance of the Fraser and Thompson rivers in 1826, but Simpson personally attempted the Thompson and Fraser canyons despite their reports. Pierre La Course and three men were sent off ahead for Kamloops "to commence building a boat there immediately, to take us down to Fort Langley."109 The boat was built in five days and Simpson and his party of sixteen continued their journey going down the Thompson River; ${ }^{110}$ this part of the trip proved to be "exceedingly dangerous". Yale's simultaneous reconnaissance of the upper Fraser was also depressing news to Simpson:

From Alexandria to the Falls close to what is called the Bridge [Bridge River] there are 27 strong rapids: at 8 or 10 of them...the loading must be carried, but the boats can be hauled up all except $4 . .{ }^{111}$

[^30]At the "Grand Forks" (Lytton) Simpson and Yale rejoined each other, stated McDonald, "both parties descending rivers that were never ran before [That is to say, dangerous parts not run before]."112 Upon descending the Fraser between the Forks and the Falls (later Fort Yale), and despite the expertise of his Iroquois boatsmen, Simpson determined that

Frasers River, can no longer be thought of as a practicable communication with the interior... and altho we ran all the Rapids in safety, being perfectly light, and having three of the most skilful Bowsmen in the country ... I should consider the passage down, to be certain Death, in nine attempts out of Ten. ${ }^{113}$

Fort Langley was reached on 10 October. ${ }^{114}$ Simpson then proceeded south along the coast via Puget Sound and overland along the Cowlitz Portage, arriving at Fort Vancouver on 25 October and remarking, "having between that Date, and the first of May performed the longest Voyage ever attempted in North America in one Season, about 7000 miles."115 From York Factory to Fort Langley by Simpson's route was 3,261 miles $(5,248 \mathrm{~km})$, of which the canoe course was 3,181 miles $(5,119$ km). Out of a total of three months (less two days) total travel time, his travelling time by canoe was 65 days; the

112 Peace River, 35.
113 E.E. Rich, Part of Dispatch from George Simpson... . 38-39.
${ }^{114}$ Fort Langley Journal, 27 June 1827 - 30 July 1830. Two more boats were built at Fort Langley for the remainder of the trip to Fort Vancouver.

115 E.E. Rich, Part of Dispatch from George Simpson... 47.
average distance by canoe per day was almost 50 miles ( 80 km). ${ }^{116}$ After discovering the Fraser River's unsuitability as a transportation route, Simpson made the new Fort Vancouver instead of Fort Langley the main depot in the Columbia Department.

A second major decision also resulted from Simpson's second inspection of the Cordilleran fur trade in 1828. His voyage via the Peace River route, (including a shortcut by the Nelson-Burntwood-English rivers west from York Factory), pointed out the difficulties of this communication and permanently ended the Company's attempt to supply New Caledonia from Hudson Bay. (Simpson's itinerary from Fort Chipewyan to Fort Langley is summarized in Appendix E.) Simpson referred to the New Caledonia route as "the most tedious, harassing and expensive transport in the Indian Country, "117 even though the portage trail from McLeod Lake to Stuart's Lake Post, approximately 80 miles (129 km ) in length, avoided the longer and more difficult route up the Crooked River to Summit Lake and the Giscombe Portage, explored by Chief Trader Simon McGillivray in 1828. Back-packing in the summer and dog-sledding during the winter were the original modes of transport between Ft. St. James and McLeod Lake but horses were also used on occasion, as Simpson had tried. The portage is first described in September 1828 by Archibald McDonald who accompanied Simpson. Upon reaching McLeod Lake (called by

[^31]Simpson "the most wretched place in the Indian Country") ${ }^{118}$ canoes were left behind and a portage of 100 miles ( 161 km ) was effected "through a rugged Country which was passed in Five Days, a very fatigueing part of our Journey. ${ }^{119}$ His fourteen men portaged the distance each carrying a piece (80-90 lbs):

Thus loaded, we cannot be expected to get on quickly, for the road is exceedingly bad, no transport of any consequence having gone on here for the last three years, and no improvement or clearing away made on the road. ${ }^{120}$

The route included a three-hour traverse of Carp Lake by "a very frail raft." ${ }^{121}$

The redirection of the supply line to New Caledonia from the Columbia resulted in McLeod's Lake, once vital in the line of communication, becoming an insignificant outpost. John Tod reported:

In consequence of recent changes in the Department my situation has become more lonesome. I am not now as formerly assailed with the landing of noisy Brigades of Canoes, men, women, and dogs clamouring for potatoes and fish... ${ }^{122}$

John McLean about 1836 summarizes the transportation system
to New Caledonia:
When the district was first settled, the goods required for trade were brought in by the winterers from Lac La
${ }^{118}$ McLeod, Peace River, 17.
119 Ibid., 16.
120 Ibid., 23.
121 Ibid.
122 John Tod, letter to Edward Ermatinger, McLeod Lake 27 February 1826, Mss. 2176, Volume 2 (BCARS).

Pluie [Rainy Lake], which was their dépôt. The people left the district as early in spring as the navigation permitted, and returned so late that they were frequently overtaken by winter ere they reached their destination... The outfit is now sent out from England by Cape Horn, to Fort Vancouver, thence it is conveyed in boats to Okanagan, then transported on horses' backs to Alexandria, the lower post of the district, whence it is conveyed in boats to Fort St. James. ${ }^{123}$

The main problem of the transcontinental fur trade thus was the problem of transporting supplies inland before freezeup. The voyage by sea from England to York Factory took approximately six weeks in 1827; from York Factory it took twelve weeks to cross the continent to Kamloops. ${ }^{124}$ On the other hand, around the same period, from England to Fort Vancouver on the Columbia via Cape Horn took about thirty-six weeks or less, then five to six weeks by water and land to Kamloops. ${ }^{125} 126$ The voyage from England to Kamloops via Fort Vancouver thus took twice as long as from England to Kamloops via York Factory. But the expense and trouble of supplying the cordilleran posts was greater by the transcontinental communication. Time did not matter so long as the posts had supplies that would carry them over. After 1826 annual ships

123 W.S. Wallace, ed., John McLean, Notes of a Twenty-five Years' Service in the Hudson's Bay Territory, (London, 1849), Vol. I, 185.

124 The time taken by George Simpson's party in 1828.
${ }^{125}$ David Douglas', Journal... See also Appendix E, Douglas' itinerary.

125 By comparison, in 1835-36 the pioneer steamship Beaver travelled as a brigantine from Gravesend, England to Fort Vancouver in 225 days ( 32 weeks).
bearing supplies for the whole Cordillera arrived at the Columbia River generally about June in time to distribute supplies to the inland posts, and receiving the year's fur returns.

Peter Warren Dease's journal of the 1831 brigade up the Columbia reveals how the new system worked. The brigades of three districts, New Caledonia, Fort Colvile and Thompson River left Fort Vancouver together in nine boats each manned by seven men and evenly loaded with 46 to 48 pieces. About 275 miles (443 km) upstream, Fort Nez Percés (Fort Walla Walla) received its outfit and the loads were redistributed. At Fort Okanogan, the Colvile brigade departed for the upper Columbia with its outfit in four boats. The remaining pieces were packed on 110 horses for the overland trip to Kamloops and Fort Alexandria. Five horses were replaced at Kamloops. At Alexandria supplies were unloaded and transferred to North canoes. Due to the bad shape of the canoes 44 pieces were left at Alexandria tó be forwarded later. Four bark canoes carried 35 pieces each ( 3150 pounds/1429 kilograms total) and a fifth weaker craft held 18 pieces. At Fort George another portion of the outfit was left and two wooden Indian canoes were obtained to replace the poor canoe. ${ }^{127}$

On the lower Columbia River there were three portages "at the Cascades, the Dalles, and the Chûtes, " according to Anderson, the numerous Indians of the two latter places being employed to assist in the transport with their horses, and
${ }^{127}$ HBCA, B. 188/a/17, 3-52, Fort St. James Journal, 1831-32, 5 May - 13 Sept. 1831.
personally to convey the boats when necessary." The strong sea breeze along the Columbia "called by the Indians the 'Chinook wind' ...enabled the voyageurs to employ the sail... O Kinagan was generally reached in about 20 days. ${ }^{128}$

On the upper Fraser River, from Alexandria to Stuart's Lake, navigation also
occupied 20 days, the steady Current of the upper Fraser impeding a severe obstacle to the progress of the boats and demanding the Constant use of the pole and tracking line, though unattended with the formidable dangers which characterized the navigation of the Columbia. ${ }^{129}$

Boats gradually replaced bark canoes on the upper
Fraser in the 1830s. Wooden canoes were important for a time, with six to ten appearing on the Fort St . James inventories yearly between 1829 to 1838 . But bateaux were also used as early as 1831 to bring out the outfits to Alexandria. ${ }^{130}$ By the 1839 Fort St. James inventory, only boats are listed. ${ }^{131}$

From Fort St. James supplies were sent to the outlying posts including Fort Kilmaurs, and Fort Connolly and McLeod Lake. The region east of the Rockies was served by Fort Dunvegan via the Peace River.

## The Fraser-Okanagan Brigade Trail

The overland route between the Fraser and Columbia river

[^32]drainages was the longest trail section of the brigade system in the Cordillera. Commonly called the "brigade trail" by fur trade historians, it has been well documented especially in the

Okanagan by F. M. Buckland, Margaret Ormsby, F.W. Howay, E.P. Creech and others. ${ }^{132}$

The trail between Fort Alexandria and Fort Okanogan can be analyzed as two sections. From Alexandria, the trail headed south to present Williams Lake, past Lac la Hache to present 100 Mile House, then east to Horse Lake, Bridge Creek, Bridge Lake, and Lac des Roches. East of Lac des Roches the trail climbed "the Mountain," as the divide was called, and descended steeply to the "North (Thompson) River" valley. (This part of Simpson's voyage is excerpted in Appendix F.) At La Traverse (present Little Fort), a crossing of the river was made to the east side and the trail headed south to Fort Kamloops, located until 1841 on the northeast corner of the confluence of the North and South Thompson rivers (Figure 2.9).

The 200 -mile ( 322 km ) portion of the brigade trail between Alexandria and Kamloops was first described by Simpson in 1828:
our road leading a short distance along the Banks of the [Fraser] River, and then taking a Southerly direction through an open Country, intersected by Small rivers and Lakes, amidst beautiful Valleys, over high Hills, across the faces of precipices many Hundred feet high (where a

132 F.M. Buckland, Sixth Annual Report of the Okanagan Historical Society; Margaret Ormsby, "The Significance of the Hudson's Bay Company Brigade Trail," The Okanagan Historical Society, 1949, 29-37.; F.W. Howay, "British Columbia Brigade Trails," The Beaver, 1938, 48-51.


Figure 2.9. Alexandria to Kamloops up to 1843.
false step in our broken track rarely 12 Inches wide would have proved fatal) occasionally over points of Wood, and at times through deep Swamps; in short we had a ride occupying Eight Days... ${ }^{133}$

The section from Fort Okanogan north to Kamloops followed the east side of the Okanogan River, crossed to the west side near the present town of Oroville, Washington and continued north along the west side of Osoyoos Lake and Okanagan River. ${ }^{134}$ Some back valleys, via Myers Flat, White Lake, and Marron Valley, provided an alternate route between Osoyoos and Okanagan lakes, possibly to avoid flooded lowlands in the spring. ${ }^{135}$ The trail also followed back valleys along the west side of Okanagan Lake as far as present Peachland, following the route of the modern Highway \#97 to present Westbank, then along benchlands above the lake to Shorts Creek where it continued along the shore to the head of the lake. ${ }^{136}$ From the north end of Okanagan Lake the trail went past Round Lake to Salmon River, then through a natural grassland bowl named by the fur traders Grande Prairie (now Westwold). The divide between the Fraser and Columbia drainage systems -- the height of land between the Okanagan
${ }^{133}$ Rich, Simpson's Dispatch, 1829, 29-30.
${ }^{134}$ Note the differing modern spellings in B.C. and Washington. This aboriginal name (meaning "rendezvous") had many spellings over the years. I have kept the spelling Okanogan to refer to the fur trade post and Okanagan to refer to the river and lake.

135 This part of the route has been described by various authors but is best documented by Bob Harris, Harley Hatfield and Peter Tassie in The Okanagan Brigade Trail in the South Okanagan 1811-1849 (1989).
${ }^{136}$ See F.M. Buckland, Ogopogo's Vigil, 14, for a detailed description of the route through the Okanagan Valley.

Valley and the South Thompson River Valley -- is reached near Monte Lake. This name derives from la montée, meaning "the climb," referring to the long uphill march that the brigade made from the Thompson Valley to the summit. Going northward and downhill from Monte Lake was less strenuous. On reaching the South Thompson Valley the trail followed the south side of the South Thompson River to Kamloops (Figure 2.11). Until 1842 the fort was located on the northeast corner of the river junction, necessitating the crossing of furs and supplies by canoe, and initially the swimming of horses. ${ }^{137}$

The use of such a long horse portage between Forts Okanogan and Alexandria made Thompson's River Post (Kamloops) an essential node of the brigade system. Even though Kamloops was only a marginal place for furs, the length of the overland journey necessitated an intermediate post for safety and resupply. The trail between Okanogan and Thompson's River alone was a journey of 12 or 14 days, suggesting an average distance of twenty miles per day. ${ }^{138}$ Although Okanagan Lake and River were navigable (except for a short portage around Okanagan Falls), the use by boats would have entailed another post at the head of Okanagan Lake, at an additional

[^33]expense. ${ }^{139}$ It would appear, however, that the North west Company had earlier conceived of such a post between Okanogan and Kamloops: "One of these [outposts], in charge of Mr. Montigny, assisted by a man named Pion, was placed on the peninsula between the two arms of Okanagan Lake, near its head."140 It is surmised that the Nor'Westers used canoes on the lake and that the post at the head of the lake was a mainly a transshipment point. However, under the Hudson's Bay Company, the aboriginal
trail along the west side of Okanagan Lake was firmly established as the brigade route; Thomas McKay is credited with blazing the trail in 1824 in time for the first major brigade from Fort Vancouver to Fort St. James the following year. ${ }^{141}$

Archibald McDonald's report on the Thompson's River District in 1827 provides an explanation of the transport:

Were the use of Horses attended with more difficulty than it is, the Okanakan river might be navigated with canoes or a smaller description of Boats to the North end of the big Lake, but Subject to tedious Voyages This Lake is one of the largest to the West of the Rocky

139 There is some evidence that the North West Company had constructed a post at the north end of Okanagan Lake around 1814.

140 George Dawson, "Notes on the Shuswap People of British Columbia", 27, in Proceedings and Transactions of the Royal Society of Canada, 1st Series, Vol. IX, 1891 Section II, Montreal.

141 McKay, born about 1796 and the son of John McLoughlin's wife by a previous marriage, he worked for the Pacific Fur Company in 1810, joined the North West Company in 1814, and the Hudson's Bay Company in 1821. He was well-known by the Indians in the Columbia Department [which may help to explain his knowledge of the Country.] HBRS, IV, 3497-9.

Mountains - say from 60 to 70 miles long and 3 to 4 broad. ${ }^{142}$

It made more sense to maintain the two existing posts, Okanogan and Kamloops, than to build a new one. Of Kamloops, McDonald remarked:
...its local situation pointing Thompson's River out a central place for the accommmodation of the neighboring departments whether the depôt be on the Columbia or Fraser's river, it cannot at present be looked upon as existing solely for the sake of the few Furs collected. Okanakan .... like Kameloops...is necessary for the Communication. ${ }^{143}$

The total distance of the overland route from Fort
Okanogan to Fort Alexandria was about 500 miles [805 km], taking the brigades on the average 18 days to travel; from Okanogan to Kamloops ( 224 miles ) took 10 days, an average of 22 miles per day. ${ }^{144}$ From Alexandria to Kamloops via the North Thompson route totalled 215 miles and took eight days, an average of 27 miles per day. ${ }^{145}$

Archibald McDonald's "A Sketch of Thompson's River District, 1827" (Figure 2.10), similar to Ross' 1821 map, does not show the Okanagan brigade trail but does reveal a "Canoe Bay" at the north

[^34]end of Okanagan Lake, (again suggesting the use of water transportation along the lake) and delineates a number of other trails including his route from Kamloops to "Okanakan River" in October 1826 via the Similkameen, a trail from the "South Branch" (South Thompson River) to the head of "Big Okanakan Lake," the trail between Osoyoos Lake and Fort Colvile "frequented by Indians," a pack road between the Fraser Canyon and the "Coutamine River" (Nicola River), a portage between the North Thompson River and the Columbia River, and another route from the Shuswap watershed to the Columbia. This sketch was drawn to illustrate his report. Of interest is the fact that McDonald explored a few routes that were subsequently used by the brigades after the boundary settlement, specifically one followed by Anderson across the Cascades in 1846 (the brigade route south of Kamloops to the Nicola Valley) and the brigade trail along the north side of the Similkameen River to Osoyoos Lake (used annually after 1849), later made part of the Dewdney Trail. David Douglas' sketch maps document his journey in spring 1833 along the brigade trail through the interior from Fort Okanagan to the upper Fraser via Kamloops, replete with campsites and astronomical observations (see also Appendix E). These sketches were the basis of Chief Trader Samuel Black's important 1:1,000,000 scale map of the Thompson River District (untitled, c.1835) which incorporated Douglas' astronomical
observations that appear with other notes on the back of the map. ${ }^{146}$ Black's manuscript map, folded but with one panel missing (Figure 2.11), was obviously carried by him on brigade trips. Noteworthy is the "New Rout" to New Caledonia via Cache Creek and Loon Lake (traversed by Douglas in 1833, perhaps with Black, as well as the first cattle imported into the region) and the "projected rout" via Deadman River to the north, a variation of which came into effect after 1841. The Okanagan trail is pronounced; every creek crossing the trail is named. The Similkameen route used by McDonald in 1826 is also acknowledged; this route would be regularly used after 1849 by the Colvile brigade. Black further explored an alternative route to the Okanagan via "Jacques River," shown as an Indian trail on later maps, between the Okanagan and Nicola valleys. Black's map became the progenitor of other maps of the interior that followed, including one by the Royal Engineers (1861) and A.C. Anderson's large map of a portion of B.C. (1867).

The death of Samuel Black at Kamloops in 1841 was followed by the removal of the fort to the northwest corner of the river junction. ${ }^{147}$ The brigade route was shortened and made

146 Identification of the map was made in 1986 by Bob Harris and Ken Favrholdt. The writing is without a doubt that of Samuel Black, but the astronomical notations are exactly the same as those of David Douglas, suggesting Douglas shared the information with Black.

147 Black was buried at Fort Kamloops, but distinterred in 1842 in order to be reburied at Fort Vancouver. At Monte Creek the horse bearing his body fell into the creek and it was decided not to transport him farther. It is near Monte Creek along the brigade trail where H.B.C. Chief Trader Samuel Black is presumably buried.
easier by another trail north from Kamloops which became the regular route after $1843 .{ }^{148} 149$ The new route went along the north side of Kamloops Lake to Copper Creek where it headed northwest over several small divides and streams, crossing Criss Creek, Deadman River and Bonaparte River to the south end of Green Lake, then continued north to Horse Lake and joined the old route at Bridge Creek (present 100 Mile House). A.C. Anderson, when appointed in charge of Fort Alexandria, took this trail with his family on a trip from Fort Colvile to Alexandria in $1842^{150}$ (see Appendix I for his itinerary) and in spring 1843 he brought the New Caledonian brigade south via the same route which became the regular brigade route through the interior for the next two decades (see Figure 3.4).

The Leather Pass (Tête Jaune or Yellowhead Pass)
Two thousand feet ( 610 metres) lower than the Athabasca Pass and only forty miles (64 kilometres) to the northwest along the Miette River and Buffalo Dung Lake (later known as Yellowhead Lake), the Yellowhead Pass led west through the Rockies to the Fraser River and New Caledonia. As early as 1824, George Simpson recognized the possibilities of using this

[^35]route to supply goods and take out furs from New Caledonia instead of by the Peace River route:
...great advantages would arise from changing the route now pursued by the New Caledonia brigade... to forward the New Caledonia outfit in two Boats and thirteen men in company with the Saskatchawaan Brigade; from Edmonton cross over to Fort Assiniboine in three or Four Days then proceed in two Boats to Henry's House in the mountain in Ten Days; thence by horses to Buffalo Dung Lake (1 pipe across) in Two Days; thence by Land or Water to the head of Frazer's River in Three Days and thence by a fine bold stream to the different Posts. ${ }^{151}$

In the fall of 1825 James McMillan investigated a route from Jasper's House to the head of the Fraser River by the Miette River Valley to Buffalo Dung Lake and Moose Lake. ${ }^{152}$ McMillan reported favourably on the Yellowhead Pass as a route for leather shipments to New Caledonia. In fall 1826, a brigade bound for

New Caledonia set out from the unoccupied La Rocque's House
("William Henry's old House") on the west side of the Athabasca River. ${ }^{153}$ The 1826 trip consisted of Chief Trader Joseph McGillivray, James McDougall and eight new recruits assisted by Saskatchewan District servants. New Caledonians met the incoming horse brigade at Tête Jaune Cache, the head of canoe navigation on the Fraser River, and transported them by canoe to Fort St. James.

Fort George (now Prince George) became the western

151 Merk, Fur Trade and Empire, 37.
${ }^{152}$ HBCA, B.188/b/a, 9-10, James MacMillan to William Connolly, 24 Oct. 1825; ibid., B.188/b/4, Saskatchewan District, 5 Feb. 1826.
${ }^{153}$ Lieut. Aemilius Simpson, "Journal of A Voyage across the Continent of North America in 1826." HBCA B.223/a/3.
terminus for the so-called "leather brigade." Five hundred skins, along with packcords, babiche (rawhide thongs or lacings) and sinews were supplied in 1826 and 800 skins, mainly moosehides, in 1827. ${ }^{154}$ Moose and deerskins were used for moccasins, leggings and other items of clothing. ${ }^{155}$ In 1827 the HBC Council ordered that a specified amount of leather goods was to be provided and shipped from Edmonton House to Tête Jaune Cache by the end of October 1829. Other supplies for New Caledonia came from Fort Vancouver via the Columbia.

A winter crossing of the Yellowhead Pass took place in March 1827 with the spring express. Clerk George McDougall, with three retiring servants and an Iroquois guide left Fort St. James on 14 March and, using snowshoes most of the way, reached Tête Jaune Cache on 1 April, taking another eighteen days to reach Jasper House. ${ }^{156}$ Considered too arduous, the route was not used again in the winter and in 1828 the inbound New Caledonia express was sent circuitously by the Columbia brigade via Athabasca Pass

154 HBCA, D.4/6, 5 July 1826, York Factory, Simpson to Connolly, fol. 16d., and B.239/k/I, fols. 88d.-9.
${ }^{155}$ Reported Simpson, "Leather is one of our principal articles of Traffic with the Natives of New Caledonia as large Animals are very scarce throughout the District," Governor George Simpson to HBC London, York Factory, 1st September 1825,. HBCA D.4/88, f.79.

156 A. G. Morice, The History of the Northern Interior of British Columbia (Toronto: William Briggs, 1904), 155. Also, Edward Ermatinger, "Edward Ermatinger's York Factory Express Journal, Being a Record of Journeys Made Between Fort Vancouver and Hudson Bay in the Years 1827-1828," Proceedings and Transactions of the Royal Society of Canada, Third Series, Vol. VI, Section II (May 1912), 82n.
to Fort Okanogan and from there northward. ${ }^{157}$
The fall brigade in 1827 left Edmonton by horse to Fort Assiniboine and from there by canoe to Jasper House. The New Caledonians separated from the Columbians at the mouth of the Miette River; the Saskatchewan men then crossed the Yellowhead Pass with the express, transporting twenty-eight packs of leather and forty horses. The end of the portage was a day's journey downstream from Tête Jaune Cache where thirteen New Caledonians in three canoes met them. The Saskatchewan men then returned east across the pass with the horses.

In 1828 and 1829 the Yellowhead route was not used by the brigades due to a case of mistiming, so new recruits to New Caledonia were sent via the Okanagan. A decision was made in 1830 that the Athabasca District would replace the Saskatchewan district as the supplier of leather and the Yellowhead Pass would be abandoned in favour of the Peace River route. Fort Dunvegan on the upper Peace then became the supply depot where the New Caledonians obtained their leather. The new route meant a decrease in the number of horses required at Jasper House to facilitate one mountain portage instead of two.

After 1830 the Yellowhead Pass was only occasionally used by the Company. In 1835, A. C. Anderson arrived at Fort George from the Columbia district and was assigned to go through Tête Jaune's Pass to Jasper House to meet a party with a consignment of leather. The return trip was beset by problems:

When they reached the height's of Frazer's River, they found ice beginning to form along its shores. They persevered, however; sometimes forcing their way through the ice, sometimes carrying the canoes and property overland where the passage was blocked up by the ice. But all their efforts proved unavailing, for they were at length completely frozen in. ${ }^{158}$

Anderson's party, forced to return to Jasper House, went to Fort Edmonton and then back to Jasper House again, finally reaching Fort George. After this episode the Council decided to finally abandon the Yellowhead Pass in favour of the less direct but more reliable Athabasca Pass and Okanagan routes, although Peter Skene Ogden in 1836 managed to transport the leather again across the Yellowhead and down the Fraser. ${ }^{159}$ The Athabasca route was used for the leather supply after 1837 but in 1840 the Athabasca District was again made the supplier of leather and the Peace River route was once again used until 1847, although the Saskatchewan District on occasion indirectly supplied New Caledonia with grease via Fort Dunvegan and westward. ${ }^{160}$

The Yellowhead Pass was also sometimes used by the express brigades from York Factory. In December 1845 the post
journal of McLeod Lake notes that "the Express from York Factory had not yet arrived at Stuart's Lake [Fort St. James]." Winter travel between McLeod Lake and Stuart's Lake

[^36]was made by sledge along the miserable portage route recounted by McDonald in 1828.

The Yellowhead route was again used in $1849^{161}$ and 1853 for the transport of leather but the more general route for leather reverted to the Peace River Pass. Each fall eight New Caledonians were sent to Dunvegan where they picked up fifty pieces of leather and returned in two canoes to McLeod Lake; the shipment was then forwarded to Fort St. James. The practise of obtaining a year's supply in advance at McLeod Lake avoided the lack of leather. ${ }^{162}$

## Simpson's River

As early as 1812, Nor'Westers Daniel Harmon and James McDougall explored the headwaters of the Skeena River. By the 1820s, a route to New Caledonia from the Pacific coast was envisaged by the HBC via a suspected outlet named Simpson's River, really confusion over the Bulkley, Nass and Skeena drainages. Samuel Black later explored the upper reaches of the Finlay River in 1824 in search of northern outlets for the New Caledonia trade. In an effort to extend the trade and food supply, Fort Kilmaurs was built on Babine Lake in 1822, Fort Connolly on Bear Lake in

161 HBCA, B. 188/a/20, 17 November 1849, D.5/26, 27 December 1849, Edmonton House, Rowand to Simpson, fol. 747 d and D.5/27, 25 February 1850, Stuart Lake, Donald Manson to Governor, Chief Factors and Chief Traders, fol. 358.
${ }^{162}$ E.H. Oliver, The Canadian North-West..., Vol. 1, 643, 65253, 3 July 1830; ibid., Vol. 2, 714, 721, 3 June 1835; HBCA, 4-39, 72d-74, Simpson to Donald Manson, 3 June 1849; ibid., D.5/36, 32031, Donald Manson to Governor and Committee, 27 Feb. 1853.
1826. In 1825 James Murray Yale was appointed to go to [Fort] Okanagan to get horses and return to New Caledonia to accommpany William Brown to go to the Babine country "on a voyage of discovery towards the sea," ${ }^{163}$ suggesting the use of the brigade trail through the interior. However, returns of furs were still made at this time via McLeod's Lake to Peace River.

After Fort Simpson was established at the mouth of the Nass River in 1831 to capture this outlet for New Caledonian furs, an overland connection seemed viable. Further exploration from Fort St. James west to Babine Lake and Babine River was carried out by Chief Trader Simon McGillivray in 1833. ${ }^{164}$ In 1834 the HBC sent traders under John McLeod to the headwaters of the Stikine River as far as Dease Lake. The route from the Nass to the junction of the Bulkley and Skeena rivers was an ancient aboriginal "grease trail." Ironically, the route from New Caledonia to the Pacific would eventually be realized in the late 19 th century after the fur trade in southern British Columbia had faded and the . Okanogan-Alexandria brigade trail had long been abandoned.

## The Express Route

For a period of three decades, the Athabasca Pass route remained the "express" route from the east to the Columbia. The annual "express" carried letters, accounts and other information

[^37]for the Governor and Council who met once a year at York Factory on Hudson Bay or after 1826 at Norway House on Lake Winnipeg. Along this route heading eastward in April or May travelled the express from Fort Vancouver; westward in October travelled the express from York Factory.

David Douglas left a description of the journey of the annual express eastward in March 1827 led by Edward Ermatinger. ${ }^{165}$ Botanizing along the way, Douglas walked along the Columbia River, following the brigade upstream from Fort Vancouver to Fort Colvile in twenty-five days. From Kettle Falls he continued north by water with Ermatinger and seven men. Upon reaching Boat Encampment they encountered snow and donned snowshoes, then took six days to cross the mountains. ${ }^{166}$ At Rocky Mountain House they obtained two "light [unloaded] birch canoes" to take them to Jasper's House, three days journey from Rocky Mountain House. ${ }^{167} 268$

Ermatinger returned to the Columbia in the fall of 1827, leaving Jasper House on 2 October:

The 4 canoes were sent off about 8 o'clock this morning to proceed to the Portage, the 2 large ones, laden with

[^38]fifteen packs Leather and 3 Cassettes or cases and manned by 6 men - and the 2 old ones each 12 packs 1 Cassette and manned by five men. Provisions 1 bag Pemican pr. canoe. At noon our horses being collected and the baggage tied etc. our van marched and the whole party were off from Jasper's by 1 p.m. All the gentlemen and families go by land to lighten the canoes. Our pieces for this amount 66 packs of Leather and parchment, 18 bags pemican, with our private baggage and the number of horses we are to employ on the Portage amount to 54. We encamped at 5 p.m. below the point of Mietts Rock, which is high and difficult to pass. The mares are to follow us Light to the Portage. ${ }^{169}$

It took Ermatinger only four days from the Hole to Boat
Encampment, that is, about twenty miles ( 32 km ) per day.
Another account of the express by William Ashley mentions only six men from Colvile carrying the "annual express or packet" to York Factory. They set out in a bateau on 21 September 1829 and arrived at Boat Encampment on 4 October, covering the three hundred miles ( 483 km ) in fourteen days, an average of twenty-one miles ( 34 km ) per day. The brigade had to wait at Boat Encampment nearly a month, however, to meet a westbound party which took the bateau in which Ashley's group had ascended, who in turn used the horses brought across the mountains. At the summit, Ashley recounts, the snow was three feet deep and "great difficulty was experienced in getting the horses along. ${ }^{170}$ They reached Jasper's House on 11 November, taking nine days to cross the mountains.

The traverse of Athabasca Pass and an ill-fated brigade
${ }^{169}$ Edward Ermatinger's York Factory Express Journal., 108.
170 William H. Ashley, British Establishments on the Columbia..., (Fairfield, Washington: Ye Galleon Press, 1981), 20.
journey down the Columbia River in 1838 by Father Blanchet and Father Demers is recounted in the Notices and Voyages of the Famed Quebec Mission. On 5 October 1838 the missionaries left Jasper's House with a brigade of 72 horses. "They were made to swim across streams, and the baggage was carried across on rafts. As many as 25 crossings were made some days." They reached the height of land on 10 October; "The descent has ...more ... danger and trouble than the ascent." On 13 October they reached "the encampment of the bateaux ... 41 leagues [205 km] from Jasper's House" where "two bateaux (that was the number sent each year from Colville) were awaiting them there."171 Part of the party was left behind. The downriver trip from Boat Encampment left 14 October, shot the "dalles des morts" on 15 October and reached the "maison des lacs" on 16 October, "55 leagues" (about 300 km ) from Boat Encampment. Maison des Lacs, also known as McKay's House, was under construction at the time. ${ }^{172}$ A bateau was sent back to Boat Encampment and eight days later the bateau reappeared but "half-wrecked." The trip from Maison des Lacs to Fort Colvile took four days and from Colvile to Okanogan took four days.

Athabasca Pass, while mainly an express route, was also used for the transport of some furs. After 1839, as a

[^39]result of an agreement between the $H B C$ and the RussianAmerican Company, the HBC supplied the Russian company 2000 landotter skins from west of the Rockies and another 3000 from east of the Rockies. The eastern shipment was sent via Athabasca Pass to Fort Vancouver, an arrangement that continued until 1849. Paul Kane, in crossing Athabasca Pass in 1847, noted a party of between "fifty and sixty horses loaded with ... the furs destined for Russia." ${ }^{173}$

In 1841, in anticipation of the looming political crisis over the settlement of the international boundary between American and British Territories, George Simpson made a final expedition west. Simpson's third transcontinental journey to the Columbia was part, however, of a much greater expedition, published as the Narrative of a Journey Round the world in 1847. ${ }^{174}$ Simpson's route would take an untried (as far as the HBC was concerned), more southerly route through the Rockies, but its impact on the fur trade network in the Cordillera would be nil.

Unlike his previous two voyages, Simpson's third trip originating at Montreal would take an overland route across the Plains. His party's ordinary rate of travelling was four or five miles ( 6 to 8 km ) an hour for ten, twelve or fourteen hours a day -- the carts sometimes requiring a longer time to

[^40]accompany the day's march. ${ }^{175}$ Between Fort Edmonton and the Rockies, the country was impracticable for the carts so all the baggage was conveyed on horseback. Instead of Athabasca Pass, because of the "danger and impractibility of going to the Athabaska [sic] portage at so early a period of the season, when the waters are swollen by the melting of the mountain snows, "176 Simpson's party of twenty men (and 45 horses) followed another route from Edmonton House via Red Deer River and Bow River Valley (through what is now the town of Banff) and emerged through the Rockies via another pass (now Simpson Pass) to the upper Columbia and Kootenay rivers; they then headed south.

