

1 Introduction

There was one or two flu epidemics and a lot of his relatives and friends passed away. But he's telling you this story and he is at the moment kind of leery of saying any more or carrying on because he thinks that maybe some of you think that he is not – he's just telling you a story because he is all alone now and no old person here to say that he is telling you the truth.

Philip Simba's testimony to the Mackenzie Valley Pipeline Inquiry, speaking through an interpreter, Kakisa Lake, 17 July 1976

In the summer of 1928, epidemic influenza tore through villages and camps along the length of Dehcho (the Mackenzie River), out along the shores of the large lakes to the east – Sahtú (Great Bear Lake) and Tı̄ndee (Great Slave Lake) – north to the delta and along the coast of the Beaufort Sea. Observers estimated that one in ten people across the region perished in two short months. There were camps with only a handful of survivors. The 1928 epidemic was devastating and world-changing for Dene, Gwich'in, Inuvialuit, and Métis families. Stories about 1928 continue to be shared in the North a century later, whether told out on the land or published in collected histories.¹ In Dene Elder George Blondin's three books, the 1928 epidemic marks a major historical transition heralding the loss of Dene medicine power in the modern world.

In 1942, a research associate working at Toronto's Connaught Laboratories, Ronald Hare, wrote to Roy A. Gibson, a top government official responsible for Canada's northern territories, asking for information about the 1928 influenza epidemic.² Hare was looking for records, and Gibson had few to offer; an ironic response given that I found this correspondence at the end of a thick file about the epidemic preserved in Canada's national archives.³ Although deputy

¹ Elizabeth Yakeleya, Sarah Simon, and other Sahtu and Gwich'in Elders, *We Remember the Coming of the White Man = Gahnaandaih unjoo kat degehnoo dai anahgoogwaandak* (Calgary: Durvile & UpRoute Books, 2020); Leslie McCartney and Gwich'in Tribal Council, *Our Whole Gwich'in Way of Life Has Changed = Gwich'in K'yuu Gwiidandai' Thak Ejuk Goonlih: Stories from the People of the Land* (Edmonton: Polynya Press, 2020).

² R. Hare, to The Director, 13 Mar. 1942, RG 85 C-1-a vol. 789 file 6099 [hereafter file 6099], LAC.

³ But characteristic of Gibson, see Matthew D. Evenden, 'Harold Innis, the Arctic Survey, and the Politics of Social Science during the Second World War', *Canadian Historical Review* 79, no. 1 (1998): 36–67 (pp. 56, 63).

commissioner of the Northwest Territories when the influenza struck, Gibson responded cursorily to Hare, offering little insight into the epidemic. Meanwhile, along the shores of the northern lakes and rivers there were hundreds of men and women who, as children, had lost parents and grandparents in that awful epidemic fifteen years previously. For them, 1928 was etched as an indelible memory, even as the federal bureaucracy chose to obscure and forget.

Ronald Hare, along with Laurella McClelland, directed influenza virus studies at the lab in Toronto. He was smack in the centre of a cohort of biomedical researchers who at mid-century turned their sights north, participating in a larger programme of what Joanna Radin has described as ‘biomedical prospecting efforts’.⁴ These Canadian researchers corresponded with international colleagues, most notably Yale epidemiologist John Rodman Paul, whose work would shape the World Health Organization’s program of ‘serological surveillance’.⁵ This research imagined northern Indigenous people – Inuit in particular but not exclusively – as ‘isolated’ and ‘pristine’, and thereby potential subject populations for cutting-edge immunology and epidemiology. To imagine northern peoples in this fashion involved sharing a set of assumptions about them and entailed a process of forgetting epidemics like the 1928 influenza, and other influenza, scarlet fever, and measles epidemics that had come before.

The assumptions shared by Hare, Paul, and other biomedical researchers in Canada and globally during the post-war decades were built on anthropological constructions. As Jenny Reardon and Kim TallBear write, these imaginaries saw Indigenous peoples in the Americas as representing ‘an earlier period in human evolution’, who could thus ‘help modern humans understand themselves’.⁶ Researchers targeted northern Indigenous peoples and other populations because their perceived geographic and cultural isolation made them, in Radin’s analysis, ‘portals into the human past’.⁷ Reardon, TallBear, Radin, and others examine the role of frozen blood samples and Indigenous DNA in shaping the study of population genetics and biological anthropology. These biomedical constructions, held by Hare and colleagues McClelland, C. E. Van Rooyen, A. J. Rhodes, Fred Nagler, and Arthur F. W. Peart in Toronto and Ottawa, also shaped the interpretation of ‘virgin soil epidemics’ used by historians to understand the impact of introduced pathogens in the process of European colonization.

⁴ Joanna Radin, *Life on Ice: A History of New Uses for Cold Blood* (Chicago: University of Chicago Press, 2017), 63.

⁵ Radin, *Life on Ice*, 6.

⁶ Jenny Reardon and Kim TallBear, ‘“Your DNA Is *Our* History”: Genomics, Anthropology, and the Construction of Whiteness as Property’, *Current Anthropology* 53, suppl. 5 (2012): S233–45 (S237); see also Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object* (New York: Columbia University Press, 2002); Jane Buikstra to June Helm, 8 Jul. 1983, file ‘Fort Norman Deaths 1927–65’, box 1, N-2002–012, June Helm Fonds, NWT.

⁷ Joanna Radin, ‘Latent Life: Concepts and Practices of Human Tissue Preservation in the International Biological Program’, *Social Studies of Science* 43, no. 4 (2013): 484–508 (p. 494).

The biomedical research undertaken in the 1940s and 1950s came after the histories of disease and colonialism that are the subject of this study. I begin at the end because constructions and considerations of *time* are central to the analysis in this book. The timing of smallpox, scarlet fever, and influenza epidemics shaped their history in northern North America – *not* because they came so late that they encountered ‘isolated’ and ‘pristine’ Indigenous populations, but because sometimes the delay (the ten years, for instance, between 1918 and 1928) influenced the course and consequences of an epidemic. This is a theme that will be explored in the chapters to come. For Alfred Crosby, though, a handful of twentieth-century northern epidemics served as models that could be projected backwards to understand the role of ecological relationships in European imperialism.⁸ In so doing, Crosby collapsed the distance between Inuit along the Arctic Coast in the 1940s and the effects of smallpox at the sixteenth-century siege of Tenochtitlán. He created a portal to the past as described by Radin. This book, by following the path of northern epidemics between 1860 and 1940, seeking out stories shared in community oral histories, and using the colonial archive to hold government officials, traders, and missionaries to account for their roles in and responses to these epidemics, aims to reassert the distance between Tenochtitlán in 1521 and Tuktoyaktuk in 1940; to create a space within the academic literature to learn more about the experiences of these epidemics and their historical significance from those who survived; to assess how colonial ecologies shaped the history of northern disease; and to call on those who persist in using ‘virgin soils’ to understand the history of disease, to dispense with this distorted lens permanently.

Settler colonialism in the North involved diverse Indigenous peoples, settlers, and sojourners coming together and moving apart, an ebb and flow that involved pathogens and which increased in frequency and intensity between 1860 and 1940. There were epidemics before and after, but infectious diseases caused great mortality in this period. Throughout this book, *outbreak* refers to a disease with local effects; *epidemic* to a disease with regional effects; and *pandemic* to a disease that crossed continents. Tracing outbreaks, epidemics, and pandemics means following experiences of ill health, medicine, and dying, but in the process this history shows the relationships forged by colonialism: the new geographies and ecologies that emerged, the new identities including racial categories by which people and difference came to be defined, and the changed relationships of care that underpin persistent disparities in Indigenous and settler, northern and southern, health care in Canada.

