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FIDLER IN CONTEXT

In July 1792 Peter Fidler, a young surveyor for the Hudson's Bay Company, set out from York Factory to the company's new outpost high on the North Saskatchewan River. He spent the winter of 1792-93 with a group of Piikani hunting buffalo in the foothills SW of Calgary. These were remarkable journeys. The river brigade travelled more than 2000 km in 80 days, hauling heavy loads, moving upstream almost all the way. With the Piikani, Fidler witnessed hunts at sites that archaeologists have since studied intensively. On both trips his assignment was to map the fur-trade route from Hudson Bay to the Rocky Mountains.

Fidler kept two journals, one for the river trip and one for his circuit with the Piikani. The freshness and immediacy of these journals are a great part of their appeal. They are filled with descriptions of regional landscapes, hunting and trading, Native and fur-trade cultures, all of them reflecting a young man's sense of adventure as he crossed the continent. But there is nothing naive or spontaneous about these remarks. The journals are transcripts of his route survey, the first stages of a map to be sent to the company's head office in London. The core language of the journals is the notation required by a cartographic survey; his descriptions have the focus and exactitude of scientific observation. Fidler noted the compass direction and distance of every reach in the rivers, every zigzag crossing the plains, together with sights for latitude and longitude that would fix the strings of courses on a cartographic grid. He observed stars, rapids, mountains, post sites and the Piikani with the same careful detachment, in the same scientific spirit. He was curious, adaptable, tolerant, amused, not in the least romantic.

Fidler was still in his teens when he joined the Hudson's Bay Company. He was born in 1769 at Sutton Mill near Bolsover, Derbyshire, where his family were tenant farmers.[1] No aspect of his Midlands agrarian childhood suggests that the spring of 1788 would see him in London, preparing to go abroad, not for the first time perhaps. On 19 April Fidler left his boarding-house in Addle Street, walked south to Cheapside, then roughly east to the heart of the City – the Bank of England, the Royal Exchange, the East India Company in Leadenhall Street and the much smaller Hudson's Bay Company in Fenchurch Street.[2] With the fur company he signed a five-year contract to work as a labourer in its overseas service.[3] The Hudson's Bay Company was looking for Englishmen, "men of fair character and those who can bear fatigues," as an alternative to their usual practice of hiring workers from Orkney.[4] Why Fidler

chose this company, and why despite his considerable skills he was willing to accept the lowest category of service it offered, are questions for which there is no evidence, thus no answers. He sailed in May with three other Englishmen hired as labourers and two young "writers" or clerks. One of the labourers was John Ward, with whom he travelled to the Rocky Mountains; one of the writers was James Bird, who became a good friend when Fidler rose in the company ranks.[5]

Fidler left the ship at York Factory and spent the winter there. Scurvy affected everyone at the coastal depot despite the best efforts of the resident chief Joseph Colen.[6] When the inland brigade arrived in late June 1789 only two men were strong enough to help with unloading furs and readying the canoes for another year of trade. One of those men was Fidler; he joined the brigade when it returned to the North Saskatchewan River. By the time he left York Factory Fidler had impressed Colen with his abilities not only in penmanship and accounting, the skills proper to young men hired as writers, but also in surveying and drafting. Colen's main project was the construction of "New York" after a flood ravaged the old site downriver, so Fidler had proved useful far beyond his service as a simple labourer. Colen recommended him to the post masters inland.[7] As of December 1789 Fidler was put to work as a writer at South Branch House; six months later Philip Turnor, appointed as the company's surveyor and waiting at Cumberland House to follow the North West Company to Lake Athabasca, recommended "that Peter Fidler be sent down, that he may not slip the opportunity of receiving all the information in my power, respecting finding the Latitude and Longitude of any place he may be sent to."[8]

At Cumberland House Turnor reorganized his "Expedition to the Northward." The previous summer's plan had fallen apart: Turnor's first choice for his assistant, Thomas Stayner, proved disappointing and George Hudson, the appointed manager, died of a lingering illness. Turnor had little trouble (or regret) replacing Hudson, but the job of assistant was harder to fill. "It would seem that the Hon^ble^ Hudson's Bay Company has found every boy is not fit for discoveries," he wrote to Colen. "They had a strange set for some years past."[9] Over the winter he had coached David Thompson, who was staying at Cumberland House to recover from a leg fracture. In May 1790 Thompson also suffered an ocular inflammation; for the moment he seemed doubtful as a good second choice. Providentially Fidler was not far away. The young labourer would need, Turnor estimated, only a brush-up course in navigation to become his third choice for assistant.

On 4 June 1790 Fidler arrived at Cumberland House with the South Branch House canoes. One historian after another has assumed that Turnor trained Fidler as he had Thompson and several other young men in previous years. But this is to overlook several important details. Only five days after Fidler's arrival Turnor wrote to Colen to announce that "Peter Fidler who seems a likely person to succeed me in such undertakings [i.e. survey expeditions] is going with me in [Stayner's] place. David Thompson who has been my assistant this year can give proof of his Abilities he has been very diligent in learning . . . his accident is to be regret-

ted."[10] Turnor thus decided quickly and definitively to take Fidler. On 9 June Thompson and Stayner embarked for York Factory with the brigade. Determined to "give proof of his Abilities," Thompson surveyed the route and sent his data to the HBC Committee in London.[11] Perhaps he could have gone north after all. Thompson had no further contact with Turnor, who clearly preferred Fidler. Meanwhile, within two weeks of his arrival at Cumberland House, Fidler took 44 observations for longitude as well as 11 for latitude and successfully worked their long and complex calculations.[12] He couldn't have gained this competence with a few hours of instruction. Once they met, Turnor seems to have recognized in Fidler an experienced surveyor who had no need of instruction. Fidler's skills are evidenced not only by Turnor's confident letter to Colen but also by three extant books on astronomical navigation from Fidler's library, signed and dated 1785, 1786 and 1788.[13] Fidler must have brought these books with him to Hudson Bay and the dates, spread over four years, suggest gradual acquisition rather than last-minute purchases when he signed with the company. In other words, by the time he arrived at York Factory Fidler was already conversant with survey techniques. His observations during the summer of 1790 demonstrated skill and experience. Where he acquired these is unknown; the most likely answer is service at sea.

The "Expedition to the Northward" set out in mid-September: Turnor the surveyor, Fidler his assistant, Malcolm Ross the future master of a post at Lake Athabasca, Ross's family and four men. Fidler's introduction to continental travel had been his trip from York Factory to Manchester House on the North Saskatchewan River. Still scorbutic from his winter at the coastal depot, he had learned how to paddle, pole, track, hand and carry a canoe, shifting his share of 1100 pounds of cargo at each portage, moving upstream almost all of the way.[14] Now he began a three-year period of constant travel. To appreciate the distances he covered, readers are invited to trace them on a large modern map of Canada. To appreciate the conditions of long-distance canoe travel there is nothing like personal experience, although a dozen internet filmlets give an idea of them. Turnor's party followed the North West Company's route through the lakes of the Churchill River to winter at Ile à la Crosse, where Fidler and another man spent several weeks with a Chipewyan band.[15] Once the rivers were open the survey expedition went north towards Methy portage but soon turned NW to Garson Lake, across to the Christina River, down it and the Clearwater River to the Athabasca River, along the shore of Lake Athabasca and north again down the Slave River to Great Slave Lake.[16] Over the second winter, while Turnor and Ross remained at Lake Athabasca, their assistant Fidler again volunteered to live with a Chipewyan band.[17] The expedition returned to Cumberland House via Methy portage and the Churchill River, then continued down to York Factory.[18] Only eight days later Fidler set out again, returned up the gruelling track to Cumberland House, continued west to a new site on the North Saskatchewan River, was put to work building Buckingham House, and that winter travelled SW with a Piikani chief named Sakatow to the eastern edge of the Rockies. In March 1793 he was back at Buckingham House. He then surveyed the

North Saskatchewan River above the post before returning to York Factory.[19] These 36 months of uninterrupted strenuous travel were spent with people Fidler scarcely knew – members of the fur-trade brigade and two entirely different Native societies – whose skills, customs and languages he learned quickly because he had to. Present-day wilderness adventurers pride themselves on achieving far more modest tests of ability and endurance.

From 1793 to 1795 Fidler stayed at York Factory as a writer, married there, spent a year at Swan River and then went back to the Saskatchewan River as a post master.[20] He became the HBC surveyor when Thompson left suddenly to join the North West Company.[21] By 1802 Fidler had explored several routes to Lake Athabasca and far up the South Saskatchewan River; he had collected information about the geography and populations west of the continental divide; he was as ready as Thompson to cross the mountains or to explore the upper Missouri River.[22]

Instead of further exploration Fidler returned to Lake Athabasca just as the North West Company's extravagant profits from this region began to taper off. Patiently, though with increasing bitterness, he endured the rival company's attempts to maintain its exclusive control of the Athabasca trade. The summer of 1811 found him at York Factory waiting to board the company ship bound for London.[23] His passage "home" may have been intended as a year's leave or the end of his overseas career. If a year's leave, it is hard to explain his decision to build an imposing stone house in the centre of Bolsover, for which he paid a good part of the money he had earned during the difficult Athabasca years.[24]

Fidler returned to a kingdom still armed against France and resistant to any hint of social unrest. He found no peace in Derbyshire: the months he spent there coincided with Luddite resistance in the textile industry, which was spreading west and north from Nottingham.[25] Similar demands for recognition of work well done and the right to negotiate acceptable labour conditions were made by Orkneymen "in combination" against decisions of the HBC Committee.[26] As a post master Fidler was bound to oppose the rebels; as a former labourer he understood their grievances; the cost of his own obedience to the HBC's aims and policies had been very high. Fidler may have been more than ever aware of the hierarchy of power at the core of England's commercial and social structures. "No order could possibly be preserved," the HBC Committee's secretary insisted, "if the Suggestions of Individuals are to be listen'd to . . . If this were to be the Case there must be an End of all subordination."[27]

But there might be an alternative. Fidler met with Lord Selkirk, who wanted to found a new colony at Red River. Fidler could live there with his family and his longtime colleagues. This was not a choice between civilization and the wilderness: provincial life in Bolsover provided less stimulus than contact with other traders. There is evidence that Fidler kept in touch with his fellow surveyor David Thompson. As he leafed through Sir Alexander Mackenzie's *Voyages from Montreal* at Nottingham House, Fidler compared his own skills and experience of the routes to Athabasca with those of the famous author. Joseph Howse, one of the Saskat-

chewan River masters, read Ovid; Roderic McKenzie read Homer in Greek with Latin notes, Raynal's *Histoire philosophique des deux Indes* in translation and *Tristram Shandy* in lighter moments. Fidler entertained his rival Daniel Harmon at Cumberland House, offering fish suppers and access to his library. Although competition between the two fur companies was cutthroat, individuals could be civil if there were intellectual interests to be shared. The conversation of fur traders was rich in reflection as well as experience. Whatever his motivation, Fidler sailed for York Factory again, this time with a band of Irish settlers.[28]

If a quiet tenure at Red River was what he had hoped for he was again disappointed. During the rest of his active life Fidler promoted the colony's interests against those of the North West Company, which relied on pemmican from hunts on the surrounding plains. Twice the colonists were dispersed and their houses razed to the ground. Fidler's books and papers were scattered during a raid on Brandon House.[29] His experience of almost daily tension and violence now stretched over two decades. He retreated to a small post west of Dauphin Lake, lived there in poor health for two years, and died at the age of 53.[30]

Fidler assumed the role of company surveyor when David Thompson deserted to the North West Company in 1797. Equally skilled in navigational techniques, well informed about contemporary scientific thought, more attuned to social aspects of fur-trade organization and Native lifeways, Fidler's importance as a period witness has been occluded by a century of attention to the renegade.

There are two good reasons for the focus on Thompson and a corresponding neglect of Fidler, despite their complementary careers. One reason is early twentieth-century historians' greater attention to the North West Company, which had roots in the French fur trade north of the St Lawrence River, around the Great Lakes and west to the Saskatchewan River.[31] Its traders were the first non-Natives to travel to Lake Athabasca and beyond the continental divide. The Hudson's Bay Company seemed merely to follow the lead of the Canadians; it was ruled from London and until 1974 its archives remained in London, open to a few privileged researchers, most of whom were British.[32] The second reason for the focus on Thompson was publication of his retrospective *Narrative*, edited by one of Canada's foremost geological surveyors and actively promoted by the Champlain Society. Thompson's *Narrative* evoked the splendour of Canada's landscapes and the drama of the fur trade in a single, accessible volume.[33] When the book appeared in 1916 it was classed with major texts of western and Arctic exploration – Samuel Hearne's *Journey from Prince of Wales's Fort . . . to the Northern Ocean*, Alexander Mackenzie's *Voyages from Montreal*, and John Franklin's *Narrative of a Journey to the Shores of the Polar Sea*.[34] For decades after publication of Thompson's readable *Narrative*, Fidler's many journals (and Thompson's as well) lay in archives, scarcely noticed by professional historians.[35] Emphasis on the "content" of these documents – events and actors – rather than on their textual form meant that the process of writing exploration accounts, from rough journals to

company fair copies and exceptionally to published books, was overlooked.[36]

As chronological records of progress towards geographical goals, Hearne's, Mackenzie's and Franklin's published books retain traces of the journals that these men kept during their travels. In the case of Hearne and Mackenzie, intermediate narrative versions of their journals indicate a practice of manuscript circulation current among gentlemen with scientific interests. These extant narratives, together with excerpts and data lists from other manuscripts are at several removes from the journals that the explorers wrote as they travelled.[37]

By the time Hearne opted for publication, an unknown number of manuscript narratives derived from his journal were in circulation. William Wales, who had spent a winter at Churchill waiting to observe the transit of Venus in June 1769, had befriended Hearne there and seems to have been the conduit by which Hearne's journey to the Coppermine River became known to London's scientific community. A modified version of Wales's own Churchill journal had appeared in the *Philosophical Transactions of the Royal Society*: the daily progress of his sea voyages was reduced to summary form while amplified descriptions of icebergs, Inuit, Chipewyans, goose hunts and intense winter cold filled out the printed text. Wales clearly stated that the journal parts of his published article covered only the time when the ship was underway; his descriptions were interpolations which he hoped might be "useful . . . or be conducive of pleasure to any person whatsoever" — in fact, to the relatively narrow circle of his scientific colleagues.[38]

Prominent in this circle defined by membership in the Royal Society were Alexander Dalrymple and Sir Joseph Banks, both of whom had been associated with Cook's voyages. Both became immensely powerful in their direction of the scientific investigations of the period. John Hawkesworth, editor of Cook's first voyage, followed Wales's lead in the *Transactions* and amplified the ship's journal with descriptions of people and places taken from Banks's private record of the same trip. Hawkesworth's book was a bestseller. Cook was dismayed by the changes but Banks was delighted: by associating Banks so closely with Cook's success, Hawkesworth's book ensured the young naturalist's scientific reputation.[39] If a published work was "entertaining," as Wales and Hawkesworth hoped, it provoked discussion and reflection; the line between diversion and edification was often blurred.[40] The readers that Wales and Hawkesworth targeted were earnest men; the eighteenth century was an age of improvement. It was also the first age of leisure reading.