Fort Colvile was the terminus of Simpson's trip on horseback - a distance of nearly 2,000 miles ( $3,219 \mathrm{~km}$ ) in fortyeight days, riding from early dawn to sunset, $111 / 2$ hours a day, ( 50 miles $[80 \mathrm{~km}]$ a day for 40 days). From Colvile, canoes were used for the trip down the Columbia. On the first day Simpson's party made 100 miles ( 161 km ) in fifteen hours, on the second day, 120 miles ( 193 km ). They arrived at Les Chutes (the Dalles) where finally a portage was necessary after running nearly 400 miles ( 644 km ), "without even lightening our craft."177 At this point Simpson reminisced about his earlier voyages and the great

[^41]changes that had taken place over the years. Perhaps in view of his earlier harrowing journeys, Simpson walked the portage along the Dalles while his men navigated the rapids, where Indians had formerly harassed the traders. Simpson arrived at Fort Vancouver on 25 August 1841.

## A Comparison with the Siberian Fur Trade

A comparison of fur trade transportation in Canada and Russia in the $19 t h$ Century reveals parallels in technique used to overcome similar transport problems. Governor Simpson's narrative of his journey across British North America and Siberia in 1841 provides a detailed picture of the fur trade domains of the two realms. ${ }^{178}$

The fur trade was the basis of Russian eastern expansion and the conquest of Siberia beginning in the 15 th Century; Russians reached the Pacific seaboard in 1639. The problem of supply to fur trade outposts required shipments of foodstuffs by land and water from eastern Siberia, as well as by sea from Russian overseas colonies (including California).

Between the Urals and Primorye region of the eastern Siberian coast, the Ob, Yenisey and Lena rivers afforded the main communication systems. Barge-like vessels -- flatbottomed, single-decked, one-masted, 70 to 105 feet (21 to 32 metres) long -- were used on these large rivers. Simpson
${ }^{178}$ Ibid.
describes a "large bateau made of round logs, which were covered with boards ... nothing more than a raft." Russian trade goods such as tobacco, brick tea, beads, firearms and gunpowder, iron implements, clothing, flour, groats (hulled and crushed grain), and liquor were imported, wrapped in rawhide and made up into 90 lb (41 kg) containers to facilitate their conveyance by pack horses on the overland route from the Russian fort of Yakutsk on the Lena River to Okhotsk on the Pacific Ocean. Between Yakutsk and Okhotsk were various water and land routes used at different seasons.

The Aldan (or Okhotsk) Track, as the most important overland portion was called, was about 600 to 750 miles (800-1000 km) in length but "ill-defined" with "no guideposts," although there were eleven stations along the track at approximately twenty mile ( 32 km ) intervals. ${ }^{179}$ The varied landscape along the route included grassy lowlands and rugged, forested mountains up to 3000 feet ( 914 m ) in elevation. ${ }^{180}$ The mountains separated the inland Yakut people from the Evenk people on the coast (the Khabarovsk region of Siberia).

Freight was dispatched from Yakutsk to Okhotsk using the land route twice each year -- in mid-spring and mid-summer. As many as 6,000 to 10,000 horses were annually packing freight to Okhotsk in the 1810s; natives were used as haulers.

179 James R. Gibson, Feeding the Russian Fur Trade: Provisionment of the Okhotsk Seaboard and the Kamchatka Peninsula 1639-1856, (Madison: University of Wisconsin Press, 1969), 123.

180 James R. Gibson, in Feeding the Russian Fur Trade, 79.

George Simpson found the Aldan Track "absolutely alive with caravans and travellers" when he travelled across Siberia in 1841. Trains of up to five hundred horses travelling singlefile marched generally about four or five miles an hour for ten to twelve hours a day. ${ }^{181}$ Rawhide bags called "sumas" were used for pieces of freight averaging 90 lbs (41 kg) each. Provisions were mainly carried on the Yakustk-Okhotsk track, "especially in spring when the unthawed track was safer and cheaper than in summer." ${ }^{182}$ But when Simpson passed by, he mentioned that the road was in poor condition and the "unfortunate brutes lie down to die, in great numbers, through famine and fatigue." Lack of feed at Okhotsk forced horses to be returned to Yakutsk even without loads; but, in good circumstances the return trip sometimes took only eight days.

Similar to the brigade trails in the Columbian Cordillera, there were many hazards along the Aldan Track: predators, especially bears, were numerous along the road (a factor rarely mentioned along the routes of the Cordillera); horses sometimes became ill from consuming an intoxicating plant along the route; in 1829 up to 2500 horses died from anthrax along the trail; the track was periodically obliterated by streams, fallen trees, and pot-holes created by horses; caravans were often looted by thieves, and extortion at posts along the way was not uncommon. The most prevalent problem was the traversing of waterways.

181 Ibid.
182 Ibid., 220.

Rivers had to be frequently forded; in 1822 there were no fewer than 1000 stream crossings on the Yakutsk-Okhotsk track (one every $2 / 3$ of a mile [1 km]), many times more than the Columbian Cordillera. Drownings were not uncommon; in 1842 Simpson learned that 300 horses had drowned in the swollen Luktur River. Corduroy roads were constructed over bogs but caravans might be temporarily marooned on high ground during freshets. ${ }^{183}$ Under adverse conditions it could take 70 to 80 days to travel from Yakutsk to Okhostk. ${ }^{184}$ Lastly, the Aldan River route between Yakuskt and Okhostk was indirect and longer than the overland track and variable flow of rivers caused delays, so that the Aldan River was seldom used for upstream travel; travelling westward, however, movement was rapid. Unlike the trail, along the river were way stations, storehouses and landing places. The river route, however, was overshadowed by the faster and cheaper, though more difficult Aldan Track.

The Russian experience, witnessed first-hand by Simpson, reveals some major differences and minor similarities to the transportation system of the Hudson's Bay Company. The Siberian fur trade was much older; undoubtedly, the tracks were also former aboriginal routes. Unlike the Pacific slope of North America, no large rivers debouche into the sea of Okhotsk. The Lena River, like Canada's Mackenzie River, flows to the Arctic. No Russian rivers provide long east-west corridors that

[^42]could be used continuously by the fur trade. Moscow was three thousand miles ( 4830 km ) farther from the Pacific Ocean than Montreal. On the other hand, along the Siberian routes there were no high mountain barriers like the Rockies or Cascades to cross. The fundamental differences between the Russian and North American fur trades were the higher latitude and more continental climate of Siberia (ruling out winter travel by horse caravans) and the absence of bison, the main food supply of the fur trade across the North American plains. The techniques of the Canadian fur trade were otherwise analagous to the Russian in some ways: both relied on the use of horses and boats but standardized bales were only dependent on horses.

## Summary

By the mid-1840s the fur brigade routes in the cordillera achieved much of the regularity and efficiency that simpson had envisaged. Initial discoveries of routes led to their subsequent use by the fur brigades. The fur trade was conducted across the region by a network of routes, both waterways and trails. The early trunklines first explored by the North west Company and Pacific Fur Company, then rationalized by the Hudson's Bay Company's reorganization of the Cordilleran operation in the mid-1820s, were still being modified by the 1840s. The route across Athabasca Pass, first used by the North West Company, retained its importance to the $H B C$ mainly as an express route but also for furs shipped west of the Rockies. But
by 1846 no birch canoes were used on the Columbia or elsewhere in the Oregon Country by the HBC. ${ }^{185}$ The difficult Yellowhead route was used mainly for the supply of leather to New Caledonia and other express shipments in both directions.

The early 1840 s represented a transition period between the early routes of the fur trade and the latter routes that were to come. The fur trade had reached its acme in the Cordillera by 1840. The Hudson's Bay Company had attained its greatest areal and economic expansion but the innovation of using silk to make top hats and the "question" of the Oregon boundary settlement presaged the decline that was to face the Company.

Other changes had also occurred. On the Northwest Coast, after 1836, a Company steamship, the Beaver, plied between the Columbia and northern posts which were not served by the inland brigade routes; American emigration along the Oregon Trail in covered wagons was beginning by 1840 and creating competition and new problems for the HBC.

185 John Dunn, History of the Oregon Territory..., (London: Edwards and Hughes, 1846), 61.

## CHAPTER III

THE NEW COMMUNICATIONS - AFTER 1846
"...the line of Lat. 49 ...would deprive Great Britain of a valuable Country now occupied and traded by the Hudson's Bay Company and would occasion many practicle inconveniences in carrying on the Trade of the Country which would be left to us."186

It is ironic that just as the brigade system in the Cordillera had reached its fullest potential and use by the early 1840s, a major event would change the configuration of the system from a "Columbian communication" to a network redirected to the Fraser River. The establishment of the boundary between British and American territories in 1846 along the $49 t h$ parallel would have a major impact on the brigade system through the Cordillera.

In advance of the boundary resolution the U.S. Exploring Expedition under Commander Charles Wilkes produced a fine smallscale map of Oregon (from 40 degrees to 55 degrees $N$. latitude) in 1841. The area north of the $49 t h$ parallel was based on information supplied by the $H B C$ and shown on the Arrowsmith maps (as well as the list of campsites en route across the Rockies, see Appendix H.). Although the brigade route from Ft. Okanogan to Ft. Alexandria is not shown, physiography and hydrography along the brigade routes is well-depicted, especially in a larger-scale inset of the lower Columbia River (Figure 3.1). Wilkes' printed cartographic work represents the last major map
${ }^{186}$ Gov. J.H. Pelly to Hon. George Canning, London 9 Dec. 1825. HBCo. Correspondence with Government No. 721 In Appendix "A", Merk, Fur Trade and Empire, 257.


Figure 3.1 C. Wilkes' (U.S. Ex. Ex.) map of Lower Columbia River (inset), 1841.
produced during joint occupancy in the Oregon Country when the Columbian brigade system was at its acme. Later maps would show the prospective boundary between American and British Territory and make graphic the transportation and communication problems that the $H B C$ was to face with its posts in the Cordillera.

## Search for an All-British Route

After his visit to the Pacific Coast in 1841, Governor Simpson recognized that the United States would eventually lay claim to the lower Columbia River and that the brigade system might need to be realigned to pass through British Territory. However, it was not until the final settlement confirmed the 49th parallel as the boundary that a concerted effort was made to locate an all-British route.

However, before the boundary negotiations were complete, the Council of the Northern Department put Chief Trader A.C. Anderson in charge of finding a new route for the brigades
for carrying on the business of the Interior, in the event of our being deprived of the Columbia or other circumstances rendering it advisable to remove our principal depot, to the Straits of de Fuca, and Fort Langley becoming the rendez-vous of the Interior Brigades. ${ }^{187}$

A month prior to the boundary settlement, in May 1846, Anderson and a party from Kamloops set out "with a view to ascertaining the practicability of a communication with the interior for the

[^43]import of annual supplies. "188 They followed the brigade route to Copper Creek, then to the western end of Kamloops Lake, crossed Rivière Defunt (Deadman River), travelled on to Cache Creek, to Rivière aux Chapeaux (Hat Creek), Lillooet, Anderson and Seton Lakes, and finally reached the lower Fraser River via the Lillooet and Harrison rivers. This circuitous route from Kamloops to Fort Langley, Anderson estimated at just over 237 miles ( 381 km ) ; its use by the brigades would have required boats and portages between the lakes and around rapids, especially on the Lillooet River which Anderson considered impassable for loaded boats. Consequently, he took a different route on the return journey from Fort Langley to Kamloops, taking the Fraser River to the mouth of the Coquihalla River, then following it a short way to the Nicolum River, the across the divide to the Sumallo, Skaist and Tulameen rivers to present Otter Lake), the first traverse by the Hudson's Bay Company of the Cascade Mountains north of the 49 th parallel. From Otter Lake, Anderson continued north to Lac de Nicholas (Nicola Lake) and to Kamloops. Anderson surmised this route might prove practical if the brigades travelled outbound late enough to avoid the mountain snow. ${ }^{189}$ Anderson suggested,
${ }^{188}$ A.C. Anderson Journal, 1847.
189 BCARS, MG29, B.35, Vol. 4, Alexander Caulfield Anderson., "History of the Northwest Coast" (Victoria, 1878), 73-98, "Journal of an Expedition under command of Alex. C. Anderson of H.B.Co. undertaken with the view of ascertaining the practicability of a communication with the interior for the import of the annual supplies, 15 May to 9 June, 1846."; HBCA, B.223/b/34, 1-13, Ogden, Work and Douglas to Governor and Council, 2 Nov. 1846.
a temporary establishment would of course be required at a place where the horses must remain at the mouth of the Quequehalla [Coquihalla]... The boats necessary for the accommodation of the brigade to be brought up by the Langley people and Indians... ${ }^{190}$

In the summer of 1847 Anderson made another expedition from Kamloops to Fort Langley via the Thompson and Fraser canyons. There were many rocky passages which Anderson ${ }^{191}$ stated, "I think ... quite impracticable for a loaded brigade" although up Squa-zowm (Anderson's River) there was a "horse road to Similkameen Country". Anderson noted two bridges were necessary across present Uztlius Creek. He then took the southern branch and headed back toward the Fraser to Kequeloose, commenting: "The country is very rough and much labor with many painful circuits would be necessary to complete a road anywise practicable for horses."192 Anderson's return journey from Fort Langley was by canoe (one a "large N.W. Coast canoe") which "it is my wish to take as far as Kequeloose, the spot where I propose the horse portage to commence, thus to afford evidence that the navigation is available so far". They cleared a road "of all impediments subject to removal, and from 10 to 12 feet in width. . . ${ }^{193}$

190 Ibid.

191 Ibid.
192 Ibid., 35.
193 This is one of the few mentions of a fur road requiring construction, suggesting it was not an aboriginal route.

In order to use the new route which Anderson explored between Thompson's River and Fort Langley in the spring of 1847, he suggested
it will be necessary to get an adequate number of boats, similar in all respects to those used upon the Columbia, made either at Langley or Kequeloose, during the winter.

For the Spring Express I am informed that the navigation is open very early from Kequeloose downwards, and therefore proceed on the supposition that a party could reach Kequeloose...in the boats at an early season.

Thence to the low country of the opposite valley upon snowshoes, possibly with the aid of dog sledges if found expedient. Horses might be brought thither for the accommodation of the party thence to Kamloops. ${ }^{194}$

Anderson suggested that boats could be built at Kequeloose. The majority of the timber, he noted, "consists of heavy pine and the Sapin Batard (Bastard fir)."195

Samuel Robertson, a boatbuilder from Fort Vancouver, arrived at Fort Langley in April 1847 under engagement to build four large bateaux; a year later it was reported that seven boats had been constructed at Fort Langley for navigation to Yale. Henry Peers mentions "five batteaux and two river boats" being used in July 1848. ${ }^{196}$ However, conditions were not as favourable for boats on the Fraser as along the lower Columbia. Low water made

194 A.C. Anderson, "History of the Northwest Coast", 38.
195 Ibid. The word "pine" was used to describe conifers in general. In the Fraser Canyon near Spuzzum, the predominant species today are interior Douglas fir and coastal western hemlock. Anderson is probably referring to Douglas fir (Pseudotsuga menziesii).

196 It is not entirely clear what the difference between these boats would be.
warping difficult and poling impossible; one portage was necessary. According to Peers, the trip, heavily laden, took eight days from Fort Langley to Fort Yale. ${ }^{197}$ William Yates later recounted, "It would take us from Langley here [Fort Hope] from ten to twelve days to get up..."198 Anderson's views on the subject were changed by the following year, "though... I think it practicable to bring up Columbia boats by making the necessary portages...it must be very arduous ... at higher stages of the water, and therefore inadvisable."199 Loaded bateaux took from five to six days to make the journey upstream from Fort Langley to Fort Hope, while on the downward trip the bateaux were carried by the current, making the journey in three or four days. ${ }^{200}$

Although Article II of the Oregon Treaty provided that the continued navigation of the Columbia River, including all the usual portages along the river, should remain free and open to the $H B C$, the settlement was clearly perceived by the Company as a short-term reprieve for its operations south of the 49th parallel. The promise of free British navigation on the Columbia River was limited by the establishment of a customs district for Oregon, imposing duty on all British imports

[^44]beginning in 1849.
The last New Caledonian brigade via the Columbia took place
in 1847. Subsequently, Anderson's route of 1847 was used in 1848
by the southbound brigade from Nicola Lake to near the forks of
the Anderson River, over the ridge to the Fraser River at
Kequeloose (present Chapman's Bar) and downriver to Fort
Langley ${ }^{201}$ (see Figure 3.3 supra). In anticipation of this
route Chief Trader James Murray Yale of Fort Langley informed Sir
George Simpson:
I in the 19th Novr sent off a party of six men with the Interpreter, Ovid Allard, to the Falls to commence immediately making the necessary arrangements for opening the route by Douglas' Portage. They are to build a House and a store at the foot of the Falls, and a store at the crossing place above the falls. ${ }^{202}$

Allard proceeded to build Fort Yale and Simon's House at
Spuzzum, the north end of the Douglas Portage. In December 1848
Chief Factors James Douglas and John Work reported to HBC in
London:
The preparations for opening the new road to the interior for the passage of the summer Brigade threw much additional work upon the establishment of Fort Langley, as besides making the road from Kequeloose to the Ferry, and from thence through the Portage to the lower end of the Falls of Frasers River a distance of eighteen miles, through a wooded country, levelling and zig-zagging the steep ascents, bridging rivers, there were stores to be erected for the accommodation of the Brigades above and below the Falls, boats and skows built for the ferry, and seven large Boats for the navigation from Fort Langley to the Falls... ${ }^{203}$

201 Elton A. Anderson, 42.
202 Yale to Simpson.
203 Fort Victoria, 5th December 1848. Transactions of Royal Society of Canada, Reid, 1936, Section II, 89.

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Figure 3.2 A.C. Anderson's sketch of routes across the Cascades, 1846-1849.


Figure 3.3. Anderson's explorations across the Cascades 1846-47.

But after a disastrous crossing in 1847 the route was deemed by Donald Manson "utterly impracticable for a large brigade." On the return journey the brigade
lost Twenty-seven horses and 14 pieces of goods by various accidents on the way. Chief Trader Manson complains much of the road between Frasers River and the Plains a distance of 45 miles which he represents as dreadfully severe upon the horses in consequence of steep hills and stony ground which fag and wear out their feet. He also complains of the Indians. . . ${ }^{204}$

## The Cascades Trail

Henry Peers was then appointed to further examine Anderson's return route of 1846. Peers explored a new route farther south of the Kequeloose trail, entering the Cascades via the Coquihalla (as Anderson had done) but taking the second easterly tributary (now named Peers Creek). Crossing Manson Ridge, Peers traversed the Sowaqua basin and entered the Columbia watershed by a major tributary of the Tulameen River, now Podunk Creek. Peer's trail then cut across the Tulameen Plateau, joining Blackeye's trail about five miles ( 8 km ) south of Lodestone Lake. ${ }^{205}$ Blackeye was a "respected Indian Chief" who lived at Otter Lake and told Anderson of a route across the north side of the Tulameen Plateau that avoided the Tulameen River canyons.

204 James Douglas and John Work to the Governor, Deputy Governor and Committee, Fort Victoria, December 5, 1848. B. $223 / \mathrm{b} / 38$, fo. 65 .

205 For a full description of the route, see R.C. Harris and H.R. Hatfield, Old Pack Trails in the proposed Cascade Wilderness, (Summerland, B.C: Okanagan Similkameen Parks Society, 1980), 8-16.

Peers reported that the country he examined
is favourable enough as to ground, there being no very steep or fatiguing hills and the ascent of the mountains gradual on both sides, but he was informed by his Indian guides that the snow is very deep in winter and that the mountains are from that cause impassable with horrese until the beginning of July. ${ }^{206}$

The new trail over the Cascades was first used by the HBC in 1849 and described by Eden Colvile who took seven days with five loaded horses and men on foot to make the journey from Thompson's River to Fort Hope. Only two days of the journey, Colvile remarked, "was through anything very distressing to the horses," namely, the traverse of the Cascade Mountains, deadfalls, swamps and heavy timber. Colvile also noted the "abundant supply of good grass" between Kamloops and the Horseguard "where the plain country ends \& the thickwoods commence" (on the Tulameen River) but recommended the need to sow "a sufficient quantity of timothy and white clover at ... encampments for the brigades" ${ }^{207}$ where there was no pasture for the horses. Nor was there any grass at Hope, which meant that the horses had to be sent back to the Horseguard after their arrival with the returns. Improvements to the trail were soon made, including the cutting of fallen timber and draining and corduroying of swamps, but the route across the
${ }^{206}$ B. $223 / \mathrm{b} / 38$, fo. 65. James Douglas and John Work to the Governor, Deputy Governor and Committee, Fort Victoria, December 5, 1848.

207 Colvile to Pelly, Fort Victoria, 15 October 1849, HBCA A.12/13. In Eden Colvile's Letters 1849-52, (London: Hudson's Bay Record Society, 1956).

Cascade Mountains required regular clearing. In the summer of 1851 a
party of ten men were employed on the new road from Fort Hope to Thompson's River... [they] made many substantial improvements. They cut out the fallen timber... ${ }^{208}$

The route was high: heading east the location of the first campsite at 4750 feet [1448 metres] was the saddle on Manson Ridge, named after Chief Trader Donald Manson; the second and highest campsite was Campement du Chevreuil (Deer Camp), at 6100 feet ( 1859 metres), almost at the summit of the trail 30 miles (48 km) from Hope. At Horseguard, the third camp, was located on what is now the Podunk River; horses were corralled overnight on the east bank; the fourth camp was at Lodestone Lake, 60 miles (97 km) from Hope; the fifth camp was Campement des Femmes (Women's Camp), on the east bank of the Tulameen River (below the present village of Tulameen). From Campement des Femmes the brigades split to go north to Kamloops via the Nicola Valley or southeast to Colvile via the Similkameen Valley (see Figure 3.4).

## The Colvile Route

As a result of the realignment of the brigade system, Fort Victoria, constructed in 1843 on the southern tip of Vancouver Island, would become the general depot for the Pacific fur trade,
replacing Fort Vancouver after the boundary settlement of 1846;
Fort Langley on the Fraser would finally become the new outlet for the interior trade that Simpson had earlier envisaged.

Simpson believed that the Fraser River could supply all the posts in "the New Caledonia, Snake and Colville districts, Thompson's River, and Walla Walla; leaving only F. Vancouver, Fort George, Umpqua [in southern Oregon] and Willamette, to be supplied by way of Columbia River."209 To obviate the gradually increasing customs duties in Washington Territory, the Company began to purchase more American goods but found itself in a progressively worsening economic position.

The boundary settlement left the Colvile District divided by the 49 th parallel, but $H B C$ operations in American territory continued despite irregular river navigation and a lack of voyageurs after 1847. A measles epidemic from the Columbia District appears to have diffused in December 1847February 1848 along the brigade route to Kamloops and north to Alexandria, suggesting there was already a cross-country communication line between Colvile and Kamloops in use, ${ }^{210}$ as Anderson had shown in 1842 (see Appendix G and H). The Cayuse
${ }^{209}$ HBCA, D.4/40, 20 October 1849, Lachine, Simpson to Board of Management, fols. 28-8d.

210 Robert Boyd, "The Pacific Northwest Measles Epidemic of 1847-1848," Oregon Historical Quarterly 95, no.I (1994): 6-47. A variation of Boyd's theory is posed by R.M. Galois in "Measles, 1847-1850: The First Modern Epidemic in British Columbia," BC Studies, no. 109, Spring 1996. Galois shows how the measles contagion may have spread inland via the Skeena route to New Caledonia.

War of 1848 served to confirm the rerouting of the Company's line of communications ${ }^{211}$ and after 1849, the Colvile district regularly sent its fur returns to Fort Hope. One route from Colvile (later spelled Colville) went north to present Cascade, B.C., then west through Grande Prairie (present Grand Forks) by a route mostly north of the 49 th parallel along the kettle River, then along Dease's River (part of the Kettle River today), crossing it a few times. According to General Sherman, writing years later, the trail crossed the river
many times, is not passable except at low stages of water, when the river is fordable; otherwise it is said to be a reasonably good trail, and was formerly used considerably by the Hudson's Bay Company. ${ }^{212}$

Following the north side of Rock Creek towards Osoyoos the trail continued along the north side of the Similkameen River to Campement des Femmes where it joined the route from Kamloops to Hope (see Appendix E for A.C. Anderson's itinerary). The outbound brigade from Colville to Fort Langley took seventeen days. ${ }^{213}$ An alternative route, a "Mountain Trail" avoiding crossings of the Kettle River at high water, connected Colvile with the junction of the Bonaparte and Okanogan rivers (near present Tonasket, Wash.). General Sherman confirms this was

[^45]known as the "Old Hudson's Bay Company Trail." The Similkameen part of the route, connecting the Okanagan and Nicola valleys, was originally explored by Alexander Ross in spring 1813 on his return to Fort Okanogan from Kamloops (see Fig. 2.12 supra). The reduced navigation on the Columbia River after 1847 meant that it was no longer necessary for the Colvile District to keep a staff of voyageurs; instead, Indians were employed in greater numbers at Colvile to fill out boat crews. ${ }^{214}$

After 1849, the California gold rush compounded the drain of Canadian labour and the Committee in London looked "with much interest" at the possibility of substituting Indians for the deserters. ${ }^{215}$

Simpson noted, "The danger of desertion from New Caledonia is lessened by the circumstances of the Fraser's River route having been substituted for the old Columbia River communication..."216 As well, the Yellowhead Pass was still used after 1849 in order to prevent desertions from the Columbia route at Colvile and Okanogan. Simpson reported:
...the risk of desertion among the in-going Columbia recruits this season has rendered it expedient to change the usual route (say, from the Boat Encampment down the Columbia) to a more northerly pass, from the Athabasca portage by Tete Jaune's Cache and New Caledonia; where the people will have less temptation \& opportunity to

214 HBCA D.5/25/150, Alexander Anderson to Governor and Council, Fort Colvile, 23 April 1849.

215 HBCA B. $223 / \mathrm{C} / 1 / 354 \mathrm{a}$, London, 15 December 1849, Archibald Barclay to P.S. Ogden.
${ }^{216}$ HBCA, A. 12/4, 30 June 1849, Simpson to Governor, Deputy Governor and Committee, fol. 524d.-5.


Figure 3.4. Okanagan Brigade Trail and Columbia River route after 1842.
desert, but where, from the insufficiency of our means of transport and the character of the navigation, it would be a very difficult matter to convey the other packs. ${ }^{217}$

In 1849, most of the incoming men who crossed the Yellowhead Pass into New Caledonia were destined for Columbia postings. ${ }^{218}$ In 1850, thirty new recruits were sent across the Rocky Mountains: twelve men via the Athabasca Pass with the Columbia express and eighteen (mainly destined for Fort Victoria) via Tête Jaune Cache, led by clerk Kenneth Logan who arrived at Fort St. James in early November with the New Caledonia packet. ${ }^{219}$ In 1851 twenty servants were sent across the Yellowhead Pass to New Caledonia and the Columbia; however, the 1852 recruits were delayed at Jasper House when the salmon fishery failed, causing a food shortage. The last regular use of the Yellowhead Pass by the HBC was in fall 1853, when 140 moose skins and twenty-five buffalo skins were sent with sixteen men and the express. By this time, boats were used on the upper Fraser.

As late as 1853, there was regular communication between Jasper House and the Columbia but in the previous year the Governor and Committee had reorganized the districts west of the Rockies, formerly part of the Northern Department, into a separate Department. This was made effective by developments in ocean shipping allowing faster mail service and other

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218 HBCA, B.188/a/20, 17 November 1849.
219 HBCA, B.188/a/20, 8 November 1850.
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shipments, largely in response to the California gold rush. In
1854 the new outfitting arrangements took effect; although the
last regular Company express took place that winter, no
new recruits were sent across the Rockies in 1854.
After 1850 the New Caledonia brigades settled into the
new routine. ${ }^{220}$ Simpson noted

The road question to Kamloops $I$ believe is now finally settled, and I understand the track has been rendered very passable for loaded horses, so that in the course of a few years, by gradual improvements (say by clearing timber, removing rocks, making halting places \&c, \&c) it will probably be come as easy and direct means of communication with the Interior British Territory [as the Columbia was]. ${ }^{221}$

Yale replied:
We have no more complaints about the new road to the interior. [Paul] Fraser, to whom the credit is due for bringing out the Brigades some twenty or thirty days earlier than is considered practicable, speaks highly of it... ${ }^{222}$

Douglas wrote to Archibald Barclay in 1850:
It is a great relief to have established the practicality of this route to the interior,... a triumph, probably the last of the kind, reserved for the fur trade. ${ }^{223}$

By 1851 James Douglas had supplied 182 brood mares to Fort
Kamloops since, according to Eden Colvile, it was the

220 Cullen, The History of Fort Langley..., (Ottawa: Parks Canada, 1979), 46 .

221 Simpson to James M. Yale, Hudson's Bay House, Lachine, 22 May 1852, Yale Letters \#40.
${ }^{222}$ Yale Correspondence, J.M. Yale to Sir Geo. Simpson, Fort Langley 22 October 1852.
${ }^{223}$ Fort Victoria, 17 August 1850.
establishment to which the Company would have to look to the future, "for horses required for the Interior Transport..."224 The outbound brigade from Colville to Fort Langley took seventeen days, from Kamloops to Fort Langley 17 days. ${ }^{225}$ The annual
brigades from New Caledonia, Thompson River and Fort Colvile usually arrived at Fort Langley about 20 June each year where they stayed until 15 or 20 July when they made their return journey. By 1850, the route was also contemplated for the express, "there being so many hindrances by the Columbia, so that it is highly desireable to have another string to our bow, to use as occasion may require. "226

The end of $H B C$ operations south of the 49 th parallel had been presaged by the Donation surveys and treaty-making with the Indians by Washington Governor Isaac Stevens. His complaints about the hegemony of the Company in the territory increased and in 1854 Stevens warned Peter Skene Ogden to wind up the Company's affairs in Washington. By that time, transport problems had put the Company in the position of being unable to supply the needs of the Indians. In that year the Colvile returns were taken through American territory via the Naches Pass (northwest of present Yakima) to Fort Nisqually on Puget Sound, permitting an

[^46]outfit to be made up at Nisqually (overstocked with goods), to be sent back to Colvile by the same route, thus avoiding duty by not crossing the boundary ${ }^{227}$ (Figure 3.5).

In July 1855 the Colvile brigade arrived at Nisqually with Angus McDonald in charge of 200 horses packed with furs, "the result of the year's trade of Fort Colvile, Walla Walla, Boise, Hall, Okanogan, Nez Percé and the Snake Country." A brigade of 55 horses returned in advance to Fort Walla Walla followed by MacDonald with 76 horses for Colvile, passing safely through territory that would become embroiled in an Indian War in September that year. ${ }^{228}$

In October 1855, Fort Nez Percés was abandoned at the orders of the Territorial Indian Agent for fear that it would be captured by the Indians; the few supplies remaining were sent to Flathead Post, as well as the effects of Fort Hall. Fort Boise and Fort Hall were closed in the winter of 1855. After that, the only active post was Fort Colvile and its outposts, Kootenay and Flathead. Still, Stevens complained before the 1856 Washington

[^47]

Figure 3.5. Columbia Department of the HBC, after 1849.

Territorial Legislature:
Nothing has been effected in the way of relieving the territory from the foreign corporations in our midst. This want of action is retarding the settlement of the country, and has especially of late, been the cause of mischievous results. Colville at this moment practically a British dependency, the road thither is closed to American citizens. ${ }^{229}$

By the time the boundary was finally surveyed, the overland route between Walla Walla and Colvile across the Columbia Plain was the route of a projected wagon road, which "has been travelled for years by parties of the Hudson's Bay Company. "230

The new brigade route north of the 49 th parallel, however, was not without its problems. The use of bateaux on the lower Fraser River began in earnest when the new "all-British" brigade route was established after the boundary settlement. The time and expense of maintaining bateaux on the lower Fraser, however, led the Company to search for a land route between Fort Langley and Hope that would create a continuous trail from the interior to the coast and a shorter route for the Colvile returns and supplies. The Company attempted to build a trail in 1856 along the Chilliwack River but at the south end of Chilliwack Lake the Cascade Mountains presented a formidable barrier preventing access to the Skagit River watershed (Figure 3.6). ${ }^{231}$

229 Charles M. Gates, ed., Messages of the Governor of the Territory of Washington to the Legislative Assembly, 1854-1889 (Seattle: University of Washington Press, 1940), 57.


Figure 3.6. Active routes across the Cascades (detail) c. 1856.

The old route, despite its difficulties, continued to serve as the passage to the interior. Improvements were made in 1856 even though new routes were being sought: "McLean is now with a pretty large party working hard on the road along Peer's River and Mr. Ogilvy is off examining a new route between yours and Anderson's via the Falls." ${ }^{232}$ Despite the improvements, Donald McLean, crossing the Cascades in 1857 or 1858, had a disastrous trip reported by H.S. Palmer: "in riding over the mountain and more particularly on its eastern slope, my horse frequently shied at the withered bones of some of the poor animals... left to perish where he lay."233

By 1857, the discovery of gold along the Thompson River placed the HBC in the position of supplying miners and cattle drovers who in the next few years used the brigade trails from Washington Territory to enter British territory. Although river steamboats went beyond Fort Langley to Forts Hope and Yale, the Okanogan and Colvile brigade trails were major entry routes from Washington. As early as 1851, three steamers were in use on the

Boundary Commission, 1858, 33. James Douglas and John Work reported to the Governor, Deputy Governor and Committee in 1847 that "the Indians ... pointed out another route to the interior, considerably southward of those already explored, which falls upon Fraser's River 25 miles above Fort Langley. This would be of immense advantage in many ways, \& relieve us of the expense of maintaining a fleet of Boats exclusively for the River transport." B.223/b/38, fos. 2021.

232 J.M. Yale to H.N. Peers, Fort Langley, Oct. 1856, Yale Letters \#50, BCARS.
${ }^{233}$ R.C. Harris and H.R. Hatfield, old Pack Trails in the Proposed Cascade Wilderness, 11.
middle Columbia between the Cascades and the Dalles, and in 1859 steamer service was in effect above the Dalles from Celilo Falls to Fort Walla walla. An overland route beginning at the Dalles, which became known as the Cariboo Trail (north of Fort Okanogan following the old brigade trail), was popular but also dangerous. A group of miners was attacked and two men were killed by Indians along the trail north of Fort Okanogan at what became known as McLoughlin Canyon (near present Janis, Washington) in July 1858. North of the 49th parallel at Similkameen River, the McLoughlin party was met with the annual $H B C$ brigade from Fort Colvile to Fort Hope, " 20 men led by ... Angus MacDonald" who protected the miners on the rest of their journey to the confluence of the Thompson and Fraser Rivers.