The urgency and significance of these issues came to the fore in 2020 with the onset of the COVID-19 pandemic. Everything old became new again.

⁸ Alfred W. Crosby, ‘Virgin Soil Epidemics as a Factor in the Aboriginal Depopulation in America’, *The William and Mary Quarterly* 33, no. 2 (1976): 289–99 (pp. 293–7).

In these pages, there are quarantines, vaccination mandates, and those who opposed them. There are Medical Health Officers who made poor decisions rooted in politics that enabled pathogens to spread with devastating effect. There are *syndemics* (when two or more diseases interact in a population, leading to worse health outcomes) that deepened mortality.⁹ There is the role of nutrition, built environments, sanitation, and power in shaping vulnerability to disease. There are people who cared for and nursed family, friends, and community members and helped them in their time of need. These are themes common to the history of disease. Throughout the COVID-19 pandemic, I was attuned to the tensions between diverse local events and responses and the larger collective experience. From the desire to come to terms with the scale and scope of our most recent pandemic, there is a flattening of experiences. This book considers the importance of those instances when the history of epidemic disease in the North diverged from the main historical patterns elsewhere: in the absence of smallpox epidemics with high mortality or the appearance of influenza in 1928, these divergent episodes are not just outliers but illuminate important changes in diseases over time and shaped northern experiences of epidemics and colonialism.

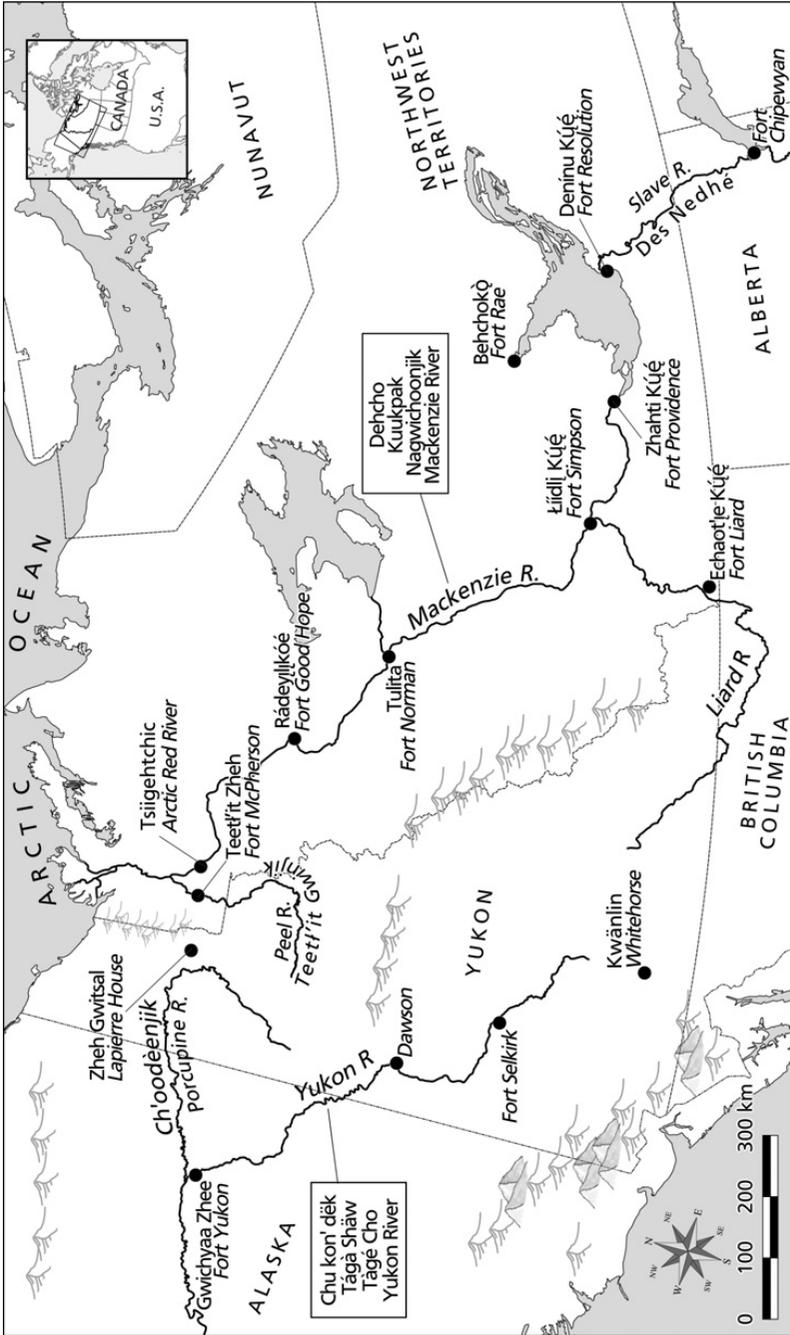
Places and People

Two great rivers and their tributaries run through this history (Map 1.1). The lands rise to peaks in the northern reaches of the Rocky Mountains. Between 1860 and 1940, waters normally froze by November, with the first new ice appearing as early as September. The land thawed in May, although waterways might not be free of ice until June or July. August was at once the height of summer and the arrival of fall. Into the twenty-first century, lands and waters are frozen for more than half the year.

Dehcho, the Dene Zhaté name for what came to be called the Mackenzie River, translates as ‘big river’. Along with the Inuvialuktun name, Kuukpak, meaning ‘great river’, and the Gwich’in name, Nagwichoonjik, ‘river flowing through a big country’, each captures the importance of the river, its great size, and its role as a ‘highway’ for northern peoples.¹⁰ The river threads through the land, carrying waters from two enormous lakes, Tıındee/Tucho/Tu Nedhé/ Great Slave Lake, and Sahtú/Sahti/Great Bear Lake, the latter via Sahtúdé or the Great Bear River. The lands and waters of these lakes were home to many different Dene: Dēnesųłné (Chipewyan), Tłı̄chų (Dogrib), Dehcho (South

⁹ Timothy P. Newfield, ‘Syndemics and the History of Disease: Towards a New Engagement’, *Social Science & Medicine* 295 (2022) <http://doi.org/10.1016/j.socscimed.2021.114454>.

¹⁰ Gabe Andre in M. Heine, A. Andre, I. Kritsch, A. Cardinal, and the Elders of Tsiigehtshik, *Gwichya Gwich'in Googwandak: The History and Stories of the Gwichya Gwich'in, As Told by the Elders of Tsiigehtshik* (Tsiigehtshik, NT: Gwich'in Social and Cultural Institute, 2007), 61.



Map 1.1 Map of northern North America.