Hearne was surprised by "the notice of the Public." He agreed to a print version only "to rectify" the errors and "disagreements" that were showing up in various manuscript versions of his journal. He consulted the fair copy of his journal made for the Hudon's Bay Company in 1772 and made a new copy "as correct as possible" for publication. But he did more than "correct" his journal. As Wales had done, he "expunge[d] some passages . . . as being no ways interesting to the Public, and several others have undergone great alterations; so that in fact the whole may be said to be new-modelled." Hearne conceded that publication came at a price: in his words,

he catered to "the amusement of candid and indulgent readers" in order to set his navigational record straight for "so ingenious and indefatigable a geographer as Mr. Dalrymple," who had criticized his route-finding and latitudes.[41]

Mackenzie accepted fame and publication more easily than Hearne had done. Moving in titled circles came naturally to the cousin of a laird: the Duke of Kent and Strathearn was his friend; the King was his patron. Publication was a means of promoting his dream of unidirectional global trade. An adventurous character served him well as a gentleman and a businessman; the published *Voyages from Montreal* added ghost-written heroics to earlier manuscript narratives that were based on the journals.[42] Mackenzie must also have hoped that revision would smooth over his major failures: his first voyage had led him to the Arctic, not the Pacific Ocean; during his second voyage he reached the sea only by a detour. For his part, Franklin could only hope that the published narrative of his first polar expedition, despite its disastrous turn of events, would reward him as the *Voyages* had rewarded Mackenzie, and it did: both men were knighted. The knighthoods celebrated Mackenzie's and Franklin's importance as authors – as publicists of their own explorations.[43]

Like Hearne's *Narrative*, Mackenzie's *Voyages from Montreal* went very far in the direction of Wales's journal adaptation; the published book catered to English readers' interest in exotic adventure and picturesque description. At the same time, Mackenzie did not lose sight of the scientific aims which had motivated his expeditions. He expressed the wish that "this volume, with all its imperfections, [might] not be thought unworthy the attention of the scientific geographer" – that is, of Dalrymple.[44] Mackenzie's explorations were noted by fellow traders who shared his scientific aims. Conversations with Turnor and Fidler had alerted Mackenzie to the high level of expertise attained by other fur traders. By his own admission Mackenzie spent the winter of 1791-92 in Britain so he could receive further instruction in astronomical observation.[45] Fidler copied a log of the courses and distances of Mackenzie's Arctic trip into his rough journal, then copied this log and another of Mackenzie's Pacific trip into one of his own exploration notebooks.[46] The interest of Fidler's copied logs is that they were not made from Mackenzie's *Voyages from Montreal*, which had appeared two years earlier and which Fidler had read, but from a manuscript text spared the changes considered necessary to attract the general public. Lewis and Clark had to be content with the published *Voyages*. The American captains repeated the book's heroic phrases in their journals. Thompson was fuelled with the same continental ambition, and Fraser obstinately pursued the route that Mackenzie had abandoned.[47] None of these later explorers was fooled for a moment into thinking that Mackenzie had done what he set out to do. Intrigued by his "darling project," they saw through the rhetoric proclaiming its accomplishment. Thompson, Fidler, Fraser, Lewis and Clark were interested in finding a navigable Columbia River. Mackenzie's rock in Dean Channel was not a sign of success.[48]

Fur-trade authors found the process of revision difficult, whether they undertook it for publication or for the accuracy and clarity of their manuscript texts. Mackenzie began to revise

his voyage to the Pacific Ocean soon after he had written it. He asked his cousin Roderic "to peruse at [his] leisure and correct the calculations and other errors."[49] At this stage, it would appear that Mackenzie's focus was on geographical accuracy, not pleasing polite society. When they prepared to publish their accounts, Mackenzie and Hearne before him struggled to re-cast their experiences according to norms that were foreign to their habits of mind and difficult to reconcile with their continuing wish for scientific exactitude. As they wrote their journals they were not anticipating publication; print and general readership were not goals of commercial or even naval record-keeping. Cook's journals were kept in addition to the official ships' logs. The fur traders' journals had almost nothing in common with literary travelogues such as Smollett's *Travels in France and Italy* or Johnson's *Journey to the Western Islands*. Fur-trade journals were not lacking in style. Their laconic, technical presentation was different from, not inferior to what was consumed by the reading public of the day. The journals employed a different vocabulary, were attentive to different aspects of the trips recorded, organized information differently. They cannot be viewed as a rough, early stage of published books.[50] Literary fame was not the aim and looked-for consequence of fur-trade explorations, nor was print the natural or necessary medium for their records. The fur trade of this period was a manuscript culture; so, until the late nineteenth century, was the entire European business world.[51]

Five manuscript forms – lists, letters, journals, memoirs and maps – were used by the Hudson's Bay Company to conduct its business and to communicate its scientific knowledge. Instructions for keeping records in various forms were issued to company personnel:

> You are to keep a Journal of the principal events and Transactions, happening and done in your going up to, during the time you stay at, and your coming down from [the inland houses] . . . You are also to keep an Accompt book in which you will enter the Trading goods and Stores your receive from York Fort, as also what Furs and Provisions you receive in exchange for such Goods, also what Presents you make to Indians, and what you give to the men. Also you will keep an Allowance book, and be very careful and frugal in the expenditure of the companys effects.[52]

Lists accounted for goods and furs that were the items of trade. Each item on the list had its material correlative and was assigned a price, measured by the value of a beaver pelt, in the company's Standard of Trade.[53] A sample list can be found in Fidler's second journal; as he set out on 8 November 1792 the trading goods he carried to the Piikani were enumerated and their value in "Made Br" was assigned. Most company letters were politely paraphrased lists and arrangements for delivering the items they represented, with variants of a standard salutation "wishing you health & plenty."[54] They followed a standard template and were narrowly focused: any expression of pleasure, hope or fear was strictly related to business outcomes.

Just as lists accounted for supplies, goods and furs, so the factory and post journals accounted for trade and daily work. Young employees learned by imitation, copying the form of accounts for previous years.[55] Hence the conservatism of the company's records: the format of lists and journals did not vary from the mid-eighteenth to the late nineteenth century.

Journals reflected the fact that the Hudson's Bay Company traded overseas. Ships were sent annually to Hudson Bay and James Bay, where the company's factories lay like additional ships moored to the shoreline. The organization of these trade centres resembled the social structure of ships' crews, and more than a few men who worked in them had previous experience at sea.[56] The journal structure was derived from the basic function of a ship's log — to ascertain position and record a route by dead reckoning. This system of plotting travel dates from the fifteenth century, when ships first sailed beyond sight of land; it is still central to modern navigation.[57] Direction was determined by a compass bearing, distance by the time travelled, and the sequence of courses was noted in a log. Here, for example, is part of the entry for 22 July 1775 in the log of the HBC sloop *Charlotte* during a passage from London to Hudson Bay. The page is ruled to note time (in hours), speed (in knots), depth (in fathoms), bearings, winds, and the operation of the ship ("Remarks").

H	K	F	Courses	Winds & Weather	Remarks
2	3	4	N½W	WNW	a strong Gale and Hazy Carry'd away the Bobstay Iron at the Bowsprit end. So Close Reeft the Bowsprit and set the 2^{d} Jibb with the Bonet off.
4	3	4	N½E	D^{o} weather	a great many Isles of Ice
6	3	-	NbE	NWbW	more Moderate fix'd a Snap for the Bobstay and set it up[58]

Information flows from the left-hand categories into the "Remarks." In this excerpt from the *Charlotte*'s log the "Remarks" include sea conditions, weather and adjustment of the sails in response to them. The log of the HBC brig *Ceres*, three decades later, used the same template and recorded the same kinds of information.[59] Midway between these voyages the log of the *King George* recorded Fidler's passage from London to York Factory during the summer of 1788, in company with the sloop *Sea Horse*. On the left side of each opening was the usual set of ruled columns for noting the speed, depths, courses and winds with another column for "Remarks"; the recto was left blank for further remarks. Once underway William Christopher, the

captain, filled in the spaces for each kind of information every two hours; occasionally he would sum up the day's work from noon to noon. In Hudson Strait, for example, he added this note to his measurements for Monday, 28 July 1788:

> These 24 hours have had for the most part rainy Wea^{r} with thick fogs very little wind & calm at times rowing & towing among open Ice At 7 AM came to a Grapling & made the Signal for the Sea Horse The Sloop made fast to the same peice of Ice with us. Fired a gun in answer to one from the Sea Horse. S^{d} but had no ground with 150 f^{m} of line.[60]

At anchor in front of the factories Christopher ignored the columns of the template, sometimes writing across them, sometimes writing only on the recto. The entries for 18-29 August 1788 were written across the opening, from the "Remarks" column to the far edge of the recto page. For example,

> at ½ Pm came to Anchor in 5 f^{m} hole Moor'd with both bowers water Shot Hoist'd out the Long Boat after making the Signal Down top Gall^{t} Y^{ds} & Masts & made the Ship all Clear for delivering the Cargo.[61]

Journals of the overseas service adopted this in-port style, restricting each entry to a set of remarks. Mention of the day and date would be followed by notice of the wind and weather, travel progress or the men's employment, and any notable events. When posts were established west of Hudson Bay, their masters were expected to keep a daily record using the same journal format. Complete inland journals began at the Bayside factory and ended there, roughly a year later; time spent at the posts, which could be seven to eight months, was simply a long pause in the journey from and to the Bay.[62]

The prescriptive nature of daily business records reduced various objects, places, individuals and groups of people to manageable categories. Special knowledge gained from experience at the Hudson Bay factories and posts was filtered and controlled by means of these written forms. Colen, the York Factory chief, "was a perfect Master of his Pen in writing and figures"; as a result he held his own against William Tomison, the inland chief.[63] Down the scale, men with even marginal writing skills were able to keep records that were reasonably clear and complete, thanks to the journal template and its set phrases.[64] Thus characteristics of the ship's log produced in the HBC's journals a spare, technical, almost impersonal reportage.

Lists and journals recorded everyday business in the company's overseas service. In the spring "fair copies" were made of them; these copies were collected and shipped to London with the year's "return" of furs. An additional form of record was the personal memoir. Several pamphlets were published by former employees,[65] but far more important to HBC exploration

were two manuscript memoirs that summed up a long acquaintance with the natural and social environments of the company's trade in North America. They were the work of men who commanded York Factory and Churchill between 1737 and 1774. James Isham's "Observations on Hudsons Bay" were written at both forts and sent to the company's directors in 1744. The first state of Andrew Graham's "Observations" dates from 1767. Graham continued to copy, amplify and modify his memoir after he retired from active service; the last state dates from 1790.[66]

The mid-eighteenth century saw the rapid development of scientific research and promotion of what can be called a scientific attitude. Scientific societies and observatories in Britain and France were established roughly eighty years before Isham set to work. By mid-century these institutions defined properly scientific subjects and standards of research, and were increasingly identified with projects of commercial and imperial expansion. In the 1770s Cook's circumnavigations represented the interaction of scientific, commercial and imperial aims. Cook's *Third Voyage*, published in 1784, made Europe aware of additional resources and possible routes of global trade.[67] Knowing what lay between Hudson Bay and the Pacific Ocean took on new importance, and the kinds of knowledge now considered necessary were very different from almost legendary quests of the sixteenth and seventeenth centuries.

Isham was introduced to scientific research when he was obliged to host Christopher Middleton and his ships' crews at Churchill in 1741-42. Middleton, commissioned to find a northwest passage, kept busy as he overwintered in Churchill's harsh climate. His research on the effects of cold, conducted at Churchill, was published in the Royal Society's *Philosophical Transactions* and awarded the society's Copley medal.[68] Middleton arrived at his conclusions by experimentation, the core technique of scientific research recommended by the Royal Society. Probably he discussed his scientific work with Isham and outlined other scientific contributions to be made by means of measurement, collection, classification and description. Fur-trade research could be scientific by its regular measurement of temperatures, by its systematic route surveys, by determining latitude and longitude. Flora and fauna could be listed; specimens could be collected and classified. Geographical regions and their features could be described in detail, together with their inhabitants.

Isham's "Observations" reflect his awareness of these techniques. He was not a well-educated man and he was living on the margins of his cultural world. Nevertheless he was a scientific pioneer. Not only did he collect and describe plant and animal species, particularly birds, that were unknown in Europe,[69] but far more importantly he innovated by making a study of the Native populations who traded at his factories. Decades before Cook's description of the Tahitians, long before ethnography was considered a science, Isham documented the people he lived with, met and heard about, borrowing the techniques of classification and description he used to compile his lists of flora and fauna. Classification in Isham's "Observations" was according to language and territory. Description was limited to observation of physical characteristics, dress, houses, hunting techniques, habits, customs and ceremonies. Isham was less sure of Native

beliefs; he made only a few general remarks, "all the acc[t] I can give upon this Subject."[70] Isham's perspective was always that of a European; as he made very clear, "I [could be] satisfied in my curiosity and Glad I had gott Clear of my unmannerdly company."[71]

The people who most interested him were those about whom he knew next to nothing – the "Earchethinues [Piikani or Siksika, whose] Country Lyes on the Back of this Land," a country unseen and unmapped by Europeans.[72] Isham asked the company's permission to send a young man inland to promote trade with the factory, to map the route he followed and to describe the people he met.[73] Isham's choice was Anthony Henday, although the young man's route-finding skills were approximate at best and he spoke no Cree when he set out.[74] Henday went up the Hayes River in June 1754; a year later he returned to York Factory. He reported meeting not only Earchithinues but also French traders who offered stiff competition at their inland posts. Isham added an optimistic gloss to Henday's report and may even have authorized changes in the fair-copy journal sent to London. The HBC Committee looked instead at Henday's log and map, complaining that he was "not very expert in making Drafts with Accuracy or keeping a just Reckoning of distances other than by Guess which may prove Erroneous."[75] Following Henday's first trip, more winterers were sent west from York Factory. Their journals were just as vague; some of the young men kept no journal at all. Trade was furthered by these inland visits, but Isham's scientific aims remained unfulfilled for the rest of his tenure at York Factory.