In British Columbia, similar troubles with Indians in the Fraser Canyon flared up in 1858 but had subsided by the following year. The brigade trail across the cascades was still in use by the HBC but by this date it was also used by parties of prospectors and government officials. Lieutenant Richard $C$. Mayne, R.N. on a reconnaissance of the interior for the new colony of British Columbia, describes the route:

There is a trail from this [Kamloops] to Fort Hope which is always used by the servants of the Hudson Bay Company for transporting their goods to and from the northern parts. It is however, dangerous in some parts, and a number of horses are lost each time the fur-brigade comes down. There is a bad swamp 7 or 8 miles long, and a steep mountain, Manson Mountain, both of which they have to cross. It takes them ten or fifteen days to go from Kamloop [sic] to Hope; but I am told that, travelling without luggage, it could be done in three or four days.

A man has gone from Kamloop [sic] to Langley in five days. ${ }^{234}$

Mayne further describes the trail from Kamloops west to
Coppermine (Copper Creek) and "the arrival of the great Fur
Brigade from the north;" but he also provides a swan-song for the brigades:

It is one of those old institutions of this wild and beautiful country, which must give way before the approach of civilisation. The time will come - soon, perhaps, - when such a sight as a train of some two hundred horses, laden with fur-packages, winding their way through the rough mountain-passes of British Columbia, will be as unfamiliar as that of a canoe upon its rivers. ${ }^{235}$

Susan Allison gives an account of one of the last brigade
trips across the Cascades headed by Angus McDonald:
I shall never forget my first sight of a Hudson's Bay Company Brigade train coming up from Colville. I had gone for a stroll on the Hope-Similkameen trail... I heard bells tinkling... and a horseman, the most picturesque figure I had ever seen. He rode a superb chestnut horse, satiny and well groomed, untired and full of life in spite of the dust, heat, and long journey. He himself wore a beautifully embroidered buckskin shirt with tags and fringes, buckskin pants, embroidered leggings, and a soft cowboy hat... as the Bell Boy and other horses rode up, he lifted his hat on and passed on. I...was told he was a Hudson's Bay Company officer in charge of the Colville train and that he was never more surprised in his life to see a white girl on the trail - he lived so long without seeing anyone except Indians. ${ }^{236}$

Lieutenant H.S. Palmer R.E. describes the crossing of Manson

234 Richard C. Mayne Report..., 12 December, 1859.
235 Richard C. Mayne, Four Years in British Columbia..., 124.
${ }^{236}$ Margaret Ormsby, ed., A Pioneer Gentlewoman in British Columbia: The Recollections of Susan Allison (Vancouver: U.B.C. Press, 1976), 10. The man she describes was Chief Trader Angus McDonald, Chief Factor at Fort Colville (1852-1871).

Ridge in 1859, perhaps the last such account,
"We rose at dawn and soon commenced the laborious ascent of the Mountain by a zig-zag trail, very steep and rocky... After struggling up this difficult mountain path for an hour and a half we reached the summit of the pass..." ${ }^{237}$

## The End of An Era

Use of the brigade route across the Cascade Mountains ceased in the early 1860 s as better trails and roads were built by miners and the colonial government of British Columbia. As late as January 1858, the $H B C$ was contemplating using boats on the middle Fraser to serve a new post to be built at Lytton. ${ }^{238}$ A rough $60-\mathrm{mile}(97 \mathrm{~km})$ mule road was constructed by the miners themselves from Yale to Lytton in $1858 .{ }^{239}$ Mules were gradually introduced from the United States but were little used by the Hudson's Bay Company until the gold rush period; by then mules were common, often replacing horses. This trail was replaced by the construction of the Cariboo Wagon Road, finished in 1862 (except for Alexandra Bridge) from Yale to Cache Creek, then to Soda Creek by mid-1863.

The last fur brigade along the old Alexandria-Kamloops trail was observed by a few people: Walter Moberly, a civil engineer surveying in 1862 for a route north of Cache Creek near Loon Lake, came across "a large pack train of animals and packers

[^48]encamped there," where he met Captain Allan MacDonald, "son of a former HBC officer" ${ }^{240}$; Captain Parsons, RE, on a survey of the Cariboo Road construction, mentions coming upon the Hudson's Bay Brigade Trail at Green Lake, and at Bridge Creek notes that "grass ...near at hand has been much eaten off by the large pack trains that halt here ${ }^{241}$; Sergeant John McMurphy RE reports that north of 70 Mile on the Cariboo Road, "the wagon Road [under construction] is running... parallel [about 4 miles apart] with the Brigade Trail". After 1862, fur trade goods were forwarded from Yale to Alexandria along the Cariboo Road by pack trains hired by the HBC; in 1864 the Company used its own wagons on the road from Yale north. ${ }^{242}$ After 1863, paddlewheeelers began plying the Fraser River between Fort Alexandria and Quesnel, but from Quesnel north batteaux were still used to Fort St. James. ${ }^{243}$

Arrowsmith's small-scale 1859 map, The Provinces of British Columbia \& Vancouver Island with portions of the United States \& Hudson's Bay Territories, is the culmination of
${ }^{240}$ Mark S. Wade, The Cariboo Road, (Victoria: The Haunted Bookshop, 1979), 62-63.
${ }^{241}$ Captain R.M. Parsons, R.E., "Report of a journey from New Westminster to Lake La Hache", 1862.
${ }^{242}$ HBCA, B. $226 / \mathrm{b} / 27,18-25, \mathrm{R}$. Finlayson to Board of Management, 17 July 1862; ibid., B. 226/b/23, 173-74, Finlayson to Ogden, 2 April 1864.

243 In 1867 the post at Fort Alexandria was closed and until 1872 only a farm was maintained there. Quesnel then became the chief centre of distribution for supplies sent to the northern posts.
the fur trade explorations; it shows the brigade routes from Fort Alexandria to Ft. Okanagan [sic], from Hope to Ft. Shepherd, across Athabasca Pass, as well as many other features (Figure 3.7). A similar Arrowsmith map with further additions was produced in 1862. Anderson said of this map:

Arrowsmith's Map compiled from information derived from the Hudson's Bay Company and other reliable sources, is by far the best map extant; it has been prepared with great care and is accurate in a high degree. ${ }^{244}$

Several fine maps were produced by the Royal Engineers during the gold rush period, including Lieutenant Palmer's "Sketch of route from Fort Hope to Fort Colville" (Figure 3.8), which provides comparative elevations along the brigade trail. Palmer, who travelled with HBC trader Angus McDonald, also made astronomical observations along the way and produced a printed Report on the country between Fort Hope on the Fraser and Fort Colville on the Columbia River. ${ }^{245}$

A map titled British Columbia, Thompson River District, "derived in large part, from one in Governor Douglas' possession that had been made about 1835 by Samuel Black of the Hudson's Bay Company," lithographed by the Royal Engineers in 1861, delineates the various trails and routes of the fur trade as well as some additions by the Royal Engineers (Figure 3.9). This map omits much of the detail of Black's map but retains the trails of Black's time. The Royal Engineers' maps were designed to open

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2 4 4 ~ A . C . ~ A n d e r s o n , ~ " B r i t i s h ~ C o l u m b i a . " ~
245 Journal of Lt. H.S. Palmer, R.E., BCARS.
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Figure 3.7 Arrowsmith map of Western North America (part), 1859.


Figure 3.8 Lt. Palmer's sketch of route - Ft. Hope to Ft. Colville (east half),


Figure. 3:9 Royal Engineers' map of Thompson River. District (part), 1861.
the hinterland to settlement; this map represents one of the earliest colonial map of the mainland. The U.S. Northwest Boundary Survey produced a comparable map to the Royal Engineers' work along the 49 th parallel (Figure 3.10) showing the "Hudson Bay Company trail" across the Columbia Plain. The Okanogan brigade route through Washington had by this time become the Cariboo Trail.

Several maps produced during the Fraser River and Cariboo gold rush period reveal the use of former fur brigade routes by miners entering British Columbia. Notable among these is Gustavus Epner's Map of the Gold Regions in British Columbia published in San Francisco in 1862 (Figure 3.11). It includes mileages along the brigade trail.

In 1867 A. C. Anderson completed his large map of "a portion of B.C." which draws from the early map produced by Black as well as several sketches by Anderson which were assembled as a collage before producing the final map. One sketch of the upper Columbia and Athabasca Pass (Figure 3.12) was re-drawn from Anderson's original. Anderson's magnum opus embodies all the accumulated knowledge of fur trade and colonial exploration to that date, revealing the plethora of trails and routes through the interior of British Columbia (Figures 3.13 and 3.14).

Eastwards, the Dewdney Trail, built between Hope and Princeton in 1860, followed the brigade route through the Similkameen Valley to Fort Shepherd, established on the Columbia.



Figure 3.11 Gustavus Epner's routes to the Goldfields (part), 1862


Figure 3.12 A.C. Anderson sketch of Athabasca Portage, 1866.


Figure 3.13 A.C. Anderson (part of map of British Columbia), 1867.


Figure 3.14 A.C. Anderson (part of map of British Columbia), 1867.

River north of the 49 th parallel by the HBC in 1856, although Colvile was not abandoned by the Company until 1871. ${ }^{246}$ Fort Okanogan was similarly replaced in 1862 by a post called Similkameen (or Keremeos) situated midway along the Fort HopeFort Shepherd route.

Even as the final monetary settlement was imminent, the HBC continued to operate south of the 49 th parallel. In 1865 fiftysix horse-loads of goods were transported from Portland to Fort Colvile via the "White Bluffs" route, a trail from Priest Rapids on the Columbia. ${ }^{247}$ As late as 1868, Chief Factor William Tolmie instructed Joseph Hardisty of Fort Shepherd to ascertain the best way of outfitting boats in the Kootenay District, whether through Fort Hope or Portland, Oregon.

[^49]
## CHAPTER IV

THE NATURE OF TRANSPORTATION AND COMMUNICATION IN THE CORDILLERA
"...with vast distances to be got over time to escape the closing of the navigation, great exertions had to be made, and every journey was accomplished on the principle of a ' forced march. ' "248

The routes of the fur brigades are related to the basic measures of transportation systems as defined by Vance (see Chapter II). An analysis of these components shows their interrelatedness and how modifications were attempted to improve the efficiency of the entire system. The various modes of transport, the shipments, the regimen and organization of brigades, and the cost of transportation are all looked at here.

The term "brigade" has a long usage in the North American fur trade, at least since the mid-18th century. ${ }^{249}$ Earlier (in the 15 th century) a military term (usually referring to two or more army regiments), a brigade simply came to be applied to a group of people organized for some purpose. In the fur trade west, a brigade was applied not only to groups of canoes and voyageurs but to strings of horses and riders. ${ }^{250}$ Each brigade

[^50]had its own officer in charge; whole families often accompanied the brigade. Although the term was used in a loose sense to denote any party such as the trappers of the Snake River area, the term is used here to denote the annual party which each spring brought the fur returns from New Caledonia and the interior Columbia basin posts to Fort Vancouver by a combination of canoe, pack trains, and boats and also journeyed annually up the Columbia River and via Athabasca Pass to the east side of the Rocky Mountains. The word brigade is thus closely associated with the mainline trails used by the fur trade for the transportation of furs and supplies.

## Canoes

Canoes were the most familiar mode of conveyance of the fur brigades, certainly in the Canadian Northwest. The use of birchbark canoes by native people across the northern part of the continent was long-standing; however, west of the Rockies according to A.C. Anderson, "The natives do not use the bark for Canoes, this custom having been borrowed by us [the fur traders]

[^51]from the Crees, Algonquins, Iroquois and other Eastern tribes." ${ }^{251}$ Fur traders brought the bark canoe to the Cordillera. ${ }^{252}$
"Each 'canoe road' forming the main lines of travel ... had requirements that affected the size of the canoes employed on it. ${ }^{253} 254$ West of the Great Lakes, a smaller birchbark canoe, the canot du nord or "North canoe" was used. ${ }^{255}$ Also known as the "light canoe", the North canoe was 24 to 27 feet (four fathoms) in length and 50 to 60 inches ( 127 to 152 cm ) wide with a capacity of $11 / 2$ tons $(1,361 \mathrm{~kg})$, plus four to six men with provisions and gear. ${ }^{256}$ Such a canoe, empty, weighed about $21 / 2$ hundred weight ( 280 pounds, English weight/127 kg). ${ }^{257}$ The bows and sterns of the canoes were usually decorated with emblems of

[^52]the fur trade companies; flags were often hoisted when the brigade approached a fort.

Birchbark canoes were surprisingly strong for their weight and could carry large loads. The North canoe could accommodate thirty-five pieces (totalling 3150 lbs or 1429 kilograms) plus four to six men. ${ }^{258}$ Nicholas Garry described the process of loading a Montréal canoe (a similar procedure used for the North canoe) :

The first Part of the Loading is to place 4 poles or long Sticks at the bottom of the Canoe which run the whole Length. These support the whole weight and prevent the Bottom being injured. The Pieces or Packs which weigh about 901 l . each are then placed in the canoe and with wonderful precision, each piece seeming to fit. The most weighty Goods are put at the Bottom, the Provisions, Cooking Utensils, Liquor \&c., are likewise put in; at the Bow is placed a large Roll of Bark in case of Accident, with a supply of Wattape, Gum \&c. ${ }^{259}$

A roll of birchbark called écorce, a bucket of pitch, a bundle of spruce root for repair, and a piece of fleecy sheepskin to sponge up the water in the canoe were essential items. The oilcloth tarpaulin or parala was kept to cover gear in rain and rough water. All canoe equipment including oars were referred to as agrès. ${ }^{260}$

Sails were often used with canoes for lake travel. Some canoes carried masts, sails and rigging. However, a sail could be easily improvised from a folded parala and a mast and boom could

258 Alexander Mackenzie, Voyages From Montréal..., (Edmonton:
M.G. Hurtig Ltd, 1971), xlvii.

259 Ibid., 90.
260 That is, the rigging.
be cut from a tree. Tumplines were used to lash the mast and rigging for the sail. A cross-bar would be cut with a hole to fit a mast and, "sails on the canoes were constructed so as to allow them to be raised or lowered ("reefed") depending on the velocity of the wind."261 Thompson notes how little sail was needed: "We reefed our sail down to two feet, and even that was more than the canoe could carry with safety. ${ }^{262}$

On the Cordilleran rivers west of the Rockies only the North canoe was used, and it was most prominent in the early trade by both the North West Company and Pacific Fur Company. Alexander Mackenzie used a twenty-five foot North canoe on his journey up the Peace River; it was damaged heading down the Bad River which required a search for bark. Simon Fraser followed the same route and had the same disastrous experience with his two canoes.

Journeying down the Fraser River, Fraser used four North canoes, his own built at Lac la Pluie (Rainy Lake, west of Fort William on Lake Superior) but the others rather crudely built by John Stuart in New Caledonia. The canoes were unsuitable for the heavy rapids and whirlpools on the Fraser in mid-summer and they had to abandon the river along several stretches. George Simpson's journey of 1828 down the Fraser River from Fort st. James to Alexandria employed two "Light Canoes" carrying nine

[^53]262 The Manuscript Journals of Alexander Henry and David Thompson, 1799-1814, Vol. II, 467.
men each. ${ }^{263}$ The continuation of the river journey south from Alexandria by James Murray Yale and fourteen men was made in two bark canoes (i.e., seven men in each). From Alexandria south, the Fraser River enters canyon country; the hazards of the Bridge River rapids (just north of Lillooet) would have beem impossible to navigate at any other time than low water in the fall. Yale's group travelled the river entirely down to its junction with the Thompson where they were met by Simpson and the rest of the party in boats.

The Columbia River, on the other hand, was navigable by canoes along its entire length except for a number of portages. Upon reaching the headwaters of the Snake River, Lewis and Clark's party made four "large" canoes and one "small" one, adopting "the Indian method of burning out the canoes."264 Indians of the region used canoes on many stretches of the river. Gass's Journal notes they were met by thirty-six canoe-loads of Indians near the junction of the Snake and Columbia. ${ }^{265}$ One of the earliest fur brigades up the Columbia River, described by Gabriel Franchère in 1814, left Fort George "in a brigade of 10 canoes"266 "... Five of which were of bark and five of cedar

[^54]wood, ${ }^{267}$ carrying each seven as crew, and two passengers, in all ninety persons..."268

The birch canoe was easily and frequently damaged and needed constant repair. Accidents were inevitable yet, carefully managed, they were a safe means of transport. Nicholas Garry remarks that

> they go for thousands of Miles seldom meeting with serious Accidents. Mr McGillivray assured me that during the whole Time he was engaged in the Fur Trade $1 / 2$ per cent would pay every loss. 269

Safety is relative, however. In the Cordillera, the use of canoes, as Mackenzie, Fraser and Simpson had all discovered, was generally more perilous. On Ross Cox's expedition up the Columbia River in 1817, seven men too weak to continue the journey were sent back in a canoe from the Rocky Mountain Portage (Athabasca Portage) to Spokane House, but their canoe was destroyed as they tried to line it down the Upper Dalles. In 1820 on the upper Fraser River in New Caledonia, two men were drowned when their canoe was overturned in a whirlpool. ${ }^{270}$

North canoes served the function of exploration and express travel, and could readily be portaged, but they were not suitable to the transport goods and furs in large quantities. Furthermore,

[^55]the birch tree, the mainstay of canoe manufacture in the east,
was not found everywhere west of the Rockies:

> Canoe-birch (Betula alba) is found in various parts of British Columbia; but rarely of size for useful purposes of importance until we approach the Rocky Mountains - At Mackenzie's Forks, above Fort George, it grows luxuriantly...At Tete Jaune's Cache it is abundant and of large size. At Fort St James it was formerly abundant. 271

Ross notes that during the North Westers' time,
the country was ransacked for prime birch bark ... and to guard against a failure in this fanciful article, a stock of it was shipped at Montreal for London, and from thence conveyed around Cape Horn for their establishment at Fort George . . . ${ }^{272}$

Birch was not used for canoe manufacture by First Nations of the Cordillera who instead used the "Weymouth pine" (American white pine, Pinus strobus) and spruce. ${ }^{273}$ (Figure 4.1 reveals a variety of craft at Boat Encampment.) On the other hand, dug-out canoes, made of poplar (inland) or cedar (on the coast), were more common than bark canoes among the natives of the region. Although birchbark canoes and dugouts were originally used by the fur trade for transport between the interior fur trade posts in the Cordillera, the lack of birch and less capability of canoes

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    271 A.C. Anderson, "British Columbia."
272 Alexander Ross, The Fur Hunters of the Far West, (Norman OK: University of Oklahoma Press, 1956), 55.
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273 A.C. Anderson, The Dominion at the West..., (Victoria: Richard Wolfenden, 1872), 20. The American white pine, however, does not occur naturally in B.C. Anderson is probably referring to the Western white pine (Pinus monticola), similar in appearance to Weymouth pine.


Figure 4.1 H.J. Warre, "Boat Encampment in the Rocky Mountains", 1846
meant "boats" were soon substituted; the canoe, however, remained essential for rapid communication.

## Boats

In the fur trade, the term "boat" can mean either a York boat or a bateau, although it is the bateau, a clinker-built ${ }^{274}$ but keel-less and smaller version of the York boat, that was used west of the Rockies.

The evolution of the York boat in western Canada can be traced directly to the fishing dory of the Orkney and Shetland Islands of Scotland where its antecedent was likely Viking clinker-built boats. It was no coincidence that so many of the Hudson's Bay Company boatbuilders and other employees were Orcadians familiar with clinker construction. ${ }^{275}$ Named after York Factory on Hudson Bay, the York boats actually first appeared on the Albany River some time after 1745. ${ }^{276}$ These boats were apparently small "neatly built and painted and sharp at both ends: they are propelled by four oarsmen and a steersman and carry 45 packages ... averaging 80 lbs. each. "277 George Sutherland is credited with launching boats on the Saskatchewan

[^56]River system in 1795, also before boats were in use at York. ${ }^{278}$
Larger boats were used on the Saskatchewan, carrying seventy pieces. The difference between a York boat and a bateau is confusing although the York boats were probably larger overall. A description in later years by Eden Colvile indicates a keel was perhaps the defining characteristic:

The York boat's measurements were at least 24 feet in keel, with stern and aft raking fore and aft each a further 6 feet to make an overall length of 34 feet; by 1850 the measurements were sometimes a 30 -foot keel and an overall length of 42 feet. The beam was 9 feet amidships, the depth 3 feet. It was clinker built, with spruce timbers and planking. ${ }^{279}$

Glover provides more detail:
They were propelled by oars, or sweeps, in still water or a steady current, the men rising to swing the oar and falling back on the seat with the stroke. In fast water the boat was poled, or tracked with a line. If the wind was astern a mast was stepped and a square sail raised, and the oarsmen knew what it was to rest. ${ }^{280}$

In the Cordillera a new type of boat was built to suit
a different hydrography than the Interior Plains. The boats were, as a group, clinker-built and double-prowed but smaller than the York boats and keel-less. The first such boats used west of the

[^57]Rocky Mountains were likely made by the Pacific Fur Company.
Astorian Robert Stuart, in his journal, indicates that plank canoes generally referred to as bateaux, were not unfamiliar on the lower Columbia; they were made of cedar boards a quarter-inch thick and supported inside by "braces or Knees of the same material $3 / 8$ of an inch to which the boards are sewed with sturgeon twine..."281

Independently, in March 1811, David Thompson and his
Nor'Westers, upon crossing Athabasca Pass, built a canoe of cedar planks, after first searching for birch:

We had to turn our thoughts to some other material, and Cedar wood being the lightest and most pliable for a Canoe, we split out thin boards of Cedar wood of about six inches in breadth and builded a canoe of twenty five feet in length by fifty inches in breadth, of the same form of a common Canoe, using cedar boards instead of Birch Rind, which proved to be equally light and much stronger than Birch Rind, the greatest difficulty we had was sewing the boards to each round the timbers. As we had no nails we had to make use of the fine Roots of the Pine which we split... ${ }^{282}$

At Kettle Falls, Thompson built another, similar canoe and set out with an Indian and seven voyageurs "to open out a passage for the interior trade with the Pacific." ${ }^{283}$

Thus, on the Columbia River, bateaux were built by both the

[^58]Pacific Fur Company and the North west Company. Ross further notes:

> The description of craft used on the waters of the columbia by Astor's concern consisted of split or sawed cedar boards, strong, light and durable, and in every possible way safer and better adapted for rough water than the birch rind canoes in general use on the east side of the mountains. They carried a cargo or burden of about 3000 lbs. weight, and yet nimbly handled were easily carried across the portages. 284

The first bateaux in the west were built on the lower Columbia River for use between forts Astoria, Okanogan and Colvile. The inaugural brigade up the Columbia by the North West Company was made in the spring of 1814 by 124 men "in a squad of 14 boats," that is, averaging eight men per boat. ${ }^{285}$

By the time of the amalgamation of the North west and Hudson's Bay companies, the use of York boats was standard on the Interior Plains. Nicholas Garry in 1821 remarked, "The whole country may now be supplied with Boats except the Columbia, Athapaskan and Mackenzie's River and Peace River between Athapascan Lake [Lake Athabasca] and Rocky Mountains." ${ }^{286}$ As late as 1825 , boats were still not common on the upper Athabasca. Ross earlier wrote:

Wherever there is a north-wester in this country, the birch-rind canoe is sure to be found. Although boats would have been far more safe and suitable for our

284 Ross, The Fur Hunters of the Far West, 55.
285 Ibid.
286 "Diary of Nicholas Garry," Proceedings and Transactions of Royal Society of Canada, Section II, 1900.
purpose, yet we had to embark in those fragile shells to shoot a dangerous stream. ${ }^{287}$

At least one boat was built in New Caledonia by 1820 under the North West Company who sent Thomas Hodgson, a boatbuilder, to the district in $1819 .{ }^{288}$ Under the Hudson's Bay Company more boats were constructed in the Cordillera. George Simpson in 1824 noted:

The Craft used on the Columbia are of a different construction to those on the east side of the mountain; they are called boats but are more properly speaking Batteaux \& wrought by Paddles instead of Oars, intended to carry 50 pieces Trading Goods besides Provisions for the Crew of Eight Men but they have of late reduced the size altho' they have not reduced the number of the Crew so that Eight Men are employed in the transport of about 35 pieces. ${ }^{289}$

The rights of employees in latter years were reinforced by the "Standing Rules and Regulations" which stipulated
that as a general rule, the crews in the boats shall be in the proportion of one man to every 10 or 12 pieces; but that the Superintendent of Transport be authorized to regulate the number of pieces by the state of the water, 9 pieces per man downwards and 11 pieces per man upwards, however, being considered the minimum lading. ${ }^{290}$

A later rule added "that in future should the crew of any
District boat consist of 8 men, the minimum of cargo should be 75 pieces leaving York Factory." ${ }^{291}$

However, at Spokane House in 1825 John Work describes the

[^59]construction of three boats (fitting the description of York boats) for use on the Columbia:

The sawyers finished the wood for 3 boats, in all 73 boards 6 inches wide and 40 feet long and 3 broad pieces for keels 40 feet long 214 inches wide, and 6 pieces for gunwales 40 feet long and 2 inches wide in 15 days ${ }^{292}$

On Simpson's 1828 voyage, a boat was built at Kamloops, in order to test both types of water conveyance on the Thompson and Fraser rivers. Simpson sent Pierre La Course and three men ahead to Thompson's River to construct a bateau; it took only six days to build and carried sixteen men with twelve paddles. ${ }^{293}$ The party "started with the miserable Thompson River boat and the two bark canoes, (the Governor in his own canoe with eight men) to run the Fraser River Canon" the portion which had not been run by Simon Fraser twenty years previously. ${ }^{294}$ Meanwhile at Fort Langley, on 19 September, men were "sawying [sic] Boards for the Boats" and by 10 October just before Simpson's arrival there, "the Carpenters' part of the Boat [was] finished and only requires Gumming." The boat was intended for the use of Donald Manson and a party of "8 or 10 Men" to examine the navigability of the Fraser River upstream. Upon the arrival of Simpson at Fort Langley on 11 October, another boat (probably a bateau) was

[^60]built in five days in order to facilitate the transport of his party south to the Columbia River via Puget Sound and the Cowlitz River. ${ }^{295}$

By 1846 Paul Kane describes the boats obtained at Boat
Encampment as "formed in canoe fashion, with round bottoms of
boards, clinker built. ${ }^{296}$ By this time, it was said
there are no birch canoes used in the Oregon. They only use batteaux, which are made of quarter-inch pine boards, and are thirty-two feet long, and six and a half feet wide in midships, with both ends sharp, and without a keel - worked according to the circumstances of navigation, with paddles, or with oars. ${ }^{297}$

Wilkes in 1841 describes the boats on the lower Columbia:
...we found one of Mr. Ogden's boats manned by fourteen voyageurs, all gaily dressed in their ribands and plumes ...The boat was somewhat of the model of our whaleboats, only much larger, and of the kind expressly to accommodate the trade; they are provided yearly at Okonagan, and are constructed in a few days; they are clinker-built, and all the timbers are flat. These boats are so light, that they are easily carried across the portages. They use the gum of the pine to cover them instead of pitch. ${ }^{298}$

These boats were about 30 feet ( 9 metres) long and $51 / 2$ foot (1.68 metres) beam and could carry three tons; 60 pieces each

[^61]was the customary load. ${ }^{299}$ Boutes, ${ }^{300}$ the steersman and the bowman, used the longest paddles (about six feet or 1.8 metres) because they often stood in the canoes; still longer paddles, eight feet (2.4 metres) or more in length, were used by the boutes when running rapids. According to Angus McDonald, Chief Trader at Colvile, the Columbian boats during his tenure were all made of yellow pine (also known as bull pine and Ponderosa pine) found in the vicinity, whip-sawn into planks about thirty feet (9 metres) long (see Figure 4.2). ${ }^{301}$

By 1858, the bateaux were standardized throughout the HBC west. A resolution was made "that to prevent inconvenience all boats built for general transport be constructed of one size and capacity on the same mould, and that mould now in use at Edmonton be adopted as the standard." ${ }^{302}$ By this time, however, use of bateaux in the Cordillera, at least on the Columbia and lower Fraser, was coming to an end.

The use of boats, like canoes before them, entailed inherent risks associated with travelling through dangerous rapids, going both downstream by sheer skill and courage, and upstream where

299 According to Alexander Begg, History of British Columbia...(Toronto: 1894), 104, the "bateau [was] thirty-two feet long, six and a half feet amidships.."

300 The "ends."
301 "Angus McDonald: A few Items of the West," in Washington Historical Quarterly, Vol. VIII, 1917: 198.
${ }^{302}$ HBC "Standing Rules and Regulations," \#128 (1858).


Figure 4.2 J.M. Stanley, "The Dalles" (Pacific R.R. Reports, vol, 12, 1855-61).


Figure 4.3 H.J. Warre, "Hauling Up A Rapid, Les Dalles des Morts,..." 1845
strength was required to pull boats by a cordelle or towing line. (see Figure 4.3). Sometimes a combination of canoes and bateaux were used to effect an upriver journey. Anderson notes that in the lower Fraser River canyon "the ascent can be effected only by warping alongshore, with the aid of Indian canoes to pass the lines." ${ }^{303}$

Accidents were a common occurrence on the boat voyages, often resulting in lost lives and property. One of the earliest incidents, about 1817, recounted by Alexander Ross, occurred on the upper Columbia where

The waters being unusually high much time was lost in ascending the current, so that by the time they reached portage point, their provisions got short, and some of the hands falling sick and unable to undertake the difficult portage of eighty miles on foot, the gentleman in charge had no alternative left but to fit out and send back a boat from that place with seven men, three of whom being unable to undertake the portage...the returning party took to the current, but on reaching the Dalles des Morts, they disembarked contrary to the usual practice to hand the craft down by a line, when unfortunately they quarrelled among themselves and letting go of the line, in an instant the boat wheeled round, was dashed to pieces on the rocks and lost. ${ }^{304}$

A similar incident is recounted many years later by walter Moberly:

One of the Hudson Bay Company boats was running the Columbia from "The Boat Encampmemt" to Colville. They were always accustomed to take out the cargoes and passengers, and drop the boats with a line over the bad rapid known as the "Dalle de Mort." A person in the boat, who did not know the river, accused the crew of cowardice, and seizing the steering oar, forced the boat into the rapid and swamped her, ony one man ever being
known to have escaped. After long wandering he reached Fort Colville in a half insane state, from his ravings it was feared he had been guilty of cannibalism. The officer in charge sent up a boat and the few bodies found were buried... Hence the name of the rapid, "Dalle de Mort," or "Death Rapid."305 306

In spring 1828, three men drowned and four others narrowly escaped when their boat capsized descending Priest Rapids in the middle Columbia; the furs were saved with the help of "the old Priest and his people. ${ }^{307}$ In spring 1830 a serious accident took place at the Dalles on the lower Columbia on the return trip of Ogden's Snake River expedition from Walla Walla to Fort Vancouver. Ogden luckily took to land at the portage but was witness to the catastrophe which claimed a "crazy boat" with all nine men except one, the steersman, Baptiste; ${ }^{308}$ five hundred beaver skins were also lost along with Ogden's journals. After this disaster came the loss of one of Mr. Harriott's boats, carrying the fall [October 1830] express, with seven men in the little Dalles near Okanogan. In 1831 nine of ten men were

[^62]307 "John Work's Journal", May 29th - June 1, 1828. See also E.E. Rich, ed., Simpson's Dispatch, 1829, 27-28.
${ }^{308}$ Ogden to John McLeod, 10 March 1831. Transcript, BCARS.
drowned, as well as a woman and two children. ${ }^{309}$ About 1834, three men drowned in a bateau being lined down the Cascades rapids. Nine men drowned at the Dalles the same year. ${ }^{310}$ John Tod recounts a disaster at the Little Dalles in 1838 when an over-loaded boat was upset and six passengers drowned, including two botanists en route to Fort Vancouver. ${ }^{311}$ But according to Father Demers, the party had capsized in the Dalles des Morts and twelve of the 26 passengers had perished (including botanists Mr. Banks and Mr. Wallace). In 1841, Father De Smet recounts the drowning of five boatmen at Nespelem Canyon east of Fort Okanogan. On Paul Kane's own trip about 1842, a party of forty in two boats capsized (probably at Dalles des Morts), drowning fourteen. ${ }^{312}$ In 1846 at the Grand Rapid between Kettle Falls and Fort Okanogan, a boat crashed on the rocks but no lives were lost and much of the baggage was retrieved; however, a new boat had to be obtained from Colvile in order to continue the journey. ${ }^{313}$ By 1846 there had been 68 drownings on the Columbia River according to Kane. ${ }^{314}$ Old Pierre, Alfred Downing's guide

[^63]down the Columbia River in 1881, recounted a bateau capsizing at "Nespilem [sic] Rapids" where eight men out of sixteen perished "some years ago." ${ }^{315}$

## People's Backs

A portage where both goods and a canoe or boat were transported overland was the most arduous part of a brigade voyage. A décharge was a portage where only the goods needed to be carried ${ }^{316}$. Each man was expected to carry two pieces totalling 180 pounds ( 82 kilograms) of goods along a portage which could range from a few hundred yards to many miles. The pactons, as the packs were called, were carried using a long tumpline (collier or portage collar) over the forehead attached to the packs on the back. The voyageur had to bend over and literally run under a heavy load. Poses, or resting places, were made every 500 or 600 yards ( 457 to 549 metres) or $1 / 3$ of a mile, along a portage. The men portaged in couples to assist each other in putting on and taking off loads. The boutes, the bowman and steersman, were only responsible for carrying the canoe or lining the boat upstream.