Slavery), Tetsó't'iné (Yellowknives) and their descendants the Wíliideh Yellowknives Dene, K'áhshó Got'ine (Hare), Sahtúot'ine (Bearlake), K'áalq Gotine (Willow Lake), and Shita Got'ine (Mountain).¹¹

Dehcho flowed north to the delta, a flat coastal plain connecting the lands along the river to the coast and ocean beyond. Teet'it Gwinjik, or the Peel River, joins with the main stem of Dehcho in the delta. Gwich'in, Inuvialuit, Métis, and many others met and mixed on these lands. Among the Dinjii Zhuh or Gwich'in (who are also Dene) who appear in this book, the Van Tat Gwich'in (Vuntut Gwitchin), Teet'it Gwich'in, and Gwichya Gwich'in figure most prominently.¹² Along the coast lived Inuvialuit, Inupiat from the west, and Inuinait to the east. Van Tat (or Crow Flats), to the west of the delta, was a place used by both Van Tat Gwich'in and Inuit.¹³ Inuvialuit and Gwich'in traditional territories overlapped in places that both groups used at different times of the year.¹⁴ Relations between these two northern peoples shifted in the decades and centuries preceding the arrival of Europeans. According to Gwich'in Elders, the 'age of the great travellers and leaders [ts'ii deḡi days – the long-ago time] was followed by a time when fights with the [Inuit] occurred more frequently'.¹⁵ Before that, Gwich'in had fewer conflicts with Inuit but had fought more with Dene to the south. Ishmael Alunik emphasized that Inuit and Gwich'in conflicts took place in the delta, where they competed for hunting areas. He noted that 'long ago Inupiat or Inuvialuit never travelled too far into the delta areas because the [Gwich'in] lived there'.¹⁶

The Yukon River is called Chu kon' dēk in Hän, meaning 'sparkling water river'.¹⁷ In Northern Tutchone and Southern Tutchone, the names Tágé Cho and Tágà Shāw respectively both translate to 'great river', like its counterpart to the east.¹⁸ Chu kon' dēk, runs from its source in Áa Tlein (Atlin Lake)

¹¹ James Auld and Robert Kershaw, *The Sahtu Atlas: Maps and Stories from the Sahtu Settlement Area in Canada's Northwest Territories* (Norman Wells: Sahtu GIS Project, 2005), 5, 9; Yellowknives Dene First Nation and Prince of Wales Northern Heritage Centre, *This Land Is Our Home: Wíliideh Yellowknives Dene* (Yellowknife: Prince of Wales Northern Heritage Centre, 2015), www.nwtexhibits.ca/navigator/ykdene/index-en.html.

¹² For the Van Tat Gwich'in, I follow the conventions set out in Vuntut Gwitchin First Nation and Shirleen Smith, *People of the Lakes: Stories of Our Van Tat Gwich'in Elders* (Edmonton: University of Alberta Press, 2009), xx.

¹³ Vuntut Gwitchin First Nation and Smith, *People of the Lakes*, 106.

¹⁴ Ishmael Alunik, *Call Me Ishmael: Memories of Ishmael Alunik* (Inuvik: Kolausok Ublaaq Enterprises, 1998), 11; Pierre's Creek on the Mackenzie River served as a boundary between the Gwich'in and the Inuvialuit about 200 to 300 years ago and was also a good place for blueberries and cranberries. I. Kritsch, *Gwich'in Territorial Park (Campbell Lake) Oral History Project Final Report: Prepared for Dept. of Economic Development and Tourism (GNWT)* (Tsiigehtchic: Gwich'in Social and Cultural Institute, 1994), 27.

¹⁵ Heine et al., *Gwichya Gwich'in Googwandak*, 30; George Blondin, *Yamoria the Lawmaker: Stories of the Dene* (Edmonton, AB: NeWest Press, 1997), 101–3.

¹⁶ Alunik, *Ishmael*, 66. ¹⁷ Georgette McLeod, pers. corr., 17 May 2022.

¹⁸ Yukon, *Gazetteer of Yukon* (Yukon Geographical Names Program, 2022).

north-west to its junction with the Ch'oodènjik or Porcupine River, and then at Fort Yukon abruptly south-westward across Alaska to its mouth in the Bering Sea. To the east of what became an international border, along the shores of the river, its tributaries, and out on the land, live Gwich'in, Tr'ondëk Hwëch'in, Tlingit, Northern Tutchone, Southern Tutchone, Upper Tanana, and Tagish people.

Euro-Americans travelled to the north-west interior from the late eighteenth century for exploration and trade, with more arriving and more frequently in the nineteenth century. Akaitcho, a nineteenth-century Tetsôt'iné leader, met with John Franklin in July 1820. Franklin was not the first newcomer to Akaitcho's land; by the 1820s, the North West Company had established several posts around the shores of what they called Great Slave Lake. Having brought meat to the posts in trade, Akaitcho agreed to guide and provision Franklin and his men on their journey northward. They set out together, but Akaitcho soon questioned his initial optimism about their journey. In mid-August, he informed Franklin that it would take a further forty days to descend the river 'and during the whole journey the party must experience great sufferings for want of food, as the reindeer had already left'. When pressed about why he had changed his timeline for their journey, Akaitcho replied that 'he had been unacquainted with our slow mode of travelling', and winter was coming. Franklin's response was painfully naïve given his ultimate arctic fate: 'We now informed [Akaitcho] that we were provided with instruments by which we could ascertain the state of the air and water, and that we did not imagine the winter to be so near as he supposed; however, we promised to return on discovering the first change in the season.' Akaitcho accepted their decision but emphasized that they would be going to their deaths. Akaitcho's persuasion, combined with some 'recent changes in the weather', finally led Franklin and his men to winter at a place they called Fort Enterprise on Winter Lake.¹⁹

Although newcomers, such as Franklin and the North West Company traders, came as colonizers, at their outset their power and significance was limited. Akaitcho's importance to Dene history lies not in his role guiding Franklin, but foremost in his leadership in negotiating a lasting peace with T̥h̥ç̥ leader Edzo in the mid-nineteenth century at N̥h̥dlati/Gots'q̥k̥ati/Mesa Lake.²⁰ Akaitcho's critique of Franklin's 'slow mode of travelling' exposed European weakness: explorers were encumbered by their instrumentation – the burdens of European society that they insisted on carrying with them – and by their ignorance of northern environments. Although they emphasized their

¹⁹ John Franklin and John Richardson, *Narrative of a Journey to the Shores of the Polar Sea in the Years 1819, 20, 21 & 22* (Philadelphia: H. C. Carey & I. Lea, 1824), 200–2, 226.

²⁰ This story is told by Dene. For two written accounts see George Blondin, 'Edzo Overpowers the Great Enemy', in *Yamoria*, 93–100; Yellowknives Dene First Nation, *Proposed Dinàgà Wek'èhodi Protected Area YKDFN Traditional Knowledge Report* (31 Mar. 2018), 12–15.

work of exploration and discovery, people like Franklin and Alexander Mackenzie followed in the footsteps of northerners, led by guides and visiting well-known places, such as fish camps in use for hundreds of years, on their journeys down Nagwichoonjik.²¹ Traders followed northerners for furs and missionaries followed them to their camps to proselytize, only later establishing missions for Dene, Gwich'in, and Inuvialuit to discover.

From 1795 until 1821, the North West Company dominated the trade in the Mackenzie River District. From 1821 until 1895–1900, the Hudson's Bay Company (HBC) monopolized trade with posts along the Mackenzie River from Great Slave Lake to Peel River Post, along the tributary Liard River, with Fort Simpson the district headquarters, at the junction of the two rivers (hence its original name, the Fort of the Forks). Peel River Post was renamed Fort McPherson and, here, Gwich'in acted initially as intermediaries to Inuvialuit, although after 1853 Inuvialuit traded directly at the fort, as well as at Fort Anderson on the Anderson River.