Graham's memoir was modelled on Isham's but it was better organized and far more detailed. Isham's mixed topics, one suggesting the other in various ways, were presented in Graham's work as a sequence of general categories and an orderly arrangement of items within them. What came to be valued as precise, clear and rational analysis stemmed from intellectual practices that overruled earlier perceptions of relationship and kinds of explanation.[76] Isham struggled with the new norms, and so did the young men he sent inland. Graham was closer to mastering them. Graham's specimen collections and descriptions were reported to the Royal Society by John Reinhold Forster, a naturalist who sailed with Cook; Thomas Pennant referred to Graham's lists in his *Arctic Zoology*, published in 1784-85.[77] Graham also worked with Thomas Hutchins, the surgeon at York Factory. Hutchins went on to conduct more experiments on the effects of cold for which, like Middleton, he won the Royal Society's Copley medal.[78] Added to this recognized scientific activity were the expansionist and explorational aims that Graham inherited from Isham: to increase inland trade, to map the country "behind" the western Bayside factories, and to describe the nations who lived there.

Graham began his "Observations" with a description of Hudson Bay. He outlined its extent (expressed in coordinates of latitude and longitude) and its climate (measured in high and low temperatures); then he listed its geographical features (elevation, soil, rivers and lakes) and described its animals, birds, fish, insects and plants. After describing various native species he wrote, "It is full time I should say something of the inhabitants."[79] He described the Cree who lived near the factories and with whom he had been acquainted for years. It is worth noting the

combination of close observation and intellectual distance in his descriptions. This observer position ruled out Graham's longstanding personal relationships; instead, as Isham had done, Graham focussed on external signs – dress, customs, ceremonies – and emphasized differences between Cree culture and his own. "While they have a sufficiency or abundance they never have any thought to provide for the future . . . When they observe an Eclipse of the sun, or Moon, they are much afraid . . . They have no manner of Government or Subordination amongst them."[80] Graham considered that "the best method of giving a just idea of their dispositions [is to] mention such of their peculiarities as have come within my knowledge."[81] As Isham had done, Graham described the Cree of Hudson Bay much as he described the specimen birds and quadrupeds he sent to London.

Like Isham's, Graham's information about plains nations was second-hand, gained from young men who wintered with Plains Cree and Assiniboin bands. In 1771, when he began his second term as interim chief at York Factory, Graham analyzed the winterers' success in bringing more trade to Hudson Bay. He concluded that competition from Montreal traders along the Saskatchewan River must be matched by new tactics, but before anything was decided the company would need more and better information about inland geography. Matthew Cocking, second in command at York, volunteered to make the same trip that earlier winterers had made. "He will give a rational Account of things & endeavour to find the Lat & Long of the several places," Graham wrote hopefully.[82] In Cocking, for the first time the company had a winterer who was fully literate, who spoke Cree and who had some training in navigation.

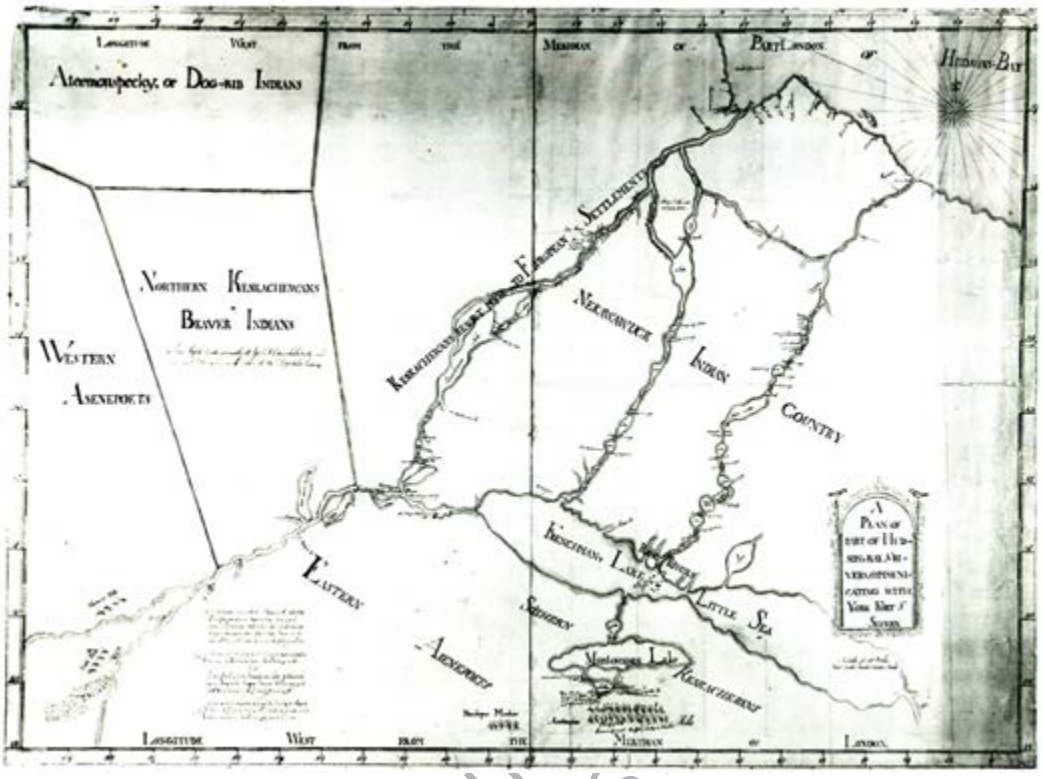
Cocking was absent for a year from York Factory; he returned with a coherent journal and a log of his courses and distances. His observations for latitude provided fixes for his courses, although some of his sights were better than others. His descriptions of landmarks, regions and the people he met were fuller and sharper than those Graham had found in earlier journals.[83] Cocking noted fairly accurate direction and distance, Native names and accurate translations, landscape features, lists of trees, shrubs, birds, animals, and how the Cree used these resources. He documented various hunting methods, including the use of pounds, and the band's dispersal as food sources became less plentiful in winter. A ceremony, the wippetanassowin, marked the first separation.

> This day was spent in feasting on Berries (which are going out of Season) and a farewell smooking. The Leader gave a Wippetanassowin or throwing away of things, this they commonly do every Year. On this occasion all the Men and Women were invited, the Leader's grand Pipe Stem being exposed to view, and several Speeches made. Two Looking Glasses with several other triffles were presented, these were to be given to the ground to induce it to favour them with plenty of Furrs and Provision; they have a notion that these gifts have a great effect, and when any thing happens contrary to their desires, they commonly use this method to appease the ill Demon.[84]

This description went far beyond what the Hudson's Bay Company needed to know for trade with the Plains Cree; it resembled instead Graham's analysis of the Cree in his "Observations." Graham may have encouraged Cocking to make such detailed remarks. While he carefully noted details of the wippetanassowin, Cocking considered this custom to be "very foolish" because it could leave the band deprived of necessities.[85] As an Englishman Cocking did not share Cree beliefs, and to the extent that he subscribed to Graham's scientific enquiry he would have adopted its skepticism. The detail of his description is also scientific, the result of careful enquiries and close observation of the participants.

Graham mapped what data he could glean from the winterers' journals.[86] By 1772, when Hearne returned from the Coppermine River, the company was as impatient as Graham with vague reports of the Saskatchewan River. Thanks to his naval training Hearne had been able to keep a journal and draw maps that gave the company some idea of the hinterland served by their factory at Churchill.[87] The buzz in British scientific circles created in part by Hearne's explorations suggested a new way of doing business. Samuel Wegg, the HBC governor, had been treasurer of the Royal Society before his company appointment; now he moved his firm into the Royal Society's orbit.[88] Under Wegg's direction the Hudson's Bay Company hired a trained surveyor recommended by Wales.[89] By early September 1778 Philip Turnor was on his way to Cumberland House via the Nelson River; in mid-March 1779 he was a good distance up the North Saskatchewan River. Turnor returned to York Factory by the "lower track," soon to be the usual route from Cumberland House to York Factory. There he drew "A Chart of Rivers and Lakes Falling into Hudson's Bay . . ." based on his survey journal.[90]

Turnor's 1778-79 journal reverted to the original function of the ship's log. It was once again a route-finding device, a stage of mapping. Turnor's journal was a running survey, essentially the same as dead reckoning, the record of a ship's alternate directions while it beat against the wind. The general direction was not taken relative to a particular landscape feature but was deduced from the pattern of courses recorded in a log and later plotted on a map.[91] The accuracy of dead reckoning depended on careful measurement and notation of every change in direction and all the distances covered. Adapted to route-finding in the maze of rivers and lakes between York Factory and Cumberland House, then over relatively featureless plains, this nautical technique was reinforced by occasional sights for latitude and longitude. The astronomical fixes were points between which sequences of courses (direction plus distance) could be plotted on a cartographic grid.[92] Turnor's latitudes were often accurate to the minute; his successors Thompson and Fidler observed to the second. The running survey, corrected by astronomical coordinates, was the core technique of Turnor's, Thompson's and Fidler's journals. Further remarks on geographical features, the rate of progress, organization of the trip and any noteworthy events could be added to the course sequence, but they were no substitute for this sequence. Here, for example, is Turnor's account, on his passage down to York Factory, of the Echimamis River past Painted Stone to "the white Fall" (Robinson Falls):



HBCA G.2/17: [Graham], "A Plan of Part of Hudson's-Bay, & Rivers, Communicating with York Fort & Severn." 1774. This map includes Cocking's exploration west to the Eagle Hills.

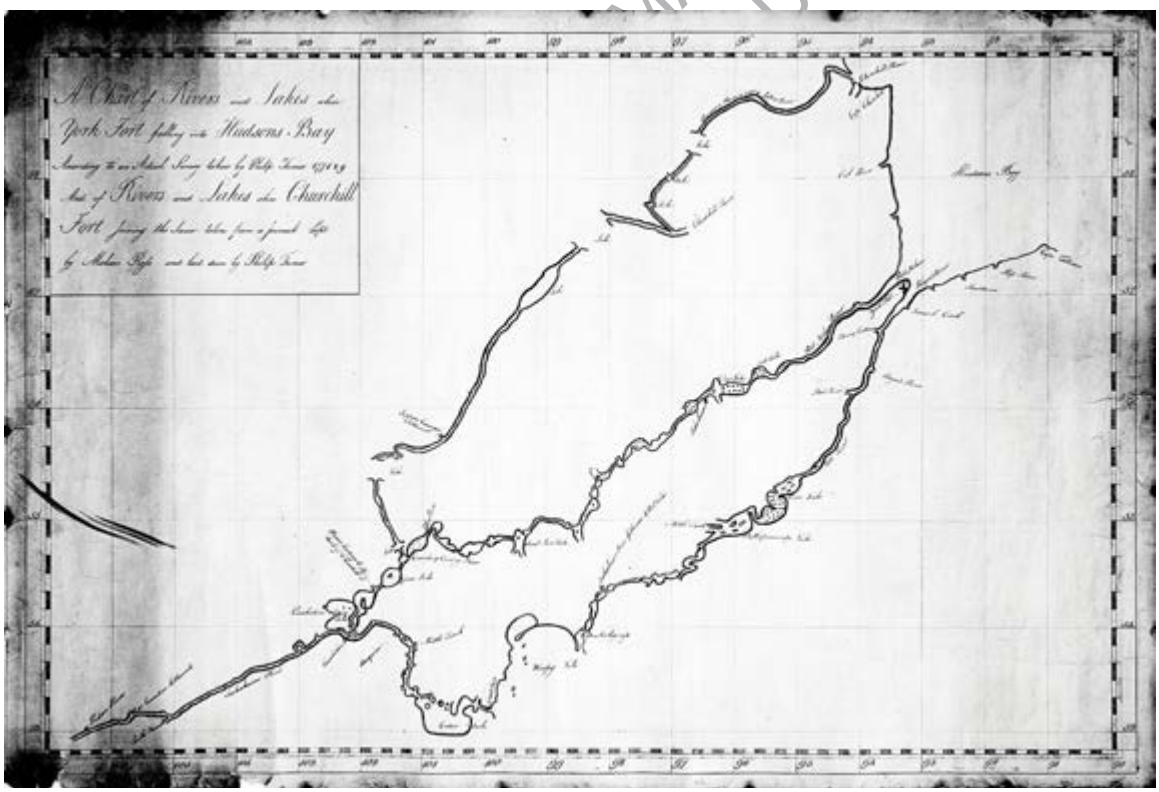
1779 July 1st Thursday at 2 AM got underway in a narrow river and very black water easey current against us, went about 30 Miles mostly from E to NE (the River in some places not above 4 yards wide but good depth of water) came to the end of the River which is a small Bay the sides bold Rocks which the water is supposed to spring out of, Carried over a low Rock at the end of the Bay 50 yards into another bay of the same kind on the other side the Rock. Latitude by Observation 54°26'N° went 8 Miles E by N, in the Bay which in some places is ½ Mile wide land on both sides bold and Rockey, a branch of a large River joined us falling from the South went down this River Et 1 Mile & NE 1 Mile and came to a Lake about 2 or 3 Miles wide 7 or 8 ft deep Land bold and Rockey, went Et 4 Miles & NE 5 Miles and entered a River and went ½ Mile and came to the white Fall & Carrying place and put up at 7 PM, Wind Wt light breeze & Clear

> 2nd Friday this morning carried over the Carrying place being 1400 yards the Indians being behind did not get underway until 1½ PM went 2 Miles from E to NE and entered a Lake and put up at 2½ PM the Indians being hunting. Wind Easterly Cloudy weather[93]

Turnor's courses were complemented by measurement of the width and depth of rivers and lakes. Special care was taken to trace an intricate route through the rivers and lakes. In the flat watery landscape of the Canadian Shield the art of route-finding was to follow a single track through a multiplicity of lakes and streams. Turnor's entries did this; the journal's sequence of courses indicated the map line to be drawn using the journal as the field reference.