In portaging, the North canoes used in the west were carried bottom-side down on the shoulders of two or three men

[^64]> When arrived at a portage, the bowman instantly jumps in the water, to prevent the canoe from touching the bottom, while the others tie their slings to the packages in the canoe and swing them on their backs to carry over the portage. The bowman and the steersman carry their [North] canoe, a duty from which the middlemen are exempt. ${ }^{317}$

The loading, made up of packages of about ninety pounds each, was carried by the men upon their backs, supported by a strap passing across the forehead. A full load is two pieces, or one hundred and eighty pounds. ${ }^{318}$

Alexander Mackenzie identifies the main portages on his voyage in 1793, but in ascending the Peace River, Mackenzie's party followed close to the river, instead of portaging along an Indian trail north of Peace River Canyon. Eventually they reached a point where they could proceed no further except by climbing out of the canyon and cutting a trail seven miles (11 km ) in length along the southern slope of Portage Mountain. Simon Fraser, in 1806, followed Mackenzie's route up the Peace, but took the Indian trail and described the road as "amazing bad and the Portage ... at least 14 or 15 miles long [actually about 12 miles.] 319320

In 1828 on reaching the "old Mountain House,"(Hudson's Hope today) on the Peace River, Simpson's party encountered

[^65]about a mile of the worst road in Christendom. ... No people having passed this way for the last three years, and, of course, no clearance made in a road that at best must be an infamous one, presented a horrible appearance to-day...the way would be impracticable for passing the canoes. ${ }^{321}$

Both Mackenzie and Fraser negotiated the portage between the Arctic and Pacific drainages but with great difficulty;
fallen trees blocking the passage had to be removed. On the Tacoutche Tesse, Fraser's party had to make several long portages on their journey in 1808. ${ }^{322}$ The portages followed native trails but were given French names: north of the outlet of the Quesnel River was "La Décharge de la Montagne" signifying only a portage of the lading -- the canoe could be lined down. "Portage du Baril" ["de Barrel"] (after the horn of a Rocky Mountain ram) was "at least a mile long" and took the men "five hours to transport the baggage across."323

Travel on the Columbia River also involved the making of several portages. Three hours downstream from Boat Encampment was the "Dalle de Mort" [sic] "about three miles long and
${ }^{321}$ McLeod, Peace River, 18.
${ }^{322}$ The "carrying places" are shown in on David Thompson's map. Although the upper Fraser is classified as grade 1 or 2 water, the large volume creates turbulence, boils, eddies and whirlpools that can easily flip a modern canoe. The current of the river varies from 6 to 13 km per hour with water volumes increasing tenfold from low to high water.
${ }^{323}$ Red Rock or Fort George Canyon is located 20 km downstream from Prince George. The rapids vary from grade 3 to grade 5 . Cottonwood Canyon, 5 km upstream from the Cottonwood River, is grade 3 to 4 .
...the most dangerous of all the rapids on the Columbia, " ${ }^{324}$ although it could be run. Further downstream, the "Little Dalle" was near "a series of dangerous whirlpools":

They are about twenty miles from Kettle Falls, and are the narrowest part of the Columbia River for full one thousand miles.... This is one of the most dangerous places that the boats have to pass. In going up the river the boats are all emptied, and the freight has to be carried about half a mile over the tops of the high and rugged rocks. One man remains in each boat with a long pole to keep it off the rocks, whilst the others drag it by a long tow-rope up the torrent.

In coming down, however, all remain in the boats... ${ }^{325}$
Farther south, the Chaudière or Kettle Falls "exceeds in height any other fall on the Columbia" which meant a portage of two miles over a hill two or three hundred feet high. ${ }^{326}$

Along the lower Columbia, Lewis and Clark make several portages: the "first falls or great rapids" (Celilo Falls) was circumvented by a portage of 1300 yards (1087 metres); at the Cascades (the lower falls of the Columbia), "there is a small rapid below the falls...the men had to carry part of the baggage across a portage of two miles and half, while the rest took down the canoes. ${ }^{327}$

The Athabasca Portage across the Rockies was the longest

324 Ibid., 90.
325 De Smet, Life, Letters and Travels, Vol. III, 168.
${ }^{326}$ Ibid.
327 Sergeant Patrick Gass, Gass's Journal of The Lewis and Clark Expedition, (Chicago: A.C. McClurg \& Co., 1904) 162, 167.
portage made by foot in the Cordillera. Ross Cox recounts the eastward brigade in May 1817. ${ }^{328}$ At Boat Encampment each man was "obliged to carry ninety pounds weight each, besides their own kits, which in such cases are never taken into consideration." ${ }^{329}$ After two days march (comprising a distance of only twenty miles), "the men were much fatigued from their heavy loads, and some of them were hardly able to proceed. " ${ }^{1330}$

One of the difficulties of the Athabasca Portage was having to cross icy rivers on the approaches to the mountain pass itself. On May 30 Cox's party reached the "grande traverse", so-named "owing to its great depth and breadth."

To cross this was a measure of much danger. We all advanced in line, the tallest and strongest mixed alternately with the lowest, each holding the other firmly in hand. This arrangement was peculiarly necessary: for during our progress several of the smaller men were swept off their legs by the force of the current, and would inevitably have perished, but for the support they received from their stronger brethren. ${ }^{331}$
(Figure 4.4 shows a brigade crossing battures).
Father Pierre-Jean De Smet, S.J., recounted in May 1846 the brigade crossing of Athabasca Pass when he met the brigade travelling east led by Ermatinger and accompanied by captains Ware and Vavassour. Fifteen Indians from Kettle Falls who accompanied them "had scaled the mountains with 150 pounds weight
${ }^{328}$ Cox, The Columbia River, 280-292.
329 Ibid., 280.
330 Ibid., 281.
${ }^{331}$ Ibid.


Figure 4.4 H.J. Warre, "Crossing the Canoe River...," 1846.
upon their backs."332 At Camp du Fusil the brigade "threw away their snowshoes" to take horses for four days; at Jasper they used "skiffs" to go to Fort Assiniboine. De Smet and his party then donned snowshoes for the "seventy miles .... in order to reach the boat encampment on the banks of the Columbia"333 (see Figure 4.5). They made thirty miles ( 48 km ) the first day and the next day commenced the five-hour descent of "The Great Western Slope", or "La Grande Côte de l'Ouest". Also in 1846, artist Paul Kane traversed the Athabasca Pass with the annual westbound brigade in November. He mentioned the distance from Boat Encampment to Fort Vancouver as 1,200 miles ( $1,931 \mathrm{~km}$ ) which they accomplished in fifteen days. ${ }^{334}$ (See Appendix J for excerpts of Kane's itinerary.)

## Horses and Dogs

Horses represented an important mode of transportation in the fur trade, especially through the interior of the Cordillera where water transportation was discontinuous. Horses were used on overland trails travelled previously by aboriginal people on foot. In effect, the major trails represented long portages between navigable waterways.

[^66]334 Kane, Wanderings of An Artist, 89.


Figure 4.5 H.J. Warre, "Ascending the Rocky Mountains," 1845

Horses first spread through the southern Cordillera from Mexico at the end of the 16 th century, to the Shoshones of the upper Snake River between 1690-1700, then to the Flatheads by 1720 and on to the Nez Percés and Cayuses of the Columbia Plain of southeast Washington sometime after 1730, as evidenced in oral tradition and rock art. ${ }^{335}$ Horses were used in the fur trade east of the Rockies by explorers and traders before Europeans entered the Cordillera. According to a native informant recorded by David Thompson, horses were in use in the Bow River Valley by 1730. ${ }^{336} 337$ Indian pack horses were used by Lewis and Clark in 1804 to carry their possessions, supplies and equipment after leaving their river transport on the Missouri River until they reached the Clearwater River; they encountered horses all along the Snake and Columbia rivers. ${ }^{338}$ David Thompson used horses as early as 1809 in Idaho and Montana.

The use of horses west of the continental divide was an expansion rather than an innovation of a transport mode of the fur trade. But horses were not common throughout the northern Cordillera at the same time. Alexander Mackenzie does not
${ }^{335}$ James Keyser, Indian Rock Art of the Columbia Plateau, 29.
${ }^{336}$ Richard Glover, ed., Narrative 1784-1812, David Thompson, (Toronto: The Champlain Society, 1962).
${ }^{337}$ Henday on his 1754-55 expedition used pack horses and noted the Blackfoot hunted on horses and used travois, according to Barbara Belyea (ed.), Henday Journals, personal communication.
${ }^{338}$ Hunn, Nch'i-wána, "The Big River": Mid-Columbia Indians and Their Land, 23.
mention horses on his voyage of 1793, but when Simon Fraser in 1808 descended the river named after him, he observed "the vertiges [sic] of horses" near the Quesnel River. Farther south, his party "procured four horses...of service in the carrying place [portage] where the road is excessively bad..."339 He further mentioned that among the "Swhanemugh" (Okanagan people), "their country was well stoked [sic] with animals such as horses..."340 The Astorians in 1811 described the Crow as being "the grand intermediaries in such transactions between the transmontane and the plains tribes." ${ }^{341}$ To the north, Daniel Harmon in his journal makes no mention of the use of horses, suggesting that they had not reached New Caledonia before the arrival of Europeans.

The regular use of horses by the fur trade along trails in the northern Cordillera dates from 1811 when David Stuart and Alexander Ross of the Pacific Fur Company travelled from Fort Okanogan on the Columbia River north to Kamloops with six horses they had obtained from the Indians along the Columbia. They "declined buying more, not knowing what to do with them. " ${ }^{342}$

In 1812 John Clarke and Ross Cox purchased horses from the Palouse Indians in the fall of 1812 to travel from the

[^67]Lewis (Snake) River to Spokane House. In May of 1813, Clarke's party transported their Spokane returns with 28 loaded horses to Lewis River.

In 1815 Alexander Ross mentions a lack of horses at Okanogan "to transport the goods inland" and "no horses were to be got nearer than the Eyakema [Yakima] Valley" from the Indians there. ${ }^{343}$ By this period, Ross confirms, "the use of horses or sledges drawn by dogs is resorted to, as the most practicable for transporting property during the early stages of the season."344 Franchère in 1814 writes: "They take their horses from among bands of wild mustangs ... [which] come from Mexico and are of a Spanish breed. ${ }^{1345}$

Not until 1818 when Donald Mackenzie took trapping expeditions into the Snake Country were horses used in large numbers for the shipment of supplies and returns. With the Union of 1821, the Hudson's Bay Company then expanded the use of horses west of the Rockies. By 1828, Simpson notes that the HBC depended on the natives of the Fort Nez Percés area "for an annual supply of about 250 horses, " ${ }^{346}$ many of which must have been sent north with the brigades to Kamloops and Alexandria.

The size of the horse brigades varied but it is generally confirmed that the annual brigades inbound and outbound were

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343 Ross, The Fur Hunters of the Far West, 22.
344 Ross, The Fur Hunters of the Far West, 81.
345 Franchère's Journal...., 151.
346 Rich, Part of Dispatch from George Simpson, 1829, 51.
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comprised of a few hundred horses, probably reaching their maximum number in the early 1840s. John Tod describes the
... noble cavalcade of 400 to 500 horses.... A "brigade" ...consisted of 16 horses in charge of two men. The horses so banded kept together and each had its own name.

The load for each horse was two "pieces" of 84 pounds each, and the horse was supposed to convey this about 20 miles a day, but, in fact, the distances between camping places varied. ${ }^{347}$

The first brigade from Kamloops to Yale in 1848, which included the returns from New Caledonia, Thompson River and Fort Colvile, consisted of "about 400 horses (many of them unbroken) and in all about 50 men. " ${ }^{348}$ The 1848 brigade from Fort Langley to Thompson's River involved fifteen strings of eighteen horses each -- 270 horses in all -- and thirty men. "Each officer retained control of his own horses", according to Tod. ${ }^{349}$ Peers, in his 1848 journal of the inbound brigade, describes "each Brigade having 18 \& some a greater number of horses to 2 men." ${ }^{350}$ What must have been one of the last brigades outbound from New Caledonia is described by Bishop Hills as having "some two hundred animals attended by thirty or forty men, principally half breeds and Indians. ${ }^{351}$

347 Wolfenden, "John Tod," 219.
${ }^{348}$ E. P. Creech, "Brigade Trails of B.C.," The Beaver, 15.
349 Ibid., 219.
350 Peers, "Private Journal"..., 3. BCARS.
351 Roberta L. Bagshaw, ed., No Better Land: The 1860 Diaries of the Anglican Colonial Bishop George Hills, (Victoria: Sono Nis Press, 1996), 153-54.

John Keast Lord, a naturalist with the Boundary Commission in the late 1850s, describes in detail the method of horsepacking used by the Hudson's Bay Company. A pack-horse could carry some 320 pounds ( 145 kg ), but two bales (180lbs) were average. ${ }^{352}$ The method of packing horses, according to Lord, was long-standing: "the Hudson's Bay Company's traders stick to, and swear by, the cross-tree pack saddle, from which they hang their bales of fur-peltries by loops. ${ }^{353}$ A piece of buffalo hide called an apichimo was first placed on the horse with the fur next to the animal. The pack saddle, a miserable affair with its two little pillows or pads, tied into the cross-trees of woodwork, is girthed with a narrow strip of hide, which often, from the swaying of the load, cuts a regular gash into the poor animal's belly. ${ }^{354}$

The "Hudson's Bay Company's system of packing is about the very worst means of conveying freight on the backs of animals." 355 Whether this way of packing contributed to accidents is a moot point, but there is no doubt that horse transportation was difficult (see Figure 4.6).

According to Wilkes in 1841, the horse brigades were slow-moving. From Okanogan to Thompson's River "takes twenty

[^68]354 Ibid.
355 Ibid.


Figure 4.6 Paul Kane, "Pack Horses in the Mountains," 1846.
days to accomplish" [loaded], i.e., only eleven miles per day. ${ }^{356}$ However, Wilkes' distances are too short.

From Vancouver to Okonagan is three hundred miles [closer to 400 miles] by water with four portages; and from Okonagan to Fort Thompson by land, one hundred and fifty miles [actually 224 miles]; thence to Fort Alexandria, one hundred and twenty, and as much more to Fort st. James...: total, seven hundred and twenty miles, that occupy nearly sixty days in travelling, .... without loads ... in twenty days [i.e. 36 miles per day] ${ }^{357}$

Demers mentions "each morning's preparations are not
finished until nine or ten $0^{\prime}$ clock... and the day's travel ends in three or four hours."358 such long and slow moving trains of horses necessitated many campsites en route where feed and water could be obtained. Anderson's 1867 map of British Columbia shows the routes and camping spots through the interior (see also Appendix I). According to Anderson, the average distance between campsites along the brigade trail between Okanagan and Alexandria was twenty miles, corresponding to Demer's remarks.

Travelling in winter slowed transport even more. Demers left Fort Alexandria with Ogden on 21 February 1844 and arrived at Fort Thompson on 1 March, "on horseback in knee-high snow through woods and prairies." He noted:
...on such an expedition...one cannot ordinarily go except at a walk, because the way is not beaten; the cold takes hold of us, and it must be endured until evening. Then is the question of making camp, but there

[^69]is more than a foot of snow. This is how the encampment is made. As a precaution one carries with him a wooden paddle with which the snow is removed to the ground; fir branches are broken off when one can find them and laid on the spot where the snow has been removed; they are covered with articles from our mounts, then with our blankets carried in a packsack. While all this is being arranged, some of the men go to cut wood for making as big a fire as possible; supper is prepared; we eat it with appetite, then we go to bed..." Our horses are far from being as comfortable. The most tractable are given their liberty; the less so have their front feet tied, so they will not stray far from camp. The poor beasts must delve all night long to procure the meager grass the snow covers. Often our native horses go several days unable to find nourishment; this happens when there there are three or four feet of snow on the ground. Our Canadian horses would not be able to stand such great privation. ${ }^{359}$

Each of the interior posts along the brigade trail was also well-stocked with horses; horses were changed on the route between Okanogan and Alexandria at Kamloops. Initially, horses were obtained from Nez Percés but the HBC decided to circumvent dependence on this expensive source by sending breeding mares from Fort Vancouver and the Snake Country to Kamloops. The number of horses kept at different posts varied over the years. The peak years were 1838 in New Caledonia and in 1840 in Thompson's River (including Okanogan) District, when the number of horses was 228 and 350 respectively. ${ }^{360}$ Two hundred horses were also kept at Fort Alexandria. ${ }^{361}$ After the boundary settlement it became difficult to procure horses from the

[^70]Columbia District and, from 1852 on, Kamloops became the horseraising centre for the New Caledonia brigades. Paul Fraser informed Governor Eden Colvile:
...last year and this there has been Considerable Encrease of Colts than usual, and I have no doubt should the winters prove mild as the last one has been, but Thompsons River will be able in two years from this, to meet all reasonable demand in horses. ${ }^{362}$

The Kamloops Journal for 1854-55 shows that the fort possessed 342 mares, 75 one-year old mares, 65 one-year old horses, and 184 colts for a total of 666 animals. ${ }^{363}$ Kamloops had become the most important place for horse breeding along the brigade trail in the Columbia Department. ${ }^{364}$ There was ample feed and horses were rested and exchanged. Low snowfall and moderate temperatures allowed horses to be wintered northeast of the fort (later known as Scheidam Flats, now Kum-Gen-Natkwa) and Garde Lafferty ("Lafferty's Horseguard," now Lac du Bois grasslands) northwest of the fort (after 1843). Although horses did not usually wander very far on the open ranges, horses lost to thievery were common; some forts, such as Colvile and Kamloops, had corrals in order to keep the horses secure. Malcolm McLeod, son of Chief Trader John McLeod in charge of

[^71]Kamloops in the early 1820s, wrote:
I remember the old compact and well palisaded Fort, and the stockades a little distance off, large enough for three or four hundred horses, for transport of 'goods in' and 'returns out' for the District, and for New Caledonia, generally numbered about two hundred and fifty horses. A beautiful sight was that horse brigade, with no broken hacks in the train, but every animal in his full beauty of form and color, and all so tractable! ${ }^{365}$

Unlike the Interior Plains, the topography of the Cordillera prohibited the used of wheeled wagons, except in the vicinity of fur trade posts where Red River carts and other types of wagons could be used. ${ }^{366}{ }^{367}$ The steep grades, high elevations, and high snowfall on the windward side of the Cascade and Rocky mountain passes meant that travel was curtailed by snow for several months of the year. Loaded horses could traverse

Athabasca Pass in the late fall, ${ }^{368}$ but horse when the snow had melted from the previous season and before the onset of winter. However, the horses could be kept on the east side of the Rockies year-round. States Anderson:

About Jasper's House a large expanse of the finest pasture is at all seasons available; the snow never lying in the valley to any depth, or for any length of time...

[^72]the large band of horses, numbering some 300 , kept here formerly [between 1820s and l840s] by the Hudson's Bay Company for the purpose of transport, wintered constantly in good condition upon the open pastures. ${ }^{369}$

Some sections of the brigade routes were particularly difficult. The Douglas Portage between Yale and Spuzzum involved eighty Indians making three or four trips on foot, as well as four trips on horseback with 35 horses, each trip three hours long. Even in the summer, some trails, such as the routes over the north Cascade Mountains, were extremely difficult for horse brigades; falling off cliffs, drowning and getting bogged in mud holes were the main causes of horse fatalities. The 1848 brigade between Kamloops and Hope resulted in one in ten horses either killed by accident or lost. ${ }^{370}$ Douglas in 1850 remarked

Our attention having been attracted by the alarming loss of horses experienced during the last two years.... a band of 87 brood mares, to be hereafter increased to 100 , are to be retained at Thompson's River exclusively for the purpose of rearing horses. ${ }^{371}$

In 1859, Lieutenant H.S. Palmer of the Royal Engineers reported seeing the skeletons of sixty or seventy horses on Manson Mountain:

Traces of their deaths are still visible, and in riding over the mountain, and more particularly on its eastern slope, my horse frequently shied at the whitened bones of

[^73]some one of the poor animals who had broken down in the sharp struggle with fatigue and hunger. ${ }^{372}$

River crossings by the brigades were particularly dangerous. Lac des Chevaux Noyés, ("Lake of Drowned Horses," present Horse Lake), on the brigade route between Kamloops and Alexandria, was so-named for an incident in 1827 when a number of horses drowned, ${ }^{373}$ possibly in attempting to cross the outlet of the lake. ${ }^{374}$ In the fall of 1822, Chief Trader McBean and four men from Alexandria arrived at Kamloops with 50 horses "of which 10 were drownded," probably at the crossing place on the North Thompson. ${ }^{375}$ Because the Thompson River at Fort Kamloops had also to be forded, horses were kept on both sides of the river to avoid drownings. At "Forks of the Okanagans" (at Osoyoos Lake) ${ }^{376}$ Demers recounts, "... we made a crossing ordinarily quite productive in tragic accidents, but where our horses had water only up to their middle." ${ }^{377}$ Bridges (made of single

[^74]trees) over narrow though otherwise unfordable rivers were sometimes constructed expressly for the brigades. The Anderson River in the Cascade Mountains required two bridges. ${ }^{378}$ Bridge Creek is so-named for a bridge (near present 100 Mile House) along the route between Kamloops and Alexandria.

The use of dogs to transport goods was also an early innovation of native people in the west observed by fur traders in the northern plains by 1740s. The use of the dog travois was apparently more common in the southern Plains area and dogpacking in the north. ${ }^{379}$ The use of dog teams to pull sledges certainly an eastern invention, brought west of the Rockies by the voyageurs.

Dogs were used on some portages in the wintertime to pull sleds employing one to four dogs harnessed in line. Simon Fraser in 1806 mentions the use of traineaux (sledges) between Stuart and McLeod lakes in late April that year. ${ }^{380}$ Harmon elaborates:
... each pair of dogs drew a load of from two hundred, to two hundred and fifty pounds. I have seen many dogs, two of which would draw a sledge five hundred pounds, twenty miles, in five hours. ${ }^{381}$

[^75]A.C. Anderson also recalled this means of transport in New Caledonia:

The dogs used for transport in this part of the Country are ordinary curs; the sole requisites being that they combine hardiness under severe cold with a certain degree of strength, activity and endurance.

The sledges used are merely flat planks of Birch (half an inch thick) turned up in front, about sixteen inches broad and nine feet in length...

Being hard, close-grained and elastic, it [the birch] is peculiarly well-adapted... ${ }^{382}$

Dogs were less expensive than horses and could run over deep snow that horses would find difficult or impossible to travel through. Typically, a few men on snowshoes would "break track" in front of the dogs and sledges. Paul Kane provides the following description:

Two men would go before [the lead dog] on the run in snowshoes to beat a track, which the dogs instinctively follow: these men are relieved every two hours, as it is very laborious. ${ }^{383}$
(See Figure 4.7 of $\operatorname{dog}$ sleds.)

## Goods and Provisions

The main purpose of the brigades was to convey large quantities of goods, both furs ("returns") and supplies ("outfits"). The use of different modes of transport necessitated a uniform type of package that could be carried on men's backs, on horses, as well as in canoes, boats and on sledges. The "piece," weighing

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382 A.C. Anderson, "British Columbia."
383 Kane, Wanderings on an Artist..., 271.
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Figure 4.7 H.J. Warre, "Meeting with Père De Smet in the Rocky Mountains," 1846.
approximately 80 to 90 pounds ( 41 kilograms), became the standard unit used in all shipments, whether "returns" of furs or "outfits" of supplies. At a transshipment point, the cargo in boats was transferred to horses' backs without any repacking of bales. Dry goods were packed into bales but not all supplies could be conveniently bundled; valuable items such as papers or goods were placed in strong boxes known as cassettes. Each chief trader had a cassette to carry his personal possessions. ${ }^{384}$ Liquor was shipped in small kegs and trade guns were placed in cases of probably six per box. Such items as shot and ball were put into rawhide bags. The small cannons mentioned at the forts at Kamloops and Alexandria also had to be carried on horseback. Chickens and even small pigs had to be boxed. Bags of barley and Corn meal were shipped from Fort Colvile to Okanogan in $1828^{385}$ and wheat in bags from Colvile was supplied to New Caledonia a year or two later. Livestock, such as cattle, trailed the horses. The first cattle were driven from Okanagan to Kamloops and Alexandria in 1833; many more followed the old brigade trails during the Cariboo gold rush of the 1860s.

An example of the amount of goods shipped to the Interior from Fort Vancouver is found in John Work's journal of July 1826. ${ }^{386}$ Nine boats were used each carrying six men, women and

[^76]children; cargoes comprised 72 pieces for Fort Colvile, 52 for Thompson's River, 60 for Nez Percés, 106 for New Caledonia and one for York Factory (including private orders). ${ }^{387}$ The average cargo was therefore 32 pieces or 2,880 lbs (1,306 kg) per boat (not including men and passengers).

Detailed inventories of goods were maintained and have been preserved for some years. In 1846 (the penultimate brigade from Fort Vancouver to New Caledonia), the shipment included 111 pieces comprised of bales, cases, kegs, bags and bundles of goods. Based on the carrying capacity of the boats described twenty years earlier by Work, this shipment would have involved three or four boats to carry the New Caledonia outfit between Fort Vancouver and Okanogan and 56 horses for the overland trip to Alexandria.

On the lower Fraser River, the bateaux were larger than those used in Work's time on the Columbia. In 1848 the goods sent inland by bateaux from Fort Langley to Fort Yale, bound for New Caledonia, Thompson's River and Colvile, amounted to 197 pieces or about 4500 lbs (2041 kg) per boat. Besides furs or supplies, the brigades also had to carry enough provisions for the people on the voyage. There was little time for a brigade to obtain food en route. During the North West Company period, each man was allowed eight pounds $(3.6 \mathrm{~kg})$ of solid meat (such as buffalo, deer, or horse) per diem. According to Cox, "in some of our journeys up the Columbia they were allowed pork and rice..."

[^77]and "on particular occasions, such as wet weather, or making a long portage, they received a glass of rum. ${ }^{1388}$

Under the HBC regime, there was similar though reduced fare. Simpson's 1828 journey from York Factory to the Pacific provides an indication of the variety and quantity of provisions used by his party. This expedition was wellprovisioned: a bag of bread, a bag of biscuit, two kegs of spirits, two kegs of porter, one tinnet of beef, one bag of fine pemmican (for the gentlemen), and two bags of (common) pemmican for the men. The Hudson's Bay Company standard meat ration was $21 / 2$ to 3 pounds ( 1.4 kg ) of pemmican per man each day while en route. To supplement this staple the men sometimes picked berries along portages; occasionally, birds or animals, such as ducks, a deer or rabbits, would be shot by the gentlemen en passant and immediately eaten by all. In general, however, food supplies and other items were replenished at posts along the way, a measure of the amounts consumed en route. On simpson's 1828 trip, fresh stores were regularly obtained at the forts along the communication. In some instances, posts were replenished with a party's unused foodstuffs.

In the Columbia Department, dried salmon instead of buffalo pemmican was the mainstay. The 1825 eastbound express carried enough provisions of corn, peas, dried meat and dried salmon for 36 days. ${ }^{389}$ In 1826 Thompson's River Post supplied

1,500 salmon for the consumption of the brigade from Kamloops to Okanogan and 2,500 for the incoming journey from Kamloops to Fort St. James. ${ }^{390}$ Dease's 1831 brigade took 4,000 salmon from Fort St. James for the trip to the Columbia and added another 1028 salmon at Kamloops. ${ }^{391}$ As farming developed, "country produce" supplemented the daily fare of salmon. Ogden in 1842 noted "The servants attached to the brigade received their usual allowance of Flour at Okanagan...."392

Although liquor was not traded after the HBC acquired a monopoly, a ration of rum was provided to the engagés during the course of the working day. They were permitted four drams per diem, but sometimes two or three glasses of spirits were given to the men at the poses on a portage. A hard day's work which included a difficult portage was sometimes rewarded by an extra bumper of port wine. ${ }^{393}$ Simpson's men, who probably worked harder and were better treated than most, consumed two kegs of spirits in the course of three weeks between York Factory and Frog Portage. ${ }^{394}$

[^78]
## Information

Besides trade goods, furs, and provisions, the brigades also carried information in the form of post journals, account books, and both written and oral messages between posts. News of the outside world was carried via the brigade routes and then disseminated along the way, especially at the posts where natives and fur traders congregated. In most cases,"psychical" information travelled no faster than other "material" commodities. ${ }^{395}$ However, when brigades carried only what they themselves needed, they could travel faster in smaller groups. The term "express" was used to designate light, small parties carrying passengers, only a few goods and information from the Cordilleran posts to eastern headquarters. Before 1813, New Caledonia was connected with the Athabasca and Saskatchewan districts by "express" communication. As early as 1815, the North West Company sent information -- papers, bills and other documents -- directly from Fort Okanogan east to Fort William, their supply depot on Lake Superior, via the Columbia route to Athabasca Pass. ${ }^{396}$

From every distant Department of the Company a special light canoe is fitted out annually to report their transactions. The one from the Columbia sets out from the Pacific ocean the first of April, and with the regularity and rapidity of a steamboat it reaches Fort william on Lake Superior the first of July, remaining there until the twelve of that month, when it takes its departure
back, and with an equal degree of precision arrives at Fort George ... on the 20 th of October.

A light canoe, likewise, leaving the Pacific, reaches Montreal in a hundred days, and one from Montreal to the Pacific in the same space of time... ${ }^{397}$

After 1821 York Factory was made the equivalent base for the Hudson's Bay Company from which messages were received from London. In 1825, David Douglas recounts that the Columbia express, "Consisting of two boats and forty men," left Hudson Bay on 21 July and arrived at Fort Vancouver on 18 November, a total of 119 days. "They left Hudson's Bay before the arrival of the ship which left London the May before." Douglas bemoaned that there were no letters or parcels for him from Scotland. If any mail was not in time for the departing ship from Europe, it would arrive on the Columbia a year late. ${ }^{398}$ Simpson's voyage across the continent in 1824 was an example of the speed possible by unencumbered "express" travel. He left York Factory on 15 August and arrived at Fort George on 8 November "having performed the Voyage from Hudson's Bay across the continent of America to the Northern Pacific Ocean in 84 Days thereby gaining Twenty Days on any Craft that ever preceded us. " 399

The annual express, which carried letters, accounts, and other information in the charge of an officer and was destined

398 David Douglas, Journal..., 1823-27, 151.
399 Fur Trade and Empire, 64.
for the Governor in Council who met once a year either at York Factory or Norway House, left Fort Vancouver about the middle of March. ${ }^{400}$ James Douglas, as accountant in charge of the books at Fort Vancouver, accompanied the annual express in 1832 and 1833. ${ }^{401}$ A. C. Anderson was the leader in $1842 .{ }^{402}$

Internally along the brigade routes, couriers, usually natives, were employed to deliver messages between posts.

According to Morice, the earliest long-distance transmission of a letter was from David Thompson dated "Ilk-kay-ope [Kettle] Falls, Columbia River, 28 August 1811", before his journey to Fort Astoria, and addressed to "Mr. John Stuart, Fort Estekatadene, New Caledonia," but it did not arrive until 6 April 1812. 403 In 1813 Daniel Harmon at Stuart Lake recounts how "an Indian arrived from below [the south] and delivered ... three Letters from ... O-ki-na-gun [Okanagan]."404 Often, messages carried by an oncoming brigade were sent ahead, as Harmon did in 1813. In HBC times, much information in the form of messages flowed back and forth at all seasons along the brigade trail between Forts Alexandria, Kamloops and Okanagan, relying on the trust and

400 Anderson, "History of the Northwest Coast", 2.
401 Walter Sage, Sir James Douglas and British Columbia (Toronto: The University of Toronto Press, 1930), 65.
${ }^{402}$ Ibid., 3.
${ }^{403}$ Morice, The History of the Northern Interior of British Columbia, 92.

404 Lamb, ed., Harmon, Sixteen Years in the Indian Country, 163.
ability of mainly native couriers. ${ }^{405}$ The death of Samuel Black at Kamloops in February 1841 is a particularly good example of the speed by which unencumbered riders could travel along the brigade route in winter. When John Tod at Fort Alexandria learned of Black's murder, he and three others immediately set out for Kamloops. "There were two feet of snow on the ground during the first part of our trip of 270 miles, and after a long week of almost incessant travel, or 'march' as the word was, we reached our destination."406

The pattern of transcontinental express communication continued relatively unchanged until 1848 when the Pacific Mail Steamship Company obtained a contract to carry mail between Panama and the Pacific Coast, cutting two to three months off the six-month long trip from London via Cape Horn to the Columbia River. By 1851 there was regular mail service via Panama resulting in "monthly news from England and the states."407 From the Columbia, $H B C$ vessels distributed the mail to Fort Victoria, Fort Langley and other coastal posts. But the boundary settlement, at this time, forced the HBC to consider an express route that avoided the lower Columbia. As a result of these changes, the Columbia Department became administratively linked with London beginning with the 1853 outfit, ending the spring and

[^79]fall trans-mountain expresses between the Columbia Department and the Northern Department.

## The Regime

An extension of commercial capitalism in the wilderness, the fur trade involved a quasi-military hierarchy of organization and discipline, establishing "calculated distributions" by which the activities of people could be controlled and measured.
"In order to extract from bodies the maximum time and force, the use of those overall methods known as timetables, ... total and detailed surveillance" need to be applied. ${ }^{408}$ Disciplinary organization was an integral part of the brigade system. The use of journals, chronometers, and smoking pipes were all ways of recording the progress of the brigades.

In the early days of the Cordilleran trade, the length of a voyage and line of supply was governed by temperature, that is, the distance and route covered was determined by the length of the travelling season. ${ }^{409}$ On 2 May 1818 in New Caledonia, Harmon recounted: "expecting that the ice in Peace River will soon break up ... sent the last of our people who are going to

408 M. Foucault, Discipline and Punish: The Birth of the Prison (New York: Vintage Books, 1979). These ideas are looked at in general by Cole Harris in "Strategies of Power in the Canadian Fur Trade," In The Resettlement of British Columbia: Essays on Colonialism and Geographical Change, (Vancouver: UBC Press, 1997), 31-67.

409 See Eric Morse, Fur Trade Routes of Canada, (Ottawa: National and Historic Parks Branch, 1969) and Harold Innis, The Fur Trade in Canada, 387-389, for descriptions of the influence of geography on the fur trade.
the Rainy Lake [west of Lake Superior]. "410 They returned six months later on 7 November, but "on account of the large quantities of ice that was drifting in Peace River, they were obliged to leave the greater part of the goods ... a short distance this side of the Rocky Mountain Portage."411 The following year, revealing the regularized time for travel, Harmon made the journey east starting from McLeod's Lake on 8 May 1819 and arrived at Fort William on 18 August. ${ }^{412}$

The departure of a brigade was usually celebrated by the voyageurs with a régale, or debauch, when they were allowed a pint of rum each. This custom usually took place a day's travel from the point of departure to prevent men from getting waylaid from the brigade. ${ }^{413}$ After leaving Fort Vancouver, Paul

Kane recounts the practice:
As soon as the men got their allowance, they commenced all sorts of athletic games; running, jumping, wrestling, \&c. We had eight Sandwich Islanders amongst the crews, who afforded great amusement by a sort of pantomimic dance accompanied by singing... gradually, as the rum began to take effect, the brigades, belonging to different posts, began to boast of their deeds of daring and endurance....Numberless fights ensued... the next day the men were quite good-tempered and obedient; ... the fights... seemed to be a sort of final settlement of all

[^80]old grudges and disputes. ${ }^{414}$
After this ritual, the brigade soon fell into a common routine. It was the task of the officers to maintain the schedule. On Simpson's 1828 journey that duty was shared by Dr. Hamlyn and Archibald McDonald who took turns each night watching a chronometer (carried in a secure box) in order to start exactly on time; the brigade was usually on the move by about $2 \mathrm{a} . \mathrm{m}$. (The land portions of a voyage were generally started later.) Breakfast was taken at 8 a.m. after a few hours of travel had been accomplished, luncheon at 1 p.m. (eight to ten minutes in duration, long enough for the men to swallow a mouthful of pemmican), and supper at 8 p.m., only after setting up camp. This was followed by gumming of the canoes and repairs to other equipment. Although Simpson's journey was an attempt to break records, the same routine was generally followed by the regular brigades. ${ }^{415}$

Simon Fraser, on the strenuous ascent of the Parsnip River in 1806, mentions allowing his men "to make three meals a day, and as they eat all together out of the same bag of Pemmican ... [they] put ashore for that purpose...," instead of eating a little pemmican "at every Pipe."416
414 Wanderings of An Artist..., 179.