The upper Yukon River and its watershed was the last part of the Mackenzie and Yukon region where fur traders established posts. There were existing Indigenous trade networks reaching into this region and contacts with Russian traders to the east. Then the HBC erected five posts in the 1840s. In 1842, Robert Campbell established Fort Frances on Frances Lake and shortly thereafter Pelly Banks on the upper Pelly River. In 1846, to the north, LaPierre's House was built as a satellite post – just across the mountains – to Peel River Post. Both fell under the responsibility of a single officer. In 1847, Alexander Murray established Fort Yukon at the junction of the Porcupine and Yukon rivers and well within what was then Russian and would become American territory. Campbell erected the most significant central Yukon post, Fort Selkirk, at the confluence of the Yukon and Pelly rivers, one year later.²² Fort Selkirk was abandoned in 1852, after a raid by Chilkat Tlingit, who felt their trade position threatened by the HBC. The Russian American Company had been trading in Alaska since the end of the eighteenth century and focused their attention on the sea otter pelt trade along the coast. Even after over-harvesting otters led to declining returns, the Russians only came as far inland as Nulato, establishing a post there in the early 1840s. Russian and HBC traders travelled from their respective posts at Nulato and Fort Yukon to the junction of the Yukon and Tanana rivers.²³ Of all these posts, Fort Yukon flourished until the

²¹ Heine et al., *Gwichya Gwich'in Googwandak*, 169; See also Alexis Arrowmaker, Madeline Judas, Pierre Judas, et al., *We Know and Love Tłı̄chò Ndè: Comments and Concerns From the Dech'ı̄laot'ı̄ Elders to the Environmental Assessment Review Panel, February 1996* ([Yellowknife]: Dene Cultural Institute, 1996), 10.

²² Greg Hare and Ruth Gotthardt, *A Look Back in Time: The Archaeology of Fort Selkirk* ([Yukon: Selkirk First Nation], 1996), 24.

²³ Thomas J. Turck and Diane L. Lehman Turck, 'Trading Posts along the Yukon River: Noochuloghoyet Trading Post in Historical Context', *Arctic* 45, no. 1 (1992): 51–61 (p. 51).

sale of Alaska to the United States forced the HBC across the border. The closing of Fort Yukon in 1869 led to the decline of LaPierre's House. The HBC withdrew up the Porcupine River to Rampart House, which moved several times until the boundary was settled.²⁴ Chapter 4 picks up this historical thread.

Christian missionaries arrived in the 1840s. The Methodist Wesleyans reached Fort Chipewyan ahead of the Roman Catholic Oblates of Mary Immaculate (OMI), but the Roman Catholic and Anglican presence would be the most consequential.²⁵ The Oblate Alexandre Taché visited Fort Chipewyan in 1847 and returned the following year as well. He was succeeded by Henri Faraud, who spent much of 1849–50 at the post. The rapid expansion of missionary activity along the Mackenzie River began in 1858. By this time, the Roman Catholic Oblates had secured permission from George Simpson and the HBC to proceed with establishing northern missions. This permission ensured that the HBC would provide free transportation and accommodation to missionaries. The Anglican church at Red River was, in historian Kerry Abel's words, 'suddenly roused'.²⁶ Much has been made of the competition between Anglicans and Roman Catholics along the Mackenzie River and the Arctic Coast, although both groups benefited from larger institutions that enabled northern missions to draw on personnel and financial resources from outside.²⁷ The Roman Catholic Oblate missions relied on the support of lay brothers and Grey Nun sisters in furthering the work of priests. The Grey Nuns took responsibility for schools and did much of the work in the hospitals. In effect, the Roman Catholic mission families had brothers, sisters, mothers, and fathers labouring together. Anglicans, by contrast, could bring their immediate family to share the work, encouraging what Myra Rutherford referred to as 'last minute' marriages.²⁸ By the end of the 1880s, there were twelve Oblate priests, seven Grey Nuns, and thirteen lay brothers operating fifteen missions from Fort Chipewyan to Arctic Red River (Tsiigehtchic) and two residential schools at Fort Providence (1867) and Fort Chipewyan (1874). At this time, the Anglican Mackenzie River Diocese included eight clergy and four schoolmasters and catechists, operating ten missions in the Mackenzie district and Yukon Territory combined, in addition to a mission post at Fort Chipewyan.

²⁴ Vuntut Gwitchin First Nation and Smith, *People of the Lakes*, 118.

²⁵ Morris Zaslow, *The Opening of the Canadian North, 1870–1914* (Toronto: McClelland and Stewart, 1971), 64.

²⁶ Kerry Abel, *Drum Songs: Glimpses of Dene History* (Montreal: McGill-Queen's University Press, 1993), 115–16.

²⁷ Martha McCarthy, *From the Great River to the Ends of the Earth: Oblate Missions to the Dene, 1847–1921* (Edmonton: University of Alberta Press, 1995), ch. 4; Zaslow, *Opening*, 63–76; Abel, *Drum Songs*, ch. 6.

²⁸ Myra Rutherford, *Women and the White Man's God: Gender and Race in the Canadian Mission Field* (Vancouver: UBC Press, 2002), xiii, 50–1.

From this diversity of lands, cultures, languages, history, and relations, the Dominion of Canada delineated an international border with the United States of America, carved out two territories, the Yukon and the Northwest Territories, and would sign Treaties 8 and 11 with some of the Indigenous people of these lands. The Northwest Territories were soon subdivided into three districts, the Mackenzie, Keewatin, and Franklin. The District of Mackenzie corresponded to the fur trade's Mackenzie River District and includes the lands that along with the Yukon, and with some spilling over boundaries, are considered in this book. Collapsing northern Indigenous historical diversity into the geographic categories of the Yukon and the Mackenzie district is a simplification deployed in this book only to better examine the structures imposed and sustained at the moving edges of Canada's settler colonial state.

Disease, Medicine, and Colonialism

The most powerful narrative about the arrival of Europeans in the Americas hinges on the role of epidemic diseases in shaping this encounter. That story goes like this: Europeans who crossed the Atlantic brought with them infectious diseases, with which they had co-evolved in crowded urban centres and through close proximity to domestic animals. This relationship ensured greater immunity among first-generation European settlers and sojourners. By contrast, Indigenous peoples in the Americas had not acquired immunity to the most common European childhood diseases – smallpox, measles, scarlet fever, to name a few. When these pathogens arrived, they encountered populations of Indigenous Americans who had no immunity and who, in consequence, died en masse. The catastrophic impact of these diseases was reinforced by traditional healing practices such as sweating that could aggravate respiratory illnesses, for example, and by ignorance of effective quarantine measures. The diseases spread like wildfire, carried by the infected-but-unaware, who fled their villages and travelled to other communities bringing the diseases with them. So powerful was this disease tsunami that it cleared the land of Indigenous people, in many instances in advance of the arrival of explorers or colonists, creating the impression of an emptied land. The effects of these 'virgin soil epidemics', which killed large numbers of adults of reproductive age, were such that they led to catastrophic depopulation, conceivably as great as 90 per cent in parts of the Americas.²⁹

This story has been told time and again since the 1970s and 1980s when it was articulated by Alfred Crosby and William McNeill, then popularized by writers like Jared Diamond, in a fashion that found wide resonance among

²⁹ Crosby, 'Virgin Soil Epidemics', 289–99.

scholars and the reading public.³⁰ The power of this narrative arises in several ways. The story has hemispheric reach: it offers a single narrative thread to the history of European colonialism that is accessible in a way that complex, multifaceted, localized stories rarely are. Authors, especially popularizers, of this story rely heavily on quantification and biological explanations. In particular, those who emphasize the role of ‘virgin soil epidemics’ harness the authority of dispassionate science and hard numbers of population sizes in reconstructing the causal mechanisms at work. They turn a language of childhood disease and ‘virgin soil’ that simultaneously infantilizes, naturalizes, and genders Indigenous populations to render them submissive and vulnerable, into a biological inevitability.³¹ Lastly, the narrative conveys the horrific drama of colonization, while displacing the responsibility for its worst effects onto nature – onto viruses and pathogens that lack intentionality – and by extension away from the colonizers and settlers who profited from this catastrophe.