Characteristic of Turnor's journals, of Thompson's and Fidler's as well, is the rigorous isolation and sequencing of geographical features. This notation reflects a conscious decision not to group or collect. In the passage above, Turnor recorded his route through three rivers, two bays and two lakes. The features were mentioned one by one as he came upon them, in strict chronological order; subsequently he would map the route he followed with the features

HBCA G.2/11: Turnor, "A Chart of Rivers and Lakes above York Fort Falling into Hudsons Bay According to an Actual Survey . . ." 1787-8.



drawn in the same order. Time was translated into distance for each course, and also from one day's work to the next: at a fairly constant rate of travel, the distance between Turnor's early-morning departure on 1 July and his arrival at Robinson Falls 17 hours later could be estimated. The habit of mentioning features in specific time/distance contexts extended to descriptions of them ("land on both sides bold and Rockey . . . Land bold and Rockey") and even to narrating the organization and progress of the brigade ("the Indians being behind," "the Indians being hunting"). Every topic was localized in space and time, linked to points along the route and presented as the writer passed them.[94] This journal structure, which operated by tagging its information, fixing it specifically to the place and moment of its observation, was quite different from the tendency of published exploration narratives to group similar features, to omit others, and to replace the journals' specificity with comprehensive views. In their published form exploration journals avoided repetition and turned a succession of details into "prospects." The published narratives were easier to read in an armchair but useless when travelling the route.

Thompson's first survey was of his passage from Cumberland House to York Factory in June 1790. His entry describing the Echimamis River and his arrival at Robinson Falls can be compared with Turnor's.

> June 20th . . . entered Eachawamahmus Co NE 8 M turnings from North to East ESE ½M sharp turnings and short from East to South then North 150 Yds from NW to SW 2M East 2M South ½M ENE 6M SSE 1M NE and ENE 5M 3 bad Beaver Dams the land low Grassy in places and rocky, very little current & its width about 10 Yds to 8 Yds at 6½ AM came to the Head of the River and put up on the Carrying place.
> June 21st Wind North a stiff Breeze Weather Clear at 5 AM embarked, entered the Dead waters Co EbN 1½M about 20 Yds wide EbS 2M E5N 2½M E15N 2M E5N 1½M E15S 1M East ¾M SEbE ¼M enter a Lake Co ENE 1M EbS 2M NE 3½M enter a River 60 Yards wide land low Co West ¼M NW ½M came to the White Fall Carrying Place carried over and put up about 11¾ AM[95]

Already the student was surpassing Turnor in the fineness of his course notation. The entries of this journal consist of little else besides measurements. Numbers were Thompson's exclusive building blocks; reading these entries from Thompson's journal, one could be forgiven for not immediately recognizing the features of the route: a dark sluggish river, a stone at the portage, a lake with stands of wild rice, the river barred with beaver dams, three steep falls and a long portage around them. Fidler's entries for 12-15 August 1792 not only provide the sequence of courses and four sights for latitude; they also describe all of these features in detail and include three sketch maps. Fidler's surveys were as careful and exact as those of Thompson; like Turnor and much more than Turnor, Fidler was also attentive to description of geographical features and to their appearance as one came upon them. Turnor must have been surprised and even

taken aback by the way these two young men immediately developed their own styles of surveying and arrived at results that were fuller and more accurate than he himself could produce.

A characteristic of Fidler's surveys was to record much, at times most, of his information in the form of small sketch maps that provided an immediate visual impression and described very efficiently certain aspects of geographical landmarks. A precedent for such drawings can be found in naval surveys: for example, Franklin, whose first land expedition mapped the Hayes River route in 1819, coupled the day's work of measuring directions and distances with "making a connected eye-sketch of the whole."[96] These "eye-sketches" were drawn in plan; they were distinct from "views" (usually of harbours as seen from ships approaching them) that marine navigators also drew. The "eye-sketches" were small provisional maps attached to the log.

The conventions of Fidler's small maps also point to Native cartography as a model. Fidler would have had many opportunities to see and use Native maps, and his collection of them indicates the high value he placed on them as tools and records of the regions he explored. The "sense" of Native maps lay in their connected design, not in a mathematical ratio between cartographic space and the earth's surface.[97] Small maps that employed Native cartographic conventions and emphasized tracks and links, as Native maps did, were part of Fidler's surveys from the start; many of them figure in his first extant journals.[98] Tyrrell's comment on one of these early drawings is perceptive: "Fidler's map of Cumberland Lake gives a general idea of its shape, though it is neither on a definite scale, nor is it orientated in any definite direction."[99] These are characteristics of Native maps.

A third model for Fidler's sketch maps was the common practice of his fur-trade contemporaries, many of whom drew small maps of the areas they traded in and the routes they travelled. Ninety drawings of rivers, lakes, coastlines and trading regions, the work of thiry-five traders, have survived from the period between 1770 and 1820, the date of Fidler's last map. The practice of making sketch maps was common to all the fur companies; it was casual, widely diffused and well understood.[100] The integration of sketch maps in Fidler's journals was unique, however. The drawings were not illustrations, as his later surveys clearly demonstrate: by 1809 complete entries were presented in map form; already in 1792 the maps were integrated seamlessly with the measured sequence of courses and verbal descriptions of landmarks and landscapes.[101] The little maps were the text's visual component, presented together with its numerical and verbal components. Lines of directions and distances (e.g. SW ½, WNW ¼) followed the left-to-right sequence of words, often through the drawings, while annotations (e.g. sandy bay, hill, burnt woods, way to the middle track) were verbal elements inscribed on the maps. Fidler's progress was measured, narrated, described and drawn simultaneously.

Surveys commissioned by the hudson's bay company were plotted as maps and added to the company's business record. During Wegg's term as governor, the company actively promoted surveys of its territory and paid Turnor to produce a huge 75 x 100 inch (193 x 259

cm) composite map of the company's inland trade routes. Turnor relied on earlier maps drawn at Albany, his own surveys, maps of the west coast drawn by Cook and maritime fur traders, a log of Mackenzie's route to the Arctic Ocean and, as soon as they were sent to London, maps by Thompson and Fidler.[102] Wegg saw publication as a way to confirm the company's right to control the vast territory depicted on the map. He therefore allowed the London cartographer Aaron Arrowsmith to copy from Turnor's work. Arrowsmith reduced Turnor's manuscript map to a 36 x 66 inch (90 x 169 cm) engraving, published as *A Map Exhibiting all the New Discoveries in the Interior Parts of North America*.[103] Arrowsmith effusively thanked the "Honorable Governor" of the Hudson's Bay Company for his "liberal Communications" but made no specific mention of the fur-trade cartographers. Turnor retreated to Rotherhithe, a dockland suburb of London, where he taught navigation until his death in 1799.[104]

An odd pattern of communication developed between the company's head office, its surveyors and the Royal Society. For a time the future of Turnor's successors seemed bright. Thompson mapped his surveys of two routes from Lake Winnipeg to York Factory, sent this map to the HBC Committee in 1794 and was duly commended for his diligence.[105] The following year Fidler sent a map of his western surveys to Turnor, who was then able to plot the company's westernmost discoveries. A detailed image of the Saskatchewan River watershed was added when he saw Fidler's regional map in late 1795, at least eight months after receiving payment for his composite map in January 1795.[106] By 1799 the HBC Committee grew impatient with their new surveyor's indirection: they thanked Turnor "for the Communication of M^{r} Fidler's Loc^{n} [probably some longitudes] they think he should have likewise wrote himself to the Board."[107] In 1802, after two years at Chesterfield House on the company's southwestern trade frontier, Fidler obeyed the Committee's directive and sent them three new maps. The first was a fresh reworking of Fidler's 1792-93 surveys with the addition of his exploration of the South Saskatchewan River in 1800. The second map was his plotting of Native information about the upper Missouri River and multiple mountain ranges west of the great divide. The third map was his copy of a Siksika chief's drawing of the Missouri.[108] Favorably impressed, the Committee not only forwarded Fidler's maps to Arrowsmith but also alerted Banks and Dalrymple in identically worded letters.

> Some Maps & Papers which appear to throw considerable light on the North Western Geography have been sent home by a M^{r} Fidler now in their Service. These Maps &c are deposited with M^{r} Arrowsmith who considers them as important in ascertaining with some degree of certainty, the Sources of the Mississury . . . it will be highly satisfactory to the Governor & Committee if these Discoveries should be of Sufficient Importance to attract your notice.[109]

Not since Hearne had a company employee been so specifically and personally recommended.

When Arrowsmith first published *A Map Exhibiting all the New Discoveries*, Turnor, Fidler, Thompson and the company's other cartographers had been kept, like good servants, in the background. Now Fidler might win the attention of the Royal Society, as Middleton, Graham and Hearne had done in previous years.

Neither Banks nor Dalrymple expressed interest in Fidler's maps. Dalrymple's indifference was a volte-face. In 1790 he had published a *Memoir of a Map of the Lands around the North Pole*, part of his promotion of a global trade scheme requiring continental access to the Pacific.[110] He had consulted published narratives and printed maps; he had examined Native maps collected by the Hudson's Bay Company; he had spoken with Wales and learned of Hearne's journey to the Coppermine River. Dalrymple's *Memoir* recommended the program of discovery that Mackenzie, Turnor, Fidler, Thompson and Fraser carried out for the next twenty years. They read Dalrymple's *Memoir* and acted on it: Fidler's letter to the HBC Committee in July 1802 repeated a phrase from the *Memoir* verbatim.[111] Dalrymple formed the aims of a generation of fur-trade explorers. But Dalrymple made no move to accept Fidler's maps as contributions to British science.

After 1802, when Banks and Dalrymple failed to notice his work, when Arrowsmith took what he wanted and left out the rest, Fidler may have realized what Thompson was also to learn in years to come: that science was not so much a set of principles and methods meticulously followed, not so much the rational exposition of new evidence, as it was the imprimatur of certain socially prominent authorities. Science was defined by the interests of the gentlemen who met regularly at Somerset House; the scientific importance of arguments, evidence and proofs depended on what they chose to consider. After Vancouver's naval surveys defeated maritime traders' hopes of a northwest passage, after Mackenzie failed to find the Columbia River, Dalrymple laid aside his scheme of global trade "through" North America. Fidler's explorations were now considered irrelevant to British commercial and imperial interests.[112] Meanwhile Thomas Jefferson was ambitious to explore the Louisiana purchase and west, beyond it, to the Pacific Ocean. He read *Voyages from Montreal*, perused one of the 1802 states of Arrowsmith's *Map Exhibiting all the New Discoveries*, and immediately organized the Lewis and Clark expedition.[113]

Remarkable in the journals reproduced in this edition are Fidler's descriptions of Native societies living on the western plains and across the continental divide. Half a century earlier, these people had been the subjects of rumour and speculation in Isham's "Observations." Henday was sent to meet them and persuade them to trade at York Factory. Ninety-six days of travel brought Henday's Cree band to rolling prairie with "Buffuloe in great droves," where they met seven tents of "Archithinues, the Men all mounted on Horseback with Bows & Arrows, and Bone spears, and darts."[114] At a much larger camp of hundreds of tents, Henday tried to persuade the chief to travel to Hudson Bay. The chief agreed, according to the version of

Henday's journal sent to London; in Henday's other three texts, copied into Graham's "Observations," the chief demurred:

> He made answer it was far of, and that they could not Live without Buffalow's flesh, and that they never would leave their Horses, and mentioned many more obstacles, which I thought was very Just, the Chief of which was that they never wanted provisions.[115]

Henday was duly impressed with the plenty and ease of the Archithinues' life, with their abundance of horses, their skill in using them to hunt buffalo, and the signs of their victories in war. He made his trade speech to the chief; at the same time he could see that these people lacked for nothing that his company could supply.

For twenty years after Henday's first trip inland, the far-off plains nations that he and Isham had documented were undefined as separate groups. In 1772, camped near Eagle Creek, Cocking learned that there were eight nations "which go under the name of Yeachithinee Indians." On the plains east of the continental divide lived the "Powestick Athinnewach or Water-Fall Indians . . . Mithcoo-Athinneewock or Blood Indians; Koskiketew Watheessituck, or black-foot Indians; Pigonew Athinnewock, or muddy Water Indians and Sussewuck, or woody country Indians,"[116] who are now known as Atsina, Kainai, Siksika, Piikani and Tsuu T'ina. The other four nations, from across the mountains, were considered enemies of those on the plains. A map drawn for Fidler by the Siksika chief Akkomokki in 1802 identified smaller groups along the divide and to the south, along tributaries of the Missouri River.[117]

The Hudson's Bay Company's names for the Piikani were "Pekenow" and "Muddy River Indians." Robert Longmoor, who built Manchester House in 1786, initiated trade by sending four men "to the Stony Mountain with Different Articles of Trading Goods for the Pee-ke-new Indians and to bring them in, in the Spring."[118] This was a variant of the earlier winterers' trips from York Factory and the precursor to Fidler's trip in 1792-1793. The HBC men returned with numerous Piikani bringing a large first trade. William Tomison named ten of the Piikani men as "Leaders," gave them presents and "rigged" six of them in fur-trade clothes. "This I have done for their better encouragement," wrote Tomison; "none of these went to any of the other Houses."[119] It might be thought that with such a welcome the road to habituation, dependence and decline stretched ahead and was already well paved.[120] But according to Fidler's journal the Piikani's way of life was not essentially altered by the fur trade. The people with whom Fidler travelled lived exactly the same plentiful, traditional life that Henday had witnessed almost forty years earlier. Archeological studies of kill sites and camp sites east of the front ranges indicate the "time depth" of this tradition. The Old Women's phase endured more than a thousand years and ended only when buffalo herds disappeared from the plains.[121] Nations of the high plains were not dependent on European goods before the mid-nineteenth century. Fur-trading

was secondary to the preoccupations of hunting and war. As James Bird wrote from Edmonton House,

> all without exception are tenting in the plains, killing buffalo for themselves to eat and catching a few wolves . . . most of the Indians are going off to a pound where they are assembling in order to form a war party early in the spring.[122]

"A few wolves" would pay for all that was wanted in trade with the Europeans. Brazil tobacco was enjoyable but the plains nations grew their own tobacco. Brandy was consumed in quantity while trading, but long dry months separated the Piikani's visits to the Saskatchewan River posts. Guns were reserved for war, often used for their shock effect, but as late as 1819 battles were still fought with traditional weapons and the large shields depicted in "ceremonial" rock art. Meanwhile buffalo were run off jumps, driven into pounds, and shot from horseback with bows and arrows. At this time only horses, traded along from Spanish territories, often stolen and naturally proliferating, were an important consequence of indirect contact with Europeans; yet in almost every respect horses enhanced more than altered traditional plains life. Fidler travelled with people whose lives were scarcely touched even by direct contact. His journal describes daily life in this millennial culture.