415 Ibid, 45.
${ }^{416}$ Lamb, The Letters and Journals of Simon Fraser.... 193.

The "pipe" was the traditional method of measurement of distance on the water between respites. ${ }^{417}$ Every hour for ten or fifteen minutes, the voyageurs were allowed to pause to smoke a pipeful of tobacco which became a measure of the distance from one place to another. ${ }^{418}$ Three pipes marked about twelve miles ( 19 km ) of travel in still water. ${ }^{419}$

The measurement of distance covered by horse brigades along trails from one encampment or landmark to the next was calculated in days rather than by pipes or miles; on average, loaded horse brigades travelled fifteen miles ( 24 km ) a day. Travel by foot was measured by pacing, "forty paces to the chain being found a good average on level ground. ${ }^{420}$ The length of a portage was computed by voyageurs by the distance they could carry the goods and a canoe or boat before putting them down, the "pose," usually about $1 / 3$ mile. ${ }^{421}$

Trails through the mountains were usually marked with tree

[^81]blazes, useful during winter travel. In view of Mount Hooker in Athabasca Pass, R.M. Rylatt painted a picture showing two trees cut with the intitals "PNK" and "J.H." dated "Octr 2nd 1827", the work of some Hudson's Bay Company men. ${ }^{422}$ "Lob-poles," (a.k.a. "lobsticks," a tradition of stripping a tree of its branches except for the crown, were made to mark campsites. Sometimes prominent trees became landmarks along the routes, such as the "lone tree" on the west side of Okanagan Lake, identified on Ross's 1821 map and still shown on A.C. Anderson's 1867 map. On rare occasions, usually when the weather was foul or the brigade had made exceptional progress, the Governor would allow the men to relax en route or to make an early camp. They then amused themselves "shooting at marks, playing the flute, bagpipes, etc."423 The only other respite was at end of the day when the men could finally entertain themselves with games, songs and stories. ${ }^{424} 425426$ After four or five hours sleep, the réveille repeated the cycle of work.

Travel by horseback was apparently less arduous than by

[^82]boat, at least according to Father Demers who travelled with the New Caledonia brigade from Fort Vancouver in 1842:

It is nine or ten in the morning before everything can be made ready for a start. One must seek out and gather the animals set loose and scattered in all directions the previous night. After long hours of waiting, the band is finally brought in...

At length, after having partaken on the grass of a meal of dried salmon, they [the men] load the horses, and at ten o'clock we are off.

There is no halt until camping time, and the day's work is over by three or four in the afternoon. Then everything is prepared for the night, the animals are unloaded and sent out to feed, the outfit is set in order, small groups of men ostensibly form themselves in anticipation of the forthcoming rest, the inevitable meal of dried salmon is taken and the sun has disappeared below the horizon. ${ }^{427}$

Demers' trip took five days from Fort Vancouver to Okanogan, and twelve days from Kamloops to Fort Alexandria, where he proceeded by boat to Fort George in six days, then ten days more to Fort St. James.

George Simpson's voyage of 1828 is a well-documented
example of how the "friction of distance" was overcome. Similar to his 1824 journey, Simpson travelled across the prairies in two "light canoes"; from Fort Chipewyan the route was via the Peace River to the mouth of the Fraser, combining canoe and horse travel. This voyage left York Factory on July 12 and arrived at Fort Langley on October 10, a distance of 3,261 miles ( $5,248 \mathrm{~km}$ ). Portages through the Cordillera, including the 83 mile portage from McLeod's Fort to Fort St. James and the 215-mile (346 km)

[^83]Fort Alexandria to Kamloops portage, totalled 365 miles ( 587 km ). The canoe portion involved travel averaging 50 miles ( 80 km ) a day; the daily distance along portages by horseback averaged about thirty miles ( 48 km ), about twice the distance a loaded brigade would travel. Starts varied from 2 a.m. to 4 a.m. by canoe, and $5 \mathrm{a} . \mathrm{m}$. to $6 \mathrm{a} . \mathrm{m}$. by horseback and as the season progressed. (See Appendix E for schedule and distances from Old Mountain House to Fort Langley.)

## The People, Organization and Power

Brigades, by definition, were groups of people and units of transportation that involved a system of organization. The well-defined class structure in the fur trade extended to the brigades. The leader of a brigade was a "bourgeois" or "gentleman" of the Company; generally, the leaders were the men in charge of different posts - chief factors, chief traders or sometimes clerks who were responsible to the Company for the safety and security of the property being transported. Race, may be considered a factor in the organization of the brigades which depended on the perceived abilities of various ethnic groups. The Hudson's Bay Company officers were mainly British-Scots or European men. The common labourers were mainly French-Canadians termed voyageurs (travellers) ${ }^{428}$ whether they were travelling by water or by land. The voyageur was an engagé, "an employee

[^84]engaged for a specified time, for an agreed-upon wage, and with specific duties." ${ }^{429}$ Cox notes that the voyageurs were "generally engaged for five years" during the North West Company regime in the west; the average contract during the HBC period in the west was three years. ${ }^{430}$ Specific policies were outlined in the "Standing Rules and Regulations."

Much has been made of the qualities of the French Canadian voyageurs, especially their dutiful service to their employers. Said Cox in 1817: "I know of no people capable of enduring so much hard labour as the Canadians, or so submissive to superiors. ${ }^{431}$

The Canadians [voyageurs] are chosen Men inured to hardships and fatigue, under which most of Your [Hudson's Bay Company] Present Servants would sink, a Man in the Canadian Service who cannot carry two packs of eighty Lbs. each, one and a half [League] losses [sic] his trip that is his Wages. ${ }^{432}$

Besides being strong and brave, the voyageurs are also portrayed as "fickle," and "of a gay and lively disposition."433 Cox notes that they were brought up according to the principles of "passive obedience and nonresistance."434 Washington Irving

429 Wheeler, A Toast to the Fur Trade, 23.
${ }^{430}$ For an analysis of the origins of voyageurs and reasons for French-Canadian recruitment see Allan Greer, Peasant, Lord and Merchant (Toronto: University of Toronto Press, 1985), ch. 7.

431 Cox, The Columbia River, 355.
432 W. Stewart Wallace, ed., Documents Relating to the North West Company, (Toronto: The Champlain Society, 1934), 43.
${ }^{433}$ Harmon, Sixteen Years in the Indian Country, 197-198.
434 Cox, The Columbia River, 220.
summarizes the merits of the voyageurs:


#### Abstract

They are generally of French descent, and inherit much of the gayety and lightness of heart of their ancestors, being full of anecdote and song... Thery inherit, too, a fund of civility and complaisance... they are mutually obliging and accommodating; interchanging kind offices, yielding each other assistance and comfort in every emergency... Their natural good-will is probably heightened by a community of adventure and hardship... ${ }^{435}$


Indians were also an important component of the voyageurs. Iroquois were the most common group, many from the Kanawaghe area across from Montreal. In 1812, David Thompson of the North West Company travelled down the Columbia in a light canoe "manned with eight Iroquois and an Interpreter, chiefly men from the vicinity of Montreal." George Simpson, who always had "the best of canoe-men, the Iroquois" ${ }^{436}$ largely credits the success of his 1828 journey down the Fraser River to his "Iroquois Bowsman who is nearly amphibious." ${ }^{437}$ Over time, local Indians were added to the ranks of the voyageurs or hired for their help with the transport. Tolmie hired Indians as boatmen and canoemen at Fort Vancouver in 1840-41.438 The Company also rented horses and canoes with Indian help at portages in later years on the lower Columbia and Fraser rivers, reflecting the integration of native

[^85]and non-native cultures that had taken place. Like the qualities of the Canadians, the Indians that were desired - "submissive," "quiet" - could not always be contained. The Métis, or "halfbreeds," as they were called, became a greater component of the personnel over time and played essential roles in the brigades, mainly as boutes. Kanakas or Hawaiians also became voyageurs; their great swimming abilities made them brave on the water parts of the brigades but less adapted to land travel.

Seniority was important but within the voyageurs' ranks where there were several positions. The boutes, or bowmen and sternmen, (the governail and the avant), also known as foreman and steersman, were the most skillful of the voyageurs and the highest paid employees. In North West Company times boutes were paid one thousand livres per annum. ${ }^{439}$ In 1836 bowmen received £24 per annum irrespective of seniority; the steersman received slightly less and common boatmen received $£ 19 .{ }^{440}$ The boutes were also the most experienced and powerful of the voyageurs. Of the voyageurs in general, summarizes Washington Irving,

They are dextrous boatmen, vigorous and adroit with the oar and paddle, and will row from morning until night without a murmur. The steersman often sings an old traditional French song, with some regular burden in which they all join, keeping time with their oars; if at any time they flag in spirits or relax in exertion, it is but necessary to strike up a song of the kind to put them in fresh spirits and activity.
${ }^{439}$ Cox, The Columbia River, 354.
440 "Standing Rules and Regulations," (1835). In Douglas Mackay, The Honourable Company: A History of the Hudson's Bay Company (McClelland and Stewart Limited, 1949),
...Patient of toil, not to be disheartened by impediments and disappointments, fertile in expedients, and versed in every mode of humouring and conquering the wayward current, they would ply every exertion, sometimes in the boat, sometimes on shore, sometimes in the water, however cold; always alert, always in good-humour...
... The main dependence was on bodily strength and manual dexterity. ${ }^{441}$

Commodore Wilkes in 1841 observed that the both the boutes
use long and large-blade paddles; and it is surprising how much power the two can exert over the direction of the boat. These men, from long training, become very expert, and acquire a coolness and disregard of danger that claim admiration, and astonishes those who are unused to such scenes. ${ }^{442}{ }^{443}$

However, the Standing Rules and Regulations prohibited risk-
taking: Rule \#44 resolved:
That no guide or steersmen be permitted to run any rapids or Fall where the least danger is to be apprehended, and that any contravention or evasion of this Resolution be visited with the most severe punishment the Governor and Council can legally inflict, and that gentlemen in charge of Brigades be not allowed to absent themselves from such charge until they reach their destination. ${ }^{444}$

Still, the bowman was the most important position:
the most experienced voyageur is taken as a pilot for the brigade, and he is the bowman of the leading boat, which is looked upon as a station of great trust and honour.

[^86]Each boat has also its bowman, who is considered the first officer and responsible man; the safety of the boat, in descending rapids particularly, depends upon him and the padroon who steers the boat. ${ }^{445}$

The prestige of being a bowman often resulted in rivalry between the boutes. Ermatinger recounts
... continual jarring of our leading men" on a trip to Thompson's River. The conductors ... were jealous of each others power and had not sense enough to keep it within bounds. ${ }^{446}$

Officers were not adverse to competing against one another either:
nor were the heroes of the Columbia singular in this respect but those of a higher station seemed to possess similar feelings and heartily to wish each other at the Devil. ${ }^{447}$

The qualities of the voyageurs, however generalized the stereotype may be, undoubtedly had a bearing on the ability of the Company and its officers in the field to manage their employees and ensure that the work of the brigades was satisfactorily accomplished. The voyageur remained a central

[^87]image of the brigade system well into the late 19 th century. ${ }^{448}$
Similarly, the hard work that the voyageurs braved was also endured by the officers. On the Athabasca Portage everyone had to "toil on in clothes frozen stiff from wading across to torrents, half-famished..."449 But class distinctions were noticeable at camps and during meals.

The officers had tents and bedrolls; the men, on the other hand, slept in the open on a bed of boughs with only blankets needed in summer (a buffalo robe was used to keep them warm in the winter). Officers were supplied with better food and more to drink. But, upon reaching a fort, the voyageurs would be permitted to rest and eat copiously. At Colvile, Paul Kane and the men of his brigade
did little else but eat and sleep. The rapidity with which they changed their appearance was astonishing. Some of them became so much improved in their looks, that it was with difficulty that we could recognise our voyageurs. ${ }^{450}$

Voyageurs were prone to many physical ailments although Cox remarked that the Nor'Westers enjoyed "good health, and with the exception of occasional attacks of rheumatism, are seldom afflicted with disease."451 But recent research reveals
${ }^{448}$ H.M. Robinson in The Great Fur Land... provides detailed sketches of voyageur character and life (New York: G. P. Putnam's Sons).

449 Kane, Wanderings of an Artist, 89.
450 Ibid., 90.
451 Cox, The Columbia River, 357.
ailments such as rheumatism and arthritis were common. ${ }^{452}$
Another common affliction of those inexperienced with
travelling on snowshoes, as Paul Kane found out, was mal de raquet, an ailment suffered by using snowshoes for the first time. ${ }^{453}$ Most men-in-charge had some medical training they could adminster en route or at the forts. ${ }^{454}$ Most complaints, however, were from sheer exhaustion and would often involve sending men to the nearest post to recuperate.

The quasi-military nature of the brigades was evident in different ways. The use of the brigade to engender a display of power and spectacle among the native people they encountered, especially at the forts, was standard procedure. The approach of a brigade to a fort was often turned into a military procession; Simpson's arrival at Fort St. James in 1828 was such an event: the men changed dress, the piper donned full Highland costume, the British ensign was hoisted, and

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... every arrangement was made to arrive at Fort St.
James in the most imposing manner we could, for the sake
of the Indians. A gun was fired, a bugle was sounded,
and the piper commenced the celebrated march of the
clans, "Peace: or War, if you will it otherwise"....455
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The brigade also served as a defensive unit for the

[^88]protection of the goods or furs being transported. In the early days of the trade on the lower Columbia, there was constant danger of attack by Indian tribes, especially at the portages along the river. Alexander Ross noted that the "Long Narrows" was the "noted haunt of Indian pillagers" along the Columbia River. ${ }^{456}$ During the North West Company monopoly an incident occurred near Walla Walla where the Cayuse Indians "had stopped the fall express"..."and laid hold of the boats" resulting in a struggle where "two Indians were shot and another badly wounded. "457 Peter skene Ogden's party was also attacked near Nez Percés in 1818 "and was obliged to take refuge on the island near the fort, where he made a stand and completely routed the Indians. "458 In 1824, George Simpson offered the following comment about travelling by boat brigade on the Columbia: "We... rarely venture to send a party even with letters, and with property never less than from 30 to 40 Men. ${ }^{459}$

During the Nor'wester period, Ross described how encampments required watches during the night and how the boats and tents were used to create a square formation: "This novel fortress had but one opening... wide enough to admit only a single person at at

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456 Ross, The Fur Hunters of the Far West, 21.
457 Ibid., 46.
458 Ibid.
459 Merk, Fur Trade and Empire, 304.
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time. "460 This defensive arrangement continued under the Hudson's Bay Company: John Work in 1826 described how encampments were set up in "a square ... formed with the boats round the property."461 That year the express brigade in charge of John McLeod, consisting of two boats and fourteen men, was threatened at the portage around the "Great Falls" (Celilo Falls). However, by the era of Simpson's third visit west in 1841, the number of incidents with Indians had diminished. After that time, no attacks were made along the Columbia. ${ }^{462}$ However, by the 1840s, severe Native depopulation had occurred from disease. (See Figure 4.8 of the tranquil scene at the Dalles.)

Occasional conflicts also occurred on the overland routes. John McLeod in his Spokane House report of 1822-23 stated:
the Si-mi-ha-ca-meachs (similkameens)... often committed depradations on the white people when passing in small parties. Three years ago [1820] they pillaged three of Thompson's River men, of their Horses, Provisions \&c. ${ }^{463}$

As well, McLeod continued, [Okanagan Indians] "...give us a great deal of trouble and uneasiness in attempting to steal our Horse when passing and repassing..."464 A reported attack was made on

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460 Ross, The Fur Hunters of the Far West, 88.
461 Work's Journal, 1826, 29.
462 Lt. Wilkes, Narrative of the US Ex.Ex., Vol. 4, 391.
463 John McLeod, "Spokane House Report, 1822-23."
464 John McLeod, "Kamloops, Spring 1823," A B 40 M22K.
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Figure 4.8 H.J. Warre, "Les Dalles, Columbia River," 1845
a brigade travelling south of Kamloops in $1838^{465}$ and "along the communication" between Kamloops and Alexandria, Indians had, according to Donald Manson,
repeatedly plundered, grossly insulted and frequently nearly murdered several of our people when passing in small parties along that route...I am told, they now think nothing of publickly insulting Mr. Ogden on his way out and in, tho' supported by his whole brigade. Some time last autumn an Indian of Lac Verd [Green Lake] and a ringleader among that hord of banditti camped nearly two months on this road with the avowed intention of waylaying and killing one of our Gentlemen... ${ }^{466}$

Similarly, along the route from Colvile to Kamloops, Manson notes, "Okanagan River Indians ... have also given much annoyance latterly in thieving the Company's Horses and bullying the men when passing through that route in small parties. "467 Sometime after 1846 the Similkameen Indians threatened to attack the Colvile brigade on its way to Fort Hope. ${ }^{468}$ In 1848 Alexis Belanger was shot when Indians attacked the brigade near Quesnel River. Indian troubles flared again along the Columbia when the Cayuse War in 1848 finally put an end to the transportation system along the Columbia River, coincidentally as the HBC was looking for an "all-British" route north of the 49 th parallel

[^89]after the boundary settlement with the Americans. ${ }^{469}$
For the brigade to function as a unit of transportation also required another aspect of power: discipline within the brigade itself. Outside the confines of the forts, the control of the actions and behaviour of the voyageurs was a challenge to the personal power of the men-in-charge. The chief trader or head officer on the voyage was the source of that power when required. Ideally, the officer in charge had the respect of the men assigned to him, but that respect was often out of convenience:
... when necessity obliges them, even when destitute of every kind of nourishment, they will endure all. the * fatigue and misery of hard labour \& cold weather \&C. for o several Days following without much complaining... They are obedient but by no means faithful Servants. ${ }^{470}$

On occasion, when obedience was not forthcoming, discipline was meted out. Usually only a stern reprimand or a bit of cajoling was required to keep men in line. Simon Fraser on his expedition of 1806 frequently had to reprimand La Malice for his lack of attention to duty and "threatened him severely if he was not more careful in the future."471 McDonald on Simpson's 1828 voyage recounts an instance when "..the foreman of the second canoe was called to account [by Simpson] for not keeping up with

469 For an overview of the power strategies of the fur trade vis-a-vis aboriginal peoples in the Cordillera, see Cole Harris "Towards a Geography of White Power in the Cordilleran Fur Trade," The Canadian Geographer 39, no. 2 (1995): 131-140.
${ }^{470}$ Lamb, Sixteen Years in the Indian Country, pp. 197-198.
${ }^{471}$ Lamb, The Letters and Journals of Simon Fraser...,
the other, which seems to have had the effect of spurring them on the remainder of the day. "472 On some occasions, corporal punishment was used to make the men subservient. An example of this use of power was displayed by Simpson in 1824 on his return voyage across Athabasca Pass. When a keg of spirits was opened and consumed by a few men who had fallen behind along the trail, Simpson beat the main culprit, an Iroquois, with a stick, "on the spot," and remarked in his journal, "...it will have a good effect on the whole of our Columbians who are by no means in a state of good discipline."473 George McDougall in 1827 "dealt out punishment to a man who had discarded a supply of pemmican to lighten his load. ${ }^{474}$ The most serious punishments were meted out for behaviour that threatened the safety or security of the brigade as a whole; theft of provisions en route was punished by repeatedly knocking the delinquent down until he could no longer get up. ${ }^{475}$ Usually, such punishment was administered after the brigade had arrived at the next post, in order that all ablebodied men were usefully employed.

Men were sometimes exchanged between different forts as punishment for disobedience. Remote outposts, such as those in New Caledonia, were often the recipients of many

[^90]recalcitrant voyageurs. New Caledonia became known as the "Siberia" of the fur trade.

Sometimes men would desert instead of rebel, especially in the face of danger or by the enticement of more favourable opportunities. Alexander Mackenzie and Simon Fraser made passionate pleas with their men not to desert for the benefit of the group and the success of their mission. During the HBC period, deserters, if caught, were usually severely punished, but punishment generally took place after the completion of a journey. Paul Kane describes the treatment of two Kanakas who absconded from the inland-bound brigade in 1847:

The next thing was to punish the deserters, ... Our guide, a tall, powerful Iroquois, took one of them and Mr. Lewis seized the other...: the punishment consisted in simply knocking the men down, kicking them until they got up, and knocking them down until they could not get up any more, when they finished them off with a few more kicks. ${ }^{476}$

In the mid-1840s a rash of desertions among New Caledonians took place under Donald Manson's command. According to Morice, "on his [Manson's] very first trip from the Columbia with the brigade... three of his men deserted, " ${ }^{477}$ forcing Manson to hire Indians to complete the trip with his five boats. ${ }^{478}$ The deserters were caught by A.C. Anderson and sent back to Manson who in turn called for measures to prevent this

[^91]increasingly frequent occurrence, but a year later two more men deserted near Alexandria, then four more at Fort George. Most of the New Caledonia desertions could be attributed to the difficulty of ascending the Fraser by boat; Manson recommended a horse trail be cut from Alexandria to Fort St. James but it was never built.

The brigade trail south to Kamloops had its own problems that may have promoted desertion; six left the New Caledonia brigade in 1846 apparently because their food was indifferent compared to the Columbia District fare. ${ }^{479}$ An unusually severe winter in 1848 resulted in a large loss of horses at Alexandria which may have added to this problem.

Along the lower Columbia desertion was met with "extreme leniency" under John Mcloughlin's regime even though in 1845 "the entire crew of one boat" deserted between Fort Vancouver and Fort Nez Percés, forcing the officers "to leave the Boat and cargo at the post, to the serious inconvenience of the trade. "480 Although desertion to agricultural pursuits in the willamette Valley was a nuisance, with the outbreak of gold discoveries in California in 1849, desertion became a major problem in the lower Columbia region. In an effort to curb men from quitting to California, Simpson wrote to the Governor and Committee:

To lessen the temptation for incoming recruits to desert, the usual route from Boat Encampment down the Columbia
${ }^{479}$ HBCA, D.5/19, 366-72, Ogden to Simpson, 15 March 1847.
${ }^{480}$ E.E. Rich, ed. The Letters of John McLoughlin, Third Series, 1844-46, 100 .
was abandoned in favour of the Tête Jaune Cache Route to New Caledonia. ${ }^{481}$

Anderson prevented his men from deserting by "prudent management" and "possessing the confidence of his men," at least until the expiry of their contracts. ${ }^{482}$ The Fraser River gold rush of 1858 and subsequent Cariboo and Omineca gold rushes in British Columbia resulted in new waves of desertion. The annual wage of a voyageur compared unfavourably to one week's earnings in the goldfields. ${ }^{483}$

The problems of desertion translated into the difficulty of obtaining men for the service in the Columbia Department. The best recruits for New Caledonia, according to William Connolly, were "young men from Canada, that is FrenchCanadians."484 Although convicts and Sandwich Islanders were a large part of the employment by the 1840s, Canadians continued to be popular for the transport service.

On rare occasions, men committed suicide. Henry Peers recounts that on the 1848 inbound brigade, after crossing the Fraser River at Kequeloose, "Jacob Ballenden was found dead

[^92]near the encampment with his gun discharged by his side..."485 It was apparently typical for each man to carry a musket.

Except for the early days of the brigades on the Columbia there were very few instances where the officers in charge were injured or killed en route. In 1849 John Charles was accidentally shot on the Athabasca Portage when another man was displaying his marksmanship with an old rifle. Charles was buried at the campsite (possibly Fusil). ${ }^{486}$ The death of Chief Trader Paul Fraser in 1855 was suspicious because of his men's dislike of Fraser's "club law". Apparently, after the brigade had set up camp on Manson Ridge east of Fort Hope, Fraser's men chopped down a tree which fell on the tent where he was resting. He died within hours and was buried on the summit.

The need for safety and security along the route brought the brigade group together as a cohesive unit. The native people presented an omnipresent and unpredictable force. On the lower Columbia, many instances of harassment and some attacks, especially in the early period of the Pacific Fur Company and North West Company, revealed the symbolic importance and use of arms. In later years, however, the fear of the native people,

[^93]who themselves became integrated in the Company and employed by the brigades, was diminished. ${ }^{487}$

## Passengers

While employees might rebel or desert, the brigades often accommodated passengers on brigade trips at the expense of the Company. Ranald MacDonald stated, "the few travelers who were daring to go about in those days attached themselves to the column [brigade] and received protection."488 Notable among those travellers for the descriptions and images that they left of their journeys were artists Paul Kane and H.J. Warre, priests Father Pierre De Smet and Father Modeste Demers, and naturalist David Douglas. Kane and Warre provide some of the earliest pictures of the brigade routes in the 1840s which supplement HBC journal accounts. Besides drawings and paintings along the brigade routes, Kane left a journal of travels (see Appendix $J$ for excerpts of the brigade journey in 1846). Of particular interest are Kane and Warre's sketches of Boat Encampment (now flooded behind the Mica Dam) and the Athabasca Portage. Demers, travelling with the brigade between the Columbia and New Caledonia with Peter Skene Ogden in summer

[^94]1842, provides a colourful description of the daily routine along
the brigade trails:
After long delays you at last find everything ready, and the neighing of horses, the shouts of engages, the oaths jerked out by impatience, the disputes, the orders of the leaders form a hullabaloo by which scrupulous ears are not always flattered. At last, after having eaten on the grass a repast of dried salmon, the horses are loaded, and at ten o'clock you are on your way. The march is extremely slow and filled with incidents more or less disagreeable. There is a feverish atmosphere, an oppressive sun, a choking dust, a hill to climb, a rivine to cross ...A low buzz of conversation is heard with a monotomy only broken when passing through a creek of a river. Then we draw closer together, horses hesitate, men shout, get angry, jostle each other, tumble; and often wrecks follow, exciting general hilarity and reviving conversations for the rest of the day. Halts are made only for camping; that is to say in the idiom of the country, one only hitches up once.... Then arrangements are made for camping; the horses are turned loose and sent to pasture as they can; the baggage is arranged in an orderly manner; men gather in groups to pass the night; they eat their meal of dried salmon, and the sun has vanished from the horizon. ${ }^{489}$

According to Demers the overland journey from Fort Thompson
(Kamloops) to Fort Alexandria took twelve "hitchings" or
twelve days' march. ${ }^{490}$
David Douglas, the Scottish botanist, provides not only evidence of the flora and fauna of the lower Columbia region through which the brigades passed but also detailed descriptions of his journeys with the brigades. In order to botanize and to protect his precious collections, Douglas often travelled on foot, following the boat brigades along the

[^95]490 Ibid.

Columbia River. ${ }^{491}$ On his trip with the annual express from Fort Vancouver eastward in March 1827, he travelled the whole distance from Fort Vancouver to Fort Colvile on foot in twentyfive days (the same time it took the boats) and from there by bateau with Edward Ermatinger and seven men to Boat Encampment in nine days. His description of the Athabasca portage is especially detailed:

Having the whole of my journals, a tin box of seeds, and a shirt or two tied up in a bundle, we commenced our march across the mountains in an easterly course, first entering a low swampy piece of ground about 3 miles long, knee deep of water and covered with rotten ice through which we sunk to the knees at every step... About eleven we entered the snow, which was 4 to 7 feet deep, moist and soft, and together with the fallen timber, made heavy walking on snowshoes.
... we started this morning at four, due east for six miles, in the course of which we made six traverses or fordings of the river, which was $21 / 2$ to 3 feet deep, clear and with a powerful current. Though the breadth did not exceed 25 to 50 yards, the length of time in the water was considerable, for the feet cannot with safety be lifted from the bottom, but must be slided along. ${ }^{492} 493$

Women sometimes accompanied voyageur husbands on brigade trips, although they are given very little mention in the fur trade journals. The express of 1825 consisted of only one boat but 18 people -- a crew of 8 men and 10 passengers --

[^96]children of chief traders and their wives. ${ }^{494}$ Wilkes in 1841 mentions a brigade consisting "of nine boats rowed by sixty voyageurs, eight of whom had their wives with them..."495 Women and children were an expense for the Company and were generally not mentioned in the Company journals which would be seen by the Council, but they were an accepted fact, acknowledged and tolerated by the traders. However, Governor Simpson's view was that women were "by and large a hindrance to the conduct of Company business" stating "...if these Women \& Children were not appendages to the brigades there would not be so many extra men employed in the Columbia ... ${ }^{496}$ Although Simpson urged an end "to the practice of Gentlemen bringing their Women \& Children from the East to the West side of the Mountain, it is attended with much expense and inconvenience on the Voyage...;"497 a blind eye was cast on this situation and it became accepted. ${ }^{498}$ Archibald MacDonald transported his wife and ten year old son Ranald from Fort Colvile across Athabasca Pass in 1834. Ranald was carried in a pannier on a pony. ${ }^{499}$

Sometimes passengers were commissioned to help with the

494 "Journal of John Work", WHS, Vol. V No. 3, July 1914, 166.
${ }^{495}$ Wilkes, Narrative of the U.S. Ex. Ex., Vol. 4, 379.
${ }^{496}$ Merk, George Simpson's Journal, 58.
497 Ibid, 131.
${ }^{498}$ Simpson himself travelled with his unmentioned native wife in 1824.

499 MacDonald, The Narrative of His Life 1824-1894, 26.
transportation, as Paul Kane was in September 1847 when, for lack of officers, he was placed in charge of the brigade of two boats from Fort Colvile to Boat Encampment where they rendezvoused with the westbound brigade consisting of fity-six packhorses with Russia-bound otter furs. There Kane with four men returned with the horses over the mountain portage to Jasper House.

Upon reaching Walla walla in the mid-1840s, American immigrant parties travelled at times with the $H B C$ on bateaux down the lower Columbia or built their own craft.

At the time of our arrival [at Walla walla], a considerable body of the emigrants under the direction of Mr. Applegate... had nearly completed the building of a number of Mackinaw boats, in which they proposed to continue their further voyage down the Columbia... They called them skiffs, and one of average size would carry a family of eight or ten persons. ${ }^{500}$

The Barlow Road built between The Dalles and Oregon City in 1846 bypassed the river; the boundary settlement in the same year secured continued navigation rights of the HBC to the Columbia River. In 1848 a new resolution was made
that the Board of Management in the Columbia be instructed not to permit passages to be given in any of the company's craft to any strangers, native families (unaccompanied by the heads of such families on duty) or persons unconnected with the trade... ${ }^{501}$

However, the use of the Columbia River by the HBC after that date was minimal, as the trade was reoriented north of the $49 t h$ parallel.

[^97]
## Cost and Profit

Ray and Freeman in their study of the Hudson's Bay Company fur trade as a spatial system, suggest that "as with other spatialeconomic systems, development went hand-in-hand with efforts to reduce the costs of movement within the system. " ${ }^{502}$ York boats, for example, replaced canoes in the prairies after 1800 which allowed larger shipments to be moved by fewer men and cut transportation costs by one-third. ${ }^{503}$

As early as 1811, the cost of supplying the Cordillera was on the minds of the North West Company. David Thompson recognized the advantages of the Athabasca route over that of Howse Pass, which he had previously explored, although Athabasca Pass was higher. From Fort Augustus (Fort Edmonton) to the Columbia River (at Boat Encampment) was only 29 days travel, two days more than the Howse Pass route across the Rockies but according to Thompson avoiding "much of that tedious \& expensive business of Horses which can never be brought within strict Calculation, being liable to too many accidents."504

But the costs of transportation were not specifically accounted for by either the North West Company or the Hudson's Bay Company. With the monopoly of the Hudson's Bay Company in the Cordillera after 1821, the apparatus of production became

502 Arthur J. Ray and Donald B. Freeman, Give Us Good Measure...., (University of Toronto Press, 1990), 246.

503 According to Simpson.
${ }^{504}$ Thompson's Journals, 25, AO.
more extended and complex; on the other hand, in a sense, monopoly reduced costs. To increase profitability canoes gave way to bateaux and Canadian employees were replaced by cheaper Indian help. The measure of the cost of transportation was calculated by the efficiencies of time and labour. But it is difficult to determine the actual costs of transportation which varied from region to region.

Mary Cullen, in her study of transportation to New Caledonia, suggests, "it is questionable whether the exact costs of getting goods into the district was ever known." She states:

Expenses incurred in getting the outfits to the interior were expected to be charged to the fur trade but nowhere in the Columbia Account Books are freighting expenses computed as a separate item". ${ }^{505}$

Cullen concludes that "there seems to be no way to come up with complete transportation costs through analysis of the various accounts."506

However, estimates of costs may be gauged indirectly by approaching the matter in a different way. The employment of manpower in the implementation of the brigades was a major expense and utilization of time and labour, reflected in the large complement of servants at many Cordilleran posts. Those
${ }^{505}$ Mary Cullen, "Outfitting New Caledonia 1821-1858," in Old Trails and New Direction. Papers of the 3 rd North American Fur Trade Conference. Judd and Ray (eds.), (Toronto: University of Toronto, 1980), 236.

506 Ibid.
men employed to conduct the brigades were also put to work at the forts in other capacities, but a great deal of time was spent in transport-related work. Arthur Ray's study of New Caledonia reveals that much time was spent on repairing canoes and other transport-related duties. ${ }^{507}$ The cost of the voyageur labour was fixed and some estimate can be made of the time spent in travelling and preparing for brigade travel. ${ }^{508}$ The number of voyageurs can also be figured as well as the quantity of provisions per trip, although the value of provisions, largely "country produce" is more difficult to calculate. The cost of horses is known through Indian trade although the value of horses later bred and raised by the $H B C$ is also a hidden cost that is difficult to reckon. To begin to estimate the gross costs, examples of trips must be considered. Fortunately, there are some very accurate records.

George Simpson's detailed account of his 1828 voyage from York Factory to Fort Langley may begin to form a basis for analyzing the costs of transportation. The distance and time involved is precisely known and the number of men and amount of provisions consumed by them can be closely estimated. However, Simpson's trip was not a regular brigade and did not transport goods for which a cost per unit transported can be calculated.