There is a well-established revisionist interpretation of ‘virgin soil epidemics’ that disputes their value in understanding the experience of disease as part of the history of European colonization in the Americas. This historiographical position, clearly articulated in 2003 with the publication of ‘Virgin Soils Revisited’ by David S. Jones, does not deny that infectious diseases, introduced by European colonizers, had catastrophic effects on Indigenous communities and populations. However, in works covering many different locales in the Americas, historians have undermined the singularity of this narrative and the simplistic resort to immunological explanations.³² Suzanne Alchon situated sixteenth- and seventeenth-century contact-era epidemics in global disease context, demonstrating that high mortality in epidemics was not unique to Indigenous peoples in the Americas at this time.³³ What was exceptional about the colonial context, Alchon shows, was the role of European colonial policy in disrupting Indigenous societies and the effects of the arrival of multiple overlapping pathogens.

The colonizing work done by the idea of ‘virgin soil epidemics’ was the subject of David Jones’s *Rationalizing Epidemics: Meanings and Uses of*

³⁰ Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900–1900* (Cambridge: Cambridge University Press, 1986); William McNeill, *Plagues and Peoples* (Garden City: Anchor Press, 1976); Henry F. Dobyns, *Their Number Become Thinned: Native American Population Dynamics in Eastern North America* (Knoxville: University of Tennessee Press, 1983).

³¹ Jocelyn Thorpe, *Temagami’s Tangled Wild: Race, Gender, and the Making of Canadian Nature* (Vancouver: UBC Press, 2012), 45, 64–5; David S. Jones, ‘Virgin Soils Revisited’, *The William and Mary Quarterly* 60, no. 4 (2003): 703–42 (p. 714).

³² For a summary of this literature, see David S. Jones, ‘Death, Uncertainty, and Rhetoric’, in *Beyond Germs: Native Depopulation in North America*, ed. C. M. Cameron, Paul Kelton, and A. C. Swedlund, 16–49 (Tucson: University of Arizona Press, 2015).

³³ Suzanne Austin Alchon, *A Pest in the Land: New World Epidemics in a Global Perspective* (Albuquerque: University of New Mexico Press, 2003).

American Indian Mortality since 1600 (2004). Jones attended to sickness and mortality among Indigenous peoples, but the cultural construction of the ‘Vanishing Indian’, which shaped ideas about Indigenous mortality and depopulation, has long shaped American and Canadian colonial policies.³⁴ ‘Virgin soil’ interpretations have a long history in understandings of tuberculosis, in particular as part of early efforts to explain the apparent greater susceptibility of Indigenous peoples to TB. Christian McMillen shows how ‘virgin soil’ explanations were overly simplistic in the context of tuberculosis and were ultimately supplanted.³⁵ Jones and Paul Kelton, in advancing our understanding of Indigenous mortality as part of colonization, distinguished between the idea of ‘virgin soils’ and what Jones termed ‘the social contingency of depopulation’.³⁶ Kelton argued in *Epidemics and Enslavement* (2007) that, along with the novel pathogens that arrived with colonizers and the epidemics that ensued, ‘the nonbiological aspects of colonialism mediated the spread and impact of those diseases’.³⁷ In a subsequent work, Kelton showed how the Cherokee responded creatively and effectively to the new dangers of smallpox, including by implementing their own culturally specific quarantines.³⁸

In the historiography of Indigenous peoples whose lands became Canada, there have been key works that have traced colonial epidemics, their course and consequences. Some of the earliest work was done by Arthur Ray in the 1970s and by Jody Decker in the 1980s and 1990s.³⁹ Regional explorations have been most sophisticated. Paul Hackett, Ann Carlos, and Frank Lewis describe epidemics around Hudson Bay and the Petit Nord. Robert Boyd’s work on the Pacific Northwest and Ted Binnema on the western plains detail the impacts of major epidemics upon diverse Indigenous societies and economies.⁴⁰ These works all acknowledge the importance of historical

³⁴ Brian W. Dippie, *The Vanishing American: White Attitudes and U.S. Indian Policy* (Middletown: Wesleyan University Press, 1982).

³⁵ Christian W. McMillen, *Discovering Tuberculosis: A Global History, 1900 to the Present* (New Haven: Yale University Press, 2016), 25–7.

³⁶ David S. Jones, *Rationalizing Epidemics: Meanings and Uses of American Indian Mortality since 1600* (Cambridge: Harvard University Press, 2004), 57.

³⁷ Paul Kelton, *Epidemics and Enslavement: Biological Catastrophe in the Native Southeast, 1492–1715* (Lincoln: University of Nebraska Press, 2007), 161–3.

³⁸ Paul Kelton, *Cherokee Medicine, Colonial Germs: An Indigenous Nation’s Fight Against Smallpox, 1518–1824* (Norman: University of Oklahoma Press, 2015).

³⁹ Arthur J. Ray, *Indians in the Fur Trade: Their Role as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660–1870* (Toronto: University of Toronto Press, 1974); Jody F. Decker, ‘Depopulation of the Northern Plains Natives’, *Social Science & Medicine* 33, no. 4 (1991): 381–93; Jody F. Decker, ‘Tracing Historical Diffusion Patterns: The Case of the 1780–82 Smallpox Epidemic Among the Indians of Western Canada’, *Native Studies Review* 4, nos. 1 & 2 (1988): 1–24.

⁴⁰ Paul Hackett, ‘A Very Remarkable Sickness’: *Epidemics in the Petit Nord, 1670–1846* (Winnipeg: University of Manitoba Press, 2002); Ann M. Carlos and Frank Lewis, ‘Smallpox and Native

circumstance, colonial objectives and responses, and environmental context in shaping mortality and the spread of disease. None of these works, however, go much farther north than the 60th parallel or much later than 1850. Within the northern historiography that considers the lands that became the Yukon and the Northwest Territories, less attention has been paid to the history of epidemic disease. The only comprehensive works on northern health are Robert Fortune's books on Alaska.⁴¹ Epidemics discussed in the chapters to come appear also in works by Kerry Abel, Martha McCarthy, Patricia McCormack, and others.⁴² The general assumption has been that colonial epidemics operated in these lands much as the wider literature showed they operated elsewhere.

Within Canadian historiography, the significance of novel pathogens and immunities is secondary to the role of colonialism and racism in shaping persistent and significant health disparities. Mary-Ellen Kelm, Maureen Lux, James Daschuk, Lisa Stevenson, Mary Jane McCallum, Adele Perry, and others have emphasized that it was, in McCallum's words, the 'colonial policies and practices of the Canadian government' that created ill health, as much as, if not more so than, pathogens.⁴³ These works draw on the international literature on imperialism, colonialism, and medicine to show how public health and sanitation became tools to control and manage 'problem' populations – including

American Mortality: The 1780s Epidemic in the Hudson Bay Region', *Explorations in Economic History* 49, no. 3 (2012), <https://doi.org/10.1016/j.eeh.2012.04.003>; Robert Boyd, *The Coming of the Spirit of Pestilence: Introduced Infectious Diseases and Population Decline among Northwest Coast Indians, 1774–1874* (Vancouver: UBC Press, 1999); Theodore Binnema, *Common and Contested Ground: A Human and Environmental History of the Northwestern Plains* (Toronto: University of Toronto Press, 2004); Ted Binnema, "'With Tears, Shrieks, and Howlings of Despair': The Smallpox Epidemic of 1781–82", in *Alberta Formed, Alberta Transformed*, vol. 1, ed. Michael Payne, Donald Wetherell, and Catherine Cavanaugh, 110–31 (Edmonton: University of Alberta Press, 2006).