Thanks to its detailed descriptions, Fidler's journal of his months with the Piikani is the most reliable documentation there is of a western plains nation's seasonal movement and the buffalo hunts that sustained their way of life. To my knowledge Fidler is the only writer to have witnessed use of a jump; his subsequent description of pounds over a period of several weeks indicates why pounds were a preferred method of hunting. Tent counts in various camps furnish insights into social structure and the rhythm of aggregation and dispersal. His encounters with Shoshone on a peace mission and Ktunaxa who crossed the divide to trade horses were the first instances of direct European contact with both nations. The sharpness and balance of Fidler's cultural perceptions, together with precise location of the Piikani's activities, make this eye-witness record an extraordinary source for scholars, not to mention the Piikani themselves. It is astonishing, given its ethnohistorical importance, that this journal has received so little attention.

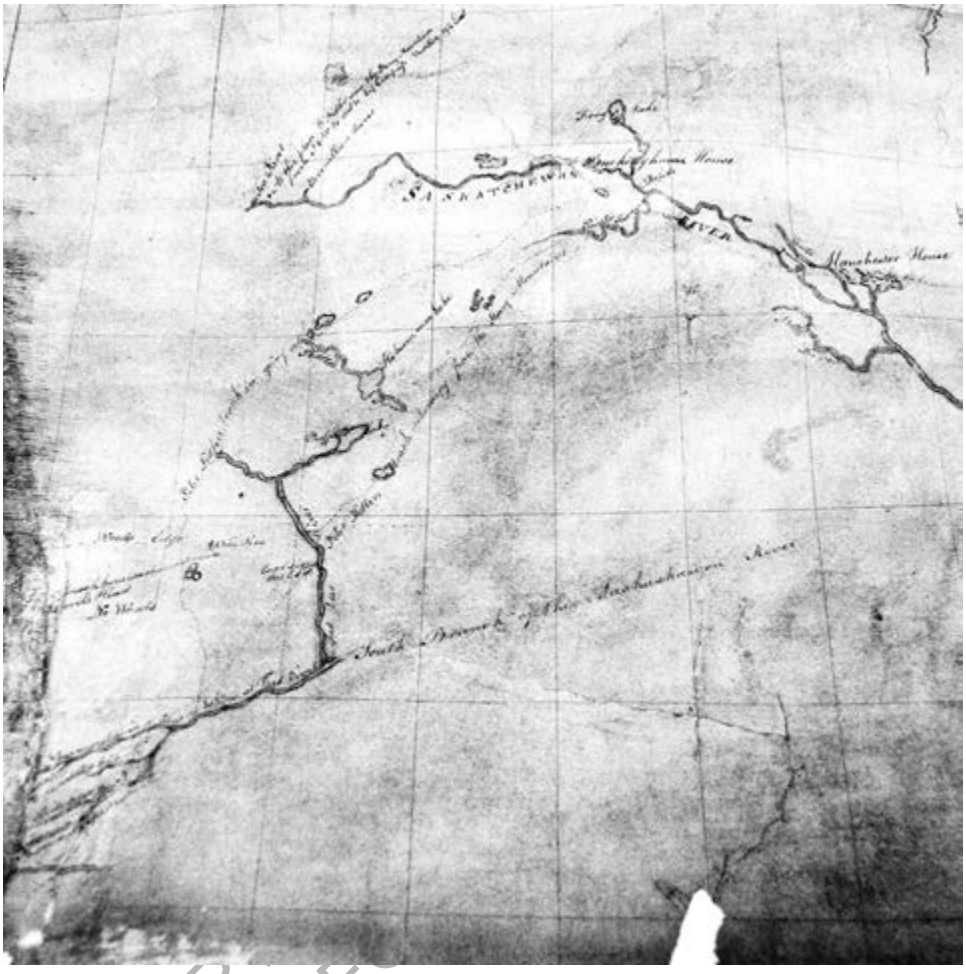
Worth noting are the two kinds of information that contributed to Fidler's ethnographic descriptions. Like Graham's notes on plains nations, Fidler's report of the Ktunaxa's way of life was based largely on others' experience of it; he inserted a summary report, learned at second- or third-hand, of two North West Company engagés who wintered west of the great divide in 1800-01.[123] Fidler's reported topics were the same as Graham's – location of the region, its climate and landscape features, animals to be hunted there, tools, tribal organization. In contrast, Fidler's journal of a season with the Piikani was a daily notation of his own observations and experiences. Fidler's description of Native societies, like his respect for their maps, hints at

considerable appreciation and understanding. Yet the outsider stance he assumed in his journals was in line with Isham's and Graham's "Observations." He was amused by the Ktunaxa's pipe ceremony; he was quick to attribute the Piikani's curious attention to his sights for latitude to "whimsical notions." When he witnessed a shaking-tent ceremony Fidler seems to have been unaware that the roles had been reversed. On both sides, beyond curiosity and a polite respect for custom, there was no acceptance of the other's practices and beliefs. Fidler's view of the Piikani and their neighbours was across a cultural distance he made no effort to close. After four months with Sakatow's band he returned to the fur trade and its own kind of métissage.

Scientific recognition of his survey-based maps may have been one of Fidler's ambitions; publication of his journals, as Hearne's and Mackenzie's had been published, was not. Fidler worked and wrote entirely within the manuscript culture of the fur trade. He was well aware of contemporary publishing; his personal library was one of the largest owned by a trader. He spent a great deal of money on books, took good care of them, even rebinding some that had suffered hard carriage, and generously lent them to his colleagues.[124] He was interested in the look of printed books. When he copied his exploration journals into a set of vellum-covered notebooks he furnished page numbers, running titles and a table of contents. Copied journals were insurance against loss in a nomadic and risky occupation. Fidler's copies of his exploration journals also indicate their value as a record of his scientific achievement.

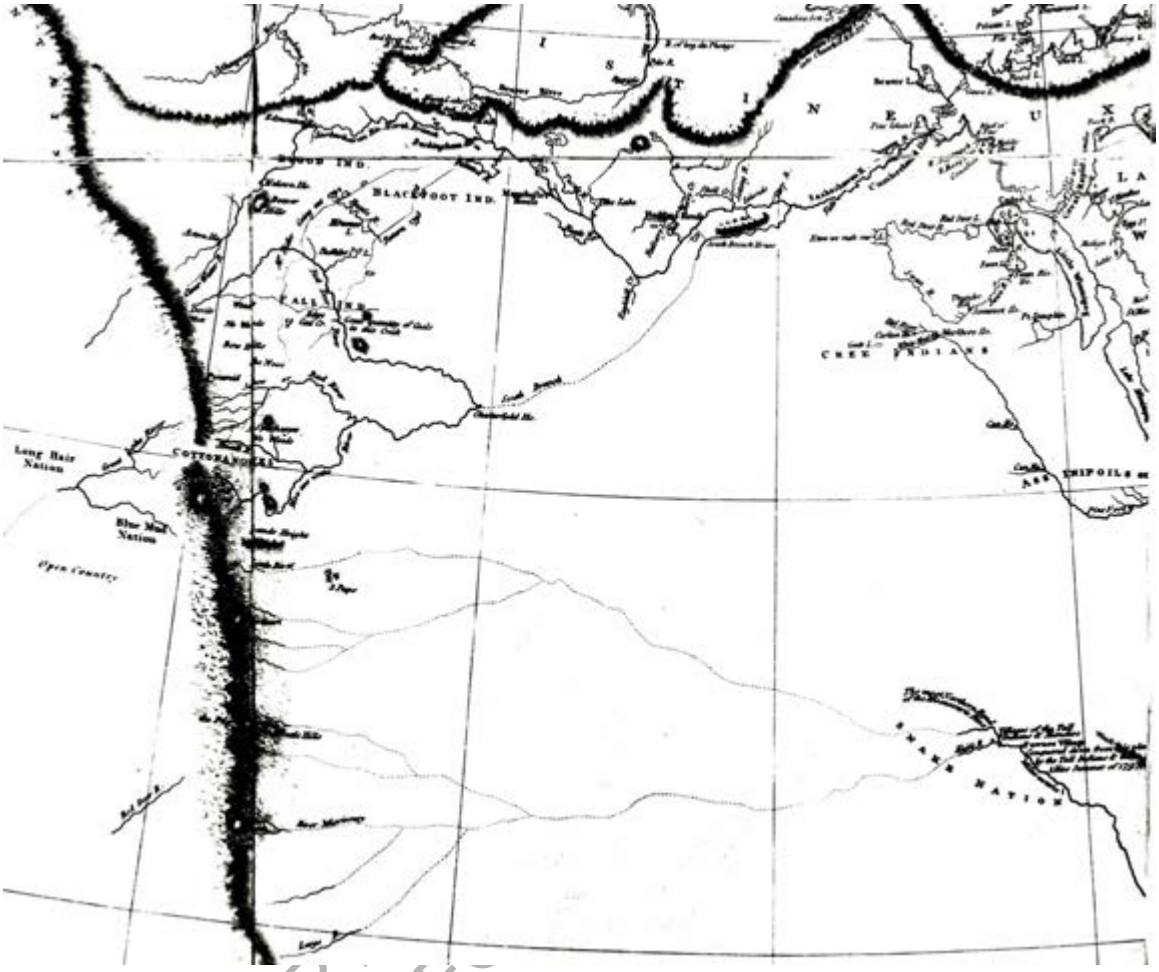
Fidler's attention to making and keeping records was shared by all the Hudson's Bay Company's servants. During the 1790s forms of writing became an essential mode of communication within the overseas service as well as between London and the Bayside factories. Half the inland brigade of 1792 could sign their names; the career of every working man was regulated by personnel lists, bills of exchange and "Men's Debts."[125] Factors, masters and writers (clerks) were by definition those servants who produced the company records — lists of employees, accounts, journals that noted trade, travel or daily tasks at the factories and outposts. Great care was taken not only to produce administrative records but to copy them accurately, to ensure their delivery and to store them safely. Letters were carried in a "packet" from post to post; journals and accounts were boxed and stowed in the master's canoe for the passage down to Hudson Bay. Year after year, with few exceptions, this paper record reached the Bay and was shipped to London. Even two journals, wrapped in furs and left in the ruins of York Factory after a French attack, were picked up the next year and delivered safely.[126] Such care was taken of company records, and such luck has been with them ever since, that despite their fragility they are the only fur-trade artifacts to have survived in good proportion to the number produced.

Fidler began writing his first journal as soon as the "Expedition to the Northward" set out from Cumberland House. Paper was at a premium; he was given a few loose sheets – "small detached pieces, some of which I unluckily lost. I had no books or paper at that time to minute down every thing respecting the Lakes . . . the Altitudes &c were marked down, but loosing it



HBCA G.2/32: Turnor, "... Map of Hudsons Bay and Rivers and Lakes Between the Atlantick and Pacific Oceans ..." (1794-95), detail.

The discoloured paper and damaged edge of Turnor's map have left a dark image of Fidler's route from Buckingham House to the Rocky Mountains. Turnor also mapped Fidler's 1793 survey of the North Saskatchewan River above Buckingham House.



LAC NMC 19687: Aaron Arrowsmith, *A Map Exhibiting all the New Discoveries in the Interior Parts of North America . . . Additions to 1802*, detail.

Arrowsmith's "Additions to 1802" (this state of the map was actually issued in 1803) are based on Fidler's maps sent to London in 1802. "Additions" include extension of the North Saskatchewan River to its source and mountain sources of the Missouri River. The Red Deer, Bow and Oldman rivers are drawn from their sources to their junction at Chesterfield House, where Fidler traded 1800-02. Inexplicably Fidler's exploration of the South Saskatchewan River is not included. The hypothetical Missouri watershed may refer to Fidler's lost map based on Siksika maps and reports, or it may be Arrowsmith's invention.

[the journal of 1790] I can only give the result that is the Latitude alone." [127] A year later Tomison's bias against the Athabasca expedition ensured that just "one Quire of Paper and a marble cover Book of one Quire," in all 48 foolscap sheets, were carried north by the NWC brigade in answer to Turnor's request.[128] Fidler was issued more loose sheets for his winter journal and took better care of them, but even these ran out: for the return to Cumberland House he was "obliged to draw & write upon Birch rind for want of Paper."[129] Fidler was indignant about these shortages. In every respect the expedition was under-supplied: poor scanty food, too few instruments to allow him to document his winter trips as skilfully as he could have, and too little paper for keeping a record of them. For the passage over Methy portage Turnor's expedition had "some rude sketches & instructions from the Canadian Master" at Lake Athabasca.[130] From Ile à la Crosse they consulted Turnor's 1790 journal. Right away Fidler could see the practical advantage of keeping good records. Presumably he copied his bark entries into a memorandum book as soon as he could. This journal proved useful when he headed north over the same route in 1799. With him was a pilot from Cumberland House who, it turned out, "knew not the least of the Track from that Place to the Isle a la Crosse which is by much the most difficult of the whole way – we proceeded on by the assistance of my Old Journal & maps, made when I went from the Athapescow in 1792."[131]

It is possible that Fidler's journals were paper guides for more than his own trips. Maps of the company's inland routes were of interest to the HBC Committee; the survey journals from which they were drawn may have been useful within the overseas service. Hired pilots were problematic: they were often ignorant; they often ran away; they could deliberately mislead.[132] Yet some kind of guidance was necessary even for routes repeatedly travelled. The pattern of Canadian Shield lakes and rivers was too complex and the rapids far too numerous, variable and dangerous for any brigade to travel unguided. As Colen wrote to the HBC Committee, "Here are many of your honors Servants who are well acquainted with the road from this factory to the upper Settlements, – and strange as it may appear, only three amongst the whole are able to come down without Indian Guides."[133] One solution to the guide problem was to specially appoint the few HBC men who could find their way. Mitchell Oman was named a "Pilot" in the 1790s.[134] Another solution may have been to equip a brigade with a journal that documented each turn and drop in the rivers, each connection between rivers and lakes, the sequence of portages, landmarks, and resources such as fishing spots and camping places. This use for a survey journal would explain the ample detail of Fidler's comments. As in Turnor's journals, one sequence regulated the other: landmarks were mentioned in the strict order of their location, and their distribution in the text was relative to the time it took to reach them. For brigades following the route, the journal format guaranteed the paper guides' precision and usefulness: subsequent travellers would repeat the writer's trip, coming across each landmark in turn, aware that no two reaches or rapids were the same. Recreational canoeists now use Fidler's journals in this way.[135]

Fidler copied his exploration journals into a set of five notebooks that he kept for the rest of his life and willed to the company.[136] The first two notebooks contain the journals reproduced in this edition. HBCA E.3/1 contains Fidler's early Athabasca journals (1791-1792) and his trip from York Factory to Buckingham House (1792). HBCA E.3/2 includes the journey to the Rocky Mountains (1792-93), a survey upriver from Buckingham House (1793), the route from Cedar Lake to the Red River (1795), two journals of Fidler's winter at Lac la Biche (1799-1800), and Fidler's exploration of the South Saskatchewan River (1800).