[^98]In the Cordillera, some idea of the value of the furs shipped out of New Caledonia has been estimated by T. C. Elliott who claims Peter Skene Ogden brought out furs to the value of $\$ 100,000$ each spring. ${ }^{509}$ Ogden notes that the profit alone in 1837 was $£ 10,000$, the previous year $£ 7,000$. Based on this, the costs of shipments from Fort St. James to Fort Langley via Kamloops after 1849 can be roughly calculated. The distance, 534 miles ( 860 km ) was accomplished on average in 28 travelling days employing an average of twenty men transporting 400 pieces. The value of goods was $£ 40,000$. The cost of the men for a period of 560 man-days was $£ 560$ (£1 per man/month), not including the cost of provisions or cost of supplying and maintaining 200 horses, several boats on the upper and lower Fraser and other equipment. The average value per 90 lb. piece of returns (furs) is estimated to be $£ 10$. The average cost of transport of one piece of returns from Fort St. James to Fort Langley is thus estimated to be approximately $£ 1$, plus the extra hidden costs.

This provides a starting point for other possible calculations. However, comparison of boat and horse transportation costs may be more difficult to assess. Whatever the costs, it is clear that the transportation costs were not exhorbitant compared to the value of items shipped, and that profits easily mounted. In the total scheme of things in the Cordillera, transportation was not a great cost. More important
was the capacity of the brigades to function on schedule without disruption and loss.

It is questionable whether higher wages and more men could have improved the transportation system. There was a limit to the size of boats and the number of men and animals that could be managed. The transportation system reflected the volume of furs being transported and the amount of trade goods needed to facilitate the annual trade. As long as the Hudson's Bay Company had the field to itself, the question of cost was secondary. However, with the end of its monopoly in the Cordillera and the beginning of "opposition in every direction," after 1846 south of the 49 th parallel and after 1858 north of the boundary line, the Company was more preoccupied with the cost of transportation. With the completion of the Cariboo Road to Quesnel in 1864, the HBC used private packers from Yale, for which the transportation costs were not hidden in the expense of their own employees. By 1866 the transport by the "present expensive route, ...costs the Company one shilling the pound weight for transport from Yale to Stuart's Lake."510 During the gold rush, the cost of transportation by mule from Priest Rapids to Fort Alexandria along the brigade trail was estimated by Joel. Palmer to be 20 to 22 cents (U.S) per lb. ${ }^{511}$

The cost of provisioning can be fairly precisely calculated

[^99]at different times. Units of food per man per day can be accounted for (eg. the Leather party of 1869, Appendix K) although the actual value of provisions, consisting mainly of "country produce," is more difficult to estimate. Detailed packing accounts of goods forwarded by the brigades can provide the values of shipments so that a crude measure can be devised for the average per unit cost of transport based on the number of days of transport multiplied by the costs of labour. The costs of the transportation units, --boats and horses--, including time in obtaining materials and periodic labour of construction in the case of boats and the cost of obtaining and maintaining horses (with agrés and feed), are more difficult to analyze.

The value of fur returns can provide the opposite side of the ledger. The value of goods shipped from Fort Vancouver to New Caledonia in 1846 per unit of transportation can be compared with later years from Fort Langley to New Caledonia. Assuming labour and provisioning costs are equal, a comparison can be made of the time involved in shipping, per unit value. Approximate costs can be estimated for the brigades from Fort Langley to Hope by boat and then from Hope to Fort St. James in October 1846.

A more extensive analysis of costs may be possible in a separate study, requiring a thorough perusal of $H B C$ account books and the value of supplies and furs at different times. Suffice to say, cost of transportation was an important variable which can be estimated where data are available.

## Summary

The measures of transportation, as theorized by Vance and others, are readily applied to the brigade system. Unit of service (referring to different modes of transport) varied depending on the ease of land versus water transport, terrain and season. Frequency of service was limited to one inbound and one outbound movement per year, further limited by the speed of movement over land on foot and by horseback and on water by canoe and boat. The concept of stage (or stops) for rest and repair added to the duration of the voyages. Financial and energy costs played a role, although less significantly than other factors. These costs, based on preindustrial transportation, were already low per unit shipped.

Other variables, such as human resources noted by Hurst and more broadly described by Ellul, also have been identified. The human factor, reflected in the organization and regimen of the brigade, was perhaps the most inconstant element. The challenge of risk was related to the skill and bravery of individuals. The vagaries of human action (resulting in many accidents and deaths) were controlled as much as possible by the managers of the companies but the nature of the system at times overpowered their capability to completely harness all components in an controlled manner.

The variables, as outlined, must be considered in an integrated manner, that is, as a system. The brigade system through the Cordillera was inherently fragile, vulnerable to the
lack of expertise to build canoes or boats, to the health of horses, to the lack of experienced voyageurs, to seasonality and the forces of nature -- snow, ice, water, lack of forage -- to hostile native people along the route, to obstructions on the trail and many other factors.

As with any form of transportation, there is an inherent element of risk that ultimately inhibits the functioning of a system such as the fur brigades. There is always a search to optimize a system to reduce risk, but risk is never entirely eliminated: accidents and losses are inevitable. As with any transportation system, the brigade system reveals the principle of "least effort" in the efficient movement of goods, people and information.

## CHAPTER V

## CONCLUSION

"But we are talking of things that are fast fading away. The march of mechanical invention is driving everything poetical before it." ${ }^{512}$

Several conclusions emerge from a study of the fur trade transportation system in the Cordillera. First, the brigade routes of the fur trade used pre-existing aboriginal transportation networks. Second, adaptations or hybrids of methods of transportation used east of the Rockies extended the fur trade hinterland into the Cordillera. Third, new transportation and communication systems created new conditions which superseded old methods of resource use. Finally, transportation routes were directed by political events as well as by the costs of particular strategies.

The facsimile maps (figures throughout the thesis) underscore the significance of the archival record and reflect the continuity of knowledge and use of communication routes from pre-European aboriginal times to the industrial age. The brigade routes through the Cordillera followed aboriginal routes that probably had been in use for hundreds, even thousands of years, although our knowledge of the aboriginal use of these routes in the early 19 th century is incomplete. No native maps of native trails exist, but some of the maps that have been preserved incorporate aboriginal knowledge of the routes through the

[^100]Cordillera. Natives and fur traders both used these trails, and conflicts arose at times.

Traders maintained and even cleared some trails for their horse brigades. In a few areas, new trails were made where none previously existed. While most routes followed aboriginal trails, the routes were visualized and developed by European traders as part of a continental enterprise, and the relative importance of different routes changed accordingly. For example, although Mackenzie found a direct communication between the interior and the coast used by various aboriginal groups, ${ }^{513}$ the connection between the Fraser and Columbia river watersheds became the main communication of the fur trade for more than three decades.

The physical terrain of the Cordillera through which the brigade routes passed was the most singular transportation problem. The brigades used a variety of routes depending on the season, relations or opportunities with different First Nations, and new information obtained from exploration. Several passes through the Rockies were tested; of these, three passes -- the Peace, the Yellowhead and the Athabasca -- became links in the transcontinental communication for ten, twenty, and thirty years respectively. However, the water routes from the Pacific littoral up the lower Columbia River to Okanogan after 1826 and up the lower Fraser River to Hope after 1847 became the main approaches into the Cordillera.

513 Known as "Alexander Mackenzie Heritage Trail" but properly referred to as the "Nuxalk-Carrier Grease Trail."

Distance, time and the length of the travelling season were the critical factors governing the use of these various routes. Terrain still presented obstacles along the Columbia where rapids needed to be circumvented. The Cascade Mountains east of Hope presented as formidable a barrier as the Rockies.

Improvements to the brigade routes did not reflect changes in transportation technology so much as the gradual exploration of the region and refinement of the routes as more geographical knowledge became available. Exploration and trade were combined in the early period; Black's map, in particular, reveals the gradual changes in routes through the Thompson's River District before 1835. When A.C. Anderson travelled through the region in 1842, the routes were further modified. Anderson's later explorations, concerned only with finding an all-British route to replace the Columbian communication, reveal the general lack of exploration until new circumstances forced change.

The modes of transportation used by the fur brigades in the Cordillera were extensions of earlier practices but adapted to the unique environment of the Pacific Slope. Canoes and boats were diffused and adapted to a new environment and continued to be modified over time to suit local conditions and needs. Bark canoes were used during the early phase of Cordilleran exploration and trade, but after Governor Simpson's tours in the 1820s, canoes were gradually replaced by bateaux, as they were on the Plains. The bateaux used on the Columbia were smaller than their York boat counterparts, and the Fraser River bateaux were
further modified to suit local conditions. Cordilleran waterways required larger craft than canoes but smaller boats than could be used on the Plains; the relative lack of birch-bark for boatbuilding, especially in the Columbia District, was also a factor. Water transport was cheaper than land transport, but much less flexible. Waterways did not go everywhere. Road transport was generally as fast or faster than water transport up-river; downstream, water transport was twice as fast as by trail. ${ }^{514}$ Road transport avoided break-of-bulk points where loads would have to be transferred from horses to boats or canoes and where watercraft would have to be stored and protected. Although traverses and portages were common, the possibilities of delay and damage, injury or death were far less over land than on water. The seasonal rhythms of freeze-up and break-up affected rivers more than trails. Small brigades could travel overland in the winter using snowshoes or sledges and dogs.

Without horses, the communication system through the Cordillera could not have been integrated into an effective transmontane system. Horses, introduced before Europeans arrived in the Cordillera, were used as the fur trade expanded. Yet horses were not plentiful, and the brigades served the secondary purpose of bringing new stock to the interior forts. "Unused capacity" on the brigades was less a concern than the problem of obtaining men and horses for the brigades. Horses or boats were

514 Szostak, The Role of Transportation in the Industrial Revolution..., 50-52.
either added or left behind as needed. The small, standardized packs of goods allowed for this type of flexibility. ${ }^{515}$

All modes of transportation were vulnerable to different natural hazards. The fluctuation of rivers was a constant concern. Boat accidents on the rivers (at rapids and falls) resulted in many fatalities. Trails were constantly interrupted by deadfalls, and rain caused muddy, sometimes almost impassable conditions; fallen rocks and landslides occasionally blocked trails. Trails in wet environments quickly overgrew and had to be cleared periodically; trails through the Interior grasslands of the Cordilleran region remained open longer, partly because they were used by ungulates such as deer, elk and caribou. Losses of horses were a common occurrence along the trails and at river crossings.

The risks and dangers associated with passage through native territories were always a consideration. Aboriginal people pilfered or extorted goods, in some instances clashing with the fur traders. Boats in open water initially provided a measure of security from Indian attack, especially on the lower Columbia, but were vulnerable upon arrival and departure from shore. Horse brigades were susceptible to sporadic raids. Transportation in Washington Territory between Fort Vancouver and Fort Colvile then ceased for a time in the late 1840s and mid-1850s; however, a new route between the coast and the interior through British Territory circumvented the war zone.

Both water and land transport, therefore, were vital to the Cordilleran fur trade. The trade could have been conducted with few horses only if it had operated in separate segments: York Factory to the Peace, and Fort Vancouver to the Columbia basin. However, the decision to combine the New Caledonia and the Columbia districts made the use of horses essential. Horses did not take over entirely for the following reasons: an elaborate network of camps would have been needed to feed and water many horses; some brigade routes, such as the trail across the Columbia Plain, traversed hostile environments with little feed and water for horses; the upper Columbia valley was impassable for horses; and bulk transport on uninterrupted waterways was cheaper than road transport. When, after 1846, the Columbia was largely abandoned as a major artery, boats became much less important than horses.

At the local level, the brigade routes conformed to terrain with switchbacks only used on the steepest slopes. Conformity to terrain declines with technological advance, especially from preindustrial to industrial modes of transportation, as revealed by the construction of the Cariboo Wagon Road to provide a route for wheeled transportation. The Hudson's Bay Company alone could not afford the expense or manpower to undertake such a transport endeavour. As long as the volume of shipments was fairly constant and losses were kept at a minimum, the "tried and true" form of transportation was maintained. The general decline of the fur trade itself no doubt had a large part in the lack of
transport innovation in the Cordillera until external pressures and other forms of transportation came along.

The transportation network was rationalized over time in response to changing conditions. The establishment in 1846 of the boundary between American and British possessions from the Rockies to the Pacific was a major event that altered the network, but, although a new "all-British" route was subsequently developed, the former route along the lower Columbia was used a short time after and Fort Vancouver remained in operation by the HBC long after 1846.

More than systems of transporting goods, the brigades extended the "civilized world" into the wilderness. Furs and trade goods were the mainstay of the system but other products moved along the brigade routes. They were means by which orders were delivered, news of the outside world was received, and nonnative culture was diffused. Information was relayed in annual or twice-annual pulses, but communication was more frequent between neighboring posts. The use of brigade routes for the communication of information -- some unrelated to the fur trade itself -- was, however, the seed of its demise. News of gold discoveries in the interior of British Columbia travelled with the brigades to the "outside" world and the fur trade dramatically declined.

The gold rushes introduced roads and wheeled vehicles to the Cordillera, effectively making obsolete the brigade trails which carried smaller loads on steeper grades than freight wagons or,
eventually, railway cars. In its latter years, the fur trade took advantage of these new transportation systems; conversely, the former brigade routes were used by settlers and miners travelling by foot and mule, and by cattle drovers.

Paddlewheelers on the lower Columbia and Fraser rivers superseded the bateaux and Indian canoe for the transport of Hudson's Bay Company property. The railway further reduced the use of these routes.

The old Yellowhead route was also used as a gateway to the colony, in particular to the Cariboo, by prospective miners and settlers, including the famous "Overlanders" of 1862. Travellers Lord Milton and W. B. Cheadle crossed the Yellowhead Pass in 1863 and the following year John Rae, the Arctic explorer, led a Hudson's Bay Company expedition through the Yellowhead Pass to survey the route for a transcontinental telegraph. A.C. Anderson favoured the Yellowhead for the prospective transcontinental railroad and the pass was eventually surveyed for the Canadian Pacific Railway by Sandford Fleming in 1872. Athabasca Pass was also explored by the CPR survey in the same year, using mules as pack animals. The Yellowhead Pass became the official proposed route of the $C P R$ until it was rejected for the southerly route through Eagle Pass, rediscovered earlier by Moberly. ${ }^{516}$
J.B. Launders' small-scale 1871 map of British Columbia (also known as the "Trutch map" after Chief Commissioner of Lands and Works Joseph Trutch who authorized its publication) became
the official map of the new province, replete with the former Hudson's Bay Company brigade trails and the new wagon roads, (Figure 5.1). This finely executed map represents the culmination of work by the Royal Engineers. The cartographer, exRoyal Engineer Launders, was still working for the Lands and Works Deptartment, now part of the new British Columbia provincial government.

Although the trails were no longer used by the fur brigades in the southern part of the Province, the brigade trails continued to be identified on many large-scale pre-emption surveys from the 1860 s onward. The Land Ordinance Act of 1860 led to the establishment of the pre-emption system and required that a survey be commissioned; many areas were surveyed by exRoyal Engineers. The brigade trails are shown in detail where they pass or cross a pre-emption, although the routes are sometimes known by newer names such as "Old Kamloops Trail," "Granite Creek Trail," or "Colville Trail." George Dawson, of the Geological and Natural History Survey of Canada, with Amos Bowman, extensively explored the southern interior of B.C. between 1875 and 1878 and in the 1880s. The "Old Brigade Trail" is shown prominently on Dawson's 1886 map (Figure 5.2). H. Neville-Smith's 1911 map of Eastern Lillooet District (Figure 5.3) shows the "Old Brigade Trail to Savona and Kamloops" passing through lots near Green Lake and intersecting the Cariboo Wagon Road. As brigade trails were replaced by roads, references diminished and the routes were eventually forgotten on the maps.


Figure 5.1 J.B. Launders' map of British Columbia (part), 1866.


Figure 5.2 G.M. Dawson's map of Southern Interior of B.C. (part), 1886.


Figure 5.3 H. Nevile-Smith's map of Lots near Green Lake, 1911.

The legacy of the brigade system was evident in other ways decades after the demise of the HBC brigades. Bateaux were still used in parts of the Cordillera many years after the fur trade had begun to fade. A "three ton boat," most likely a bateau, was used by the CPR survey to take supplies from Kamloops to Clearwater on the North Thompson River. ${ }^{517}$ Similarly, Lieutenant Symons' "exploring expedition" of the Columbia River in 1881, to examine the feasibility of extending steamboat navigation past Priest Rapids, was conducted in a " 40 -foot bateau." The "Watchwitch," as the vessel was named, was propelled by four Indian rowers with steersman "Old Pierre," a half-blind French-Canadian who had worked on the Columbia for 40 years. ${ }^{518}$ (See Appendix J for Symon's distances along the Columbia River.)

Until the gold rush period from the late 1850 s onward, preindustrial transport by canoe, boat, horse, and foot had been in use since the inception of the fur trade in the cordillera. With the goldrush, steamboats plied the lower Columbia and Fraser rivers which were formerly navigated by canoes and bateaux. The arrival of steam transportation -- the completion of the Northern Pacific Railroad across the northern tier of the United States and the Canadian Pacific Railway across Canada in 1883 and 1885

[^101]respectively -- effectively ended the dominance of pre-industrial modes of transportation overland and heralded the industrial phase.

With the opening of the more southerly and lower Kicking Horse Pass, the CPR also made obsolete the communication route from eastern Canada via the northerly Peace River route and the HBC express route through the high Athabasca Pass. ${ }^{519}$ The completion of the first transcontinental railway across Canada in 1885 finally created a new Cordilleran communication that permanently ended the use of the Athabasca Pass as a transportation corridor. Although the brigade trails continued to be used by ranchers, miners and others long after the HBC had abandoned them, their use as the main transportation and communication corridors, binding the vast region once known as the Columbia District and New Caledonia with the rest of the continent, had come to an end. The use of the brigade routes by the fur trade after 1885 carried on in northern British Columbia, although the mainline routes were discontinuous even there. As early as 1866 explorations were renewed to find an outlet from New Caledonia to the Pacific coast via the Skeena River. By 1880 a regular route from New Caledonia to the coast came into operation via the chain of lakes and the Skeena River west of Fort St. James. Schooners were built on Stuart and Babine lakes; at the western end of Babine a portage trail continued to

[^102]Hazelton, the head of steamboat navigation on the Skeena. This route, similar to Mackenzie's trail, was one of the ancient "grease trails" of the trade between the coastal and interior Indian tribes. ${ }^{520}$

The brigade routes of the Cordillera can still be followed today. Although the waterways and portages of the Columbia and Peace rivers have been dammed and flooded, the sections of the Fraser and Stuart rivers used by the brigades remains unchanged. Even though railway and highway construction, logging and other developments have destroyed or altered many portions of the brigade routes, some segments of the trails survive. The continued use of some of the brigade trails over time is no better revealed than by the Hope-Princeton Map No. 4 (Figure 5.4), (produced in 1939 after the announcement of a southern trans-provincial highway to be constructed over the Cascade Mountains), which shows "the principal trails of historical importance," including Blackeye's Trail and the two brigade trails in that area.

A few portions of the brigade trails have been preserved by government heritage designation in British Columbia, including part of the Athabasca Portage, partly within present Jasper National Park; the route across the Cascade Mountains, partly within the Cascade Recreation Area; and a section of trail within Nehalliston Provincial Forest west of Little Fort on the North

520 Like the CPR in the south, the construction of the Grand Trunk Pacific Railway across the northern interior, completed in 1914, made obsolete the role of the HBC brigades.


Thompson River. In Washington State, the Okanogan County Historical Society has identified although not officially preserved the trail through the Okanogan Valley.

The legacy of the fur brigades is also found in toponymy. The persistence of French place names in the northern Cordillera such as Téte Jaune Cache, Grande Prairie (several), Mauvais Rocher ("bad rock," a generic name for cliffs), The Dalles, and Portage Mountain attest to the deep imprint of the fur trade communication. The selected historical maps in this thesis help to understand the European discovery of aboriginal routes, the changing pattern of fur trade routes through gradual exploration and the immediate impact on the brigade system of such factors as the 1846 boundary, the 1858 gold rush, and finally the transcontinental railways. A fairly comprehensive (although not exhaustive) list of manuscript and published maps that chronicle the development of the brigade routes follows in Appendix A. Thus, the brigade system in the Cordillera formed a transcontinental link, and a technological transition, between the emerging industrial space of eastern North America and the receding preindustrial space of the far west. The role of transportation routes was instrumental in the creation of new commercial space as trails connected forts and generated linkages that persisted even as the fur trade faded.

That the fur trade empire of the Hudson's Bay Company was maintained for so long was, as Innis stated, "an indication of
the efficiency of communication."521 "Large-scale political organizations such as empires must be considered from the standpoint of ... space and time."522 The "monopoly of space" and "destruction of time," as Innis has characterized the forces of empire-building, were the results of the efficiency of a continental transportation network of which the Cordilleran communication was a part. However, only after the total monopolization of the fur trade in British North America by the Hudson's Bay Company after 1821 was complete continental development of the fur trade realized.

Located at the margin of the fur trade, the Cordillera was exploited only with a huge effort. Time, or more accurately timing, was the critical factor working against the Athabascan connection to New Caledonia with its short ice-free travelling season, and favouring instead the Columbian communication from the Pacific. The expansion of the Hudson's Bay Company to the west coast of North America was nevertheless a strain on the resources of the Company, and "Oeconomy" became the by-word of Governor Simpson for thirty-five years after he reorganized the Columbian trade. ${ }^{523}$

[^103]Simpson's management role in the development of the Cordilleran communication system was pivotal; without his control the fragile system could very well have disintegrated. Stress points along the fur trade routes had to be overcome -- often by autocratic means and great human exertion -- to provide an efficient and relatively safe system. In essence, barriers to the conduct of the trade were overcome by psychical endeavours and sheer force.

In conclusion, the evolution of brigade routes within the fur trade of the northern Cordillera of western North America represents a discrete and complex historical geography that falls on the cusp of contact between indigenous and colonizing peoples, and between pre-industrial and industrial economies. The evolution of the brigade system through the Cordillera was a response to the desire to harvest furs and to develop an efficient, least-cost method of transportation to extract the resource. Time, speed and efficiency were of paramount concern and were reflected in the complex organization of the brigades. The routes used by the fur trade were European constructions overlain on a pre-existing system of aboriginal transportation and communication. The integration of native and Euro-Canadian networks by the fur trade fused the use of certain trails and waterways into part of a super-continental transportation system, initially oriented east-west across the continent but later with an increasingly Pacific bias. The brigade system functioned for several decades as a "Northwest Passage," until the railways
replaced the preindustrial passage through the Cordillera with new industrial routes across the United States and Canada.

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## APPENDIX A

Select list of one hundred manuscript and printed maps and plans (in chronological order by date of creation/publication; annotated) showing fur trade routes, in particular HBC brigade trails in the northern Cordillera:

1. A Map of America between Latitudes $40^{\circ}$ and $70^{\circ}$ North and Longitudes $45^{\circ}$ and $180^{\circ}$ West Exhibiting Mackenzie's Track from Fort Chipewyan to the Pacific Ocean in 1793. London, 1801. A. Arrowsmith.
2. [Part of] A Map of Lewis and Clark's Track Acrofs the Weftern Portion of North America from the Mifsifsippi to the Pacific Ocean By order of the Executive of The United States in 1804, 5, \&6. Copied by Samuel Lewis from the Original Drawing of Wm. Clark.
3. [Detail of] "Map of the North-West Territory of the Province of Canada from actual survey during the years 1792 to 1812." David Thompson. 1813-14. NA NMC 20687 (original in AO). Shows "Priests Rapid," [Columbia River] "Kamsheen" [Lytton, B.C.], numerous carrying places on Fraser River (per Simon Fraser).
4. Portion of a Map Exhibiting all the New Discoveries in the Interior Parts of North America...1819. A. Arrowsmith. HBCA Map Collection, G.4/29 (N11667) (one of a series, see \#6).
5. "Map of Columbia" Sept. 1821; Additions, 1849. British Library, Add MS 31358B. (Remarks...) Shows "Portage" between Okanagan Lake and "Tsaen" (Monte Creek). Also shows "Dalles des Morts 15? persons drowned."; "Long Portage" between "Lewis's River" and Spokane House and portage between Spokane and Pend d'Oreille; also "Alexander Ross on his route across land to reach the Pacific in 1815" across North Cascades.
6. Portion of a Map Exhibiting all the New Discoveries in the Interior Parts of North America... A. Arrowsmith, 1824. HBCA Map Collection, G.4/31 (N11668)
7. "A Sketch Map of Thompson's River District, 1827 by Archd McDonald." [1 inch:ca. 20 miles] HBCA B97/a/2 fo.40. Shows "Mr. Archibald McDonalds trail in Oct. 1826 between Kamloops and Similkameen. Also, "Colt Encampment" on Monte Creek.
8. [Book of Sketch Maps of Journey from the junction of the Columbia and Okanagan Rivers to Quesnel and North, AprilMay, 1833] David, Douglas. [with later notes by historian A.G. Harvey] BCARS E/A/D75.4.
9. [Thompson's River District] Black, Samuel. c.1833-1835. BCARS CM B 13660. Shows rivers, trails, campsites and astronomical observations on reverse. Transcribed by R.C. Harris, 1987.
10. Map of the Oregon Territory by the U.S. Ex. Ex. 1841. [Includes inset: Columbia River Reduced from a Survey by the U.S. Ex. Ex. Charles Wilkes Esqr. Commander.] Shows location of physical features along brigade routes, including rapids, etc.
11. "Map of Northern Rocky Mountains and Plateau." Pierre Jean de Smet. C.1842-48. De Smetiana Collection, Jesuit Missouri Province Archives, St. Louis. IX-C8-13.
12. "Original Sketch of Explorations between 1846 and 1849." Alexander Caulfield Anderson. BCARS CM B 1094. Shows "Bridges" across "Bridge [Anderson] River", Douglas Portage.
13. Map of A Part of the Territory of Washington to Accompany Report of the Surveyor General 1855. Shows route via Naches Pass through Cascade Mountains. OHS (2).
14. [Trails between Sumass amd Chiloweyuk Lake] U.S. Northwest Boundary Survey, USNA RG 76 Series 69 Map 51 c.1858. Shows "Brigade Trail" along Chiloweyuk [Chilliwack] River.
15. "Charcoal Sketch by C.O. Phillips Nov. 10, 1858", from "To the Fraser River!" California Historical Society Quarterly. Vol. 11, No.2, 1932. Shows "Hudsons Bay Brigade Trail" between Fort Hope and Ft. Thomson [sic] and north to Fraser River:
16. A Correct Map of the Northern Coal and Gold Regions Comprehending Frazer River....A. Waddington. San Francisco, May 1858. 4th Edition Revised. Shows "Natchess Pass" trail, Ft. Hope to Ft. Thompson brigade trail, "Sammilkimin R." trail to "Ft. Colville."
17. Map showing the different Routes of Communication with the Gold Region of Fraser River Compiled from Original Notes by Alexander Caulfield Anderson, published by J. J. Lecount. San Francisco [May 1858] Shows "Blackeyes Portage," [Okanagan HBC brigade trail].
18. The Provinces of British Columbia and Vancouver Island with Portions of the United States \& Hudson's Bay Territories, Compiled from Original Documents by John Arrowsmith 1859. [Reprinted in] British Parliamentary Papers relating to British Columbia. Also BCARS CM B 127.
19. "Sketch of Route from Fort Hope to Fort Colville traced from Lieut. Palmer's Map." [Includes] Sketch of Comparative Elevations on Route. Scale 1 in. $=5 \mathrm{mi}$. Surveyor General of BC, 22 T 1 ROADS \& TRAILS.
20. "Map showing the relative positions of the different tribes of Indians and Missions in the Territory of the United States between the Cascade and Rocky Mountains, and also in the British Possessions between the 49 th and 54 th parallels of North L. Prepared by Captain A. Pleasonton, from the Maps of Reverend Father R.J. De Smet S. of J."; Fort Vancouver, W.T. 1859. National Archives, RG 77 U.S. 201-2.
21. Department of Oregon, Map of the State of Oregon and Washington Territory compiled by the Bureau of Topogl. Engrs., chiefly for military purposes, by order of Hon. John B. Floyd. Sec. of War 1859. 1:1,500,000. Shows Naches Pass route, trails across Columbia Plain, Okanagan and Colville trails.
22. "Sketch showing the different Routes of Communication with the Gold Region on Fraser River; Chiefly compiled from the routes of A.C. Anderson, Esqr. \& Mr. Mackay." Arrowsmith, London, 1859. Shows various [brigade] routes.
23. Sketch of Part of British Columbia By Lieutnt $R$ C Mayne, RN of HMS Plumper 1859. Lithographed at the Topographical Depot of the War Office, Col. H. James, RE Director. Approx. $1 / 4$ inch = one nautic mile. Shows [brigade] trail south of Kamloops.
24. "A Rough Tracing of part of British Columbia from the Columbia River to Fraser's River \& C. from a map [by Samuel Black] in the pofsefsion of the Hudson's Bay Co." R. Homfray. c.1860. Surveyor General of BC, P24 T3 MISCELLANEOUS. Shows trail from Fort Hope to Fort Colville; "unproved road to New Caledonia."
25. "Part of the Town of Hope and the Coquahalla River Showing the Proposed Bridge Sites" Launders, J.B., R.E, C. 1860. Scale 6 inches $=1$ mile. Surveyor General of BC, P3 T2B TOWNSITES. Shows ford for "Brigade Trail" over Coquihalla River.
"Sketch of the Country between Point Roberts and Fort Colville." US NW Boundary Survey, 1860. USNA, Record Group No. 76, Series 69, Map 11. 1:600,000. Shows A.C. Anderson's 1846 route across Cascades, "Hudson's Bay Company trail 1848" across Cascades, Similkameen Trail to Ft. Colville.
26. "Sketch Map of Part of British Columbia shewing Trails and Routes of Communication." Surveyor General of BC, 17 Tl ROADS \& TRAILS. 1860 (see also 21 T 3 MISC.). Shows "old Hudson's Bay Brigade Trail" east of Fort Hope. Shows "Old Hudson's Bay Company Trail" (Douglas Portage) between Fort Yale and Spuzzum.
27. Ft. Hope to Tulameen River. Surveyor General of BC, 12 T 3 MISCELLANEOUS Shows "Brigade Trail" between Similkameen River" [Tulameen River] and "Piers [sic] River." May 1860. See Colonial Correspondence $F$ 1298. [An exploration made by P. O'Reilly at Douglas' request between Fort Hope and Tulameen River.]
28. "Rough Sketch of the Route between Lytton and Boston Bar showing the relative position of Waggon Road \& Mule Trail." J. Turnbull R.E. 1860. Suŕveyor General of BC, 14 Tl R\&T, SK A-E. (B) Shows "Brigade Trail" at Jackass Mountain.
29. British Columbia. Thompson River District. From a map in the possession of H.E. Gov. Douglas, C.B. made in 1835 by S. Black Esq. H.B. Company's Service... Lithographed under the Direction of Captn. Parsons, R.E., New Westminster, July 1861. Scale 1 inch=15 miles. BCARS.
30. Sketch of Ground from Lillooet to Kamloops and the Mission Ferry at Okanagan Lake. Drawn by J. Launders RE. By Capt. Parsons RE September, 1861. 5 Statute Miles to One Inch. Additional information by James Turnbull, RE, 1862. Surveyor General of BC, 1 T3 R\&T. Shows [brigade] trail and features along west side of Okanagan Lake.
31. The Gold Regions of the Fraser River and Cariboo Country, British Columbia. From Reconnaissance by the Honourable Judge Begbie, 1861. Shows "Brigade Trail Alexandria to Kamloops." NMC H2/610.
32. [Transcript of] British Columbia. Sketch of Trail from Lytton, and Lillooet to Alexandria and the Cariboo District by Matt. B. Begbie, Judge of the Supreme Court November 1861. Scale: 10 miles to 1 inch. NMC H12/600.
33. "Sketch of Exploration from Hope Through the defiles of the Coquahalla." Explored and Sketched by J. Turnbull [RE], 1862. One Mile to an Inch. Surveyor General of BC,1 T1 OLD MAPS, 1A T1 OLD MAPS. Shows "H.B. Trail to Kamloops," branching to east up Peers Ck.
34. Sketch to accompany report of 16 September 1862 by capt. R.M. Parsons, RE. Shows brigade route along Bonaparte River, Green Lake and Lac La Hache.
35. Map of the Gold Regions of British Columbia by Gustavus Epner, 1862. Lith. Britton \& Co. S. Francisco. Shows brigade trails and mileages, including Similkameen trail on north side of river to "Camp Femmes"[sic] and trail from Nicola Lake to "Chapmans Bar"[Kequeloose].
36. [Map of British Columbia] (from an Atlas). A. Fullarton \& Co. Edinburgh, London and Dublin, 1862.
37. Sketch of a Map Showing the Frazer River Route to the Cariboo Gold Mines January 1862. Shows "Brigade Trail" between Alexander [sic] and Ft. Kamloops. Nagel, Fishbourne and Kuchels's Lithog., San Francisco. BAN 1560M, also F1088/1862/.S45.
38. Sketch from Lillooet to Quesnelle River by Mr. G.B. Wright Launders, J. B., R.E. 1862. Shows "Brigade Trail" between Loon Lake and Green Lake, and distances along Brigade Trail from Bonaparte River to Davidson's Ranch (north end of Williams Lake).
39. Sketch of part of British Columbia by Lieut. H.S. Palmer RE to accompany report of 21 st February 1862.
40. Part of British Columbia and Vancouver Island, 1862. In Mayne, Four Years in British Columbia and Vancouver Island (1862). Shows [brigade] trail south and west of Kamloops.
41. British Columbia. Sheet [2 \& ] 5 (joined). Prepared under the Direction of Captain Parsons R.E. New Westminster, Sept. 1863. By Order of Col. R.C. Moody, R.E. Scale: 1 inch=20 statute mile.
42. [Unfinished 10-Mile map of southern British Columbia in 7 sheets], shows route from Fort Colville to Princeton, \&c. J.B. Launders. C. 1865. Surveyor General 1 Locker T ORIGINAL MAPS. Shows "Old Trail" between Hope and "Campement des Femmes"; rapids on upper Columbia and Boat Encampment.
43. [Sketch map of routes along 49th parallel] Shows "Road to Colvile" and "Road to Shepherd." E. Dewdney. BCARS, Colonial Correspondence F461(1) With letter \#2 42/65, 27 May 1865.
44. "Rough Sketch of Route of M. Orr's prospecting party from Kamloops to the Great Bend of the Columbia River by North Branch" Surveyed and drawn by P.J. Leech [ex RE] 12th September 1865. Four Statute miles to one inch. Surveyor General of BC, $7 T 3$ R\&T. Shows trail along east side of North Thompson River; also "Trail to Lake la Hache."
45. Map of Public Surveys in the Territory of Washington. To accompany report of Surveyor General 1865 . Oregon Historical Society, G 42801865 G . Originals in Library of Congress/Caleb Cushing Papers, Container No. 142. Shows: "Natchess Pass" trail; White Bluffs to Spokane River trail.
46. "Plan of Columbia River District shewing the Routes Explored by Messrs. Moberly, Green \& Turnbull" c.1865 Surveyor General of BC, 8 T 2 MISCELLANEOUS. Trail from Ft. Shepherd to Osoyoos lake, features along Columbia River. 10 statute miles = 1 inch. Shows
47. [A.C. Anderson's explorations - a collage of Yellowhead Pass to 49 th parallel] C. 1866. BCARS CM B 104.
48. "Sketch of the Upper Columbia \&c Colvile to Jasper's House. 1842 and other Years. [signed] Alex. C. Anderson." [with footnote] "Recopied from the fragments of my old maps 1st Feby 1866. A.C.A." Surveyor General Plan 25 T 3 ROADS \& TRAILS.
49. "Sketch of the Country Between Fraser and the Columbia Rivers from a Hudsons Bay Map." [probably Black's map] US NW Boundary Survey records. 1:1,000,000. USNA RG 76, Series 69, Map 14. Shows [brigade] trails through Okanagan Valley, across Cascades, etc.
50. U.S. North West Boundary Survey, Map of Western Section. 1866. USNA RG 76 Series 66. John G Parke U.S. Engineer Chief Astronomer and Surveyor. Archibald Campbell, U.S. Commissioner. 1:720,000. Shows "Hudson Bay Company Trail to Ft. Colville..."
51. "Portion of the Colony of British Columbia...from various sources, including original Notes from personal explorations Between the years 1832 and 1851 by Alex. C. Anderson $23 r d$ May 1867." Scale $=10$ statute miles to one inch. BCARS CM F7. 1:633,600.
52. [Map of] British Columbia. Launders, J.B. 1871.. Compiled and Drawn at the Lands and Works Office, Victoria B.C. under the direction of the Honble J.W. Trutch...Chief Commissioner of Lands and Works and Surveyor General. Scale: 1:1,584, 000 or 25 Statute Miles to 1 inch. Also referred to as "Trutch map."
53. Military Map of Washington Territory, Engineer Office, Mil. Div. of the Pacific, San Francisco, Cal., G.F. Lydecker, Capt. Corps of Engineers, 1873. Scale: 2 Miles to the Inch. Shows portion of B.C. along 49th parallel.
54. Sketch of Proposed Trail to Nicola Valley to Accompany Mr. Landvoight's Reports [in B.C. Sessional Papers], 1874. BCARS 8000 V13. Shows "H.B.C. Trail to Nicola."
55. [Old Townships south of Kamloops by John Jane. Lith. Britton, Rey \& Co. San Francisco.] c. 1875. A copy in Surveyor General of BC, DFB 5166. Shows route of brigade trail past Brigade Lake and Stump Lake.
56. Geological Map of a portion of the Southern Interior of British Columbia, 1877. Dawson, George M. Geological Survey of Canada.
57. [Survey for the Nicola Waggon Road from Spence's Bridge] Surveyor General 18 T 3 MISCELLANEOUS 1870s
58. [vicinity of 100 Mile House] c.1881. FB $64 / 88$ PH2 LILLOOET. Shows "Bridge Creek" \& "HBCo Trail to Kamloops."
59. Map of the Department of the Columbia, Projected and Compiled at the Engineer Office, Department of the Columbia by Lieutenant Thomas W. Symons, Corps of Engineers, 1881.
60. UUnofficial Plan of Penticton IR 1." Surveyor General of BC, $28 T 3$ MISCELLANEOUS. Shows "Brigade Trail" along Shingle Creek-Marron Valley. [The brigade trail is used as the west boundary of the Reserve.]
61. [W. Robinson, D. Lot 121 G1.] Loon Lake Creek, Lillooet District. 1886. Surveyor General of BC, FB 111/82 PH 2 LILLOOET, 1882. Shows "Old Brigade Trail." 20 chains to one mile.
62. A Map of the Country between Old Ft. Colville W.T. and the Fraser River, B.C. showing the trail followed by the General of the Army during Auqust 1883. Compiled and drawn under the direction of 1st Lieut. Geo. W. Goethals, Corps of Engineers, Chief Engineer Officer, Dept. of the Columbia, by Alfred Downing, Topographical Assistant U.S.A. Shows "Old Hudson Bay Trail" via "Sin-pail-hu Creek" between Kettle Falls and "Okinakane River."
63. Map of a portion of the Southern Interior of British Columbia Embodying the Explorations made in 1877 by G.M. Dawson, and in 1882-4 by Amos Bowman. Scale: 1:506,880. Department of the Interior, Geological and Natural History Survey of Canada. 1886. Shows [HBC] routes.
64. Reconnaissance Map of a Portion of the Rocky Mountains... Geologically Colored by George M. Dawson. Geological and Natural History Survey of Canada, 1886. Shows "Simpson Pass" (taken by George Simpson, 1841) and other passes through southern Rockies.
65. Indian Reserves near [Alexandra Br., Fraser Canyon]. Shows "Hudson Bay Trail" [1847,'48] Surveyed and drawn by Capt. W.S. Jemmett, 1886. Surveyor General of BC, IR Y6.
66. "Field Notes...Township 18 Range 17 West of Sixth Meridian. Thomas Fawcett, 1887. Surveyor General of BC. Shows "Old H.B.Co. Pack Trail" on south side of McLeod Lake.
67. Township 18 Range 17 West of Sixth Meridian. Shows "HBC Pack Trail" east of [McLeod] Lake. Surveyor General of BC. See item 66 for Dominion Field Notes.
68. Township 19, Range 17, West of Sixth Meridian, Thomas Fawcett, 1886-87, Dominion Lands Office. Surveyor General of BC. Shows "HBC Pack Trail" [Brigade Trail].
69. Lands and Works Dept. Victoria. Survey near Nicola Lake. Shows "Granite Creek Trail" [HBC trail] through [old Provincial] Township 95 Section 33, lot 209; Section 34, lot 208; Section 27, lot 207. 1887. Surveyor General of BC.
70. Township 20, Range 19, West of Sixth Meridian. [Kamloops Lake] 1890. Surveyor General of BC. Shows "H.B.Co. Bridge [sic] Trail."
71. Lot 656. Surveyor General of BC, 28 T 1 LILL. Shows "brigade trail" south of lake (and esker).
72. L 1778 [south of Aspen Grove]. Surveyor General of BC, 38 T 1 KAM. Shows "Old Hudson Bay Trail."
73. Map Showing Exploration Surveys in the northern portion of the Province of B.C. A.L. Poudrier and N.B. Gauvreau. 1891.
74. "Plan of Surveys for G. Stocker, C.C. Carr and Gainnell \& East. Osoyoos Div. - Yale Dist." Scale 20 chs.=1 inch. 1891. Plan by John A. Coryell, for Surveyor General in Twp 73 OSOYOOS FBl4/1891 PH5 OSOYOOS, shows Lots 347, 348, 349 at Kettle River and the International Boundary. Two trails diverge from the west side of Lot 348: "waggon trail to Fort Shepherd" and "trail to Colville."
75. Land \& Works Department, Victoria. Plan of Twp 73 OSOYOOS Shows "Osoyoos-Colville Trail" along Kettle River. c. 1890s. Surveyor General of BC.
76. N.B. Gauvreau c. 1891. Shows trail (partly the brigade route) between North Thompson and 100 Mile House. Surveyor General of BC, 8 L K.
77. [District lots along Otter Creek] FB 4/1892 PH6 KAMLOOPS. J.G. Thynne Pre-emption, L. 68; H. Cancellor Pre-emption L. 69; R. Gulliford Pre-emption, L. 71. Shows "Granite Creek Trail," formerly HBCo Trail.
78. British Columbia. Kamloops Sheet, geologically coloured by George M. Dawson, Geological Survey of Canada, 1895. Shows "Old Brigade Trail" north of Kamloops Lake.
79. British Columbia. Shuswap Sheet, Geological Survey of Canada. George M. Dawson. 1898... Geologically coloured Shows [brigade] route from Okanagan to Thompson Valley.
80. Plan of Wm. McCulloch's Pre-emption Lot 903 Survey [west of Rocher de la Biche] 1898. Surveyor General of BC, 19 Tl KAMLOOPS 1903. 20 Chs. $=1$ inch. Shows "old H.B. Trail...from Coldwater to Similkameen."
81. John Cưrrie's Pre-emption, Lot 656. Lillooet District. Shows "Brigade Trail" along "high ridge." Surveyor General of BC, FB 746/01 PH5 LILLOOET 1901 and Plan 28 T1 LILLOOET.
82. Plan of Township 1 Range 28 West of the Sixth Meridian. Department of the Interior, Ottawa, 1904. Shows "Old Hudsons Bay Company Trail" along Chilliwack River.
83. Map of the Northern Interior of British Columbia by A.G. Morice, O.M.I. Published by Direction of The Honourable The Chief Commissioner of Lands and Works Victoria, B.C. 1907. Scale (approx) 1 inch $=754,000$ inches Shows Portage route between Ft. St. James and Fort McLeod; Portage on Peace River.
84. Map of Yale District \& Portion of Adjacent Districts. Compiled and Drawn in the Lands and Works Department, Victoria, B.C., 1907. [Scale 1 inch= 8 miles] Shows "old Brigade Trail" between Green Lake and Deadman Creek.
85. Township 17 Range 17 West of Sixth Meridian Department of the Interior, 1908. Surveyor General of BC. Shows "Old HBCo Trail" and "Brigade Lake" north of Napier Lake.
86. Survey by G.E. Jorgensen PLS, 1909. Surveyor General of BC. L. 1778 Kamloops. Shows "Old H.B.Cos. Trail" northwest of Harvey Hall Lake in vicinity of Pike Mountain.
87. SW 1/4 Township 19 Range 17 West of Sixth Meridian Department of the Interior, 1910. 20 Chains to an Inch. Surveyor General of BC. Shows "Old H.B.Co. Pack Trail" south of Peterson Creek.
88. Hermon \& Burwell, 1910 "to accompany report on exploration." Surveyor General of BC, 1 Tu 46 Shows "Hudson's Bay Co. Trail to Hudson's Hope through Pine Pass" north of Fort McLeod.
89. H. Nevil[l]e Smith's Map of Eastern Portion Lillooet [Land] District March 1911. 1 inch=1 mile. Shows "Old Brigade Trail to Savona and Kamloops" west of Green Lake. Plan 1 Tu 60 (Blueprint).
90. Sketch Map of part of Kamloops Mining Division To accompany the Report of W.M. Brewer; for Minister of Mines Annual Report, 1913. Compiled and drawn by H.T. Nation, Draughtsman, Bureau of Mines, Victoria, B.C. 1913. Shows "Old Brigade Trail" north of Deadman River.
91. British Columbia Railway Belt. Kamloops and Lytton Sheet. West of Sixth and Seventh Meridians. Prepared under the direction of Department of the Interior, Canada, 1913 F.C.C. Lynch. Scale 1:190,080. Shows "Old Brigade Trail" east of Hihium Lake.
92. [Survey of Bridge Creek area] W.S. Drewry BCLS, 1914. Shows "old Kamloops Trail"[formerly a brigade trail] along Bridge Creek east of Horse Lake through L.4076, L. 4240 Surveyor General of BC, 2 L 6 ( 20 chains).
93. LILLOOET $20 \mathrm{ch}=1 \mathrm{in} .\mathrm{Surveyor} \mathrm{General} \mathrm{of} \mathrm{BC} ,\mathrm{FB} \mathrm{935/15}$ LILLOOET. C. 1915. Shows "old Kamloops Trail" [formerly a brigade trail] north of Bridge Creek.
94. Department of the Interior, Ottawa. Plan of Township 2 Range 28 West of the Sixth Meridian. Shows "Old Hudson's Bay Trail" along north side of "Chilliwak River." Additions to 1915. (See also Map \#83.)
95. Railway Belt. Sectional Map. KAMLOOPS. West of Sixth Meridian. Sixth Edition, 1st March, 1916. Shows "Old Brigade Trail" to Deadman River. 1:190,080. Surveyor General of $B C$.
96. Surveyor General of BC, 35 T6 LILL \& 36 T6 LILL. Shows "Old Brigade Trail" (near 83-Mile west of Green Lake crossing P.G.E.R. right-of-way).
97. EAST LILLOOET ... Dept. of Lands (B.C.) Pre-emptor's Sheet 4L, 1926 1:126,720. Shows "Brigade Ck."
98. Map 1L 1929. Shows "water route" from Fort St. James to Prince George; and "trail route" from Fort St. James to McLeod Lake. Dept. of Lands (B.C.).
99. Department of Lands. British Columbia. Hope-Princeton Sheet Map No. 4Q, 1939. 1:126,720. Shows "Brigade Trail," "Blackeyes Trail"; describes two H.B.C. trails.

## APPENDIX B

Extracts of Simpson's Voyage, 1824, Edmonton to Fort George (New Caledonia). (Ed.) K. Favrholdt.

Oct. loth Arrived Rocky Mountain House [Jasper's House]
Oct. 11th preparing for portage.
Oct. 12th sent horses ahead with McMillan, followed in the canoes to William Henry's Old House (old NWC post used by $H B C$ as winter establishment located where Miette R. enters Athabasca).

Oct. 14 th started in a body with a cavalcade of 21 horses. Crossed the river once, encamped at the Grand Traverse.

Oct. 15th left Encampment after Breakfast road hilly, craggy and rugged forded river twice, put up at Campement d'Orignal.

Oct. 16th renewed March, road gets worse forded river about a dozen times put up at Campement Fusel [sic] near the height of land.

Oct. 17th snowed about 8 inches, started early road bad descent extremely rapid down the West Side from Committee's Punch Bowl to base of Mountain 4 2 hours over Grand Cote.

Oct. 18th 3 miles of Bottoms, crossed two points of Woods road a mire, large fallen timber laying across the track every 10-20 yds.

Oct. 19 got to Boat Encampment (from Henry's House - 80-90 miles - six days in crossing Portage). Canoe River falls into Columbia a mile below this Encampment.

# APPENDIX C <br> Returns and Outfits of New Caledonia Brigade, 1826 

## Returns

## 83 Packs of Furs

6 Kegs Castoreum
15 Bales of Dry Salmon ${ }^{524}$
[104 pieces, not including voyaging apparatus]

## Outfit

38 Bales dry goods Including Summer Mens Orders
2 Baskets Copper Kettles
6 Cases Guns
5 Cases Irons
3 Cases Sundry Goods
5 Cases Traps
6 Bags Beaver Shot
4 Bags Ball
9 Bags Flour
5 Kegs Gunpowder
9 Kegs Tallow
2 Kegs Brandy
3 Kegs Spirits
3 Kegs Salt
2 Kegs Butter
9 Rolls Twist Tobacco ${ }^{525}$
[120 pieces]

## APPENDIX D

Excerpts from Edward Ermatinger's York Factory Express Journal, 1827 (Fort Vancouver to Fort Colville).

Mar 20th The Express Boat leaves Fort Vancouver... A second Boat accompanies us as far as the Chutes to assist in carrying our Boat over them and to strengthen the party. Proceed 3 miles and encamp.

21 st Embark at 4 a.m. Breakfast at upper end of Prairie du Thé. Encamp at the end of Portage Neuf.

22nd Clear the Cascades Portage. Encamp a little below Cape Horn.

23rd Start at 5 a.m. Breakfast below the Dalles. Encamp above little Dalles.

24 th Start at 5 a.m. Pass our Baggage and Boat and clear the Chûtes portage by 11 a.m. The other Boat and crew return to the Fort. Hoist sail with a stiff breeze...Encamp 3 miles above J. Day's River.

25 th ...the gentleman walk by turns to lighten the boat which is insufficient to carry all the baggage and 6 passengers besides an extra man and the Indian Slave. Encamp about 6 miles below the Gros Isle.

26th Embark at 5 a.m. Find Indians with horses -- hire 3.
27th Encamp above the Grand Rapid [18 miles below Fort Walla Walla]

28th The Boat arrives at Walla Walla. Encamp... 4 or 5 miles below Lewis and Clark's river.

29 th Start at $5 \mathrm{a} . \mathrm{m}$. pole all day. Encamp at 6 p.m. about 2 miles above the Marle Banks [les Terres Jaunes].

30 th Embark at $1 / 2$ past 4 a.m. Encamp at 5 p.m. about 2 miles above the Marle Banks.

31 st Proceed at $1 / 2$ past $4 \mathrm{a} . \mathrm{m}$. Proceed $1 / 2$ way up the Priest's Rapid and encamp at $1 / 4$ past 6 p.m.
April 1st. The Boat continues her progress up the Rapids (which are very bad this year, the water being remarkably low)...encamp at $1 / 2$ past $6 \mathrm{p} . \mathrm{m}$. about 12 or 125 miles above. Hire an Indian canoe to carry some of the passengers.
April 2nd. Start at $1 / 4$ past 5 a.m. Proceed as usual and encamp above Rapids à Potein [Paquin Rapid] at 1.2 past 6 $o^{\prime}$ clock.
3rd. Start at $1 / 2$ past 5 a.m. Clear Isle des Portage [Rocky Island rapid] (Hauled our boat up without discharging; gummed). Encamp 5 miles above the Picscouhoose River at 1/2 past 6 p.m.
4th Embark at $1 / 4$ past 4 o'clock. Encamp a league above Clearwater Creek [Chelan River] at 8 p.m. The gentlemen afoot...
5th Resume our journey at 5 o'clock Arrive at Okanagan at 5 p.m.
6th
7th Messrs. McLoughlin, McLeod and E, Ermatinger leave Okanagan on horsebackk in order to join the Boat at the Grosse Roche
8th Embarked at $5 \mathrm{a} . \mathrm{m}$. reach nearly the upper end of the Grand Coulée and encamp at 7 p.m.
9th Start at 5 a.m. and encamp at $1 / 2$ past 7 p.m. Perrault falls sick and is unable to work.
loth Embark $1 / 2$ past 4 o'clock. Pass the Spokane River. Encamp from 12 to 15 miles above at 7 p.m.
11th Start at $1 / 2$ past $20^{\prime} c l o c k a . m$. Pole and Paddle all day. Encamp 4 miles below the Grand Rapid at 7 p.m.
12 th Proceed at $1 / 2$ past 4 a.m. Make 2 portages at the Grande Rapide which is extremely bad on account of the shoalness of the River. Arrive at the Kettle Falls at noon. Leave our Boat below the Portage... Get all our Baggage up to Fort Colville.

## APPENDIX E

Itinerary of George Simpson's 1828 Voyage (part)

- Old Mountain House (Peace River) to Fort Langley ${ }^{526}$


## Place

## Old Mountain House (Rocky Mountain House)

## Upper end of Bend

Head of Portage
Pass of Mountains
Bernard's River
Finlay's Branch
Peace River
McLeod's Fort [Mile 0]
18th Mile Encampment
33rd Mile
53 rd Mile
71st Mile
$83 r d$ Mile
Fort St. James
Fort Alexander (Alexandria) [Mile 0]
34 th Mile
64 th Mile
94 th Mile
122nd Mile
147th Mile (Traverse)
175th Mile
215th Mile

Date
Sept. 2

Sept. 4
Sept. 5
Sept. 6
Sept. 8
Sept. 8
Sept. 8
Sept. 13
Sept. 14
Sept. 15
Sept. 16
Sept. 17
Sept. 17

Sept. 28 4
Sept. 2930
Sept. 3030
Oct. 128
Oct. 2 25
Oct. 313
Oct. 4 15
Oct. 5 40

Oct. 6 7
West end of [Kamloops] Lake Oct. 7 13
Two miles below McDonald's Encampment

Oct. 870

"Grand Forks" of Fraser and
Thompson rivers

Oct. 8 ..... 30
Fort LangleyOct. 10144

## APPENDIX F

## Alexandria to Kamloops by trail

Excerpts from Peace River: A Canoe Voyage from Hudson's Bay to the Pacific by the late George Simpson in 1828 (J. Durie \& Son: Ottawa, 1872), ed. by K. Favrholdt.

Saturday, 27th [Fort Alexandria] Had everything prepared by four [p.m.] and made a start shortly after... Came about four miles, and encamped on second little stream from the fort.

Sunday 28th - Had our horse collected early, and were on the move a little before six [a.m.]. Passed the last of the two steep [? word omitted here]. In a few minutes the canoes hove in sight, put ashore, and breakfasted at half past eight, at what is called "Head of the Rapids," distance from House [Alexandria] twenty miles [McCalister]. ... division of the roads three or four leagues lower down [Soda Creek]. Here we left the river at two. Encamped at four on Current River [Hawks Creek, formerly known as Deep Creek], which falls into the main stream within two miles of the first small Lake [not Williams Lake, which they did not pass].

Monday 29th, - ... Started at six. Passed two little rivers during the morning, and breakfasted on main stream at eleven [San Jose Creek]. Resumed the journey at one, when we immediately crossed and re-crossed in an hour after. Continued on north side. Another little river at two. A Lake [probably 130 Mile Lake], half a mile, at three. Encamped at four within a league [2.4 4.6 statute miles] of Long Lake [Lac la Hache]....Road very good indeed.

Tuesday, 30th, - Off this morning at five. Reached end of Lake [Lac la Hache] at eight. Crossed to the south in fifteen minutes. Came to an ordinary encampment on small river [Watson Creek] running from a lake about half a mile round [possibly 108 Mile Lake] but did not stop; continued for an hour longer, main river vanished. Breakfasted at Salt Lake [possibly Watson Lake] ... Point of woods took us an hour, and in another we arrived at a large stream which flowed to the left [Bridge Creek]. Cross it immediately at beaver dam about one o'clock, and continued on North bank for three hours, which brought us to another lake [Horse Lake], a mile of which we made this evening, and encamped ...The river we came along today has all the appearance of beaver... Dams are all over it. Course, for the last two and a half days S.E.

Wednesday, 1st. Breakfast at half-past nine [had travelled four hours along Horse Lake and Bridge Creek] on main river [Bridge Creek]. Off again about noon. Came to another lake at two [Bridge Lake]. Encamped at the other end at half-past four. In woods whole of afternoon.

Thursday, 2nd. Started at usual time. First half of road, good, along a chain of small lakes [Stack Lake, Muddy Lake, Lac des Roches], but the last part was hilly and rocky. Came to a small lake half a mile long, and breakfasted [possibly Phinetta Lake]. The lakes today seem still water. The afternoon was a gradual ascent of what is called the Mountain [divide between Fraser and Thompson watersheds]. Here also passed several small ponds and a number of swamps, that must be "very bad going" in spring and very soft weather. Encamped at height on a little M..... between two little lakes.

Friday, 3rd. Started at six. Began to descend about eight, continued so for a whole hour coming down to the first small stream at foot, which we crossed, an in an hour got to the traverse of North River. Here we found Lolew, the Kamloops Interpreter, who left a canoe and two men from the Fort a little below this, early in the morning. Laprade arrived with the canoe about noon. In about an hour after, the horses, alone, and most of the men, crossed, and continued the journey on the other side over a piece of very bad road; ourselves with three men and the baggage embarked at three, after a harangue with the few Indians there, and got to the proposed encampment in two hours, where the land party joined us soon after.

Saturday, 4th. Horses could not be collected early. Governor and three men in canoe again this morning; rest of us accompany the Horse Brigade. At Barrier Village at eight [modern Barriere]. Crossed two rivers in succession soon after. Got to the Stockades about eleven, when the whole expedition again breakfasted, surrounded by the Indians of the Barrier...

The road thus far to-day, is not bad, and to the House, is uncommonly fine. At the Pines we all took horse, and with our flag flying formed a respectable cavalcade. Did not arrive at the House [Kamloops] before dusk. Pipes played, and much firing on both sides.

APPENDIX G<br>Itinerary of David Douglas, $1833^{527}$ Compiled by K. Favrholdt \& Bob Harris

Going

March 20
April 13-18
April 18
April 21
April 22
April 23
April 24
April 25
April 28-May 2
May 2
May 3
May 9
May 19
May 20
June 2-4
June 2-9

Leave Fort Vancouver
Arrive/leave Fort Okanogan
[just south of Grise River (Omak Creek)]
Red Stone Knob [west of Osoyoos Lake]
Beaver River [now Shatford Creek]
L'arbre seul [the Lone Pine]
Bear River [Lambly Creek]
Head of Okanagan Lake
Arrive/leave Kamloops
Knife Creek [Eight Mile]
outlet of Loon Lake, north side
old Fort Alexandria
leave Fort Alexandria
Quesnel River
Ft. Fraser
Ft. St. James

## Returning

June 12
June 23
July 11
July 15-25
Aug 7

Fort George
Fort Alexandria
Fort Okanagan
Fort Walla Walla
Fort Vancouver

[^104]APPENDIX H
Stopping places or encampments usually taken en route ..... across
Rockies, e.g. journey in months of August-October $1839^{528}$
Stopping place Elevation (in feet)
Aug. 29 Edmonton ..... 2566
Sept. 22 Jasper's House ..... 3867
29 Camp d'Origal [sic] ..... 4391
30 Camp de Fusil ..... 5716
30 Punchbowl ..... 7324
30 Head of Grand Cote ..... 5188
Oct. 1 Bottom of Grand Cote ..... 4131
3 Boat Encampment ..... 3607
8 Colville ..... 2049
14 Walla Walla ..... 1286

## APPENDIX I

Table of Distances Between Camps - Fort Colvile to Alexandria (Mileages according to Chief Trader A.C. Anderson, 1842) ${ }^{529}$

Miles
Cumulative
0 24 48
73 103 135 169 189 214

242
269
278
300
319
346
374
402
429
449
462

-

No. from previous

I 24
II 24
III 25
IV 30
V 32
VI 34
VII 20
VIII 25
IX 28
X 27
XI 9
XII 22
XIII 19
XIV 27
XV 28
XVI 28
XVII 27
XVIII 20
XIX 13

## Location of Campsites

Colvile
Dease's (Kettle) R.
Grand Prairie (Grand Forks)
Rock Creek
Tea R (Testalinden Cr)
$R$ aux Serpens
McDonald's R (McDougall Cr)
R a la Biche, (Shorts Cr.)
South side, Salmon R
Crossing
Campement du Poulain
Kamloops
[10th day from Colvile]
Mouth of Tranquille $R$
Campement a la Carabine
South of west end, Green Lk
Crossing of Bridge Creek
North of Lac la Hache
Northwest end of Williams
Lake
White Mud (McLeese Lake)
Alexandria
[19th day from Colvile]

TOTAL: 462 miles over 19 days, Fort Colvile to Alexandria [i.e. 24 miles per day]
APPENDIX J
Paul Kane's Journey, 184-47, Fort Edmonton to Fort VancouverExtracted from Wanderings of An Artist.
Westbound:
October 6, Edmonton... we started at daybreak... we had1846with us sixty-five horses to carry our baggage andprovisions.
October 10. ...arrived at Fort Assiniboine
October 11 ... we found two boats here... and set to work to repair and pitch. At 2 o'clock P.M., we embarked...
October 15 ...
October 24 th ...We passed the Rapids de Mort
October $28 t h$...We passed the mouth of Old Man's River
October 29th ...saw for the first time the ....chain of the Rocky Mountains
November 1st We entered Jasper's Lake ... about 12 miles long... but at this season of the year very shallow
November 2nd ...Miette's Rock
November 3rd ...arrived at Jasper's House ... only kept up for the purpose of supplying horses to parties to cross the mountains
November 5th - We started with a cavalcade of thirteen loaded horses
November 6th - We made but a few miles progress ... obliged to camp at La Row's [La Rocque's] Prairie in order to pasture our horses
November 7th - We made a long day
November 8th

November $9 t h$ - ...despatched the guide and M'Gillveray to hasten on to Boat Encampment ...We encamped at the "Grand Batteur", where we found some snowshoes, which had been hidden by the party that had come out in the spring.

November l0th ...the horses stuck fast in the snow, and we were obliged to encamp on the spot to give those men who were unprovided, time to make snowshoes, without which they could not proceed.

November 11th
November 12th - ...attained...the Height of Land... We encamped [at the Committee's Punch Bowl]

November 13th ... commenced the descent of the grand cote, having been seven days continually ascending ... The descent was so steep, that it took us only one day to get down to nearly the same level as Jasper's House. The descent was a work of great difficulty on snowshoes, particularly for those carrying loads...

November l4th ...arrived at a river
November 15th ... arrived at Boat Encampment ... The men had been waiting here for our arrival for thirty-nine days, and would have returned to Fort Vancouver the next day, had not the guide and McGillveray opportunely arrived in time to prevent them...

November 16th ... leaving Boat Encampment ... about three hours after our departure, we shot the celebrated "Dalle de Mort". It is about three miles long and is the most dangerous of all the rapids on the Columbia

November 17th and 18th - We passed through the two lakes [Arrow Lakes]

November 19th - We again entered the current of the river
November 20th - we ran through the Little Dalle, which, though short is a series of dangerous whirlpools ... arrived safe at Colville

November 23rd ...encamped a few miles below the falls.

November 24 th ... arrived at the Grand Rapid, which the boats were obliged to run ... mishap...

November 29th ... arrived at Fort Walla-Walla
December 8th ... reached Fort Vancouver

Eastbound:
July 29th, 1847 ... Walla-Walla ... determined to go to Colville by the Grand Coulet [Grand Coulee]

July 31st ... I thought I should save a considerable distance by striking across the country, and intersecting the Grand Coulet at some distance from its mouth. We ... travelled ... through a barren, sandy desert.

August 8th ... Fort Colville
September $23 r d$...succeeded in getting past the Little Dalles in safety.

September 25 th ... we hoisted our sail, and soon scudded into an open lake, about three miles wide and twelve long.

September 26 th ... got into what is called another lake.
September 27th - Still in the lakes
September 29th - Got through the lakes... and again entered into what may be properly called the river.

September $30 t h$... We stopped here to make some paddles, in a forest abounding with birch, the only wood fit for this purpose, and which is not met with lower down the Columbia ...

October 1st ... walk for a few miles along the shore ... the place is a sandbank... called the "Grand Batteur"

October 2nd ... passed the Upper little Dalles, a very long and rapid shoot of three or four miles.

October 4th ... camped ...below the "Dalle des Morts"

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October 6th ... ascending rapids ... hauled the boats up ...
    greased bottoms with pine resin
October 18th - rapids of st. Martin
October l9th - Boat Encampment
October 29th - [arrival of brigade]
November 2nd - Grand Cote
    Campement de Fusei [sic]
November 29th - Fort Assiniboine ...
    ... 350 miles in 15 days
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## APPENDIX K

Points along the Columbia River and some mileages, Fort George (Astoria) to Boat Encampment. Compiled by K. Favrholdt from information per Ross Cox, John Work, A.C. Anderson, Paul Kane and T. W. Symons.
Place names Mileages
Fort George
Fort Vancouver114
La Prairie du Thé
Point of the Mangy Dog [near Hood River]
Gibraltar
Cape Horn [probably Mitchell Point]
Cascades
Lower Cascades ..... 159
Upper Cascades ..... 165
Dalls [sic]
little Dalls [or Nine Mile Rapids]
Great Falls, Chutes [Celilo Falls]at head of Dalles220
Mr. Day's River [John Day]
Grande Rapide [above the mouth of Umatilla River,below the Wallah Wallah]
Chimney Rocks
Lewis' River (Snake River) ..... 336
Big Island [also known as Long Island later Blalock's Island] ..... 372 (head)
Les Terres Jaunes White Banks (Bluffs), ..... 382
Priest's Rapid (or Priest Rapids) ..... 409.5-421
Rascal Rapid
Rocky Island Rapids (Stony Islands)(Rock Island Rapids)467.5-469
Ross' Rapid (later called Methow Rapids) ..... 539.5 (lower ..... end)
Okinakane River ..... 549
Dalles of Okinagan
Les Grosses Roches (along horse portage)
Iles de Pier
La Rapide d'Ignace [Box Canyon]
Grand Rapid [just below Kettle Falls]Kettle Falls [Chaudiere Falls]711
Little Dalles (First Dalles*) ..... 737
la Rivière de Beliers [Kettle River] Boundary line - 49th parallel ..... 752
Grande Batture
Lower Arrow Lake ..... 789-831
the Straits
Upper Arrow Lake ..... 847-880Second Dalles (Lesser Dalles) (LittleNarrows or Dalles)917
Upper Dalles (Dalles des Morts) ..... 962
Canoe River (Boat Encampment) ..... 1032
Sources
Ross Cox, The Columbia River, c. 1817Journal of John Work, 1831Paul Kane, Wanderings of An Artist, 1846
A.C. Anderson, "Great Map", 1867
Symons Report on the Upper Columbia, 1881. Mileages arecalculated using his report.

## APPENDIX L




[^0]:    2 I use the term Cordillera to connote the mountainous nature of the region which makes it distinct from the fur trade regions to the east. Another term for this region, used by the American historical geographer Donald Meinig and others, is "Pacific Slope."

[^1]:    ${ }^{3}$ A.C. Anderson, The Dominion At the West...(Victoria: Richard Wolfenden, 1872), 3.
    ${ }^{4}$ Eugene S. Hunn, Nch'i-Wana: "The Big River": Mid-Columbian Indians and Their Land. (Seattle: University of Washington Press, 1990), 3 .

    5 There were more than one brigade trail.

[^2]:    6 John Alwin, Mode, Pattern and Pulse: Hudson Bay Company Transport, 1670 to 1821 (University of Manitoba, Department of Geography, 1978). He notes that as early as 1967, R.C. Harris suggested the "unrealized potential of studies of the geographical implication of transportation technology and networks," Canadian Geographer, XI Winter 1967, 239.

[^3]:    8 Although two studies have been made of the historical cartography of British Columbia (Albert Farley Historical Cartography of British Columbia..., 1971) and the Hudson's Bay Company (Richard I Ruggles, A Country So Interesting...,1991), these works are limited and lacking in their analysis of the

[^4]:    brigade routes per se. Neither Farley nor Ruggles had knowledge of Samuel Black's pivotal map (c. 1835, supra).

[^5]:    9 C. H. Cooley, "The Theory of Transportation", American Economic Association, vol. IX, no. 3, May 1894. In M.E. Eliot Hurst, ed., in Transportation Geography: Comments and Readings, (McGraw-Hill, 1974), 15.

    10 Michael Eliot Hurst has edited a book Transportation Geography: Comments and Readings (McGraw-Hill, 1974) that is cited elsewhere in this study. James E. Vance, Jr. provides a historical focus in capturing the Horizon: The Historical Geography of Transportation since the Sixteenth Century (John Hopkins University Press, 1990).