- ⁴¹ Robert Fortune, *Chills and Fever: Health and Disease in the Early History of Alaska* (Fairbanks: University of Alaska Press, 1992); Robert Fortune, 'Must We All Die?: Alaska's Enduring Struggle with Tuberculosis' (Fairbanks: University of Alaska Press, 2005).
- ⁴² Abel, *Drum Songs*; Kenneth Coates, *Best Left As Indians: Native–White Relations In the Yukon Territory, 1840–1973* (Montreal: McGill-Queen's University Press, 1993); McCarthy, *Great River*; Patricia McCormack, 'The Athabasca Influenza Epidemic of 1835', *Issues in the North* 1 (1996): 33–42; Patricia McCormack, *Fort Chipewyan and the Shaping of Canadian History, 1788–1920s: 'We Like to Be Free in This Country'* (Vancouver: UBC Press, 2010).
- ⁴³ Quotation in Mary Jane Logan McCallum, 'Starvation, Experimentation, Segregation, and Trauma: Words for Reading Indigenous Health History', *Canadian Historical Review* 98, no. 1 (2017): 96–113 (p. 100); Mary-Ellen Kelm, *Colonizing Bodies: Aboriginal Health and Healing in British Columbia, 1900–50* (Vancouver: UBC Press, 1998); Maureen K. Lux, *Medicine That Walks: Disease, Medicine and Canadian Plains Native People, 1880–1940* (Toronto: University of Toronto Press, 2012); Maureen K. Lux, *Separate Beds: A History of Indian Hospitals in Canada, 1920s–1980s* (Toronto: University of Toronto Press, 2016); James Daschuk, *Clearing the Plains: Disease, Politics of Starvation, and the Loss of Aboriginal Life* (Regina: University of Regina Press, 2013); Frank James Tester and Paule McNicoll, 'Why Don't They Get It? Talk of Medicine as Science. St Luke's Hospital, Panniquatq, Baffin Island', *Social History of Medicine* 19 (2006): 87–106.

Indigenous populations as viewed by settler states.⁴⁴ In *Rationalizing Epidemics*, Jones described the importance of moral communities to understanding why Europeans and Americans acted opportunistically when confronted with Indigenous sickness and mortality. For many early colonizers, notes Jones, Indigenous Americans lay outside their moral community, ‘the limits of its empathy and concern’, and they therefore did not ‘feel an obligation to intervene and provide assistance’.⁴⁵ In the late nineteenth- and early twentieth-century North, moral communities were not drawn exclusively around categories of what we now term ‘Indigenous’ people and ‘settlers’. Local circumstances, family relations, and individual personalities held greater sway in shaping relations of care. The creation and reinforcement of categories of racial difference between those designated as ‘half-breeds’, ‘Eskimos’, ‘Indians’, and ‘whites’, part of the governing colonial bureaucracy that emerged after 1900 especially, contributed to growing indifference towards the health and well-being of northern Indigenous peoples. If, as David Goldberg writes, race is one of the ‘central conceptual inventions of modernity’, in the construction of the modern North it contributed directly to the creation of the ‘structures of indifference’, detailed by McCallum and Perry, that constitute health care as produced by settler colonialism.⁴⁶ In her work on Inuit health in the Canadian Arctic in the 1940s and after, Lisa Stevenson writes of the ‘murderous’ indifference of the bureaucratic state, ‘always couched in terms of benevolence and care’.⁴⁷

Ideas and experiences of isolation shaped northern health history in critical ways. Spatial isolation was, according to Alison Bashford and Carolyn Strange, a ‘persistent strategy for the management of problem populations in liberal and non-liberal nations, in colonial and post-colonial states’.⁴⁸ Public health figured importantly in the reproduction of liberal democratic values as part of the rise of local settler governance in Canada’s territorial north. Quarantine became a tool for epidemic management, and spatial control – including isolation and exclusion – was one way that racial constructions shaped infrastructures of care in the North, as we will see in Chapters 5 and 6. McCallum emphasizes that

⁴⁴ See Warwick Anderson, *Colonial Pathologies: American Tropical Medicine, Race, and Hygiene in the Philippines* (Durham, NC: Duke University Press, 2006); Alison Bashford and Carolyn Strange, ‘Isolation and Exclusion in the Modern World: An Introductory Essay’, in *Isolation: Places and Practices of Exclusion*, ed. C. Strange and A. Bashford, 1–18 (London: Routledge, 2003); David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993).

⁴⁵ Jones, *Rationalizing Epidemics*, 13.

⁴⁶ As cited in Bashford and Strange, ‘Isolation and Exclusion’, 4–5; Mary Jane Logan McCallum and Adele Perry, *Structures of Indifference: An Indigenous Life and Death in a Canadian City* (Winnipeg: University of Manitoba Press, 2018).

⁴⁷ Lisa Stevenson, *Life beside Itself: Imagining Care in the Canadian Arctic* (Oakland: University of California Press, 2014), 73.

⁴⁸ Bashford and Strange, ‘Isolation and Exclusion’, 1.

segregation was a defining feature of Indigenous health, whether on reserves, in schools, or in hospitals, including the post-war Indian Hospital system erected to house tuberculosis patients and which served as an extension of the residential school system.

Isolation also worked in other ways in the history of northern epidemics. Geographic isolation was an essential part of how northern Indigenous populations were imagined in the mid-twentieth century as ‘virgin soil’. By thus defining isolated populations, medical researchers and later historians articulated that these populations were *endangered* – as also understood by liberal democratic states that deemed it necessary to isolate people ‘considered a danger to themselves or to others’.⁴⁹ In a 2005 article, McCallum deftly charted how ideas of Indigenous bodies as ‘isolated’ were constructed first through geographic location – at a distance and remote from – then through the ways that the idea of isolation was part of larger constructions of civilization and primitivism.⁵⁰ Indigenous peoples were ‘isolated from’ civilization, and this produced a set of paradoxes, namely that isolation had meant both greater health and greater susceptibility to disease. McCallum observes that this ‘did not translate into a policy of non-interference . . . [or] a desire to recognize and protect the integrity of Native and Inuit cultures, resources, and territories’; instead, it served to justify greater, more intrusive colonial medical interventions that included segregation and isolation.⁵¹ The language and construction of ‘isolation’ was most powerful in the North, where it resonated with and reinforced colonial ideas of northern environments as a frontier and wilderness that persist into the present.⁵²

Dene, Gwich’in, Inuvialuit, Métis, and other northern Indigenous populations were *not* isolated, remote, or disconnected. People were profoundly connected with one another, forming rich, diverse, historic socio-ecological worlds, travelling long distances, and holding and sharing expertise across territories the Canadian state – with far, far less knowledge – would come to claim. In the latter half of the twentieth century, the conceptual isolation of northern populations served to disconnect Indigenous people in the service of

⁴⁹ Bashford and Strange, ‘Isolation and Exclusion’, 3; Lux, *Separate Beds*, 7–8.

⁵⁰ See Paige Raibmon, *Authentic Indians: Episodes of Encounter from the Late-Nineteenth-Century Northwest Coast* (Durham: Duke University Press, 2005), 7–9; Gail Bederman, *Manliness and Civilization: A Cultural History of Gender and Race in the United States, 1880–1917* (Chicago: University of Chicago Press, 1995); Bruce Mazlish, *Civilization and Its Contents* (Stanford: Stanford University Press, 2004).

⁵¹ Mary Jane McCallum, ‘This Last Frontier: “Isolation” and Aboriginal Health’, *CBMH/BCHM* 22, no. 1 (2005): 103–20 (p. 108).