Both E.3/1 and E.3/2 measure 8.6 x 15 inches (22 x 38.25 cm) and are bound in vellum. Blank business books of this kind were readily available from stationers' shops close to the company's head office.[137] The watermark of the paper in E.3/1 is "BUGDEN 1794," of the E.3/2 paper "TB" with a crowned fleur-de-lys, also dated 1794 (as of 1794 dates were added to watermarks in order to avoid a paper tax). "TB" may be Bugden; in any case, paper for the two notebooks was produced in the same year and they were probably bound and bought at the same time. Each book was made of 60 sheets of writing demy measuring 20 x 15½ inches (51 x 39.5 cm); the sheets were folded once with the grain, then gathered into a block of multiple signatures and attached to vellum-wrapped pasteboard covers. The broken spine of another notebook in the set allows a glimpse of the binding: the signatures were sewn onto four vellum thongs, the ends of which were split, laced through the vellum at the spine joint and glued to the inside of the two covers. Then the book block was trimmed to correct unevenness caused by folding and stitching. The outer leaves were glued to the covers, enclosing the ends of the thongs and leaving 58 folios, or 116 pages, to write on.[138] Fidler copied his texts into these notebooks, on average 33 lines/450 words to a page, with scarcely a blot or an error; very occasionally a caret indicates an added word or phrase above the line. Both notebooks are in excellent condition – no wrinkles, tears or ingrained dirt, and only slight discoloration along the edge of the pages. The ink is still dark. These fine vellum-covered books are more than 200 years old; they have travelled by canoe, ship and plane from Fidler's frontier outposts to London and back again; they have survived fur-trade harassment, colonial unrest, office removals and wartime bombing. Yet one can imagine that Fidler has just laid down his pen.

Dating the E.3/1 and E.3/2 notebooks is uncertain. Their contents and appearance are one indication; the times and places where Fidler had the requisite conditions for writing more than scribbled entries in a rough journal – where he had a table, a chair and a roof over his head – are another. The two notebooks' identical format, the uniform colour of ink on the copied pages, the consistent spacing of letters and lines, the textual cross-references suggest that these two books were copied continuously, without a long pause or interruption.

There are three possible scenarios: Fidler copied his exploration journals at Chesterfield House in 1800-1802, at Nottingham House in 1802-1806, or in England during his winter there in 1811-1812. HBCA B.39/a/2, a rough journal begun at Chesterfield House in 1801 and kept during Fidler's first year at Nottingham House provides a clue to the earliest plausible

date. In the back pages of this rough journal, sandwiched between the last daily entries and lists of trade goods, names of visiting chiefs and lists of their debts, are the maps that Akkomokki, Akkoweeak and Kioocus drew for Fidler in February 1802. Pencilled lines are inked over; for some of the names added in ink the pen appears to have been held awkwardly, as if Fidler reached across the chiefs while they drew the lines. These are the originals of the Siksika maps carefully copied into the E.3/2 notebook.[139] Obviously the maps in E.3/2 were copied after the originals were drawn in B.39/a/2. Copying at Nottingham House is suggested by entries in B.39/a/2 that refer to binding magazines and preparing a manuscript book.[140] But Fidler specifies in one of these entries that the the manuscript book was a quarto — not the same size as the vellum-covered folio books. The most likely scenario is that Fidler copied all five of his exploration notebooks while he was in England during the winter of 1811-1812. Together the five books cover all of Fidler's explorations, from 1792 to 1810. Their coherent presentation and neat appearance point to a period of continuous, uninterrupted copying which the winter in England would have allowed him.

Fidler's willed documents remained in London for almost 150 years before they were transferred to Winnipeg.[141] B.39/a/2 was also in London by the time the archives were catalogued in 1933. Three battered notebooks were left at York Factory, unclaimed and unclassified: they were Fidler's rough Cumberland House journals and the journal kept by mutineers at Brandon House; it is likely that Fidler found and kept the Brandon House journal when he became master there. The York Factory district manager gave the three rough journals to Tyrrell. In 1952 the Keeper of the HBCA visited Tyrrell in Toronto; during this meeting the 94-year-old geologist "returned" them to the company archives.[142]

Since the two journals included in this edition survive as unique manuscripts, there is no problem with the choice of copy-texts. And since Fidler's manuscripts are carefully written, few emendations are necessary. Added words, indicated by carets in the manuscripts, are silently brought down to the line; words obscured by a blot, cramped by the edge of the page or clearly erroneous (e.g. "that" for "than") are corrected and the correction placed in square brackets (e.g. "tha[n]"). Occasional features such as underlining and interlinear map signs, words written in pencil, later additions to the maps, and marginal comments in other hands are described in the editorial notes as they occur in the texts. Capitalization, superscripts and spacing have been preserved. The characteristic syntactical structure of fur-trade journals is not the sentence but the phrase, and eighteenth-century punctuation differed from the conventions we observe today. Nouns could be capitalized because they seemed important in a particular context, or because the writer habitually capitalized certain letters regardless of context. Often Fidler ended a phrase with a dash, or wrote a series of phrases separated by dashes. Writing in phrases is a clue to how Fidler and other fur-trade writers perceived and mentally organized events and situations. My edited text does not make sentences of the phrases, nor are the daily entries,

LAC NMC 97818: Arrowsmith, *A Map Exhibiting all the New Discoveries in the Interior Parts of North America . . .* 1795. This is the first state of the map, with an overlay of Hearne's route to the Arctic Ocean; the Saskatchewan River is drawn from Turnor's own knowledge of it, noting Fidler's 1792-93 journey only by report. I have superimposed a dotted line to show Fidler's route from Hudson Bay to the Rocky Mountains.

whatever their length, subdivided into paragraphs. Every effort has been made to reproduce Fidler's beautifully written manuscripts as exactly as print allows.

The forward movement of the journals is doubly determined by the spatial sequence of survey data as well as the daily sequence of events. The survey data stand out in the manuscript texts; the directions are written in capital letters and the distances are big even numbers that are best represented in print by lining rather than old-face characters. To the numerical and verbal components is added the visual component of the small sketch maps. These are not illustrations; they do not repeat, confirm or demonstrate the verbal component; instead they take

up the journal's narrative and descriptive functions where the words leave off. An important objective in editing the manuscripts has been to respect the integrity of the numerical, verbal and visual components and to suggest it by photographically reproducing the maps and drawings in a ratio to the printed text that is close to the ratio on the notebook pages. The relative weight of the drawn lines is also respected. Since the maps are essential components of the numerical-verbal-visual text, care has been taken to ensure that all of their details are legible. Fidler's route can be traced on a series of national-grid topographical maps; a list of them can be found on p. 321 of the sources and references section with the matching dates of his 1792-1793 survey. The on-line *Atlas of Canada* (atlas.gc.ca) is another excellent resource: it seamlessly presents all ratios of the topo maps and the coordinates of every location touched by the user's mouse. Google Earth (https://earth. google.com/) provides corresponding satellite images.

Two sets of notes, placed after the texts, are keyed to the dates of the journal entries and range from short references to short essays on topics suggested in the journals. Each note follows the order of the texts, commenting on topics as Fidler mentions them. Thus the organization of the edition imitates the spatial/narrative structure of the journals. The parallel presentation of texts and notes means that detailed editorial support is available as readers advance with Fidler up the route of his survey. But books, like websites, can be read in any order. Readers of this edition have the freedom to approach Fidler's journals starting with the introduction, or the texts, or the notes, or even the bibliography. Those who are relatively unfamiliar with the fur trade may wish to begin with the notes in order to gain some background information. Links to print sources are provided in the form of references (notes to the notes) and readers are invited to pursue them. Those who are familiar with this background may wish to begin with the bibliographical list of sources, many of which are previously unpublished archival documents. The bravest, boldest readers will immediately turn to the journal texts and head up the Hayes River with Fidler. However the book is approached, readers will find an introduction to the format and function of fur-trade exploration journals, texts that are as close to the manuscripts as print allows, ample notes providing background information and commentary on the texts, and a list of sources and references for further study of the many topics addressed in the journals.

Fidler's narrative of the brigade's progress from York Factory to Buckingham House is an impressive record of wilderness travel. His anecdotes of earlier posts along the Saskatchewan River add up to a history of the inland fur trade. His eye-witness account of a season with the Piikani is the fullest and most exact description there is of a pre-settlement plains nation. The journals' running surveys can be re-plotted to test the accuracy of eighteenth-century navigation and to recreate Fidler's cartographic image of the continental interior. Many of Fidler's geographical notes are useful for monitoring climate change in the regions he traversed. Although they are rich sources for this range of interests, the two journals are dense, complex and far from easy to read. The words clothe an armature of courses and distances; the little sketches

suggest the maps to come. The journals' technical precision, laconic phrasing and formulaic expressions defeat any expectations of heroic decision or lyrical description that published exploration narratives may have raised. Instead Fidler's technique of fixing topics in space and time suggests a new way of reading: not to anticipate, not to collect and summarize, but to take in the details as, day by day, entry by entry, the journals establish a pattern of slow, methodical discovery. Long before Fidler reaches the mountains' edge halfway through the second text, attentive readers will have figured out how the journals work as route-finding guides, how they organize what the writer saw and heard, how they can provide glimpses of a continent that has since been transformed.

We may be tempted to redefine in hindsight what Fidler observed. This would be a mistake, since few of the elements of Fidler's account correspond exactly with what we would perceive in the "same" places and situations. The Piikani who hosted Fidler led a bison-hunting life almost unchanged for a thousand years. Fidler's own habits, values and aims differed from those of the Native societies he described, from those of Orkneymen and Canadians in the fur brigade, and from ours. None of these people, Fidler included, can be relied on to look at the world as we do centuries later. Of course we can revisit the places, imagine the events and try to conjure up the people that Fidler wrote about. At the same time we must accept that our insights are guesswork – that the past is less about memory, much more about loss.

As with all wilderness expeditions, it is an art to know what to take and what to leave behind. Fidler's personal gear was limited to his instruments, a notebook, a blanket and a clean shirt. Too much stuff (this includes mental baggage) can slow progress, even prevent it. Filling in the unknown that Fidler faced, reducing unfamiliar elements to what is easier to understand, imposing retrospective values, is to miss the point of his journey. Perhaps the first thing we can gain from Fidler's journals is a sense of his confidence and his readiness to take on new situations. The unknown was part of the fur-trade experience. It must also be part of ours as readers of these journals.

NOTES TO THE INTRODUCTION

1. Kettle, *Sutton-cum-Duckmanton Parish*, 32.
2. Pennant, *Some Account of London*, 300-24; John Horwood, *Map of London, Westminster & Southwark . . .* 1792, www. motco.com/map/81005; BL maps Crace Port. 5.171: John Cary, *New and Accurate Plan of London and Westminster . . .*1792, www.mapco.net/Cary1795/Cary.htm.
3. HBCA A.32/3, p. 186: "Servants' Contracts," 19 April 1788; HBCA A.30/4: "List of Servants at York Factory and Inland" (1790); Johnson, "Introduction," *Saskatchewan Journals and Correspondence*, ed. Johnson, xv.
4. HBCA A.11/116: Marten to HBC Committee, 2 September 1785; HBCA A.11/116: Colen to HBC Committee, 6 September 1787; HBCA A.11/117: Colen to HBC Committee, 29 August 1788.
5. HBCA A.11/117: YF Council to HBC Committee, August 1788.
6. HBCA B.239/a/89: York Factory journal (Colen), 22 and 27 April 1789, 11 and 28 May 1789, 10 and 18 July 1789; HBCA B.121/a/3: Manchester House journal (Tomison), 2 July 1789.
7. HBCA A.5/3: HBC Committee to Marten, 11 May 1785; HBCA A.11/117: Colen to HBC Committee, 6 September 1787; HBCA B.239/a/88: York Factory journal (Colen), 26 May 1788, 18 June 1788; HBCA A.11/117: Colen to HBC Committee, 27 August 1788; HBCA B.239/b/49: Colen to Walker, 24 July 1789; HBCA B.239/b/50: Colen to Turnor, 20 July 1790.
8. HBCA B.121/a/4: Turnor to Walker, 12 May 1790.
9. HBCA B.239/b/52: Turnor to Colen, 22 March 1791.
10. HBCA A.11/117: Turnor to HBC Committee, 9 June 1790; see also HBCA B.239/b/50: Turnor to Colen, 10 June 1790.
11. HBCA A.11/117: Thompson to HBC Committee, 19 and 20 September 1791.
12. HBCA E.3/1, ff. 98v-103r: Fidler, "Astronomical Observations made at Cumberland House," 19 June 1790-12 September 1790.
13. Beattie, "'My Best Friend': evidence of the fur trade libraries located in the Hudson's Bay Company Archives," *Epilogue* 8 nos. 1 and 2 (1993): 19.
14. HBCA B.121/a/4: Manchester House journal (Tate), 30 September 1789.
15. HBCA B.121/a/6: Turnor to Tomison, 22 December 1790; HBCA E.3/1: Fidler, "From the Isle a la Crosse to the Athapescow Lake," 30 May 1791.
16. HBCA E.3/1: Fidler, "From the Isle a la Crosse to the Athapescow Lake," 30 May 1791-30 August 1791; Turnor, *Journals of Hearne and Turnor*, ed. Tyrrell, 327-491.
17. HBCA E.3/1: Fidler, "With the Chepawyans towards the Slave Lake," 4 September 1791-10 April 1792; Fidler, *Journals of Hearne and Turnor*, ed. Tyrrell, 495-555.
18. HBCA E.3/1: Fidler, "From the Athapescow Lake to the Isle a la Crosse" and "From Isle a la Crosse to Cumberland House," 9 May 1792-26 June 1792.