    11 Robin Butlin, "Historical Geographies of Trade, Transport and Communication" in Historical Geography: Through the Gates of Space and Time, (London: Edward Arnold, 1993), 252.

[^6]:    ${ }^{12}$ Hubert Howe Bancroft, History of the Northwest Coast (1884), History of Oregon (1886), History of British Columbia (1890); Alexander Begg, History of British Columbia from its Earliest Discovery to the Present Time (1894); Lawrence J. Burpee, The Search for the Western Sea (1908); ; Howay and Scholefield, British Columbia Historical... (1913); John Murray Gibbon, Steel of Empire... (1935).

[^7]:    14 Innis, The Fur Trade in Canada..., xv.
    15 H.A. Innis, Problems of Staple Production in Canada, (Toronto: Ryerson Press, 1933), 14.

[^8]:    ${ }^{19}$ For a summary of these passes and others through the Rockies see Richard C. Mayne, Four Years in British Columbia and Vancouver Island, (London: John Murray, 1862), 359-367.
    ${ }^{20}$ Mackenzie missed the junction of the Pack or McLeod's Lake River and instead travelled up the Parsnip to the portage between Arctic and Pacific lakes, then down the Bad River, as Simon Fraser named it.

[^9]:    ${ }^{28}$ Walter McClintock, The Old North Trail... (London: MacMillan and Co., Ltd, 1910) and Old Indian Trails (Boston: Houghton Mifflin, Co. 1923).
    ${ }^{29}$ Carl Sauer, "The Road to Cibola," in John Leighly, ed., Land and Life: A selection of the Writings of Carl Ortwin Sauer, (Berkeley: University of California, 1969), 53.

[^10]:    ${ }^{33}$ Charles D. Trombold, "An introduction to the study of ancient New World road networks" in Ancient road networks and settlement hierarchies in the New World, (Cambridge University Press, 1991), 1.
    ${ }^{34}$ Ibid., 3.

[^11]:    ${ }^{37}$ Ibid.
    ${ }^{38}$ G.M. Dawson, "Diary 1889," 119.
    39 w. Kaye Lamb, The Journals and Letters of Sir Alexander Mackenzie (Toronto: MacMillan of Canada, 1970), 295. Simon Fraser mentions that this portage was between six and seven hundred yards in length.

[^12]:    ${ }^{40}$ Ibid., 311.
    ${ }^{41}$ Ibid., 320.
    42 Lamb, 1970, 73.

[^13]:    43 Lamb, The Letters and Journals of Simon Fraser 1806-1808 (Toronto, 1960), 168.
    ${ }^{44}$ Ibid., 96.
    45 Ibid., 218.

[^14]:    ${ }^{47}$ M. McLuhan, Understanding Media: The Extensions of Man, (Toronto: McGraw-Hill, 1969). 90.
    ${ }^{48}$ C.H. Cooley, "The Theory of Transportation" in Hurst, Transportation Geography: Comments and Readings, 15.

    49 Ibid.

[^15]:    50 James E. Vance Jr., Capturing the Horizon, (Baltimore: The Johns Hopkins University Press, 1990), 24-32.

    51 Innis, The Fur Trade in Canada, 3-6
    52 Vance, Capturing the Horizon, 25.

[^16]:    ${ }^{53}$ M.E. Eliot Hurst, "The Geographic Study of Transportation, Its Definition, Growth and Scope" in Transportation Geography: Comments and Readings, (McGraw-Hill, 1974), 7-10.

[^17]:    54 Torsten Hagenstrand, Innovation Diffusion as a Spatial Process, (Chicago: University of Chicago Press, 1968).

    55 R. Szostak, The Role of Transportation in the Industrial Revolution, (McGill-Queen's University Press, 1991), 32.

    56 Lewis and Clark encountered a native shaman at Wallula on the Columbia River who said he had been foretold of the coming of the white man. See Reuben Gold Thwaites, ed., Original Journals of the Lewis and Clark Expedition, 1804-1806, (New York: Dodd, Mead, 1904-1906), 136f, 334.
    ${ }^{57}$ Canoes, in fact, were faster conveyances than bateaux.

[^18]:    58 Barry Gough, "The Character of the British Columbia Frontier," BC Studies, 32 (1976-7): 28-40.

    59 Derek Gregory, "Suspended Animation: the stasis of diffusion theory." In Gregory and Urry, eds. Social relations and spatial Structures, (New York: St. Martin's Press, 1985).

[^19]:    ${ }^{60}$ Michael E. Eliot Hurst, A Geography of Economic Behaviour (Belmont, CA: Duxbury Press, 1972).

[^20]:    ${ }^{61}$ J. Ellul, The Technological Society, (London, 1965), xxxiii.
    ${ }^{62}$ See Tina Loo, Making Law, Order and Authority in British Columbia, 1821-1871 (University of Toronto Press, 1994); also Cole Harris "Towards A Geography of White Power in the Cordilleran Fur Trade," The Canadian Geographer 39, 1995.

[^21]:    ${ }^{70}$ Ibid., 163.

[^22]:    ${ }^{73}$ Merk suggests that this river was an intentional fabrication by the North West Company to assist the British claim to the area. See Frederick Merk,"The Ghost River Caledonia in the Oregon Negotiation of 1818" in The Oregon Question: Essays in AngloAmerican Diplomacy and Politics, (Cambridge, Massachusetts: The Belnap Press of Harvard University, 1967).

[^23]:    74 Alexander Ross, The Fur Hunters of the Far West (London: Smith \& Elder, 1855), 11.

    75 Ibid., 21.

[^24]:    ${ }^{76}$ Alexander Mackenzie, Voyages from Montreal... (Edmonton: M.G. Hurtig Ltd., 1971), 285.

    77 David Douglas' Journal.... (Royal Horticultural Society, 1914), 70.

    78 Gabriel Franchère Journal A Voyage on the North west Coast..., (Toronto: The Champlain Society, 1969), 159.

[^25]:    ${ }^{83}$ He was to try the longer Peace River route four years later.
    ${ }^{84}$ Merk, Fur Trade and Empire, 33.
    ${ }^{85}$ Ibid., 36.
    ${ }^{86}$ Ibid., 38.

[^26]:    ${ }^{87}$ Ibid., 261-6. Answers to queries by Mr. Addington, Hudsons Bay House, 5 January 1826.
    ${ }^{88}$ Ibid., 144.

[^27]:    94 Patterson, "We Clomb the Pathless Pass" The Beaver Winter, 1960, 55.

[^28]:    98 Merk, Fur Trade and Empire, 71-72.
    99 HBCA, B.188/e/1, 2-5, Report on District 1822-23, 7 July 1823; ibid., B.188/e/3, 11-12, Report on District 1824-25.

    100 A.C. Anderson, "History of the Northwest Coast," 92.
    101 Ibid., 12.

[^29]:    102 E.E. Rich, Part of Dispatch from George Simpson's, 1829, (London: The Champlain Society, 1947) 25.

    103 A.C. Anderson, "History of the Northwest Coast," (Victoria, 1878), 2.

[^30]:    108 This route between Alexandria and Kamloops, however, was used in 1822 by the Hudson's Bay Company, as noted by John McLeod in his journal, B 97/a/1.

    109 McLeod, Peace River..., 26.
    110 There is only a vague description of the hastily-built boat. It appeared to be equipped with a sail for use on Kamloops Lake ("in full puff"), and equipped with "thafts" and twelve paddles. By inference, four men -- the Governor and the officers -did not paddle.
    ${ }^{111}$ Archibald McDonald to Thompson's River to John Warren Dease 3 Dec. 1826.

[^31]:    116 "Itinerary.-Canoe Course," in Malcolm Mcleod, ed. Peace River..., xvii.

    117 Merk, Fur Trade and Empire, 71-72.

[^32]:    128 A.C. Anderson, "History of the Northwest Coast," Vol. 4, 95-96.

    129 Ibid.
    ${ }^{130}$ Ibid., and HBCA, B.188/a/17, May 6, 10-11, 1831.
    ${ }^{131}$ HBCA, B.223/d/80, 51; ibid., B.223/d/93, 73-77; ibid., B. 223/d/105b, 63-67; ibid., B.223/d/115, 106-08.

[^33]:    ${ }^{137}$ Horses were kept on both sides of the river to avoid having to swim horses more than necessary.
    ${ }^{138}$ Wilkes states it took twenty days to travel from Okanogan to Thompson's River, Narrative of the U.S. Ex. Ex..., 379.

[^34]:    ${ }^{142}$ HBCA, B.97/e/I., Thompson River District Report, 5 April 1827, Okanagan, Archibald McDonald to the Governor and Council. McDonald should have added the wind on the lake, although conducive to the use of sail, may have been a hindrance at times. The difficult trail along the west side of Okanagan Lake was, it appears, viewed as the lesser of two evils.

    143 Ibid.
    144 John Work's Journal, WHQ Vol V. No. 4 Oct. 1914: 285.
    ${ }^{145}$ According to Archibald McDonald, in McLeod, Peace River, A Canoe Voyage from Hudson's Bay to the Pacific, xiv-xv, 1872.

[^35]:    148 Utilizing this route between Okanagan and Alexandria totalled 462 miles (according to A.C. Anderson), somewhat less than the former route.

    149 It was partly followed by David Douglas in 1833 as evidenced in his book of Sketch Maps.
    ${ }^{150}$ See A.C. Anderson's maps (3.13, 3.14) for plot of route.

[^36]:    158 John McLean, John McLean's Notes of a Twenty-five Year's Service in the Hudson's Bay Company, ed. W.S. Wallace (Toronto: The Champlain Society, 1932), 166.

    159 HBCA, D.5/4, 4 January 1837, Edmonton House, Rowand to Governor, Chief Factors and Chief Traders, fol. 224.

    160 HBCA, D.5/5, 5 January 1840 [1841], Edmonton House, Rowand to Governor, Chief Factors and Chief Traders, fol. 222.

[^37]:    ${ }^{163}$ William Brown to James Murray Yale, Fort St. James, 21 Feb. 1825, Yale Letters \#5, BCARS.

    164 HBCA D4/126, Letter and map from Simon MCGillivray to George Simpson, 15th July 1833.

[^38]:    ${ }^{165}$ Journal. Kept by David Douglas during his travels in North America, (New York: Antiquarian Press, 1959), 69-76.

    166 Footpath markings (blazes) were hidden by the depth of the snow. It was on this voyage that Douglas purportedly climbed Mt. Brown which he named after the famous Scottish botanist and incorrectly ascertained to be 17,000 feet in elevation; he also named Mt. Hooker.

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    167 Ibid., 73.
    168 Ibid., 261.
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[^39]:    ${ }^{171}$ Carl Landerholm (trans.), Notices and Voyages of the Famed Quebec Mission to the Pacific Northwest, (Portland: Oregon Historical Society, 1956), 7.
    ${ }^{172}$ This post was probably related to the shipment of Russian furs across the Rockies.

[^40]:    173 Paul Kane, Wanderings of An Artist Among the Indians of North America..., (Edmonton: M.J. Hurtig, Ltd., 1968), 130.

    174 Archibald Barclay, who became secretary to the HBC in 1843, is acknowledged to be the ghostwriter.

[^41]:    175 Sir George Simpson, Narrative of A Journey Round the World... (London: Harry Colburn Publisher, 1847), 74.
    ${ }^{176}$ Letter to Governor Deputy Governor and Committee, 20 June 1841.

    177 Simpson, Narrative of A Journey Round the World During the Years 1841 and 1842. Vol. 1 \& Vol. 2 (London: Henry Colburn, Publisher, 1847), 164.

[^42]:    ${ }^{183}$ Ibid., 116.
    184 Ibid, 118.

[^43]:    187 Board of Management to Governor \& Committee, November 2, 1846, A.11/70, fol. 227d.

[^44]:    197 Henry Newsham Peers, "Private Journal - From Fort Langley to Thomson's [sic] River, 1848."

    198 William Yates "Reminiscences", n.d., BCARS
    199 A.C. Anderson, "History of the Northwest Coast," 39.
    200 William Yates, "Reminiscences," BCARS.

[^45]:    ${ }^{211}$ HBCA D. 5/23/262, Fort Vancouver, 10 November 1848, Peter Ogden to George Simpson.

    212 Hester White. "General Sherman at Osoyoos", The Okanagan Historical Society (1951), 46.

    213 James Douglas to Archibald Barclay. Victoria, 17 August 1850. A. 11/72, fos. 290-293d.

[^46]:    224 Eden Colvile to Governor and Committee, July 21, 1852, in HBRS, XIX, 148.

    225 James Douglas to Archibald Barclay, Victoria, 17 Aug. 1850, A.11/72, fos. 290-293d.

    226 James Douglas to A.C. Anderson, Fort Victoria, 18 March 1850.

[^47]:    ${ }^{227}$ The Naches Road, according to the Fort Nisqually Journal of Occurrences for 1850, was started by a group of settlers. One of the road crew was a deserter from Fort Victoria. Work in earnest continued in 1853, following an old Indian trail. See Roderick Peayttie, ed., The Cascades: Mountains of the Pacific Northwest (New York: The Vanguard Press, 1949), 59-63. According to George Gibbs in 1853, the "Nachess and main Yakima passes" were used by the Yakima Indians to take horses to Fort Nisqually, in Northwest Discovery; The Journal of Northwest History and Natural History, Vol. 1, August 1980, Number 3, 130.
    ${ }^{228}$ Edward Huggins, The Beaver, Summer 1961, Outfit 292, 1015. Huggins was a clerk at Fort Nisqually between 1850 and 1870.

[^48]:    ${ }^{237}$ Lt. H.S. Palmer, R.E. "Report,..." 17.
    ${ }^{238}$ B226/b/15. Letter from James Douglas to William G. Smith, January 14, 1858.

    239 Described by Begbie to Douglas, 25 April 1859.

[^49]:    ${ }^{246}$ Colvile gained an extra "l" after Americans settled here. The present town of Colville is fifteen miles from the now-drowned HBC fort site.

    247 Chief Factor Roderick Finlayson to Angus MacDonald at Fort Colville, dated Victoria, June 6, 1865, HBCA B. 226/b/26.

[^50]:    248 A.C. Anderson, "History of the Northwest Coast," 253.
    249 According to the Dictionary of Canadianisms, since at least 1761 (Henry Elder).

    250 The O.E.D., 2nd Edition (Oxford: Clarendon Press, 1989, 548) defines brigade as 1. a company or crew of people, 2. a large body or division of troops, 3. a band of persons more or less organized for the purpose of fighting, hunting, etc., 4. a disciplined band of workers. For a Canadian interpretation, $\underline{A}$ Dictionary of Canadianisms on Historical Principles (W. J. Gage Limited, Toronto, 1967, 77) describes brigade as 1. a fleet of canoes, bateaux, or York boats carrying trade goods, supplies and

[^51]:    furs to and from the inland posts of the fur companies; 2. a train of Red River carts, pack horses, dog sleds, etc. employed by the fur companies...; 3. a train of wagons; a fleet of bateaux employed in freighting merchandise; and 4. a number of canoes on a canoe trip, especially when following the historic routes of the early explorers and voyageurs.

[^52]:    251 A.C. Anderson, "British Columbia."
    ${ }^{252}$ Edwin Tappan Adney and Howard I. Chapelle, The Bark Canoes and Skin Boats of North America, (Smithsonian Institution Press: Washington, D.C. 1983), 135.

    253 Ibid. 138.
    254 Ibid. The largest type of canoe, the "Montréal canoe" or "canot du maitre" or "maitre canot" ranged from 32 to 36 feet ( 5 1/2 fathoms) in length and 60 to 66 inches in width and had a capacity of $3 \mathrm{t} / 2$ to 4 tons ( 3175 kg . to 3629 kg .) of goods or furs plus 7 to 12 men with their provisions and gear.

    255 On the voyage between Sault St. Marie and Grand Portage, Harmon describes 300 men in 35 canoes forming four brigades, ie., eight or nine canoes in a brigade and 8 or 9 men in each canoe.

    256 Adney and Chapelle provide the term canot léger.
    257 Nicholas Garry, "Diary," (Royal Society of Canada, 1900), 118.

[^53]:    ${ }^{261}$ From The Manuscript Journals of Alexander Henry and David Thompson, 1799-1814, Vol. II, 467, IN R.C. Wheeler, A Toast to the Fur Trade, 26.

[^54]:    263 McLeod, Peace River..., 1. The "Light Canoe," or North Canoe, typically carried a crew of eight or nine.
    ${ }^{264}$ Gass's Journal of the Lewis and Clark Expedition, 152.
    265 Ibid., 160.
    266 Gabriel Franchère, Journal of a Voyage on the North West Coast of North America During the Years 1811, 1812, 1813 and 1814, (Toronto: The Champlain Society, 1969), 145.

[^55]:    267 Probably dugout canoes.
    ${ }^{268}$ R. G. Thwaites (ed.), Early Western Travels (Cleveland: Arthur H. Clark, 1904), 336.

    269 "Diary of Nicholas Garry," Proceedings and Transactions of the Royal Society of Canada, (1900), 90.

    270 HBCA, B. 188/a/1. 25d, October 20, 1820.

[^56]:    274 Clinker-built refers to boards that overlap one another.
    275 The Viking knorr, a big stout boat about 50 feet long, was the model for the smaller dories. The bateau in Canada was smaller yet.
    ${ }^{276}$ Richard Glover, "York Boats," The Beaver, March 1949, 20.
    277 Alexander Henry in 1803 near Brandon House.

[^57]:    278 E.E. Rich, The History of the Hudson's Bay Company, 16701870, Volume II:1763-1870. (London: The Hudson's Bay Record Society, 1959), 279-280. Rich (278) states that Thomas Stayner, Chief Factor at Churchill, "reported that in 1796 he had taken two bateaux containing four thousand Made-beaver in trade goods up his river [the Churchill]"; Rich later notes (282) that "two bateaux, each of thirty foot keel"... "brought the furs from the Upper Settlements some twelve hundred miles to Trout River."
    ${ }^{279}$ Eden Colvile's Letters, (London: The Hudson's Bay Record Society, 1956) Introduction, xii.

    280 Glover, "York Boats", The Beaver, 19-23.

[^58]:    281 Philip Ashton Rollins, ed., The Discovery of the Oregon Trail: Robert Stuart's Narratives of His overland Trip Eastward from Astoria in 1812-13. From the Original Manuscripts in the Collection of William Robertson Coe, Esq. (New York, 1935).
    ${ }^{282}$ W.K. Lamb, ed., David Thompson's Narrative (Toronto: The Champlain Society, 1916), 454-455.
    ${ }^{283}$ Idid. 473 f1.

[^59]:    ${ }^{287}$ Ross, The Fur Hunters of the Far West, 182.
    288 Jamie Morton, Fort St. James, 1806-1914: A Century of Fur Trade on Stuart Lake (Environmemt Canada, 1988), 37.

    289 Merk, Fur Trade and Empire: George Simpson's Journal, 38.
    290 HBC Standing Rules and Regulations.
    291 Ibid.

[^60]:    292 "Journal of John Work", Washington State Historical Quarterly Vol. V No. 3, July 1914, 175.

    293 McLeod, Peace River, 34-35.
    294 The Fraser Canyon between Boston Bar and Yale is extremely difficult with six major (grade 4) rapids in 42 km ; portaging is made difficult by the confines of the canyon.

[^61]:    295 "Fort Langley Journal", Oct. 16, 1828.
    296 Kane, Wanderings of An Artist, 89.
    297 Dunn, History of the Oregon Territory and British North American Fur Trade, 61.

[^62]:    305 Walter Moberly, The Rocks and Rivers of British Columbia (London: H. Blacklock \& Co. 1885), 42.

    306 According to Alexander Ross, the men likely resorted to cannibalism and murder to stay alive; only one man survived but was acquitted of any crime. See Ross Cox, The Columbia River (Norman, OK: University of Oklahoma Press, 1957), 278-79.

[^63]:    ${ }^{309}$ Francis Ermatinger, letter 16 Feb. 1831 Fort Vancouver to Edward Ermatinger.

    310 Samuel Parker, Journal of An Exploring Expedition .... (Moscow: University of Idaho Press, 1990), 143, 273.
    ${ }^{311}$ Madge Wolfenden, "John Tod", B.C.H.Q., 208-210.
    312 Kane, Wandering of An Artist, 233-234.
    ${ }^{313}$ Kane, Wanderings of An Artist, 90.
    314 Kane's diary, 'Accidents on the Columbia River.' In Paul Kane's Great Nor'west, 77.

[^64]:    315 Alfred Downing, 23. Old Pierre was a voyageur for the Hudson's Bay Company forty years earlier, i.e. about 1841 (30). Father De Smet's account may be another version of the same incident.

    316 "Diary of Nicholas Garry," 95.

[^65]:    ${ }^{317}$ L.R. Masson, Les Bourgeois de la Compagnie du Nord-Ouest, (New York: Antiquarian Press, Ltd, 1960), 313.

    318 Robert Kendicott, "Diary," (Chicago Academy of Sciences, Transactions, 1869 Vol. 1, Part 2), 150.

    319 Lamb, The Journals and Letters of Alexander Mackenzie, 271-274.
    ${ }^{320}$ According to Lamb, The Letters and Journals of Simon Fraser 1806-1808, 185 .

[^66]:    ${ }^{332}$ Father Pierre-Jean De Smet, Life, Letters and Travels, (New York: Francis P. Harper, 1905), 542.

    333 Ibid., 543.

[^67]:    ${ }^{339}$ Lamb, The Letters and Journals of Simon Fraser, 166.
    340 Ibid., 213.
    341 Washington Irving, Astoria, 208, 221, 430.
    ${ }^{342}$ Ross, Adventures of the First Settlers... 148.

[^68]:    ${ }^{352}$ H. P. White and M. L. Senior, Transport Geography (Essex, England: Longman Group Ltd., 1983), 23.

    353 John Lord, At Home in the Wilderness... (London: Hardwicke and Bogne, 1876), 62-62.

[^69]:    ${ }^{356}$ Lt. Charles Wilkes, Narrative of U.S. Ex. Ex. Vol 4, (New York, 1856), 378.

    357 Ibid., 454.
    ${ }^{358}$ Landerholm, Notices and Voyages of the Famed Quebec Mission to the Pacific Northwest, 152-53.

[^70]:    359 Ibid.
    360 Gibson, in his study of agricultural development in the Oregon Country, Farming the Frontier... (Madison: University of Wisconsin Press, 1969) has compiled data on livestock.

    361 Wolfenden, "John Tod," 219.

[^71]:    362 Paul Fraser to Eden Colvile, 26 March 1852 (HBCA B. $235 / \mathrm{c} / 1$ ).

    363 Anderson, in The Dominion At the West, 57, confirms that "...the band at Kamloops ... including broodmares and young stock [numbered] probably five to six hundred."
    ${ }^{364}$ HBCA, D.7.1, 24, 60, 62, Douglas to Colvile, 16 March 1852; ibid., D.5/34, 484-85, Anderson to Governor, Chief Factors and Chief Traders, 28 Sept. 1852; ibid., B.226/b/10, 110-11, Douglas to Manson, 12 April 1854.

[^72]:    365 McLeod, Peace River, 114.
    366 The exact date of the introduction of carts in the Northwest is not known, but carts were being used by the HBC in 1734 during the construction of Fort Prince of Wales (Eric Ross, Beyond the River and the Bay, 71). Carts were used by the French and later the North West Company in the Red River area.

    367 "Carts" were used to portage around Kettle Falls according to Edward Ermatinger's York Factory Express Journal, 1827-28, 110.

[^73]:    369 A.C.Anderson, "Notes Connected With the Accompanying Map of British Columbia, 1867."

    370 Peers, "Private Journal", 8.
    371 Hartwell Bowsfield (ed.), Fort Victoria Letters.... 11.

[^74]:    372 Palmer, "Report of the Country Between Fort Hope and the Similkameen", OHS 36th Annual Report, 1972.
    ${ }^{373}$ See A.C. Anderson's map, "Portion of the Colony of British Columbia... 1867." The drownings probably occurred at the west end of Horse Lake upon crossing the outlet.

    374 This incident likely resulted in the realignment of the brigade route northwest of Green Lake, to avoid the marshy outlet of Horse Lake.

    375 "Thompson's River Journal" by James McMillan and John McLeod 1822-23. B 97/a/1.
    ${ }^{376}$ According to Demers, in Landerholm, Notices and Voyages.... 200, the "Fork of the Okanagan" was "three days journey from the fort of the same name" at the junction of the trail to fort Colville.

    377 Landerholm, Notices and Voyages..., 153.

[^75]:    ${ }^{378}$ Ibid., 4. By the 1860 s bridges were still in use along the Boston Bar and Hope Trail as recounted by Bishop Hills in Bagshaw, No Better Land: The 1860 Diaries of the Anglican Colonial Bishop George Hills (Victoria: Sono Nis Press, 1996), 201.

    379 Frank Gilbert Roe, The Indian and the Horse, Norman: University of Okaholma Press), 19-21.

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    380 Lamb, The Letters and Journals of Simon Fraser, 172.
    381 Lamb, Sixteen Years in the Indian Country..., 147.
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[^76]:    384 Cassettes were pine boxes 28 inches long, 16 inches wide and 15 inches deep. (See McLeod, Peace River, 43).

    385 John Work's Journal, 186.
    386 See Appendix $C$ for a list.

[^77]:    387 Journal of John Work, WHQ Vol. VI No. 1 Jan. 1915, 26-49.

[^78]:    390 HBCA, IM 224, 42, A. McDonald to Wm. Connolly, 14 March 1826.

    391 HBCA, B.188/a/17, Fort St. James Journal, 1831-32, 15 May 1831.

    392 Sage, "Peter Skene Ogden's Notes...", BCHQ I, I (January 1937): 54.
    ${ }^{393}$ McLeod, Peace River, 23.
    394 Ibid. 7.

[^79]:    405 Alexandria and Kamloops Journals.
    ${ }^{406}$ Wolfenden, ed. "John Tod: 'Career of A Scotch Boy,'" BCHQ $183 \& 4$ (July-October 1954): 214.

    407 Peter Skene Ogden to Paul Kane, 18 March 1851, Vancouver.

[^80]:    410 Here the special brigade came out from Grand Portage to meet and exchange packs with the Athabasca Brigade (Morse, 84).
    ${ }^{411}$ Lamb, Sixteen Years in the Indian Country, 192-193.
    ${ }^{412}$ Ibid., 196.
    ${ }^{413}$ According to Wilkes, Narrative of the US Ex. Ex., on the lower Columbia it was Ogden's practice to take the brigade upstream to the sawmill where the régale took place.

[^81]:    ${ }^{417}$ Grace Lee Nute, The Voyageur, (St. Paul: Minnesota Historical Society, 1955), 50-51.
    ${ }^{418}$ Kane, Wanderings of An Artist, 45.
    419 Anna Jameson, Sketches in Canada, 296-98.
    420 E.W. Jarvis, "Report on Exploration Across the Rocky Mountains by Smoky River Pass." A chain is 66 feet, therefore a pace is 1.65 feet according to this source.
    ${ }^{421}$ Nute, The Voyageur, 46. According to Joseph McKay, "each man in the brigade was expected to carry from eight to ten pieces a mile a day in quarter mile stages, two pieces at a time" in R. E. Gosnell, ed., The Year Book of British Columbia.... (Victoria: 1897), 25. According to Archibald McDonald Peace River..., 9, poses across the twelve-mile Portage la Loche in the Athabasca country were " 500 to 600 yards each."

[^82]:    ${ }^{422}$ Rylatt, R.M. Surveying the Canadian Pacific, (University of Utah Press, 1991), 122.
    ${ }^{423}$ Ibid, 19.
    ${ }^{424}$ Mayne, Four Years in British Columbia.... 124.
    425 Nicholas Garry lists several songs in his "Diary" including: "Bon Jour, Jolie Bergere," sung in the morning, "Brave Capitaine," "Vin Blanc," and "Champagne," at dinner, and "A Terre, a terre" in the evening at the encampment, 158.

    426 Nute provides a whole chapter on voyageur songs in the Voyageur, 103-153.

[^83]:    ${ }^{427}$ Rapport, etc. Lettre a Mgr. 1'Eveque de Quebec, December 20th, 1842, 14-15.

[^84]:    ${ }^{428}$ Nute provides a comprehensive profile of these men in her book, The Voyageur (St. Paul: Minnesota Historical Society, 1955).

[^85]:    435 Washington Irving, Astoria or Anecdotes of An Enterprise Beyond the Rocky Mountains, (New York: George Putnam, 1849), 47-48.
    ${ }^{436}$ MacDonald, Peace River..., 42.
    ${ }^{437}$ E.E. Rich, ed., Simpson's Dispatch, 30.
    ${ }^{438}$ William Fraser Tolmie, "Utilization of the Indians," The Resources of British Columbia, I, 12, (1 February 1884): 7.

[^86]:    441 Washington Irving, Astoria or Anecdotes of An Enterprise Beyond the Rocky Mountains (New York: George P. Putnam, 1849), 48, 136-137.
    ${ }^{442}$ R. M. Martin, The Hudson's Bay Territories (London, 1899), 61.
    ${ }^{443}$ For a colourful description of their bravery, see Rev. Charles Nicolay, The Oregon Territory..., (Fairfield, WA: Ye Galleon Press, 1967), 80-86.

    444 Standing Rules and Regulations.

[^87]:    445 Wilkes, Narrative..., (London: Wiley and Putnam, 1845). Merk, in Fur Trade and Empire notes the pilots was also known as the "guides." "They were trusted men, the aristocracy of the voyageur class, distinquished for exceptional expertness in the arts of the stream, for intelligence and for a high sense of responsibility. They had the function of directing the movements of the brigade, supporting the authority of those in charge of individual craft, and at exchange points, in the absence of the officers of the Company, transacting brigade business"(15n).
    ${ }^{446}$ Letter from Francis Ermatinger to Robert Miles, Thompson's River 14 March 1826. In Lois Halliday McDonald, Fur Trade Letters of Francis Ermatinger, (Glendale, CA: The Arthur H. Clark Company, 1980), 61.

[^88]:    ${ }^{452}$ Ping Lai and Nancy Lovell, University of Alberta, "Lifestyle and Health of Voyageurs in the Canadian Fur Trade" Paper presented to Rupert's Land Colloquium, Edmonton, May 1994.

    453 Kane, Wanderings of An Artist, 133.
    454 Cox, The Columbia River, 357.
    455 McLeod, Peace River, 24.

[^89]:    465 J.B. Good, Mission Life, Vol. \# III, 95.
    ${ }^{466}$ Donald Manson to Simpson, Thompson's River, 6 December 1841. HBCA D5/7, 1842 fos. 346-8.
    ${ }^{467}$ Ibid.
    ${ }^{468}$ George Stanley, Mapping the Frontier (Toronto: Macmillan of Canada, 1970), 111.

[^90]:    ${ }^{472}$ McLeod, Peace River...
    473 Merk, Fur Trade and Empire, 143-144.
    ${ }^{474}$ George McDougall, "Extracts from Diary, 1827."
    475 Kane, Wanderings of An Artist, 86.

[^91]:    476 Kane, Wanderings of An Artist, 181-182.
    ${ }^{477}$ Morice, The History of the Northern Interior of British Columbia, 245.

[^92]:    ${ }^{481}$ Simpson to Governor and Committee June 30, 1849 A. 12/4, fo. 528 d . This route prevented men from deserting after they had reached Forts Colvile or Okanogan.

    482 Simpson to Governor and Committee, June 30, 1849 A. 12/4, to. 528d. This route prevented men from deserting after they had reached Okanogan.
    ${ }^{483}$ Cullen, "Outfitting New Caledonia, 1821-1858." In Old Trails and New Directions. Eds. Judd and Ray, (Toronto: University of Toronto Press, 1980), 244.
    ${ }^{484}$ HBCA, D/4/28, pp.30-34, Connolly to Governor and Committee, 28 Feb. 1829.

[^93]:    485 Peers, "Private Journal...," 3.
    486 Sir Edward Poore to Lady Poore, Fort Vancouver, 19 March 1849.

[^94]:    487 For a fuller treatment of "HBC Club law," see Tina Loo, Making Law, Order and Authority in British Columbia 1821-1871, (Toronto: University of Toronto Press, 1994), 18-33.

    488 Ranald MacDonald, The Narrative of His Life, 1824-1894, (Portland, OR: Oregon Historical Society Press, 1990), 55-56.

[^95]:    ${ }^{489}$ Landerholm, Notices and Voyages of the Famed Quebec Mission to the Pacific Northwest, 152-153.

[^96]:    491 Trails paralleled the river in the lower Columbia and as well as the Fraser River in parts.

    492 It was on this trip that Douglas named Mount Brown after "the illustrious Botanist" and Mount Hooker in honour of his "early patron, the Professor of Botany and the University of Glasgow."

    493 Published in the Companion to the Botanical Magazine, Vol. II, 135-138.

[^97]:    500 The Mackinaw boat would appear to be similar to the bateau, although the term is loosely applied to any heavy flat-bottomed freight boats.

    501 "Standing Rules and Regulations", \#80, 1848.

[^98]:    507 Arthur Ray, "The Land-Based Fur Trade of British Columbia 1820-24," (Unpublished manuscript 1989), 33, 167, 174, 178.

    508 As Ray and Freeman have attempted.

[^99]:    510 Roderick Finlayson to Peter Ogden, Victoria, November 24, 1866. HBCA B. $226 / \mathrm{b} / 35$, fo. 151 d .

    511 Joel Palmer,"Oregon Statesman," Feb. 14, 1860. PABC J B P 182.

[^100]:    512 Washington Irving, Astoria or Anecdotes of An Enterprise... Author's Revised Edition, (New York: George P. Putnam, 1849), 48.

[^101]:    ${ }^{517}$ Reverend George M. Grant, Ocean to Ocean: Sandford Fleming's Expedition through Canada in 1872, (Toronto: James Campbell \& Son), 293.
    ${ }^{518}$ Alfred Downing, The Region of the Upper Columbia River and How I Saw It (1881), (Fairfield, WA: Ye Galleon Press, 1987), 13, 30.

[^102]:    519 Kicking Horse Pass at 5339 feet; Athabasca Pass at 5725 feet.

[^103]:    ${ }^{521}$ H. A. Innis, Empire and Communication, (Victoria: Porcepic Press Limited, 1986), 7.

    522 Ibid., 3.
    523 John Galbraith, "The Little Emperor," The Beaver, Winter 1960, 25. See also, Galbraith, The little Emperor, (Toronto: Macmillan of Canada, 1976).

[^104]:    527 From Douglas' Journal, Sketchbook April 1833, and former "unidentified map of the Thompson's River District" PABC CM B 13,660.