⁵² Daniel Chester Forest Sims, ‘Balloon Bombs, the Alaska Highway, and Influenza: Tsek’ehne Perspectives on the 1943 Flu Epidemic’, *BC Studies* 203 (2019): 111–30 (p. 126); Shelagh D. Grant, ‘Arctic Wilderness – And Other Mythologies’, *Journal of Canadian Studies* 33, no. 2 (1998): 27–42; Sherrill Grace, *Canada and the Idea of North* (Montreal: McGill-Queen’s University Press, 2001).

a model of 'island evolution' that provided an easy-to-understand interpretation of the effects of novel pathogens as part of colonization.⁵³ To say that this interpretation was 'easy to understand' presupposes a system of knowledge in which this model of disease made sense. This system of knowledge was the inheritance of settler colonialism in the Americas that witnessed the collapse and 'extinction' of Indigenous peoples, purported inhabitants of a virgin wilderness, while colonizers stood by helpless – refusing to help. These were stories that, although reformulated in the 1970s, had been told for over a century in northern North America, a narrative trajectory traced in the chapters to come.

This work builds on ecological approaches to disease, exemplified by Linda Nash, that consider pathogens and people as situated in place, in time, in seasons, in relations with other people, and in relations with other-than-human nature.⁵⁴ Chapter 2 opens in the 1860s with a scarlet fever pandemic. Tracing scarlet fever and influenza down river and out on to the land reveals emerging colonial ecologies in the late nineteenth century. Chapter 3 considers stories told about good and ill health, epidemics and mortality, in the late nineteenth century. These stories, told at the time and since, articulate colonial motifs and fictions. This chapter also addresses the early history of smallpox and vaccination in the North. Chapter 4 opens at the turn of the twentieth century in the midst of the gold rush, an event that brought tens of thousands of people to the confluence of the Klondike and Yukon rivers. These men, women, and children carried with them countless pathogens, creating outbreaks and epidemics from Alaska to the Arctic Coast to Lake Athabasca. Beginning in 1898, the Canadian state's desire to access northern resources led it to seek title through treaties to northern lands. In return, treaty commissioners made promises to provide for the health of northern Indigenous peoples. Chapter 5 considers these promises, made to enable an infrastructure of extraction, which produced anaemic infrastructures of care. Chapter 6 extends the spatial analysis illuminated by these infrastructures to the public health measures introduced in the Yukon and the Mackenzie district, primarily in response to smallpox. Colonial authorities used health tools to disproportionately control the movement of Indigenous people, part of the gravitational forces asserted by settler colonialism in the North. Chapters 7 and 8 examine the 1928 influenza epidemic in detail. First, the course of the epidemic is traced. This serves to better understand its relationship to previous influenza outbreaks and pandemics, as

⁵³ Radin, 'Latent Life', 494.

⁵⁴ Linda Nash, *Inescapable Ecologies: A History of Environment, Disease, and Knowledge* (Berkeley: University of California Press, 2006); J. D. Mathews, J. M. Chesson, J. M. McCaw, J. Mc Vernon, 'Understanding Influenza Transmission, Immunity and Pandemic Threats', *Influenza and Other Respiratory Viruses* 3, no. 4 (2009): 143–9. <https://doi.org/10.1111/j.1750-2659.2009.00089.x>.

well as to demonstrate the profound impact of this epidemic. Chapter 8 examines the growing significance of racial constructions in this period and how colonial racism shaped critical decisions and the transformative outcomes of the 1928 influenza. This chapter also assesses the importance to any interpretation of its effects of situating epidemic disease in time and place. Finally, while the narrative arc in this book moves from scarlet fever in 1860 to influenza in 1928, throughout this period tuberculosis was spreading, with greatest intensity in the 1920s and 1930s. The impacts of tuberculosis in changing relationships with the land and as part of the history of residential schooling are examined in detail in Chapter 9. The book closes with the 1940s influenza epidemics that were used in the construction of 'virgin soil epidemics', returning us to where we started.

Oral Histories and Archives

This research relies on oral histories conducted with past generations of Elders in northern Indigenous communities. Beginning in the 1970s, systematic efforts were made to record, transcribe, and disseminate the stories, expertise, and knowledge of Elders and communities across the North. These efforts took many different forms and were closely connected to political organizing around land claims through, for instance, the work of the Committee for the Original People's Entitlement (COPE), the first Inuvialuit political organization, and the Dene Mapping Project of the National Indian Brotherhood. In the past fifty years, northern Indigenous heritage organizations, including the Gwich'in Social and Cultural Institute – now the Gwich'in Tribal Council's Department of Culture and Heritage, the Dene Cultural Institute – now the Yamozha K'ue Society, and the Tr'ondëk Hwëch'in Heritage Department, among others, have become important repositories for oral histories and interviews recorded with several generations of Elders. There have also been countless smaller oral history projects conducted through schools and colleges, others funded by Parks Canada or the Yukon Heritage Branch, others in conjunction with environmental impact assessments for major development projects, that have recorded interviews with Elders and community members, chronicling memories and life experiences going back to the nineteenth century and before. The transcripts of the Mackenzie Valley Pipeline Inquiry represent a distinct contribution to the archive of lived experience and northern Indigenous history, expertise, and politics.

These existing oral histories are found in many different places and forms. Some of the transcripts used in this research were accessed through agreements with northern heritage organizations, specifically the Gwich'in Tribal Council's Department of Culture and Heritage, the Tr'ondëk Hwëch'in Heritage Department, and the Inuvialuit Cultural Centre. I also relied on

historiographical interpretations, set forth in published works such as Dene Elder George Blondin's three books, and in the interviews themselves, that share clear interpretations about not only what happened but also its historical significance.⁵⁵ Other oral histories are held in archives, such as the Salt River Oral History collection and the Metis Heritage Association interviews in the Northwest Territories Archives in Yellowknife. Archives also hold individual interviews. Some transcripts were printed and bound or published and have found their way into library collections. Others have been used as the foundation for major published works, including the Vuntut Gwitchin First Nation's *People of the Lakes* and the Gwichya Gwich'in's *Gwichya Gwich'in Googwandak*.⁵⁶

From these collected oral histories, I have been able to learn much more about northern history over the last 150 years than would otherwise have been possible. Interviews conducted beginning in the 1970s included the life experiences of men and women born in the last decades of the nineteenth century as well as those who came after. Some of these Elders, like Inuvialuk Felix Nuyaviak, were known for their stories about historical epidemics (Figure 1.1).⁵⁷ Moreover, as was described in the *People of the Lakes* collection, 'Elders knew stories from before their time'.⁵⁸ Sarah Abel, a Gwich'in Elder, emphasized, 'Even me, I never saw it but it was spoken about in front of me. That is what I talk about. This is how I know, but really it happened before them.'⁵⁹ When interviewed, Elders would often explicitly state how they knew about events that had happened before they were born or when they were very small, identifying who they had heard the story from. Elders thus established their authority to share a particular story. When Gwich'in Elder Hannah Netro shared a story about the smallpox epidemic at Rampart House in 1911, she noted that 'I heard a story that was passed down from my dad'. Netro also specified that she remembered the year it happened because that was when 'my sister Ellen Bruce was born in 1911'.⁶⁰

⁵⁵ On George Blondin as a storyteller, see Richard Van Camp, foreword to *Trail of the Spirit: The Mysteries of Medicine Power Revealed*, by George Blondin (Edmonton: NeWest Press, 2006).

⁵⁶ To ensure proper attribution, I identified in the footnotes where I am quoting or referencing the words of an interviewee or Elder, whether the quotation appears in a published volume, interview transcript, or elsewhere. For example, in abbreviated form: Name of Interviewee in *Title of Published Collection*, page number. This is distinguished from where I am quoting the ideas or otherwise referencing the editors or compilers of a collection that includes extended oral histories or transcriptions. For example, Editors of Volume, *Title* etc. Likewise, I have not changed the original language or used [*sic*] when quoting from oral histories or interviews.