19. HBCA E.3/1: Fidler, "From York Factory to Cumberland Manchester & Buckingham Houses," 25 July 1792-14 October 1792; Fidler, "From Buckingham House to the Rocky Mountains," 8 November 1792-20 March 1793; Fidler, "Journey by Land . . . to the Tea Sturgeon or Red Willow River," 1-11 April 1793; HBCA B.24/a/1: Buckingham House journal (Tomison), 12 May 1793-4 July 1793.
20. HBCA B.213/a/6: Swan River House journal (Isham), 1795-96; HBCA B.49/a/27b: Cumberland House and Buckingham House rough journals (Fidler), 1796-97; HBCA B.24/a/4: Buckingham House journal (Fidler), 1796-97; HBCA B.49/a/28: Cumberland House journal (Fidler), 1797-98; HBCA B.49/a/29: Cumberland House journal (Fidler), 1798-99.
21. Thompson, *Narrative*, ed. Glover, 130-34; HBCA B.14/a/1: Bedford House journal (Ross), 21 May 1797; Belyea, *Dark Storm Moving West*, 15-29.
22. HBCA E.3/2: Fidler, "From the Mouth of Beaver river . . . towards . . . the Red Deers Lake," 24 August 1799-17 May 1800; HBCA E.3/2: "From the mouth of the South Branch . . . to the confluence of the Bad & Red Deers Rivers . . ." 15 August 1800-24 September 1800.
23. HBCA B.39/a/1-5: Nottingham House journals (Fidler), 1802-06; HBCA E.3/3 and E.3/4: Fidler, maps and exploration journals, 1806-10; HBCA B.89/a/2: Ile à la Crosse journal (Fidler), 1810-11.
24. PAM MG1 D3: Fidler, "Money paid for the new House built in 1812." The cost of materials and labour was £408.1.0½.
25. *Luddism in Nottinghamshire*, ed. Thomis, 7-36, 39; *Writings of the Luddites*, ed. Binfield, 98-136.
26. Belyea, *Dark Storm Moving West*, 97-107; cf. Burley, *Servants of the Honourable Company*, 156-244.
27. HBCA A.5/3: Lean to Rev. Francis Liddell, 17 May 1794; see also HBCA A.5/3: Lean to Geddes, 21 December 1794.
28. AO F443-1, Thompson, journal no. 8 (1797): coordinates observed "By M^{r} Peter Fidler"; HBCA E.3/1: Fidler, "From York Factory to Buckingham House," 13 August 1792; HBCA E.3/2: "From Buckingham House to the Rocky Mountains," 31 December 1792; Beattie, "'My Best Friend': evidence of the fur trade libraries located in the Hudson's Bay Company Archives," *Epilogue* 8 nos. 1 and 2 (1993), 1-31; Lindsay, "Peter Fidler's Library: philosophy and science in Rupert's Land," *Readings in Canadian Library History*, ed. McNally, 209-27; Murray, "Fur Traders in Conversation," *Ethnohistory* 50 no. 2 (2003), 285-314; McGregor, *Peter Fidler, Canada's Forgotten Explorer*, 185.
29. HBCA B.235/a/3: Red River Settlement journal (Fidler and sons), 1814-15; HBCA B.22/a/19: Brandon House journal (Fidler), 1815-16; HBCA B.22/a/20: Brandon House journal (Fidler), 1817-18.
30. HBCA B.51/a/3: Dauphin Lake House journal (Fidler), 1820-21.
31. *The Works of Samuel de Champlain*, ed. Cameron *et al.* (1908-39); Davidson, *The North West Company* (1918); *Documents Relating to the North West Company*, ed. Wallace (1934); Innis, *The Fur Trade in Canada* (1939); Morton, *A History of the Canadian West to 1870-71* (1939).

32. Simmons, "The Hudson's Bay Company Archives: the role of the Hudson's Bay Record Society," *Epilogue* 2 no. 1 (1996), 1-13; Simmons, *Keepers of the Record*, 209-12, 218-86, quotation 232. The first Canadian visitor to the HBCA was Scots-born Arthur S. Morton from the University of Saskatchewan, welcomed as "a very cheap and fairly helpful form of unpaid propaganda" for the HBC brand.
33. Thompson, *Narrative*, ed. Tyrrell (1916); Glover, "Introduction," Thompson, *Narrative*, xi-xii, lx vii-lxviii.
34. Hearne, *A Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean* (1795); Mackenzie, *Voyages from Montreal on the River St Laurence, through the Continent of North America, to the Frozen and Pacific Oceans . . .* (1801); Franklin, *Narrative of a Journey to the Shores of the Polar Sea* (1823).
35. Thompson, "David Thompson's Journal," *The Early Fur Trade on the Northern Plains*, ed. Wood and Thiessen, 96-128; Thompson, *Travels in Western North America 1784-1812*, ed. Hopwood; Thompson, *Columbia Journals*, ed. Belyea.
36. Almost alone in his attention to the publication of fur-trade and naval journals is I. S. MacLaren. See MacLaren, "Samuel Hearne's Accounts of the Massacre at Bloody Fall, 17 July 1771," *ARIEL* 22 no. 1 (1991), 25-51; MacLaren, "Exploration/Travel Literature and the Evolution of the Author," *International Journal of Canadian Studies* 5 (1992), 39-66; MacLaren, "Notes on Samuel Hearne's *Journey* from a Bibliographical Perspective," *Papers of the Bibliographical Society of Canada* 31 no. 2 (1993), 21-45; MacLaren, "Samuel Hearne and the Printed Word," *Polar Record* 29 no. 169 (1993), 166-67; MacLaren, "From Exploration to Publication: the evolution of a nineteenth-century Arctic narrative," *Arctic* 47 no. 1 (1994), 43-53; MacLaren, "In Consideration of the Evolution of Explorers and Travellers into Authors: a model," *Studies in Travel Writing* 15 no. 3 (2011), 221-241. See also Glover, "A Note on John Richardson's 'Digression concerning Hearne's Route,'" *Canadian Historical Review* 32 no. 3 (1951), 253-63, and Cavell, "Representing Akaitcho: European vision and revision in the writing of John Frankin's *Narrative of a Journey to the Polar Sea*," *Polar Record* 44 no. 228 (2008), 25-34.
37. BL ms Stowe 307 and its close copy BL ms Add. 59237 are manuscript narratives based on Hearne's missing journal. Passages quoted from other manuscript versions of Hearne's journal are found in HBCA E.2/12: Graham, "Observations on Hudson's Bay," 39-41, 336-45; Pennant, *Arctic Zoology*, 1:cclxxvii-cclxxviii; Douglas, "Introduction," Cook, *Voyage to the Pacific Ocean* 1:xlv iii-xlix. See Lamb, "Introduction," Mackenzie, *Journals and Letters*, ed. Lamb, 32-36, 47-48.
38. Wales, "Journal of a Voyage made by Order of the Royal Society to Churchill River . . . in the Years 1768 and 1769," *Philosophical Transactions of the Royal Society* 60 (1770), 100-36; cf. Dalrymple, "Journal of a Voyage to the East Indies, in the Ship *Grenville* . . . in the Year 1775," *Philosophical Transactions of the Royal Society* 68 (1778), 388-418.
39. Hawkesworth, "Introduction," *An Account of the Voyages undertaken . . . for making Discoveries in the Southern Hemisphere*, 2:xiii-xv.

40. Johnson, *A Dictionary of the English Language*, 1:707. Apart from the still-current sense of receiving hospitably Johnson gave three eighteenth-century definitions of the verb "to entertain": "to converse with", "to reserve in the mind," "to please; to amuse; to divert." As examples of diverting subjects Johnson suggested "meditations of God's law," "the progress of knowledge," "uncommon topicks" and "beauties of nature."
41. Hearne, "Preface," *A Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean*, v-ix; Dalrymple, *Memoir of a Map of the Lands around the North Pole*, 4, 6-12.
42. Montgomery, "Mackenzie's Literary Assistant," *Canadian Historical Review* 18 (1937), 301-04; Hamilton, *Doctor Syntax*, 210.
43. Anonymous, *A New, authentic and complete collection of voyages round the world . . .* (1786) title; Franklin, *Journals and Correspondence of the first Arctic land Expedition*, ed. Davis, 428.
44. Mackenzie, *Journals and Letters*, ed. Lamb, 60.
45. Turnor, *Journals of Hearne and Turnor*, ed. Tyrrell, 317, 369, 417-19; HBCA E.3/1: Fidler, "From York Factory to Buckingham House," 23 August 1792; Mackenzie, *Journals and Letters*, ed. Lamb, 58.
46. HBCA G.2/32: Turnor, " . . . Map of Hudson's Bay and the Rivers and Lakes Between the Atlantick and Pacifick Oceans . . ." 1794; HBCA B.39/a/2, ff. 54v-55v, and HBCA E.3/2, ff. 90v-96r: Fidler, "Extracts from Sir Alexander M^{c}Kenzies Journal from the East side of Slave Lake down M^{c}Kenzies River to the Hyperborean Sea in 1789," and "Extracts from Sir Alex^{r} M^{c}Kenzies Journal from the Old Establishment in Peace River, across the Rocky Mountains to the Pacific Ocean in 1792 and 1793."
47. Lewis and Clark, *The Journals of the Lewis and Clark Expedition*, ed. Moulton; Belyea, "Heroes and Hero-Worship," *Oregon Humanities* (Spring 1004), 38-39; Thompson, *Columbia Journals*, ed. Belyea, 15-30; Fraser, *Letters and Journals*, ed. Lamb, *passim*.
48. Cf. Hayes, *First Crossing*, 11-15, and Gough, *First Across the Continent*, 136-40, 148-56.
49. Mackenzie, *Journals and Letters*, ed. Lamb, 428, 454.
50. Cf. Rich, "Introduction," *Cumberland House Journals and Inland Journal, 1775-82*, ed. Rich, 2:lv-lvi.
51. Raven, *The Publishing Business in Eighteenth-Century England*, 46, 63, 70, 87, 97-98, 103, 149, claims that use of printed forms contributed to increasingly complex business practices during the eighteenth century. But with few exceptions the Hudson's Bay Company's voluminous record to 1870 was manuscript. The exceptions include templates for some ships' logs and one list of employees, each with a single line of print for column headings and the rest to be filled in by hand: HBCA C.1/391: log of the ship *King George* (Christopher), 1788; HBCA C.1/236: log of the brig *Ceres* (Ramsey), 1803; HBCA A.30/10: "List of Servants at York Factory and Inland," 1800. In each instance the printed form exactly reproduced the earlier manuscript format. The printed template did not initiate a new business practice; instead it replicated an old practice. Makepeace, *The East India Company's London Workers*, 10-11, 53 points to a similar conservatism in the extant documents of the East India Company.

52. HBCA B.239/b/36: Marten to Tomison, 12 July 1776.
53. HBCA E.2/12: Graham, "Observations on Hudson's Bay," 355-58; HBCA A.11/117: YF Council to HBC Committee, 3 September 1789; HBCA A.11/116: Marten to HBC Committee, 4 September 1785; PAM MG1 D3: Fidler, "Standard of Trade," 30 May 1795; Umfreville, *The Present State of Hudson's-Bay*, ed. Wallace, 43-47; Ray, *Indians in the Fur Trade*, 61-69; AO F443-1, journal no. 5: Thompson, "Standard of Trade at York Factory, 1797-98."
54. HBCA B.239/b/51: Colen to James Spence Jr, 16 December 1790, in reply to HBCA B.239/b/51: James Spence Jr to Colen, 24 September 1790. See also two exemplary letters: HBCA B.24/a/4: Sutherland to Fidler, 16 February 1797; HBCA B.24/a/4: Fidler to Sutherland, 5 May 1797.
55. Thompson, *Narrative*, ed. Glover, 19-20. Thompson also copied HBCA B.239/a/86: York Factory journal (Marten)1785-86 and HBCA B.121: South Branch House journal (Oman), 1786-87. Fidler's unofficial status as writer was gained in the same way: see HBCA B.121/a/4: South Branch House journal (Walker), 1789-90. Subsequently both young men served as writers at York Factory – Thompson from 1790 to 1792, Fidler from 1793 to 1795. See HBCA B.239/b/52: Colen to Thompson, 30 August 1792.
56. See Belyea, *Dark Storm Moving West*, 97-107.
57. Moore, *The New Practical Navigator*, 64-66; Bowditch, *The New American Practical Navigator*, preface, 178-87; Budlong, *Shoreline and Sextant*, 55-72.
58. HBCA C.1/239: log of the sloop *Charlotte* (Tunstall), 22 July 1775.
59. HBCA C.1/236: log of the brig *Ceres* (Ramsey), 12-24 August 1803.
60. HBCA C.1/391: log of the ship *King George* (Christopher), 28 July 1788.
61. HBCA C.1/391: log of the ship *King George* (Christopher), 18-29 August 1788.
62. HBCA B.239/b/36: Marten to Tomison, 12 July 1776. The inland journals of William Tomison, George Hudson, Robert Longmoor, William Walker and James Tate include the passage from York Factory up to the Saskatchewan River and/or down again.
63. HBCA A.11/116: Marten to HBC Committee, 2 September 1785.
64. For example, HBCA B.205/a/6-7: South Branch House journals (Knarston, Sandison), 1791-93. Consider also Longmoor's limitations and even Fidler's when writing letters to the company directors: HBCA 11/116: Longmoor to HBC Committee, 21 July 1786 and HBCA A.11/52: Fidler to HBC Committee, 10 July 1802.
65. Robson, *An Account of Six Years Residence in Hudson's-Bay*; Umphreville, *The Present State of Hudson's-Bay*, ed. Wallace.
66. HBCA E.2/1-2: Isham, "Observations on Hudsons Bay"; *Isham's Observations and Notes, 1743-1749*, ed. Rich; HBCA E.2/12: Graham, "Observations on Hudson's Bay"; Graham, *Observations on Hudson's Bay*, ed. Williams.
67. Gough, *Northwest Coast*, 69-103.
68. Middleton, "An Examination of Sea-Water Frozen and Melted Again, to Try What Quantity of Salt is Contained in Such Ice, Made in Hudson's Streights," *Philosophical Transactions of the Royal*

Society 41 (1739), 806-807; Middleton, "The Effects of Cold; Together with Observations of the Longitude, Latitude, and Declination of the Magnetic Needle, at Prince of Wales's Fort, upon Churchill-River in Hudson's Bay, North America," *Philosophical Transactions of the Royal Society* 42 (1742), 157-171.

69. Houston, Ball and Houston, *Eighteenth-Century Naturalists of Hudson Bay*, 41-54.
70. Isham, *Observations and Notes,* ed. Rich, 65.
71. Isham, *Observations and Notes,* ed. Rich, 77.
72. Isham, *Observations and Notes,* ed. Rich, 113.
73. Isham, *A Year Inland*, ed. Belyea, 39; see also Isham, *Observations and Notes,* , ed. Rich, 180: Isham anticipated by almost 30 years Moses Norton's commission of Hearne's trip to the Coppermine River, 1769-72.
74. Isham, *A Year Inland*, ed. Belyea, 40-42.
75. HBCA A.6/9: HBC Committee to Isham, 27 May 1755.
76. Foucault, *Les Mots et les choses*, 32-40, 170-76, 262-65, 388-90.
77. Forster, "An Account of Several Quadrupeds from Hudson's Bay," *Philosophical Transactions of the Royal Society* 62 (1772), 370-81; Forster, "An Account of Some Curious Fishes, Sent from Hudson's Bay," *Philosophical Transactions of the Royal Society* 63(1773), 149-60; Pennant, *Arctic Zoology*, "Advertisement."
78. Rich, Cumberland House and Hudson House Journals, 1775-1782, ed. Rich, 1:xviii; Glyndwr Williams, "Andrew Graham and Thomas Hutchins: collaboration and plagiarism in 18th-century natural history," *Beaver* 308 no. 4 (1978), 4–14.
79. HBCA E.2/12: Graham, "Observations on Hudson's Bay," 237.
80. HBCA E.2/12: Graham, "Observations on Hudson's Bay," 258, 270, 278.
81. HBCA E.2/12: Graham, "Observations on Hudson's Bay," 256.
82. HBCA E.2/12: Graham, "Observations on Hudson's Bay," 649.
83. See, for example, Henday, *A Year Inland*, ed. Belyea, 107, 115; HBCA B.239/a/63: York Factory journal (Pink), 9-24 September 1769; HBCA B.239/a/69: York Factory journal and log (Cocking), 4-14 September 1772. For commentary on early winterers' routes, see Russell, *The Eighteenth-Century Cree and their Neighbours*, 93-97, and Henday, *A Year Inland*, ed. Belyea, 325-42.
84. HBCA B.239/a/69: York Factory journal (Cocking), 2 October 1772.
85. HBCA B.239/a/69: York Factory journal (Cocking), 2 October 1772.
86. HBCA G.2/15: [Graham], "A Plan of Part of Hudson's-Bay & Rivers communicating With the Principal Settlements," 1772; HBCA A.11/115: Graham to HBC Committee, 26 August 1772; HBCA E.2/12: Graham, "Observations on Hudson's Bay," 643-49; HBCA G.2/17: [Graham], "A Plan Of Part of Hudson's-Bay, & Rivers, Communicating with York Fort & Severn," 1774.
87. University of Minnesota (James Ford Bell Collection): "A Plan of the Coppermine River" (1771); HBCA G.1/10: Hearne, "A Map of part of the Inland Country to the $N^{h}W^{t}$ of Prince of Wales's Fort $H^{s}B^{y}$ . . ." (1772).

88. Williams, "The Hudson's Bay Company and its Critics in the Eighteenth Century," *Transactions of the Royal Historical Society*, fifth series 20 (1970), 149-71; Ruggles, "Governor Samuel Wegg, 'Winds of Change,'" *Beaver* 307 no. 2 (1976), 10-20; Ruggles, "Governor Samuel Wegg, Intelligent Layman of the Royal Society, 1753-1802," *Notes and Records of the Royal Society of London* 32 no. 2 (1978), 181-89; Ruggles, *A Country So Interesting,* 121; Binnema, *Enlightened Zeal*, 109-10.
89. Ruggles, *A Country So Interesting*, 18-19.
90. HBCA G.2/11: Turnor, "A Chart of Rivers and Lakes above York Fort . . . According to an Actual Survey taken by Philip Turnor 1778 & 9 . . ." 1787; Turnor, *Journals of Hearne and Turnor,* ed. Tyrrell, 195-258.
91. Franklin, *Narrative of a Journey to the Shores of the Polar Sea,* 28; Greenhood, *Mapping*, 39-74; Burns and Burns, *Wilderness Navigation*, 27-61.
92. AO F443-1: Thompson, journal no. 14, 23 January-9 May 1803: in these entries Thompson describes in some detail the process of plotting survey data; see also HBCA B.39/a/2: Chesterfield House rough journal (Fidler), 11-31 March 1802; Andreas Korsos, personal communication.
93. Turnor, *Journals of Hearne and Turnor*, ed. Tyrrell, 245-46.
94. See Fidler's entries for 2-3 August 1792, 22 August-14 October 1792, 5 December 1792-9 March 1793.
95. AO F443-1: Thompson, journal no. 1, "From Cumberland House to York Factory," 20-21 June 1790.
96. Franklin, *Narrative of a Journey to the Shores of the Polar Sea*, 28.
97. Lewis, "Maps, Mapmaking and Map Use by Native North Americans," *Cartography in the Traditional African, American, Arctic, Australian and Pacific Societies*, ed. Woodward and Lewis, 51-57, 115-35; Belyea, "Amerindian Maps: the explorer as translator," *Journal of Historical Geography* 18, no. 3 (1992), 267-77; Belyea, "Inland Journeys, Native Maps," *Cartographic Encounters*, ed. Lewis, 135-55; Binnema, "How Does a Map Mean?" *From Rupert's Land to Canada*, ed. Binnema, Ens and Macleod, 201-24; Belyea, "A Map and Nine Makers," *ACMLA Bulleti*n 144 (2013), 42-45.
98. HBCA E.3/1: Fidler, "From the Isle a la Crosse to the Athapescow Lake. . . ., "From the Athapescow to the Slave Lake & back," "From the Athapescow Lake to Isle a la Crosse," "From Isle a la Crosse to Cumberland House."
99. HBCA E.3/1: Fidler, "From Isle a la Crosse to Cumberland House," 26 June 1792; Tyrrell, note to Turnor, *Journals of Hearne and Turnor*, ed. Tyrrell, 485.
100. Ruggles, *A Country So Interesting*, 198, 201-09; Belyea, *Dark Storm Moving West*, 81-86.
101. Belyea, *Dark Storm Moving West*, 80-81.
102. HBCA G.2/32: Turnor, ". . . Map of Hudson's Bay and the Rivers and Lakes Between the Atlantick and Pacific Oceans . . ." 1794 [1795].
103. LAC NMC 97818: Arrowsmith, *Map Exhibiting all the New Discoveries in the Interior Parts of North America* . . . 1795. The cartouche acknowledges the HBC Governor's "liberal Communi-

cations." An overlay of Hearne's route to the Coppermine River, drawn after publication of Hearne's *Narrative of a Journey from Prince of Wales's Fort to the Northern Ocean* in 1795, updates this copy of the map. Loss of Fidler's survey maps (1795, 1802) has been attributed to Arrowsmith's repeated failure to return them to the Hudson's Bay Company: see Ruggles, *A Country So Interesting*, 64, 66, 68; Binnema, *Enlightened Zeal*, 114, 117, 341. Fidler's map of routes west of the continental divide, based on data from Joseph Howse, is also missing. While Arrowsmith is probably responsible for these losses, destruction of the firm's records (the building was bombed during the second world war) leaves some room for doubt – see Verner, "The Arrowsmith Firm and the Cartography of Canada," *Canadian Cartographer (Cartographica)* 8 no. 1 (1971), 1-7.

104. Arrowsmith, "Advertisement," *Result of the Astronomical Observations made in the Interior Parts of North America*, 4.
105. HBCA A.11/117: Thompson to HBC Committee, 19 and 20 September 1791; HBCA A.5/3: HBC Committee to Thompson, 25 May 1792; HBCA G.2/18: Thompson, "Nelson River, Hayes River, and communications through Lake Winnipeg to, and along, Saskatchewan River . . . ," 1794.
106. HBCA A.11/52: Fidler to HBC Committee, 10 July 1802; Ruggles, *A Country So Interesting*, 60.
107. HBCA A.5/4: HBC Committee to Turnor, 4 October 1799.
108. HBCA A.11/52: Fidler to HBC Committee, 10 July 1802; HBCA G.1/25: Akkomokki, "An Indian map of the Different Tribes that inhabit on the East & west side of the Rocky Mountains . . . reduced ¼ from the Original Size – by Peter Fidler," 1801.
109. HBCA A.5/3: HBC Committee to Dalrymple, 17 December 1802; HBCA A.5/3: HBC Committee to Banks, 17 December 1802. The letters were identically worded.
110. Dalrymple, *Plan for Promoting the Fur-Trade, and securing it to this country by uniting the Operations of the East India and Hudson's-Bay Companys* (March 1789); Dalrymple, *Memoir of a Map of the Lands around the North Pole* (May 1789).
111. Dalrymple, *Memoir of a Map of the Lands around the North Pole*, 12; HBCA A.11/52: Fidler to the HBC Committee, 10 July 1802.
112. Williams, *The British Search for the Northwest Passage in the Eighteenth Century*, 127-37, 212-72; Cook, "Alexander Dalrymple and the Hydrographic Office," *Pacific Empires*, ed. Frost and Samson, 57, 60-63; Belyea, *Dark Storm Moving West*, 1-13.
113. LAC NMC 19687: Arrowsmith, *Map Exhibiting all the New Discoveries . . . Additions to 1802*; Lewis, *Journals of the Lewis and Clark Expedition*, ed. Moulton, 4: 266-70.
114. Henday, *A Year Inland*, ed. Belyea, 97, 96.
115. Henday, *A Year Inland*, ed. Belyea, 105.
116. HBCA B.239/a/69: York Factory journal (Cocking), 1 December 1772.
117. HBCA G.1/25: Akkomokki, "A map of the Different Tribes that inhabit on the East & west side of the Rocky Mountains . . . ," 1801.
118. HBCA B.121/a/1: Manchester House journal (Longmoor), 21 October 1786.
119. HBCA B.121/a/1: Manchester House journal (Tomison), 9 and 11 March 1787.

120. Cf. Ray, Miller, Tough, *Bounty and Benevolence*, 11, 35; cf. also Daschuk, *Clearing the Plains*, 41-77.
121. Peck, *Light from Ancient Campfires*, 375-408, 417-35; T. Kehoe, *The Gull Lake Site*, 39-43, 144-51.
122. HBCA B.60/a/4: Bird to Tomison, 6 January 1799.
123. Thompson, *Columbia Journals*, ed. Belyea, 11.
124. HBCA B.39/a/2: Nottingham House rough journal (Fidler), 16 November 1802- 28 December 1802; HBCA B.49/a/32b: Cumberland House rough journal (Fidler), 30 October 1806-22 November 1806. See Beattie, "'My Best Friend': evidence of the fur trade libraries located in the Hudson's Bay Company Archives," *Epilogue* 8, nos. 1 and 2 (1993), 19-20; Lindsay, "Peter Fidler's Library: Philosophy and science in Rupert's Land," *Readings in Canadian Library History*, ed. McNally, 209-29.
125. HBCA B.239/d/110: "Men's Debts" (1796) can serve as an example: of thirty men listed at Buckingham House eighteen could sign their names, nine made a mark, and the ability of three is unknown. Of the eighteen literate men, four bought quires of foolscap paper.
126. HBCA B.49/a/11: Cumberland House journal (Tomison), 1781-82 and HBCA B.87/a/4: Hudson House journal (Walker), 1781-82 were left at York Factory, packed in furs. Examples of loss are the four Saskatchewan River journals for 1794-95.
127. HBCA E.3/1: Fidler, "From Isle a la Crosse to Cumberland House," 10 June 1792.
128. HBCA B.121/a/7: Manchester House journal (Tomison), 9 September 1791.
129. HBCA E.3/1: Fidler, "From Isle a la Crosse to Cumberland House," 10 June 1792.
130. HBCA E.3/1: Fidler, "From the Athapescow Lake to the Isle a la Crosse," 17 May 1792.
131. HBCA E.3/2: Fidler, "From the Mouth of the Beaver river . . . towards . . . Red Deers Lake," 24 August 1799; HBCA B.60/a/5: Fidler to Bird, 8 September 1799.
132. For example, HBCA E.3/1: Fidler, "From the Isle a la Crosse to the Athapescow Lake," 30 May 1791; HBCA E.3/2: "From the Mouth of the Beaver river . . . towards . . . Red Deers Lake," 16 September 1799.
133. HBCA A.11/117: Colen to HBC Committee, 24 September 1791.
134. HBCA A.30/6: "List of Servants at York Factory and Inland" (1794).
135. Marchildon and Robinson, *Canoeing the Churchill*, 57-58, 85-86, 98-99, 176-92, 342-48, 369-70, 381-89; Steve Shirtliffe, personal communication, 27 July 2006.
136. HBCA E.3/1-5: Fidler, exploration journals and maps, 1791-1810; HBCA A.36/6: Fidler, "Will," clause 3.
137. Raven, *Bookscape: geographies of printing and publishing in London before 1800*, maps 4.9, 4.10, 7.4, locates, among the London book trades, a high proportion of stationers near the chartered overseas companies. The Hudson's Bay Company bought ink, ledger books, memorandum books and quires of loose paper from stationers, but supplied quills from goose hunts at its factories.
138. Szirmai, *The Archaeology of Medieval Bookbinding*, 285-319; Pollard, "Notes on the Size of the Sheet," *The Library*, fourth series 22 nos. 2-3 (1941), 105-17; Gaskell, "Notes on Eighteenth-Century British Paper," *The Library*, fifth series 12 no. 1 (1957), 34-42; Gaskell, *A New Introduction to Bibliography*, 57-77, 146-49; Oldman, "Watermark Dates in English Paper," *The Library*,

fourth series 25 (1944), 70-71; Rijksdienst voor het Cultureel Erfgoed, "The Iron Gall Ink Website," www.irongallink.org.

139. HBCA B.39/a/2, ff. 85v-86r, 92v-93r: Chesterfield House rough journal (Fidler), maps drawn by Kioocus, Akkoweeak and Akkomokki, 1802.
140. HBCA B.39/a/2: Nottingham House rough journal (Fidler), 17-20 November 1802.
141. Simmons, *Keepers of the Record*, 87-92, 152-55, 228-31, 243-51, 262-86.
142. Archives of Manitoba finding aid; HBCA B.49/a/27b: Cumberland House and Buckingham House rough journals (Fidler), 1796-97; HBCA B.49/a/32b: Cumberland House rough journal (Fidler), 1806-07; HBCA B.22/a/18b: Brandon House journal (Yorston for the mutineers), 1811-12.