⁵⁷ Felix Nuyaviak (1892–1981): for his expertise on stories about disease, see Willie Gruben, interview with Florence Nasogaluak and Cathy Cockney, 26 Jul. 1996, Kitigaaryuit, tape 16B, transcript, in Cathy Cockney, *Kitigaaryuit Oral Traditions Research Project 1996* (Inuvik: Inuvialuit Social Development Program, 1997), 244.

⁵⁸ Vuntut Gwitchin First Nation and Smith, *People of the Lakes*, 65.

⁵⁹ Sarah Abel in *People of the Lakes*, 65.

⁶⁰ Hannah Netro interviewed by Shelagh Bearsto, in *Rampart House: Stories Told By Our Elders* (Old Crow: Te'sek Gehtr'oonatun Zzeh College, 1993), 14.



Figure 1.1 Felix Nuyaviak (1892–1981), in centre, drumming at Tuktoyaktuk. ©NWT Archives/Terrance Hunt fonds/N-1979–062: 0064.

Using oral histories collected in such diverse ways required constant attention to the contexts of production.⁶¹ Stories and experiences, ways of framing expertise, as shared before the Berger Inquiry or in the context of environmental impact assessments, were very different from how stories and experiences were shared in community collections intended to teach young people about their heritage. There was anger apparent in the Berger transcripts, as witnesses gave testimony and challenged colonial authorities to take responsibility for their actions.⁶² There was also, at times, language like that found in the opening quotation from Dene Elder Philip Simba, where he qualifies what he is saying by observing, ‘because he is all alone now and no old person here to say that he is telling you the truth’ (Figure 1.2). Simba was asserting the importance of collectively held knowledge and acknowledging that in colonial settings like the Inquiry, Indigenous expertise was not given its proper weight. The breadth of oral histories that have been collected over

⁶¹ Malin Thor Tureby, ‘To Hear with the Collection: The Contextualisation and Recontextualisation of Archived Interviews’, *Oral History* 41, no. 2 (2013): 63–74.

⁶² See also Sarah A. Nickel, *Assembling Unity: Indigenous Politics, Gender, and the Union of BC Indian Chiefs* (Vancouver: UBC Press, 2019), 39–41; Sara Ahmed, *Complaint!* (Durham, NC: Duke University Press, 2021), 13.



Figure 1.2 Philip Simba and Madelaine Simba, 1984. Photograph by Tessa Macintosh. NWT Archives/©GNWT. Dept. of Public Works and Services/G-1995-001-5544.

the years meant that health and disease came up specifically in many transcripts. Major epidemics were the subject of focused attention.⁶³ Likewise, as interviews were often collected in conjunction with archaeological and heritage projects, this could involve visiting gravesites, which in turn prompted people to tell stories about sickness and epidemics.⁶⁴ That said, the experience of sickness itself can be a challenge to access through interviews and oral histories. As Gwich'in Elder Julienne Andre pointed out, 'I was sick many times and those parts I don't remember' (Figure 1.3).⁶⁵

This book is foremost a history of colonialism, not a community-based history of epidemics. For those interested in the latter, these can be found in many of the sources I have referenced here, especially the larger comprehensive collections.

⁶³ For example, 'Influenza Epidemic, July 1928', in *That's the Way We Lived. An Oral History of the Fort Resolution Elders* (Yellowknife: Northwest Territories Culture and Communications, 1987), 75-8.

⁶⁴ For example, Yukon Territory, Heritage Branch, *Fort Selkirk Elders Oral History Project* (Whitehorse: Yukon Heritage Branch, 1987).

⁶⁵ Julienne Andre in *Gwich'ya Gwich'in Googwandak*, 282.



Figure 1.3 Julienne Andre at fish camp at Tree River, July 1978. Photograph by James Jerome. ©NWT Archives/James Jerome/N-1987-017: 0864.

This book relies as well on government, missionary, and fur-trade archival records used to understand both what happened and how different people, especially those with power, responded to epidemic disease. Access to some archival records was contingent on research agreements that required me to ensure the anonymity of those whose personal health information was revealed. These restrictions informed my use of pseudonyms or the omission of names altogether in places throughout this book. The few instances where I used pseudonyms, I have used only first names (e.g. ‘Alex’, ‘Catherine’), and these are clearly identified.

Access restrictions applied most significantly to the burial registers used to construct a cause of death database, which provided quantitative evidence supporting the arguments laid out here. This database and its interpretation are discussed in the Appendix. The database includes over 7,000 records of death from 1860 to 1970 and was used to trace the regional extent of outbreaks, to assess the scale and impacts of epidemics, to understand the broad contours of health, sickness, and medicine, and to identify smaller outbreaks that were not always apparent in other materials. That said, while this database turns lives into statistics, I have throughout this book subordinated data to story, using numbers to better understand the dynamics of disease but not to obscure experience. The records in the database are all anonymized. Each was entered

by me, usually in an archive, as for most of the registers I was not permitted to make copies that could be removed from the premises.⁶⁶ In this process, I encountered thousands of men, women, and children in the context of their passing. I found this experience deeply moving. In the course of working on this book, I gave birth to two premature babies, both of whom spent their first weeks of life in neonatal intensive care units, likely surviving only because of medical interventions that our family was fortunate to be able to access. It was impossible for me to read and record the deaths of premature infants from the burial registers with detachment, and more than once I found myself in tears. I would like those reading this book to know that I have treated all these records, and the lives they represent, with the utmost respect and care throughout the process of research and interpretation.

This also speaks to one last methodological issue in weighing the significance of northern history. Northern populations are small. Collectively, present-day populations of the Northwest Territories and the Yukon are less than 100,000 people. In the period studied in this book, the total population was in the tens of thousands, at most. In some ways, these small numbers work against circumpolar peoples from the perspective of global historical significance. Throughout this book, the numbers who died in epidemics, even the largest epidemics, are relatively small – much, much less than, say, the 40,000 deaths from COVID-19 in Canada in its first two years. Noted Inuit leader and activist Siila Watt-Cloutier wrote about the issue of numbers, drawing from her experiences working to limit persistent organic pollutants and their toxic effects at high latitudes:

I remember quite clearly a person from The Malaria Project suggesting, in his presentation, that if we continued with the goal of eliminating POPs, including DDT, we would be bringing death to many thousands and perhaps millions of people. He used images of jumbo jets filled with people to show the numbers that would die each year if DDT were not available to help fight malaria. As I was listening to this presentation I started to question how 150,000 Inuit could compete with these stark figures of potential deaths. Our team, which included Shirley Adamson of the Yukon First Nations, had to develop a strategy to circumvent seeing this solely in terms of numbers; if numbers were going to be part of the equation the Inuit and Aboriginal peoples of the circumpolar world would surely lose.⁶⁷

Watt-Cloutier was speaking to the larger moral issue in our contemporary world of what is happening to small communities and small societies, not

⁶⁶ A small number of records were drawn from publicly accessible registers, for example the Dawson City Mortuary Records 1898–1938, www.alaskaweb.org/dawmort/c_d.html.

⁶⁷ Sheila [Siila] Watt-Cloutier, 'The Inuit Journey towards a POPs-Free World', in *Northern Lights Against POPs: Combatting Threats in the Arctic*, ed. Terry Fenge, Inuit Circumpolar Conference, David Leonard Downie (Montreal: McGill-Queen's University Press, 2003), 259–60.

just in the northern villages destabilized by melting permafrost and generations of colonial trauma, but also island nations facing the deluges and hurricanes of a heating earth. This book offers an exploration of how history is made, not just at the centres of population and power, but in the countless small communities, in the hamlets and villages, and among families and camps out on the land, through the mountains, along the coast, and on the banks of rivers.